FY 2024-2027
Transportation Improvement Program (TIP)

400 Kendrick Lane, Suite E
Front Royal, VA 22630
Winfredmpo.org

Adopted April 2023

Winchester-Frederick Country Metropolitan Planning Organization (WinFred MPO)

Prepared for WinFred MPO by the Northern Shenandoah Valley Regional Commission

NSVRC
NORTHERN SHENANDOAH VALLEY REGIONAL COMMISSION

Winchester-Frederick County Metropolitan Planning Organization

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Daniel Hoffman – City of Winchester

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Phil Milstead – City of Winchester

Steven Minor – Federal Highway Administration (non-voting)

Tony Cho – Federal Transit Administration (non-voting)

Amy Garbarini – Virginia Department of Rail and Public Transportation (non-voting)

R.N. (Rusty) Harrington – Virginia Department of Aviation (non-voting)

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Mike Ruddy – City of Winchester

Plan Documentation

Contact Information

400 Kendrick Lane, Suite E, Front Royal, Virginia 22630

Phone: (540) 636-8800

Virginia Relay for Hearing & Voice Impaired: Within Virginia 7-1-1; Outside Virginia Voice 800-828-1140 • Hearing 800-828-1120 Website: https://winfredmpo.org

Disclaimer

The Winchester-Frederick County Metropolitan Planning Organization (WinFred MPO) Transportation Improvement Program (TIP) has been prepared in accordance with federal regulations 49 U.S.C. § 5303(j) and 23 CFR 450.326, and the Virginia Association of Metropolitan Planning Organizations TIP Development Guidelines; and in partnership with the City of Winchester, County of Frederick, and Town of Stephens City, the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). The contents of this report reflect the views of the WinFred MPO, which are responsible for the accuracy of the information and data presented herein.

Self-Certification

Submission of the WinFred MPO TIP fulfils the federal self-certification requirements set forth by 23 CFR 450.336, confirming the WinFred MPO's metropolitan transportation planning process is conducted in accord with all applicable federal and state regulations.

Non-Discrimination Statement

The WinFred MPO ensures non-discrimination and equal employment in all programs and activities in accordance with Title VI and Title VII of the Civil Rights Act of 1964. If you have questions or concerns about your civil rights regarding this document, or if you need special assistance for persons with disabilities or limited English proficiency, please contact the WinFred MPO. For more information, or to obtain a Title VI Complaint Form, see https://winfredmpo.org/resources or call (540) 636-8800.

WinFred Metropolitan
Planning Organization
400 Kendrick Lane, Suite E
Front Royal, Virginia 22630
Phone: 540-636-8800
Website: www.winfredmpo.org

May 24, 2023

Mr. Adam Campbell
VA Department of Transportation
811 Commerce Road
Staunton, VA 24401

RE: Approval of FY24-27 TIP

Dear Mr. Campbell,

The Winchester Frederick County MPO Policy Board met on April 19, 2023, and unanimously approved the FFY 2024-2027 Highway Transportation Improvement Program. It should be noted that this matter was advertised as required by our Public Participation Plan and no public comment was received during the 20-day public comment period.

Please accept my thanks in advance for your assistance in this matter.

Sincerely,

Brandon P. Davis

Brandon Davis
WinFred MPO Secretary-Treasurer

Contents

Introduction

Purpose of this Document

Federal regulations [49 U.S.C. § 5303(j) and 23 CFR 450.326] require that all Metropolitan Planning Areas develop and maintain a Transportation Improvement Program (TIP) to coordinate regional transportation planning, maximize resources, provide transparency in the investment of federal transportation funds, and make progress towards achieving state and regional performance targets. Additionally, federal regulations require the TIP to be compatible with the WinFred MPO's Metropolitan Transportation Plan(MTP), the State's SYIP (VDOT's Six- Year Improvement Program), the State's Transportation Improvement Plan (STIP), and that it be updated a minimum of every 4- years. This TIP identifies the investment plans for Highway and Transit which are provided in the TIP Financial Plan on page 9.

Public Participation

Public participation is vital in the TIP development process to ensure that transportation projects being advanced address needs identified by the community. Federal regulations require the WinFred MPO to develop, implement, and maintain a Public Participation Plan (PPP) to provide a transparent and open planning process. The PPP identifies the various methods and ways the WinFred MPO works to ensure that the public is properly notified of its activities, and that opportunities to participate in the WinFred MPO's short and long-range planning activities are available to all residents. The TIP is updated and amended according to the procedures provided in the PPP.

The WinFred MPO

The MPO was established in 2003 through a Memorandum of Understanding (MOU) between the Secretary of Transportation for the Commonwealth of Virginia and the localities in the urbanized area including the City of Winchester, the Town of Stephens City, and Frederick County. A map of the planning area boundary for the WinFred MPO, including the major roads within the boundary can be seen in Figure 1.

The Winchester-Frederick County (WinFred) MPO is responsible for conducting a continuing, comprehensive and coordinated (3-C) transportation planning process for the Winchester metropolitan area in accordance with Section 134, Title 23, and Section 5303, Title 49, United States Code, and the joint metropolitan planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The 3-C Process enables the WinFred MPO to collaborate with its members and partners to develop a comprehensive picture of the region in its effort to identify potential issues, prioritize needs, provide solutions, identify funding opportunities, and make decisions to support, maintain and improve the region's transportation network.

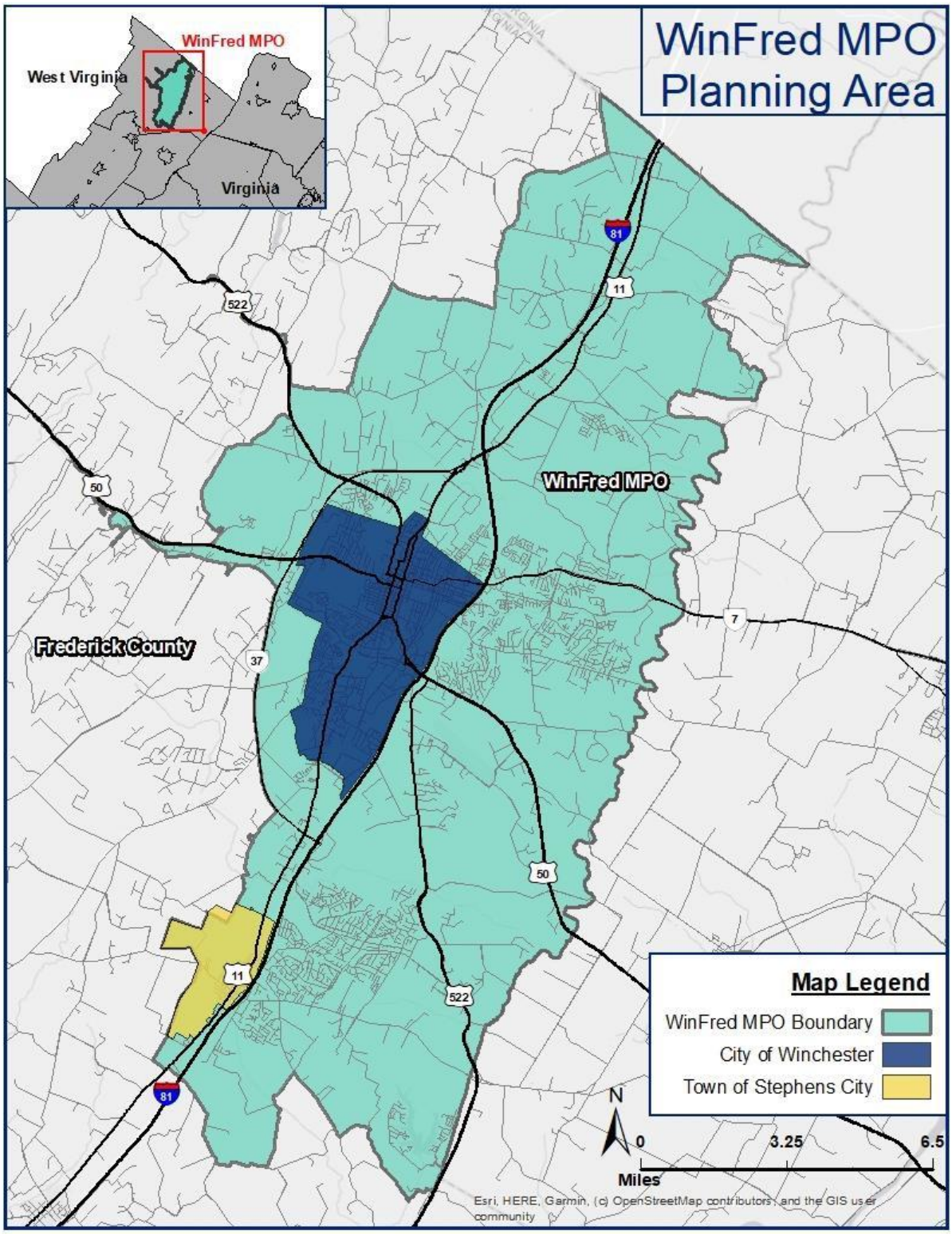
WinFred MPO Policy Board

The MPO is governed by a Policy Board comprised of elected officials from each locality and representatives from the Virginia Departments of Transportation (VDOT) and Rail and Public Transportation (DRPT), and FHWA. See page ii for the board roster. Typically meeting monthly, the Policy Board is responsible for making all of the official decisions of the MPO.

Technical Advisory Committee (TAC)

The Policy Board is advised on technical matters by a Technical Advisory Committee (TAC) comprised of planners, engineers and other transportation experts employed by the member localities and state and federal partners. See page iii for the committee roster. The TAC typically meets monthly.

Figure 1: WinFred MPO Planning Area and Major Roads



The WinFred MPO TIP

The WinFred TIP is the region's fiscally constrained four-year program of all transportation and transit projects programmed in the WinFred MPO region that:

Are scheduled to receive federal transportation funds

Require a federal action; or

Are deemed regionally significant

Projects using only local or state funds are typically not included in the TIP unless they require a federal action or are considered regionally significant. The list of transportation and transit projects programmed in the WinFred MPO FY 2024 – 2027 TIP can be found in the TIP Highway & Transit Financial Plans on page 9 of this document.

Consistency with Other State and Regional Planning Documents

Federal regulations require the TIP to be consistent with other federal, state, and regional transportation planning documents. These documents include the Statewide Transportation Improvement Program (STIP), and Six Year Improvement Program (SYIP), and the WinFred MPO Metropolitan Transportation Plan (MTP).

Upon approval by the WinFred MPO Policy Board, the WinFred MPO TIP is submitted to VDOT and DRPT for approval and inclusion into the STIP, which is then forwarded to the FHWA and FTA for federal approval.

TIP Development

The TIP is developed in accordance with 23 CFR 450.326, the Virginia Association of MPOs (VAMPO) TIP Development Guidelines, and in partnership with member agencies, stakeholders, VDOT, DRPT, FHWA and FTA, from projects in the WinFred MPO's Constrained Long Range Plan (CLRP), the VTrans 2040 Plan, and from member agency comprehensive plans. The TIP is updated at least every four years.

TIP Financial Plans

Highway Financial Plan

The TIP Highway Financial Plan lists all transportation projects programmed in the WinFred MPO region during the TIP 4-year life-cycle. The Financial Plan provides a project's details including the type of project to be implemented, its phase, scope, obligated funding source(s), project cost(s), and delivery schedule

Transit Financial Plan

The Transit Financial Plan provided by DRPT identifies all transit projects programmed for implementation during the 4-year life cycle of the TIP. Project details shown in the Transit Financial Plan include a project's cost(s), funding allocation(s), funding source(s) and anticipated future funding.

Grouped Projects

Projects in the TIP that are determined not to be regionally significant or are considered by VDOT or DRPT not to be of an appropriate scale to be individually programmed are listed in grouped categories. Listing these projects in grouped categories provides programming flexibility and reduces the administrative process. Grouped category lists may be identified by function, work type, or geographic area per 23 CFR 771.117(c) and (d) and 40 CFR part 93. A grouped project list shows the total sum of funding obligated for the grouped category rather than individual project descriptions and obligated funding. Grouped project listings are provided in both financial plans.

Amendments & Modifications

The TIP is periodically amended to add new projects or modify an existing project's scope, cost, and/or schedule when requested by VDOT, DRPT, or the project sponsor. TIP amendments and modifications are included in the Highway and Transit Financial Plans beginning on page 9 of this document. Amendments and administrative modifications are defined below per 23 CFR Section 450.104:

Amendments are considered when a revision to a TIP involves a ***major change*** to an existing project programmed during the document's life-cycle. Major changes may include the addition or deletion of a project, or a major change to a project's cost, scope, or schedule (e.g., adding new funds to a project, changing a project's termini or revising the start and/or delivery date). Amendments require a public notice that includes a review and comment

period. Once the review and comment period are complete the amendment is presented to the WinFred MPO Policy Board, VDOT/DRPT, FHWA/FTA for approval. Any change to a TIP's financial plan(s) must continue to demonstrate fiscal constraint.

Administrative Modifications are considered to be *minor revisions* to a TIP. This includes minor changes to an existing project's programmed phase, costs, funding source(s), and minor changes to a project's schedule/delivery date. An administrative modification only requires a staff-level review. Administrative modifications do not require a public notice of the change, public comment period, or re-demonstration of fiscal constraint.

Amendments or modifications the WinFred MPO TIP are made according to the amendment policy found in Section IX of the Win Fred MPO PPP.

Performance Management Requirements

The WinFred MPO is dedicated to improving the region's transportation network by working with its member agencies, VDOT, DRPT, FHWA, and FTA to implement regional performance measures that support and advance regional, state, and national transportation performance goals.

The FHWA defines Transportation Performance Management as a "strategic approach that uses system information to make investment and policy decisions to achieve national performance goals." With the passage of Moving Ahead for Progress in the 21st Century (MAP-21) in 2012 the and the subsequent Fixing America's Surface Transportation (FAST) Act in 2016, the FHWA and FTA mandated that States and MPOs establish performance measures to integrate system-performance management into the transportation and transit planning process. In order to guide the integration of system performance measures into the planning process the FHWA and FTA identified the following seven national performance measures:

Safety
Infrastructure Condition
Congestion Reduction
System Reliability
Freight Movement & Economic Vitality
Environmental Sustainability
Reduced Project Delivery Delay

Advancing the seven national performance goals ensures that transportation networks continue to develop and operate in a safe and efficient manner. Implementation of these measures in the

WinFred MPO region ensures that transportation investments advance federal performance objectives, and that the WinFred MPO TIP is consistent with statewide planning documents.

The performance measures and implementation schedule provided in Appendix B satisfy the requirements of 23 CFR 450.218(q). WinFred MPO concurred with the state's safety targets on January 15, 2020. Performance measures and their revisions are to be incorporated into the TIP via the administrative modification process as they are advanced by VDOT and DRPT and approved by the WinFred MPO Policy Board.

The TIP Financial Plan

MAP-21 requires a financial plan be provided in the TIP (23 CFR 450.324(h)). The Financial Plan must demonstrate how the projects programmed can be implemented with existing obligations. TIP projects identified must be consistent with the WinFred MPO's Long-Range Transportation Plan, and must be fully funded to the extent of available funding obligations or funding that is reasonably expected to be available.

The WinFred MPO and its partners have collaborated to develop financial forecasts for the Highway and Transit TIP based on the latest official planning assumptions, available or assumed revenue(s), and estimated project cost(s). The financial information provided is either project specific, or listed by a grouped funding category. All projects listed in the TIP are expected to be implemented during the four-year life cycle of the document. The TIP Financial Plan may contain projects that show $0.00 for planned obligations. Possible reasons for this include:

The project is complete and is awaiting final closeout
Project phases extend beyond four years
A Project type ID that has no allocated funding during the four-year period of the TIP

TIP Financial Plan – Highway Projects

UPC NO	115717	SCOPE	Bridge Replacement w/ Added Capacity			
SYSTEM	Interstate	JURISDICTION	Frederick County		OVERSIGHT	
PROJECT	#SMART20 I-81 EXIT 313 BRIDGE CAPACITY IMPROVMENT				ADMIN BY	VDOT
DESCRIPTION	FROM: Bridge Replacement over I-81 TO: And interchange Improvements (0.3900 MI)					
ROUTE/STREET	0081				TOTAL COST	$5,264,400

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN AC	Federal - AC OTHER	$0	$5,264,400	$0	$0	$0

UPC NO	117220	SCOPE	Safety			
SYSTEM	Interstate	JURISDICTION	Statewide		OVERSIGHT	NFO
PROJECT	#ITTF21 I-81 OPERATIONAL IMPROVEMENTS - PROGRAM UPC				ADMIN BY	VDOT
DESCRIPTION	FROM: Various TO: Various					
ROUTE/STREET	0081				TOTAL COST	$9,618,000

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - NHS/NHPP	$0	$118,206	$0	$0	$0
PE AC	Federal - AC OTHER	$0	$9,499,794	$0	$0	$0

UPC NO	115869	SCOPE	Safety			
SYSTEM	Interstate	JURISDICTION	Statewide		OVERSIGHT	NFO
PROJECT	#ITTF20 STATEWIDE TECHNOLOGY FOR OPERATIONS				ADMIN BY	VDOT
DESCRIPTION	FROM: Various TO: Various					
ROUTE/STREET	9999				TOTAL COST	$2,000,000

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - NHS/NHPP	$0	$913,491	$0	$0	$0
PE AC	Federal - AC OTHER	$0	$1,086,509	$0	$0	$0

Primary Projects

UPC NO	110396	SCOPE				
SYSTEM	Primary	JURISDICTION	Frederick County		OVERSIGHT	NFO
PROJECT	#HB2.FY17 RTE 277 - WIDEN TO 5 LANES GARVEE DEBT SERVICE				ADMIN BY	VDOT
DESCRIPTION						
PROGRAM NOTE	Includes $3,871,858 GARVEE Debt Service Interest Prev, $920,863 FFY24 GARVEE Debt Service Interest, $882,324 GARVEE Debt Service Interest FFY25, $808,758 GARVEE Debt Service Interest FFY26, $731,563 GARVEE Debt Service Interest FFY27, $2,929,499 GARVEE Debt Service Interest FFY28-38. Total GARVEE Debt Service Interest $10,144,865. Corresponding CN UPC 18003.					
ROUTE/STREET	0277				TOTAL COST	$19,705,940

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - AC CONVERSION	$0	$0	$882,324	$808,758	$731,563
	Federal - STP/STBG	$0	$920,863	$0	$0	$0
PE TOTAL		$0	$920,863	$882,324	$808,758	$731,563
PE AC	Federal - AC	$0	$5,352,144	$0	$0	$0

UPC NO	120968	SCOPE	Resurfacing			
SYSTEM	Primary	JURISDICTION	Staunton District-wide		OVERSIGHT	NFO
PROJECT	#SGR23VP District Wide Plant Mix Schedule (PM-8H-23)				ADMIN BY	VDOT
DESCRIPTION	FROM: VARIOUS TO: VARIOUS (5.8500 MI)					
ROUTE/STREET	9999				TOTAL COST	$1,487,863

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN AC	Federal - AC OTHER	$0	$1,487,863	$0	$0	$0

Miscellaneous Projects

UPC NO	119654	SCOPE	Traffic Management/Engineering			
SYSTEM	Miscellaneous	JURISDICTION	Statewide		OVERSIGHT	NFO
PROJECT	#I81CIP PARALLEL FACILITIES IMPROVEMENTS O&M FY 21-27				ADMIN BY	VDOT
DESCRIPTION	FROM: State Line with Tennessee TO: State Line with West Virginia					
ROUTE/STREET	ARTERIALS ADJANCET TO INTERSTATE 81 (0081)				TOTAL COST	$479,805

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN AC	Federal - AC OTHER	$0	$479,805	$0	$0	$0

UPC NO	116851	SCOPE	Reconstruction w/ Added Capacity			
SYSTEM	Miscellaneous	JURISDICTION	Winchester		OVERSIGHT	NFO
PROJECT	GREEN CIRCLE TRAIL WIDENING				ADMIN BY	Locally
DESCRIPTION	FROM: Handley Avenue TO: West of Harvest Drive (0.2700 MI)					
ROUTE/STREET	U000				TOTAL COST	$2,100,714

	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - TAP/F	$48,691	$194,762	$0	$0	$0
RW	Federal - TAP/F	$24,345	$0	$0	$97,381	$0

Project Groupings

GROUPING		Construction : Bridge Rehabilitation/Replacement/Reconstruction				
ROUTE/STREET					TOTAL COST	$31,328,926
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
RW	Federal - AC CONVERSION	$51,894	$0	$207,574	$0	$0
	Federal - NHS/NHPP	$833,466	$3,333,862	$0	$0	$0
RW TOTAL		$885,359	$3,333,862	$207,574	$0	$0
RW AC	Federal - AC OTHER	$0	$259,468	$0	$0	$0
CN	Federal - AC CONVERSION	$3,087,033	$0	$0	$6,233,100	$6,115,032
	Federal - NHS/NHPP	$767,981	$3,071,924	$0	$0	$0
	Federal - STP/STBG	$200,344	$0	$801,377	$0	$0
CN TOTAL		$4,055,358	$3,071,924	$801,377	$6,233,100	$6,115,032
CN AC	Federal - AC OTHER	$0	$0	$20,540,503	$0	$0

GROUPING		Construction : Rail				
ROUTE/STREET					TOTAL COST	$2,173,530
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - STP/STBG	$7,900	$0	$71,100	$0	$0
CN	Federal - STP/STBG	$83,600	$279,000	$473,400	$0	$0

GROUPING		Construction : Safety/ITS/Operational Improvements				
ROUTE/STREET					TOTAL COST	$116,256,887
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - NHS/NHPP	($373)	($1,492)	$0	$0	$0
RW	Federal - NHS/NHPP	$27,958	$111,832	$0	$0	$0
	Federal - STP/STBG	$24,069	$96,276	$0	$0	$0
RW TOTAL		$52,027	$208,108	$0	$0	$0
RW AC	Federal - AC OTHER	$0	$93,261	$0	$0	$0
CN	Federal - AC CONVERSION	$194,000	$0	$1,746,000	$0	$0
	Federal - HSIP	$15,000	$135,000	$0	$0	$0
	Federal - NHS/NHPP	$143,747	$574,989	$0	$0	$0
	Federal - STP/STBG	$101,958	$375,824	$32,009	$0	$0
CN TOTAL		$454,706	$1,085,813	$1,778,009	$0	$0
CN AC	Federal - AC OTHER	$0	$4,799,652	$801,122	$0	$0

GROUPING		Construction : Transportation Alternatives/Byway/Non-Traditional				
ROUTE/STREET					TOTAL COST	$16,260,565
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
PE	Federal - AC CONVERSION	$38,840	$155,360	$0	$0	$0
RW	Federal - HSIP	$50	$450	$0	$0	$0
	Federal - STP/STBG	$99,284	$397,135	$0	$0	$0
RW TOTAL		$99,334	$397,585	$0	$0	$0
RW AC	Federal - AC OTHER	$0	$503,581	$0	$0	$0
CN	Federal - HSIP	$98,890	$0	$890,010	$0	$0

	Federal - TAP/F	$24,400	$0	$97,600	$0	$0
CN TOTAL		$123,290	$0	$987,610	$0	$0
CN AC	Federal - AC OTHER	$0	$0	$7,222,100	$0	$0

GROUPING	Maintenance : Preventive Maintenance and System Preservation					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	$90,996,464
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN	Federal - STP/STBG	$0	$22,608,309	$22,701,124	$22,795,517	$22,891,514

GROUPING	Maintenance : Preventive Maintenance for Bridges					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	$29,779,836
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN	Federal - NHS/NHPP	$0	$755,556	$755,556	$755,556	$755,556
	Federal - STP/STBG	$0	$6,648,943	$6,675,613	$6,702,736	$6,730,320
CN TOTAL		$0	$7,404,499	$7,431,169	$7,458,292	$7,485,876

GROUPING	Maintenance : Traffic and Safety Operations					
PROGRAM NOTE	Funding identified to be obligated districtwide as projects are identified.					
ROUTE/STREET					TOTAL COST	$12,358,669
	FUND SOURCE	MATCH	FY24	FY25	FY26	FY27
CN	Federal - STP/STBG	$0	$3,070,544	$3,083,149	$3,095,969	$3,109,007

Appendix A

Projects by Groupings

Winchester MPO

Construction : Bridge Rehabilitation/Replacement/Reconstruction

System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	113535	Frederick County	MILLWOOD PIKE (0017)	$31,328,926
		#SGR19VB - RT 17/50/522 MILLWOOD PIKE BRIDGE OVER I-81		
		FROM: 0.13 Mi. E. Int. Apple Blossom Dr. TO: 0.05 Mi. W. Int. Tulane Dr. (0.4220 MI)		
Miscellaneous	T18994	Staunton District-wide	0000	$0
		BRIDGE REHABILITATION/REPLACEMENT		
Construction : Bridge Rehabilitation/Replacement/Reconstruction Total				$31,328,926

Construction : Rail

System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T18981	Staunton District-wide	0000	$0
		CN: RAIL		
Secondary	113063	Frederick County	631 / MARLBORO RD. (0631)	$310,000

		Rt.631-Install Flashing Lights and Gates		
		FROM: 18 Ft. E Of Rabbit Ln. TO: at CSXRR Crossing #139462A		
Secondary	113062	Frederick County	638 / VAUCLOSE RD. (0638)	$310,000
		Rt.638-Upgrade Existing Flashing Lights and Gates		
		FROM: .10 Mi. W of Rt.11 TO: at CSXRR Crossing #139465A		
Secondary	110985	Frederick County	BRUCETOWN RD (0672)	$350,542
		Rt.672-Upgrade Cabinet, Circuitry and Raise Cantilever FROM: .45 Mi. East of Rt.11 TO: at WW RR Crossing 517963C		
Secondary	110988	Frederick County	BRUCETOWN RD (0672)	$260,000
		Rt.672-Realign curve, Raise road & Install Concrete Surface FROM: .45 Mi. East of Rt.11 TO: at WW RR Crossing 517963C		
Secondary	114900	Frederick County	RT. 664 / STEPHENSON RD. (0664)	$425,000
		Rt.664- Upgrade to Flashing Lightsand Gates		
		FROM: .13 Mi. East of Rt. 11 TO: at CSXRR Crossing DOT #139435H		
Secondary	110986	Frederick County	WELLTOWN RD (0661)	$337,988
		Rt.661-Install New Control House &Track Redundant Detector FROM: .20 Mi. Northwest of Rt.11 TO: at WW RR Crossing 517975W		
Urban	113065	Winchester	SOUTH LOUDON STREET (0000)	$180,000
		S. Loudon St.-Install Concrete crossing Surface		
		FROM: 165 FT N of Featherbed Ln. TO: at WWRR Crossing #868160N		
Construction : Rail Total				$2,173,530

Construction : Safety/ITS/Operational Improvements

System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	112900	Frederick County	R-VA IS00081NB (0081)	$2,240,000
		I-81 - INSTALL HIGH TENSION CABLE BARRIER		
		FROM: MM 304.9 TO: MM 324.2 (19.3000 MI)		

Winchester MPO

Construction : Safety/ITS/Operational Improvements

System	UPC	Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	115181	Frederick County	0081	$3,209,056
		#SMART20 I-81 Exit 317 Accel/Decel Lane Extensions		
		FROM: Northbound acceleration TO: Southbound deceleration (0.2500 MI)		
Interstate	120642	Frederick County	0081	$6,943,514
		EXIT 317 NB RAMP REALIGNMENT TO REDBUD ROAD LOCATION		
		FROM: NB Exit Ramp Realignment TO: Redbud Road Relocation (0.1600 MI)		
Interstate	116039	Statewide	0081	$9,407,380
		#I81CIP DMS INSTALLATION		
		FROM: Various TO: Various		
Interstate	117790	Statewide	0081	$382,000
		#ITTF21 STUDY OF ADVANCED TECHNOLOGIES -I-81		
		FROM: various TO: various		
Interstate	110551	Statewide	9999	$307,192
		TRAFFIC VIDEO EXPANSION (PSAP) - STATEWIDE		
		FROM: Various TO: Various		
Interstate	110912	Statewide	9999	$813,019
		Statewide Truck Parking Management System - Phase 1 FROM: Various		
		TO: Various		
Interstate	111613	Statewide	9999	$1,807,000
		STATEWIDE TRUCK PARKING MANAGEMENT SYSTEM - PHASE 2		
		FROM: Various TO: Various		
Interstate	115854	Statewide	9999	$0
		#ITTF20 ARTERIAL OPERATIONS PROGRAM DASHBOARD		
		FROM: n/a TO: n/a		
Interstate	115856	Statewide	9999	$1,950,000
		#ITTF20 PARKING DEMAND MANAGEMENT SYSTEM		
		FROM: Various TO: Various		
Interstate	119197	Statewide	9999	$1,500,000
		#ITTF22 OSPREY FIBER CONNECTIONS - STATEWIDE		
		FROM: Various TO: Various		
Interstate	119198	Statewide	9999	$25,040
		#ITTF22 HIGH SPEED COMMUNICATIONS FOR SIGNALS (PHASE II)		
		FROM: Various TO: Various		
Interstate	119199	Statewide	9999	$500,000
		#ITTF22 STUDY FOR SMARTER LIGHTING INITIATIVE STATEWIDE		
		FROM: Various TO: Various		
Interstate	119332	Statewide	9999	$300,000
		#ITTF22 DATA-DRIVEN MGMT PROGRAM FOR PAVEMENT MARKING		
		FROM: Various TO: Various		
Interstate	119379	Statewide	9999	$0
		#ITTF22 CONNECTED WORK ZONES PROGRAM STATEWIDE		
		FROM: Various TO: Various		
Interstate	119401	Statewide	9999	$250,000
		#ITTF22 PROJECT EVALUATIONS STATEWIDE		
		FROM: Various TO: Various		

Interstate	119402	Statewide	9999	$1,030,000
	#ITTF22 INCIDENT RESPONSE OPTIMIZATION -STATEWIDE			
	FROM: Various TO: Various			
Interstate				
	119404	Statewide	9999	$1,000,000
	#ITTF22 GUIDE LIGHTS FOR SPEED MANAGEMENT STATEWIDE			
Interstate	FROM: various TO: various			
	119406	Statewide	9999	$0
	#ITTF22 AUTOMATED SPEED ENFORCEMENT PILOT STATEWIDE			
Interstate	FROM: Various TO: Various			
	121564	Statewide	9999	$350,000
	#ITTF23 LEVERAGING CONNECTED CAR DATA FOR IMPROVED SAFETY			
Interstate	FROM: Various TO: Various			
	121654	Statewide	9999	$1,000,000
	#ITTF23 OPERATIONALIZE TRAFFIC OPERATIONS SUPPORT CENTER			
Interstate	FROM: Various TO: Various			
	121655	Statewide	9999	$500,000
	#ITTF23 IMPLEMENT AI-BASED INTEGRATED SECURITY PREDICTION			
Interstate	FROM: Various TO: Various			
	121666	Statewide	9999	$500,000
	#ITTF23 ITTF PROJECT EVALUATIONS			
	FROM: Various TO: Various			
Interstate	121667	Statewide	9999	$3,575,000
	#ITTF23 RM3P DEP Data Services FROM: Various TO: Various			
Interstate	121668	Statewide	9999	$1,000,000
	#ITTF23 REAL-TIME INFORMATION DISSEMINATION FOR CMVs			
	FROM: Various TO: Various			
Interstate	121670	Statewide	9999	$500,000
	#ITTF23 ADVANCED ROAD WEATHER INFORMATION SYSTEMS STUDY FROM:			
	VARIOUS TO: VARIOUS			
Interstate	121712	Statewide	9999	$650,000
	NETWORK OPERATIONS CENTER IMPLEMENTATION			
	FROM: Various TO: Various			
Interstate	121776	Statewide	9999	$1,000,000
	HARD SHOULDER RUNNING FEASIBILITY STUDY-Technology component			
	FROM: Various TO: Various			
Interstate	121822	Statewide	9999	$5,000,000
	#ITTF23 STATEWIDE FIBER NETWORK ENHANCEMENTS			
	FROM: Various TO: Various			
Interstate	122048	Statewide	VARIOUS (9999)	$500,000
	#ITTF23 - RM3P EVALUATION			
	FROM: various TO: various			
Miscellaneous	T18993	Staunton District-wide	0000	$0
CN: SAFETY/ITS/OPERATIONAL/IMPROVEMENTS				
Miscellaneous	121643	Statewide	9999	$1,000,000
#ITTF23 SMART INTERSECTIONS DEPLOYMENT SUPPORT				
FROM: Various TO: Various				
Primary	119644	Frederick County	BERRYVILLE PIKE (0007)	$999,624

	#SMART22 - ROUTE 7 STARS ACCESS MANAGEMENT PROJECTS		
	FROM: Intersection Improvements TO: on Route 7 (1.0000 MI)		
Primary	117944 Frederick County	0011	$510,000
	#I81CIP DETOUR IMPROVEMENTS - EXIT 317 FROM:		
	VARIOUS TO: VARIOUS		
Primary	120643 Frederick County	MARTINSBURG PIKE (0011)	$6,357,196
	ROUTE 11/OLD CHARLES TOWN ROUNDABOUT		
	FROM: Intersection improvements to a TO: Roundabout (0.1500 MI)		
Primary	120820 Frederick County	VALLEY PIKE (0011)	$750,000
	#ITTF22 HIGH SPEED COMMUNICATIONS FOR SIGNALS RTE 11		
	FROM: Renaissance Drive TO: Shawnee Drive (1.7390 MI)		
Primary	119649 Winchester	PLEASANT VALLEY ROAD (0011)	$202,978
	#SMART22 - PLEASANT VALLEY ROAD ACCESS MANAGEMENT		
	FROM: Jubal Early Drive TO: 0.03 Mi. N. Int. Jubal Early Drive		
Primary	119650 Winchester	PLEASANT VALLEY ROAD (0011)	$829,668
	#SMART22 - PLEASANT VALLEY ROAD ACCESS MANAGEMENT II		
	FROM: S. Intersection of Parkview Ave TO: Intersection of Parkview Ave. (0.1500 MI)		
Primary	107022 Frederick County	NORTHWESTERN PIKE (0050)	$3,801,165
	RTE 50 - SAFETY IMPROVEMENTS		
	FROM: WVA State Line TO: Rte 654 (12.4600 MI)		
Primary	18003 Frederick County	FAIRFAX PIKE (0277)	$32,314,759
	#HB2.FY17 RTE 277 - WIDEN TO 5 LANES		
	FROM: 0.131 MILE WEST ROUTE STICKLEY DRIVE TO: 0.115 MILE EAST OF DOUBLE CHURCH ROAD (0.7371 MI)		
Primary	111227 Frederick County	FAIRFAX PIKE (0277)	$476,644
	#SMART18 - (St) INTERSECTION OF RTE 277 AND WARRIOR DR		
	FROM: West Int. Warrior Drive TO: East Int. Warrior Drive (0.1600 MI)		
Primary	78825 Frederick County	0522	$3,620,267
	Route 522, Fred. Co., Str. ID 08156 Brg Repl. Fed ID-08156		
	FROM: 0.85 Mi. North of Rte. 642 TO: 0.05 Mi. North of Rte. 644 (0.4520 MI)		
Secondary	59259 Frederick County	SULPHUR SPRING RD. (0655)	$6,343,821
	RTE 655 - RECONSTRUCTION		
	FROM: 0.691 Mi. W. Rte 656 TO: 0.288 Mi. E. Rte 656 (0.9780 MI)		
Urban	112211 Winchester	NORTH LOUDOUN STREET (0011)	$668,354
	Signal Replacement N. Loudoun St / Brick Kiln Rd / Brooke Rd FROM:		
	North Loudoun Street TO: Brick Kiln Rd/ Brooke Rd		
Urban	103013 Winchester	VALLEY AVENUE (U000)	$10,792,240
	Rte 11 - Improve Drainage, Add Sidewalks and C&G		
	FROM: .08 M N of Shawnee Dr (City Limits) TO: .03 M S of Middle Road (1.3340 MI)		
Urban	115138 Winchester	VALLEY AVENUE (U000)	$1,350,970
	#SMART20 Traffic Signal Improvements, Valley and Gerrard St. FROM:		
	Intersection of Valley TO: And Gerard Street		
Construction : Safety/ITS/Operational Improvements Total			$116,256,887

Construction : Transportation Alternatives/Byway/Non-Traditional

System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	113895 Frederick County	0657	$1,089,900
	Abrams Creek Trail - Frederick County		
	FROM: Senseny Road TO: Woodstock Lane (1.0000 MI)		

Construction : Transportation Alternatives/Byway/Non-Traditional

System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Enhancement	106054 Winchester	WENTWORH DRIVE (EN14)	$3,425,564
	Wentworth Drive SRTS Sidewalk		
	FROM: Valley Avenue TO: Cedarmeade Avenue (0.3300 MI)		
Enhancement	106055 Winchester	JUBAL EARLY DRIVE (EN14)	$998,485
	Green Circle Trail - Jubal Early Segment		
	FROM: 0.04 MI West of Harvest Drive TO: 0.04 Miles East of Valley Avenue (0.3300 MI)		
Enhancement	111418 Winchester	EN17	$2,750,516
	Museum of the Shenandoah Valley Trail Connection		
	FROM: Museum entrance on Amherst St./Green Circle Trail TO: Jefferson Street sidewalk		
Enhancement	111027 Winchester	GREEN CIRCLE TRAIL (EN18)	$5,492,000
	#SMART18 - (St) GREEN CIRCLE TRAIL - FINAL PHASES		
	FROM: Various Locations in TO: The City of Winchester		
Enhancement	116858 Winchester	BOSCAWEN STREET (EN20)	$2,504,100
	BOSCAWEN STREET PEDESTRIAN MALL		
	FROM: Indian Alley TO: Cameron Street (0.1500 MI)		
Miscellaneous	T18971 Staunton District-wide	0000	$0
	CN: TRANSPORTATIONS ENHANCEMENT/BYWAY/OTHER NON-TRADITIONAL		
Construction : Transportation Alternatives/Byway/Non-Traditional Total			$16,260,565

Maintenance : Preventive Maintenance and System Preservation

System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Interstate	120970 Staunton District-wide	9999	
	#SGR23VP District Wide Plant Mix Schedule (PM-8M-23) FROM:		
	VARIOUS TO: VARIOUS (3.0700 MI)		
Interstate	120971 Staunton District-wide	9999	
	#SGR23VP District Wide Plant Mix Schedule (PM-8N-23) FROM:		
	VARIOUS TO: VARIOUS (5.2300 MI)		
Miscellaneous	T14725 Staunton District-wide	0000	$90,996,464
	STIP-MN Staunton: Preventive MN and System Preservation		
Maintenance : Preventive Maintenance and System Preservation Total			$90,996,464

Maintenance : Preventive Maintenance for Bridges

System	UPC Jurisdiction / Name / Description	Street(Route)	Estimate
Miscellaneous	T14724 Staunton District-wide	0000	$29,779,836
	STIP-MN Staunton: Preventive MN for Bridges		
	Maintenance : Preventive Maintenance for Bridges Total		$29,779,836

Maintenance : Traffic and Safety Operations

System	UPC	Jurisdiction / Name / Description		Street(Route)	Estimate
Miscellaneous	T14723	Staunton District-wide	0000		$12,358,669
		STIP-MN Staunton: Traffic and Safety Operations			
		Maintenance : Traffic and Safety Operations Total			$12,358,66
Winchester MPO Total					**$299,154,877**

TABLE C : WINCHESTER MPO FEDERAL FUNDING CATEGORIES
FISCAL CONSTRAINT BY YEAR

Fund Source	FFY 2024		FFY 2025		FFY 2026		FFY 2027		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	$135,450	$135,450	$890,010	$890,010	$0	$0	$0	$0	$1,025,460	$1,025,460
NHS/NHPP	$7,091,115	$7,091,115	$0	$0	$0	$0	$0	$0	$7,091,115	$7,091,115
STP/STBG	$2,069,098	$2,069,098	$1,377,886	$1,377,886	$0	$0	$0	$0	$3,446,984	$3,446,984
TAP	$194,762	$194,762	$97,600	$97,600	$97,381	$97,381	$0	$0	$389,743	$389,743
Subtotal -- Federal	**$9,490,425**	**$9,490,425**	**$2,365,496**	**$2,365,496**	**$97,381**	**$97,381**	**$0**	**$0**	**$11,953,302**	**$11,953,302**
Other										
State Match	$2,085,202	$2,085,202	$392,136	$392,136	$24,345	$24,345	$0	$0	$2,501,683	$2,501,683
Subtotal -- Other	**$2,085,202**	**$2,085,202**	**$392,136**	**$392,136**	**$24,345**	**$24,345**	**$0**	**$0**	**$2,501,683**	**$2,501,683**
Total	**$11,575,627**	**$11,575,627**	**$2,757,632**	**$2,757,632**	**$121,726**	**$121,726**	**$0**	**$0**	**$14,454,985**	**$14,454,985**
Federal - ACC (1)										
HSIP	$0	$0	$1,746,000	$1,746,000	$0	$0	$0	$0	$1,746,000	$1,746,000
NHS/NHPP	$0	$0	$207,574	$207,574	$6,233,100	$6,233,100	$6,115,032	$6,115,032	$12,555,706	$12,555,706
STP/STBG	$155,360	$155,360	$882,324	$882,324	$808,758	$808,758	$731,563	$731,563	$2,578,005	$2,578,005
Subtotal -- Federal - ACC (1)	**$155,360**	**$155,360**	**$2,835,898**	**$2,835,898**	**$7,041,858**	**$7,041,858**	**$6,846,595**	**$6,846,595**	**$16,879,711**	**$16,879,711**
Statewide and/or Multiple MPO - Federal (3)										
NHS/NHPP	$1,031,697	$1,031,697	$0	$0	$0	$0	$0	$0	$1,031,697	$1,031,697
Subtotal -- Statewide and/or Multiple MPO - Federal (3)	**$1,031,697**	**$1,031,697**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,031,697**	**$1,031,697**
Maintenance - Federal (4)										
NHS/NHPP	$755,556	$755,556	$755,556	$755,556	$755,556	$755,556	$755,556	$755,556	$3,022,224	$3,022,224
STP/STBG	$32,327,796	$32,327,796	$32,459,886	$32,459,886	$32,594,222	$32,594,222	$32,730,841	$32,730,841	$130,112,745	$130,112,745
Subtotal -- Maintenance - Federal (4)	**$33,083,352**	**$33,083,352**	**$33,215,442**	**$33,215,442**	**$33,349,778**	**$33,349,778**	**$33,486,397**	**$33,486,397**	**$133,134,969**	**$133,134,969**

(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

TIP Financial Plan – Transit

Virginia Department of Rail and Public Transportation Statewide Transportation Improvement Program Transit Costs (in $1000)

	Previous Funding	FY 2024	FY 2025	FY 2026	FY 2027	Total FY 2024-2027	
WINCHESTER AREA METROPOLITAN PLANNING ORGANIZATION							
STIP ID:	**WIN0001**	Title: Operating Assistance			Recipient:	**Winchester Transit Service**	
FTA 5307		427				FTA 5307	427
State						State	
Local						Local	
Revenues						Revenues	
Year Total:	-	**427**				***Total Funds:***	**427**
Description:							
STIP ID:	**WIN0002**	Title: Rehab/Renovation of Yards & Shops			Recipient:	**Winchester Transit Service**	
FTA 5307						FTA 5307	
State						State	
Local						Local	
Year Total:	-		-		-	***Total Funds:***	
Description:							
STIP ID:	**WIN0003**	Title: Rehab/Renovation of Maintenance Facility			Recipient:	**Winchester Transit Service**	
FTA 5307		6,800				FTA 5307	**6,800**
State		1,360				State	**1,360**
Local		340				Local	**340**
Year Total:	-	**8,500**	-	-		***Total Funds:***	**8,500**
Description:							
STIP ID:	**WIN0004**	Title: Passenger Bus Shelters			Recipient:	**Winchester Transit Service**	
FTA 5307				20		FTA 5307	**20**
State				3		State	**3**
Local				2		Local	**2**
Year Total:	-	-	-	**25**		***Total Funds:***	**25**
Description:							
STIP ID:	**WIN0008**	Title: ADP Software			Recipient:	**Winchester Transit Service**	
FTA 5307			160			FTA 5307	**160**
State			20			State	**20**
Local			20			Local	**20**
Year Total:	-	-	**200**	-	-	***Total Funds:***	**200**
Description:	.						
STIP ID:	**WIN0009**	Title: ADP Hardware			Recipient:	**Winchester Transit Service**	
FTA 5307			60			FTA 5307	**60**
State			8			State	**8**

Local			7			Local	**7**
Year Total:	**-**	**-**	**75**	**-**		***Total Funds:***	**75**
Description:							
STIP ID:	**WIN0010**	Title: Expansion Rolling Stock			Recipient: **Winchester Transit Service**		
FTA 5307			336			FTA 5307	**336**
State			42			State	**42**
Local			42			Local	**42**
Year Total:	**-**	**-**	**420**		**-**	***Total Funds:***	**420**
Description:							

	Previous Funding	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Total FY 2024-2027**	
WINCHESTER AREA METROPOLITAN PLANNING ORGANIZATION							
STIP ID:	**WIN0011**	Title: Replacement Rolling Stock			Recipient: **Winchester Transit Service**		
FTA 5307			336	272	272	FTA 5307	**880**
State			42	34	34	State	**110**
Local			42	34	34	Local	**110**
Year Total:	**-**	**-**	**420**	**340**	**340**	***Total Funds:***	**1,100**
Description:							
STIP ID:	**GRA0002**	Title: Paratransit Vehicles			Recipient:	**Grafton School, Inc.**	
FTA 5310		62	62	62	62	FTA 5310	**248**
State						State	**-**
Local		15	15	15	15	Local	**60**
Year Total:	**-**	**77**	**77**	**77**	**77**	***Total Funds:***	**308**
Description:							

	Previous Funding	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**Total FY 2024-2027**	
WINCHESTER AREA METROPOLITAN PLANNING ORGANIZATION							
STIP ID:	**NCS0001**	Title: Paratransit Vehicles			Recipient: **Northwestern Community Services**		
FTA 5310			72	72	72	FTA 5310	**216**
State						State	**-**
Local			14	14	14	Local	**42**
Year Total:	**-**		**86**	**86**	**86**	***Total Funds:***	**258**
Description:							
STIP ID:	**SAA0002**	Title: Operating Assistance			Recipient: **Shenandoah Area Agency on Aging**		
FTA 5310	110	182	200	210	220	FTA 5310	**922**
State	185	146	160	168	176	State	**835**
Local	22	36	40	42	44	Local	**184**
Revenues						Revenues	**-**
Year Total:	**316**	**365**	**400**	**420**	**440**	***Total Funds:***	**1,941**
Description:							

STIP ID:	**SAA0003**	Title: Paratransit Vehicles			Recipient: **Shenandoah Area Agency on Aging**		
FTA 5310	187		217	246	217	FTA 5310	**867**
State						State	**-**
Local	47		54	62	54	Local	**217**
Year Total:	**234**		**271**	**308**	**271**	***Total Funds:***	**1,084**
Description:							

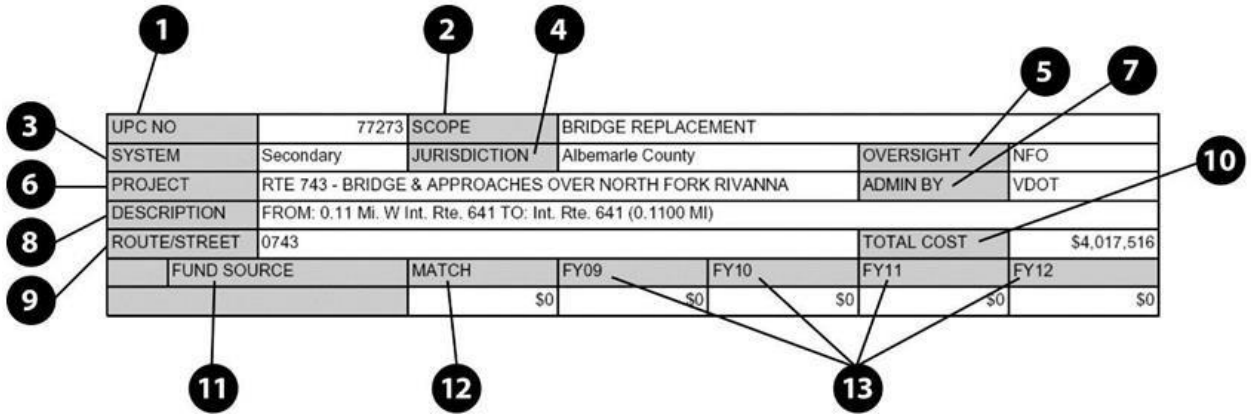
Appendix A: Resource Guide

Highway TIP User's Guide

This guide assists the reader in understanding project information for all projects in the Highway TIP. Information for each project appears in the chart format shown below.

Terms used to identify specific programming requirements are presented in the grey boxes, while project-specific details are presented in the white boxes to the right of, or below, each term. Definitions for the numbered terms appear in the corresponding Glossary of Terms table.

Figure 2: TIP Programming Table



Glossary of Terms

Table 1: Tip Programming Glossary of Terms

ID	Term	Definition
1	Universal Project Code (UPC) Number	Number assigned to each project at its conception, remaining with the project until completion.
2	Scope	Details work to be covered by the project
3	System	Indicates which system, program, or mode of transportation the project falls within. E.g. - Interstate, Primary, Secondary, Urban, Rail, Transportation Enhancements, or Miscellaneous
4	Jurisdiction	Identifies the project jurisdiction
5	Federal Oversight Indicator (FO or NFO)	FO: Indicates Federal Oversight in the project construction, contracting, and management. NFO: Indicates No Federal Oversight in the construction, contracting, and management issues, and does not affect the standard environmental review process for transportation projects. All federally funded transportation projects must include the required environmental documents regardless of whether there is federal oversight required
6	Project/Project Phase	Name of the Project and Phase (i.e. PE: Preliminary Engineering - Preliminary field survey, utility location, environmental or historical studies, design drawings, final field inspections and public hearings will be done. This process can take several months to years to complete; RW: Right of Way - Negotiations with property owners take place, payments are made, and arrangements with utility companies are finalized to obtain the land necessary for the project; or CN: Construction - Project is advertised to prospective contractors for bids. Once the bids are opened and a contract awarded, construction can begin.)
7	Admin By	Identifies the entity responsible for the project
8	Description	Identifies the project's limits
9	Route/Street	Identifies local Route number or name of road/street
10	Total Cost	The total estimated cost (TO) reflecting the best overall estimate available at the time. Estimated costs begin as rough estimates, usually based on historical data, and are updated at critical stages (e.g. the final field inspection), as plans are more defined.
11	Fund Source	Identifies the FHWA or FTA funding source. Additional funding source information is provided in Appendix C
12	Match	Dollar amount matched to federally funded project. Most federal fund sources require a match of some sort; most often 20% of the total cost. The match is included in the obligations section for informational purposes. The match can come from local, state or other sources
13	Current and Future Obligations	The amount of funding which is obligated for the indicated phase of work. An obligation represents a commitment from the Federal government to reimburse the state for the Federal share (e.g. 80%) of a project's eligible cost. This commitment occurs when the project is approved and the Federal government executes the project agreement. The funding obligation listed is the dollar amount that a state may spend and expect reimbursement for during each Federal fiscal year.

Highway Funding Programs

Accelerated Incentive Deployment (AID):

The AID Demonstration program provides funding as an incentive for eligible entities to accelerate the implementation and adoption of innovation in highway transportation. The AID Demonstration program is one initiative under the multi-faceted Technology and Innovation Deployment Program (TIDP) approach providing funding and other resources to offset the risk of trying an innovation. The new Notice of Funding Opportunity (NOFO) was published on September 1, 2016, continuing the AID Demonstration program under the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94).

Bridge Rehabilitation and Replacement/Bridge Off-System Funds Program (BR/BROS):

A former SAFETEA-LU program that provided funding for bridge improvements. Eligibility for funding was based on a rating of bridge condition by VDOT as a candidate for upgrading.

Interstate Maintenance (IM):

A former SAFETEA-LU program that provided funding for resurfacing, restoring, rehabilitating and reconstructing (4R) most routes on the National System of Interstate and Defense Highways.

National Highway Performance Program (NHPP)

MAP-21 eliminated the programs with dedicated funding for repair by consolidating the Interstate Maintenance and Highway Bridge Repair programs and shifting these funds to the new NHPP. The new NHPP is now the largest highway program, receiving 58 percent of all highway formula dollars. MAP-21 dramatically expanded the funding for the NHPP program (previously called the National Highway System program) and consolidates the other programs intended for bridge repair and Interstate maintenance.

Only projects located on the National Highway System (NHS) are eligible, which was expanded to include an additional 60,000 new lane miles and bridges. If a state fails to meet minimum Interstate pavement condition standards, they must set aside an additional amount of NHPP funds until the standard is met. If the total structurally deficient deck area of NHS bridges exceeds 10 percent of all NHS bridge deck area, then a state must set aside NHPP funds to the Highway Bridge Program until the standard is met. VDOT has consolidated funds into customized pots of money for the State of Good Repair (SGR) program, which seeks to meet the State's interstate and bridge repair needs.

Non-Federal:

Any funding that does not come from federal sources is grouped into the nonfederal funding category.

Surface Transportation Program (STP):

Under the former SAFETEA-LU and MAP-21 eras, this program provided flexible funding that could be used on any project located on a roadway that is classified higher than a minor collector. Projects that were eligible for funding under this program included construction, reconstruction, and rehabilitation, and bridge projects on any public road. Regional STP funds were designated as RSTP, and Local STP funds were designated as LSTP.

Surface Transportation Block Grant Program (STBG):

The FAST Act converts the long-standing Surface Transportation Program into the Surface Transportation *Block Grant* Program acknowledging that this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program's name with how FHWA has historically administered it. [FAST Act § 1109(a)]. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs.

VDOT has consolidated its STBG funds (after set asides for TA and planning/research) and National Highway Performance Program (NHPP) funds into customized pots of money for SMART SCALE, State of Good Repair (SGR), and other programs.

Safe Routes to School Program (SRTS):

This is a competitive grant program to enable and encourage children to safely walk and bicycle to school. Funds can be used for infrastructure improvements and educational programs.

Transportation Alternatives Program (TAP):

These funds are available for bicycle and pedestrian facilities through the Surface Transportation Program of MAP 21 A 10% set aside from each state's allocation of STP funds must be used for Transportation Enhancement Activities.

Transit Funding Programs (FTA)

FTA 5307:

This is the FTA Urbanized Area Formula Program, Section 5307 provides funds for public transportation capital investments, and operating expenses in urbanized areas (UZAs). Pursuant to the FAST Act, job access and reverse commute projects that are located in urbanized areas are now eligible for funding under this program.

FTA 5310:

This program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services. Under the FAST Act, projects that were formerly eligible for funding under SAFETEA-LU's New Freedom, Section 5317 grant program are now eligible for Section 5310 funds.

FTA 5311:

The FTA 5311 program is a non-urbanized area formula funding program for public transit capital and operating costs in non-urbanized areas with a population fewer than 50,000 as designated by the United States Census Bureau. Job access and reverse commute projects, which are located in non-urbanized areas, are now eligible for these funds under the FAST Act.

FTA 5339:

This program provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. Created under the FAST Act, this program replaces components of SAFETEA-LU's former Section 5309 Bus and Bus Facilities program.

Appendix B: Highway Performance Based Planning and Programming – Safety Performance Measures

Performance Measure Implementation Schedule

Table 2: USDOT/FHA Implementation Schedule

TPM
HOW WE GET THERE

Implementation Timeline

Final Rule	Effective Date	State Sets Targets By	MPO Sets Targets By	LRSTP, MTP, STIP and TIP Inclusion
Safety Performance Measures (PM1)	April 14, 2016	August 13, 2017 and annually thereafter	No later than 180 days after the State sets targets	Updates or amendments on or after May 27, 2018
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	May 20, 2018 and every four years thereafter	No later than 180 days after the State sets targets	Updates or amendments on or after May 20, 2019
System Performance Measures (PM3)	May 20, 2017	May 20, 2018 and every four years thereafter	No later than 180 days after the State sets targets	Updates or amendments on or after May 20, 2019

U.S. Department of Transportation
Federal Highway Administration

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 2 below.

Table 3: 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 more comprehensive transportation safety planning.

[1] It 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:

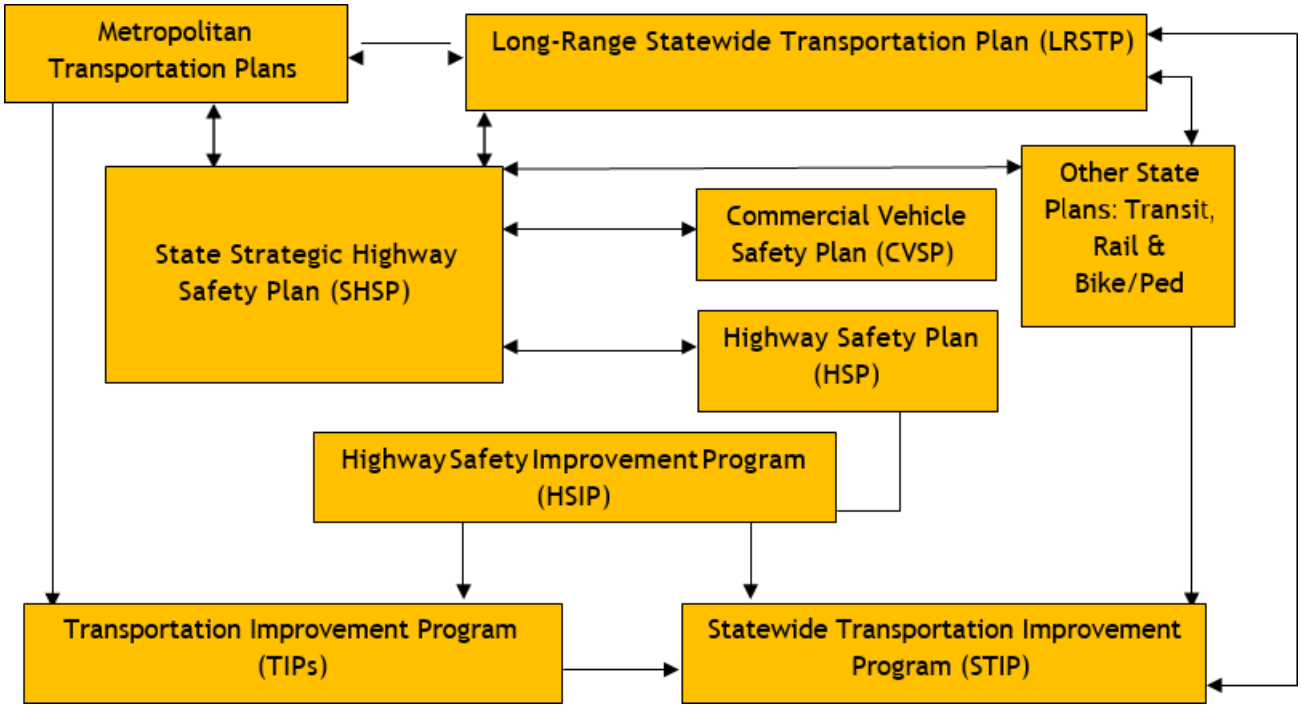
- *Guiding Principle 2:* Ensure Safety, Security, and Resiliency – Provide a transportation system that is safe for all users, responds immediately to short-term shocks such as weather events or security emergencies, and adapts effectively to long-term stressors such as sea level rise.
- *Guiding Principle 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 an 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:

Figure 3: Plan Relationship Matrix



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 C: Performance Based Planning and Programming – 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 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.

The first completed TAM plan must be sent to the National Transit Database (NTD) by October 1, 2018. Other required deadlines are found in the table below.

Table 4: Transit agency deadlines for TAM Rulemaking for June-July fiscal year

Reporting Activity	**Reporting Deadline**
Complete compliant TAM Plan	October 2018
Report FY18 asset data to NTD Submit FY19 targets to NTD	October 2018
Report FY19 asset data to NTD Submit FY20 targets to NTD Submit narrative report to NTD	October 2019
Report FY20 asset data to NTD Submit FY21 targets to NTD Submit narrative report to NTD	October 2020
Complete updated TAM Plan	October 2022

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 WinFred MPO planning process will integrate, either directly or by reference, the goals, objectives, performance measures, and targets described in the Tier II group plan.

Appendix D: Performance Based Planning and Programming – Pavements and Bridges

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 2018-2021[2]. 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 5 below.

Table 5: Pavement Condition Measures and Performance Targets

Interstate Pavement Condition Measures[3]	**CY 2018-2019 Two Year Target**	**CY 2018-2021 Four Year Target**
Percentage of Pavements in Good Condition	N/A[4]	45.0%
Percentage of Pavements in Poor Condition	N/A[4]	3.0%
Non-Interstate NHS Pavement Condition Measures[5]	**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%

[2] Virginia's Baseline Performance Period Report data is through December 2017.

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

[4] 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.

[5] 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.

Bridge condition measures and established performance targets for the 2018-2021 performance period are indicated in Table 6 below.

Table 6: 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 VTrans2040Vision, 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: 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 7 below.

Table 7: Travel Time Reliability Performance Measures and Performance 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[6]	82.5%

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

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 8 below.

Table 8: Freight Travel Time 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.

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 VTrans2040Vision, 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.