



COMMONWEALTH of VIRGINIA

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

Charles A. Kilpatrick, P.E.
Commissioner

August 17, 2016

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 aligns its goals and technology strategies with the purpose of the monies allocated to the ITTF. Projects using future ITTF monies will 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 incorporates 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.

Pilot programs and infrastructure projects will support these eight strategies.

In January 2016, VDOT presented a proposed project list to the Commonwealth Transportation Board (CTB) regarding this program. VDOT obtained CTB approval to allocate \$74.8M of Innovation and Technology Transportation Funds in FY17-FY22.

On July 1, 2014, the ITTF funding became effective. In FY15, \$2.12M was allocated to the fund. This funding was used with \$1.72M from funds allocated by the CTB under the FY14 CTB Alternative Formula for the identical purpose (“smart roadway technology” pursuant to then section 33.1-23.1) to advance projects supporting the above referenced strategies (\$3.84M total).

The attached table lists the allocation, expenditures, purpose and status of these projects.

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.

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Bcc: Mr. Dean Gustafson
Mr. Ray Khoury
Ms. Kim Pryor
Ms. Vanloan Nguyen
Mr. Paul Szatkowski

Projects Funded by ITTF

UPC	Project Purpose	Total Funding through FY15	Expenditures through FY15	Future FY16 Allocations	Status (December 31, 2015)
104591	Unallocated amount for equipment upgrades	67,630	0	Yes	
105257	Prepare design plans to connect roadway technology devices and TOC to fiber to improve communication reliability	181,663	174,163		Design plans completed
105363	Prepare design plans to expand ramp metering on I-395 to reduce congestion	300,000	114,139	Yes	Underway
105364	Prepare design plans to improve traffic & safety at the I-66 Rosslyn Tunnel	259,521	238,912	Yes	Underway
105368	Prepare design plans to improve traffic operations at the I-64 Hampton Roads Bridge Tunnel	50,000	137,056	Yes	Underway – Project advanced faster than allocation anticipated. Future allocations to be provided.
105369	Signal improvements for Route 1 from Caroline County to Colonial Heights to improve travel flow	150,000	2,851	Yes	Design plans underway
105372	Upgrade outdated traveler information signs in Northern Virginia	113,000	81,937	Yes	Design plans completed
105378	Pilot parking management system at the Dale City Park & Ride	600,000	256,560		Underway
105379	Update travel time collection systems for Route 1 to provide alternative route information	632	632		Project canceled after starting design efforts due to the reassignment of the project's funding to the High Priority Project Program. The shown funding and expenditures include the work completed before the project cancellation.
105382	Expand camera coverage and message signs on I-95 Northern VA to improve incident management	56,639	56,639		Project canceled after starting design efforts due to the reassignment of the project's funding to the High Priority Project Program. The shown funding and

Projects Funded by ITTF

UPC	Project Purpose	Total Funding through FY15	Expenditures through FY15	Future FY16 Allocations	Status (December 31, 2015)
105385	Expand camera coverage and message signs on I-95 Southern VA to improve incident management	87,226	87,226		Project canceled after starting design efforts due to the reassignment of the project's funding to the High Priority Project Program. The shown funding and expenditures include the work completed before the project cancellation.
105388	Prepare design plans to improve traffic operations at the I-664 Monitor Merrimac Tunnel	150,000	31,575	Yes	Project rescheduled
105398	Signal improvements for arterial highways in Northern Virginia to improve traffic flow for east-west travel	85,000	17,366	Yes	Design complete, installation underway
105400	Signal improvements for arterial highways in Northern Virginia to improve traffic flow for north-south travel	61,000	10,772	Yes	Design complete, installation underway
105401	Signal improvements for arterial highways in Northern Virginia to improve traffic flow for US 1 from Alexandria to Stafford	57,000	33,697	Yes	Design complete, installation underway
105403	Signal improvements for arterial highways in Northern Virginia to improve traffic flow for US13	40,000	43,294		Project canceled after starting design efforts due to the reassignment of the project's funding to the High Priority Project Program. The shown funding and expenditures include the work completed before the project cancellation.
105404	Signal improvements for US 60 between New Kent and Newport News to improve traffic flow	160,000	82,289	Yes	Design plans underway

Projects Funded by ITTF

UPC	Project Purpose	Total Funding through FY15	Expenditures through FY15	Future FY16 Allocations	Status (December 31, 2015)
105443	Signal improvements for Route 1 between Prince William to Caroline County to improve traffic flow	540,000	60,096		Design plans underway
105444	Signal improvements for US 60 between New Kent and Richmond to improve traffic flow	60,419	3,513	Yes	Design plans 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	825,000	306,817	Yes	Installation underway
	Total	3,844,730	1,739,534		