

**Transportation Improvement Program
(TIP)
for the
New River Valley Metropolitan Planning
Organization**

Fiscal Years 2021 – 2024

Approved May 7, 2020

Amendment # 1 November 5, 2020

Amendment # 2 May 6, 2021

Amendment # 3 November 4, 2021

Amendment # 4 _____, 2022

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This Transportation Improvement Program was approved as a Final Report by the New River Valley Metropolitan Planning Organization on May 7, 2020.

It was prepared for the New River Valley Metropolitan Planning Organization by the Technical Advisory Committee of the New River Valley Metropolitan Planning Organization through a cooperative process involving the Towns of Blacksburg and Christiansburg, the City of Radford, the Counties of Montgomery and Pulaski, Blacksburg Transit, Radford Transit, Pulaski Area Transit, the Virginia Tech - Montgomery Executive Airport Authority, Virginia Tech, Radford University, New River Community College, the Virginia Department of Transportation, the Department of Rail and Public Transportation, the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA).

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

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Introduction

Purpose and Development

The Transportation Improvement Program (TIP) for the Blacksburg Urbanized Area is a comprehensive listing of transportation activities to be undertaken during the three-year interval for which it is developed. The basic purpose of the TIP is to recommend transportation projects for federal funding while combining the efforts of local jurisdictions into a regionally coordinated plan of improvements. The TIP is developed in accordance with provisions in federal legislation; Fixing America's Surface Transportation (FAST) Act. Information on the FAST Act can be found on the MPO website or at the following link: www.fhwa.dot.gov/fastact/.

Projects are proposed for the TIP by local officials, transit operating officials, the Virginia Department of Transportation and any other agencies or officials responsible for transportation projects within the region. These officials, through the New River Valley Metropolitan Planning Organization (MPO), select and schedule projects that they support for endorsement in the TIP. The Transportation Improvement Program is endorsed annually by the MPO and may be modified by amendments at any time. MPO membership currently includes officials from Montgomery and Pulaski Counties, the Towns of Blacksburg and Christiansburg, The City of Radford, Virginia Tech, Radford University, New River Community College, the New River Valley Regional Commission, Blacksburg Transit, Radford Transit, Pulaski Area Transit, the Virginia Tech/Montgomery Regional Airport Authority, the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, the Federal Highway Administration, and the Federal Transit Administration.

The Comprehensive, Continuing, Cooperative (3-C) process of the MPO, provides a natural mechanism by which the plan can be carefully reviewed and updated annually. Annual development of this program helps to clarify future needs, allow revisions to accommodate changing conditions, and allows developing local and regional plans to be continually incorporated. The Technical Advisory Committee to the MPO made up of representatives from local, state, and federal agencies, provides the professional expertise necessary to derive a plan, and ensure that all local and regional interests are considered. Once the program is developed, the MPO reviews and approves the program according to policies adopted by the local governments.

With few exceptions, any proposed transportation project should be included in the TIP to be considered eligible for federal funding. All phases of a project including preliminary engineering, right-of-way acquisitions, or construction should be documented in the TIP.

Understanding the TIP

The arrangement of the Transportation Improvement Program identifies those capital projects anticipated during fiscal years 2021-22, through 2024-25. The project tables generally include a brief description of each project and the projected funding required to complete the project. This document provides detailed project tables for highway improvements including Interstate, Primary, Urban and Secondary system projects; safety improvements, Transportation Alternative projects, public transportation improvements, and airport improvements.

Financial Plan

The New River Valley MPO Transportation Improvement Program (TIP) provides a summary of how transportation revenues in the program will be invested over a four-year period by the state and local agencies that have legal responsibility to build, operate, and maintain the state's highway, road, street, airport, and public transit systems. Federally funded expenditures are required by federal law to be consistent with the FY2040 Long Range Plan adopted in November 2015 and to be constrained to include only projects that we anticipate having enough revenue to complete. A portion of this money is used to maintain and operate the transportation systems. The remainder is for capital projects.

The project tables have been derived from information provided to the MPO staff by the state and local agencies responsible for funding participation. These tables represent the best estimate of project descriptions and costs that can be made in advance of final negotiation. The principal references for the compilation of the roadway improvements section was the Virginia Commonwealth Transportation Board's current Transportation Development Plan, and the reader is directed to this publication for further discussion of the majority of roadway projects included in this report, as well as the Six Year Secondary Road Improvement Program for Montgomery County.

Federal regulations require the TIP to be financially constrained by fiscal year. The STIP must demonstrate that there is enough money available each year to fund projects listed in the TIP for the year. The purpose of the included tables is to demonstrate financial constraint (for Highway Projects, see pp. 9-15; for Transit/Public Transportation Projects, see pp. 16-21; for Airport/Aviation Projects, see pp. 22-23). The tables compare estimated revenues and expenditures by funding source and indicate how much revenue is estimated will be available each year from federal, state and local sources.

Definitions and Abbreviations

- *AC - Advance Construction*
- *ADA - Americans with Disabilities Act*
- *Allocation - An administrative distribution of funds set apart or designated for a special purpose.*
- *Apportionment - A law that refers to a statutorily prescribed division or assignment of funds. An apportionment is based on prescribed formulas in the law and consists of dividing authorized obligation authority for a specific program.*
- *BH – Bridge Rehabilitation Funds*
- *BR – Bridge Replacement Funds*
- *BROS – Bridge (off-system, not on the federal-aid system)*
- *DEMO – Demonstration*
- *Earmarked – To reserve or set aside for a specific purpose*

- *EB – Equity Bonus*
- *EN – Enhancement Funds*
- *IM – Interstate Maintenance Funds*
- *M – Urbanized Funds*
- *MG – Minimum Guarantee*
- *NHS – National Highway System Funds*
- *PAPI – Precision Approach Path Indicator*
- *PPMS – Project Planning Management System (VDOT Tracking System Number)*
- *RPZ – Runway Protection Zone RRP – Rail Highway Protective Devices Funds*
- *RRP – Rail Highway Protective Devices Funds*
- *RRS – Rail Highway Grade Separation Funds*
- *S – State Funds*
- *STP – Surface Transportation Program Funds*
- *UST – Underground Storage Tank*
- *[] – Signifies a Very Preliminary Estimate of Cost*

PUBLIC TRANSPORTATION PROGRAM

Federal Public Transportation Funding

Federal grants for public transportation programs are authorized by the FAST Act signed into law in December. Brief descriptions of funding categories for capital and operating expenses are given below for the programs typically used by transit agencies in the NRVMPPO. Descriptions are posted at <https://www.transit.dot.gov/grants>.

Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities (formerly section 16) - Formula funding to states for the purpose of assisting private nonprofit groups in meeting transportation needs of the elderly and persons with disabilities.

Section 5311 Formula Grants for Rural Areas (formerly Section 18) - Provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations.

Section 5339(a) Grants for Buses and Bus Facilities Formula Program - Provides funding to states and transit agencies through a statutory formula to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. In addition to the formula allocation, this program includes two discretionary components: The Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program.

Grants for Buses and Bus Facilities Program - Provides funding through a formula and competitive allocation process to states and transit agencies to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. The competitive allocation provides funding for major improvements to bus transit systems that would not be achievable through formula allocations.

Section 5307 Urbanized Area Formula Grants - Provides funding to public transit systems in Urbanized Areas (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. Up to 80% of capital improvements and up to 50% for operating expenses may be federally funded. Project priority is determined by the state.

The Federal Transit Administration has several other funding programs that are for planning and other specialized purposes and are generally not referred to in the Transportation Planning and Research Program.

Public Transportation Project Justification Narratives

In accordance with FTA reporting procedures discussions of the justification for individual projects applied for under the federal transit program must be included in the TIP. Section 5310 projects, which are reported through the Virginia Department of Rail and Public Transportation Division, remain unaffected by this requirement.

Operating Assistance (Blacksburg Transit)

Blacksburg Transit, a department of the Town of Blacksburg, Virginia, is a designated recipient of state and federal aid programs for public transit service. BT provides transit service to roughly 74,000 residents of the MPO area. Transit service is provided within the Town of Blacksburg, with a route that runs through Montgomery County to the Town of Christiansburg. Since a majority of Blacksburg Transit ridership is associated with the local university, Virginia Tech, service schedules coincide with the class schedules at the university.

During full service the hours of operation for routes within the Town of Blacksburg town limits are

Monday – Thursday 7:00 am to 12:45 am

Friday 7:00 am to 2:45 am

Saturday 9:30 am 2:45 am

Sunday 11:30 am to 11:30 pm

During reduced service* the hours of operation are:

Monday – Friday 7:00 am to 10:30 pm

Saturday 9:30 am 9:15 pm

Sunday 11:30 am to 7:15 pm

*note “reduced service” is during the summer and winter breaks.

Blacksburg Transit’s complementary paratransit service is known as BT ACCESS. BT ACCESS’ door-to-door service for persons with disabilities. It is available throughout the Town of Blacksburg during the times that fixed route service operates, and is widely recognized as one of the best in the state.

For routes in Blacksburg, Blacksburg Transit maintains an active fleet of 53 full-sized transit buses and 18 Body-On-Chassis (BOC) vehicles and vans for a total of 71. Blacksburg Transit’s fleet is 100 percent accessible. Morning pullout during full service is 47 vehicles. BT provided 4,659,053 passenger trips during fiscal year 2019.

Service for the Town of Christiansburg

Service in the Town of Christiansburg, provided by BT, covers all areas within the Town limits. The current routes include the Go Anywhere! (demand-response), Explorer (deviated fixed route), and Commuter Service routes.

For year round service within Christiansburg, the hours of operation are

Monday – Friday 7:00 am to 5:45 pm

Saturday 9:30 am to 4:45 pm there is no Sunday service.

See the latest hours at <http://ridebt.org/hours-of-operation>

Blacksburg Transit, in cooperation with Virginia Tech, plans to construct a multi-modal transit facility (MMTF) to serve the existing and future riders in Blacksburg and the surrounding region. It is envisioned that this facility will be a hub for local and regional transit, creating a centralized transportation center that will promote alternative modes and facilitate non-automobile traffic. The facility, to include 17 bus bays on an east and west loop along with a 13,500 square foot building with a passenger waiting area, will allow future expansion of service to be better served by an expanded and comprehensive transit operation.

The NRV MPO Policy Board has authorized the Town Manager of the Town of Blacksburg on behalf of the NRV MPO to seek federal and state funding to support transit services. The projected program budget is for expenditures to be incurred for the provision of a standard level of transit service system-wide and represents no major changes in eligible expense categories from the previous grant year.

Operating Assistance (Radford Transit)

Radford Transit is a service provided by the City of Radford. Service is contracted through New River Valley Community Services and is a partnership between the City of Radford and Radford University. RT provides service to citizens and students in the City of Radford, Radford University, Fairlawn in Pulaski County, with connecting service to Christiansburg, and Blacksburg. Service is provided year-round with reduced service provided during times when Radford University is not in session.

At times when full service levels are provided, typical hours of operation are as follows:

Monday - Thursday: 6:50am – 10:50pm

Friday: 6:50am - 2:40am

Saturday: 9:50am - 2:40am

Sunday: 5:50pm – 11:50pm

Reduced service hours (when Radford University is not in session) are as follows:

Monday - Friday: 6:50am – 8:05pm

Saturday: 9:50am – 8:05pm

All Radford Transit service is "deviated fixed-route" which enables any person requesting a deviation to do so with 24-hour notice. Buses may deviate from fixed routes up to $\frac{3}{4}$ mile from the bus route.

Radford Transit's fleet consists of five (5) body-on-chassis (Cutaway) style buses, eleven (11) 23-passenger low floor body-on-chassis (Cutaway) style buses, two (2) 29-passenger medium duty body-on-chassis (Cutaway) style buses, and two (2) low floor heavy duty transit buses.

In fiscal year, 2019 RT provided 268,727 passenger trips, a drop from the previous year. RT employs approximately 60 full and part-time employees and is a functioning department of New River Valley Community Services within the agency's transit services department. NRVCS also provides Community Transit (CT) service throughout the New River Valley. This service targets human service transportation and provides some service for Radford Transit in the connection with the New River Valley Medical Center.

The NRV MPO Policy Board has authorized the City Manager of the City of Radford on behalf of the NRV MPO to seek federal and state funding to support transit services. The projected program budget is for expenditures to be incurred for the provision of a standard level of transit service system-wide and represents no major changes in eligible expense categories from the previous grant year.

Performance Measures

Federal legislation requires that all MPOs establish performance measures to help assure funding is being used appropriately. This can be accomplished by setting measures specifically for the MPO or adopting the measures that are set by the State. The NRV MPO has adopted the measures used by the State. Currently, performance measures have been established for Safety. Other measures will be adopted later this year. The State measures adopted by the MPO for Safety follow.

Appendix E, Addendum 1: Performance Based Planning and Programming – Safety Performance Measures

Performance Targets

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established safety performance objectives as published in [Virginia’s 2017 – 2021 Strategic Highway Safety Plan \(SHSP\)](#) and, starting in 2017, annual targets in the Highway Safety Improvement Program (HSIP) Annual Report. The SHSP performance measure objectives are indicated in Table 1 below.

Table 1: 2017 – 2021 SHSP Safety Performance Objectives

	Performance Target	Per Year Reduction
1	Number of Fatalities	2%
2	Rate of Fatalities per 100 Million Vehicle Miles Travelled	3%
3	Number of Serious Injuries	5%
4	Rate Serious Injury Million Vehicle Miles Travelled	7%
5	Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	4%

For safety performance measures 1, 2, and 3, annual targets are developed collaboratively by the Department of Motor Vehicles (DMV) Highway Safety Office (HSO) and VDOT HSIP staff.¹ The DMV HSO includes these measures in their Highway Safety Plan submitted to the National Highway Traffic Safety Administration (NHTSA) every June.

The Commonwealth Transportation Board approves all five annual targets and VDOT includes these in the HSIP Annual Report submitted to FHWA every August. Within 180 days of VDOT’s annual report submission to FHWA, MPOs must indicate their support of the state targets or submit their unique regional targets for one or more of the safety measures.

Connection to Other Performance Based Planning Documents

The federally required SHSP, a five-year multi-agency comprehensive plan focused on reducing fatalities and serious injuries on all public roads, serves as the coordinating document for other plans and programs that involve traffic safety. This coordination involves the long-range statewide transportation plan (LRSTP), the metropolitan transportation plans (MTP), and three plans that implement parts of the SHSP – the Highway Safety Plan (HSP), the HSIP, and the Commercial Vehicle Safety Plan (CVSP). This integration is important for improving overall safety coordination amongst various partners and leads to transportation that is more comprehensive safety planning.

¹It is a federal requirement that safety performance measures 1, 2, and 3 are identical targets for NHTSA's Highway Safety Grants Program and FHWA's Highway Safety Improvement Program. This requirement allows States to align their safety performance targets and work collaboratively to achieve them.

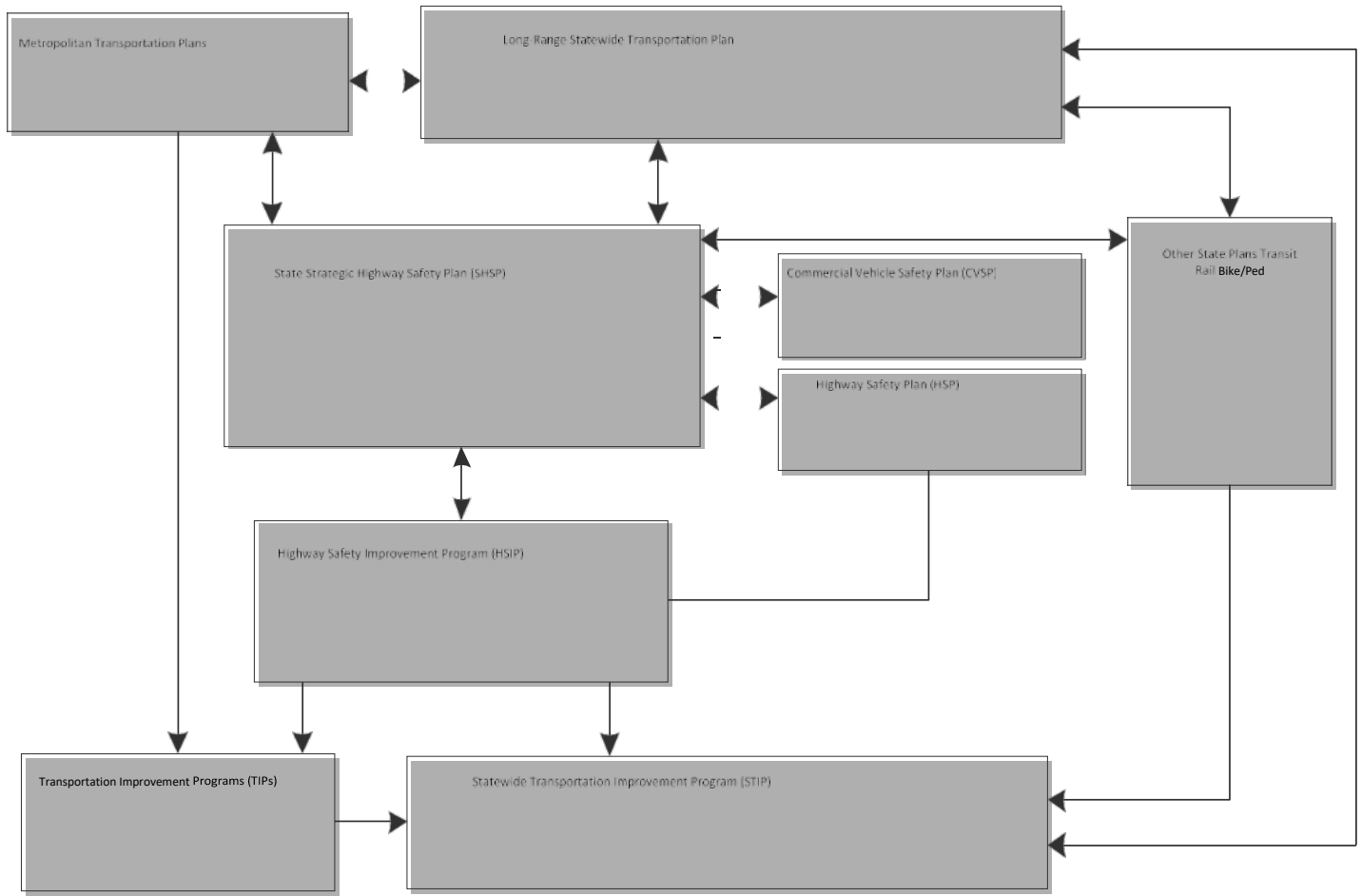
The LRSTP, VTrans2040, guides the state's investment decisions for transportation improvements. Safety and performance management is included in the VTrans2040 Vision, Goals & Objectives, and Guiding Principles:

- Guiding Principle 2: Ensure Safety, Security, and Resiliency – Provide a transportation system that is safe for all users, responds immediately to short-term shocks such as weather events or security emergencies, and adapts effectively to long-term stressors such as sea level rise.
- Guiding Principle 5: Ensure Transparency and Accountability, and Promote Performance Management – work openly with partners and engage stakeholders in project development and implementation, and establish performance targets that consider the needs of all communities, measure progress towards targets, and to adjust programs and policies as necessary to achieve the established targets.
- Goal C: Safety for All Users – provide a safe transportation system for passengers and goods on all travel modes.
 - Objectives:
 - Reduce the number and rate of motorized fatalities and serious injuries.
 - Reduce the number of non-motorized fatalities and injuries.

MTPs are similar to the LRSTP however; a MTP covers a specific metropolitan planning area. MTPs include goals and objectives for their respective areas/regions and identify strategies for advancing long-term transportation investments in a specific region.

The HSP is an annual plan to address highway user behaviors that will improve safety through education and enforcement campaigns. The HSP and associated NHTSA grants are administered through the Highway Safety Office at the DMV. Furthermore, each year Virginia State Police (VSP) submits a Commercial Vehicles Safety Plan (CVSP) to Federal Motor Carrier Safety Administration as a requirement of obtaining related enforcement grants.

The relationship between the various plans and programs is shown below:



Projects in the STIP are directly linked to the safety objectives outlined in the SHSP through the strategies and actions that are priorities in Virginia.

Funding for Safety Projects

Safety targeted improvements are implemented through HSIP projects. Each year Virginia is allocated ~\$55 Million for HSIP and \$5 Million for Railway Grade Crossing improvements. Virginia is also subject to a Penalty Transfer provision, Section 154 “Open Container”, such that 2.5% of NHPP funds are reserved for either NHTSA Alcohol-Impaired Driving or HSIP projects. The State determines what proportion goes to each program. Of the HSIP funds, about 10 percent is set aside for non-motorized safety projects and 20 percent of the remainder for improvements on locally maintained roadways.

How do Safety Projects get selected for Inclusion in the STIP?

The HSIP project planning and delivery follows these steps:

- Each year highway segment and intersection locations that have the highest potential for safety improvement are identified based on the previous five years of traffic crash and volume data. These above average crash locations are provided to the VDOT Districts to determine appropriate locations and countermeasures for HSIP funding. The potential for vehicle-train crashes at each at-grade railroad crossing is also distributed.
- HSIP project proposals are submitted through the SMART Portal for the appropriate safety program.
- VDOT and locality submitted HSIP proposals are reviewed and prioritized based on the number of targeted crashes and the benefit to cost ratio or the potential risk reduction for non-motorized and rail highway grade crossing improvements.
- Projects are selected and programmed for the last two or three years of the SYIP. At present, there are over \$100 million of safety improvement proposals, with an expected benefit, that remain unfunded.

In recent years, programmed priority HSIP projects have shifted from being higher cost spot intersection and segment improvements to lower cost systemic improvements that target specific crash types and/or roadway characteristics that are factors in crashes across the network.

Examples of systemic improvements include traffic signal devices and timing at intersections and curve signing, higher friction surfaces and rumble strips on segments.

Safety improvements are also included within projects funded with non-HSIP funds. The SMART SCALE scoring and prioritization process for inclusion of projects in the SYIP, considers safety benefits from improvements addressing travel of all modes. Many of the large SMART SCALE projects, upon completion, will have distinct impacts on safety performance in the Commonwealth. In addition, projects funded through other state and federal sources in the SYIP, such as the Transportation Alternatives Program, including Safe Routes to School grants, Revenue Sharing, and even some CMAQ and maintenance projects, will also have crash reduction benefits that contribute to improved safety performance.

Thus, the funding to meet Virginia's safety objectives and targets is allocated to projects in the CTB approved SYIP, and is consistent with VTrans2040. Since the SYIP is the foundation for the STIP, the program of projects in the STIP demonstrates support to achieve Virginia's safety performance objectives and targets and is consistent with Virginia's SHSP and the HSIP.

Appendix E, Addendum 3: Performance Based Planning and Programming – Pavement and Bridge Performance Measures

Performance Targets

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established pavement and bridge condition performance targets as reported in Virginia’s Baseline Performance Period Report for 2018-2021¹. This report, submitted to FHWA in October 2018, satisfies the federal requirement that State DOTs submit a Baseline Performance Period Report to FHWA by October 1st of the first year in a performance period. Performance measures for pavement condition are required for the National Highway System (NHS), while bridge condition requirements relate to structures identified as part of the National Bridge Inventory on the NHS. The pavement condition measures and established performance targets for the 2018-2021 performance period are indicated in Table 1 below.

Table 1: Pavement Condition Measures and Performance Targets

Interstate Pavement Condition Measures²	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Percentage of Pavements in Good Condition	N/A ³	45.0%
Percentage of Pavements in Poor Condition	N/A ³	3.0%
Non-Interstate NHS Pavement Condition Measures⁴	2018-2019 Two Year Target	2018-2021 Four Year Target
Percentage of Non-Interstate Pavements in Good Condition	25.0%	25.0%
Percentage of Non-Interstate Pavements in Poor Condition	5%	5.0%

Bridge condition measures and established performance targets for the 2018-2021 performance period are indicated in Table 2 below.

¹ Virginia’s Baseline Performance Period Report data is through December 2017.

² Interstate condition measures are based on four distresses: International Roughness Index (IRI), cracking, rutting, and faulting.

³ During this first performance period, States are not required to establish 2-year targets for interstate pavements; however, Virginia has chosen to establish performance targets and are 45.0% and 3.0% for percentage of pavements in good and poor condition, respectively.

⁴ During this first performance period, Federal requirements for Non-Interstate NHS pavement condition and performance targets are based on a single distress, IRI. However, Federal guidance outlined in a September 27, 2018 Memorandum on State DOT Targets for Non-Interstate NHS Pavement Measures allows for the use of full distress data when reporting Non-Interstate NHS performance targets. Given the availability of full distress data, Virginia has chosen this approach and reported performance targets for Non-Interstate NHS pavements based on all four distresses. This allows for consistency in assessing the condition and setting performance targets for both Interstate and Non-Interstate NHS pavements.

Table 2: NHS Bridge Condition Measures and Performance Targets

NHS Bridge Condition Measures	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Percentage of Deck Area of NBI Bridges on the NHS in Good Condition	33.5%	33.0%
Percentage of Deck Area of NBI Bridges on the NHS in Poor Condition	3.5%	3.0%

Background/History

Virginia’s history of monitoring asset conditions and utilizing performance information to determine investment strategies based on available funding levels spans over 10 years for pavements and bridges.

VDOT maintains a comprehensive inventory of all pavement and bridges on the state-maintained network. This inventory, which includes location, maintenance responsibility, ownership, and current condition or inspection information, serves as the foundation for life cycle planning, performance forecasting, maintenance and rehabilitation needs estimation, as well as prioritization of work to maximize asset life given available funding. Condition information is also important for communicating with external stakeholders, including the general public.

VDOT’s commitment to responsible Transportation Asset Management (TAM) practice is demonstrated through VDOT’s annual condition data collection programs and its establishment and publication of network level pavement and bridge performance goals. VDOT’s current condition measures and performance goals have been in place for many years and are fully integrated into VDOT’s budgeting process and investment strategies.

The federal pavement and bridge performance measures apply to a limited portion of the network for which VDOT is responsible (less than 15% of all lane miles and 18% of the bridge inventory).

Connection to Other Performance Based Planning Documents

VTrans, the state’s long-range multimodal plan, provides the overarching vision and goals for transportation in the Commonwealth. The long-range plan provides a vision for Virginia’s future transportation system and defines goals, objectives, and guiding principles to achieve the vision. It also provides direction to state and regional transportation agencies on strategies and policies to be incorporated into their plans and programs. The most recent approved long-range multimodal plan is VTrans2040.

Performance management, specifically as it relates to pavements and bridges, is included in the VTrans2040 Vision, Goals & Objectives, and Guiding Principles as noted below:

- Guiding Principle 5: Ensure Transparency and Accountability, and Promote Performance Management - Work openly with partners and engage stakeholders in project development and implementation, and establish performance targets that consider the needs of all communities, measure progress towards targets, and to adjust programs and policies as necessary to achieve the established targets.
- Goal D: Proactive System Management - maintain the transportation system in good condition and leverage technology to optimize existing and new infrastructure.
 - Objectives:
 - Improve the condition of all bridges based on deck area.
 - Increase the lane miles of pavement in good or fair condition.

Virginia’s federally required Transportation Asset Management Plan (TAMP) presents pavement and bridge inventory and conditions, along with the Commonwealth’s performance objectives, measures, and associated risks as they relate to the federal requirements. Asset funding, investment strategies, forecasts, goals, and gaps are also included. The TAMP is specific to the NHS and provides the Commonwealth’s Transportation Asset Management (TAM) processes and methodology to meet federal requirements. Pavement and bridge projects included in the STIP are consistent with Virginia’s reported TAM processes and methodology.

The program of projects in the STIP are directly linked to the pavement and bridge objectives outlined in VTrans2040 and the TAMP through the strategies and actions that are priorities in Virginia.

Funding for Pavement and Bridge Projects

There are two key funding sources for pavement and bridge projects, the Highway Maintenance and Operations Fund (HMOF) and State of Good Repair (SGR) program funds. The pavement and bridge funding is used for differing projects from routine maintenance to reconstructive work. Funds are allocated to pavement and bridge projects based on an annual needs assessment process supported by a data-driven prioritization and selection process. The prioritization process is the same for the various funding sources; however, the [State of Good Repair](#) program funds are designated for deteriorated pavements and structurally deficient bridges.

The SGR program requires funds be distributed proportionality between VDOT and localities, based on assessed needs. More details, including the requirements for pavements and bridges, and the SGR prioritization process methodology, can be found at: [State of Good Repair for Bridges](#) and [Local Assistance Funding Programs](#).

VDOT has developed a robust asset management program, placing maintenance of the transportation network at the forefront of VDOT’s investment decisions. This commitment to responsible asset management practice is demonstrated through VDOT’s annual collection of condition data on pavements and bridges along with its establishment and publication of network-level pavement and bridge performance targets. For more than a decade, VDOT has

monitored pavement and bridge conditions using performance information (measures and targets) to determine investment strategies based on available funding levels.

In the annual needs assessment process, VDOT assesses 100% of the pavement network on Virginia's Interstate and Primary systems and approximately 20% of the Secondary system. In 2016, VDOT assessed 100% of the Secondary pavement network to create a condition baseline. The pavement condition data is compiled, analyzed and reviewed to report the optimized needs at a roadway system and district level. VDOT's pavement program selects resurfacing projects, in relation to needs, and optimizes the timing of projects through a data-driven pavement management system.

For bridges, VDOT follows national standards in performing safety inspections and determining general condition of the structures. Condition assessments are performed by certified safety inspection personnel. The inspection program requires a qualified inspector to complete a "hands-on" review of the structure or bridge during each inspection. By federal regulation, VDOT is required to conduct detailed inspections of NBI structures at intervals not to exceed 24 months. VDOT uses BrM software to store bridge condition and inventory data for each structure and to program, schedule, and track bridge and structure inspections. The data collected during inspections allows VDOT to use a proactive approach to maintenance. Preventive maintenance and timely intervention repairs are performed to avoid and slow deterioration that leads to greater rehabilitation or replacement cost. Virginia's bridge maintenance program is large and complex, so in order to direct its efforts more easily, performance targets have been developed.

VDOT uses a prioritization process when determining funding for the pavement and bridge programs and prioritizes work ranging from preventative maintenance to replacement. The prioritization processes take into account similar factors such as condition, cost effectiveness, maintenance history, and traffic volumes. While the systematic prioritization processes are a guide to assist in funding projects, districts direct the work performed as the local experts.

How do Pavement and Bridge Projects get selected for Inclusion in the STIP?

As noted above, the funding to meet Virginia's pavement and bridge objectives and targets is allocated to projects in the CTB-approved SYIP and is consistent with VTrans2040. Each spring, the public is invited to comment on projects included in the draft SYIP prior to CTB approval. Since the SYIP is the foundation for the STIP, the program of projects in the STIP demonstrates support to achieve Virginia's pavement and bridge performance objectives and targets and is consistent with Virginia's TAMP.

Appendix E, Addendum 4: Performance Based Planning and Programming – Highway System Performance

Performance Targets

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established performance targets for three reliability performance measures to assess the Highway System Performance. All three measures are included in Virginia’s Baseline Performance Period Report for 2018-2021 which was submitted to FHWA in October 2018. This report satisfies the federal requirement that State DOTs submit a Baseline Performance Period Report to FHWA by October 1st of the first year in a performance period and establishes baseline performance as of December 31, 2017.

Performance of the NHS is measured by the level of travel time reliability. The travel time reliability performance measures and performance targets for the 2018-2021 performance period are indicated in Table 1 below.

Table 1: National Highway System Travel Time Reliability Performance Measures and Targets

NHS Travel Time Reliability Performance	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Percent of Person Miles Traveled on the Interstate That Are Reliable	82.2%	82.0%
Percent of Person Miles Traveled on the Non-Interstate NHS That Are Reliable	N/A ¹	82.5%

The assessment for freight reliability is based on the truck travel time reliability index. The truck travel time reliability performance measure and performance targets for the 2018-2021 performance period are indicated in Table 2 below.

Table 2: Freight Reliability Performance Measure and Targets

Truck Travel Time Reliability Performance	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Truck Travel Time Reliability Index	1.53	1.56

The Commonwealth Transportation Board (CTB) approves the performance measures and targets developed for Virginia’s surface transportation network. Such targets, including those for Highway System Performance, are linked to the goals and objectives in Virginia’s long-range transportation plan, or VTrans.

¹ During this first performance period, States are not required to establish 2-year targets for the Non-Interstate NHS reliability measure.

Connection to Other Performance Based Planning Documents

VTrans, the state's long-range multimodal plan, provides the overarching vision and goals for transportation in the Commonwealth. The long-range plan provides a vision for Virginia's future transportation system and defines goals, objectives, and guiding principles to achieve the vision. It also provides direction to state and regional transportation agencies on strategies and policies to be incorporated into their plans and programs. The most recent approved long range multimodal plan is VTrans2040.

VTrans2040 identifies the most critical transportation needs in Virginia to ensure the overarching transportation goals in the long-range plan are achieved. The screening process was informed by a data-driven approach that considers highway system performance measures and targets in addition to other performance indicators.

Performance management, as it relates to the reliability of the NHS and freight, is included in the VTrans2040 Vision, Goals & Objectives, and Guiding Principles as noted below:

- Guiding Principle 4: Consider Operational Improvements and Demand Management First
 - Maximize capacity of the transportation network through increased use of technology and operational improvements as well as managing demand for the system before investing in major capacity expansions.
- Goal A – Economic Competitiveness and Prosperity: invest in a transportation system that supports a robust, diverse, and competitive economy.
 - Objectives:
 - Reduce the amount of travel that takes place in severe congestion.
 - Reduce the number and severity of freight bottlenecks.
 - Improve reliability on key corridors for all modes.
- Goal B – Accessible and Connected Places: increase the opportunities for people and businesses to efficiently access jobs, services, activity centers, and distribution hubs.
 - Objectives:
 - Reduce average peak-period travel times in metropolitan areas.
 - Reduce average daily trip lengths in metropolitan areas.
 - Increase the accessibility to jobs via transit, walking and driving in metropolitan areas.

Additionally, the Virginia Freight Element (VFE), a component of VTrans2040, discusses freight system trends, needs, and issues. The VFE also includes freight policies, strategies, and performance measures that guide Virginia's freight-related investment decisions.

Projects included in the STIP are directly linked to the Highway System Performance objectives outlined in VTrans2040 and associated needs analysis, and the VFE through the strategies and actions that are priorities in Virginia.

Funding for Highway System Performance Projects

SMART SCALE, Virginia's data-driven prioritization process for funding transportation projects, considers the potential of a project to improve reliability. In order to be considered for SMART SCALE, a project must first meet a need identified in VTrans2040, thus strengthening the connection between the planning and programming processes. Congestion mitigation, safety, accessibility, economic development, environment, and land use are the factors used to score SMART SCALE projects. Freight considerations are included in the economic development factor.

The FAST Act established a National Highway Freight Program, including a freight-specific funding program to highlight the focus on freight transportation needs. Projects eligible for National Highway Freight Program (NHFP) funding must contribute to the efficient movement of freight on the National Highway Freight Network (NHFN) and be included in the VFE. VDOT uses NHFP funding to construct freight beneficial projects identified through the SMART SCALE process.

SMART SCALE screening and scoring results, along with public feedback and CTB guidance, are used to develop the SYIP.

Other projects selected for funding are subject to program specific prioritization processes approved by the CTB. All funding (federal, state, and other sources) for transportation projects are allocated to projects in the CTB approved SYIP.

How do Highway System Performance Projects Get Selected for Inclusion in the STIP?

As noted above, the funding for all transportation projects, including funding for projects to meet Virginia's NHS system performance and freight movement targets is allocated to projects in the CTB approved SYIP, and is consistent with VTrans2040 and the VFE. Since the SYIP is the foundation of the STIP, the program of projects in the STIP demonstrates support to achieve Virginia's NHS and Freight Reliability performance objectives and targets.

Performance Based Planning and Programming for Transit Asset Management

The two most recent federal transportation laws, MAP-21 and FAST Act, establish performance measure requirements to ensure states and metropolitan planning organizations (MPOs) are investing transportation funds in projects that collectively will contribute towards the achievement of national goals. The USDOT recently published new rules for states and MPOs to collect data and establish performance targets that will support performance and outcome-based investment decisions.

The new federal performance measurement requirement for transit agencies focuses on one area: transit asset management (TAM). The measures look specifically at the percentage of revenue vehicles that have exceeded their Useful Life Benchmark (ULB), the percentage of non-revenue and service vehicles that have exceeded their ULB, and percentage of facilities with a condition below 3.0 on the Federal Transit Administrator's TERM Scale. All transit agencies receiving grants from the FTA are required to complete a TAM plan. The FTA has established two tiers of agencies based on size parameters.

A Tier I agency operates rail, OR has 101 vehicles or more all fixed route modes, OR has 101 vehicles or more in one non-fixed route mode.

A Tier II agency is a sub recipient of FTA 5311 funds, is an American Indian Tribe, has 100 or less vehicles across all fixed route modes, OR has 100 vehicles or less in one non-fixed route mode.

The Department of Rail and Public Transportation (DRPT) has opted to sponsor a group TAM plan for Tier II providers. Tier I providers are not eligible for group plans.

For Tier II providers under the DRPT Group Plan, any Transportation Improvement Program (TIP) document or Metropolitan Transportation Plan (MTP) adopted after October 1, 2018 will be in compliance with the TAM Plans developed by DRPT and adopted by the Tier II transit providers within the MPO as well as the regional performance measures adopted by the MPO as a whole.

The performance measurements and the targets can be found in the DRPT *Group Transit Asset Management Plan*.

The New River Valley's planning process will integrate, either directly or by reference, the goals, objectives, performance measures, and targets described in the Tier II group plan. The transit providers within the MPO are all Tier II.

The National Transit Asset Management System Final Rule (49 U.S.C 625) specifies four performance measures, which apply to four TAM asset categories: equipment, rolling stock, infrastructure, and facilities. Figure 2 describes each of these measures.

Figure 2: TAM Performance Measures by Asset Category

Asset Category	Relevant Assets	Measure	Measure Type	Desired Direction
Equipment	Service support, maintenance, and other non-revenue vehicles	Percentage of vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Rolling Stock	Buses, vans, and sedans; light and heavy rail cars; commuter rail cars and locomotives; ferry boats	Percentage of revenue vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Infrastructure	Fixed guideway track	Percentage of track segments with performance (speed) restrictions, by mode	Performance-based	Minimize percentage
Facilities	Passenger stations, parking facilities, administration and maintenance facilities	Percentage of assets with condition rating lower than 3.0 on FTA TERM Scale	Condition-based	Minimize percentage

FTA = Federal Transit Administration. TAM = Transit Asset Management. TERM = Transit Economic Requirements Model. ULB = Useful Life Benchmark.

Two definitions apply to these performance measures:

- **Useful Life Benchmark (ULB)**— “The expected lifecycle of a capital asset for a particular transit provider’s operating environment, or the acceptable period of use in service for a particular transit provider’s operating environment.” For example, FTA’s default ULB of a bus is 14 years.
- **FTA Transit Economic Requirements Model (TERM) Scale**—A rating system used in FTA’s TERM to describe asset condition. The scale values are 1 (poor), 2 (marginal), 3 (adequate), 4 (good), and 5 (excellent).

The National Transit Asset Management System Final Rule (49 U.S.C. 625) requires that all transit agencies that receive federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage capital assets used in the provision of public transportation create a TAM plan. Agencies are required to fulfill this requirement through an individual or group plan. The TAM rule provides two tiers of requirements for transit agencies based on size and operating characteristics:

- A Tier I agency operates rail, OR has 101 vehicles or more all fixed route modes, OR has 101 vehicles or more in one non-fixed route mode.
- A Tier II agency is a sub recipient of FTA 5311 funds, OR is an American Indian Tribe, OR has 100 or less vehicles across all fixed route modes, OR has 100 vehicles or less in one non-fixed route mode.

Tier II Group Plan

The Department of Rail and Public Transportation (DRPT) is the sponsor for the Statewide Tier II Group Plan. The New River Valley programs federal transportation funds for the Town of Blacksburg (Blacksburg Transit) and the City of Radford (Radford Transit). The Town of Blacksburg (Blacksburg Transit) and the City of Radford (Radford Transit) are both Tier II agencies participating in the DRPT sponsored group TAM Plan. The MPO has integrated the goals measures and targets described in the [Federal Fiscal Year 2018 Group Transit Asset Management Plan and 2020 plan Addendum](#) into the MPO's planning and programming process specific targets for the Tier II Group TAM Plan are included in the table below.

Table 3: TAM Targets for rolling stock and facilities: Percentage of Revenue Vehicles that have met or exceeded their ULB by Asset Type.

Asset Category - Performance Measure	Asset Class	2020 Target*
Revenue Vehicles		
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	AB - Articulated Bus	15%
	BU - Bus	10%
	CU - Cutaway	10%
	MB - Minibus	20%
	BR - Over-the-Road Bus	15%
	TB - Trolley Bus	10%
	VN - Van	25%
Equipment		
Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/Service Automobile	25%
	Trucks and other Rubber Tire Vehicles	25%
Facilities		
Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale	Administrative and Maintenance Facility	10%
	Administrative Office	10%
	Maintenance Facility	10%
	Passenger Facilities	10%

Additional information and guidance is available on FTAs Transit Asset Management website:

<https://www.transit.dot.gov/TAM>

FTA TAM planning factsheet:

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Planning%20for%20TAM%20fact%20sheet.pdf>

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

OVERVIEW OF PTASP AND IMPORTANT DATES FOR MPOS AUGUST 2020

Background

The Public Transportation Agency Safety Plan (PTASP) final rule (49 C.F.R. Part 673) intends to improve public transportation safety by guiding transit agencies to more effectively and proactively manage safety risks in their systems. It requires certain recipients and sub-recipients of Federal Transit Administration (FTA) grants that operate public transportation to develop and implement safety plans that, establish processes and procedures to support the implementation of Safety Management Systems (SMS).

The rule applies to all operators of public transportation systems that are recipients and sub-recipients of FTA grant funds. Specifically, recipients or sub-recipients who operate public transportation and are a recipient or sub-recipient of Urbanized Area Formula Grant Program funds under 49 U.S.C. § 5307 (Section 5307 Grant Program) see attachment A for a list of Transit agencies.

DRPTs Role: DRPT has drafted a PTASP on behalf of small tier II transportation providers. Under the PTASP rule a small tier II transportation provider is defined as meeting all of the following criteria:

- Is a recipient or sub-recipient of FTA’s Urbanized Area Formula Program,
- Operates 100 or fewer vehicles in peak revenue service, and
- Does not operate rail/fixed-guideway public transportation

Important Dates
Tier II PTASP plan effective date: 8/11/2020
MPO initial targets include in TIP by: 2/7/2021

Applicability	Requirements
<p>Would Apply to:</p> <ul style="list-style-type: none"> • Operators of transit systems that receive FTA funds (Section 5307) and all rail transit operators (regardless of funding source). 	
<p>Would Not Apply to:</p> <ul style="list-style-type: none"> • FTA recipients that do not operate transit systems. • Commuter rail service regulated by FRA. • Passenger ferry service regulated by USCG. • Deferring applicability for operators that only receive Section 5310 and Section 5311 funds (both recipients and sub-recipients). 	

Performance-Based Planning

As part of PTASP requirements, transit agencies must set safety performance targets in their safety plans for each mode (Fixed route and paratransit) based on the following safety performance measures that FTA has established in the [National Public Transportation Safety Plan \(NSP\)](#):

Measure	Target Type		Desired Direction
Fatalities	Total number	Rate per revenue miles	Decreasing number and rate
Injuries	Total number	Rate per revenue miles	Decreasing number and rate
Safety events	Total number per year	Rate per revenue miles	Decreasing number and rate
System reliability	Distance between major failures	Distance between minor failures	Decreasing number and rate

MPOs must reference performance targets and plans within the MPO transportation improvement program (TIP) and long-range plan. The Safety performance targets and performance-based plans should inform a transit agency's investment priorities, and those investment priorities should be carried forward within the MPO's and State DOT's planning processes. MPOs should also make reference to the PTASP plan in their TIP.

MPO Role

The PTASP rule states that each transit provider must provide the MPO with safety performance targets to assist the MPO with capital program planning process (Long Range Transportation plan and TIP). The MPO will need to incorporate the performance targets and safety plan(s) (by reference) into the TIP and LRTP. Additional resources on the MPOs role in PTAS is available from the [FTA's MPO FAQ page](#).

For MPOs with tier II transit agencies(s) participating in the group plan, DRPT is providing the agency specific targets developed for the Statewide Tier II group PTASP plan to the MPOs for consideration and inclusion in MPO TIPs.(Attachment A) MPOs may consider adopting the targets provided in the group plan or adopting regionally specific targets of their own. For additional guidance please refer to [FTA's Safety performance Targets Guide](#). In many cases MPOs can add the targets to the TIP via an administrative update instead of an amendment.¹

For MPOs with Tier I transit agencies PTASP planning responsibility falls to the transit agency. Agencies should be coordinating with the MPOs to the extent feasible on PTASP target setting. As timeline may differ due to COVID-19 impacts MPOs with Tier I agencies should directly contact the transit providers.

As with other performance measures under MAP-21, MPOs will have **180 days** from the date the plans are certified to adopt measures into the TIP and LRTP. With the publication date of the Tier II group plan being **8/11/2021** MPOs will have to adopt initial targets by **2/7/2021**.

After the initial round in 2021 MPOs will have to update the PTASP performance targets when LRTP or TIP are updated or a transit agency make changes to their targets during an annual PTASP plan review. Transit agencies are required to review their PTASP annually by July 20th.

Public Transportation Agency Safety Plan (PTASP)

The Public Transportation Agency Safety Plan (PTASP) final rule (49 C.F.R. Part 673) intends to improve public transportation safety by guiding transit agencies to more effectively and proactively manage safety risks in their systems. It requires certain recipients and sub-recipients of Federal Transit Administration (FTA) grants that operate public transportation to develop and implement safety plans that, establish processes and procedures to support the implementation of Safety Management Systems (SMS). Agencies are required to fulfill this requirement through an individual or group plan. The PTASP rule provides two tiers of requirements for transit agencies based on size and operating characteristics:

- A Tier I agency operates rail, OR has 101 vehicles or more all fixed route modes, OR has 101 vehicles or more in one non-fixed route mode.

¹ MPOs should follow their procedures as defined in their Public Participation Plans

- A Tier II agency is a subrecipient of FTA 5311 funds, OR is an American Indian Tribe, OR has 100 or less vehicles across all fixed route modes, OR has 100 vehicles or less in one non-fixed route mode.

Tier II Group Plan

The Department of Rail and Public Transportation (DRPT) is the sponsor for the Statewide Tier II Group PTASP Plan. The New River Valley MPO programs federal transportation funds for Blacksburg Transit and the City of Radford. Blacksburg Transit and the City of Radford are Tier II agencies participating in the DRPT sponsored group PTASP Plan. The NRV MPO has adopted the Tier II PTASP into its TIP by reference and integrated the goals measures and targets described in the 2020 Commonwealth of Virginia Tier II Group Transit Asset Management Plan, August 11, 2020 into the MPO’s planning and programming process. Specific targets for the Tier II Group PTASP Plan are included in the table below.

Table 1: Tier II Transit Agency PTASP Performance Targets by Mode:

Blacksburg Transit

Performance Measures	Targets by Mode	
	Fixed Route	Paratransit/ Demand Response
Fatalities (total number of reportable fatalities per year)	0	0
Fatalities (rate per total vehicle revenue miles by mode)	0	0
Injuries (total number of reportable injuries per year)	5	0
Injuries (rate per total vehicle revenue miles by mode)	Less than .5 injuries per 100,000 vehicle revenue miles	Less than .5 injuries per 100,000 vehicle revenue miles
Safety events (total number of safety events per year)	10	1
Safety events (rate per total vehicle revenue miles by mode)	Less than 1 reportable event per 100,000 vehicle revenue miles	Less than 1 reportable event per 100,000 vehicle revenue miles
Distance between Major Failures	10,000 miles	10,000 miles
Distance between Minor Failures	3,200 miles	3,200 miles

City of Radford

Performance Measures	Targets by Mode	
	Fixed Route	
Fatalities (total number of reportable fatalities per year)	0	
Fatalities (rate per total vehicle revenue miles by mode)	0	
Injuries (total number of reportable injuries per year)	2	
Injuries (rate per total vehicle revenue miles by mode)	Less than .5 injuries per 100,000 vehicle revenue miles	
Safety events (total number of safety events per year)	3	
Safety events (rate per total vehicle revenue miles by mode)	Less than 1 reportable event per 100,000 vehicle revenue miles	
Distance between Major Failures	10,000 miles	
Distance between Minor Failures	3,200 miles	

Information and Resources

Additional information and guidance is available on FTAs Public Transportation Safety Plan webpage:

<https://www.transit.dot.gov/PTASP>

PTASP final rule factsheet:

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance/safety/public-transportation-agency-safety-program/117281/ptasp-fact-sheet-02-06-2019.pdf>

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Attachment A: Tier II Group PTASP Participants

TABLE 2: TIER 2 TRANSIT AGENCIES PARTICIPATING IN DRPT GROUP PLAN

Transit Agency	MPO
Blacksburg Transit	New River Valley
Blue Ridge Intercity Transit Express (BRITE)	Staunton Augusta Waynesboro
Charlottesville Area Transit	Charlottesville Albemarle
City of Bristol Transit	Bristol
City of Harrisonburg Transit	Harrisonburg Rockingham
City of Radford Transit	New River Valley
City of Suffolk	Hampton Roads TPO
City of Winchester Transit	Winchester-Frederick County
Fredericksburg Regional Transit	Fredericksburg Area
Greater Lynchburg Transit	Central Virginia
Greater Roanoke Transit	Roanoke Valley TPO
JAUNT	Charlottesville Albemarle
Mountain Lynx Transit (District 3 Transit)	
Petersburg Transit	Tri-Cities
Williamsburg Area Transit	Hampton Roads TPO

**FEDERAL FUNDING CATEGORIES
FISCAL CONSTRAINT BY YEAR**

Highway Projects
FFY 2021 - 2024

Fund Source	FFY 2021		FFY 2022		FFY 2023		FFY 2024		TOTAL	
	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation	Projected Obligation Authority	Planned Obligation
Federal										
HSIP	\$0	\$0	\$302,108	\$302,108	\$0	\$0	\$0	\$0	\$302,108	\$302,108
TAP	\$103,250	\$103,250	\$526,181	\$526,181	\$0	\$0	\$0	\$0	\$629,431	\$629,431
Subtotal -- Federal	\$103,250	\$103,250	\$828,289	\$828,289	\$0	\$0	\$0	\$0	\$931,539	\$931,539
Other										
State Match	\$25,813	\$25,813	\$207,073	\$207,073	\$0	\$0	\$0	\$0	\$232,886	\$232,886
Subtotal -- Other	\$25,813	\$25,813	\$207,073	\$207,073	\$0	\$0	\$0	\$0	\$232,886	\$232,886
Total	\$129,063	\$129,063	\$1,035,362	\$1,035,362	\$0	\$0	\$0	\$0	\$1,164,425	\$1,164,425

Federal - ACC (1)										
HSIP	\$0	\$0	\$0	\$0	\$188,061	\$188,061	\$0	\$0	\$188,061	\$188,061
NHFP	\$1,134,633	\$1,134,633	\$0	\$0	\$0	\$0	\$0	\$0	\$1,134,633	\$1,134,633
Subtotal -- Federal - ACC (1)	\$1,134,633	\$1,134,633	\$0	\$0	\$188,061	\$188,061	\$0	\$0	\$1,322,694	\$1,322,694

Maintenance - Federal (4)										
BR	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000	\$4,000,000
NHFP	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000
NHS/NHPP	\$7,113,312	\$7,113,312	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$5,399,286	\$23,311,170	\$23,311,170
STP/STBG	\$27,244,307	\$27,244,307	\$26,068,877	\$26,068,877	\$30,021,568	\$30,021,568	\$31,070,795	\$31,070,795	\$114,405,547	\$114,405,547
Subtotal -- Maintenance - Federal (4)	\$37,857,619	\$37,857,619	\$34,968,163	\$34,968,163	\$36,420,854	\$36,420,854	\$37,470,081	\$37,470,081	\$146,716,717	\$146,716,717

- (1) ACC -- Advance Construction -- Funding included in Federal Category based on year of AC Conversion
- (2) CMAQ/RSTP includes funds for TRANSIT projects
- (3) Statewide and/or Multiple MPO - Federal - Funding to be obligated in Multiple MPO Regions and/or Statewide for projects as identified
- (4) Maintenance Projects - Funding to be obligated for maintenance projects as identified

New River Valley MPO Interstate Projects

UPC NO	115852	SCOPE	Traffic Management/Engineering			
SYSTEM	Interstate	JURISDICTION	Statewide	OVERSIGHT	NFO	
PROJECT	ITTF FY20 Micro Transit			ADMIN BY	DRPT	
DESCRIPTION	FROM: Various TO: Various					
ROUTE/STREET	9999			TOTAL COST	\$500,000	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
PE AC	Federal - AC OTHER	\$0	\$500,000	\$0	\$0	\$0

New River Valley MPO Primary Projects

UPC NO	99425	SCOPE	Reconstruction w/ Added Capacity			
SYSTEM	Primary	JURISDICTION	Blacksburg	OVERSIGHT	NFO	
PROJECT	RTE 460 - Southgate Dr. Interchange & Connector			ADMIN BY	VDOT	
DESCRIPTION	FROM: 0.156 Mi. W. Int. Southgate Dr. TO: 0.799 Mi. E. Int. Southgate Dr. (0.9556 MI)					
PROGRAM NOTE	All funds obligated based on current allocations/estimate					
ROUTE/STREET	RTE. 460 BYPASS (0460)			TOTAL COST	\$51,803,125	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

New River Valley MPO Project Groupings

GROUPING	Construction : Bridge Rehabilitation/Replacement/Reconstruction					
ROUTE/STREET				TOTAL COST	\$34,014,401	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - AC CONVERSION	\$283,658	\$1,134,633	\$0	\$0	\$0

GROUPING	Construction : Rail					
ROUTE/STREET				TOTAL COST	\$2,650,808	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

GROUPING	Construction : Safety/ITS/Operational Improvements					
ROUTE/STREET				TOTAL COST	\$59,762,604	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN AC	Federal - AC	\$159,176	\$1,432,587	\$0	\$0	\$0

GROUPING	Construction : Transportation Enhancement/Byway/Non-Traditional					
ROUTE/STREET				TOTAL COST	\$12,736,860	
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
RW	Federal - TAP/F	\$20,813	\$83,250	\$0	\$0	\$0
	Federal - TAP/SU	\$5,000	\$20,000	\$0	\$0	\$0
RW TOTAL		\$25,813	\$103,250	\$0	\$0	\$0

CN	Federal - AC CONVERSION	\$47,015	\$0	\$0	\$188,061	\$0
	Federal - HSIP	\$75,527	\$0	\$302,108	\$0	\$0
	Federal - TAP/F	\$97,088	\$0	\$388,350	\$0	\$0
	Federal - TAP/SU	\$34,458	\$0	\$137,831	\$0	\$0
CN TOTAL		\$254,088	\$0	\$828,289	\$188,061	\$0

GROUPING	Maintenance : Preventive Maintenance and System Preservation					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	\$85,964,101
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - NHFP	\$0	\$2,500,000	\$2,500,000	\$0	\$0
	Federal - NHS/NHPP	\$0	\$4,399,286	\$4,399,286	\$4,399,286	\$4,399,286
	Federal - STP/STBG	\$0	\$10,437,163	\$12,855,974	\$17,362,178	\$22,711,642
CN TOTAL		\$0	\$17,336,449	\$19,755,260	\$21,761,464	\$27,110,928

GROUPING	Maintenance : Preventive Maintenance for Bridges					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	\$45,370,193
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - BR	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	Federal - NHS/NHPP	\$0	\$2,714,026	\$1,000,000	\$1,000,000	\$1,000,000
	Federal - STP/STBG	\$0	\$13,711,369	\$8,692,278	\$7,776,634	\$5,475,886
CN TOTAL		\$0	\$17,425,395	\$10,692,278	\$9,776,634	\$7,475,886

MPO TIP Report

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GROUPING	Maintenance : Traffic and Safety Operations					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	\$15,382,423
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
CN	Federal - STP/STBG	\$0	\$3,095,775	\$4,520,625	\$4,882,756	\$2,883,267

GROUPING	Transit : Engineering					
ROUTE/STREET					TOTAL COST	\$9,340,000
	FUND SOURCE	MATCH	FY21	FY22	FY23	FY24
		\$0	\$0	\$0	\$0	\$0

Appendix A

Projects by Grouping

New River Valley MPO

Construction : Bridge Rehabilitation/Replacement/Reconstruction

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	93074	Christiansburg	0081	\$34,014,401
		#SGR RTE 81 - APPROACHES AND BR OVER RT 8 ; 22513 AND 22515 FROM: 0.381 Mile South of Christiansburg SCL TO: 0.510 Mile North of Christiansburg SCL (0.8910 MI)		
Miscellaneous	T19049	Salem District-wide	0000	\$0
		BRIDGE REHABILITATION/REPLACEMENT		
Construction: Bridge Rehabilitation/Replacement/Reconstruction Total				\$34,014,401

Construction : Rail

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T19041	Salem District-wide	0000	\$0
		CN: RAIL		
Miscellaneous	112018	Statewide	HIGHWAY-RAIL SAFETY (0000)	\$700,000
		Highway-Rail Safety Inventory Section 130 PE Only FROM: Statewide TO: Statewide		
Miscellaneous	112213	Statewide	HIGHWAY RAIL SAFETY (0000)	\$300,000
		Highway-Rail Section 130 Pre Scoping PE Only FROM: Statewide TO: Statewide		
Miscellaneous	112497	Statewide	VARIOUS (0000)	\$500,000
		ENVIRONMENTAL EQ429 FORM PROCESSING CHARGES FROM: FOR HIGHWAY/RAIL SAFETY PROJECTS WITHOUT PE NUMBERS TO: ASSIGNED		
Urban	105608	Christiansburg	CHRISMAN MILL RD (0000)	\$1,150,808
		Chrisman Mill Rd -Realign N Side of Road at Crossing FROM: 1.1 Mi. N. of Silver Lake Road (SR 662) TO: 1.2 Mi. N. of Silver Lake Road (SR 662)		
Construction: Rail Total				\$2,650,808

Construction: Safety/ITS/Operational Improvements

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	116039	Statewide	0081	\$12,500,000
		I-81 DMS Installation FROM: Various TO: Various		
Interstate	107802	Statewide	9999	\$918,907
		Incident Management Emergency Evacuation and Detour Plans FROM: Various TO: Various		
Interstate	110551	Statewide	9999	\$362,560
		Traffic Video Expansion - Statewide FROM: Various TO: Various		
Interstate	110912	Statewide	9999	\$813,019
		Statewide Truck Parking Management System - Phase 1 FROM: Various TO: Various		

New River Valley MPO

Construction : Safety/ITS/Operational Improvements

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	111613	Statewide	9999	\$1,807,000
		Statewide Truck Parking Management System - Phase 2		
		FROM: Various TO: Various		
Interstate	111892	Statewide	9999	\$0
		ATMS - Phase 1, 2, 3, 4		
		FROM: Various TO: Various		
Interstate	114400	Statewide	9999	\$300,000
		Drone Technology Project		
		FROM: Various TO: Various		
Interstate	115854	Statewide	9999	\$1,250,000
		ITTF FY20 Arterial Operations Program Dashboard		
		FROM: n/a TO: n/a		
Interstate	115855	Statewide	9999	\$4,700,000
		ITTF FY20 High Speed Communications		
		FROM: Various TO: Various		
Miscellaneous	T19045	Salem District-wide	0000	\$0
		CN: SAFETY/ITS/OPERATIONAL/IMPROVEMENTS		
Miscellaneous	105481	Statewide	0000	\$1,400,000
		Implement iPeMS (Iteris Performance Measurement System) FROM: various TO: various		
Miscellaneous	114193	Statewide	VARIOUS (9999)	\$0
		PEDESTRIAN IMPROVEMENTS AT PRIORITY CORRIDOR STATEWIDE		
		FROM: VARIOUS TO: VARIOUS		
Primary	108909	Christiansburg	US 460 EB RAMP (0460)	\$1,751,751
		#HB2.FY17 Route 460 at Franklin Street EB Ramp Construction		
		FROM: US Route 460 Bypass Ramp TO: Franklin Street (Route 460 Business) (0.2680 MI)		
Secondary	106701	Salem District-wide	9999	\$1,841,763
		HRRR - Safety Improvements		
		FROM: Int. Rte. 757 and Rte. 1535 TO: Int. Rte. 655 and Rte. 616		
Urban	104387	Christiansburg	N. FRANKLIN / CAMBRIA (0460)	\$7,483,928
		#HB2.FY17 Intersection Improv - N. Franklin St/Cambria St		
		FROM: 0.25 mi N of intersection with Cambria St (Rte. 111) TO: 0.02 mi N of intersection with Independence Blvd (0.7700 MI)		
Urban	8746	Christiansburg	PEPPERS FERRY RD (0114)	\$24,633,676
		RTE 114 - PEPPERS FERRY ROAD - WIDEN TO 4 LANES		
		FROM: ROUTE 460 TO: 0.789 Km East of WCL (1.5309 KM)		
Construction: Safety/ITS/Operational Improvements Total				\$59,762,604

Construction: Transportation Enhancement/Byway/Non-Traditional

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	113355	Blacksburg	MAIN STREET (0000)	\$780,250
		Main Street Pedestrian Improvements		
		FROM: Roanoke Street TO: Washington Street		

New River Valley MPO

Construction : Transportation Enhancement/Byway/Non-Traditional

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	103637	Christiansburg Christiansburg Downtown Streetscaping, Phase C503 (Ph1B) FROM: Roanoke Street TO: Franklin Street	EAST MAIN ST & FRANKLIN ST (0000)	\$1,808,017
Enhancement	108360	Christiansburg Huckleberry Trail - Phase 3 FROM: Future Peppers Ferry Rd Connector TO: Intersection of Gold Leaf Dr and Independence Blvd	0000	\$1,200,431
Enhancement	113352	Christiansburg Roanoke Street Sidewalk at 460 By-Pass FROM: 600 ft. east of Falling Branch Rd TO: Hubble Drive on Roanoke Street	ROANOKE STREET (0000)	\$958,226
Enhancement	104770	Montgomery County Huckleberry Trail - Phase 2D FROM: Providence Boulevard TO: Food Lion Shopping Plaza (0.5400 MI)	HUCKLEBERRY TRAIL (0000)	\$425,764
Enhancement	103920	Blacksburg Virginia Tech, Hokie Bikeways C505 fence	EN01	\$20,501
Enhancement	94264	Montgomery County Huckleberry Trail Extension FROM: Route 114 - Peppers Ferry Road (at Wal-Mart parking lot) TO: Farm View Road Extension (at Home Depot parking lot)	EN09	\$314,453
Enhancement	111319	Blacksburg Town of Blacksburg - Bike Parking FROM: Various TO: Various	BIKE PARKING AMENITIES (EN17)	\$160,885
Enhancement	111314	Christiansburg Depot Park Trail Extension FROM: Mill Lane TO: Depot Park	DEPOT PARK TRAIL (EN17)	\$499,045
Miscellaneous	T19040	Salem District-wide CN: TRANSPORTATION ENHANCEMENT/BYWAY/OTHER NON-TRADITIONAL	0000	\$0
Primary	105518	Christiansburg Relocation of Falling Branch Park and Ride. FROM: Int. Route 460 Business and Hubbell Drive TO: 0.052 Mi. E. Alma Street Int. with Hubbell Drive (0.1000 MI)	FALLING BRANCH PARK AND RIDE (9999)	\$4,665,302
Urban	56407	Christiansburg TOWN OF CHRISTIANSBURG - STREETSCAPING AND PEDESTRIAN SAFETY MEASURES WITHING THE CENTRAL BUSINESS DISTRICT	EN00	\$1,903,986
Construction: Transportation Enhancement/Byway/Non-Traditional Total				\$12,736,860

Maintenance: Preventive Maintenance and System Preservation

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14722	Salem District-wide STIP-MN Salem: Preventive MN and System Preservation	0000	\$85,964,101
Maintenance: Preventive Maintenance and System Preservation Total				\$85,964,101

New River Valley MPO

Maintenance : Preventive Maintenance for Bridges

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14721	Salem District-wide STIP-MN Salem: Preventive MN for Bridges	0000	\$45,370,193
Maintenance: Preventive Maintenance for Bridges Total				\$45,370,193

Maintenance: Traffic and Safety Operations

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14720	Salem District-wide STIP-MN Salem: Traffic and Safety Operations	0000	\$15,382,423
Maintenance: Traffic and Safety Operations Total				\$15,382,423

Transit: Engineering

	System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T19064	Salem District-wide CN: TRANSIT ENGINEERING	0000	\$0
Urban	70594	Christiansburg N. Franklin St - Rte114 - CONNECTOR TO ROUTE 460	114/460 CONNECT. (0114)	\$9,340,000
Transit : Engineering Total				\$9,340,000

New River Valley MPO Total **\$265,221,390**

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0001 Title: Operating Assistance Recipient: Blacksburg Transit								
FTA 5307			0				6,700	Blacksburg Transit
	1,877	2,174	2,174	2,211	2,315	FTA 5307	8,874 8,780	
CARES/CRRSAA/ARP	6,122	0	1,965			CARES/CRRSAA/ARP	1,965	Blacksburg Transit
		4,827	1,965	0	0		4,827	
State	2,344	2,732	3,187	3,339	3,497	State	12,755	Blacksburg Transit
			2,732				12,300	
			3,144				12,709	
Local	4,472	2,271	5,638	6,369	6,670	Local	20,948	Blacksburg Transit
			5,992				21,302	
Revenues	170	3,281	168	243	254	Revenues	3,946	Blacksburg Transit
			228				4,006	
Year Total:	14,985	10,458	10,958	12,162	12,736	Total Funds:	46,314	Blacksburg Transit
		15,285	10,713				46,069	
			11,441				51,624	
Description:	Amendment # 2 adds CRRSAA and ARP funding, and adjusts FY 21 and FY24 funding totals. Amendment # 3 moves ARP funding to multiple Capital projects. Amendment # 4 adds ARP funding, adds state additional and adjusts total.							
STIP ID: BBT0002 Title: Replacement Rolling Stock Recipient: Blacksburg Transit								
Flexible STP	208	894	17,608	3,054	3,804	Flexible STP	25,565	Blacksburg Transit
Fed 5339	0	4,075	17,608	3,051	3,804	Fed 5339	28,538	Blacksburg Transit
			4,563				15,493	
FTA 5307 ARP			1,761			FTA 5307 ARP	1,761	Blacksburg Transit
			1,487				1,487	
VW Trust	0	2,527	3,347			VW Trust	5,874	Blacksburg Transit
			3,347				2,527	
State	41	1,048	6,262	381	476	State	8,167	Blacksburg Transit
			2,204				4,106	
Local	10	176	1,991	381	476	Local	3,024	Blacksburg Transit
			2,265				3,298	
			2,204				3,234	
Year Total:	259	7,826	17,924	3,813	4,756	Total Funds:	34,319	Blacksburg Transit
			22,010	3,814			38,405	
Description:	Includes all-electric buses for FY22-FY24. Amendment # 2 warranty included with bus purchase moved from BBT0042. Amendment adjusts FY 21 funding and totals, and moved funding from Flexible STP to Fed 5339 for FY21-FY24. Amendment # 3 adds in VWTrust and ARP funding and adjust totals. Amendment # 4 changes funding from ARP to 5307 and decreases local.							

STIP ID: BBT0010		Title: Eng. Design /Construction Multi- Modal Transfer Facility			Recipient: Blacksburg Transit			
Flexible STP		4,800				Flexible STP	4,800	Blacksburg Transit
FTA 5339						FTA 5339		Blacksburg Transit
FTA ARP						FTA ARP		Blacksburg Transit
State		600				State	600	Blacksburg Transit
Local		600				Local	600	Blacksburg Transit
Year Total:		6,000	-	-	-	Total Funds:	6,000	Blacksburg Transit
Description:	Amendment # 1 adds funding in FY21. 11/5/20. Carryover FY18 funds stay in FY21 per DRPT (no future Flexible STP funds are anticipated). Amendment #3 added in FTA 5339 and ARP lines with no additional funding.							

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0016 Title: Expansion Rolling Stock Recipient: Blacksburg Transit								
Flexible STP	112	0	0	1,731	1,363	Flexible STP	3,094	Blacksburg Transit
FTA 5339	22	0	0	1,731	1,363	FTA 5339	3,094	Blacksburg Transit
FTA ARP		0 414	0	0	0	FTA ARP	3,208	Blacksburg Transit
State	6	0 469	0	216	170	State	- 386	Blacksburg Transit
Local	-	0 42	0	216	170	Local	386	Blacksburg Transit
Year Total:	140	0 286	0	2,163	1,703	Total Funds:	3,866	Blacksburg Transit
Description:	Includes all-electric buses for FY22-FY24. Amendment # 2 adjusts FY 21 funding and totals, and moved funding from Flexible STP to Fed 5339 for FY21-FY24. Amendment #3 FY21 funding removed - project delayed.							
STIP ID: BBT0017 Title: Passenger Shelters Recipient: Blacksburg Transit								
Flexible STP	0	0	19	25	23	Flexible STP	19	Blacksburg Transit
FTA 5339		6	42	25	23	FTA 5339	90	Blacksburg Transit
FTA ARP		25	42	25	23	FTA ARP	54	Blacksburg Transit
State	0	8	4	3	3	State	18	Blacksburg Transit
Local	0	13	5	3	3	Local	24	Blacksburg Transit
Year Total:	0	15	24	31	29	Total Funds:	99	Blacksburg Transit
Description:	Amendment # 2 combines FY 20 and FY21 due to funding/application (FTA), adds FTA 5339 funding, and adjusts FY21 funding and totals. Amendment # 3 adjust FY20 funding to FY22. Updated for unfunded FY22 project.							

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
Blacksburg Transit							
STIP ID:	BBT0020		Title: ADP Hardware (Technology Replacement and Expansion)		Recipient: Blacksburg Transit		
Flexible STP	104	0	84	29	94	Flexible STP	Blacksburg Transit
FTA 5339		7	84	29	91	FTA 5339	Blacksburg Transit
FTA ARP			0			FTA ARP	Blacksburg Transit
State	21	10	193	4	11	State	Blacksburg Transit
Local	5		91			Local	Blacksburg Transit
Year Total:	130	18	284	37	113	Total Funds:	452
			405		444		274
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adds ARP funding and adjust totals. Amendment # 4 removes ARP funding and increase local.						
Blacksburg Transit							
STIP ID:	BBT0021		Title: ADP Software		Recipient: Blacksburg Transit		
Flexible STP	292	460	400	480	400	Flexible STP	Blacksburg Transit
FTA 5339		80	0	180	400	FTA 5339	Blacksburg Transit
FTA ARP			0			FTA ARP	Blacksburg Transit
State	58	112	274	60	50	State	Blacksburg Transit
Local	15		129			Local	Blacksburg Transit
Year Total:	365	200	403	300	500	Total Funds:	1,403
			500	600	500		1,800
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adds ARP funding and adjust totals. Amendment # 4 removes ARP funding and increase local.						
Blacksburg Transit							
STIP ID:	BBT0023		Title: Support Vehicles		Recipient: Blacksburg Transit		
Flexible STP	28	0	306	487	0	Flexible STP	Blacksburg Transit

FTA 5339		64	306 0	187	0	FTA 5339	557 251	Blacksburg Transit
FTA ARP			18 0			FTA ARP	18 0	Blacksburg Transit
State	6	16	38 59	23	0	State	83 98	Blacksburg Transit
Local	1	16	38 28 40	23	0	Local	78 67 49	Blacksburg Transit
Year Total:	35	96 160	87 382	233	0	Total Funds:	416 775 840	Blacksburg Transit
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adds ARP funding and adjust totals. Amendment # 4 removes ARP and increase local.							

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0028 Title: Radios Recipient: Blacksburg Transit								
Flexible STP	7	42	44	9	40	Flexible STP	0	Blacksburg Transit
FTA 5339		6	0	9	10	FTA 5339	25	Blacksburg Transit
FTA ARP			44			FTA ARP	39	Blacksburg Transit
State	1	8	0	1	1	State	10	Blacksburg Transit
Local	-	1	2	1	1	Local	3	Blacksburg Transit
Year Total:	8	15	0	11	12	Total Funds:	38	Blacksburg Transit
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adjust for unfunded FY22 project.							
STIP ID: BBT0029 Title: Shop Equipment Recipient: Blacksburg Transit								
Flexible STP	96	0	443	460	480	Flexible STP	0	Blacksburg Transit
FTA 5339		25	0	160	180	FTA 5339	365	Blacksburg Transit
FTA ARP			38			FTA ARP	0	Blacksburg Transit
State	19	36	154	20	23	State	233	Blacksburg Transit
Local	5	3	48	20	23	Local	68	Blacksburg Transit
Year Total:	120	64	226	200	226	Total Funds:	716	Blacksburg Transit
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adds ARP funding and adjust totals. Amendment # 4 removes ARP, increase state, and increase local.							
STIP ID: BBT0035 Title: Recipient: Blacksburg Transit								
							-	Blacksburg Transit

								Blacksburg Transit
								Blacksburg Transit
						State	-	Blacksburg Transit
						Local	-	Blacksburg Transit
Year Total:	-		-	-	-	Total Funds:	-	Blacksburg Transit
Please recommend that this project be deleted. We do not expect this project to have any more capital expenditures.								

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
STIP ID: BBT0036 Title: NRV Bikeshare Recipient: Blacksburg Transit							
Flexible STP	0	0	0	0	0	0	Blacksburg Transit
FTA 5339							Blacksburg Transit
FTA ARP							Blacksburg Transit
State	16	20	0	0	0	20	Blacksburg Transit
Local	16	20	0	0	0	20	Blacksburg Transit
Year Total:	32	40	0	0	0	Total Funds: 40	Blacksburg Transit
Description:	Amendment # 2 adds previous funding. Amendment #3 added in FTA 5339 and ARP lines with no additional funding.						
STIP ID: BBT0037 Title: Surveillance/Security Equipment Recipient: Blacksburg Transit							
Flexible STP	77	0	0	0	0	0	Blacksburg Transit
FTA 5339							Blacksburg Transit
FTA ARP							Blacksburg Transit
State	15	0	0	0	0	0	Blacksburg Transit
Local	4	0	0	0	0	5	Blacksburg Transit
Year Total:	96	0	0	0	0	Total Funds: 4	Blacksburg Transit
Description:	Amendment #3 added in FTA 5339 and ARP lines with no additional funding.						
STIP ID: BBT0038 Title: Fare Automation System Recipient: Blacksburg Transit							
Flexible STP	24	0	0	0	0	0	Blacksburg Transit
FTA 5339							Blacksburg Transit
FTA ARP							Blacksburg Transit
State	5	0	0	0	0	0	Blacksburg Transit
Local	1	0	0	0	0	0	Blacksburg Transit

Year Total:	30	0	0	0	0	Total Funds:	0
Description:	Amendment # 2 adjusts totals. Amendment # 3 adjust for unfunded FY 22 project.						

Blacksburg Transit

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0039 Title: Rehab/Renovation of Admin Bldg. Recipient: Blacksburg Transit								
Flexible STP	144	-0	0	0	0	Flexible STP	0	Blacksburg Transit
FTA 5339						FTA 5339		Blacksburg Transit
FTA ARP		-				FTA ARP		Blacksburg Transit
State	29	0	0	0	0	State	0	Blacksburg Transit
Local	7	0	0	0	0	Local	0	Blacksburg Transit
Year Total:	180	0	0	0	0	Total Funds:	0	Blacksburg Transit
Description:	Amendment # 2 removes all FY 21 funding (construction is covered in BBT0040 and design is covered in BBT0041). Amendment #3 added FTA ARP line item (with no funding).							
STIP ID: BBT0040 Title: Construction Admin./Maintenance Facility Recipient: Blacksburg Transit								
Flexible STP		0	0	0	0	Flexible STP	0	Blacksburg Transit
FTA 5339		2,345	5,471				7,816	Blacksburg Transit
FTA 5307 ARP			204			FTA 5307 ARP	204	Blacksburg Transit
			1,887				1,887	Blacksburg Transit
State		469	1,094	0	0	State	1,563	Blacksburg Transit
Local		117	324	0	0	Local	441	Blacksburg Transit
			274				394	Blacksburg Transit
Year Total:			7,093				10,024	Blacksburg Transit
			8,726				14,657	
Description:		2,931	6,839	0	0	Total Funds:	9,770	
	Amendment # 2 removes Flexible STP funding, adds FTA 5339 funding and adjusts FY 21 and FY22 funding and totals. Amendment #3 adds ARP funding and adjusts totals. Amendment # 4 removes ARP, adds 5307, increases local & project total.							
STIP ID: BBT0041 Title: A&E Admin/Maintenance Facility Recipient: Blacksburg Transit								
Flexible STP	400	0	0	0	0	Flexible STP	0	Blacksburg Transit

FTA 5339						FTA 5339		Blacksburg Transit
FTA ARP						FTA ARP		Blacksburg Transit
State	80	0	0	0	0	State	0	Blacksburg Transit
Local	20	0	0	0	0	Local	0	Blacksburg Transit
Year Total:	500	0	0	0	0	Total Funds:	0	Blacksburg Transit
Description:	Amendment # 2 removes FY 21 funding and totals. Amendment #3 added FTA ARP line item (with no funding).							

STIP ID: BBT0042		Title: Other-Electric Bus On-Route Charger			Recipient: Blacksburg Transit			
Flexible STP	152	0	580	0	0	Flexible STP	0	Blacksburg Transit
FTA 5339	240	29	587 580			FTA 5339	616 609	
VW Trust	0	263	1,719 0	0	0	VW Trust	1,982 263	Blacksburg Transit
FTA-ARP			0 4,136			FTA-ARP	0 4,136	Blacksburg Transit
State	78	6	490 73	0	0	State	496 79	Blacksburg Transit
Local	20	2	296 73	0	0	Local	298 75	Blacksburg Transit
Year Total:	490	300	3,092 4,228 726	0	0	Total Funds:	3,392 4,628 1,026	Blacksburg Transit
Description:	Amendment # 2 moves funds to BBT002, adjusts previous funding, FY 21 funding and totals. Amendment # 3 adds ARP and VWTrust funding and adjusts totals. Amendment # 4 removes ARP and adjust total.							

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0043 Title: Infrastructure: Bus Pull-Offs Recipient: Blacksburg Transit								
Flexible STP		0	60	64	64	Flexible STP	0	Blacksburg Transit
FTA 5339		35	0 60	64	64	FTA 5339	163 223 35	Blacksburg Transit
FTA-ARP			0 15			FTA-ARP	0 15	Blacksburg Transit
State		49	51 8	8	8	State	116 73	Blacksburg Transit
Local		3	24 9 8	8	8	Local	43 28 27	Blacksburg Transit
Year Total:		87	75 76 75	80	80	Total Funds:	322 323	Blacksburg Transit
Description:	Amendment # 2 adds FTA 5339 funding and adjusts FY 21 funding and totals. Amendment # 3 adds ARP funding and adjust totals. Amendment # 4 remove ARP and increase local.							

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	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: BBT0044 Title: Other-Building Facility Items and Fixtures Recipient: Blacksburg Transit								
Flexible STP		0	0	0	0	Flexible STP	0	Blacksburg Transit
FTA 5339						FTA 5339		Blacksburg Transit
FTA ARP						FTA ARP		Blacksburg Transit
State		0	0	0	0	State	0	Blacksburg Transit
Local		0	0	0	0	Local	0	Blacksburg Transit
Year Total:		0	0	0	0	Total Funds:	0	Blacksburg Transit
Description:	Amendment # 2 removes all FY 21 funding and totals. Amendment #3 added FTA ARP line item (with no funding).							

STIP ID: CRAD001 Title: Operating Assistance Recipient: City of Radford								
FTA 5307	503	513	521 523	503 534	545	FTA 5307	2,082 2,413 2,415	City of Radford
FTA 5311						FTA 5311	-	City of Radford
CARES/CRRSAA/ARP	1,622	1,283	1,255			CARES/CRRSAA/ARP	2,538 1,283	City of Radford
State	374	381	402 389	521 397	405	State	1,709 1,585 1,572	City of Radford
Local	695	734	758	1,476 784	805	Local	3,015 2,320 3,078	City of Radford
Revenues	30	37	37	37	37	Revenues	74 141 148	City of Radford
Year Total:	3,224 4,602	2,948 4,665	2,178 4,707	2,500 4,749	1,792	Total Funds:	9,418 8,667 8,196	City of Radford

Description:	Amendment # 2 adjusts totals column & adds ARP grant. Amendment # 3 adds and modifies funding in FY22 and the totals. Amendment # 4 adjusts funding for FY23.						
STIP ID:	CRAD004	Title: Replacement Rolling Stock			Recipient:	City of Radford	
FTA 5339		408	432	139		FTA 5339	979,840
State		571	86	339		State	996,657
Local	42	42	22	20		Local	84
Year Total:		1,021	540	498		Total Funds:	2,059,561
	Amendment # 2 adjusts totals column; moved previous funding to FY21. Amendment # 4 adjusts funding by adding funds in FY23.						

City of Radford
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	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: CRAD005 Title: Purchase Support Vehicles Recipient: City of Radford								
Flexible STP			8	28	28	Flexible STP	36	City of Radford
State			1	5	5	State	6	City of Radford
Local			1	4	1	Local	2	City of Radford
Year Total:	-		10	34	34	Total Funds:	44	City of Radford
Description:	Hand Held Radio, IT. Amendment # 4 moves funding from FY23 to FY24.							
STIP ID: CRAD006 Title: Engineering Design Transit Facility Recipient: City of Radford								
Flexible STP		480	-	9,600		Flexible STP	10,080	City of Radford
State		96	-	1,920		State	2,016	City of Radford
Local		24	-	480		Local	504	City of Radford
Year Total:	-	576 600	-	11,520 12,000		Total Funds:	12,096 12,600	City of Radford
Description:	Amendment # 4 moves local funding to FY25.							
STIP ID: CRAD007 Title: Purchase Route Signage Recipient: City of Radford								
Flexible STP						Flexible STP		City of Radford
State						State		City of Radford
Local						Local		City of Radford
Year Total:						Total Funds:		City of Radford
Description:								
STIP ID: CRAD008 Title: Purchase Shop Equipment Recipient: City of Radford								
Flexible STP				9,800		Flexible STP	9,800	City of Radford
CARES/CRRSAA/ARP	20					CARES/CRRSAA/ARP		
State				23,800		State	23,800	City of Radford
Local				1,400		Local	1,400	City of Radford
Year Total:	20			35,000		Total Funds:	35,000	City of Radford
Description:	Adds previous funding from CARES/CRRSAA funding for 4-Post Lift Jacks for FY20. No effect on FY21-FY24 totals. Amendment # 1 adds funding in FY23. Amendment # 4 adjusts funding by adding funds in FY23.							

	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024		
STIP ID: CRAD010 Title: Purchase Expansion Vehicles Recipient: City of Radford								
Flexible STP			-			Flexible STP	-	City of Radford
State			-			State	-	City of Radford
Local			-			Local	-	City of Radford
Year Total:	-	-	-	-	-	Total Funds:	-	City of Radford
Description:								
STIP ID: CRAD012 Title: Purchase Spare Parts Recipient: City of Radford								
Flexible STP			-			Flexible STP		City of Radford
State			-			State		City of Radford
Local			-			Local		City of Radford
Year Total:	-	-	-		-	Total Funds:		City of Radford
Description:								
STIP ID: NRVC001 Title: Paratransit Vehicles Recipient: New River Valley Community Services								
FTA 5310		192 184	250 138	242	138	FTA 5310	822 710 702	New River Valley CC
State		-	-	-	-	State	-	New River Valley CC
Local		48 46	34	61	34	Local	177 175	New River Valley CC
Year Total:	-	240 230	284 172	303	172	Total Funds:	999 887 877	New River Valley CC
Description:	Amendment # 3 increases total funding \$10K (increase FTA 5310 \$8K, local \$2k). Amendment # 4 increases FY22 FTA 5310 funding \$112.							

STIP ID: NRVC002		Title: CADD Hardware & Software		Recipient: New River Valley Community Services			
FTA 5310						FTA 5310	
State						State	
Local						Local	
Year Total:	-					Total Funds:	
Description:	Amendment # 1 - Remove FY21 funding of \$96K (remove FTA 5310 \$77K, local \$19K). Project not approved by DRPT.						

Blacksburg Transit	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
FTA 5307	1,877	2,174	1,965 2,174 2,080	2,211	2,315	FTA 5307 8,865 8,874 8,778
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	-	-	-	-	FTA 5310 -
FTA 5311	-	-	-	-	-	FTA 5311 -
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	262	6,672 5,894	10,621 5,471	5,436 -	5,935 -	FTA 5339 28,664 11,362 4,724
FTA ARP	0	0	4,724	0	0	FTA ARP
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	1,644	4,800 4,819	19 19,397	0 5,736	0 5,935	Flexible STP 4,819 35,887
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	-	-	-	-	RSTP -
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
CARES/CRRSAA/ ARP	6,122	0 107	1,965	-	-	CARES/CRRSAA/ ARP 1,965 0 6,229
VW Trust	0	2,790	5,066	-	-	VW Trust 7,856 2,790
State	2,719 375	5,114 2,624	11,768 11,287 3,520	4,055 716	4,239 742	State 25,176 24,695 7,599
Local	4,576 104	3,219 954	8,594 8,595 2,700	7,085 716	7,412 742	Local 26,310 26,314 5,109

Revenues	170	3,281	168 228	243	254	Revenues	3,946 4,006
Totals	17,370 4,432	28,050 22,527	40,166 42,652 33,396	19,030 9,622	20,155 9,988		107,041 109,887 75,533

City of Radford	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	503	513	521 523	503 534	545	FTA 5307	2,082 2,113 2,115
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	-	-	-	-	FTA 5310	-
FTA 5311	-	-	-	-	-	FTA 5311	-
FTA 5314	-	-	-	-	-	FTA 5314	-
FTA 5337	-	-	-	-	-	FTA 5337	-
FTA 5339		408	432	139	-	FTA 5339	979 840
FTA ARP						FTA ARP	
FTA ADTAP	-	-	-	-	-	FTA ADTAP	-
FTA DPF	-	-	-	-	-	FTA DPF	-
FTA TIGER	-	-	-	-	-	FTA TIGER	-
FBD	-	-	-	-	-	FBD	-
Flexible STP	-	480	8	19,400 9,628	28	Flexible STP	19,916 10,116
CMAQ	-	-	-	-	-	CMAQ	-
RSTP	-	-	-	-	-	RSTP	-
FHWA TAP	-	-	-	-	-	FHWA TAP	-
TIFIA	-	-	-	-	-	TIFIA	-
CARES/CRRSAA/ ARP	1,642	1,283	1,255	-	-	CARES/CRRSAA /ARP	2,538 1,283
State	374	1,048	489 476	26,580 2,322	410	State	28,527 4,264 4,251
Local	695	776 800	23-0 781	2,896 1,262	806 805	Local	4,501 2,867 3,648

Revenues	30	37	0 37	0 37	37	Revenues	74 111 148
<i>Totals</i>	3,244	4,545 4,569	2,728 2,705 2,257	48,767 13,783	1,826 1,792	<i>Totals</i>	58,617 22,849 22,872 22,401

New River Valley Community Services	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024	
FTA 5307	-	-	-	-	-	FTA 5307	-
FTA 5309	-	-	-	-	-	FTA 5309	-
FTA 5310	-	192 484	250 438	242	138	FTA 5310	822 710 702
FTA 5311	-	-	-	-	-	FTA 5311	-
FTA 5314	-	-	-	-	-	FTA 5314	-
FTA 5337	-	-	-	-	-	FTA 5337	-
FTA 5339	-	-	-	-	-	FTA 5339	-
FTA ADTAP	-	-	-	-	-	FTA ADTAP	-
FTA DPF	-	-	-	-	-	FTA DPF	-
FTA TIGER	-	-	-	-	-	FTA TIGER	-
FBD	-	-	-	-	-	FBD	-
Flexible STP	-	-	-	-	-	Flexible STP	-
CMAQ	-	-	-	-	-	CMAQ	-
RSTP	-	-	-	-	-	RSTP	-
FHWA TAP	-	-	-	-	-	FHWA TAP	-
TIFIA	-	-	-	-	-	TIFIA	-
Other Federal	-	-	-	-	-	Other Federal	-
State	-	-	-	-	-	State	-
Local	-	48 46	34	61	34	Local	177 175
Revenues	-	-	-	-	-	Revenues	-
<i>Totals</i>	-	240 230	284 172	303	172		999 887 877

New River Valley MPO	Previous Funding	FY 2021	FY 2022	FY 2023	FY 2024	Total FY 2021-2024
FTA 5307		2,687	2,486 2,695 2,603	2,242 2,745	2,860	FTA 5307 10,275 10,987 10,895
FTA 5309	-	-	-	-	-	FTA 5309 -
FTA 5310	-	192 184	250 138	242	138	FTA 5310 822 710 702
FTA 5311	-	-	-	-	-	FTA 5311 -
FTA 5314	-	-	-	-	-	FTA 5314 -
FTA 5337	-	-	-	-	-	FTA 5337 -
FTA 5339	262	7,080 7,213	11,053 25,140	5,575 5,436 5,736	5,935	FTA 5339 29,643 29,504 44,024
FTA ADTAP	-	-	-	-	-	FTA ADTAP -
FTA DPF	-	-	-	-	-	FTA DPF -
FTA TIGER	-	-	-	-	-	FTA TIGER -
FBD	-	-	-	-	-	FBD -
Flexible STP	1,644	5,280	27 168	19,400 9,628	0	Flexible STP 24,735 14,935 15,076
CMAQ	-	-	-	-	-	CMAQ -
RSTP	-	-	-	-	-	RSTP -
FHWA TAP	-	-	-	-	-	FHWA TAP -
TIFIA	-	-	-	-	-	TIFIA -
CARES/CRRSAA/ ARP	7,764	1,283 6,110	3,220 1,255	0	0	CARES/CRRSAA/ ARP 4,503 2,538 6,110
VW Trust	0	2,790	5,066			VW Trust 7,856 2,790
State	3,093	6,162 6,401	11,776 7,137	30,635 6,377	4,649 4,644	State 53,222 28,959 24,559
Local	5,271	4,043 4,067	8,651 8,629	10,042	8,252	Local 30,988 29,355

		4,068	9,507	8,408	8,251		30,234
Revenues	200	3,318	168 265	206 280	291	Revenues	3,983 4,057 4,154
Totals	20,614	32,835 32,859 38,051	43,066 45,529 44,958	68,100 33,116 33,416	22,153 22,119	Totals	166,027 133,623 138,544

AIRPORT

The Virginia Tech Montgomery Executive Airport (VTMEA), in Blacksburg, accommodates business and personal travel via private charter and corporate aircraft. The Federal Aviation Administration classifies it as a general aviation airport. The Virginia Tech-Montgomery Airport Authority operates the airport and is made up of representatives from Montgomery County, the Towns of Blacksburg and Christiansburg, and Virginia Tech.

Operating two runways, each 5,500 feet long and 100 feet wide, with instrument approach available on both ends (13 and 31), the airport is located approximately 1 mile from the academic region of Virginia Tech’s campus, two miles from downtown Blacksburg, and four miles from Christiansburg. The Airport Capital Improvement Plan (CIP) is below.

Table 18: Airport CIP

2020 - 2025	2020	2021	2022	2023	2024	2025
VTMEA Airport CIP						
Extend Runway, Land Acquisition Phase II	\$1,150,000	-	-	-	-	-
Extend Runway, Land Acquisition, Phase III	-	\$2,822,380	-	-	-	-
Extend Runway, Land Acquisition, Phase IV	-	-	\$1,212,866	-	-	-
Extend Runway, Land Acquisition, Phase V	-	-	-	\$2,163,418	-	-
Rehabilitate Apron, Design	-	-	-	\$180,000	-	-
Rehabilitate Apron, Construction	-	-	-	-	\$1,620,000	-
Airport Master Plan Update	-	-	-	-	\$150,000	-
Expand Apron, Design	-	-	-	-	-	\$118,750
CIP Totals:	\$1,150,000	\$2,822,380	\$1,212,866	\$2,343,418	\$1,770,000	\$118,750