

# 2014-16 Executive Progress Report

Commonwealth of Virginia  
Secretary of Transportation

Department of Transportation

## At A Glance

VDOT will plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and goods, enhances the economy and improves our quality of life.

Staffing 7172 Salaried Employees, 0 Contracted Employees, 7485 Authorized, and 310 Wage Employees.

Financials Budget FY 2015, \$4,673.39 million, 0.26% from the General Fund.

Trends	↑ Age of assets	Key Perf Areas	↑ Interstate pavement condition
	↑ Customer expectations		↑ Bridge condition
	↑ Aging population		↑ Traffic Crash Deaths

Legend	↑ Increase, ↓ Decrease, → Steady	Productivity	↑ On-time project delivery
		Legend	↑ Improving, ↓ Worsening, → Maintaining

For more information on administrative key, and productivity measures, go to [www.vaperforms.virginia.gov](http://www.vaperforms.virginia.gov)

## Background and History

### Agency Background Statement

VDOT is responsible for building, maintaining and operating the state's roads, bridges and tunnels. The agency maintains a 58,000-mile network of highways including about 21,000 bridges, which is the third largest state-maintained highway system in the country behind North Carolina and Texas.

### Major Products and Services

VDOT will plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and goods, enhances the economy and improves our quality of life.

Our mission statement emphasizes four key performance areas - Plan, Deliver, Operate, and Maintain, and we have added a fifth area – Support - to cover the administrative areas that enable our staff to carry out our mission effectively. To strengthen the relationship between the Commonwealth's Biennial Strategic Plan and VDOT's Annual Business Plan, both are now structured under these five goals (aka "PDOMS"). While the methods of how we carry out our duties have evolved, these goals continue to represent the core of our business since the Department of Highways was created in the early 1900s. These plans focus on:

- **CORE PERFORMANCE:** Engaging local governments and citizens in planning for future transportation needs, delivering projects and services, operating and managing the system, maintaining our assets, maximizing the value of our investments, and being good financial stewards;
- **TRANSFORMATION:** Assessing opportunities and implementing methods to improve operations and delivery of services, while validating what services we should deliver;
- **INNOVATION:** Maintaining Virginia's commitment to be a national multi-modal transportation leader by promoting smart, innovative, customer-oriented transportation solutions that have a positive impact on our citizens and customers

Virginia is one of the best states in the country for citizens to live, work, operate a business, attend school, and to visit. Planning, delivery, operation and maintenance of our transportation infrastructure are essential to preserving that high living standard and enhancing the Commonwealth's economic prosperity and durability.

We will “Keep Virginia Moving” through active engagement of stakeholders, citizens and employees, smart decision making that supports the commonwealth’s transportation priorities, and efficient execution of our plan.

## Customers

### Customer Summary

The agency expects the population of Virginia to approach 9 million in 10 years. This change may impact the number of licensed drivers, registered vehicles, and vehicles miles traveled which may impact the demand for our products and services.

### Customer Table

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
Resident	Virginia residents	8,200,000	9,000,000	Increase
Local or Regional Government Authorities	Independent cities - number being served at any point in time may vary	39	39	Stable
Local or Regional Government Authorities	Counties - number being served at any point in time may vary	95	95	Stable
Federal Agency	Federal government - number of federal agencies being interacted with at any point in time may vary	1	1	Stable

## Finance and Performance Management

## Finance

### Financial Summary

The Virginia Department of Transportation’s funding comes from several sources of dedicated revenue. Federal revenues have been the largest single source of funding to the highway construction program for several years. The 1986 Special Session of the Virginia General Assembly created the Transportation Trust Fund (TTF). Until the TTF, there was only one fund, the Highway Maintenance and Operating Fund (HMOF), into which all transportation revenues were deposited. The TTF is distributed among the modes of transportation and within those modes according to the Code of Virginia (The modes include roads, mass transit, ports, and airports).

Funding for transportation was addressed during the 2013 General Assembly Session by House Bill (HB) 2313 (Chapter 766). The revenues generated by HB 2313 brought renewed financial investment for Virginia’s transportation program. Significant efforts are focused on pavement rehabilitation. HB 2313 also generated additional revenues in Hampton Roads and Northern Virginia to address the special transportation needs of those areas. Implementation of these new revenues has required an enhanced partnership with local governments to deliver much needed transportation projects.

HB 1887 (Chapter 684, 2015) modifies how the commonwealth distributes transportation revenue to maintain a state of good repair. The CTB will prioritize funding for state of good repair work based on needs. The prioritization system was developed for HB 2 (Chapter 726, 2014) and will prescribe the projects that will be eligible for the distribution of high priority project funding statewide and for the district grant program. Together, HB 2 and HB 1887 enhance transparency of the funding process and improve the commonwealth’s ability to fund the right projects generating the greatest benefit.

This legislation replaces a 30 year old funds distribution formula put in place by special session legislation in 1986. The new formula will distribute funding as follows:

- State of Good Repair of structures and pavement – 45 percent
- High-Priority Projects Program for key statewide needs – 27.5 percent
- Highway Construction District Grant Programs – 27.5 percent

## Fund Sources

Fund Code	Fund Name	FY 2015	FY 2016
0100	General Fund	\$12,173,953	\$68,141,060
0400	Commonwealth Transportation	\$16,618,113	\$15,413,101
0401	Highway Federal	\$904,624,064	\$890,105,399
0410	Highway Maintenance And Operating Fund	\$1,909,004,067	\$1,977,584,152
0422	Transportation Partnership Opportunity Fund	\$1,038,398	\$1,067,537
0431	Concession Payments Account	\$0	\$0
0436	Powhite Parkway Fund	\$10,000,000	\$10,050,000
0471	Transportation Trust Fund	\$812,833	\$837,654
0472	Highway Construction Fund	\$624,311,677	\$740,239,294
0473	Priority Transportation Fund	\$37,525,897	\$65,913,464
0476	Toll Facilities Revolving Fund	\$17,871,726	\$19,071,166
0719	Commwlth Trans Capital Projects Bond Act Of 2007	\$263,468,508	\$341,600,331
0720	Commwlth Trans Garvee Fund	\$294,600,000	\$375,000,000
0758	U. S. Route 58 Corridor Development Program	\$37,394,391	\$1,416,262
0760	Northern Virginia Transportation District Fund	\$34,609,018	\$35,264,279
0761	Transportation Improvement Set-Aside Fund	\$1,511,484	\$1,515,964
0775	Route 28 Fund	\$7,216,819	\$7,214,819
0782	Coleman Bridge Fund	\$6,000,000	\$6,000,000
0794	Va Federal Highway Reimbursement Anticipation Notes	\$31,718,020	\$7,930,652
0807	Powhite Parkway Extension	\$0	\$0
0980	Northern Va Transportation Auth Fund-2013 Session	\$299,276,334	\$297,081,245
0981	Hampton Roads Transportation Fund - 2013 Session	\$155,928,133	\$159,142,909
1000	Federal Trust	\$7,683,921	\$7,648,803

## Revenue Summary

The Motor Fuels Tax in Virginia is now a Sales Tax, collected at 5.1% on gasoline and 6% on diesel. This revenue is distributed accordingly: 80% to the HMOF, 15% to the TTF, 4% to the Priority Transportation Fund (PTF), and 1% for the Department of Motor Vehicles for administering the collection. The distribution of revenue collected will change in FY 2017 based on the enactment of HB 1887 (Chapter 684, 2015).

Other sources of revenue were also altered by HB 2313 (Chapter 766, 2013) to provide for additional revenue, with new options to help with phasing out the reliance on fuel tax revenue over time. The Retail Sales and Use Tax was increased statewide by 0.3%, with the increase dedicated to transportation. The HMOF receives 0.175% of the 0.3% increase with the remainder provided for intercity passenger rail and mass transit. There was also an incremental sales tax commitment to transportation from the current 0.5% to 0.675% over four years. This incremental commitment was frozen at 0.1% with the increase in the Sales Tax on gasoline that occurred on January 1, 2015. These additional funds are dedicated to the HMOF. With these increases, the Retail Sales and Use Tax becomes the largest revenue source.

The Motor Vehicle Sales and Use Tax was increased from 3.0% to 4.0% effective July 1, 2013, with additional incremental increases through FY 2017 to reach 4.15%. All of the revenue generated by this increase is dedicated to the HMOF. The Motor Vehicle License Fee (\$40.75) also has components that are deposited into the HMOF (\$26.00) and TTF (\$3.00). The TTF also receives 0.5% of the 5.3% State General Sales and Use Tax. Other state revenue sources that make up the transportation budget include: general fund appropriations for specific purposes, toll revenues from specific toll roads, local contributions for specific purposes, and bonds or debt.

By law, these resources must be used to finance the following activities (in order): debt service, support to other state agencies, highway maintenance and operations (including payments to localities), administrative and support services, planning and research, environmental monitoring and compliance, and finally, construction.

## Performance

### Performance Highlights

The past two biennium were periods of challenge for our country, our Commonwealth, and for private and public organizations alike. Despite this challenge, performance for the period has been positive with measure results holding steady to showing improvement.

## Highlights

**Roadway Safety:** The number of traffic crash deaths decreased by about 32% from CY2007 (1,026) to CY2014 (700); deaths are a function of many components including traffic volume, often measured by vehicle miles traveled (VMT), the numbers of licensed drivers and the number of registered vehicles.

**Pavement Condition:** Condition is measured using the Critical Condition Index (CCI), and CCI ratings run from “0” for very poor to “100” for excellent condition. VDOT’s target for interstate highway and primary roadway pavement condition is that at least 82 percent of lane miles are rated fair or better while eliminating road segments with a “30” CCI rating or less. Condition targets have recently been attained for both road systems, but weather conditions over the last two winters have had impact. VDOT’s current target for secondary roadway pavement condition is 63 percent, and the agency continues to work towards that target.

**Bridge Condition:** Condition is measured in terms of the percent of structures not rated as being structurally deficient, based on rigorous inspections. VDOT’s statewide target is that at least 92 percent of the state’s 21,000 structures are not rated as being structurally deficient; that target was achieved a couple years ago and continues to be met. Condition targets have been established at lower levels and the current goals, based on the percent of structures not rated structurally deficient, are: 97% for interstate highways, 94% for primary roads, and 89% for secondary roadways.

## Selected Measures

Measure ID	Measure	Alternative Name	Estimated Trend
501.0013	Institutionalize the business processes and tools supporting the development and implementation of the Six-Year Improvement Program to ensure that they comply with requirements of Section 33.2-214.1 of the Code of Virginia. • Continue public outreach • Monitor the prioritization processes as adopted by the Commonwealth Transportation Board	Project prioritization	Improving
50160401.001.002	Percentage of interstate roadway pavement lane miles rated in fair or better condition	Interstate pavement condition	Improving
50160405.001.004	Percentage of statewide structures rated in good or fair condition.	Bridge condition	Improving
50160402.001.002	Percentage of primary roadway pavement lane miles rated in fair or better condition	Primary pavement condition	Maintaining
50160403.001.002	Percentage of secondary roadway pavement lane miles rated in fair or better condition	Secondary pavement condition	Maintaining
50160404.001.001	Number of traffic crash related deaths on Virginia roadways	Traffic Crash Deaths	Improving
501.0015	Continue developing an integrated corridor management program to improve travel time that incorporates High Occupancy Vehicle (HOV) / Express Lanes, parallel arterial routes, real-time travel information and increased multi-modal options to include parking management systems at Park and Ride facilities, transit and rail through local coordination and key providers.	Integrated corridor management	Improving
501.0014	Continue partnerships to foster local government and citizen involvement: • The District Local Projects Advisory Group (DLPAG) will lead the implementation of strategies to improve local project delivery • Work collaboratively to support the Northern Virginia Transportation Authority (NVTa) and the Hampton Roads Transportation Accountability Commission (HRTAC) • Continue	Engagement	Improving
M501SA13005	Percentage of due projects delivered by their original specified completion date	On-time project delivery	Improving

## Key Risk Factors

Several factors will have a significant impact on the agency over the next four years.

**Governmental mandates and shutdowns:** The current federal transportation authorization, Moving Ahead for Progress in the 21st Century (MAP-21) expired on September 30, 2014 but has been extended through continuing resolution (Highway and Transportation Funding Act of 2015) through July 31, 2015. The time period of this legislation did not provide for any long-term funding commitments and there are currently significant concerns on the future solvency of the Federal Highway Trust Fund. Without sufficient Congressional action, federal reimbursements could be reduced. The impact of a federal budget impasse or shutdown could be significant; VDOT is continuing to monitor developments at the Congressional level.

MAP-21 also introduced a performance component to transportation funding, as states will be asked to set performance targets on certain performance indicators which could result in unfunded mandates.

**Customers:** The population of Virginia continues to age; it is currently estimated to be about 8 million people and is forecasted to approach 9 million in 10 years. This type of change typically impacts the number of licensed drivers, registered vehicles, and vehicles miles traveled which increases demand for our products and services. However, the future use of vehicles and consumption of gasoline, and the impact on gasoline sales based revenues, is unknown at this time based on patterns of use possibly exhibited by the next generation.

**Congestion:** While the vast majority of the state roadway system remains uncongested most of the time, recurring congestion continues to be a problem in urbanized areas during peak travel periods. As economic conditions improve, roadway use and associated congestion typically increases as well.

**Asset Condition:** VDOT continues to maintain and improve roadway pavement and bridge condition towards their respective condition targets and has made progress over the last few years, though severe weather events have been challenging. Roadways and bridges continue to need regular inspection, repair and replacement, and day-to-day wear and tear will increase as the number of vehicles increase and the population grows.

**Weather related events:** VDOT plans for a normalized level of expenditures related to snow and other weather events. Significant weather events can cause unanticipated spending which forces VDOT to make tough decisions on use of available funds, potentially delaying funding of future work.

**Workforce:** VDOT works to mitigate the potential impact of the 15.3% of the classified workforce currently eligible to retire using programs focused on core development, job skills training, and leadership skills enhancement, in conjunction with strategies to retain key talent.

## Agency Statistics

### Statistics Summary

The following statistics provide a comprehensive snapshot of the magnitude of VDOT operations:

### Statistics Table

Description	Value
Number of VDOT construction and maintenance contracts underway (January 2015 Summary of Contract Wor	372
Value of VDOT construction and maintenance contracts underway (January 2015 Summary of Contract Work	3,107
Number of construction and maintenance contracts advertised in calendar year 2014	651
Value of engineering, construction and maintenance contracts advertised in calendar year 2014 (\$M)	1,985

## Management Discussion

### General Information About Ongoing Status of Agency

As we move into the next biennium, the department will continue to emphasize our efforts to plan, deliver, operate and maintain a transportation system that is safe, enables the easy movement of people and goods, enhances the economy and improves our quality of life in Virginia. We will be diligent in preserving the condition of our key infrastructure assets such as pavement and bridges. The agency has made a commitment to maintaining these assets at a specific performance level, and will be developing a plan for routine and capital repair and replacement of major highway assets that involve significant and higher than normal costs.

HB 2 (Chapter 726, 2014) and HB 1887 (Chapter 684, 2015) bring guidance on how we select and fund the construction program projects in Virginia. While collaboratively and cooperatively supporting the Northern Virginia Transportation Authority and the Hampton Roads Transportation Accountability Commission, the department will build the right projects using the appropriate funding mechanism. Leveraging our position as a leader in utilizing technology to provide real-time information to citizens, we will further seek to integrate corridor management to better mitigate congestion, increase accessibility, clear incidents, manage severe weather events, and enhance the movement of traffic in the safest manner possible.

In order to be successful, we will continue to invest in our greatest asset – our people. We will develop programs to ensure our core business has competent talent and continue to develop our leaders of tomorrow. We will leverage technology and research to remain innovative, engage local governments and citizens, continuously seek to improve our processes, and transform how we deliver services and products.

As “We Keep Virginia Moving,” the Virginia Department of Transportation will do its part to ensure Virginia remains one of the best managed states in the country, and one of the best states in which to live and do business.

### Information Technology

#### Major IT investments underway include:

- **House Bill 2 (HB 2) Application:** HB 2 (Chapter 726, 2014), signed by Governor Terry McAuliffe on April 6, 2014 and effective as of July 1, 2014, requires the development of a statewide prioritization process and directs the Commonwealth Transportation Board (CTB) to develop and use

a scoring process for project selection by July 2016. In order to meet this deadline, applications for funding must be submitted starting August 1, 2015. The CTB has indicated that the application process must meet the following criteria:

- Simple and straightforward
- Does not require applicants to invest significant time and resources or require the use of consultants
- VDOT and Department of Rail & Public Transportation (DRPT) staff will be available to provide support and tools for applicants in compiling data and information needed for application
- The application process will be electronic and map-based to facilitate automated population of key data elements

The purpose of this IT project is to develop a simple way for eligible entities to request funding under HB 2 and automate preparation of a data file for further analysis to support project screening, scoring, and selection decisions as part of the Six Year Improvement Program (SYIP) update process. Development of an electronic data intake process is necessary in order to meet the CTB's criteria, accommodate the several thousand project requests that may be submitted for funding under HB 2, meet the very tight timeframe for data intake and preparation for analysis beginning August 1, 2015 and ending October 1, 2015, and reduce the potential for data quality issues.

- **PpM@VDOT:** Project Portfolio Management (PPM) is the management of processes, methods, and technologies used by project managers and program managers to analyze and collectively manage current of proposed projects/programs based on numerous key characteristics. In support of HB 2 and other similar initiatives, VDOT desires a portfolio management solution that will enable optimal utilization of available funding to maximize program delivery and benefits from projects objectively and quantifiably selected through the SYIP process, and to provide tools to aide in the management and execution of the program. Existing technologies supporting this need include the iSYP (Integrated Six Year Plan) Suite of applications. The technical platform for the VDOT SYIP Technology Suite is outdated.
- **Financial Management System (FMS) Sun Set & Data Marts:** The implementation of the Cardinal Project has necessitated the sun setting of both the FMSI and FMSII Financial Systems and retention of business critical data. Sun Setting of these systems in an organized fashion will create greatly reduced operational expenses from Virginia Information Technology Agency (VITA). The FMS Data Marts retain critical data from the FMSI and FMSII Financial Systems and create a Financial Data Store for reporting purposes. The objective of this project is to have the data store information available to VDOT internal systems to merge with Cardinal financial data for business intelligence reporting.
- **Customer Service Center (CSC) System 2.0:** The Customer Service Center Portal 2.0 project enhances the functionality and usability of the Customer Service Center Portal, enables Customer Service Center Agents to better respond to customer inquiries, promotes VDOT's ability to share information throughout the agency, and enhances VDOT's ability to quickly and efficiently respond to citizen requests for roadway service/maintenance.
- **HR Electronic Content Management (ECM) and Workflow Optimization:** This project increases the efficiency and effectiveness of Human Resources (HR) by converting three manual paper-based workflows into an electronic content management system with automated workflows. It improves HR's overall productivity, service levels, and data accuracy while maintaining cost effectiveness and compliance with HR, IT, and records management's regulations, policies, and standards. Secure access to electronic personnel files regardless of time and location enables a culture of collaboration across the enterprise.
- **Project Documentation Management:** This project will develop standardized business process workflows that automate the creation, storage and status designation of construction documents. It will step personnel through designated workflows, storing construction documents in a standard SharePoint repository that will have a standard set of folders for documents at each level of the construction process, from final design through the end of construction.
- **Inventory Module (Cardinal):** The project will replace the WebIMS application with the PeopleSoft Inventory Module. This will integrate the inventory function at VDOT with the Cardinal system. This implementation is required because the current application technology is reaching the end of its productive life, and the business process warrants it be incorporated within the financial system. Microsoft Corporation ended support for Active Server Pages software in 2008. It is no longer possible to make changes to certain sections of the application.
- **Straight Line Diagram (SLD):** The Roadway Network System (RNS) Program provides the means of tracking and managing Virginia's road inventory and associated assets and attributes in a tabular, linear, and geospatial context. One of the most effective methods to visualize multiple data elements along a route is with a straight line diagram. The Traffic and Engineering Division is requesting a replacement to the existing SLD application. The existing SLD does not provide all of the functionality required from the creators of the data or users of the data. Technology improvements now make this functionality available, which will improve the efficiency of managing the data, enhance the quality of the data, and advance the usability of the data.
- **Traffic Data Performance Management System:** Implement iPeMS, (Iteris Performance Management System), the selected COTs product, to archive and support analysis of VDOT's traffic performance related data. The iPeMS extracts information from real-time intelligent transportation systems (ITS) data and other sources, processes it, and stores the information in a data warehouse where it is available to users in various forms for analysis.
- **PreConstruction/CRLMS Project:** Implement Web Transport system to manage project and proposal information, automate processes, produce reports and provide a Civil Rights Labor Management System (CRLMS) to collect and process data required for Federal and State Civil Rights and labor compliance.

#### Information Technology Plans/Needs

- **Highway Maintenance Management Solution:** Commercial Off The Shelf (COTS)-based solution to replace the VDOT Asset Management System (AMS) to improve the planning, implementation and evaluation of the statewide Maintenance Program.

### **Workforce Development**

The department is authorized a maximum employment level of 7,485 and, as of June 1, 2015, employed 7,140 classified staff for a calculated vacancy rate of 4.6%.

With the dynamic nature of VDOT's workforce, the areas of recruitment, development and retention are of paramount importance to the agency. VDOT is actively accessing and preparing for the challenges resulting from the potential separation of the 15.3% of classified workforce who are currently eligible to retire. A new program, Leadership and Enhancement Development Program (LEAD), has been introduced which is targeted for middle and senior managers. VDOT's LEAD program focuses on performance enhancement, individual assessments, peer coaching, role exchanges and hot topics in transportation and leadership.

VDOT has also launched a Leadership Development Program for Teammates and Supervisors. This dynamic program is presented via online and classroom offerings focused on critical leadership competencies for success. Other areas of focus include the mapping on career paths within the agency and the continued delivery of technical training across the agency.

### **Physical Plant**

In addition to the capital investments that the department manages for the highway network, the agency must ensure that its 2,700 facilities in over 350 statewide work locations, of which more than 20% are more than 50 years old, are safe and adequate for VDOT employee and contractor use. As part of its business planning, the department is only pursuing new capital outlay and maintenance reserve projects that have already been planned through the Capital Outlay Six Year Planning process.

For the prior biennium, the 2013 General Assembly approved \$39 million to be available July 1, 2015 that addressed capital needs of more than 30 identified projects. All but 13 of those projects have been initiated.

For the upcoming biennium, planned Capital Outlay allocations are \$39 million in fiscal year 2017 and will exceed \$40 million each year for fiscal years 2018, 2019, 2020 and 2021.

The need for preventive maintenance and replacement of facilities will continue as buildings exceed their useful life and/or problems arise. New facilities and/or renovations of existing facilities are needed to ensure efficiency and effectiveness of program operations. Planned future allocations are for new facilities (capital outlay) and repair and replacement of major systems and structural components in existing facilities (maintenance reserve).

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