



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION  
1401 EAST BROAD STREET  
RICHMOND, VIRGINIA 23219 2000

**Charles A. Kilpatrick, P.E.**  
Commissioner

June 15, 2017

The Honorable Governor Terry McAuliffe  
Members of the Virginia General Assembly

Dear Ladies and Gentlemen:

Section 33.2-1531 of the *Code of Virginia* directs the Commissioner of Highways to report annually on the use of moneys in the Innovation and Technology Transportation Fund (ITTF). This letter provides the information as required by the statute.

ITTF monies are to be used solely for the purposes of funding pilot programs and fully developed initiatives pertaining to high-tech infrastructure improvements. "High-tech infrastructure improvements" pertain to projects or programs that reduce congestion, improve mobility, improve safety, provide up-to-date travel data, or improve emergency response.

The Virginia Department of Transportation (VDOT) developed a Transportation Technology Plan that aligned its goals and technology strategies with the purpose of the monies allocated to the ITTF. Projects utilizing ITTF monies originate from the Transportation Technology Plan.

The Transportation Technology Plan was developed to improve the efficiency, safety, and convenience of all modes of transportation throughout the Commonwealth. This plan incorporated recommendations from the VTrans2040 needs assessment for the 12 corridors of statewide significance and other VDOT planning documents. The eight technology strategies of the Transportation Technology Plan are:

1. **Enhance operations traffic management** – to improve corridor efficiency through active traffic management across multiple parallel freeways, arterial highways and transit systems.
2. **Strengthen incident and emergency response** – to detect, respond and clear incidents on the roadway, which include collisions, disabled vehicles, weather events, emergencies and man-made disasters.

3. **Support multimodal travel promotion** – to increase multimodal travel by increasing access and improving its efficiency.
4. **Manage arterials** – to optimize the performance of arterial roadways through signal operations improvements and performance monitoring.
5. **Furnish traveler information** – to provide real time, multi-corridor and multi-modal travel information to enable pre-trip and in-route trip planning.
6. **Support commercial vehicle/freight** – to manage and support freight mobility.
7. **Conduct emerging technology research** – to promote the development of new technologies to improve safety, convenience and efficiency of travel through connected and autonomous vehicle technologies, and bicycle/pedestrian programs.
8. **Enhance enabling technology infrastructure** – to promote future expansion and resiliency of technologies by deploying and upgrading supporting communication and utility services.

The current estimated total value of past and planned allocations for projects eligible for ITTF funding (“ITTF Projects”) is \$116.6M. This number consists of \$74.9M, which was allocated to the ITTF for FY-17 through FY-21 by the Commonwealth Transportation Board pursuant to an action dated February 17, 2016 and \$41.7M of previous allocations/projections of the CTB pursuant to the portion of the alternative formula dedicated to smart roadway technology projects: for FY-14 through FY-20.

In FY-16, \$12.9M was allocated to the ITTF. The attached tables provide information concerning ITTF Projects that were allocated funding and/or that incurred expenditures in FY16.

If you have any questions, please do not hesitate to contact Garrett Moore, Chief Engineer, at 804-786-4798 or me.

Sincerely,



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

Cc: The Honorable Aubrey L. Layne  
Mr. Garrett Moore, P.E.

<b>"ITTF Projects" Allocated Funding in FY16<sup>1</sup></b>				
<b>UPC</b>	<b>Project Purpose</b>	<b>Funding Allocation FY16 Final SYIP</b>	<b>Expenditures FY 16</b>	<b>Status</b>
105363	Expand ramp metering on I-395 to reduce congestion	\$1,600,000	\$174,588	Construction underway
105364	Prepare design plans to improve traffic & safety at the I-66 Rosslyn Tunnel	\$113,374	\$1,021	Completed
105368	Prepare design plans for an upgraded control room to improve traffic operations at the Hampton Roads Bridge Tunnel	\$645,371	\$5,715	Design plans underway
105369	Prepare design plans for signal improvements for Route 1 from Caroline County to Colonial Heights to improve traffic flow	\$375,000	\$42,731	Design underway
105372	Upgrade outdated traveler information signs in Northern Virginia	\$1,569,043	\$130,388	Construction underway
105380	Improve traffic management at the Big Walker Mountain Tunnel	\$605,108	\$0	Ad date is 07/2018
105381	Improve traffic management at the East River Mountain Tunnel	\$588,233	\$0	Ad date is 07/2018
105388	Prepare design plans to improve traffic operations at the I-664 Monitor Merrimac Tunnel	\$470,448	\$62	Design plans underway

<sup>1</sup> Information concerning FY15 allocations and expenditures for "ITTF Projects" may be found in the FY15 report published on Virginia's Legislative Information System at:

<http://leg2.state.va.us/DLS/h&sdocs.nsf/5c7ff392dd0ce64d85256ec400674ecb/175faeba8669a2f585257cc20055dc99?OpenDocument&Highlight=0,ittf>

105398	Prepare design plans for signal improvements for arterial highways in Northern Virginia to improve east-west travel. Routes include 29,50,7,236	\$168,047	\$104,851	Design Completed; Funding surplus will be transferred to the construction phase of the project.
105400	Prepare design plans for signal improvements for arterial highways in Northern Virginia to improve traffic flow for north-south travel. Routes include 28, 234, 286, and 294 – Phase 1	\$163,026	\$52,592	Design Completed; Funding surplus will be transferred to the construction phase of the project.
105401	Prepare design plans for signal improvements for arterial highways in Northern Virginia to improve traffic flow for US 1 from Alexandria to Stafford – Phase 1	\$206,509	\$79,177	Design Completed; Funding surplus will be transferred to the construction phase of the project.
105404	Signal improvements for US 60 between New Kent and Newport News to improve traffic flow	\$225,000	\$60,988	Design underway
105444	Signal improvements for US 60 between new Kent and Richmond to improve traffic flow	\$119,581	\$40,138	Design underway
105476	Install traffic monitoring devices and traveler information signs on I-64 near the Mercury Boulevard interchange to improve incident management & improve traffic flow	\$289,745	\$988,105	Construction underway; Funding will be transferred in FY-17 to cover deficit
107540	Install signal improvements with CCTV improvements for arterial highways in Northern Virginia to improve traffic flow for US 1 - Phase 2	\$255,000	\$3,945	Construction underway
107541	Install signal improvements with CCTV improvements for arterial highways in Northern Virginia to improve traffic flow for US 1 - Phase 3	\$260,000	\$0	Construction underway

107542	Install signal and camera improvements on Routes 28, 234, 286, & 294 in Northern Virginia to improve traffic flow - Phase 2	\$230,000	\$1,892	Design underway
107543	Install signal and camera improvements on Routes 28, 234, 286, & 294 in Northern Virginia to improve traffic flow - Phase 3	\$260,000	\$0	Design underway
107544	Install signal and camera improvements on Routes-29, 50, 7, 236 in Northern Virginia to improve traffic flow - Phase 1	\$270,000	\$1,950	Construction underway
107545	Install signal and camera improvements on Routes-29, 50, 7, 236 in Northern Virginia to improve traffic flow - Phase 3	\$60,000	\$0	Design underway
107548	Install infrastructure to support adaptive / real time signal improvements for US Route 1 in Northern Virginia to improve traffic flow – Phase 4	\$60,000	\$0	Design underway
107549	Install infrastructure to support adaptive / real time signal improvements for Routes 28, 234, 286 and 294 in Northern Virginia to improve traffic flow – Phase 4	\$60,000	\$0	Design underway
107550	Install infrastructure to support adaptive / real time signal improvements for Routes 29, 50, 7 and 236 in Northern Virginia to improve traffic flow	\$178,264	\$0	Design underway
107663	Install signal improvements for Route 1 between Prince William to Caroline County to improve traffic flow	\$1,000,000	\$0	Funding source; Individual projects will be setup in the future to accomplish the scope of work at various locations
107768	Upgrade outdated traveler information signs in Hampton Roads	\$732,044	\$0	Ad date is 12/2018

T14096	Smart Scale Retainage Fund	\$1,767,731	n/a	This UPC is a Smart Scale Retainage Fund that was distributed by CTB to various projects using the former Smart Roadway Technology funds
T15660	Innovative Statewide Smart Roadway Technology Implementation	\$696,562	\$144,498	Funding source for balancing deficits on Smart Roadway Technology Projects and / or funding for breakout Smart Roadway projects yet to be determined

**Grand Total FY-16 Funding Allocation      \$12,968,086**

**Summarization of Pre FY16 Fully Allocated Completed/Cancelled ITTF Projects**

<b>UPC</b>	<b>Project Purpose</b>	<b>Total Allocations</b>	<b>Expenditures FY 16</b>	<b>Status</b>
105257	Prepare design plans to connect roadway technology devices to fiber to improve communication reliability	\$181,663	\$7,500	Completed in FY16
105378	Pilot parking management system at the Dale City Park & Ride	\$373,295	\$116,735	Completed in FY16
105403	Signal improvements for arterial highways in Hampton Roads to improve traffic flow for US13	\$40,000	\$6,368	Project canceled after starting design efforts due to the reassignment of the project's funding to the High Priority Project Program. The shown expenditures include the work completed before the project cancellation.