



2017 BUSINESS PLAN UPDATE

2017 Business Plan Update

Commissioner's Message



I am pleased to present the Virginia Department of Transportation's Business Plan update for fiscal year 2017 (FY17). The plan outlines this year's objectives as we pursue our constant mission:

To 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.

VDOT is committed to staying the course toward excellence. As such, the action items in this year's plan remain nearly identical to FY16, but show forward progress through the stages of the development cycle:

- Develop – Do the research, and develop a plan
- Implement – Roll out the new product, program, process or tool
- Institutionalize – Ingrain changes throughout the agency
- Monitor – Track performance and make adjustments as necessary

As VDOT sees each action item through to successful completion, we do our part to ensure the quality of Virginia's transportation system. Our work helps to ensure that Virginia is among the best states in the country to live, work and visit.

I look forward to seeing your accomplishments unfold in FY17.

Charles A. Kilpatrick, P.E.

Commissioner of Highways

Table of Contents

Commissioner’s Message	
Mission, Values, Ethics	1
Governor’s Enterprise Strategic Priorities for Transportation	2
Accomplishments	3
Core Metrics	4
District Performance Report	5
Business Support Performance Report	6
VDOT Goals	7
Business Plan Development Cycle	8
Goal 1: Plan	9
Goal 2: Deliver	13
Goal 3: Operate	17
Goal 4: Maintain	20
Goal 5: Support	22
Appendix A: Commissioner’s Executive Agreement	30
Appendix B: Governor’s Enterprise Strategic Priorities	32
Appendix C: District Performance Measure Definitions	33
Appendix D: Business Support Performance Measure Definitions	34
Appendix E: Action Item Phase Changes	35
Photo Information	36

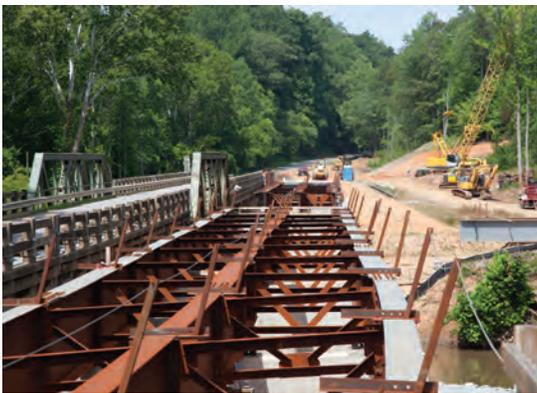
Mission, Values, Ethics

MISSION

Our mission is to 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.

SHARED VALUES IN PUBLIC SERVICE

- Be responsive to customer needs, consider what VDOT does in terms of how it benefits our customers and treat customers with respect, courtesy and fairness
- Commit to safety and continuous improvement in everything we do, learning from mistakes and successes alike
- Trust, respect, support and encourage each other
- Respect and protect the public investment
- Make decisions based on facts and sound judgment and accept accountability for our actions
- Strengthen our expertise in using information, tools and technology to achieve high performance and stay on the cutting edge
- Think ahead, acting and planning creatively for today and tomorrow



CODE OF ETHICS

As an employee of the Commonwealth of Virginia and the Virginia Department of Transportation, I will:

- Commit to be a trusted steward of public resources
- Act with integrity in all relationships and actions in the work environment
- Abide by Virginia's Standards of Conduct for employees
- Not engage in conflicts of interest between my private interest and my professional role
- Not accept or give gifts in violation of the State and Local Government Conflict of Interests Act
- Not knowingly make a false or fraudulent statement
- Not knowingly conduct or condone any illegal or improper activity

2017 Business Plan Update

Governor’s Enterprise Strategic Priorities for Transportation

Starting in 2014, Governor McAuliffe designated Enterprise Strategic Priorities for each of his Cabinet Secretaries. He also required each executive branch agency head sign an executive agreement that outlined his priorities for that agency. The intent of those agreements is to improve the effectiveness of state government by holding leaders accountable for improving agency performance, focused within key specified areas that support the larger goals of the Governor and his administration. A full copy of the Commissioner’s Executive Agreement is included as Appendix A and an overview of the Governor’s Enterprise Strategic Priorities is included in Appendix B. The Governor’s three transportation goal areas are:

Prioritization: Develop a transparent, data-driven prioritization model to help determine allocations of transportation funding and ensure ongoing accountability.

Multi-Modality: Expand the role of non-highway modes of transportation in the Commonwealth’s transportation network.

Engagement: Guarantee that local governments and citizens play a meaningful role in transportation decision-making.

Governor’s Enterprise Strategic Priorities Progress

	Agency Key Measures	Agency Progress	Business Plan Update (FY17) Action Items
Prioritization	Ensure internal processes are developed and implemented effectively to comply with the requirements of House Bill 2 and ensures stakeholder engagement.	Developed and implemented new processes, including public engagement and prioritization components. Employed processes in development of FY17-22 SYIP.	Action Item 1.1.1
	Statewide bridge condition: Percentage of statewide structures not rated structurally deficient.	FY16: All bridges: 94.7%, VDOT bridges: 95.0% (Target: 92%) - Source: VDOT Dashboard (7/7/16)	Action Items 4.1.1, 4.1.2
	Interstate roadway: Percentage of roadway pavement lane miles rated in fair or better condition.	FY16: 89.8% (Target: 82%) Source: VDOT Maintenance Division	Action Item 4.1.2
	Primary roadway: Percentage of roadway pavement lane miles rated in fair or better condition.	FY16: 83.9% (Target: 82%) Source: VDOT Maintenance Division	Action Item 4.1.2
	Secondary roadway: Percentage of roadway pavement lane miles rated in fair or better condition.	FY16: 60.2% (Target: 63%) Source: VDOT Maintenance Division	Action Item 4.1.2
Multi-Modality	Develop an integrated approach to improve travel time on corridors such as Interstate Highways 64, 66, 81 and 95 that incorporates HOV/Express lanes, parallel arterial routes, real-time travel information and increase multi-modal options to include Park and Ride facilities, transit, rail, sidewalk, and bicycle solutions through local coordination and key providers.	On track with initiatives to expand multi-modal transportation options, including integrated approaches in key corridors. Based on needs assessments, developed and adopted a Transportation Technology Plan that includes pilot and statewide programs to enhance the efficiency, safety and convenience of all modes of transportation. Also on track with initiative to expand the role on non-highway modes of transportation such as rail, transit, pedestrian and bicycle solutions.	Action Item 3.1.1
Engagement	Form partnerships to improve local government and citizen involvement by: <ul style="list-style-type: none"> Establishing a District Local Project Advisory Group (DLPAG) Supporting the Northern Virginia Transportation Authority (NVTA) and Hampton Roads Transportation Accountability Commission (HRTAC) as requested Developing additional interactive online resources to increase public participation 	Established the DLPAG and worked with the Local Projects Stakeholders Group to identify and prioritize top strategies for improving local project delivery. VDOT, NVTA, the Hampton Roads Transportation Planning Organization and the Department of Rail and Public Transportation actively collaborate to establish local planning, programming and prioritization support. Launched public-facing websites to provide information and collect feedback.	Action Items 2.3.4, 1.2.2, 5.4.6
Public Safety*	Number of traffic crash related deaths on Virginia roadways.	2015 Crash Fatalities: 753 (Goal per Commissioner’s 2014-2016 Executive Agreement is no more than 631) Source: Department of Motor Vehicles / Virginia Highway Safety Office, 2015 Virginia Traffic Crash Facts	Action Items 1.3.1, 1.3.2, 3.2.1, 3.2.2, 3.2.3

* The Public Safety goal area (*Public Safety: Protect our citizens and ensure everyone lives in a safe community*) is not one of the Governor’s three transportation goal areas. The Public Safety goal area is included here due to VDOT’s important role supporting its attainment.

2017 Business Plan Update

Accomplishments

In order to provide and maintain a safe transportation system that enables the easy movement of people and goods, VDOT continues focusing on “State of Good Repair” of existing infrastructure, providing affordable solutions to address citizens’ needs, improving highway safety and fostering multi-modal solutions to reduce traffic congestion.

VDOT’s recent achievements and progress include:

PLAN

- Completed first SMART Scale (HB2 2014) prioritization scoring process, which resulted in 321 transportation projects proposed around the Commonwealth
- Agreed upon a plan with regional partners to reduce congestion on I-66 inside the DC Beltway
- Received additional \$55.5 million in federal funds previously allocated to other states
- Planned improvements to help reduce congestion at entry and exit locations to I-95 Express Lanes

DELIVER

- Completed the \$75 million Virginia Capital Trail Project from Richmond to Jamestown



- Named 2016 Transportation Owner of the Year by Design-Build Institute of America
- Started first segment of the widening of I-64 in Hampton Roads
- Completed a nearly \$75 million pavement rehabilitation of I-264 in Hampton Roads

- Replaced several bridges, notably:
 - Rt. 340 over Gooney Creek
 - Rt. 83 over Cranes Nest River
 - Rt. 6 over Hardware River

OPERATE

- Began replacing three aging safety rest stops (two in Ladysmith and one in Skippers)
- Responded to major rain, tornado and snow events across the Commonwealth
- Introduced a new type of traffic signal with a flashing yellow arrow at various locations in each District



- Received two awards recognizing highway safety improvement projects from the Roadway Safety Foundation and the Federal Highway Administration

MAINTAIN

- Repaired 244,067 potholes after Winter 2015-16
- Performed 13,088 lane miles of

paving on interstate, primary and secondary roadways over last 12 months

- Continued Pollinator Habitat Program that received the Virginia Green Travel Star Award
- Launched new accelerated pavement testing program to better evaluate materials response to load testing
- Began making improvements to guardrail safety based on analysis of crash data

SUPPORT

- Implemented Facility Management Program focusing on preventative maintenance, repairs, alterations and improvements
- Enhanced the Core Development Program, providing more field opportunities for these new hires
- Enhanced the Leadership Enhancement and Development program, adding a formal mentoring component
- Established Office of Technology Strategic Planning that will develop a long-term vision for utilizing technology at VDOT
- Developed and launched “Customer Care” training
- Hosted career fairs and unity events statewide
- Launched public-facing websites, including SMART Scale site where public entities can submit transportation project applications

2017 Business Plan Update

Core Metrics

The public judges VDOT performance by our ability to plan, deliver, operate and maintain highways in the manner they expect, represented by the measures below. VDOT's annual Business Plan contains Goals, Objectives and Action Items that focus on enhancing our performance.

Highway Safety		CY15 Target	Desired Trend	CY12	CY13	CY14	CY15
Number of traffic crash injuries and deaths on Virginia Highways	Serious Injuries	6,011	↓	10,129	8,650	7,585	8,014
	Fatalities	669	↓	775	741	700	753

Bridge Condition		FY16 Target	Desired Trend	FY13	FY14	FY15	FY16
Percentage of structures not rated "structurally deficient"	Interstate	97%	↑	97.5%	97.6%	97.9%	98.3%
	Primary	94%	↑	95.1%	95.3%	95.6%	96.0%
	Secondary	89%	↑	91.0%	91.5%	92.4%	93.8%

Pavement Condition		FY16 Target	Desired Trend	FY13	FY14	FY15	FY16
Percentage of roadway pavement rated in "fair" or better condition	Interstate	82%	↑	84.0%	85.0%	88.0%	89.8%
	Primary	82%	↑	83.3%	82.8%	81.2%	83.9%
	Secondary	63%	↑	59.6%	60.7%	59.9%	60.2%

Project Delivery		FY16 Target	Desired Trend	FY13	FY14	FY15	FY16
Percentage of all projects planned for completion that were completed on-time or on-budget	On-Time	77%	↑	80.4%	80.8%	84.3%	84.1%
	On-Budget	85%	↑	88.8%	91.3%	88.7%	98.1%

2017 Business Plan Update

District Performance Report

VDOT has nine construction districts that execute our programs. The public judges VDOT performance on our ability to plan, deliver, operate, maintain and support highways in the manner they expect. FY2016 district performance targets and results are represented in the chart below.

Measure	FY16 Target	State-wide	Bristol	Culpeper	Fredericks-burg	Hampton Roads	Lynch-burg	Northern Virginia	Richmond	Salem	Staunton
Project Development											
Advertisement On-Time: VDOT-Managed Projects	70%	89%	92%	89%	86%	86%	92%	87%	91%	88%	88%
Advertisement On-Time: Locally-Managed Projects	70%	73%	88%	58%	100%	72%	100%	51%	77%	94%	74%
Cost Estimation VDOT-Managed Projects	74%	88%	90%	83%	100%	91%	91%	89%	89%	97%	61%
Project Delivery											
On-Time: All Projects	77%	84%	93%	79%	83%	96%	82%	72%	72%	90%	91%
On-Time: Construction	77%	83%	86%	78%	80%	100%	89%	70%	82%	80%	90%
On-Time: Maintenance	77%	84%	100%	80%	85%	94%	80%	73%	69%	91%	91%
On-Budget: All Projects	85%	98%	100%	97%	100%	98%	97%	94%	99%	98%	98%
On-Budget: Construction	82%	96%	100%	89%	100%	100%	100%	95%	94%	100%	90%
On-Budget: Maintenance	90%	98%	100%	100%	100%	97%	97%	93%	100%	98%	100%
Environmental Compliance 95-99.9% = Yellow	100%	99.4%	98.7%	99.3%	100%	100%	100%	99.2%	97.8%	99.0%	99.3%
Construction Quality Improvement Program	91%	95.1%	94.8%	97.4%	93.4%	93.7%	96.2%	95.8%	94.8%	94.5%	96.2%
Work Zone Crashes	N/A	2,531	85	179	164	555	61	776	449	161	101
Maintenance											
Maint. Spending: Expenditures vs. Plan	Statewide FYE carryover target <\$100M	105%	110%	107%	103%	104%	96%	123%	109%	93%	114%
Maint. Spending: Expenditures vs. Allocation		98%	109%	109%	95%	100%	89%	113%	101%	88%	112%
Pavement: Interstate	82%	89.8%	92.4%	97.1%	100%	95.8%	N/A	93.3%	79.4%	89.9%	89.6%
Pavement: Primary	82%	83.9%	82.0%	80.0%	84.6%	89.8%	82.6%	86.8%	78.5%	82.8%	91.9%
Pavement: Secondary	63%	59.9%	54.5%	60.9%	64.1%	75.9%	69.0%	30.8%	56.8%	63.0%	66.6%
Bridges: All VDOT	92%	95.0%	94.0%	95.6%	91.6%	96.8%	94.8%	98.2%	93.5%	95.1%	94.8%

Key: ■ Meeting or exceeding target ■ Not meeting target ■ Environmental Compliance: 95 - 99%
 Please see Appendix C for definitions of VDOT's district performance measures.

**Data as of July 2016 reporting

2017 Business Plan Update

Business Support Performance Report

The divisions and offices comprising VDOT’s business support units provide key administrative, operational, engineering and technical support to VDOT field units. These units are focused on enabling and enhancing the department’s ability to deliver quality products and services to the public with a high degree of accuracy, timeliness and customer satisfaction. Strong performance from business support units is a priority; performance measurement of these units continues to evolve, as represented by the high-level measures in the table below.

	Measure	FY16 Target	FYE FY16 Results
Financial	Tolling Violation Backlog	50% Reduction	63%
	Agency Spending Planned vs. Actual Spending: Administration, Construction, and Maintenance and Operations	(+/-) 5%	1.3%
		(+/-) 5%	0.6%
		(+/-) 10%	-0.6%
	Construction Cash Balance Planned vs. Actual	(+/-) 15%	8.4%
	Highway Maintenance and Operating Fund Cash Balance Planned vs. Actual	(+/-) 15%	1.8%
	All Non-Federal Billings: Accounts Receivable	75%	96%
	All Non-Federal Billings: Accounts Receivable - Property Damage	65%	58%
	Project Phase Close-Out Backlog	4,384 Reduction/FY	3,337
Final Voucher Backlog	720 Reduction/FY	224	
Federal Obligations Current Plan vs. Annual Plan	100%	137%	
Policy	National Environmental Policy Act (NEPA) Process Complete	85%	87%
	Permit Determination	85%	74%
	Permit Acquisition Non-Reporting	70%	77%
	Permit Acquisition Reporting	50%	41%
	On-Time Advertisement of Locally-Managed Projects	70%	81%
	Clear Right-of-Way On-Time	90%	92%
	On-Time Project Certifications	90%	96%
	Utility Estimates Approved On-Time	90%	89%
Administration	Contracts Awarded On-Time	90%	79%
	On-Time Capital Outlay	78%	73%
	On-Budget Capital Outlay	90%	94%
	On-Time Delivery of Information Technology Projects	80%	65%
	On-Budget Delivery of Information Technology Projects	80%	80%
	Scope Delivery in Information Technology Projects	80%	85%
	Information Technology Budget	(+/-) 5%	-1%
	Research Projects Implemented On-Time	75%	53%
	Research Projects Implemented On-Budget	75%	68%
	Drainage Complaints	≤ 5% of all Calls	5.0%
	Telework Participation	20%	19.66%
	Vacancy Rate	2.5%	2.0%
	Americans with Disabilities Act/ Section 504 Compliance	1400 Ramps/FY	1,418
	Disadvantaged Business Enterprise (DBE) Participation	10.53% - 13.5%	8.63%
	Small, Woman-Owned and Minority Goal	42%	39.75%

Key: ■ Meeting or exceeding target ■ Not meeting target

Please see Appendix D for definitions of VDOT’s business support measures.

**Data as of Fiscal Year End 2016 reporting

2017 Business Plan Update

VDOT Goals

The VDOT Business Plan Update (FY17) is structured around five key performance areas: Plan, Deliver, Operate, Maintain and Support. This framework, referred to as PDOMS, provides a structure to organize the agency's responsibilities, activities, processes and programs and to ensure that all efforts are properly aligned with the overall mission. Each performance area is expressed as a goal, and each goal is supported by objectives and action items.



PLAN

Use transparent, data-driven prioritization models to help determine allocations of transportation funding and ensure ongoing accountability, plan programs, projects and services to deliver a safe and reliable multi-modal transportation system



DELIVER

Effectively engage the public and local governments in preliminary engineering and project development activities, programs and services through the construction of transportation system projects that support multi-modal solutions.



OPERATE

Ensure efficient use and provide capacity solutions to the existing transportation system and services to meet customer demand and expectations of a system that is safe and reliable and to enable the easy movement of goods and people across all modes.



MAINTAIN

Use a systematic, needs-based process to effectively manage our assets, preserve and maintain the condition of the transportation system and safely maximize existing resources.



SUPPORT

Efficiently and effectively provide the appropriate tools, guidance and processes that enable core programs and services to meet their objectives, maximize the use of human resources, funding, information, and time, as well as encourage citizen awareness and participation in transportation decision-making.

Business Plan Development Cycle

To meet our goals, VDOT is committed to specific actions. Most represent initiatives that will take several years for full implementation. These initiatives are in various stages of the development cycle: develop, implement, institutionalize and monitor. Following this iterative cycle ensures continual improvement in these areas.



Each action item in the Business Plan goes through a development lifecycle. For each initiative, the first stage is to develop a plan. The next stage is to create tools and processes to implement the plan. The third stage is to institutionalize the new product, program or process throughout VDOT. The final stage is to monitor performance and make adjustments as necessary.

Each action item in this business plan is preceded by a symbol that indicates the phase it is in as of the outset of FY17:



Develop: Do the research, and develop a plan

- Determine need for the initiative, develop problem statement, determine expected benefits and how impact will be measured
- Identify an executive champion for the initiative
- Develop an implementation plan, including milestones and dates
- Secure needed resources



Implement: Roll out new products, programs, process or tools

- Execute the implementation plan and monitor progress
- Schedule and conduct reviews; conduct user testing
- Develop training materials and schedules



Institutionalize: Ingrain changes throughout the agency

- Announce new product, program, process, system, tool, policy or organizational change
- Communicate expectations
- Continually provide guidance and training, especially to new employees
- Launch feedback mechanisms
- Measure impact through quantitative or qualitative methods



Monitor: Track performance and make adjustments as necessary

- Identify anticipated and unanticipated impacts of the initiative
- Quantify impacts of the initiative, including where applicable, costs, benefits and returns on investment
- Monitor feedback and performance
- Take steps and make changes as needed for continual improvement

2017 Business Plan Update

Goal 1: Plan

Use transparent, data-driven prioritization models to help determine allocations of transportation funding and ensure ongoing accountability, as well as plan programs, projects and services to deliver a safe and reliable multi-modal transportation system.

Planning includes monitoring existing conditions and forecasting future growth; engaging stakeholders through Metropolitan Planning Organizations, Planning District Commissions and local governments; identifying needs; and short and long range planning and prioritizing, programming and funding programs (Transportation Improvement Program, Statewide Transportation Improvement Program and Six-Year Improvement Program).

A prosperous and vital future for Virginians is dependent upon careful and thoughtful planning.

The development and implementation of transportation plans are conducted via a cooperative process including VDOT and Metropolitan Planning Organizations (MPOs). It brings together all users of the system, to identify a need and generate a project idea, including transit agencies, the business community, community groups, environmental organizations, the traveling public and freight operators.

Effective planning requires the consideration of policies and legislation, land use, economic data, multi-modal transportation assets and safety data. These inputs monitor existing conditions, forecast future growth and land use and identify current and future transportation problems and needs. These needs are documented in long-range plans and short-range programs. Ultimately, for VDOT, the result is a prioritized, programmed (funded) and approved Six-Year Improvement Program.

TRANSPARENT PLANNING

Develop a nimble and evolving Six-Year Improvement Program adaptable to changes and properly linked to land use and economic development opportunities that ultimately delivers a transportation system of optimal benefit to the citizens and traveling public.

ACTION ITEM



1.1.1 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 §33.2 of the Code of Virginia.

- **Continue public outreach**
- **Monitor the prioritization processes as adopted by the Commonwealth Transportation Board (CTB)**

Prioritization optimizes development of the transportation system by ranking projects based on relative benefit to the public. Increased transparency and use of criteria-based project selection during the creation of the Six-Year Improvement Program

(SYIP) ensure stakeholders better understand how transportation funding decisions are made.

VDOT, the Department of Rail and Public Transit ((DRPT) and the Office of Intermodal Planning and Investment (OIPI) developed and implemented simplified, effective and transparent business processes and tools to support the development of the SYIP, in compliance with Section 33.2 of the Code of Virginia. After implementing the new prioritization processes as adopted by the CTB, we monitored public and stakeholder feedback on the process.

In FY16, VDOT completed its first round of highway project identification and prioritization utilizing its new “SMART Scale” and “State of Good Repair” processes. Public entities throughout the commonwealth proposed more than 300 projects for consideration in the “SMART Scale” prioritization process.

Public input from submissions and public meetings were considered in developing the FY17-22 SYIP; 163 projects were selected for funding through “SMART Scale,” and 164 were selected through “State of Good Repair.” Some elements

2017 Business Plan Update

Goal 1: Plan ... continued

of the prioritization process are being revised based on Lessons Learned from Round 1 and will be implemented in Round 2, beginning August 1, 2016.

STAKEHOLDER ENGAGEMENT

Ensure that local governments and citizens play a meaningful role in transportation decision-making.

ACTION ITEMS

1.2.1 Enhance the content, format and accessibility of public meetings with local, regional, state and federal stakeholders to provide interactive information sharing and public education of transportation funding and the Six-Year Improvement Program.

VDOT is committed to increasing public engagement, providing easier access to public meetings while offering more options for citizens to participate (notably in SYIP meetings). The public’s ability to access and use this information will

continue to be improved, as will public understanding of the project funding and programming process.

In FY16, VDOT employed new strategies for enhancing the content, format and accessibility of public meetings. Focus shifted to collecting recommendations submitted by public entities through recently adopted public-facing tools, like those developed for Action Item 1.1.1. For public meetings held during the fall of 2015, the content centered on the public’s submissions for potential transportation projects; a “town-hall” style format was utilized, and nine meetings were held throughout the commonwealth.

The way government interacts with citizens is evolving, and VDOT strives to lead the way. In addition to traditional public meetings, we will continue to look for new ways to expand dialog with citizens through technologies and social media.



1.2.2 Work collaboratively to support the Northern Virginia

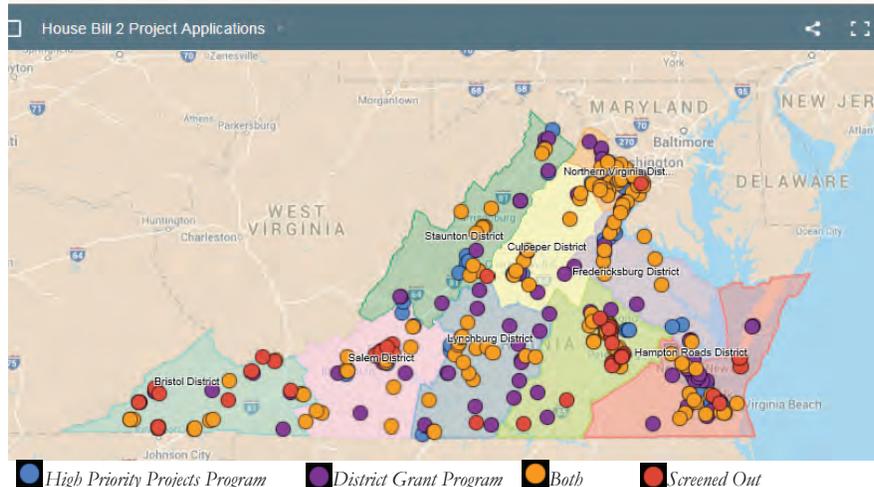
Transportation Authority (NVTA) and the Hampton Roads Transportation Accountability Commission (HRTAC).

VDOT’s collaborations with NVTA and HRTAC have positively impacted these authorities’ abilities to deliver on their missions -- long range planning to address regional and local transportation challenges. Notably, VDOT provides objective data, including cost and schedule estimates, for use in financial, project and constrained long-range planning.

VDOT provides quantitative analysis of potential projects to assist in the comparison of congestion impact of potential highway projects, transit projects and project updates. VDOT also provides programming assistance (e.g., for Congestion Mitigation Air Quality and Regional Surface Transportation programs).

These collaborations increase objectivity and transparency in transportation planning and help progress high-priority regional transportation projects.

VDOT will solicit feedback from NVTA and HRTAC executives to assess satisfaction with VDOT’s support, and to identify additional means of enhancing collaboration.



2017 Business Plan Update

Goal 1: Plan ... continued

PUBLIC SAFETY

Identify opportunities early in the planning process to reduce fatal and serious injury crashes that occur on Virginia’s highways.

ACTION ITEMS



1.3.1 Maximize the programming and construction of Strategically

Targeted Affordable Roadway Solutions (STARS) program recommendations to address safety and congestion challenges on high fatality and serious injury incident corridors and intersections, based on available funding.

The establishment of the STARS program ensured that there is a process in place to identify and fund affordable efforts that can be undertaken to increase safety and reduce congestion. STARS program projects have been implemented and efforts are currently focused on both congested and high crash locations on Virginia’s highway system.

VDOT’s Transportation Mobility and Planning Division (TMPD) reviews the SYIP to monitor STARS recommendations that have been advanced to the SYIP; 23 percent of submissions had a recommendation advance in 2014, and 50.2 percent in 2015. The goal is for at least 50 percent of STARS studies resulting in SYIP projects through 2018.

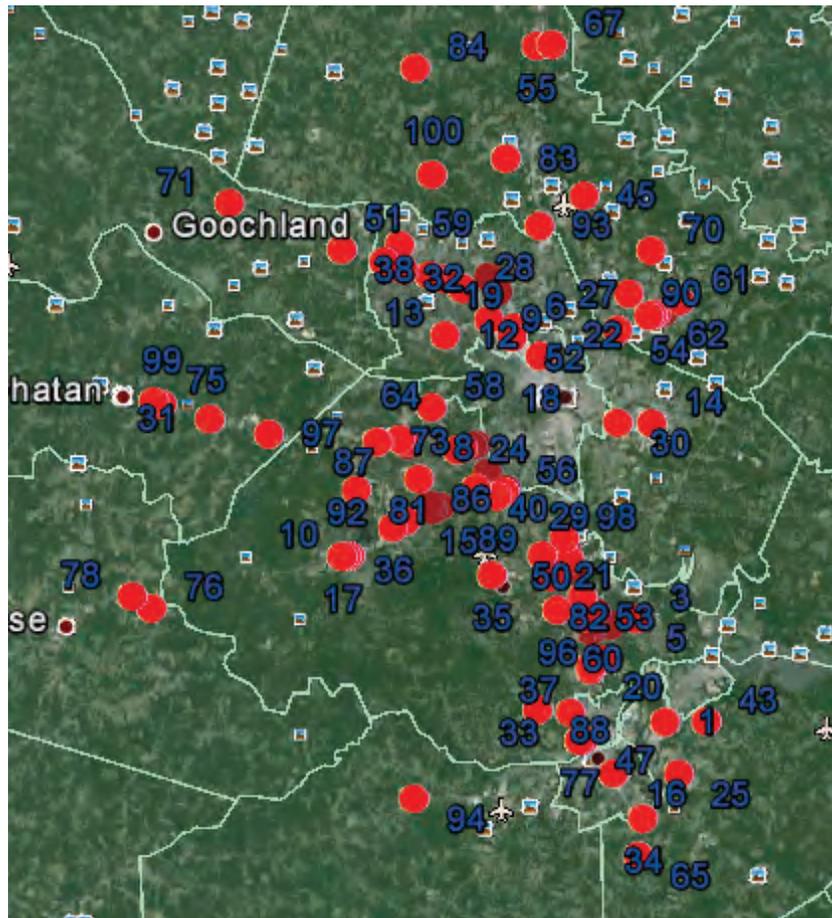


1.3.2 Ensure Highway Safety Improvement Plan (HSIP) funding is

applied to the highest priority safety needs to maximize the reduction of severe injuries and fatalities within a district given the investment. Continue monitoring before-and-after results for each project to assess the degree to which serious accidents and fatalities are reduced as a result of the project.

The HSIP targets resolving safety issues at high crash or “Hot Spot” locations. A six year plan for safety projects has been developed and adopted. Enhanced data has been made available for improved reporting and decision-making, through “Hot Spot” analysis.

In 2016, VDOT received national accolades for our “Hot Spot” analysis methodology and will continue to align HSIP funding with needs identified through data-driven analysis (action item 3.2.1 is part of this process).



Top 100 Intersections: Hot-Spot Analysis for Richmond District from 2011-2013

2017 Business Plan Update

Goal 1: Plan ... continued

Before-and-after analyses that track the impact of safety projects are being performed and will continue to be presented to VDOT leaders on a regular basis.

VDOT's Traffic Engineering Division will continue to assess the success of this program based on the percentage reduction in fatalities, serious injuries and total injuries where HSIP projects are completed.

Since 2003, 149 highway safety projects have been deployed; at these locations fatal crashes have decreased by over 57 percent and injury crashes have decreased by over 38 percent. In FY2017, targets will be developed in concert with the implementation of Federal Safety Performance Measures.



CUSTOMER SERVICE AND ECONOMIC OPPORTUNITY

Improve VDOT's services and interactions with customers and partners to promote development and economic opportunities in Virginia.

ACTION ITEM



1.4.1 Enhance land development services.

- Leverage technology to improve online interaction (i.e. online plan and fee submittal)
- Facilitate a multi-modal (bike, pedestrian and transit) approach in coordination with the Department of Rail and Public Transportation and other stakeholders

During FY16, services and related communications were improved, leading to reduced plan review times for VDOT's external customers. Improvements included

enhanced information being sent to the Department of Rail and Public Transportation related to multi-modal projects, holding pre-application meetings with the Land Development applicant/ locality and using Standardized Checklists to provide more efficient and consistent plan reviews.

In FY17, results from FY16 will be used as a benchmark for the identification and implementation of additional improvement opportunities.

Progress will be evaluated by tracking VDOT review time for Construction and Site Plans, the cycle time from initial receipt of Construction and Site Plans until final approval, the number of VDOT Land Development transactions completed online and the percent of street acceptance projects for which pre-application meetings are held.



2017 Business Plan Update

Goal 2: Deliver

Effectively engage the public and local governments in preliminary engineering and project development activities, programs and services through the construction of transportation system projects that support multi-modal solutions.

Delivery includes preliminary engineering (project scoping, evaluation of environmental impacts, obtaining comments, developing plans, specifications and estimates), right of way acquisition and construction project activities (mobilization, maintenance of traffic, construction and inspection).

Once the Six-Year Improvement Program is approved by the Commonwealth Transportation Board, VDOT begins the process to deliver projects.

Effective and seamless delivery relies on coordination and partnerships with other state entities, federal agencies, localities and industry partners; as well as coordination between the Central Office and the District Offices. To deliver transportation solutions that consider safety, congestion and environmental concerns, VDOT follows a process including many activities that culminate in preliminary engineering, right of way acquisition and construction project activities.

As a project matures from design and moves toward advertisement, the requisite real estate is acquired for constructing the facility. After construction contracts are awarded, the construction phase begins and localities and VDOT's industry partners mobilize to complete quality projects on time and on budget.

MULTI-MODAL OPPORTUNITIES

Guarantee that local governments and citizens have the opportunity to play a meaningful role in transportation decision-making; strengthen coordination and partnerships with state and federal agencies, localities and industry to support project delivery; and support multi-modal solutions that expand the role of non-highway modes of transportation in the commonwealth's transportation network.

Additionally, the committee will develop processes to enhance coordination and review with DRPT, focused on incorporating multi-modal solutions into the SYIP.



ACTION ITEMS



2.1.1 Continue to work with Department of Rail and Public Transportation (DRPT) to ensure rail and transit elements are included in highway projects, and document this as part of the Six-Year Improvement Program (SYIP) process.

VDOT is committed to enhancing partner engagement in the integration of Transportation Demand Management (TDM) strategies, including rail and transit, in the SYIP. A steering committee comprised of members from VDOT and DRPT was established to actively identify TDM solutions.



2.1.2 Monitor the ongoing process developed with local governments and advocacy groups to expand opportunities to integrate pedestrian and bicycle solutions into projects.

The Statewide Bicycle and Pedestrian Advisory Committee identifies opportunities for incorporating bicycle and pedestrian initiatives into the SYIP, and comments on aspects of bicycle and pedestrian components of projects already in the SYIP.

The Committee meetings provide a structured venue for VDOT to share information on, and receive feedback about, VDOT projects and activities. Communications

2017 Business Plan Update

Goal 2: Deliver ... continued

and relationships with localities and other stakeholders have been enhanced by the engagement that this Committee fosters, and four meetings are planned to be scheduled each year.



ENVIRONMENTAL COMPLIANCE

Facilitate environmental protection through regulatory compliance.

ACTION ITEMS



2.2.1 Assess the success of the Environmental Commitments and Compliance Assistance Program.

The Environmental Commitments and Compliance Assistance Program has been implemented and, beginning March 2016, quarterly results reporting are being published. To assess the program, VDOT's Environmental Division will track the number of projects in the program and compare this with the number of projects eligible for the program. Based on this comparison, the Environmental Division will, quarterly, identify a percentage of projects that are under compliance review.



2.2.2 Monitor compliance of VDOT's storm water management compliance and monitoring program.

This action item formulated and implemented a Municipal Separate Storm Sewer System (MS4) organization to address findings from an Environmental Protection Agency (EPA) inspection, to help meet increasing regulatory demands, and to assure VDOT remains permit compliant in the future.

VDOT's Location & Design Division led the establishment of the new MS4 Organizational Framework and hired staff to support this organizational structure. This structure improved communication and oversight of the program and strengthened existing working relationships with the Virginia Department of Environmental Quality (VDEQ) and the EPA.

In FY17, the MS4 Program moves into the monitoring phase with a main goal of sustaining performance of necessary activities to ensure program compliance.

Next steps include:

- Obtaining VDEQ acceptance of VDOT's FY16 Annual MS4 Report under our general permit with no major objections or exceptions.
- Submitting quarterly reports to the EPA describing VDOT's oversight of its statewide MS4 program compliance

- Complete nine of the ten specific mitigation projects that are part of reconciliation of the 2012 EPA inspection/audit.



ACCOUNTABLE PROJECT DELIVERY

Integrate continuous improvement techniques in project delivery processes to improve performance.

ACTION ITEMS



2.3.1 Create efficiencies in the Construction Engineering and

Inspection program to optimize the level of inspection and better align Construction Quality Improvement Program (CQIP) reviews to assess quality of the final constructed product.

VDOT continues working to enhance internal efficiencies, focused on improving the quality of constructed products.

2017 Business Plan Update

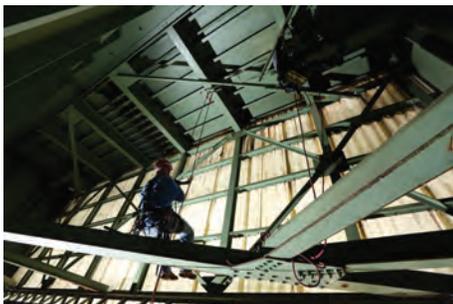
Goal 2: Deliver ... continued

In FY16, a task force was assembled to identify ways to better align CQIP reviews to assess quality of the final constructed product. VDOT also developed a new position, the Construction Quality Assurance & Compliance Manager, tasked with assessing the effectiveness of CQIP practices and ensuring that appropriate feedback loops are in place for quality assurance audit findings.

VDOT units worked to identify opportunities to enhance the Inspector Training Program, while hiring 40 new Construction Inspector trainees.

In FY17, VDOT plans to publish a new comprehensive Construction Manual to consolidate construction guidance documents. This manual will provide descriptive text on policies and links to key construction material and content.

VDOT's Construction Division and Districts will work closely with the CQIP task force to analyze recommendations and implement improvements. The number of compliance reviews performed will continue to be tracked, and results from the upcoming fiscal year will be used as the revised program's baseline.



2.3.2 Ensure project level decision-making and problem resolution continues to be integrated into core duties of staff and consultant partners.

VDOT's Construction Division leadership and District Construction Engineers will continue to work together to enhance day-to-day decision making and problem resolution. This is an ongoing process emphasizing program policy and oversight responsibility at the division level, and project contract administration at the District level.

In FY16, VDOT developed a new position, the Construction Engineer Program Manager, and identified 60 new positions across VDOT Districts needed to shore up construction management staff.

Additionally, the Area Construction Engineer (ACE) Community of Practice was reinstated, and an assessment was made on VDOT's Risk Management Program.

In FY17, VDOT leadership will task the ACE Community of Practice to review specific areas of opportunity and develop resolution for specific issues, while also filling the 60 newly approved positions across the state.

The impact of the efficiencies of this business plan initiative will continue to be reflected in the department's on-time and on-budget project delivery performance.



2.3.3 Monitor guidance and practices to ensure projects are properly scaled to meet project objectives, with estimates based on practical solutions within budgetary constraints, developed in collaboration with the construction and maintenance disciplines.

In a collaborative effort of functional and field stakeholders, VDOT's Location and Design Division lead the development of a menu of project schedule templates that electronically store project schedules and support specific project scoping needs. In addition, extensive and comprehensive efforts were undertaken across the state to implement Common Sense Engineering principles and practices.



The use of the template tools in conjunction with institutionalization of the Common Sense Engineering Principles, enhances our ability to better frame project scopes and optimizes opportunities for flexible and innovative project development.

VDOT will monitor implementation and use of Common Sense Engineering principles and practices,

2017 Business Plan Update

Goal 2: Deliver ... continued

using existing project development and program delivery frameworks.

The impact of these templates and techniques will be monitored using existing Dashboard tracking framework, where VDOT continues to track and assess compliance of project budgets and contract advertisement schedules within established performance criteria.



2.3.4 The District Local Projects Advisory Group (DLPAG) will

continue to work with the Local Assistance Division to lead the implementation of strategies previously identified to improve local project delivery.

VDOT is committed to helping localities deliver the right product at the right time for the proper cost. As a part of the FY16 Business Plan, the DLPAG established teams and began implementing strategies to improve local project delivery.

These strategy teams completed two strategies in the prior period; implement District Locality Day processes, and continue stakeholder groups. The teams are also working on other strategies including strengthen project scheduling, Locally Administered Projects (LAP) Starter Pack (quick-start guide), streamline procurement, local access to information technology applications and consistency among VDOT project coordinators.

The DLPAG will continue to utilize the strategy teams and work with

VDOT's Local Assistance Division and the Local Stakeholder's Group to advance the implementation of strategies and to improve local project delivery.

VDOT will track the percentage of locally administered projects being advertised on-time for FY 2017, with a performance target of 70 percent on-time. Prior fiscal years' results will also be used as a benchmark to evaluate trends of on-time local project delivery.



2.3.5 Identify and implement business and procedural changes and project management techniques for utility relocations during the construction phase to enhance on-time and on-budget delivery.

On-time and on-budget delivery of projects to the public depends on many factors, including the timely and accurate handling of utility relocations. Through accurate planning, implementation and frequent communication with partners, VDOT will continue

to manage utility relocation requirements with goals of reducing project delays and claims, improving delivery performance and avoiding utility relocation related project plan design revisions.

This will include reviewing the project development and delivery schedules and developing and monitoring performance metrics.

During FY16 project delays and claims related to utility relocations were reduced, with no claims presented, assisting in improved on-time and on-budget project deliveries.

Emphasis will continue to be directed toward the reduction of utility related project delays. Benchmarks for continued improvement include:

- Utility relocations authorized on or ahead of schedule
- Utility relocation budgets measured from scoping to authorization within 10%



2017 Business Plan Update

Goal 3: Operate

Ensure efficient use and provide capacity solutions to the existing transportation system and services to meet customer demand and expectations of a system that is safe and reliable; and to enable the easy movement of goods and people across all modes.

Operate includes integrated corridor management, integration of system performance and safety data, Intelligent Transportation Systems, Park and Ride intermodal facilities, tunnel and moveable bridges management, traveler information and support systems and incident management.

Effective operations of the State’s transportation network are critical to Virginia’s economy, environment and residents.

Through integrated corridor management via coordination with regional Transportation Operations Centers, government agencies, media and emergency service providers; leveraging and deploying technology solutions; and managing existing facilities to minimize service interruptions and increase safety—VDOT provides actionable traveler information.

Collectively, these components allow integrated corridor/ system management resulting in reliable transportation options (i.e., rail, transit and bicycle and pedestrian accommodations) and outcomes, reduced congestion and improved mobility.



MULTI-MODALITY AND CUSTOMER SERVICE

Ensure multi-modal travel opportunities are considered in the commonwealth’s transportation network and improve travel time and travel time reliability on key transportation corridors.

ACTION ITEMS



3.1.1 Develop 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.

Focusing on improving travel time requires that motorist’s be able to consider alternate routes or modes during their trip planning and while in route. VDOT evaluated three travel time data providers to select a source to calculate and post real-time travel time information. VDOT also piloted a Park and Ride parking management system.

VDOT piloted a Quick Clearance Program and will expand it to key corridor congestion points. VDOT will work with localities to integrate transportation operation systems to provide better parallel arterial route data for decision-making to motorists. These efforts will enable motorists to select efficient travel routes or modes to promote greater travel time reliability.

Currently, we assess Virginia’s travel time by the percentage of congestion-free travel on key interstate roadways. In FY17, we plan to review new Federal Highway Administration National Performance Measures for system performance related to travel time reliability, for incorporation.



3.1.2 Develop engineering plans to improve traffic flow in key corridors that advance integrated corridor management, connected and automated vehicle applications and other innovative congestion management strategies.

An integrated approach to improving travel time reliability through operations cannot be successful without having appropriate, functioning

2017 Business Plan Update

Goal 3: Operate ... continued

technologies along unreliable corridors and key travel decision points. Overarching plans have been initiated using in-house design, starting with review of I-64, focused on maximizing operational capability.

The scope of work of these plans includes traffic monitoring systems, traveler communications and traffic signal. This initiative improves VDOT's ability to monitor and manage traffic pro-actively and communicate issues to motorists. Together, these efforts will contribute to more reliable travel times and improved safety.



3.1.3 Deploy advanced traffic signalization technologies and resources, including advanced transportation controllers, a statewide central signal system software platform and signal performance metrics to support real-time monitoring and control of VDOT signal and arterial systems.

Without accurate, real-time traffic information on the arterial system, even the best integrated corridor designs and plans may not be able to achieve their full potential. Improving traffic flow through the use of technology is one component to improving travel time reliability.

In FY16, communications plans and arterial/signal technology improvement projects were

completed. Through benchmarking and lessons learned, VDOT seeks to apply advanced signal technology to the statewide signal and arterial system in order to provide real-time signal operations.

This will allow traffic operations centers to coordinate real-time traffic monitoring and control to improve travel time reliability, incident response times and public safety. In addition it will begin the process to ensure that VDOT's traffic signal controllers are capable of sharing information with motorists through connected vehicle technology. VDOT's Traffic Engineering Division will assess success of this program based on the percentage of VDOT's traffic signal network that is connected-vehicle capable.



3.1.4 Implement a secure, cloud-based data portal to exchange connected and automated vehicle (CAV) data with the public sector, private partners, media, application developers, and other participating original equipment manufacturers (OEM) devices to accelerate innovative technologies and services.

Exchanging transportation data and video with private sector CAV businesses and application developers is key to developing new businesses and accelerating CAV technology deployment.

Implementing a cloud-based data portal will provide road condition, traffic incident, work zone, multi-modal traffic data and roadside signage. The portal will contain standard, secure, updated data of all available non-real time information. Traffic signal data is provided at locations where such capabilities exist. The intent is that when an instrumented vehicle approaches a geo-fenced area, all relevant and available information will be accessible.

The cloud-based data portal supports several goals:

- Increase the frequency, quantity and accuracy of data shared with private sector to encourage OEM device and application development
- Improve two-way data exchange for VDOT to publish and obtain data for internal use
- Simplify the process to add new users and manage existing users
- Serve as a national model for other state DOTs



2017 Business Plan Update

Goal 3: Operate ... continued

PUBLIC SAFETY

Reduce number and severity of traffic crashes on Virginia roadways and achieve the goal of no more than 686 deaths on Virginia roadways by 2017.

ACTION ITEMS

3.2.1 Measure the before-and-after results of safety improvement projects to determine the collective impact of safety improvements on the number and severity of traffic crashes.

In FY17 Business Plan 3.2.1 was combined into 1.3.2 as a strategy.



3.2.2 Develop and implement pilot projects from statewide connected and automated vehicle program plan to maximize the safety and operational benefits of these emerging technologies.

The capability of vehicles to communicate is here; vehicles can communicate with each other, with technology supporting infrastructure and ancillary assets (like signs and stoplights) and with other types of mobility devices.

In FY16, we developed a Connected Vehicle Program Plan to provide a comprehensive strategic road map to guide future decision-making.

In FY17, VDOT leadership will begin executing the department's vision for the future state of connected vehicle technologies, the impact for that future state on transportation within the

commonwealth and define strategies that VDOT will plan to utilize to take advantage of the technology.



3.2.3 Improve traffic safety features along accident-prone corridors / locations.

Improving public safety is a key goal of the Highway Safety Improvement Program and Strategically Targeted Affordable Roadway Solutions program.

In FY16, multidisciplinary teams developed a list of VDOT-preferred low-cost/high-benefit safety countermeasures and incorporated into safety projects within the SYIP:

- Retro-reflective Signal Backplates
- Rumble Strips
- Flashing Yellow Turn Signal
- Safety Wedge



We will assess program success based on the percentage reduction in fatalities, serious injuries and total injuries were safety projects using safety funds are completed.



3.2.4 Monitor the implementation of the Strategic Highway Research Program 2 Multi-Disciplinary Traffic Incident Management training.

Focusing on clearing traffic incidents on interstate highways in a safe and efficient manner is an

important component to improving travel time reliability.

Traffic incident-management training was implemented in FY 2014 and provides training to VDOT response personnel, response staff from other state agencies and local first responders.

The current effort includes ongoing training and monitoring to ensure the program continues to meet goals.



3.2.5 Develop solutions to enable quick clearance of tractor trailer crashes by developing and implementing programmatic changes.

Traffic incidents account for 25 percent of congestion. Incident related congestion affects responder safety, cost of sitting in congestion and the mobility of goods and services on our highways. VDOT reported over 36,000 incidents over 30 minutes and 1,793 involving tractor trailers in 2015. Several responders have been hurt or killed. While tractor trailer events are not the most common highway incidents, they are often the most complex to clear and contribute to reliable travel issues.

There are strategies to reduce incident duration times by reducing crash investigation time, minimizing response times and shortening the time to clear roadways from debris, spilled cargo or abandoned vehicles. Such strategies include revising incident management procedures, updating policies and legislation and implementing new technologies.

2017 Business Plan Update

Goal 4: Maintain

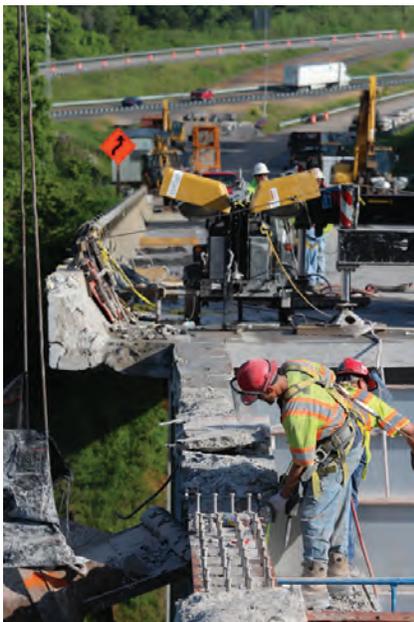
Use a systematic, needs-based process to effectively manage VDOT's assets, preserve and maintain the condition of the transportation system and safely maximize existing resources.

The Maintain goal includes budget spend plans and work plans for preventative maintenance, inspection activities, activities to improve or rehabilitate pavements and bridges, upkeep of roadside assets and ensuring the requisite tools and equipment are readily available to execute the work.

VDOT's extensive network of assets must perform safely today and maintain their integrity and utility for the expected lifecycle.

Customer perception and user confidence in the transportation system has a direct impact on the economy and mobility throughout the state.

Effective maintenance and emergency response requires consideration of and capacity for both planned and unplanned maintenance – 24 hours a day, seven days a week.



PUBLIC SAFETY AND PRIORITIZATION

Using an investment approach for system preservation, develop a data-driven strategic plan for the state of good repair of major highway assets that will improve the long-term condition.

ACTION ITEMS



4.1.1 Align the risk-based, financially constrained strategic plan for routine and capital repair or replacement of specialized major highway assets, such as tunnels and large bridges, with new transportation funding processes.

Specialized assets represent a large transportation investment. Having routine and capital repair prioritized and funded through the Six-Year Improvement Program (SYIP) will result in assets that are maintained at targeted levels.

To date, 25 of the largest and most complex structures that represent maintenance funding challenges have been identified as specialized major highway assets. VDOT developed recommended 30-year preventative maintenance plans focused on keeping these assets in good repair and in service over that period.



4.1.2 Utilize a data-driven, needs-based approach to prioritize, rehabilitate and replace bridges and pavement.

The existing highway system represents a major public investment. In order to protect that public investment, the system must be maintained in a safe, usable condition throughout its lifespan.

In FY16, tools were developed and approved by the Executive Team and Commonwealth Transportation Board that unified and standardized the data-driven, needs-based approach for maintaining and improving existing highway system, aligned with new investment strategies.

2017 Business Plan Update

Goal 4: Maintain continued

Going forward, these more automated tools will be implemented and utilized in FY17 programming funding and monitored based on needed adjustments. Impacts of these efforts will continue to be reflected in the condition of highway assets.

FISCAL STEWARDSHIP

Efficiently prioritize and use financial resources available to the maintenance program.

ACTION ITEMS



4.2.1 Enhance flexibility in the program to allow for a reduction in revenue or increased spending while still allowing for a year-end unspent balance of less than \$100 million.

Maintenance spend plans that include a base scenario and alternate scenarios, reflecting different levels of spending reductions or increases, provide VDOT staff with the flexibility needed to manage budgets impacted in unexpected ways (loss of revenue, extreme weather events, etc.).



In FY16, several iterations of alternate maintenance spend plans were developed and a prototype tool was developed and tested.

Next steps include implementation of an automated spend plan process tool, expected to be rolled out for FY18 budget cycle development.



4.2.2 Continue the Highway Maintenance Management

System initiative to develop an integrated solution for improving planning, operation and maintenance of broad range of VDOT assets, including ancillary structures.

A statewide Highway Maintenance Management System (HMMS) is needed to support improved efficiency and effectiveness of core business processes related to the management of VDOT's highway infrastructure assets.

Key HMMS deliverables include improved accuracy of maintenance spend plans, enhanced asset and inventory management, better

work order management, enhanced resource planning and utilization, easy to use work planning and budgeting functions, improved mobile technology support and enhanced analysis and reporting.

The first phase of the project has been completed; business requirements, prioritized business needs and planning budget. The second phase, identifying and procuring an integrated technology solution, has also been completed. Testing, validation and implementation will begin in FY17.



2017 Business Plan Update

Goal 5: Support

Efficiently and effectively provide the appropriate tools, guidance and processes that enable core programs and services to meet their objectives; maximize the use of human resources, funding, information and time; and encourage citizen awareness and participation in transportation decision-making.

Support includes areas such as information technology, financial and fiscal services, purchasing, communications, auditing, research, policy, civil rights, human resources, tolling, safety and business transformation.

Support at VDOT is provided through the effective use of human resources, funding, information and time by providing tools (i.e., technology, equipment, buildings, etc.), policies and efficient processes to ensure success for those who plan, deliver, operate and maintain the transportation system.

VDOT is committed to providing a safe and productive work environment for all staff, and to ensuring that those in a support role are understood as integral and indispensable to achieving VDOT's goals and upholding its mission statement.

WORKFORCE SAFETY

Provide a safe and secure work place and facilities.

ACTION ITEMS

 **5.1.1 Utilizing the Workforce Safety Guidance Documents as a guide, the agency will sustain its culture of continuous safety improvement and reinforce the agency core values of employee safety first - always.**

VDOT is dedicated to creating, fostering and enhancing the agency's workforce safety culture. Safety training, local safety committees and management involvement continue to be cornerstones of VDOT's safety program. VDOT routinely performs trend analyses of workforce injury data to identify patterns and develop plans to address root causes so as to minimize recurrences of similar types of injuries.

Beginning in FY17, recommendations from the VDOT benchmarking study conducted in 2016 will be implemented. VDOT will continue to place emphasis on leading indicators of safety. These indicators of performance will enhance the ability to identify safety hazards and take corrective actions before injuries occur.



5.1.2 Continue to assess and prioritize (to include funding) VDOT facility needs statewide in the development of an agency Long-Range Facilities Plan to ensure that VDOT facilities meet agency business needs.

This is an ongoing, long-term activity that will result in a safe, clean, accessible, energy efficient workplace for all VDOT employees and contractors. To that end, VDOT Districts have been directed to review and incorporate assessment data and critical facility needs into the Six-Year Plan and update the Capital Budget request for the next biennium (2016-2018).

In addition to Central Office, VDOT maintains facilities in the District, Residencies and Area Headquarters complexes. There are approximately 300 locations and about 1,400 buildings identified for assessment.

In FY16, VDOT developed the Statewide Facility Management Program Best Practices Guide that outlines a process for periodically evaluating buildings for preventative and responsive maintenance.

2017 Business Plan Update

Goal 5: Support ... continued

To build on its commitment to provide a safe and productive environment for all staff, the agency plans to complete facility condition assessments every five years at VDOT locations statewide. Twenty percent of locations will be assessed each fiscal year pending availability of funds.

WORKFORCE DEVELOPMENT

Ensure that VDOT is an “Employer of Choice” through training, employee engagement and succession planning.

ACTION ITEMS



5.2.1 Establish career maps for 10 critical groups and introduce training

and development programs that support advancement within each and execute the training and development programs.

Maintaining a robust, clear and maneuverable career path for critical groups ensures VDOT’s long-term effectiveness at supporting efficient delivery of the organization’s mission.

VDOT has identified a select group of critical career positions focused on engineers, technical specialists, and field maintenance supervisors; identified position details and developmental opportunities for each; and initiated a career coaching program that includes support tools for employees, managers and training staff.

We developed a customized information packet focused on field employees to provide guidance for those interested in the career path for the maintenance supervisory position. Since many field employees lack access to VDOT’s internal website, we communicated this information through multiple channels, including VDOT’s public website.

For these critical areas, we will track promotions provided to internal applicants and vacancy duration for the critical positions identified. As many of these positions require VDOT-specific knowledge and experience, we expect to see more internal selection and shorter vacancy durations in these areas.



5.2.2 Execute leadership enhancement programs for mid-level and senior managers, and focus the Core Development Program to broad VDOT operations.

Developing and maintaining a competent workforce is a key to success.

VDOT’S Leadership Enhancement and Development Program (LEAD) is designed to build leadership and management skills, and a key component of the program is coaching, including peer coaching. In FY16 the program was enhanced by matching current LEAD participants with mentors who are previous graduates of the program.



VDOT’s Core Development Program (CDP) provides entry-level opportunities to attract and develop fresh talent. This structured program includes cross-training, and in FY16 the newly hired employees in this program were provided even more opportunities for field experience and professional growth.

2017 Business Plan Update

Goal 5: Support ... continued

The LEAD program has 23 graduates and 24 current participants, and VDOT employs five CDP graduates and 18 participants, with 36 more slated for FY17. Benefits provided by these programs will be assessed by monitoring VDOT’s retention of the graduates, as well as their career progressions within the agency.



5.2.3 Implement a robust workforce engagement program. Components of the program will include recruitment and training, morale and recognition and communication and engagement.

The success of VDOT depends on the rich diversity, skills and talents of its workforce. Accordingly, with respect and integrity as guiding principles, VDOT developed a formal Workforce Engagement Plan.

VDOT’s FY16 achievements included implementing the Transportation Operator Trainee Program on a statewide basis; conducting outreach to veterans and external applicants with diverse experience and backgrounds; hosting transportation career fairs



and unity events; and educating employees on the benefits of a diverse workforce.

VDOT has also expanded the use of the Transportation Operator III (TOIII) role as a key developmental step in the maintenance management career path. TOIII’s provide leadership and on-site technical guidance and direction to crew members.

We seek to be a model workplace -- one that is fair; has a diverse workforce; and has highly engaged employees with high morale. To further this goal, we plan to fully implement the workforce engagement program by FY18.

WORKFORCE EFFICIENCY

Improve workforce efficiency through technology solutions, administrative tools and policy guidance.

ACTION ITEMS



5.3.1 Reduce time to deliver information technology services and solutions through better coordination with business units during software selection and development.

In 2015, VDOT completed a study of its information technology services that cataloged and established delivery baselines and identified opportunities for faster delivery. We acted on study recommendations by implementing organizational and process changes. Notably, we created an Office of

Technology Strategic Planning (OTSP) as well as a Strategic Technology Board that will prioritize new technology projects.

VDOT developed, adopted and implemented new project development, estimation and prioritization processes that are designed to foster coordination and clear expectations among the OTSP, the Information Technology Division (ITD), business units and service delivery organizations. We will utilize and institutionalize these processes in FY17.

To improve the execution of information technology projects, ITD established “Agile Sprint Teams” (ASTs) that apply agile software development practices and deliver incremental functionality over a 2-4 week “sprint” period so that value to the organization is delivered quickly.

Our first three ASTs were trained and fielded in Spring 2016, and we plan to have seven to nine ASTs by early FY17. As new enhancements and projects are approved, they will be allocated to ASTs for project execution and delivery.

VDOT will continue to monitor and report the percentage of information technology projects completed by their original planned implementation dates, with a goal that at least 80 percent be delivered on time.

2017 Business Plan Update

Goal 5: Support ... continued



5.3.2 Ensure the right contracting tools, processes and practices are in place to meet business needs in support of field operations.

A catalog of contracting tools with supporting processes and standard practices will enable the department to obtain products and services in a more cost effective, timely and efficient manner.

VDOT's Administrative Services Division will continue to work with District staff to identify areas where procurement authority may be enhanced, as needed to meet agency business needs.

VDOT plans to survey District and Central Office users annually to assess overall levels of satisfaction with contracting tools and identify opportunities to add new tools and/or enhance business practices.



5.3.3 Ensure all requirements relating to agency functions are documented formally. Develop a formal agency process for generating and storing documents containing mandates and requirements (governance documents).

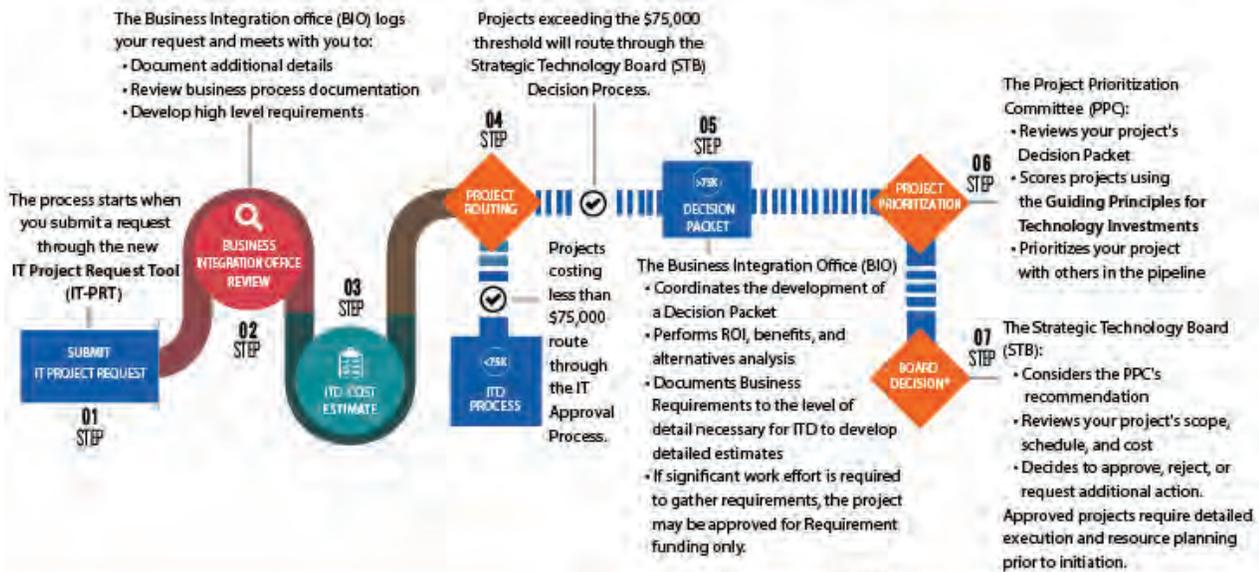
Establishing a process for generating, issuing and storing governance documents is vital to

sound management principles. In FY16, VDOT implemented the Governance Documents Repository (GDR). Housed in the Corporate Document Center, the GDR provides current, valid versions of governance documents, facilitating identification and reliability of documents.

During FY17, we will be institutionalizing this process to ensure that the "libraries" are populated with current governance documents that are kept up to date. Initial quality control/assurance is expected to be completed by FY17 and ongoing feedback will be incorporated.

Information Technology Project Request Process

The VDOT IT Project Request Process provides a transparent pipeline for the agency's technology projects, replacing the IT-10 process.



Details on this process are available here.

* Projects exceeding \$250,000 require Virginia Information Technologies Agency (VITA) approvals.

2017 Business Plan Update

Goal 5: Support ... continued

CUSTOMER SERVICE AND ENGAGEMENT

Foster stronger relationships with the public through customer-centric work processes, user-friendly technology and improved engagement at the local level.

ACTION ITEMS



5.4.1 Analyze and deploy strategies for improving internal and external customer service with the goal of improving VDOT customer service. Determine if customer service training is effective.

VDOT is in a continual process of monitoring and enhancing customer service. In 2015, VDOT conducted a review of customer service training throughout the agency and surveyed employees to gain insights on customer service barriers, needs and best practices.

In FY16 VDOT launched a new effort to train VDOT employees in effective strategies that can be applied in servicing both internal

and external customers. Training with focus on internal customer care was developed, launched and is now underway.

Customer service is also one factor that contributes to Virginia residents' overall satisfaction with VDOT. A January 2016 survey reveals that our public's satisfaction continues to increase, with 86 percent of Virginia residents now "somewhat to very" satisfied with VDOT's overall level of service.

5.4.2 Deploy electronic customer-facing systems to expand electronic payment capability and electronic application intake.

In FY17 Business Plan 5.4.2 was combined into 5.4.3 as a strategy.



5.4.3 Implement end-user technologies and solutions to improve internal work processes and enhance citizen engagement.

End-user technologies implemented by VDOT will include mobile solutions for our employees, contractors and citizens, as well as electronic signatures incorporated within applicable business processes. We have completed an assessment of current mobile technologies. Going forward, innovations in mobile workforce solutions will be evaluated for application at VDOT. We will develop a mobile solutions adaptation roadmap to assess current use, identify opportunities and implement solutions.

Execution will be focused on projects with "quick win" mobile solutions, electronic authorizations and automated workflows that can be realized in FY17 and FY18. Business processes will continuously be evaluated to incorporate new end-user solutions.



Land Use Permits

Apply online for a new permit

Note: Please see the permits types and required forms

As a Guest User

As a Registered User

Most land use permits can be obtained at [local VDOT district permit offices](#). Certain permits, such as district-wide permits that cover regional activities rather than a specific location, are issued through the VDOT Central Office Land Use Permit section in Richmond.

2017 Business Plan Update

Goal 5: Support ... continued



5.4.4 Integrate Customer Service Center with Residency staff

to enable improved, timely, efficient and accurate communications with citizens.

Maturing the Customer Service Center will include identifying and developing plans for integration with other critical systems such as the Highway Maintenance Management System, as well as improvements that will allow local VDOT offices the first opportunities to solve citizen problems.

The Customer Service Center System 2.0 enables VDOT to manage customer relationships in a methodical, documented, structured workflow. The initial deployment of the system in 2015 facilitated entry and tracking of service requests in the system by customer-facing VDOT offices (e.g., the Customer Service Center, residencies, districts, central office).

The updated application and associated processes are expected to be integrated in 2016. We will also be analyzing data from the center to improve service delivery.



5.4.5 Continue to clarify the role of the residency. Empower the Residency

Engineer/Administrator to function as an extension of the Commissioner of Highways in local government transactions including:

- Informing local officials on new legislation
- Increasing the role of the residency in project delivery, to include a more active role in project scoping and estimates, especially in residency tier projects

Residency offices have the first opportunity to address their community's needs and concerns.

The head of each residency acts and speaks on behalf of

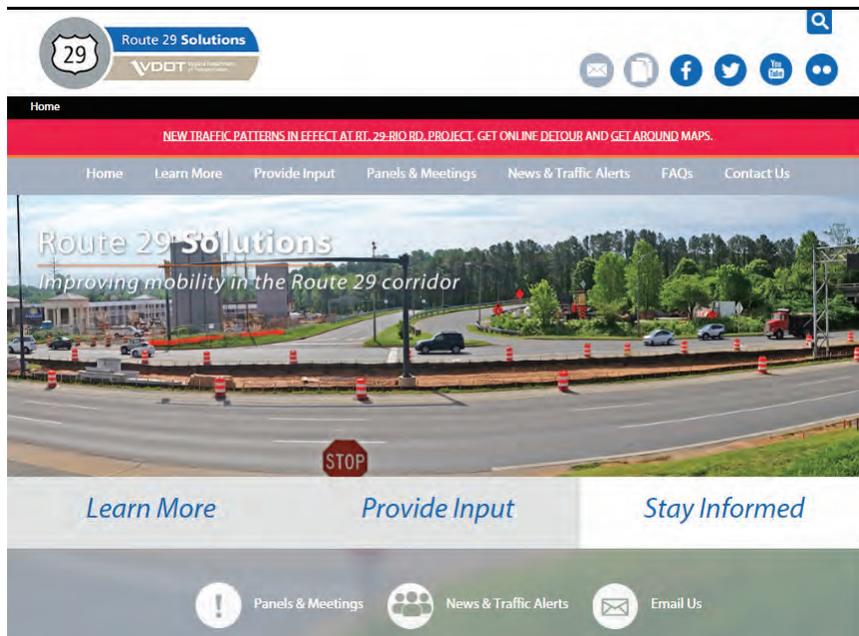
the Commissioner on local transportation issues. Residency leaders work to improve the lines of communication with local officials.

In FY16, organization changes were made to enhance the role of residencies in local land development and highway project activities. Increasing their visibility and accessibility to local citizens, contact information for residency leaders has been published on VDOT's public website.

VDOT will continue to follow and assess if the changes have had the desired impact, to identify additional changes that may be needed and adjust as necessary.



Goal 5: Support ... continued



5.4.6 Develop additional interactive web resources and other media for public engagement, outreach and participation in the transportation decision-making process. As needed, establish individual websites and outreach communications for high profile projects.

Enhancing citizen awareness and encouraging citizen participation in transportation decision-making is crucial to improving our ability to deliver projects, programs and services.

To date, VDOT has implemented public communications campaigns, websites for major projects that provide information and collect citizen feedback and an interactive site for Six-Year Improvement Program public comment.

Going forward, we will continue to develop interactive resources and engagement opportunities for major projects, programs and services, tracking the percentage of residents that have received information related to major roadway projects.

INNOVATION

Deliver a timely and effective research and technical assistance program.

ACTION ITEM



5.5.1 Continue to institutionalize the processes that have been developed and implemented to ensure research gets implemented. Monitor the utilization of these processes that allow for research and technical assistance projects to be established and implemented beyond the research advisory committee process.

VDOT's research program has produced many innovative and cost-effective practices for highway construction, maintenance and operations. VDOT's research arm, the Virginia Transportation Research Council (VTRC), is guided by nine research advisory committees that prioritize needs.

In FY16, VTRC developed and implemented new processes that include more outreach to, and earlier involvement of, field practitioners both in identifying research needs and in developing implementation plans. These processes are focused on real world solutions that VDOT can quickly implement.

Going forward, VTRC will continue to institutionalize the new processes and will monitor their utilization. We will adjust the process if needed to ensure maximum benefit of research efforts within the organization. In addition, VTRC plans to assess the potential impact of the research recommendations that VDOT adopts and implements.



2017 Business Plan Update

Goal 5: Support ... continued

PERFORMANCE MANAGEMENT

Incorporate federal requirements into VDOT's performance management program.

ACTION ITEM

 **5.6.1 Respond to notices of proposed rulemakings within designated time frames and coordinate cross-functional working teams.**

The United States Department of Transportation and the Federal Highway Administration have begun developing and publishing rules and regulations relating to establishment of highway and highway safety-related performance measures and targets.

VDOT has working teams to conduct reviews of the proposed rules and regulations for purposes of providing feedback and comments to rule-makers and to assess impacts and feasibility of implementation. This process will continue not only until all relevant

final rules and regulations have been issued but also for purposes of implementation.

In FY16, new final rules were issued related to the Highway Safety Improvement Program (HSIP) and Safety Performance Measures (PM). Additionally, Notices of Proposed Rulemakings were issued for Transportation/Highway System Performance Management.

In FY17, implementation will begin for HSIP and Safety PMs. We anticipate implementation of several additional final rules related to Transportation/Highway System Performance Management will commence in FY17 as well.



2017 Business Plan Update

Appendix A: Commissioner's Executive Agreement



COMMONWEALTH OF VIRGINIA Executive Agreement

Charles A. Kilpatrick, P.E.
Commissioner of Highways

Virginia Department of Transportation

Purpose

The Executive Agreement is an agreement and partnership among the Governor, Cabinet Secretary and Agency Head in aligning the key agency goals with the 2014 Governor's Enterprise Strategic Priorities. The Executive Agreement is intended to foster effective and timely communication, mutual accountability, and positive and effective working relationships.

Results

We agree to improve agency performance in all items in the category Government and Citizens.

In addition, we agree to the following agency key goals, which are linked to the other 2014 Governor's Enterprise Strategic Priorities, as well as the agency key measures for each goal to be accomplished. The agency key measure results will indicate the degree to which each goal is achieved. These agency key goals, measures and results should be included in the agency's strategic plan.

	2014 Governor's Enterprise Strategic Priorities	Agency Key Goals	Agency Key Measures	Agency Key Measure Results
2014 Governor's Enterprise Strategic Priorities: Transportation				
1	Prioritization: Develop a transparent, data-driven prioritization model to help determine allocations of transportation funding and ensure ongoing accountability.	Plan: Use transparent, data-driven prioritization models to help determine allocations of transportation funding and ensure ongoing accountability; plan programs, projects, and services to deliver a safe and reliable multi-modal transportation system.	Ensure internal processes are developed and implemented effectively to comply with the requirements of House Bill 2 and ensures stakeholder engagement. Target*: 100% (develop and implement)	Result: New initiative
		Maintain: Use a systematic, needs based process to effectively manage our assets, preserve and maintain the condition of the transportation system, and maximize safe and effective utility of existing resources.	Percentage of statewide structures not rated structurally deficient. Statewide bridge condition Target*: 92%	Result: 93.1% (FY2014)
			Percentage of roadway pavement lane miles rated in fair or better condition: Interstate pavement condition Target*: 82% Primary pavement condition Target*: 82% Secondary pavement condition Target*: 63%	Result: 84.5% (2014 assessment) Result: 82.8% (2014 assessment) Result: 60.5% (2014 assessment)

2017 Business Plan Update

Appendix A: Commissioner's Executive Agreement continued

	2014 Governor's Enterprise Strategic Priorities	Agency Key Goals	Agency Key Measures	Agency Key Measure Results
2	Multi-Modality: Expand the role of non-highway modes of transportation in the Commonwealth's transportation network.	Operate: Ensure efficient use and provide capacity solutions to the existing transportation system and services to meet customer demand and expectations of a system that is safe and reliable and to enable the easy movement of goods and people across all modes.	Develop an integrated approach to improve travel time on corridors such as Interstate Highways 64, 66, 81, and 95 that incorporates HOV/Express lanes, parallel arterial routes, real-time travel information and increase multi-modal options to include park and ride facilities, transit, rail, sidewalk, and bicycle solutions through local coordination and key providers. Target*: 100% (Accomplishment will be measured by monitoring the progress of the projects in the integrated approach.)	Result: New initiative
3	Engagement: Guarantee that local governments and citizens play a meaningful role in transportation decision-making.	Deliver: Effectively engage the public and local governments in preliminary engineering and project development activities, programs, and services through the construction of transportation system projects that support multi-modal solutions.	Form partnerships to improve local government and citizen involvement by: <ul style="list-style-type: none"> • establishing a District Local Projects Advisory Group • supporting NVTA and HRTAC as requested • developing additional interactive online resources to increase public participation Target*: 100%. Accomplishment will be measured by: <ul style="list-style-type: none"> • forming the advisory groups • tracking requests from NVTA and HRTAC as well as the VDOT resolution to requests • tracking the number of users of the new online resources 	Result: New initiative
2014 Governor's Enterprise Strategic Priorities: Public Safety and Homeland Security				
4	Public Safety: Protect our citizens and ensure everyone lives in a safe community.	Operate: Ensure efficient use and provide capacity solutions to the existing transportation system and services to meet customer demand and expectations of a system that is safe and reliable and to enable the easy movement of goods and people across all modes.	Number of traffic crash related deaths on Virginia roadways Goal*: 631 [Goal established in DMV 2015 Highway Safety Plan Update)	Result: 741 (CY2013)

* 2014-16 Biennial Plan runs from July 1, 2014 to June 30, 2016; a biennial target or goal is planned for achievement by the end of the plan period

Signatures

By signing below, we agree to comply with state and federal requirements and the provisions of the Executive Agreement.

Agency Head _____ Date 10/9/14
 Cabinet Secretary _____ Date 10/9/14
 Governor _____ Date 10/22/15

2017 Business Plan Update

Appendix B: Governor’s Enterprise Strategic Priorities

Economy	Education	Health and Family	Public Safety and Homeland Security
<p>Business Climate and Economic Development: Promote Virginia’s competitive business climate to maintain the designation as the best state for business.</p> <p>Poverty: Develop a clear and consistent anti-poverty policy.</p> <p>Diversification: Attract businesses to the Commonwealth that operate in new and growing fields in the 21st century economy. Targeted areas include cyber security and biosciences.</p> <p>Exports: Enhance Virginia’s trading relationship with international partners.</p> <p>Energy: Promote a diverse and reliable energy supply.</p>	<p>Achievement Gap: Improve educational success in struggling schools in high poverty communities and expand access to quality early education for all children</p> <p>K12 Education: Promote great teaching and learning through accountability reform, emphasize creativity and critical thinking skills, and strengthen support for teachers and educational leaders</p> <p>Pathways to the 21st Century Workforce: Strengthen pathways in K-12, community colleges, and throughout higher education, increasing affordable completion of high-demand degrees and credentials</p> <p>Higher Education Access and Affordability: Continue to strengthen Virginia’s system of community colleges and four-year institutions and promote greater access and affordability for all Virginians.</p>	<p>Healthcare Accessibility: Advance access to high-quality health care for more Virginians.</p> <p>Behavioral Health: Strengthen Virginia’s behavioral health system in partnership with hospitals, law enforcement, free clinics and community health centers, private providers, consumers, family members and advocates.</p> <p>Nutritional Divide: Promotes strategies to improve nutritious options for Virginians in at-risk circumstances.</p> <p>Healthcare Innovation: Embrace innovative models of care and new technologies to improve health outcomes and lower costs.</p> <p>Women’s Health: Protect women’s rights to make their own healthcare decisions.</p> <p>Children and Families: Promote strategies that encourage a culture of health through stable housing, access to high-quality health care and proper nutrition.</p>	<p>Public Safety: Protect our citizens and ensure everyone lives in a safe community.</p> <p>Homeland Security and Emergency Preparedness: Ensure Virginia is prepared to address threats to the safety and security of the Commonwealth and to respond rapidly and efficiently to emergencies.</p> <p>Gun Violence: Pursue strategies to ensure all gun owners undergo a background check when purchasing a firearm.</p> <p>Sexual and Domestic Violence: Aggressively target sexual and domestic violence for prevention and enforcement.</p> <p>Smart Sentencing: Promote improvements to the sentencing process to recognize and treat the root causes of crime thereby reducing recidivism.</p> <p>Restoration of Rights: Maximize restoration of voting rights for individuals who qualify.</p>
Veterans and Military Families	Workforce	Natural Resources	Transportation
<p>Workforce: Create seamless transitions for Virginia’s veterans with high quality education and workforce services that accelerate career opportunities.</p> <p>Homeless: Increase affordable housing opportunities and veterans support programs.</p> <p>BRAC: Retain and reinforce Virginia’s military installations and defense activities.</p> <p>Family Support: Ensure that Virginia remains the preeminent state for military personnel, their families and veterans.</p>	<p>Supply and Demand: Align Virginia’s workforce to meet current and anticipated employer demands with career pathways and training solutions for dislocated, underemployed, and future workers.</p> <p>Credentialing: Establish annual goals and identify ways to increase statewide credentials that align with employer current and future needs.</p> <p>New skills: Facilitate in-demand skills sets for Virginia’s new economy, while fostering private sector innovation and entrepreneurship.</p>	<p>Chesapeake Bay Restoration: Protect and improve the health of the Chesapeake Bay, by making every effort to meet the goals for nutrient reduction outlined in the federal government’s cleanup plan.</p> <p>Land Conservation: Implement a targeted, strategic land conservation plan that protects Virginia’s biodiversity and public access.</p> <p>Climate Change: Prepare the Commonwealth for the effects of climate change and reduce the state’s contribution to its causes.</p>	<p>Prioritization: Develop a transparent, data-driven prioritization model to help determine allocations of transportation funding and ensure ongoing accountability.</p> <p>Multi-Modality: Expand the role of non-highway modes of transportation in the Commonwealth’s transportation network.</p> <p>Engagement: Guarantee that local governments and citizens play a meaningful role in transportation decision-making.</p>
Government and Citizens			
<p>Transparency: Collaborate across secretariats to improve citizens’ access to government data and decision-making processes.</p> <p>Supplier Diversity: Ensure that Small-Women-and-Minority owned businesses are afforded representative access to government procurement.</p> <p>State Workforce Succession: Improve recruitment, retention, and succession planning for the state workforce.</p> <p>Innovation: Explore and pursue innovative strategies to increase government efficiency or to reduce government costs for needed services.</p>		<p>Fiscal Stewardship: Manage public resources efficiently and effectively in challenging economic conditions.</p> <p>Cyber Security and Upgraded Technology: Enhance current technology platforms and infrastructure while protecting all data.</p> <p>Ethics: Promote a culture within state government that values strong ethics.</p> <p>Customer Service: Deliver high quality products and services to customers in a timely manner.</p> <p>Accessibility: Encourage user-friendly online services for all citizens.</p>	

Appendix C: District Performance Measure Definitions

	Measure	Definition
Project Development	Advertisement On-Time: VDOT-Managed Projects	Percent of VDOT-managed projects that advertise by the baseline advertisement date
	Advertisement On-Time: Locally-Managed Projects	Percent of locally-managed projects that advertise by the baseline advertisement date
	Cost Estimation VDOT-Managed Projects	Percent of VDOT-managed projects that advertise within -10% and +30% of the post-scoping estimate
Project Delivery	On-Time: All Projects	Percent of contracts completed on-time
	On-Time: Construction	Percent of construction contracts completed on-time
	On-Time: Maintenance	Percent of maintenance contracts completed on-time
	On-Budget*: All Projects	Percent of contracts completed within budget
	On-Budget*: Construction	Percent of construction contracts completed within budget
	On-Budget*: Maintenance	Percent of maintenance contracts completed within budget
	Environmental Compliance	Percent of environmental reports deemed compliant
	Construction Quality Improvement Program (CQIP)	Percent of items reviewed through the CQIP program that are compliant
	Work Zone Crashes	Number of work zone crashes over the last 12 month period
Maintenance	Maintenance Spending: Expenditures vs. Plan	Maintenance expenditures for the fiscal year compared to original fiscal year spend plan
	Maintenance Spending: Expenditures vs. Allocation	Maintenance spending (less payroll operations) compared to total fiscal year maintenance allocation
	Pavement: Interstate	Percent of Interstate pavement in fair or better condition
	Pavement: Primary	Percent of primary pavement in fair or better condition
	Pavement: Secondary	Percent of secondary pavement in fair or better condition
	Bridges: All VDOT	Percent of all VDOT-maintained bridges in fair or better condition

* - The dollar costs shown in the On-Budget section represent most of the cost of the project. However, the final payment to a contractor may not be known at this time, and there may be incidental costs, such as fuel adjustments, incentive payments, and material allowances, which are not included. Also, the extent of any potential claims may not be known at the time a project is completed, and are not included in the calculations.

2017 Business Plan Update

Appendix D: Business Support Performance Measure Definitions

	Measure	Definition
Financial	Tolling Violation Backlog	Percent reduction in tolling violation backlog awaiting court docket space
	Agency Spending Planned vs. Actual Spending: Administration, Construction	Agency Spend Plan within +/- 5% of actual spending for Administration & Construction
	Agency Spending Planned vs. Actual Spending: Maintenance, Operations	Agency Spend Plan within +/- 10% of actual spending for Maintenance & Operations
	Construction Cash Balance Planned vs. Actual	Actual Construction Cash Balance within +/- 15 percent of planned balance of 60-day operating balance
	Highway Maintenance and Operating Fund Cash Balance Planned vs. Actual	Actual Highway Maintenance and Operation Fund balance falls within +/- 15 percent of 60-day operating balance
	All Non-Federal Billings: Accounts Receivable	Percent of billings collected for all non-federal accounts receivable (excludes property damage)
	All Non-Federal Billings: Accounts Receivable -Property Damage	Percent of billings collected for all non-federal property damage accounts receivable
	Project Phase Close-Out Backlog	Reduction in project phase close-out backlog by closing more project phases than are added each quarter
	Final Voucher Backlog	Reduction in backlog of final voucher processing for federally eligible projects
	Federal Obligations Current Plan vs. Annual Plan	Percent of Federal Obligations currently planned for the current Federal Fiscal Year as compared to the Annual Plan
Policy	National Environmental Policy Act (NEPA) Process Complete	Percent of on time delivery for National Environmental Policy Act (NEPA) process completion
	Permit Determination	Percent of on time delivery for permit determination
	Permit Acquisition Non-Reporting	Percent of on time delivery for non-reporting permit acquisition
	Permit Acquisition Reporting	Percent of on time delivery for reporting permit acquisition
	On-Time Advertisement of Locally-Managed Projects	Percent of locally-managed projects that advertise by baseline advertisement date
	Clear Right-of-Way On-Time	Percent of projects advertised that had an actual Right-of-Way acquisition date on or before the scheduled Right-of-Way end date
	On-Time Project Certifications	Percent of projects where project certification is issued more than 30 days in advance of the advertisement date
	Utility Estimates Approved On-Time	Percent of utility estimates approved on or before the scheduled Right-of-Way End Date
Administration	Contracts Awarded On-time	Percent of contract awards on-time
	On-Time Capital Outlay	Percent of capital outlay projects completed on-time
	On-Budget Capital Outlay	Percent of capital outlay project completed on-budget
	On-Time Delivery of Information Technology Projects	Percent of projects implemented on-time as measured against the original planned implementation date
	On-Budget Delivery of Information Technology Projects	Percent of projects implemented on-budget as measured against the original budget
	Scope Delivery in Information Technology Projects	Percent of projects that delivered full scope, based on the number of projects planned to deliver full scope (all requirements)
	Information Technology Budget	Actual expenditures as a percent of planned budget
Other	Research Projects Implemented On-Time	Percent of research projects recommendations implemented on-time
	Research Projects Implemented On-Budget	Percent of research studies recommendations implemented on-budget
	Drainage Complaints	Communication strategy intended to reduce the percentage of complaints that are drainage related to 5% or less of total customer calls
	Telework Participation	Percent of full-time and part-time employees teleworking based on the number eligible to telework
	Vacancy Rate	Vacant positions as a percent of MEL
	Americans with Disabilities Act, Section 504 Compliance	Number of curb ramps completed to comply with Title II Americans with Disabilities Act of 1990 as compared to the number of curb ramps to complete
	Disadvantaged Business Enterprise (DBE) Participation	Percent of payments made to Disadvantaged Business Enterprise (DBE) firms compared to total payments made to consultants and contractors on all federally funded projects for Construction and Maintenance
	Small, Woman-Owned and Minority Goal	Percent of payments made to Small Women and Minority Business (SWAM) firms compared to total discretionary payments made to consultants and contractors; includes both prime and subprime contractors

2017 Business Plan Update

Appendix E: Action Item Phase Changes

	Action Item	Initiative	FY16 Phase	FY17 Phase
Plan	1.1.1	Programming processes	Implement	Institutionalize
	1.2.1	Public meetings	Develop	Monitor
	1.2.2	Collaboration with NVTa and HRTAC	Institutionalize	Monitor
	1.3.1	Affordable Roadway Solutions	Monitor	Monitor
	1.3.2	Highway Safety Improvement Plan	Monitor	Monitor
	1.4.1	Enhance plan and plat review services	Implement	Institutionalize
Deliver	2.1.1	Rail and transit solutions	Monitor	Monitor
	2.1.2	Sidewalk and bicycle solutions	Monitor	Monitor
	2.2.1	Environmental programs	Institutionalize	Monitor
	2.2.2	Storm water management	Implement	Monitor
	2.3.1	Improved quality of constructed products	Implement	Institutionalize
	2.3.2	Construction project decisions and resolutions	Institutionalize	Monitor
	2.3.3	Providing solutions to meet project objectives	Institutionalize	Monitor
	2.3.4	Implementation of strategies	Implement	Implement
	2.3.5	Utility relocations	Implement	Implement
Operate	3.1.1	Travel time improvements	Develop	Implement
	3.1.2	Traffic monitoring	Develop	Implement
	3.1.3	Traffic signalization	Develop	Implement
	3.1.4	Cloud data portal	New in FY17	Develop
	3.2.1	Safety improvements	Merged into 1.3.2; now in Monitor	
	3.2.2	Connected vehicle program	Develop	Implement
	3.2.3	Traffic safety	Monitor	Implement
	3.2.4	Strategic Highway Research Program 2	Institutionalize	Monitor
3.2.5	Tractor Trailer Quick Clearance	New in FY17	Develop	
Maintain	4.1.1	Major highway assets	Develop	Develop
	4.1.2	Strategic plan for existing highway system	Develop	Institutionalize
	4.2.1	Financial resources	Institutionalize	Implement
	4.2.2	Highway Maintenance Management System	Implement	Implement
Support	5.1.1	Workforce safety	Institutionalize	Implement
	5.1.2	VDOT facility needs	Implement	Implement
	5.2.1	Training and development	Institutionalize	Monitor
	5.2.2	Leadership enhancement	Institutionalize	Monitor
	5.2.3	Workforce engagement	Implement	Implement
	5.3.1	Faster delivery of technology solutions	Implement	Institutionalize
	5.3.2	Contracting tools, processes and practices	Implement	Implement
	5.3.3	Governance documents	Implement	Institutionalize
	5.4.1	Customer service	Implement	Institutionalize
	5.4.2	Customer-facing systems	Merged into 5.4.3; now in Implement	
	5.4.3	Improved mobile and electronic technology	Develop	Implement
	5.4.4	Customer Service Center System 2.0	Institutionalize	Monitor
	5.4.5	Residency roles	Implement	Monitor
	5.4.6	Public websites	Implement	Implement
5.5.1	Research implementation	Implement	Institutionalize	
5.6.1	Performance rulemakings	Institutionalize	Institutionalize	

2017 Business Plan Update

Photo Information

Mission, Values, Ethics; (pg. 1)

Rt. 6 Bridge Work

06/23/2015

Rt. 29 - Rt. 250 Interchange Improvements

05/19/2015

Accomplishments; (pg. 3)

Capital Trail Ceremony

10/02/2015

Diagram - Yellow Flashing Arrow

6/6/2016

Plan; (pg. 10)

Screenshot - HB2 Project Applications Map

6/3/2016

Plan; (pg. 11)

Screenshot - Hot Spot Analysis - Richmond

District

6/6/2016

Plan; (pg. 12)

I-64 to I-264 High-Rise Bridge

3/29/2016

Land Use Public Meeting

10/2/2015

Deliver; (pg. 13)

Tide Grand Opening

08/11/2011

Deliver; (pg. 14)

Statewide Bicycle & Pedestrian Advisory

Committee meeting

1/26/2015

Rt. 360 Bridge Inspection

4/1/2012

Deliver; (pg. 15)

High Rise Bridge Inspection

12/2/2015

Rt. 501 Bridge over James River

3/9/2016

Deliver; (pg. 16)

Utility Pole Removal

04/12/2011

Operate; (pg. 17)

I-64 Electronic Display

5/14/2014

Operate; (pg. 18)

Varina-Enon Bridge

3/24/2016

Screenshot - Signal Management Technol-

ogy

6/3/2016

Operate; (pg. 19)

Retro-reflective backplates- night

7/27/2015

Maintain; (pg. 20)

Maury River Bridge Rehab

5/20/2016

North Amelia Avenue Bridge

7/31/2015

Maintain; (pg. 21)

Dinwiddie County Snow Plow Operations

2/15/2015

Mowing Operations

5/25/2016

Limbrack

6/3/2016

Support; (pg. 22)

“Go Orange Day”

4/13/2016

Support; (pg. 23)

New Franklin Residency

7/19/2012

LEAD Meeting

3/29/2016

Support; (pg. 24)

Hampton Roads Career Fair

10/21/2015

Support; (pg. 25)

Diagram - Office of Technology Strategic

Planning - New Project Process

6/3/2016

Support; (pg. 26)

VDOT “Customer Care” training

5/17/2016

Screenshot - New Online Permit Application

6/3/2016

Support; (pg. 27)

Salem Traffic Operations Center

2/11/2016

Support; (pg. 28)

Screenshot - Rt29 Solutions - Project Tem-

plate

6/8/2016

“Go Orange Day”

4/13/2016

Support; (pg. 29)

Humpback Bridge

9/17/2013

Tappahannock Tornado Cleanup

2/26/2016

Snowstorm Kudos from Kids

2/26/2016

Sussex Rt. 301 Bridge Repair

5/16/2016



Front cover:

Route 29 at Rio Road,
Albemarle County

The new grade-separated intersection, opened July 19, will move traffic safely and more efficiently through one of the most congested intersections on the Route 29 corridor.

Back cover:

VDOT Workers' Memorial on Afton Mountain

Dedicated on September 17, 2004, the monument honors Virginia highway workers who lost their lives while serving the commonwealth.



Contact us:

800-FOR-ROAD (800-367-7623) (TTY-TDD users call 711)

Email questions or comments to:
info@vdot.virginia.gov

Follow us online:

Facebook www.facebook.com/VirginiaDOT

Twitter @VaDOT

Web www.virginiadot.org/jobs/