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Addressing the Transportation Challenges of the 21st Century

The Commonwealth of Virginia and its Department of Transportation (VDOT) have long been recognized as being on the forefront of transportation innovation. The State's long-standing tradition of partnering with the private sector, its recent cutting-edge public-private venture to develop a network of HOT lanes on the Capital Beltway and I-95, its ambitious projects to reconstruct the Wilson Bridge and the Springfield and Gainesville interchanges, have clearly established VDOT's leadership as bold and creative problem-solvers. VDOT's 56th Annual Transportation Conference on November 7-9, was held under the banner of "The Changing Face of Transportation." The choice of this theme, symbolized VDOT's recognition that the transportation problems of today require new approaches and novel solutions. Your editor's remarks at the concluding plenary session of the conference, presided over by Secretary Pierce Homer, reflected the same sentiment.

Given the theme of this session, "The Changing Face of Transportation," I thought it would be appropriate to share with you some speculations about how to address the transportation challenges of tomorrow—in Virginia as well as elsewhere in the nation.

The scenario I am going to describe to you is based on a presentation I made last October before the Congressionally-chartered National Surface Transportation Policy and Revenue Commission. As a member of that Commission's Blue Ribbon advisory panel I was responding to the Commission's solicitation for "bold new ideas" that would end the drift in the current federal program and give it a new sense of purpose and direction. The Commissioners have stressed many times that a compelling new vision is needed to sell the program to the American public and justify expanded investment in transportation infrastructure.

The scenario drew primarily on two sources. One was a proposal by the American Road and Transportation Builders Association, called "Critical Commerce Corridors," that outlined a vision for a national network of dedicated truckways and truck only lanes. The other source was a report that my colleague Bob Poole of the Reason Foundation and I published in February 2003. In it we proposed the concept of HOT networks — a system of premium service lanes, some of them converted from existing HOV lanes, others newly constructed, that would offer urban motorists and bus riders congestion-free travel for a fee.

The scenario begins with the premise that the nation's surface transportation program faces four long-term challenges as we approach the next legislative reauthorization cycle in 2009. They are: First, the vital mission of preserving, rehabilitating and modernizing our aging transportation infrastructure; Second, eliminating traffic congestion as an obstacle to metropolitan mobility; Third, expanding the freight carrying capacity of the nation's highway system to create faster and more predictable supply chains; and Fourth,

attracting new investment capital to help finance expansion of highway capacity and supplement the eroding purchasing power of the Highway Trust Fund revenue. To accomplish these goals the scenario envisioned a sustained program of transportation infrastructure development extending over 20-30 years. The aim of this program would be to accomplish two key objectives:

Metro Mobility Networks

The first objective would be to create a system of express toll lane networks that would offer travelers the option of reliable, congestion-free travel in all major metropolitan areas. I hardly need to explain this concept to a VDOT audience since your Department is building on the Capital Beltway and I-95 the most ambitious HOT lane network in the nation. Suffice it to say that free flow of traffic would be maintained on the toll lanes at all times by employing dynamic pricing and electronic toll collection technology. The networks would be designed to accommodate express bus service (Bus Rapid Transit). Operating in free-flow traffic, BRT buses would offer transit riders dependable high-frequency, high-speed service throughout metropolitan areas with service characteristics similar to those of rail transit systems. The individual metro networks would operate much like utility companies, charging higher rates in the peak, offering discounts in off-peak, and billing customers by mail.

Freight Corridor Networks

The second objective would be to create networks of dedicated toll truckways and truck-only-toll (TOT) lanes in high-volume intercity freight corridors, such as Virginia's I-81. The networks would provide access to and from the nation's major gateways and intermodal terminals, including container seaports, airports, border crossings and major warehousing and distribution centers. The truck lanes would be built in existing alignments of the Interstates wherever possible. However, in some places they would be constructed in new rights-of-way to allow intercity freight traffic to bypass crowded urban areas.

By offering premium-level service to shippers and freight carriers and by accommodating longer-combination vehicles (LCVs), the dedicated truck facilities would enhance trucking productivity, improve highway safety, decongest existing Interstates, ensure swifter and more predictable supply chains—and, thus enhance the ability of the nation's freight network to maintain America's competitiveness in the global economy.

The Long-Term Outcome

What would eventually emerge over the next two to three decades is a two-tiered system of metropolitan and intercity roadways. Supplementing existing toll-free highways would be networks of premium service facilities offering congestion-free travel for a fee. As toll-free highways became saturated with traffic, individual motorists, shippers and truck-fleet operators would switch to the free-flowing priced facilities in sufficient numbers to ensure their political legitimacy and financial viability. That is not a far-fetched vision.

Already today, tens of thousands of commuters in Northern Virginia's Dulles Corridor choose to pay a hefty daily fee for the right to travel on the congestion-free privately-operated Dulles Greenway. They do so in order to avoid the stop-and-go traffic on the parallel toll-free state route 7.

Financing Capacity Expansion Through Tolling

In our proposed scenario, direct user fees in the form of highway tolls and the private sector would play a crucial role in financing and operating these networks. Virtually every week brings fresh evidence that highway tolling has been embraced by state and federal policy makers as a financing tool. According to a GAO survey, as many as 23 states are planning to build new toll facilities and a great majority of highway projects currently in development are expected to be toll-financed. Highway tolling has truly entered the mainstream.

Tolling has been accepted because the prospect of increased federal aid is remote and raising gas and sales taxes for transportation at state level is equally unpopular. Congressional reluctance to increase the federal gas tax became plain recently when Rep. Jim Oberstar (D-MN) chairman of the House Transportation and Infrastructure Committee bowed to political reality and withdrew his proposal for a 5-cent-a-gallon federal gas tax increase to fund his proposed bridge reconstruction program. Oberstar's proposed tax hike was vetoed by Congressional leadership and received little support from rank-and-file Democrats and Republicans alike. The climate at state level is equally tax-averse. Voters in the Seattle metropolitan area have just defeated 56-44% an \$18 billion sales tax proposal to fund local highway and transit improvements.

As Texas Governor Rick Perry observed, since Congress is not likely to come up with adequate resources to help states meet their future infrastructure funding needs, states are moving on their own to fill the vacuum. They are doing so not because they are philosophically committed to "devolution" but because, pragmatically, they must find independent ways of funding their capital needs. And numerous surveys show that most drivers prefer tolls rather than higher taxes as a way to pay for new transportation projects. Whether the political climate after the 2008 elections will allow a significant fuel tax increase as part of the next reauthorization remains to be seen. The price of gas at the pump prevailing at the time will likely be a major deciding factor.

The Emerging Role of Private Capital and Public-Private Partnerships

The second important influence in our scenario is the role of the private sector. Like tolling, private investment in toll roads is growing. According to one survey, there are 71 highway projects in the U.S., worth \$104 billion, that are being proposed for private financing, construction and operation. Six to twelve of them could reach financial close in the next two years.

Institutional investors with long-term investment horizons, such as pension funds, tell us they are prepared to make significant investments in toll roads because these assets offer a stable and predictable cash flow relatively unaffected by economic downturns, and because they deliver returns similar to those from fixed income and real estate investments. Growing acceptance of automatic toll increases geared to inflation has made investment in toll roads less risky.

While to date most of the capital has come from foreign sources, U.S. investors appear ready to step in. Wall Street investment banks, private equity funds and public pension funds are actively pursuing opportunities as equity partners in toll road concessions. Just the other day, the Carlyle Group, one of the largest private equity funds in the nation, announced that it has raised over one billion dollars for its infrastructure fund which will invest primarily in transportation and water infrastructure projects. And CalPERS, the nation's largest public pension fund (\$246 billion in assets) has launched a \$2.5 billion pilot infrastructure program focused on investments in new roads, ports and other public facilities. Another encouraging sign: a recent invitation by Florida DOT for proposals to improve its I-595 corridor in Broward County has elicited six responses from private consortia, with 12 companies offering to contribute equity capital.

In addition to equity capital, the private sector could contribute in other ways. The discipline of the market that private operators bring to asset management is likely to encourage a more efficient use of resources, greater innovation, faster project delivery and more effective customer relations. Investor-owned and operated electric utility, telecommunication and rail systems testify to the success of private management of public-purpose infrastructure.

A New Financial Model of Infrastructure Development

Underlying our scenario is the notion that the nation's surface transportation program cannot continue relying exclusively on traditional sources of transportation revenue. Fuel taxes at current rates are not adequate to support the nation's long-term capital highway needs; they barely suffice to cover the cost of system operation and maintenance. And, as I mentioned earlier, the prospect of Congress and state legislatures approving major increases in fuel taxes does not appear likely in these times of record fuel prices and with oil prices predicted to push past the \$100-a-barrel mark.

Instead of relying on periodic increases in gas taxes, our scenario calls for a gradual transition to a more entrepreneurial, market-oriented system, in which direct user fees in the form of tolls, variable (congestion) pricing, long-term operating concessions and private equity capital are allowed to play a major role in funding and managing new transportation infrastructure. Capital resources would be targeted on places where capacity expansion is most critical and on investments that benefit the nation the most—namely, congested urban areas and critical freight corridors. Funding levels would be linked to specific performance-related goals and outcomes, such as reducing travel delays, eliminating traffic bottlenecks and improving travel predictability.

New road facilities in corridors where traffic is expected to generate a stable and predictable stream of toll revenue, would be built and financed largely with private capital and operated and maintained as private toll concessions. This would free up state transportation funds and the tax dollars flowing into the Highway Trust Fund (currently \$39 billion per year and increasing to \$48 billion by 2017 according to GAO estimates) to support the essential task of preserving, rehabilitating and modernizing the Nation's existing highway network. This approach, I suggest, is the best way to ensure the long-term integrity of our surface transportation system without imposing an unacceptable tax burden on the American people.

Let me conclude by emphasizing this last point. Our scenario does not call for the abolition of the gas tax, nor for its substitution with another source of revenue. It merely assumes that every last penny that we can realistically raise through the gas tax will be needed to meet the ever-growing needs for maintenance and reconstruction of our aging facilities — the Wilson Bridges, the Springfield Interchanges and hundreds of similar projects throughout the nation.

To find the resources to expand road capacity, we shall need a fresh approach — the same approach that VDOT has wisely chosen to expand road capacity of the Beltway and I-95: a public-private partnership involving tolling, private equity, and a private operating concession that shifts much of the construction and operating risks to the private sector.

I think your state is on the right path, and I commend your Secretary, Pierce Homer, for rising to the challenge and leading your Department into the future with firm hand, good sense and imagination.

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