

Transportation

**Senate Finance Committee
November 19-20, 2009**

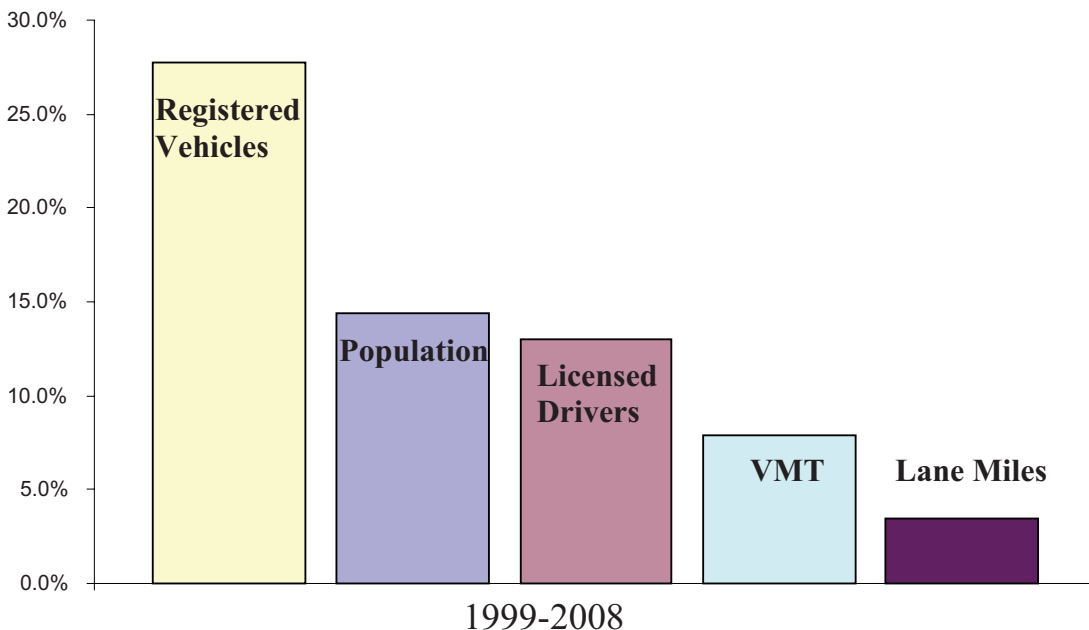
Virginia's Transportation Funding Challenge

- In the first decade of the 21st Century, Virginia has experienced a deterioration of its transportation network capacity, the overall quality of existing infrastructure, and the revenue required to make investments that maintain and improve the program.
- Much of the system growth has been concentrated in the secondary and local road systems, driven by population changes and exacerbated by state and local policy decisions.
- Decline in the integrity of existing infrastructure is driven by the age and size of Virginia's highway and transit network, principally the abundance of bridges and extensive secondary system.
- Virginia's outdated statutory framework of transportation program responsibilities and constrained revenue resources has resulted in a structural imbalance, with needed system investments exceeding available resources.

Economic and Population Growth Have Placed Significant Demands on the System

- As Virginia's population has grown over the past decade, the number of drivers, vehicles and total travel demand has outpaced growth in lane miles.
 - Population growth and demographic changes affect the types of services needed.
 - Growth in registered vehicles reflects health of economy; recent sales have dropped dramatically.
 - Increases in vehicle miles of travel (VMT) reflect both the increasing number of drivers as well as Virginia's overall economic health.
 - Highway capacity growth cannot be the only approach to addressing demand.

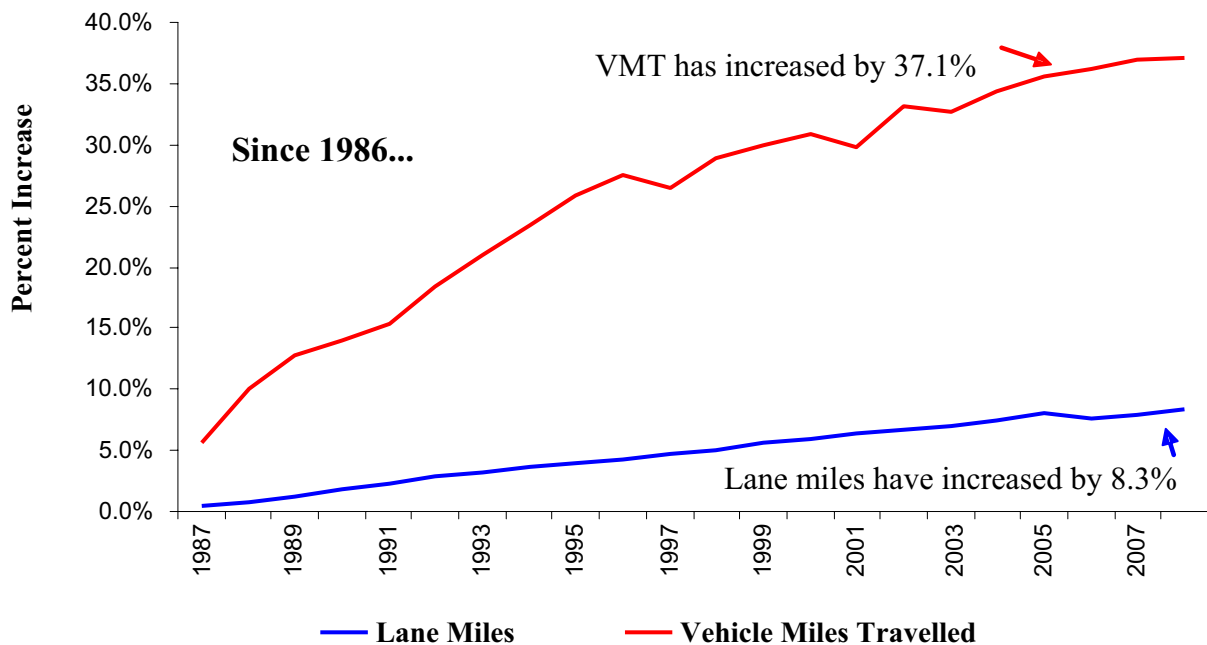
10-Year Growth in Transportation Demand



Growth in VMT Outpaces System Capacity

- Highway utilization is highly correlated with changes in economic activity and VMT is a direct measure of the demand being placed on Virginia's transportation network.
 - Growth has slowed on interstate and primary systems, but continues on the secondary system.
 - As the economy recovers, VMT will likely increase as increased disposable income tends to result in more discretionary travel.
- Since 1986, total VMT in Virginia has increased more than **four times** faster than the growth of the infrastructure.

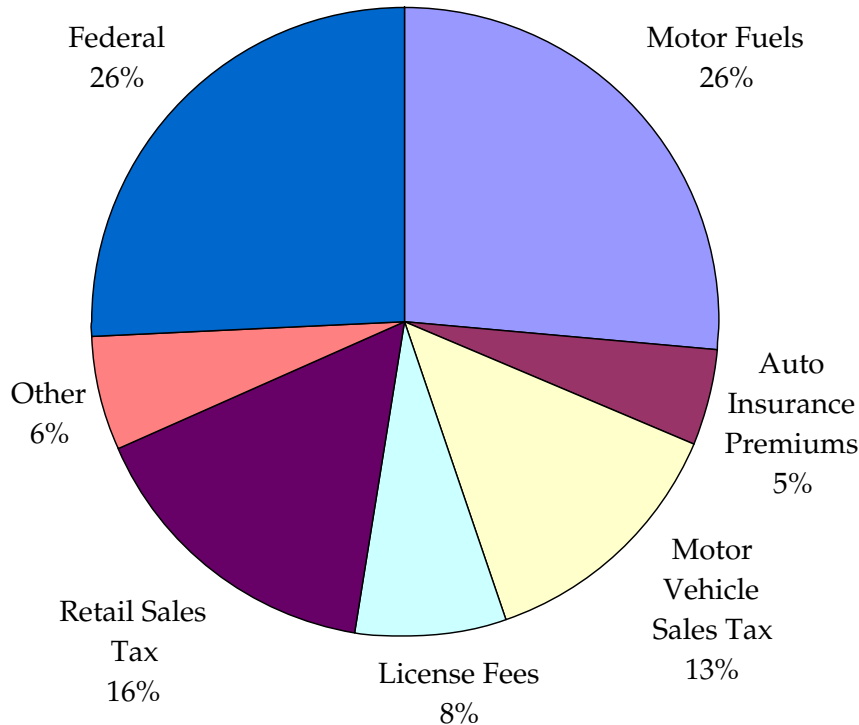
Growth in Vehicle Travel Outpaces Growth in Lane Miles



Transportation Revenues are Driven by Virginia's Overall Economic Health

FY2009 Transportation Revenue Sources

Total = \$3.1 billion



- Virginia transportation revenues are tied to gasoline and automobile sales, and are sensitive to economic cycles.
 - Gas taxes declined as employment conditions worsened and discretionary travel declined.
 - Diesel fuel sales declined as the demand for retail goods diminished.
- Real revenue growth has been based primarily on increases in motor vehicle values and sales volumes.

Virginia Generates Less Fuel Tax Revenues than Other States

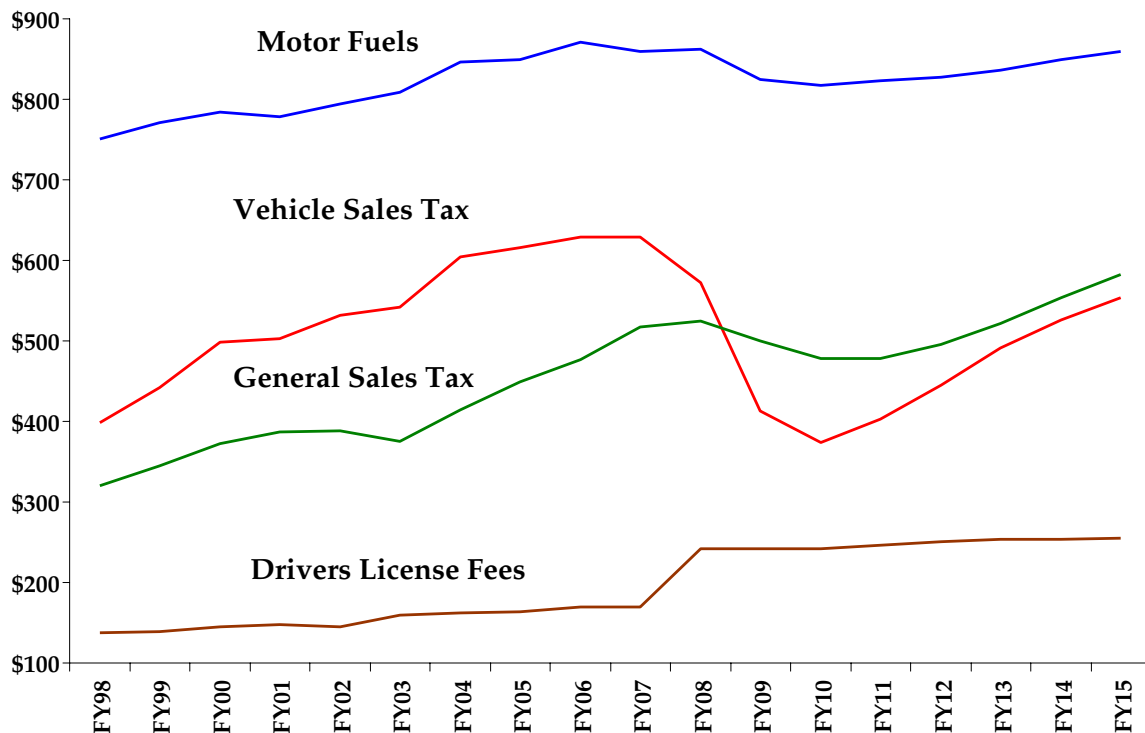
- As a **static** cents per gallon levy, motor fuels sales tax receipts fail to produce the same “bang for the buck” as they did when last increased in 1986.
 - The effects are compounded by reduced sales volume, increased fuel efficiency, and inflation.
 - Because motor fuel taxes were not indexed from the outset, it would require **doubling** the tax to achieve 1987 purchasing power.
- Transportation revenues in states that have established indexed or other *ad valorem* taxes, such as North Carolina and Maryland, have fared better during the recent economic downturn.

| Comparison of State Gasoline and Diesel Taxes | | | |
|--|----------------|-------------------|----------------|
| State | Gas Tax | Diesel Tax | Indexed |
| Virginia | 17.5 | 17.5 | No |
| North Carolina | 30.2 | 30.2 | Yes |
| Washington D.C. | 23.5 | 23.5 | No |
| West Virginia | 32.2 | 32.1 | Yes |
| South Carolina | 16.8 | 16.8 | Yes |
| Maryland | 23.5 | 24.3 | Yes |
| Pennsylvania | 32.2 | 39.2 | Yes |
| Tennessee | 21.4 | 18.4 | No |
| Georgia | 20.9 | 20.6 | Yes |
| Kentucky | 22.5 | 19.5 | Yes |
| Massachusetts | 23.5 | 23.5 | No |
| New York | 44.8 | 43.4 | Yes |
| New Jersey | 14.5 | 17.5 | No |
| Average for All States | 28.9 | 27.6 | |
| Source: API October 2009. | | | |

Recovery in Transportation Revenues is Uncertain

- Total Commonwealth Transportation Fund revenue collections are not expected to return to FY 2008 levels until FY 2012.
- Despite temporary moderation in revenue loss from the federal “Cash for Clunkers” program, Motor Vehicle Sales and Use Tax revenues have fallen 39 percent from their peak.
- Dedicated general sales and use tax revenue, now the second largest individual source, is at FY 2006 levels.

Virginia Transportation Revenue Sources
(\$ in millions)



Current Revenue Sources Do Not Provide Sustainable Long Term Funding

- Technology and policy changes are improving the fuel economy of the vehicle fleet, and reducing fuel tax revenues per vehicle mile of travel.
- Federal transportation commitments -- backed by federal gas taxes -- have required supplemental funding of \$8 billion in FY 2009 and \$9 billion in FY 2010. A new federal transportation bill may have fewer total dollars or different funding priorities.

Transportation Revenue Items

Motor Fuels Tax

Every 1¢ generates approximately \$47.1 million.

Motor Vehicle Sales and Use Tax

Every 1% generates approximately \$137.7 million.

Dedicated Sales and Use Tax

Every 1% generates approximately \$820.0 million.

Insurance Premiums

Every quarter percent generates approximately \$40.0 million.

Recordation Tax

Every 1¢ generates approximately \$13.4 million.

Driver License and Registration Fees

Every \$1 generates approximately \$5.7 million.

Recent Revenue Decline Highlights Statutory Conflicts

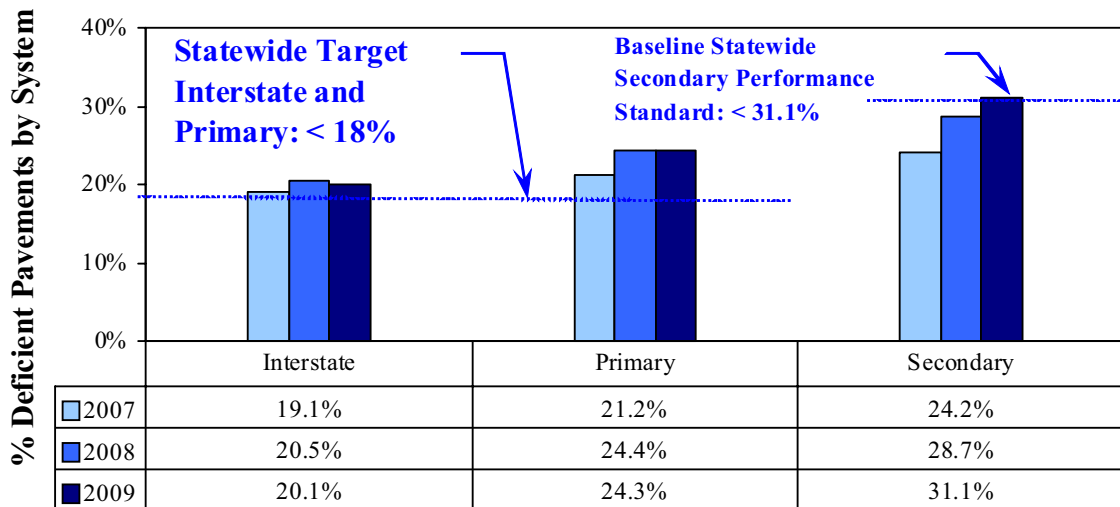
- Unlike most states, where the state is only responsible for interstates and other four-lane highways, Virginia bears the responsibility for almost all local roads.
 - At more than 125,000 lane miles Virginia has the third largest state maintained system in the country, growing an average of 475 lane miles each year.
 - Size of the state responsible program is driven by increases in local roads and determined by local policy decisions.
- The *Code of Virginia* prioritizes funding system maintenance before new construction.
 - Includes maintenance payments to localities.
- Appropriations Act requires “maximization of the use of federal transportation funds.”
 - Every dollar provided by Virginia is matched by approximately \$4 in federal funds.
 - If Virginia adequately funds identified maintenance needs, federal dollars may be left “on the table.”
- In the face of declining revenues, identified maintenance needs are not being adequately funded in order to maximize available federal dollars.

Maintenance Needs Drive Total Spending

- The age and complexity of Virginia's network of roads, bridges, tunnels, and other assets affects annual maintenance and operations costs.
 - Most of Virginia's interstate and primary system lane miles were constructed over 30 years ago.
 - Of almost 21,000 bridge structures, 55 percent are 40 years old or older.
 - 8.1 percent are considered structurally deficient.
- Tunnels have large industrial mechanical systems for power, ventilation, lighting, fire suppression, drainage, communications, and operations. Three of Virginia's eight tunnel tubes are 40 years old or older; three others are over 30 years old.
- Real value of the maintenance allocations grew 4.3 percent per year from 1986 to 2002, but grew only 0.8 percent per year between 2002 and 2009.
 - Real dollar value actually fell between 2002 and 2008, and only rose again in 2009 as materials cost dropped.
 - Since 2002, maintenance funding has not been sufficient to keep pace with the growth of the system and the rising cost of maintenance and operations work.

Pavement and Bridge Conditions Do Not Meet Performance Targets

- Asset performance measures have enhanced the ability to assess and prioritize maintenance needs. However, performance targets are not being met and sufficient funding is not being allocated.
- The condition of interstate and primary pavements has deteriorated slightly since 2007. Secondary roads historically have not had a performance target. In 2009, approximately one-third of secondary system roadways are considered deficient, the baseline for the future assessments.
- An additional amount of more than \$33 million would be needed for the biennium to meet the desired condition level for interstate and primary pavements. However, maintenance funding levels are being **reduced** to meet current revenue constraints.



Maintenance Spending Pressures Outpace Allocations

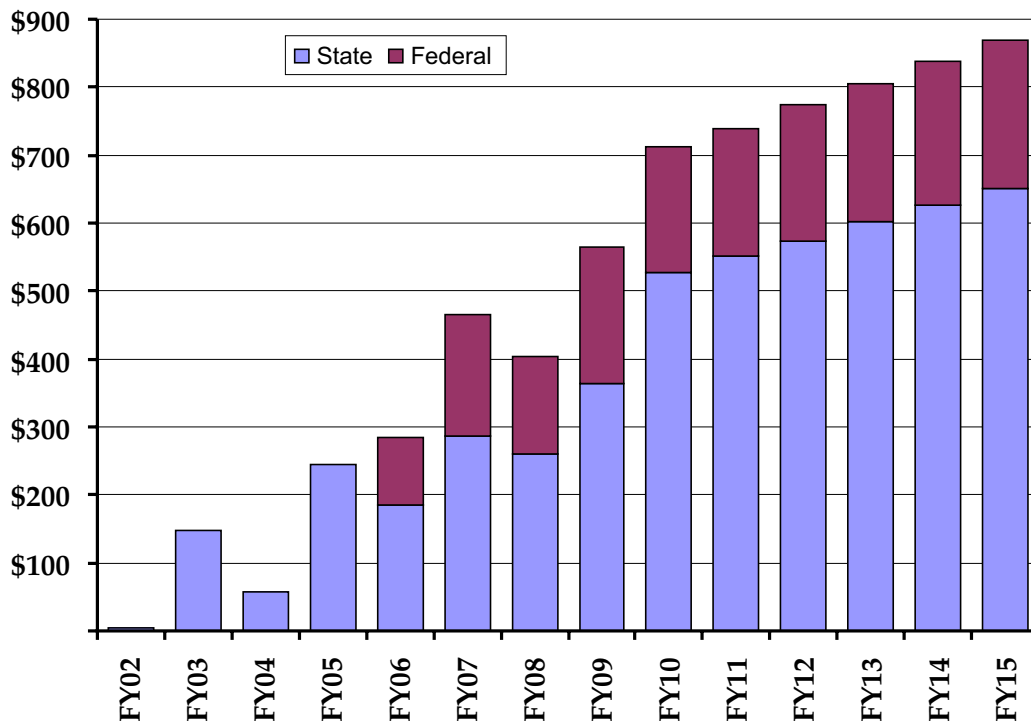
- Maintenance needs are projected to grow at a higher than average rate during the next ten years due to a combination of age and increased use.
 - Current need analysis identifies a \$923 million budget gap in the next biennium.

| Asset Investment | | FY 2011 \$Million | FY 2012 \$Million |
|---------------------------|--|----------------------|----------------------|
| Pavement | Interstate | \$119.1 | \$113.6 |
| | Primary | 251.6 | 249.7 |
| | Secondary | <u>338.3</u> | <u>348.4</u> |
| | Sub-Total | 708.9 | 711.7 |
| Bridges | Interstate | 69.0 | 36.0 |
| | Primary | 24.1 | 55.1 |
| | Secondary | <u>19.6</u> | <u>22.9</u> |
| | Sub-Total | 112.7 | 114.0 |
| Other Assets | Tunnels | 32.0 | 34.7 |
| | Traffic and Safety | 158.3 | 161.8 |
| | Signal and Technology | 90.6 | 64.0 |
| | Asset Total | \$1,102.6 | \$1,086.2 |
| Services | Emergency and Safety Response Services | \$177.1 | \$182.7 |
| | Traffic and Safety Services | 62.5 | 65.6 |
| | Roadway Services | 185.4 | 196.2 |
| | Roadside Services | 149.4 | 153.2 |
| | Facility, Equipment and Management Services | 207.6 | 215.4 |
| | Service Total | \$782.0 | \$813.1 |
| | Grand Total | \$1,884.5 | \$1,899.2 |
| Current Allocation | | \$1,409.5 | \$1,450.7 |
| Unfunded Needs | | (\$475.0) | (\$448.5) |

Maintenance Needs Reduce Construction

- Growth in maintenance spending over the last decade has increasingly “crossed-over” from traditional pools of new construction funding.
 - State and federal construction dollars transferred to maintenance increased from \$3.6 million in FY 2002 to \$712.6 million in FY 2010.
 - Increased use of federal dollars for maintenance is restricted to uses on certain roads and limits federal funding available for addressing other capacity or operational needs.
 - Not all maintenance projects are federally eligible.

**State and Federal Construction Funds
Transferred to Maintenance**
(\$ in Millions)



Transportation Allocations Are Needs-Based

- Current framework for transportation spending has historically not returned a proportionate amount of funding to regions where demand is generated.
- For much of the past decade, state transportation investment decisions have been driven primarily by the need to maintain existing infrastructure and enhance system capacity.
- Total transportation system needs vary by geography and population. Each region has a unique set of funding demands.
- Policy actions taken in the past decade have improved the alignment of transportation program expenditures with objectively identified needs.

| Regional Transportation Contributions and Expenditures | | | | | | |
|---|------------|---------------|--------------|-------------|---------|--------------|
| District | Population | Contributions | Construction | Maintenance | Transit | Total |
| Bristol | 5.1% | 4.8% | 8.1% | 10.7% | 0.9% | 9.4% |
| Culpeper | 4.5% | 5.0% | 3.3% | 6.0% | 1.7% | 3.7% |
| Fredericksburg | 5.3% | 6.1% | 3.5% | 8.5% | 2.3% | 4.8% |
| Hampton Roads | 22.9% | 20.7% | 15.8% | 12.7% | 21.5% | 16.7% |
| Lynchburg | 5.4% | 4.7% | 3.9% | 6.7% | 2.0% | 4.2% |
| Northern Virginia | 25.6% | 27.3% | 30.5% | 15.2% | 58.1% | 34.6% |
| Richmond | 15.4% | 16.0% | 8.9% | 13.8% | 9.4% | 10.7% |
| Salem | 9.2% | 8.4% | 7.0% | 10.6% | 2.3% | 6.7% |
| Staunton | 6.6% | 7.0% | 5.0% | 9.5% | 1.9% | 5.5% |

Notes: Construction and Maintenance totals do not add to 100% due to allocations for statewide programs. Maintenance allocations do not include payments to localities. Transit allocations reflect one time funding for Hampton Roads light rail construction.

Recent Reductions in Transportation Revenues Have Been Severe

- Because transportation revenue resources are heavily dependent on Virginia's general economic health, the 2007 recession has accelerated the imbalance in revenue sources that support required investments.

Transportation Revenue Forecast Reductions June 2008 – November 2009 (Six Year Estimates)

| | |
|---------------|-------------------------|
| Spring 2008 | \$1.1 billion |
| February 2009 | \$2.6 billion |
| August 2009 | <u>\$0.9 billion</u> |
| | \$4.6 billion |
| December 2009 | \$1.0 billion* possible |

- August reductions and September 2009 general fund transfers will impact all transportation agencies.

| | August FY10-15 (\$ in millions) | September Transfers (\$ in millions) |
|--------------|---|--|
| DOAV | \$13.0 | \$0.005 |
| DRPT | \$105.0 | \$0.5 |
| VDOT | \$743.0 | \$13.2 |
| VPA | \$22.0 | \$0.6 |
| DMV | \$ 0 | \$3.2 |
| Total | \$900.0 | \$17.5 |

Framework for Service Reductions Established in Appropriations Act

- The 2009 Appropriation Act establishes the framework for VDOT administration and operations reductions.
 - Ensure maintenance and operations are funded.
 - Focus on safety, pavements and bridge repair, and congestion mitigation.
 - Reduce/consolidate the number of facilities and organizational units by at least 30 percent.
 - No more than 7,500 filled classified positions by June 30, 2010.
- Highway and transit construction have been impacted the greatest with \$3.1 billion in improvements cancelled over six years -- less than 50 percent of 2008 level.
- Highway maintenance and operations programs will be reduced by \$348 million -- 13 percent -- over six years.
- Six year reduction in **services** spending includes:

| | |
|----------------------------------|------------------|
| Interstate maintenance contracts | \$ 48.0 million |
| Roadside services | \$ 120.0 million |
| Safety service patrols | \$ 39.0 million |
| Ferry services | \$ 7.68 million |
| Rest areas | \$ 54.0 million |
- Commercializing rest areas requires federal law change. Failing commercialization, possibility for demolishing currently closed sites beginning in 2011.

Significant Personnel Impact of Statewide Reductions

- The reduction in statewide VDOT workforce of approximately 11 percent -- 1,000 full-time and 450 part-time -- is underway. Involuntary separations of employees are being executed in stages with nearly 600 positions eliminated in September. Second notification of approximately 400 positions is scheduled for December with an anticipated release in March 2010.
 - Twenty-five percent of layoffs will come from the central Virginia region.
 - Positions are primarily concentrated in new construction related programs and may result in longer time-frame for completing projects.

Estimated 2010 VDOT Staffing Reductions by District

| District | Actual September 2008 Level | Estimated July 2010 Level | Total Estimated Reduction |
|-------------------|-----------------------------------|---------------------------------|---------------------------------|
| Central Office | 1,331 | 1,179 | 152 |
| Bristol | 748 | 663 | 85 |
| Salem | 941 | 834 | 107 |
| Lynchburg | 629 | 557 | 72 |
| Richmond | 1,013 | 898 | 115 |
| Hampton Roads | 1,041 | 922 | 119 |
| Fredericksburg | 550 | 487 | 63 |
| Culpeper | 510 | 452 | 58 |
| Staunton | 764 | 677 | 87 |
| Northern Virginia | 937 | 830 | 107 |
| Total | 8,464 | 7,500 | 964 |

Reductions will Impact Local Road Programs

- The Secondary Six-Year program has been eliminated, meaning that there will be no local prioritization of new construction projects.
 - Eliminated all state and federal funds flowing through primary, secondary, and urban formulas.
 - Eliminated bond component of road revenue sharing in FY 2012.
 - Restricted funding to obligated projects or projects to be obligated this year.
 - Local governments are not scheduling local planning meetings.
- Localities which receive direct payments for local road maintenance will receive 25 percent less funding growth than anticipated for the foreseeable future. This will have a negative impact on the condition of local and city streets and quality of many urban roadways.
 - Some localities will face risks to debt service requirements on outstanding obligations backed by anticipated state receipts.
 - The Appropriations Act provides a four percent annual increase in allocations for maintenance payments to cities and counties.

Temporary Economic Stimulus Funding Provides Only Limited Relief

- The American Reinvestment and Recovery Act (ARRA) provided a one-time windfall of approximately \$978.6 million in federal transportation dollars for Virginia.
 - ARRA commitments are separate from the transportation budget. Approximately \$700 million in discretionary project funding.
 - At its April 2009 meeting the CTB approved project allocations of \$328 million and the balance of these funds were awarded in June.
 - Virginia successfully obligated the first 50 percent of discretionary funds within 120 days and has not missed any deadlines.
- Commonwealth priorities included over 120 structurally deficient bridges, more than 430 lane miles of deficient pavements, previously cancelled or delayed highway and rail projects, and federal BRAC projects.
- An additional \$8 billion in high-speed and intercity rail corridor funding is available through 2012. Federal Railroad Administration is expected to announce awards in the spring of 2010.

Efforts to Address Funding Imbalance Have Been Inadequate

- Policy efforts designed to address the structural imbalance in transportation funding since 2000 have been insufficient and relied extensively on the dedication of general fund revenue sources or the commitment of general fund balances.
 - More than \$200 million in annual revenues have been diverted to transportation from sources that were previously general funds including vehicle rental, recordation, and insurance taxes.
 - Subsequent general fund revenue shortfalls have resulted in the reduction or elimination of pledged general fund dollars in favor of debt obligations or unfunded project phases.
- The Virginia Transportation Act of 2000 established a list of projects that were to be funded with excess general fund revenues. When general fund revenues declined in 2002, funding for these projects was rescinded requiring the issuance of debt obligations backed by anticipated future federal revenues (FRANs).
- Similar efforts in 2007, within the Appropriations Act, directed \$500 million in excess general fund balances to specific transportation projects. Dedicated balances for these projects have been reduced by \$185 million.

Further Transportation Debt is Constrained

- Debt financing has become one of the primary funding mechanisms for Virginia's transportation and transit programs since 2000. This has been accelerated by both policy choices and economic conditions.
 - Outstanding obligations increased from \$879.7 million in FY 2000 to \$1.35 billion in FY 2010.
 - Annual expenditures for debt service have more than doubled, from 3 percent to 7 percent of total expenditures, in the past 10 years.
- Nongeneral fund supported revenue bonds can be affected by economic cycles. The current authorization of \$3 billion in HB 3202 (2007) was later increased by \$180 million to replace general funds. Debt revenues are incorporated into both the six year plan and state debt capacity models.
 - First tranche was delayed to late FY 2010 (\$492 m) from an initial date of summer 2007(\$100 m).
 - Insufficient insurance premium revenues to support issuance, current FRAN debt has first call.
 - Issuance of these bonds remains a priority, however it will take through 2028 to let full authority.
- General fund supported debt programs, such as Route 58, are vulnerable to economic shortfalls. The September 2009 budget actions "sweep" \$13 million in accumulated balances from this program.

Recent Economic Conditions Have Affected Outsourcing Agreements

- The Appropriation Act requires at least 70 percent of total VDOT expenditures be provided by the private sector.
 - Outsourced 961 of approximately 1,200 miles of interstate maintenance (approximately \$78 million) and all aerial photography work.
 - VDOT has been able to renegotiate some service contracts to meet required funding reductions. Savings are estimated to be \$8 million.
- Outsourcing port operations may provide one-time windfall, but may not establish a long-term revenue stream.
 - An independent review panel will be established to review one unsolicited and two additional proposals received in the summer of 2009.
 - Since that time, the Port Authority has received a proposal from APM/Maersk for VIT to provide terminal operations for the private facility.
- Nationally, many large dollar transportation operations proposals have collapsed as credit markets tightened during the recession. Several Virginia projects, in Northern Virginia and Hampton Roads, are still active.
 - Construction of I-495 HOT Lanes began this summer. However, construction of I-395 HOT Lanes has been delayed.

Solutions Require Sustainable Revenues or Significant Policy Changes

- Short-term funding strategies do not address long-term funding needs of the transportation system.
- ARRA funding provides only a temporary stop-gap in funding for relatively few projects and is not a sustainable solution.
- Future reliance on federal funds is questionable. Federal transportation funds are gas taxes and the previous two years have required supplemental funding of \$8 billion and \$9 billion from general federal tax revenues to meet existing commitments.
- General fund based solutions are sensitive to economic fluctuations and compete with other programmatic priorities.
- Addressing capacity needs can be accomplished through investments in 1) highways, 2) transit, or 3) by changing development patterns to improve the overall efficiency of the system.

Longer-term Planning and Development Strategies Are Needed

- **Reduce transportation program expectations** – Reduce performance targets for the maintenance program to focus only on most critical repairs. This would include additional reductions in staffing and service contracts as well as local maintenance payments.
- **Forego federal funds** – Reduce commitments to federal funds for bridge, highway, and transit capital improvements (80% federal - 20% state).
- **Establish dynamic funding streams** – Index existing transportation revenue sources to the Producer Price Index or shift from CPG to *ad valorem* at wholesale level.
- **Establish usage based fees** – Improvements in vehicle communications technologies will help improve safety and provide opportunity to measure VMT, regardless of the energy source of the vehicles.
- **Increase reliance on commercial user fees** – A bracket scale of overweight truck permit fees that could generate \$30 to \$50 million annually depending on the fees charged.

Longer-term Planning and Development Strategies Are Needed

- **Change the composition of the system** – State funding could be prioritized for a core network of roads. Similarly, increased responsibility for local roadways could be devolved to localities.
- **Change the distribution mechanism** – Allocate statewide transportation construction dollars through a competitive grant approach. This could strengthen the nexus between desired outcomes in land use planning and system-wide efficiency.
- **Change the regulatory structure** – Define highway maintenance as a public utility and develop a utility-based regulatory framework. The State Corporation Commission could regulate rates charged to users.
- **Improve capacity planning** – Additional improvements to the coordination between transportation and land use could encourage more compact development, changing travel patterns and reducing future demand on the transportation system.
- **Promote alternatives to driving** – Increase use of technology to provide alternatives to business travel that may decrease some travel demand.
- **Increase investment in transit** – Investments in rail and transit will impact future needs for additional roadway capacity improvements helping to reduce VMT, and hence the rate of deterioration on assets.

Conclusions

- Performance has improved, but Virginia's transportation funding challenges persist.

| | 2002 | 2009 |
|--------------------------|------------------|-----------------|
| On-time Performance | 30% | 86% |
| On-budget Performance | 61% | 93% |
| Project Deficits | \$ 687 million | \$ 0.0 |
| Employees | 10,192 | 7,830 |
| Six-Year Secondary Funds | \$ 1,100 million | \$ 60.5 million |
| Maintenance Crossover | \$ 3.6 million | \$ 712 million |
| Maintenance Budget | \$ 1.1 billion | \$ 1.7 billion |

- State and federal revenue sources are projected to decline for the near term and slowly increase in the future.
 - Estimated reductions of an additional \$1.0 billion are expected by December 2009, in addition to the \$4.6 billion removed since 2007.
- Structural changes within Virginia's transportation agencies are underway but insufficient to address the magnitude of the revenue reductions.
- Continued **deterioration** of system **capacity** and infrastructure **quality** can be expected unless expectations are reduced or **revenues** are increased.
 - Short-term and general fund based solutions may be inadequate to support the long-term needs.