

The Virginia NEWS LETTER

Facing Virginia's Transportation Challenges

By Alan E. Pisarski

Introduction

Nothing has been more contentious in Virginia in recent years than the subject of transportation. In addition to how best to solve problems, there is also a crucial question of finance: where does the money come from to pay for needed transportation investments? My goal here is not to jump in on any side of the debates but, rather, to help move the discussion in a productive direction by reviewing our current situation, looking ahead to future needs, and suggesting some guiding principles.

There is a long list of transportation-related concerns in Virginia today. To name but some:

- Growing congestion
- Fuel prices
- Housing market problems
- Greenhouse gas concerns
- Freight delivery needs
- A sluggish job market
- System maintenance needs
- Declining fuel tax revenues
- Accident reduction and improvement of safety

To help us understand the issues we face and find ways to address our challenges, I propose we keep in mind the following as a goal for transportation policy:



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To reduce the effects of distance as an inhibiting force in our society's ability to realize its economic and social aspirations.

Recognizing this means that we should not be trying simply to adapt ourselves and our economy to high transportation costs. Rather, we should imagine a world where low-cost and environmentally sound transportation has permitted us largely to overcome the time cost of distance and visualize how that world might come to be.

Instead of celebrating the recent decline in vehicle miles traveled as some kind of victory, we must examine the changes that occurred and recognize what was lost as well as what might appear to have been gained. On the plus side, how many trips were shifted to carpools or transit, or combined into a time- and energy-saving trip chain? On the negative side, how many trips were just not taken at all? Trip avoidance isn't always negative. For example, teleconferencing may often be an efficient method of conducting business. But trips generally have economic or social transactions at their ends that benefit the trip-maker and the larger society. With a threatened economy, this is not a time to be inhibiting the business interactions of our society. Instead we should be seeking to stimulate them—in ways that are environmentally sound, safe, and cost-effective.



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Guiding the State Perspective

There are four levels of transportation issues that demand attention from the state's viewpoint: interstate commerce, statewide economic and social activity, metropolitan activity, and local community activity. All of these must be served by the transportation system. A state cannot choose one to the exclusion of the others.

(1) States have an obligation to recognize and serve interstate and international commerce needs. This is perhaps the foremost transportation idea embedded in the U.S. Constitution. The Interstate Highway System is a key example of that obligation; the commonwealth of Virginia owns the Interstate facilities within its borders and must act as an effective steward of them. With major airports and a major seaport, Virginia must assure access with good surface transportation.

(2) Every state has an obligation to assure that development throughout the state is well served by transportation to expand economic opportunity and allow social interaction. This includes providing access to institutions such as hospitals, universities, and transportation hubs as well as locations that will promote the commerce of the state. It can mean improving transportation in one part of the state to expand economic opportunity while responding to congestion in another part.

(3) Serving the economic and social needs of a state's metropolitan areas is critical to the well being of its citizens and to our national competitiveness. The state's metropolitan regions are its economic engines. Increasingly they span multiple jurisdictions over large distances. This need must not be neglected, or all regions of the state and nation will suffer.

(4) Transportation must serve the community level, where our households live and operate. A sound transportation policy must consider the trips made for personal business, school, and recreation that are the lifeblood of our daily life.

Virginia has strong, almost unique, capabilities with regard to transportation. The state's control of the highway system means that it can recognize and address potential freight/passenger conflicts and intercity/local conflicts, both of which will be growing issues in the future. Virginia has the ability to design better operational capabilities before reaching for large infrastructure solutions.

There are likely to be situations where states and the federal government will need to overrule cities to protect interstate commerce corridors.

An important state role here must be to assure that local governments recognize that they have the responsibility to serve the needs of interstate commerce and international trade as part of their metropolitan mobility planning.

In light of this I want to turn to some of the transportation challenges the commonwealth will begin to face in the near future.

Virginia's Changing Demographics

A hallmark of the coming years will be the aging of the massive baby-boom generation. As we see the phasing out of the working years of the generation that has dominated American population patterns for 60 years, transportation policy will need to address various dominant demographic changes.

Serving a diverse work force. With the surge of workers into their retirement years, commuting will be perhaps less dominant than in the past but will still present key challenges. Comprising a new work force will be immigrants, retained older workers, and greater numbers of working women. The new work force will be diverse not only in terms of age, sex, race, ethnicity, and skills, but in the locations and time patterns of work.

Serving an aging population. As the baby-boomers age, they will dramatically change travel patterns. How best to accommodate this will be a crucial social question over the coming years. We will need the continued skills of the aging workforce and we must assure access to employment, if needed or desired. Equally important will be access to services—medical, government, and other institutions. Social and recreational travel will also be a key feature, as it is with the rest of the traveling public. This is a complex subject that must be viewed both in terms of levels of income and levels of age and the attendant ability to drive or to walk significant distances or use public transportation. Our present collection of agencies addressing these problems seems too disparate, overlapping, and uncoordinated.

Creating and sustaining an affluent society. Good transportation will be a major contributing factor in any enhanced productivity we enjoy. Although certainly facing many economic challenges from an increasingly competitive global economy, as well as energy threats, America will continue to be propelled by tremendous technological advantages. A sound transportation policy is key to sustaining an affluent society and economy.

Alleviating traffic congestion. Virginia's population growth will be more rapid than the national average in the future. It rose from 7.1 million in 2000 to 7.7 million today, growing at 1.25 times the national rate, but it will reach 9.8 million by 2030, a 27 percent increase, 1.34 times the national rate, according to census projections, placing it 11th among states in pace of growth.¹ This will add to traffic congestion, which wastes fuel, pollutes the air, and impedes economic and social interactions. A major contribution can be made to improving the well-being of the society by reducing congestion. But using congestion as a tool in the hope of changing public behavior in certain desired directions must be specifically renounced in any useful state transportation policy.

Stabilizing housing values. The connection between uncongested transportation and housing values is a key consideration. With housing currently in the doldrums, improved access to all neighborhoods can make housing more affordable for more people and help preserve the value of existing home sites.

Enhancing tourism for quality of life and economic growth. As the baby boomer generation retires, the numbers that will have discretionary time for travel and tourism will grow immensely. This could result in huge economic benefits to regions of the commonwealth. Tourism is among the top 10 employers in Virginia, as it is in all but two of the states.²

The Number-One Challenge: Providing Access for a Skilled Work Force

Assuring access to work is the basis for a productive economy. European and Asian countries know this and are taking action to provide transportation investment that is environmentally responsive. In the United States this will mean not only providing effective road access to permit long-distance commuting, but also greater opportunities for working at home, more flexible work schedules, and better car-pooling opportunities. These latter actions are low-cost with immediate energy savings. Access to the center from longer distances, for example by commuter rail systems, will be increasingly

important, as will providing broader opportunities for lower income workers to job and social opportunities.

Modern society will continue to see increased specialization of labor and the technological support that it requires. It is clear that there is a new worker dynamic operating in the 21st century workplace. A recent study prepared for the National Chamber Foundation in which the author participated³ summarizes the future worker market in this way:

- Fewer persons of working age will result in a sellers market for workers. Employers will go where skilled employees are or want to be. Many of these sites will be localities with universities and research centers.
- Employers will be providing flexibility regarding hours and days of work.
- Increases in specialization in the labor force will mean that workers will need to be drawn from larger employment pools over greater distances.
- Employers will continue to shift locations to be near workers, permitting workers to move beyond cities and suburbs in search of rural amenities and lower cost housing if they choose. The attachment of immigrants and minorities to the center city will be broken as work locations shift.
- Multi-worker households and frequent job changes will continue to generate long work trips.

The resulting pattern could be summarized as greater freedom among workers to live where they want and work where they want, but where they will have to accept the time and cost penalties associated with longer commutes.

Why won't workers cluster around their jobs, as in the "smart growth" image, and as they did in the 19th and early 20th century? There are a number of reasons:

- We are not wedded to a job for life anymore. The average turn-around in jobs is measured in just a few years. It is expensive to move every time one changes jobs, uprooting one's family.

Multi-worker households and frequent job changes will continue to generate long work trips.

¹ U.S. Bureau of the Census, population estimates and projections. <http://www.census.gov/popest/states/NST-ann-est.html> (10/13/08); <http://www.census.gov/population/www/projections/projection-sagesex.html> (Table 4) (10/13/08).

² Special study conducted for the author by the Travel Industry Association.

³ Cambridge Systematics, Inc, Boston Logistics Group, Inc., and Alan E. Pisarski, *The Transportation Challenge, Moving the U.S. Economy* (Washington, D.C.: National Chamber Foundation, 2008). <http://www.uschamber.com/ncf/default> (10/13/08).

Auditing, or taking an outside look at how government agencies are responding to challenges, can lead to a clearer picture for improvements.

- About 70 percent of workers live in households with other workers, increasing the odds for someone to have to commute long distances.
- Workers operate in much smaller units today, with no big factory gate to live next to.
- An older population is a more stable population, far less likely to change residence.

The most challenged households will be lower income two-worker families pushed to the edge of the metropolitan region by housing costs or a search for good schools; they may be traveling long distances to disparate job sites.

A Basic Requirement for Sound Transportation Policy: Performance Measures

In the face of these trends, we will need a more performance-based, outcome-driven approach to state transportation programs. While almost all agree this is desirable, it will prove easier to say than to enact. One way to stimulate such an approach would be a federal performance bonus to states that achieve the best results on targets such as those identified below. It would take very little in percentage terms, maybe a 5-10 percent bonus, to boost active interest. Some possible targets for a bonus could be:

- Number of hours of congestion delay reduced.
- Amount of motor vehicle petroleum consumption reduced.
- Amount of carbon dioxide (CO₂) production reduced.
- Number of accidents reduced and lives saved.

The federal system has totally abrogated responsibility for such a performance process. Many states have done fine jobs in developing their own in-house performance measures, but it is far more difficult to plan, fund, and evaluate based on state measures. The Virginia Department of Transportation developed a celebrated “dashboard” as a reporting tool to keep the public informed regarding construction project status, adherence to time scheduling and budgets, that did a great deal to restore the public’s confidence in the management of administered funds.⁴ But much more needs to be done regarding system performance; such as congestion trends, the percent of travel on roads

of sound condition, or the percentage of bridges that are structurally or functionally deficient.

A requirement for public reporting of results that would hold projects up to public scrutiny would be very powerful. This would go a long way in re-establishing public faith in the effectiveness and integrity of state programs. Were projects on time and on budget? Did they meet the goals and expected results? A legislated standard process of reporting two years and five years after project completion would be a very effective management tool. In some cases, however, it has to be recognized that it could be 15 or 20 years before the full effects of a project are known. By that time other factors can have changed outcomes.

One Good Form of Measurement: A Performance Audit

Auditing, or taking an outside look at how government agencies are responding to challenges, can lead to a clearer picture for improvements. A good example of this is a congestion performance audit that was recently commissioned by the state auditor in the state of Washington.⁵ The state auditor there is a unique institution, almost a third branch of government. The auditor is elected statewide and reports directly to the public, not to or through the governor or the legislature. In response to hearings and votes held around the state, the auditor received a list of challenges to address and a strong mandate. Chief among them was to audit congestion in the Seattle area as a result of public frustration with what seemed to be lots of spending, little action, and less improvement.

It is important to note that this was not an “accounting” audit. No one was looking for malfeasance or inappropriate behavior. Rather, its function was to look at a full range of tools available to reduce traffic congestion and to show what could be done if the state department of transportation and local agencies were actually to focus on congestion. While the audit identified places where the department could have improved performance, the emphasis was on what could be achieved in the near future. The

⁵ The author served on the audit team. The report, *Washington State Department of Transportation Managing and Reducing Congestion in Puget Sound*, Report No. 1000006 (October 10, 2007) was commissioned by the Washington State Auditor and prepared by Talbot, Korvola & Warwick, LLP and subcontractors Delcan Corporation and PlanBConsultancy. A summary of the results begins on page 45. http://www.sao.wa.gov/PerformanceAudit/audit_reports.htm

⁴ The Dashboard can be viewed at: <http://dashboard.virginiadot.org/default.aspx> (10/28/08)

Delcan Corporation was awarded the contract to examine what could be done to respond to congestion within five years, not to redo the whole statewide 20-year transportation plan. The five-year time horizon means that the emphasis was placed on operations, technology, and demand management, planning, and targeted investments, as opposed to major new construction projects.

The audit produced 22 recommendations and estimated that congestion could be reduced by 15-20 percent in five years and within the current budget (albeit with significant shifts in the allocation of funds). Although the report was couched in terms of an audit of the state department of transportation, it was obvious that the study had to be much broader and in fact addressed recommendations as much to local governments, metropolitan planning organizations, and the legislature itself. In fact, it found the department to be one of the nation's top transportation agencies. One key recommendation was for a performance-based management system, using congestion as a metric.

The public gained some reassurance that funds were not being wasted and that there were significant opportunities for focused funding that could provide tangible gains in the near term. Actions have been taken on many of the recommendations in the governor's office, the state transportation department, and the legislature.

Summary and Conclusions

A sound transportation policy must serve four differing levels of needs without excluding any of them: interstate commerce, statewide interaction, metropolitan travel, and local community needs. At the same time as Virginia's population will be growing and traffic congestion increasing, its work force will be aging and becoming more diverse. Setting performance measures and auditing the progress toward them can make sure our policies stay on the right track. With a changing demographic and a struggling economy, the transportation challenges that we in Virginia face are substantial. But even greater challenges have been met successfully in the recent past. Virginia is a growing society, expanding in many ways—in population, in workers, in households, in technological advances—and not one that can afford to do nothing about transportation.

ABOUT THE AUTHOR: As a writer and consultant in transportation public policy, travel behavior analysis and statistics Alan E. Pisarski's work related to transportation has been reviewed, discussed and quoted in all of the major national media. He is frequently invited to testify by the U.S. Congress and advises States regarding future transportation trends and investment requirements. The third in his definitive series, *Commuting in America III*, was published by the National Academy of Sciences in 2006.

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