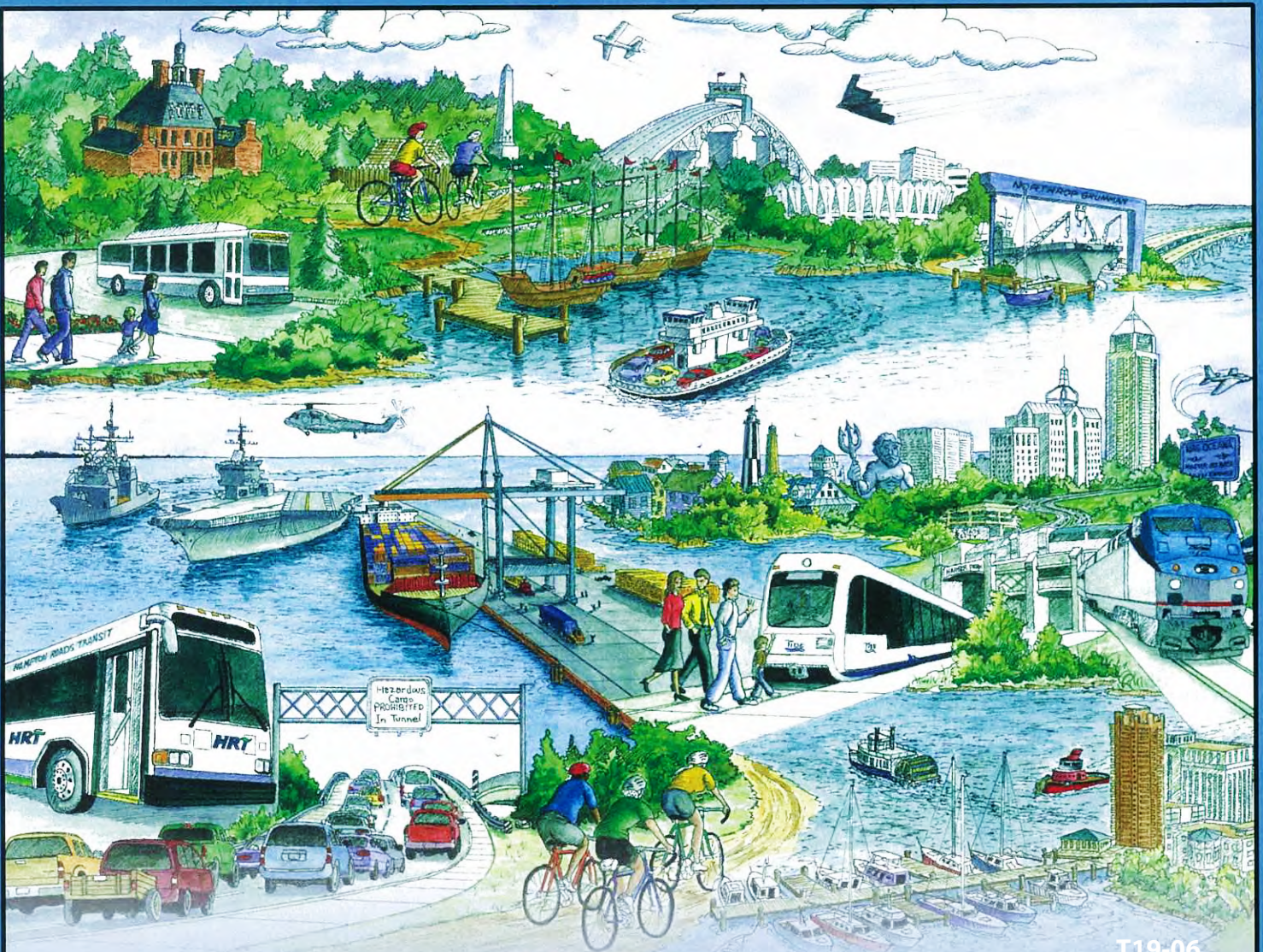


Hampton Roads
Transportation Planning Organization
**UNIFIED PLANNING
WORK PROGRAM**
FY 2020



T19-06

the heartbeat of
**HAMPTON
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TRANSPORTATION PLANNING ORGANIZATION

May 2019

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REPORT DOCUMENTATION

TITLE:

Unified Planning Work Program: FY 2020

REPORT DATE

May 2019

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FHWA/FTA/VDOT/DRPT/LOCAL
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ABSTRACT

The Hampton Roads Transportation Planning Organization (HRTPO) is the Metropolitan Planning Organization (MPO) for the Hampton Roads Metropolitan Planning Area (MPA). The HRTPO Fiscal Year (FY) 2020 Unified Planning Work Program (UPWP) describes the transportation planning work and associated funding for the Hampton Roads MPA for the period from July 1, 2019 to June 30, 2020. The UPWP is developed by the HRTPO in coordination with Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), Suffolk Transit, the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (DRPT).

ACKNOWLEDGMENTS & DISCLAIMER

Prepared in cooperation with the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), and Virginia Department of Transportation (VDOT). The contents of this report reflect the views of the Hampton Roads Transportation Planning Organization (HRTPO). The HRTPO is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, VDOT or Hampton Roads Planning District Commission. This report does not constitute a standard, specification, or regulation. FHWA or VDOT acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

NON-DISCRIMINATION

The HRTPO assures that no person shall, on the ground of race, color, national origin, handicap, sex, age, or income status as provided by Title VI of the Civil Rights Act of 1964 and subsequent authorities, be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program or activity. The HRTPO Title VI Plan provides this assurance, information about HRTPO responsibilities, and a Discrimination Complaint Form.

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LIST OF REVISIONS

9/19/2019 UPWP revised to reflect final carryover Section 5303 (CO5303) funding. The budget for Task 10.2, TDCHR Performance Monitoring and Evaluation has been increased by \$19,434 in FY 2019 5303 funds. The budget for Task 10.5, HRT Disadvantaged Business Enterprise Planning has been increased by \$582 in FY 2019 5303 funds. The budget for Task 10.9, HRT Transit Strategic Plan has been increased by \$9,558 in FY 2019 5303 funds.

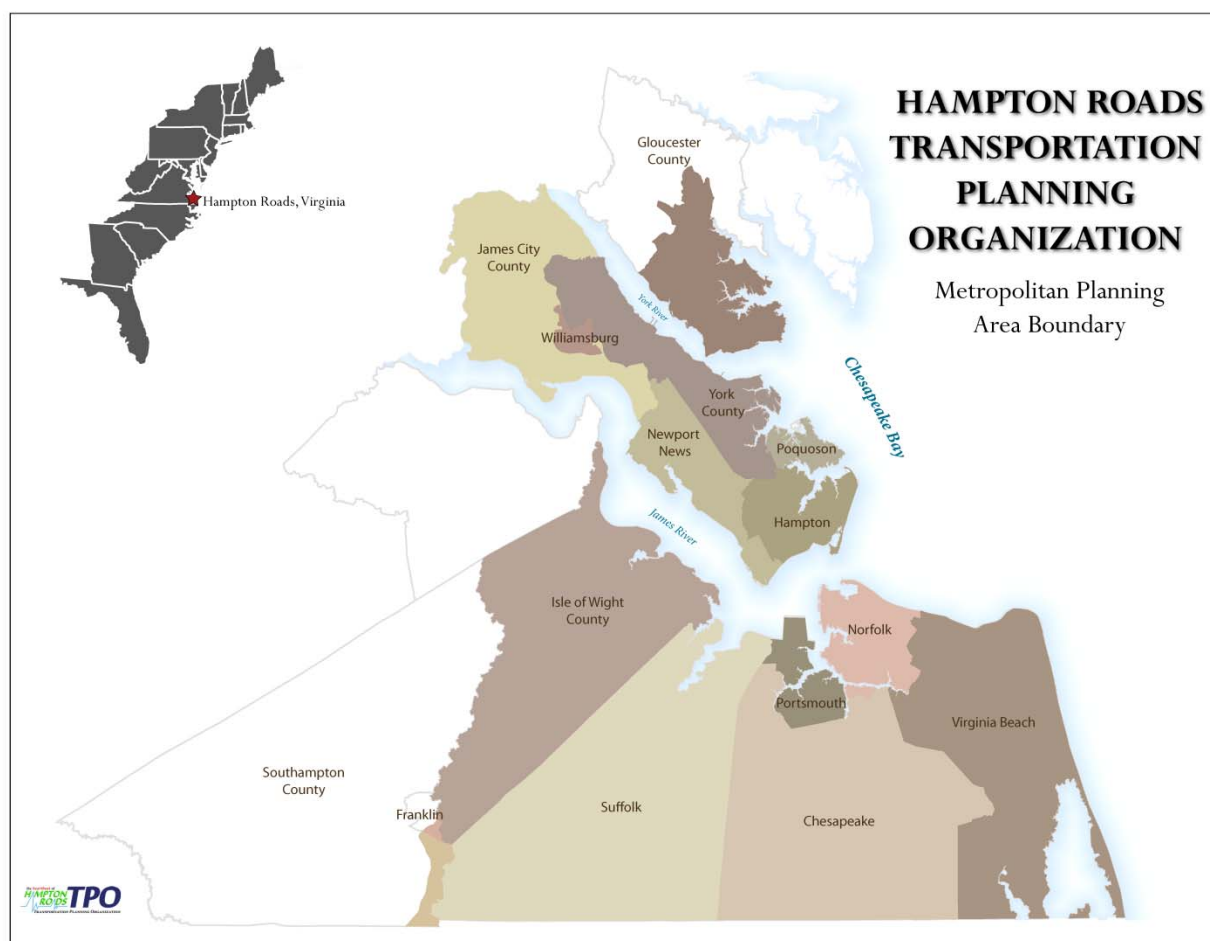
The budget for Task 8.7, Economic Impact of Bicycle Facilities in Hampton Roads has been increased by \$6,000 in PL funds to support the cost of a survey of users of the Virginia Capital Trail to estimate the annual amount of money spent locally by visitors drawn to the Virginia Capital Trail. The Budget for Task 12.0, HRTPO Contingency Funding has been reduced by \$6,000.

These revisions are also included updates to Tables A-E to account for the changes in funding.

INTRODUCTION

The Hampton Roads Transportation Planning Organization (HRTPO) is the Metropolitan Planning Organization (MPO) for the Hampton Roads Metropolitan Planning Area (MPA). The HRTPO Fiscal Year (FY) 2020 Unified Planning Work Program (UPWP) describes the transportation planning work and associated funding for the Hampton Roads MPA for the period from July 1, 2019 to June 30, 2020. The UPWP is developed by the HRTPO in coordination with Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), Suffolk Transit, the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (DRPT). Each task in the UPWP includes information on who will perform the work, the schedule for completing the work, resulting end products, and proposed funding and source of funds. Federal regulations applicable to MPOs have been included in **Appendix D**. State code applicable to MPOs is included in **Appendix E**. The Hampton Roads MPA is depicted in **Figure 1**.

FIGURE 1



The UPWP is required by the United States Department of Transportation (USDOT) to function as a basis and condition for all federal funding assistance for transportation planning to state, local, and regional agencies.

In addition to focusing on specific highway, transit, active transportation, and urban development issues, the activities in the UPWP take into consideration related issues, including land use, population and economic characteristics, climate change, Environmental Justice, and public participation and outreach. This document also includes a Rural Transportation Planning task, Task 13.0, which accounts for the work done by the HRTPO staff for Surry County and portions of the City of Franklin and the Counties of Southampton and Gloucester that lie outside of the MPA. The Rural Transportation Planning task is funded with State Planning and Research (SPR) funds.

Planning Priorities for Hampton Roads

In addition to detailing the work associated with HRTPO core functions – the Long-Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP), the Congestion Management Process (CMP), and Public Participation – federal regulations state that the UPWP for MPOs designated as Transportation Management Areas (TMA) shall include a discussion of the planning priorities of the metropolitan planning area. It is in the determination of these planning priorities that the HRTPO Board ensures its vision and goals are carried forward in the UPWP. Establishing clear direction from the HRTPO Board regarding its priorities allows HRTPO staff to ensure that limited resources (manpower, funding) are properly allocated in the UPWP.

There are a number of emerging issues that will have a significant impact on metropolitan transportation planning, and the planning priorities for the Hampton Roads TMA will strive to address these issues. For FY 2020, the planning priorities for the HRTPO include better integrating the following issues into HRTPO planning and programming:

Scenario Planning

Scenario planning provides a framework for stakeholders to make decisions that help achieve a shared vision for the future by analyzing various factors that can impact the way in which a region develops. As part of the development of the Long-Range Transportation Plan, scenario planning will investigate plausible alternate futures and their potential impacts on the transportation system. Each alternative scenario, developed through our collaborative regional stakeholder process, will be comprised of various regional drivers and trends (transportation technology, economic, environmental, land use, etc.) that can affect growth, connectivity, mobility, resiliency, and other factors. Comparing the alternatives and their trade-offs helps decision-makers identify projects that provide the most benefit to the region regardless of which future assumption is analyzed thereby highlighting smart investments for Hampton Roads.

Resilience of the Transportation System

Resilience refers to the capacity of a system to survive, adapt, and grow in the face of significant changes or events. Such changes may be foreseen, such as the expected impacts of sea-level rise, or unforeseen, such as a catastrophic event. It is important that regional transportation planning take resilience into account to help ensure that the transportation system has the capacity to overcome disruptions and keep people and goods moving. The Fixing America's Surface Transportation (FAST) Act added "take into consideration resilience needs" to the scope of the metropolitan planning process.

Active Transportation

Active transportation refers to any self-propelled, human-powered mode of transportation, such as walking and bicycling, and is an integral part of a multimodal transportation system. Improvements to the active transportation system – the network of sidewalks, crosswalks, and bicycle facilities; as well as its connectivity to other modes like public transit – enable people to use non-motorized options to reach their destinations.

Congestion Management Process (CMP) Update

The *Congestion Management Process (CMP)* provides ongoing information and analysis on multimodal transportation system performance and on strategies to alleviate congestion and

enhance mobility of people and goods. The *CMP – System Performance and Mitigation Report* is updated in accordance with the schedule for the update of the Long-Range Transportation Plan (LRTP). Given the schedule for the 2045 LRTP update, work on the CMP report update will be completed in FY 2020.

Planning Factors

The **Fixing America's Surface Transportation (FAST) Act**, signed into law on December 4, 2015, continued the eight planning factors included under the section on Metropolitan Transportation Planning in previous legislation and added two more. Title 23 USC 134(h)(1) states that the metropolitan planning process shall provide for consideration and implementation of projects and strategies that will address the following planning factors (PF):

- PF 1 Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- PF 2 Increase the safety of the transportation system for motorized and non-motorized users;
- PF 3 Increase the security of the transportation system for motorized and non-motorized users;
- PF 4 Increase accessibility and mobility of people and freight;
- PF 5 Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- PF 6 Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- PF 7 Promote efficient system management and operation;
- PF 8 Emphasize the preservation of the existing transportation system;
- PF 9 Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation, and
- PF 10 Enhance travel and tourism.

The HRTPO is committed to implementing these planning factors, as applicable, in all work tasks described in this document. All tasks included in the UPWP address at least one, and often several, of these planning factors.

Performance Management

The **FAST Act** specifies that the metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the following national goals for highways (specified in 23 USC 150(b)) and general purposes for public transportation (specified in section 49 USC 5301):

National Goals

1. **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Condition** – To maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System.
4. **System Reliability** – To improve the efficiency of the surface transportation system.
5. **Freight Movement and Economic Vitality** – To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental Sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. **Reduced Project Delivery Delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

General Purposes

1. Provide funding to support public transportation.
2. Improve the development and delivery of capital projects.
3. Establish standards for the state of good repair of public transportation infrastructure and vehicles.
4. Promote continuing, cooperative, and comprehensive planning that improves the performance of the transportation network.
5. Establish a technical assistance program to assist recipients under chapter 53 of Title 49 to more effectively and efficiently provide public transportation service.
6. Continue Federal support for public transportation providers to deliver high quality service to all users, including individuals with disabilities, seniors, and individuals who depend on public transportation.
7. Support research, development, demonstration, and deployment projects dedicated to assisting in the delivery of efficient and effective public transportation service.
8. Promote the development of the public transportation workforce.

The FAST Act requires the establishment of performance targets to use in tracking progress toward attainment of critical outcomes for the metropolitan planning area. In addition, the Act requires that metropolitan planning organizations integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under chapter 53 of title 49 by providers of public transportation.

Summary Funding and Budget Information

The following tables summarize the funding and budget information associated with the FY 2020 UPWP. **Table A** provides an overview of the amount of funding provided by federal, state, and regional (Hampton Roads Transportation Fund) sources for regional transportation planning and programming work in the Hampton Roads MPA, as well as the funds provided for this work by local governments and the transit agencies in the way of matching funds required to obtain the federal grants. **Table B** shows the amount of the FY 2020 UPWP budget attributable to the following entities: HRTPO, VDOT, HRT, WATA, and Suffolk Transit.

TABLE A

FUNDS FOR REGIONAL TRANSPORTATION PLANNING AND PROGRAMMING SUMMARIZED BY SOURCE OF FUNDS					
Federal	State	Regional (HRTF)	Local Match	Transit Agency Match	TOTAL
\$6,599,280	\$9,753,575	\$3,798,000	\$349,787	\$556,458	\$21,057,100
31.34%	46.32%	18.04%	1.66%	2.64%	100.00%

TABLE B

FUNDS FOR REGIONAL TRANSPORTATION PLANNING AND PROGRAMMING SUMMARIZED BY FUNDED ENTITY					
HRTPO	VDOT	HRT	WATA	SUFFOLK TRANSIT	TOTAL
\$5,223,373 ¹	\$2,546,650 ²	\$13,077,077 ³	\$200,000	\$10,000	\$21,057,077
24.81%	12.09%	62.10%	0.95%	0.05%	100.00%

¹ Includes: \$2,961,330 Federal Highway Administration (FHWA) planning (PL) funds
 \$391,543 Federal Transit Administration (FTA) Section 5303 planning funds
 \$114,000 Hampton Roads Transportation Fund (HRTF) for HRTPO staff support to Hampton Roads
 Transportation Accountability Commission (HRTAC)
 \$72,500 State Planning and Research (SPR) funds
 \$1,684,000 Hampton Roads Transportation Fund (HRTF) for work associated with the Hampton Roads Regional
 Connectors Study – See Task 8.8

² Includes: \$2,000,000 Hampton Roads Transportation Fund (HRTF) for work associated with the Bowers Hill Interchange
 Study – See Task 8.8

³ Includes: \$986,503 Congestion Mitigation Air Quality (CMAQ) funds, and \$2,260,800 Regional Surface Transportation
 Program (RSTP) funds and \$7,700,000 in other State/Local funds for three Transit Extension Studies

Last Revised 9-19-19 (See List of Revisions, Page vi)

Detailed information on the funding sources associated with each UPWP task is included in **Table C**, while **Table D** depicts the budget for each task by entity (HRTPO, VDOT, HRT, WATA, and Suffolk Transit). The funding shown in Tables C and D is derived from a number of sources and, as indicated previously in Table B, only a portion of the funds shown are expended by HRTPO staff. The remaining funding is either allotted to the transit agencies via pass-through agreements with the HRTPO, or allotted directly to the transit agencies via grant agreements with the Virginia Department of Rail and Public Transportation (DRPT). Descriptions of the funding sources associated with the FY 2020 UPWP are as follows:

FEDERAL HIGHWAY ADMINISTRATION (FHWA) FUNDS

Metropolitan Planning Funds (PL-Section 112):

The Federal Highway Administration (FHWA) annually apportions PL funding to urbanized areas for MPO planning-related activities. In Virginia, PL funding is administered by the Virginia Department of Transportation (VDOT) and is distributed to the MPOs through a population-based formula. These federal planning funds require matching funds of 20%, of which 10% is provided by the state and 10% is provided by local governments.

State Planning and Research Funds (SPR):

Funds allocated under FHWA's State Planning & Research Program are administered by VDOT. These funds are the primary source of funding for statewide long-range planning. SPR funds require matching funds of 20%. In the case of SPR funds shown in this UPWP, the state provides the match for the funds apportioned to VDOT, while the match for the funds apportioned to the HRTPO is provided by the local governments.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) Funds:

The CMAQ program provides federal funding to states and localities for transportation projects and programs that help improve air quality and reduce traffic congestion. This funding is intended for areas not meeting the National Ambient Air Quality Standards (NAAQS), referred to as *nonattainment areas*, or for areas that did not meet the standards, but now do, referred to as *maintenance areas*. CMAQ funds may be *flexed* to FTA to pay for public transportation projects.

Regional Surface Transportation Program (RSTP) Funds:

The Surface Transportation Block Grant (STBG) program provides federal funding that may be used by states and localities for a wide variety of highway and transit projects. RSTP funds are STBG funds that are apportioned to specific regions within the state. RSTP funds may be *flexed* to FTA to pay for public transportation projects.

Transportation Alternatives (TA) Set-Aside Funds:

The TA Set-Aside, within the Surface Transportation Block Grant (STBG) program, provides funding for programs and projects defined as transportation alternatives, including on-road and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; Safe Routes to School projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

FEDERAL TRANSIT ADMINISTRATION (FTA) FUNDS

Section 5303:

Section 5303 funds are designated for transit planning and research activities. FTA apportions Section 5303 funds for Virginia to DRPT. Virginia MPOs receive their apportionment from DRPT based on an urbanized area population-based formula. These funds require 20% match which is typically divided between the state and the MPO or transit agency, each contributing 10%. As shown in Table B, the HRTPO retains a portion of Section 5303 funds and the remaining Section 5303 funds are allotted to Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), and Suffolk Transit via pass-through agreements.

Section 5307:

Section 5307 funds are available to urbanized areas for transit capital and operating assistance in urbanized areas and for transportation-related planning. These funds are distributed by FTA to transit operators based on service area population and other factors. Section 5307 funds require matching funds of 20%, which are typically divided between the state and the transit agency, each contributing 10%. The HRTPO UPWP only includes the portion of a transit agency's Section 5307 funds that have been allotted to planning activities.

HAMPTON ROADS TRANSPORTATION FUND

The Hampton Roads Transportation Fund (HRTF) is a trust fund established by the Virginia General Assembly in 2013 for the purpose of funding transportation projects in the Hampton Roads region. HRTF revenues are generated by a 0.7% increase in the state sales and use tax and a 2.1% increase in the fuel tax paid region-wide. The HRTF is managed and administered by the Hampton Roads Transportation Accountability Commission (HRTAC).

Table C : Funding Sources by Task
Hampton Roads Transportation Planning Organization
FY 2020 Unified Planning Work Program
(Funding in Dollars)

		FHWA SPR Funds				FHWA PL Funds				FTA Section 5303 Funds				HRTAC Regional Funds				Other Federal Funds (See Footnotes)				FTA Section 5303 Carryover Funds				Total			
Task #	Task Title	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	HRTF	(In)	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	HRTF	State Match	Local Match	Grand Total	
1.0	Long-Range Transportation Plan				195,784	24,473	24,473	51,456	6,432	6,432												247,240	30,905	30,905				309,050	
2.0	Transportation Project Programming				123,762	15,470	15,470	55,947	6,993	6,993												179,709	22,464	22,464				224,636	
3.0	Performance Management				114,555	14,319	14,319															114,555	14,319	14,319				143,194	
4.0	Public Participation				256,650	32,081	32,081	46,022	5,753	5,753												302,671	37,834	37,834				378,339	
5.0	Unified Planning Work Program				55,966	6,996	6,996	6,927	866	866												62,894	7,862	7,862				78,617	
6.0	Regional Freight Planning				20,542	2,568	2,568															20,542	2,568	2,568				25,677	
7.0	Safety, Security, & Resiliency Planning				62,880	7,861	7,861															62,880	7,861	7,861				78,612	
8.1	Technical Support, Research & Special Studies				202,106	25,263	25,263	16,418	2,052	2,052												218,524	27,316	27,316				273,155	
8.2	Active Transportation Planning				60,404	7,551	7,551	24,725	3,091	3,091												85,129	10,641	10,641				106,411	
8.3	Hampton Boulevard Corridor Study				60,307	7,538	7,538															60,307	7,538	7,538				75,384	
8.4	Regional & Local Planning Implications of Connected & Automated Vehicles				11,406	1,426	1,426															11,406	1,426	1,426				14,258	
8.5	Impact of Trails and Sidewalks on Nearby Home Values				39,791	4,974	4,974															39,791	4,974	4,974				49,739	
8.6	Analyzing and Mitigating the Impact of Tolls on MTT and DTT - 2019 Update				28,217	3,527	3,527															28,217	3,527	3,527				35,271	
8.7	Economic Impact of Bicycle Facilities in Hampton Roads				35,088	4,386	4,386															35,088	4,386	4,386				43,860	
8.8	Regional Connectors Study															3,684,000												3,684,000	
9.0	HRTPO Administration				492,872	61,609	61,609	63,540	7,943	7,943												556,412	69,552	69,552				695,515	
10.1	HRTPO Coordination of Regional Transit Planning Process				15,063	1,885	1,885	48,200	6,025	6,025												63,283	7,910	7,910				79,104	
10.2	TDCHR - Performance Monitoring and Evaluation							120,000	15,000	15,000									15,547	1,943	1,944	135,547	16,943	16,943				169,435	
10.3	WATA - Performance Monitoring and Evaluation							160,000	20,000	20,000												160,000	20,000	20,000				200,000	
10.4	Suffolk Transit Performance Monitoring							8,000	1,000	1,000												8,000	1,000	1,000				10,000	
10.5	HRT Disadvantaged Business Enterprise Planning							8,000	1,000	1,000									466	58	58	8,466	1,058	1,058				10,582	
10.6	Regional Transportation Demand Management Program - TRAFFIX																					789,202	197,301	197,301				986,503	
10.7	TDCHR Financial Planning																											150,000	
10.8	TDCHR Public Involvement/Public Information/Publications																											150,000	
10.9	HRT Transit Development Plan							52,000	6,500	6,500												220,000	956	956				227,456	
10.10	Feasibility/Corridor Studies																					2,260,800	0	0				2,260,800	
11.0	VDOT Regional Planning			0																		109,330	0	0				109,330	
12.0	HRTPO Contingency Funding				593,641		74,205															593,641						74,205	
13.0	Rural Transportation Planning																											58,000	
14.0	HRTAC Administration															114,000												114,000	
Total					495,320	109,330	109,330	2,366,064	296,133	296,133						3,798,000	3,050,002	9,262,501	23,650	2,957	2,958	6,599,260	9,763,675	9,763,675				3,798,000	

Local Match provided by Hampton Roads Planning District Commission, Hampton Roads Transit, Williamsburg Area Transit Authority, and Suffolk Transit.

(fn) = Footnote - See below:

(1) = CMAQ Funds
(3) = State/Local Funds

(2) = RSTP Funds

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Table D: Budget by Recipient
Hampton Roads Transportation Planning Organization
FY 2020 Unified Planning Work Program
(Funding in Dollars)

Task #	Task Title	HRTPO				VDOT		HRT		WATA		SUFFOLK TRANSIT		TOTAL			
		FHWA PL Funds	FTA Section 5303 Funds	Other Funds (See Footnote)	FHWA SPR Funds	FHWA SPR Funds	HRTF Funds	FTA Section 5303 Funds	Other Funds (See Footnote)	FTA Section 5303 Funds	Other Funds (See Footnote)	FTA Section 5303 Funds	Other Funds (See Footnote)	FHWA PL Funds	FHWA SPR Funds	FTA Section 5303 Funds	HRTF Funds
1.0	Long-Range Transportation Plan	244,730	64,320											244,730		64,320	
2.0	Transportation Project Programming	154,702	69,934											154,702		69,934	
3.0	Performance Management	143,194												143,194			
4.0	Public Participation	320,812	57,527											320,812		57,527	
5.0	Unified Planning Work Program	69,958	8,659											69,958		8,659	
6.0	Regional Freight Planning	25,677												25,677			
7.0	Safety, Security, & Resiliency Planning	78,612												78,612			
8.1	Technical Support, Research & Special Studies	252,633	20,522											252,633		20,522	
8.2	Active Transportation Planning	75,505	30,906											75,505		30,906	
8.3	Hampton Boulevard Corridor Study	75,384												75,384			
8.4	Regional & Local Planning Implications of Connected & Automated Vehicles	14,258												14,258	0		
8.5	Impact of Trails and Sidewalks on Nearby Home Values	49,739												49,739			
8.6	Analyzing and Mitigating the Impact of Tolls on MTT and DTT - 2019 Update	35,271												35,271			
8.7	Economic Impact of Bicycle Facilities in Hampton Roads	43,860												43,860			
8.8	Regional Connectors Study			(4)	1,684,000		2,000,000									3,684,000	
9.0	HRTPO Administration	616,090	79,425											616,090		79,425	
10.1	HRTPO Coordination of Regional Transit Planning Process	18,854	60,250											18,854		60,250	
10.2	TDCHP - Performance Monitoring and Evaluation							150,000	(5)	19,434						150,000	
10.3	WATA - Performance Monitoring and Evaluation									200,000						200,000	
10.4	Suffolk Transit Performance Monitoring											10,000				10,000	
10.5	HRT Disadvantaged Business Enterprise Planning							10,000	(5)	582						10,000	
10.6	Regional Transportation Demand Management Program - TRAFFIX								(1)	986,503							(1) 986,503
10.7	TDCHP Financial Planning								(3)	150,000							(3) 150,000
10.8	TDCHP Public Involvement/Public Information/Publications								(3)	140,000							(3) 140,000
10.9	HRT Transit Development Plan							65,000	(3,5)	1,029,558						65,000	(3) 1,029,558
10.10	Feasibility/Corridor Studies								(2,3)	10,526,000							(2,3) 10,526,000
11.0	VDOT Regional Planning																
12.0	HRTPO Contingency Funding	742,051												742,051	546,650		
13.0	Rural Transportation Planning														72,500		
14.0	HRTAC Administration			(4)	114,000												114,000
Total		2,961,330	391,543	1,798,000	72,500	546,650	2,000,000	225,000	12,852,077	200,000	0	10,000	0	2,361,330	619,150	826,543	3,798,000
																	12,832,061
																	21,037,084

(fn) = Footnote - See below:

(1) = CMAQ Funds

(2) = RSTP Funds

(3) = State/Local Funds

(4) = HRTF Funds

(5) = Section 5303 Carryover Funds

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Comparison of UPWP Tasks – FY 2020 versus FY 2019

The following table provides a comparison of the FY 2020 and FY 2019 UPWP tasks and budgets associated with work performed by HRTPO staff.

Table E includes the following information:

- FY 2020 UPWP Task Number, Task Title, and Task Budget
- FY 2019 UPWP Task Budget
- Change in budget (FY 2020 budget – FY 2019 budget)
- Comments on Changes in Task Budgets (for Changes >10%)

Table E: Comparison of UPWP Tasks - FY 2020 versus FY 2019

FY 2020 Task #	FY 2020 Task Title	FY 2020 Budget	FY 2019 Budget	Change in Task Budget	Comments on Changes in Task Budgets
1.0	Long-Range Transportation Plan	\$309,050	\$283,545	\$25,505	
2.0	Transportation Project Programming	\$224,636	\$198,209	\$26,427	Adjusted to better reflect work anticipated under this task.
3.0	Performance Management	\$143,194	\$82,678	\$60,516	Adjusted to better reflect work anticipated under this task.
4.0	Public Participation	\$378,339	\$507,964	-\$129,625	Adjusted to better reflect work anticipated under this task.
5.0	Unified Planning Work Program	\$78,617	\$75,273	\$3,344	
6.0	Regional Freight Planning	\$25,677	\$40,568	-\$14,891	Adjusted to better reflect work anticipated under this task.
7.0	Safety, Security, and Resiliency Planning	\$78,612	\$87,989	-\$9,377	Adjusted to better reflect work anticipated under this task.
8.1	Technical Support, Research, and Coordination	\$273,155	\$253,163	\$19,992	
8.2	Hampton Roads Active Transportation Planning	\$106,411	\$96,441	\$9,970	Adjusted to better reflect work anticipated under this task.
8.3	Hampton Boulevard Corridor Study	\$75,384	\$0	\$75,384	New task in FY 2020
8.4	Regional & Local Planning Implications of Connected & Automated Vehicles	\$14,258	\$59,168	-\$44,910	Adjusted to better reflect work anticipated under this task.
8.5	Impact of Trails and Sidewalks on Nearby Home Values	\$49,739	\$0	\$49,739	New task in FY 2020
8.6	Analyzing and Mitigating the Impact of Tolls on MTT and DTT-2018 Update	\$35,271	\$19,140	\$16,131	Adjusted to better reflect work anticipated under this task.
8.7	Economic Impact of Bicycle Facilities in Hampton Roads	\$43,860	\$63,769	-\$19,909	Adjusted to better reflect work anticipated under this task.
8.8	Regional Connectors Study	\$1,684,000	\$3,000,000	-\$1,316,000	Continuation of FY 2018 task.
9.0	HRTPO Administration	\$695,515	\$693,354	\$2,161	
10.1	Coordination of Regional Transit Planning Process	\$79,104	\$96,613	-\$17,509	Adjusted to better reflect work anticipated under this task.
12.0	HRTPO Contingency Funding	\$742,051	\$382,164	\$359,887	NA
13.0	Rural Transportation Planning	\$72,500	\$72,500	\$0	No Change.
14.0	HRTAC Administration	\$114,000	\$120,000	-\$6,000	
	Total	\$5,223,373	\$6,132,538		

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1.0 LONG-RANGE TRANSPORTATION PLAN

A. Background

Long-range transportation planning for the Hampton Roads transportation system can be thought of as having two broad components: long-range planning as an ongoing process and the development of a report that is the region's Long-Range Transportation Plan.

The Long-Range Transportation Plan (LRTP) is a multimodal transportation plan that is developed, adopted, and amended by the metropolitan planning organization (MPO) through the metropolitan transportation planning process. As a multimodal transportation plan, in addition to highway and transit projects, the LRTP also takes into consideration other transportation modes including passenger and freight rail, passenger and freight water transport, and bicycle and pedestrian facilities. In addition, due to the significant military presence in Hampton Roads, development of the LRTP takes into account the mobility needs of the military. The LRTP must address a planning horizon of at least 20 years and includes strategies and actions that lead to an integrated multimodal transportation system. The LRTP must be fiscally constrained, which means it must include sufficient financial information to demonstrate that projects in the LRTP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately maintained. Projects included in the LRTP are vetted through the HRTPO prioritization process.

In order for the LRTP to be compliant with Title VI, it is essential that information collected and analyzed during the LRTP planning process reflect the metropolitan area and appropriately address community boundaries, racial and ethnic makeup, income levels, property taxes, etc., as well as community services, schools, hospitals and shopping areas. Data collection methods must be developed to obtain these statistics. Additionally, the LRTP must contain this data along with a narrative describing how the methodology used to obtain and consider the data was developed and implemented.

Since Hampton Roads is considered a region that is in 'air quality attainment,' the life of the regional metropolitan LRTP is currently limited to five years by federal regulation. The process for developing a new LRTP takes four to five years, so work is continually being done on the LRTP. This task includes maintenance of the current LRTP as well as development of the next LRTP.

While the LRTP is a required report for the region, the act of long-range planning is ongoing due to the dynamic nature and evolution of the cities, counties, and member organizations that the HRTPO represents. The primary products of these planning efforts are the LRTP documents, but many products are developed during the planning process. The main long-range planning efforts anticipated for FY 2020 are described under Work Elements below.

B. Work Elements (WE)

Work activities include the following:

1. Maintain and update the adopted 2040 LRTP. This includes documenting any amendments, updating the regional travel demand forecasting model network and associated inputs accordingly, and performing air quality conformity analyses/reporting as needed.
2. Produce product(s) for public and stakeholder engagement regarding the LRTP and its contents.
3. Development of the next LRTP with a horizon forecast year of 2045. Tasks to be completed during FY 2020 include:
 - a. Maintaining and updating a comprehensive schedule covering the development of the 2045 LRTP from beginning to end.
 - b. Continue scenario planning, investigating potential impacts of plausible future scenarios for the 2045 horizon year.
 - c. Continue working with localities and other regional stakeholders in the collection and review of candidate projects for the LRTP.
 - d. Finalize data inputs for candidate projects in preparation of a thorough evaluation of projects using Scenario Planning and the Prioritization Tool (see item 4 under this section for additional details).
 - e. Coordinate efforts to obtain and review cost estimates for candidate projects.
 - f. Complete candidate project evaluation.
 - g. Coordinate efforts to obtain revenue estimates for the 2045 LRTP.
 - h. Ongoing Public Outreach and marketing associated with the LRTP to obtain public input on the process as needed. Details regarding HRTPO's public participation strategies are included in Task 4.0 – Public Participation.
4. Maintenance of the HRTPO Project Prioritization Tool.
 - a. The data and measures will be updated, as necessary, to keep the Tool current and ready for use.
5. Maintain the region's Travel Demand Forecasting Model.
 - a. Provide support to VDOT, as needed, as improvements to the regional model are carried out.
 - b. Use the regional travel demand model in support of HRTPO tasks, as needed.
 - c. Provide modeling assistance, as necessary, to other agencies (HRT, localities, etc.).
6. Continue to improve the integration of multimodal transportation planning in the long-range transportation planning process, incorporating finding/data from

the multimodal mobility planning efforts outlined in Task 8.0 – Technical Support, Research, and Special Studies.

7. Continue to improve the integration of performance management in the long-range transportation planning process. Details are included in Task 3.0 – Performance Management. Typical tasks to be conducted in FY 2020 include:
 - a. Collaborating in the process of developing FAST Act performance measures
 - b. Aligning the LRTP with federal/statewide goals and performance measures
 - c. Assisting in gathering data, if necessary, to quantify performance measures
 - d. Making any necessary changes to the HRTPO Project Prioritization Tool
 - e. Studying performance trends and work with localities and agencies towards developing performance targets
8. Continue to improve the integration of Title VI/Environmental Justice (EJ) analyses in the LRTP planning process. Efforts will include identifying and collecting relevant data to analyze candidate projects via the HRTPO Project Prioritization Tool and Title VI/EJ Methodology.
9. HRTPO staff will continue to maintain a list of prioritized projects and coordinate as needed and/or directed by the HRTPO Board.

C. End Products

1. WE 1 – An up-to-date Long-Range Transportation Plan (LRTP) for the region.
2. WE 2 – Products to support continued public and stakeholder engagement in the LRTP planning process.
3. WE 3 –
 - a. An up-to-date multi-year schedule for the development of the 2045 LRTP.
 - b. Planning scenarios for the plan horizon year 2045.
 - c. List of candidate projects.
 - d. Final data for project evaluation.
 - e. Cost estimates for candidate projects.
 - f. Prioritization of Transportation Projects – Project Evaluation and Scoring Report
 - g. Revenue forecast for the 2045 LRTP.
 - h. Ongoing public participation efforts.
4. WE 4 – A maintained and up-to-date HRTPO Project Prioritization Tool.
5. WE 5 – A maintained and up-to-date regional travel demand model.
6. WE 6 – Integrated multimodal considerations in the long-range transportation planning process.

7. WE 7 – Performance management application to the long-range transportation planning process.
8. WE 8 – Integrated Title VI/EJ methodology application in the long-range transportation planning process.
9. WE 9 – An up-to-date list of prioritized projects.

D. Schedule

1. WE 1 – Ongoing
2. WE 2 – Ongoing
3. WE 3 –
 - a. Ongoing
 - b. Ongoing
 - c. First Quarter
 - d. Second Quarter
 - e. Second Quarter
 - f. Fourth Quarter
 - g. Fourth Quarter
 - h. Ongoing
4. WE 4 –Ongoing
5. WE 5 – Ongoing
6. WE 6 – Ongoing
7. WE 7 – Ongoing
8. WE 8 – Ongoing
9. WE 9 – Ongoing

E. Participants

HRTPO, VDOT, DRPT, VPA, FHWA, FTA, VPA, local governments, local transit agencies, and the public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$244,730	\$64,320		\$309,050

2.0 TRANSPORTATION PROJECT PROGRAMMING

A. Background

Transportation Improvement Program

The **Transportation Improvement Program (TIP)** is a four-year program for the implementation of surface transportation projects within the Hampton Roads metropolitan planning area (MPA). The TIP contains all federally-funded projects and/or regionally significant projects that require an action by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). Before any federally-funded and/or regionally significant surface transportation project can be built in the Hampton Roads MPA, it must be included in the current TIP that has been approved by the HRTPO. The TIP, which must be consistent with the current long-range transportation plan, identifies the near-term programming of Federal, state and local transportation funds.

The HRTPO TIP has been designed to provide available programming information for Hampton Roads transportation projects in a clear and transparent format. The HRTPO TIP format includes project phase cost estimates and schedules, allocations, scheduled obligations, and expenditures. HRTPO staff uses this information to monitor the performance of the TIP.

As a federally designated metropolitan planning organization (MPO), the HRTPO is required to coordinate the transportation planning activities for the Hampton Roads MPA. This includes the planning and programming of Federal funds through the TIP. To ensure compliance, the HRTPO TIP is developed in accordance with all applicable Federal regulations associated with the current Federal transportation act, which require that the TIP cover a period of no less than four years and be updated at least every four years. The cycle for updating the TIP must be compatible with the Statewide Transportation Improvement Program (STIP) development and approval process. HRTPO, VDOT, and DRPT staffs coordinate to ensure that the TIP and STIP are developed on compatible schedules and that the documents are consistent with one another throughout the interim years. The HRTPO TIP may be considered to be a *living* document as it is continually maintained and regularly revised.

In 2015, in response to a joint FHWA-FTA recommendation to all Virginia MPOs, HRTPO staff led an effort by the Virginia Association of Metropolitan Planning Organizations (VAMPO) to develop a uniform set of clear guidelines for understanding and developing TIPs. The resulting document, *Virginia TIP Preparation Guidance*, was approved by VAMPO in October 2015. The VAMPO working group for the project included staff from three MPOs, VDOT, and DRPT, with Federal team coordination provided by staff of FHWA and FTA. *Virginia TIP Preparation Guidance* has been distributed to all Virginia MPOs as well as VDOT and DRPT.

The TIP must be financially constrained – meaning that the amount of funding programmed does not exceed the amount of funding reasonably expected to be available. Once the TIP is approved by the HRTPO Board, the approved TIP may be revised in order to add new projects, delete projects, and update or change other project

information. In order to add projects to the TIP, sufficient revenues must be available by deferring other projects or by identifying new revenues.

In compliance with Title VI, the TIP takes into account the analysis of the benefits and impact distributions of transportation investments included in the Long-Range Transportation Plan.

The TIP development process may be summarized as follows:

1. The Long-Range Transportation Plan (LRTP) is approved by the HRTPO Board.
2. Drawing from projects included in the LRTP, the HRTPO, localities, transit agencies, and other agencies coordinate with state agencies (VDOT & DRPT) on which projects should be implemented first. These projects will be submitted for inclusion in the Commonwealth Transportation Board Six-Year Improvement Program (SYIP).
3. HRTPO, VDOT, DRPT, and the transit agencies coordinate to develop the draft TIP project list, drawing projects from the approved SYIP. This helps ensure that the TIP and STIP project lists for Hampton Roads are consistent with one another. This step includes the formulation of a financial plan for the TIP that demonstrates how the proposed TIP can be implemented.
4. The draft TIP is tested for air quality conformity, if required.
5. The final TIP is approved by the HRTPO Board.
6. The final TIP is approved by the Governor.
7. The TIP is included in the Statewide Transportation Improvement Program (STIP).

The HRTPO provides all interested parties with opportunities to comment on the proposed TIP, as well as any subsequent amendments to the TIP. Opportunities for public involvement are provided during each of the steps summarized above.

Additional information on the TIP, including the current TIP document, TIP Revision Procedures, interactive project map, associated Annual Obligation Reports, and more may be accessed via the TIP website at: www.hrtpotip.org.

SMART SCALE (formerly House Bill 2 or HB2) Statewide Prioritization Process

House Bill 2 (HB2), signed into law in 2014, directed the Commonwealth Transportation Board (CTB) to develop and use a prioritization process to guide the selection of transportation projects to be funded in the Six-Year Improvement Program (SYIP). The legislation was intended to improve the transparency and accountability of project selection, as well as the stability of the SYIP. The prioritization process – now called SMART SCALE (SMART SCALE stands for System for the Management and Allocation of Resources for Transportation, and the key factors used in evaluating a project’s merits: improvements to safety, congestion reduction, accessibility, land use, economic development and the environment.) – evaluates and scores proposed projects based on a comparison of a project’s relative benefits to its cost. SMART SCALE was initially an annual process and has been changed to a biennial cycle.

Additional information regarding the SMART SCALE prioritization process may be accessed at: <http://vasmartscale.org/>.

CMAQ/RSTP Project Selection Process

As the metropolitan planning organization (MPO) for the Hampton Roads MPA, the HRTPO is directly responsible for project selection and allocation of funds for the Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the Regional Surface Transportation Program (RSTP).

The CMAQ provides federal funding to States and localities for transportation projects and programs that help improve air quality and reduce traffic congestion. This funding is intended for areas not meeting the National Ambient Air Quality Standards (NAAQS), referred to as *nonattainment areas*, and for areas that previously did not meet the standards, but now do, referred to as *maintenance areas*. Hampton Roads was designated a maintenance area for the previous ozone NAAQS, but has been designated an attainment area for all current NAAQS.

The Surface Transportation Block Grant (STBG) program provides federal funding that may be used by States and localities for a wide variety of highway and transit projects. Regional Surface Transportation Program (RSTP) funds are STBG program funds that are apportioned to specific regions within the State.

The process for obtaining CMAQ or RSTP funding for transportation projects is competitive. The first step of the **CMAQ/RSTP Project Selection Process** is to solicit project ideas from the general public. Project ideas received from the public are forwarded to appropriate eligible applicants for consideration. Projects proposed by eligible applicants are analyzed by HRTPO staff using a specific set of criteria that have been approved by the HRTPO Board. The proposed projects are then ranked based on the results of the analyses. The CMAQ/RSTP Project Selection Process is a cooperative effort involving the HRTPO, local governments, local transit agencies, VDOT, DRPT, and the Virginia Port Authority, to prioritize and select projects to receive CMAQ or RSTP funding.

Since FY 2014, the HRTPO CMAQ/RSTP Project Selection Process has been conducted on an annual basis to ensure that funds expected to be available are properly allocated. HRTPO staff maintains “tracking tables” that identify all regional CMAQ or RSTP allocations per year associated with transportation projects. The Transportation Programming Subcommittee (TPS) of the TTAC holds quarterly meetings to monitor the status of CMAQ and RSTP projects and to make adjustments to project allocations to ensure the funds are used effectively.

Additional information on the HRTPO CMAQ/RSTP Project Selection Process, including the *Guide to the HRTPO CMAQ/RSTP Project Selection Process*, project application forms, and the schedule for the process, may be accessed via the HRTPO website at: <http://www.hrtpo.org/page/cmaq-and-rstp/>.

Transportation Alternatives (TA) Set-Aside Project Selection Process

MAP-21 established the Transportation Alternatives Program (TAP), which replaced funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs. The FAST Act, the current Federal transportation funding legislation, eliminated the TAP and replaced it with a set-aside of funding in the new Surface Transportation Block Grant (STBG) program. The STBG program, a conversion of the previous Surface Transportation Program (STP), was designed to maximize the flexibility of STP funding for local and state governments. The TA Set-Aside Project Selection Process was initially an annual process and has been changed to a biennial cycle.

For urbanized areas with populations over 200,000, the MPO, through a competitive process, selects the TA Set-Aside projects in consultation with the state from proposed projects submitted by eligible entities. HRTPO staff coordinates with VDOT Local Assistance Division staff in carrying out the project selection process for Hampton Roads. Information on the HRTPO TA Set-Aside project selection procedures, including the *Guide to the HRTPO TA Set-Aside Project Selection Process*, may be accessed on the HRTPO website at:

[http://www.hrtpo.org/page/transportation-alternatives-\(ta\)-set_aside/](http://www.hrtpo.org/page/transportation-alternatives-(ta)-set_aside/).

Additional information on the TA Set-Aside may be accessed via the VDOT website at: <http://www.virginiadot.org/business/prehancegrants.asp>.

Statewide and Regional Transportation Funding

In February 2013, the General Assembly approved the first comprehensive overhaul of the way Virginia pays for its transportation system since 1986. The 2013 transportation funding legislation, generally referred to as HB 2313, generates hundreds of millions in transportation dollars annually statewide and includes regional components that have resulted in significant additional funding each year to be used specifically in Hampton Roads. The regional revenues are directed to the Hampton Roads Transportation Fund (HRTF), which is controlled by the Hampton Roads Transportation Accountability Commission (HRTAC).

House Bill 1887 (HB 1887), signed into law in 2015, established a new construction funding formula to be in full effect in FY 2021. The HB 1887 formula divides the funding available for construction as follows:

- 45% – State of Good Repair Program (SGR)
- 27.5% – High-Priority Projects Program (HPP)
- 27.5% – Highway Construction District Grant Program (DGP)

The HPP and DGP are subject to the SMART SCALE prioritization process. Projects submitted under the HPP compete with other HPP project proposals statewide. Projects submitted under the DGP compete with other projects proposed within the same construction district. The SGR program is to fund the rehabilitation of structurally-deficient bridges and deteriorating pavement. Project selection for the SGR program is needs-based using a separate prioritization process from that of SMART SCALE.

Annual Obligation Report

Federal regulations require that an annual listing of obligated projects be produced after the end of each federal fiscal year. This Annual Obligations Report (AOR) must include all federally funded projects authorized or revised to increase obligations in the preceding fiscal year and must identify, for each project, the amount of federal funds requested in the TIP, the federal funding that was obligated during the preceding year, and the federal funding remaining and available for subsequent years. The AOR must be published or otherwise made publicly available in accordance with the HRTPO Public Participation Plan.

B. Work Elements (WE)

Work activities include the following:

1. Maintain and update the current (FY 2018-2021) TIP.
2. Conduct public reviews of proposed amendments to the current TIP.
3. Maintain and enhance the TIP website, including the use of visualization techniques, to provide easy public access.
4. Coordinate with VDOT, DRPT, and the transit agencies to prepare a listing of projects for which federal funds were obligated during the preceding federal fiscal year. Post the Annual Obligation Report on the HRTPO website to make it available for public review.
5. Lead and coordinate the annual Project Selection Process for CMAQ and RSTP projects.
6. Monitor and update CMAQ/ RSTP Project Selection Process methodologies as deemed necessary.
7. Maintain electronic spreadsheets to keep track of CMAQ and RSTP allocations and transfers.
8. Monitor and evaluate the effects of any revisions to the SYIP during the fiscal year and formally report to the HRTPO Board on significant revisions to the SYIP.
9. Conduct a quarterly review of the status of projects in the Hampton Roads TIP.
10. Coordinate with VDOT Local Assistance Division staff in carrying out the Transportation Alternatives (TA) Set-Aside project selection process.
11. Coordinate with state agencies on the implementation of the SMART SCALE Statewide Prioritization Process.

C. End Products

1. WE 1 – A current and financially-constrained TIP.
2. WE 3 – HRTPO TIP website providing user-friendly access to all TIP-related documents.
3. WE 4 – Annual Obligation Report.
4. WE 5 – A summary report on the annual CMAQ/RSTP project selection process.
5. WE 6 – An updated *Guide to the HRTPO CMAQ/RSTP Project Selection Process*, as necessary.
6. WE 8 – Presentation to HRTPO Board, as necessary.
7. WE 9 – Presentation to TTAC and HRTPO Board, as appropriate.
8. WE 10 – TA Set-Aside project selection and recommended allocations. Presentation to TTAC and HRTPO Board, as appropriate.
9. WE 11 – Presentation to TTAC and HRTPO Board, as necessary.

D. Schedule

1. WE 1-3 – Ongoing
2. WE 4 – No later than 90 calendar days following the end of the federal fiscal year
3. WE 5 – April 2020
4. WE 6 – As necessary
5. WE 7 – Ongoing
6. WE 8 – As necessary
7. WE 9 - Quarterly
8. WE 10 – Third Quarter
9. WE 11 – As necessary

E. Participants

HRTPO, local governments, HRT, WATA, Suffolk Transit, VDOT, DRPT, FHWA, FTA, other state and federal agencies, the general public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	CO 5303	TOTAL
HRTPO	\$154,702	\$69,934		\$224,636

3.0 PERFORMANCE MANAGEMENT

A. Background

The Federal Highway Administration (FHWA) defines *performance management* as a strategic approach that uses system information to make investment and policy decisions to achieve performance goals. While the FHWA and federal legislation have emphasized performance management in recent years, the HRTPO has long based its planning and programming process on performance management. This section provides an overview of the HRTPO performance management process, including work to be completed under Task 3.0 and other UPWP tasks.

A key feature of MAP-21 – continued under the FAST Act – was the establishment of a performance- and outcome-based program. MAP-21 established national performance goals in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. The FAST Act requires states and Metropolitan Planning Organizations (MPOs) to establish performance measures and set targets in the following areas:

- Roadway safety
- Pavement condition on the Interstate System and the remainder of the National Highway System (NHS)
- Bridge condition on the NHS
- Performance of the Interstate System and the remainder of the NHS
- Reliability of freight movement on the Interstate System
- Transit Asset Management and Safety

The HRTPO performance management process is comprised of the following efforts:

1. Maintaining Databases of Transportation Performance Data

HRTPO staff maintains a number of transportation performance databases on an ongoing basis for use in performance management planning efforts. These databases cover all aspects of the transportation system including roadway use, bridges, aviation, rail, public transportation, Census data, pavement conditions, fuel prices, etc. In addition, databases are maintained for other items covered in other UPWP tasks, such as freight movement and safety.

HRTPO staff also maintains a Congestion Management Process (CMP) database that includes data for over 1,700 roadway segments in the CMP Roadway Network, which covers all interstates, principal arterials, minor arterials, and key collectors. This database includes existing and historical traffic volumes, roadway characteristics, travel times and speeds, reliability, trucks, and congestion levels.

2. Annual System Performance Reports

a. Annual *State of Transportation in Hampton Roads* Report

Each year, HRTPO staff produces the *State of Transportation in Hampton Roads* report. The report details the current status and recent trends of all facets of the transportation system in Hampton Roads, including air, rail, water, and highways. Many aspects of the highway system are highlighted, including roadway usage, pavement condition, bridge conditions, congestion levels, commuting characteristics, roadway safety, transit usage, and active transportation (such as biking and walking). Comparisons are made between Hampton Roads and similar large metropolitan areas.

b. Annual *HRTPO Roadway Performance Report*

Each year, HRTPO staff produces a report documenting the performance of the Hampton Roads roadway network. This includes the volumes, speeds, and congestion levels of each segment of the CMP roadway network, and further analysis of travel times on major congested corridors. Staff analyzes travel time data collected by INRIX to measure congestion levels of roadways where it is available, and uses volumes and roadway characteristics to estimate congestion levels on roadways where INRIX data is not available.

3. Federal and State Performance Measures

As mentioned previously, MAP-21 and the FAST Act have established performance measures in the areas of roadway safety, pavement condition, bridge condition, roadway performance, freight movement, and transit asset management. In FY 2018, HRTPO staff calculated measures and established initial regional targets for roadway safety. In FY 2019, HRTPO staff calculated measures and established initial regional targets in each of the other areas. HRTPO staff also produced the initial annual System Performance report in FY 2019. This document details the performance management process, the methodology for calculating federal performance measures, current and historical conditions, statewide targets, how regional targets were set, and progress towards meeting these targets.

In addition, since 2012 HRTPO staff has annually prepared a list of performance measures identified by state legislation and established by the state Office of Intermodal Planning and Investment (OIPI). This effort – titled *HRTPO Regional Performance Measures (RPMs)* – includes existing and historical data in a number of areas including congestion reduction, safety, transit usage, HOV usage, jobs and housing, air quality, freight movement, and maintenance. As of 2019, this information has been incorporated into the annual System Performance report.

4. Congestion Management Process – System Performance and Mitigation Report

The Congestion Management Process (CMP) is an on-going systematic process for managing congestion that provides information and analysis on multimodal transportation system performance and on strategies to alleviate congestion and enhance the mobility of persons and goods region wide. During this process, HRTPO works with state and local agencies to develop these strategies and mobility options.

HRTPO staff has produced a comprehensive CMP document every few years since the HRTPO Board took action in October 1995 to adopt the region's Congestion Management System. HRTPO staff completed the latest version of the CMP - System Performance and Mitigation Report in October 2014, which included the following work:

- System monitoring, which included regional roadway travel levels and trends, an in-depth analysis of the trends at the region's bridges and tunnels, and a description of recent, planned, and programmed system improvements.
- Calculated existing peak period speeds and congestion levels using travel time data collected by INRIX for roadways where it is available. For roadways where INRIX data is not available, congestion levels were estimated using volumes and roadway characteristics.
- Determined a number of congestion measures, including congestion duration, travel time reliability, total delay, and the Potential for Intersection Congestion Alleviation (PICA), which reports the difference between the observed and the predicted congestion level.
- Identified the most congested corridors based on the congestion measures listed above and a variety of other criteria including freight, safety, and military or national significance.
- Identified and recommended congestion mitigation strategies for the most congested corridors.

HRTPO staff produces the CMP - System Performance and Mitigation Report in accordance with the regional Long-Range Transportation Plan (LRTP). With a five year cycle between LRTP cycles, work on an update to the CMP - System Performance and Mitigation Report began in FY 2019 and will be completed in FY 2020.

5. Special Transportation Studies

HRTPO staff regularly prepares special studies that examine specific topics related to the Hampton Roads transportation system. Details for Special Transportation Studies to be completed in FY 2020 are included in Task 8.0 – Technical Support, Research, and Special Studies.

6. Performance-Based Project Selection

Selecting transportation improvements based on the expected performance impact is comprised of the following types of work:

a. LRTP Project Selection:

The FAST Act states that the Long-Range Transportation Plan (LRTP) developed by the MPOs will include a description of the performance measures and performance targets used in assessing the performance of the transportation system. The LRTP must also include a system performance report (which is included in the Federal and State Performance Measures task) evaluating the condition and performance of the transportation system with respect to the targets including progress achieved by the MPO towards meeting the performance targets. MPOs that elect to conduct scenario planning shall also describe how the preferred scenario has improved performance of the system.

In addition, HRTPO uses a Project Prioritization Tool to evaluate the expected performance of each candidate LRTP project. Scores are determined based on a number of performance measures and factors related to the utility, viability, and economic vitality of each project.

More details on this work are included in Task 1.0 – Long-Range Transportation Plan.

b. Transportation Improvement Program:

The FAST Act states that MPOs shall include a description of the anticipated effect of the Transportation Improvement Program (TIP) toward achieving the performance targets identified by the MPO. MPOs shall also link investment priorities in the TIP to the achievement of performance targets in the LRTP.

In addition, projects proposed by eligible recipients for CMAQ and/or RSTP funding are analyzed by HRTPO staff using a specific set of criteria that have been approved by the HRTPO Board. The proposed projects are then ranked based on the results of the analyses. The *Guide to the HRTPO CMAQ/RSTP Project Selection Process* includes the policies, procedures, and analysis methodologies used to score and rank project proposals.

More details on this work are provided in Task 2.0 – Transportation Project Programming.

c. TA Set-Aside Project Selection:

Projects proposed by eligible recipients for Transportation Alternatives (TA) Set-Aside funding are evaluated and ranked using a specific set of criteria that were developed by the VDOT Local Assistance Division in close coordination with Virginia MPOs. The *Guide to the HRTPO TAP Project Selection Process* includes the policies, procedures, and project selection methodology.

More details on this work are provided in Task 2.0 – Transportation Project Programming.

B. Work Elements (WE)

Work activities include the following:

1. Maintaining Databases of Transportation Performance Data

HRTPO staff will continue to update its transportation databases on an ongoing basis.

2. Annual System Performance Reports

a. *State of Transportation in Hampton Roads* Report

HRTPO staff will produce an update to the State of Transportation in Hampton Roads report.

b. *HRTPO Annual Roadway Performance* Report

HRTPO staff will produce an update to the Roadway Performance report as part of the Congestion Management Process – System Performance and Mitigation Report.

3. Federal and State Performance Measures

In FY 2020, HRTPO staff will continue calculating and monitoring performance measures in the areas of roadway safety, pavement condition, bridge condition, roadway performance, freight movement, and transit. HRTPO staff will also update the roadway safety and transit asset management targets that were approved in FY 2019.

In addition, HRTPO staff will produce an update to the annual System Performance report. The performance measures identified by state legislation will also be updated as part of this report.

4. Congestion Management Process – System Performance and Mitigation Report

In FY 2020, HRTPO staff will complete work on the update to the CMP –

System Performance and Mitigation report. Many of the tasks to be completed in this effort will be similar to those tasks included in the 2014 version of the CMP report as described previously.

C. End Products

1. WE 1 – Transportation databases
2. WE 2a – State of Transportation in Hampton Roads report
3. WE 2b – HRTPO Roadway Performance report (as part of WE 4)
4. WE 3 – Regional System Performance Measures database and annual System Performance report.
5. WE 4 – Hampton Roads Congestion Management Process – System Performance and Mitigation Report.

D. Schedules

1. WE 1 - Ongoing
2. WE 2a – First Quarter
3. WE 2b – Completed as part of WE 4
4. WE 3 – Ongoing
5. WE 4 – Third Quarter

E. Participants

HRTPO, VDOT, DRPT, FHWA, FTA, and localities.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$143,194			\$143,194

4.0 PUBLIC PARTICIPATION

A. Background

Public Involvement

The HRTPO is committed to involving interested parties of all walks of life and considering their ideas through professional initiatives and a transparent and accessible regional transportation planning and programming process. The importance of public involvement in the transportation planning and programming process was recognized in federal law in the *Intermodal Surface Transportation Efficiency Act (ISTEA)* of 1991 and that recognition continued in subsequent federal transportation legislation including the *Moving Ahead for Progress in the 21st Century (MAP-21) Act*. MAP-21 required meaningful public involvement and encouraged MPOs to use a variety of methods to inform and involve interested parties in transportation planning processes. The current *Fixing America's Surface Transportation Act (FAST Act)* further underlines the importance of public involvement in the transportation planning process. Specifically, federal regulations require the development of a participation plan. In FY 2018 the HRTPO further updated its Public Participation Plan (PPP) in coordination with current federal regulations and area jurisdictions. The updated PPP – released in January 2018 – outlines current HRTPO public involvement and outreach activities. New focus has been placed upon HRTPO efforts to engage the public, specifically on the diversity of Hampton Roads and the efforts made to engage and factor in the opinions of the diverse populations of the region. The PPP serves as a blueprint for public involvement, outreach and engagement and will be reviewed and updated every one to two years.

During FY 2019, a number of new initiatives were undertaken in order to illustrate the commitment of the HRTPO to innovative, engaging public outreach. Projects initiated during FY 2017 were evaluated and refined to further support the operations, policies, and procedures of the HRTPO. Accomplishments in FY 2019 related to public participation include:

- Expansion of the HRTPO/Higher Learning Collaborative
- Creation of a Variety of Publications geared towards informing the public about HRTPO and its programs
- Refinement of HRTPO's survey methods
- Development of a refined HRTPO Brand
- Expansion of the HRPTO Community Transportation Advisory Committee

Title VI and Environmental Justice

Although they are separate, Title VI, Environmental Justice (EJ) and Public Involvement complement one another in ensuring fair and equitable distribution of transportation services and facilities. Effective public involvement not only provides transportation officials with new ideas, but it also alerts them to potential environmental justice concerns during the planning stage of a project. The HRTPO is committed to ensuring that Environmental Justice, as outlined by the 1994 Executive Order, is considered in our planning and outreach efforts, as well as our programs and initiatives, by assuring that all residents of Hampton Roads are represented fairly and not discriminated against in the

transportation planning and capital investment processes. In addition to adhering to the principles of Environmental Justice, the HRTPO will work to implement Title VI of the Civil Rights Act of 1964. HRTPO goals will be to:

- Comply with the public involvement and Title VI requirements of the Federal and State regulations.
- Provide specific opportunities for local citizens and citizen-based organizations to discuss their views and provide input on the subject areas addressed in plans, projects or policies of the HRTPO.
- Ensure full and fair participation by all potentially affected communities in the transportation decision-making process.
- Inform and educate citizens and other interested parties about ongoing HRTPO planning activities, and their potential role in those activities.
- Assess the region's transportation investments relative to the needs of disadvantaged populations, including but not limited to low income and minority populations.
- Investigate the state of accessibility and mobility for disadvantaged populations, with a focus on safety, transit, and alternative transportation modes.
- Refine mechanisms for the ongoing review of the TIP and LRTP.
- Continue to refine the Title VI/EJ Methodology in order to incorporate Title VI/ EJ analysis into individual studies, programs and plans contained in the HRTPO Unified Planning Work Program (UPWP), such as corridor studies and the Transportation Improvement Program (TIP).
- Focus study and plan recommendations on investments that promote quality of life and mitigate adverse impacts for residents of Hampton Roads.
- Utilize Public Comment Opportunities presented by Partner Agencies (VDOT, DRPT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Environmental Protection Agency (EPA), and other state and federal agencies) to lend a Title VI/EJ perspective to their policies, reports and project documents.
- Create materials that effectively inform the public of HRTPO's obligations and commitments under Title VI of the Civil Rights Act of 1964.

Title VI Legislation and Guidance

Title VI of the Civil Rights Act of 1964 created a foundation for future environmental justice regulations. Since the establishment of Title VI, Environmental Justice has been considered in local, state, and federal transportation projects. Section 42.104 of Title VI and related statutes require Federal agencies to ensure that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion.

The National Environmental Policy Act of 1969 (NEPA) addresses both social and economic impacts of Environmental Justice. NEPA stresses the importance of providing for "all Americans safe, healthful, productive, and aesthetically pleasing surroundings", and provides a requirement for taking a "systematic, interdisciplinary approach" to aid in considering environmental and community factors in decision making.

The Civil Rights Restoration Act of 1987 further expanded Title VI to include all programs and activities of Federal aid recipients, sub-recipients, and contractors whether those programs and activities are federally funded or not.

On February 11, 1994, President Clinton signed Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This piece of legislation directed every Federal agency to make Environmental Justice part of its mission by identifying and addressing all programs, policies, and activities that affect human health or the environment so as to identify and avoid disproportionately high and adverse effects on minority populations and low-income populations.

Rather than being reactive, Federal, State, local and tribal agencies must be proactive when it comes to determining better methods to serve the public who rely on transportation systems and services to increase their quality of life.

In April 1997, as a reinforcement to Executive Order 12898, the United States Department of Transportation (DOT) issued an Order on Environmental Justice (DOT Order 5610.2), which summarized and expanded upon the requirements of Executive Order 12898 to include all policies, programs, and other activities that are undertaken, funded, or approved by the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), or other U.S. DOT components.

In December 1998, the FHWA issued the FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 6640.23) which mandated the FHWA and all its subsidiaries to implement the principles of Executive Order 12898 and U.S. DOT Order 5610.2 into all of its programs, policies, and activities (see Appendix A).

On October 7, 1999, the FHWA and the FTA issued a memorandum Implementing Title VI Requirements in Metropolitan and Statewide Planning. This memorandum provided clarification for field offices on how to ensure that Environmental Justice is considered during current and future planning certification reviews. The intent of this memorandum was for planning officials to understand that Environmental Justice is equally as important during the planning stages as it is during the project development stages.

Community Outreach Strategies

The HRTPO has incorporated various strategies to seek out and consider the transportation interests and needs of Hampton Roads residents, including those traditionally underserved by existing transportation systems. These groups are identified as:

- **Low Income** – a person whose household income (or in the case of a community or group, whose median household income) “is at or below the U.S. Department of Health and Human Services poverty guidelines.”
- **Federal Assistance Recipients** – people who receive grants or federal funds. The assistance might be in the form of public housing, food stamps, support services or persons receiving Temporary Assistance for Needy Families (TANF) funds.

- **Minority Populations** - Persons considered to be minorities are identified in the Census as people of African, Hispanic, Asian, American Indian, or Alaskan Native origin (U.S. Census, STF301/Tbl008 and Tbl011; 1990). Executive Order 12898 and the DOT and FHWA Orders on Environmental Justice consider minority persons as persons belonging to any of the following groups:
 - **Black** – a person having origins in any of the black racial groups of Africa
 - **Hispanic** – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race
 - **Asian American** – a person having origins in the Far East, Southeast Asia, or the Indian subcontinent
 - **American Indian and Alaskan Native** – a person having origins in North America and who maintains cultural identification through tribal affiliation or community recognition

The HRTPO has included various strategies, listed below, specifically to reach these populations. In addition, the HRTPO has substantially increased its efforts to partner with regional agencies to share ideas and incorporate a wide range of ideas into the transportation planning processes.

B. Work Elements (WE)

Work activities include the following:

1. Implement outreach strategies for the development of the 2045 Long-Range Transportation Plan (LRTP). This will include public forum(s) where the status of the LRTP can be reviewed and public feedback can be incorporated.
2. Develop surveys to be accessed via the HRTPO website, Facebook and libraries throughout the region.
3. Develop opportunities to inform the public by participating in community events and coordinating regional forums on transportation issues, initiatives, and projects. This includes coordination with VDOT, DRPT, FHWA, FTA, HRT, WATA, and HRTPO member jurisdictions.
4. Participate in public meetings, committee meetings and hearings held by the HRTPO, plus those held by local and state governments and the local transit agencies, as appropriate.
5. Use Social Media Platforms (Facebook, Twitter, etc.) to promote HRTPO, engage partner organizations, and increase awareness of the TPO by the public.
6. Respond to information requests from the general public.
7. Create publications that highlight each effort of the HRTPO.

8. Support staff in public communications, engagement, and participation in HRTPO programs and projects, including the LRTP, the Transportation Improvement Program (TIP), and other studies, plans, and programs.
9. Prepare Newsletters and special features on timely issues.
10. Update the HRTPO website to enhance public participation and to highlight various events and publications.
11. Respond to and/or facilitate response to general comments received via www.hrtpo.org, or by other means of communication from the general public, members of governments, other MPOs, etc.
12. Review and evaluate public participation strategies, as necessary, to ensure effectiveness and outreach to a broad audience. Update public participation documents, such as the Public Participation Plan, as needed, to reflect federal mandates. Implement, review, and update the HRTPO Title VI Plan and the HRTPO LEP Plan which includes Title VI, Environmental Justice and related authorities.
13. Provide training for public involvement staff to build, enhance, and broaden public involvement techniques.
14. Provide staff support for the Community Transportation Advisory Committee (CTAC). This includes providing information about MPO processes, coordinating and facilitating meetings, developing meeting materials, responding to questions as necessary.
15. Provide translation and/or interpreter services on an as-requested basis.
16. Meet with community groups from varied sectors and with varied interests to provide information about the HRTPO's primary purpose and functions and gather input on key issues, programs, and activities they feel are critical.
17. Provide and/or facilitate training for HRTPO staff and CTAC members to enhance public involvement efforts.
18. Refine the Community Transportation Advisory Committee.
19. Assess the region's transportation investments relative to the needs of disadvantaged populations, including but not limited to low income and minority populations.
20. Update the current Title VI/Environmental Justice methodology used to identify Title VI/Environmental Justice communities as well as the benefit/burden analyses (including conducting a broad review of environmental justice methodologies by other agencies and investigating potential data sources).

21. Create an expanded Public Involvement Process aimed at addressing potential disparate impacts of transportation planning projects and policies.
22. Investigate the state of accessibility and mobility for disadvantaged populations, with a focus on safety, transit and alternative transportation modes.
23. Revamp the HRTPO Website.
24. Establish an HRTPO Videography Center, focusing on conveying HRTPO initiatives, visually.
25. Expand the HRTPO Higher Learning Collaborative.

C. End Products

1. WE 1 – Citizen Feedback and survey results for development of the 2045 LRTP. Documentation of outreach activities. Citizen Feedback and survey results for the public involvement outreach conducted for the TIP.
2. WE 2 - Innovative and engaging surveys and survey methodologies.
3. WE 3 – Publications and HRTPO outreach material.
4. WE 12 – Updated Title VI and LEP Plans. Response to Title VI complaints, as appropriate. Report to VDOT in accordance with their reporting procedures.
4. WE 20-21 – Refined HRTPO Title VI/EJ Benefits and Burdens Methodology 5.
WE 24 – Redesigned HRTPO Website.
6. WE 25 – HRTPO Videos
7. WE 26 – Fully functioning HRTPO Higher-Learning Collaborative.

D. Schedule

1. WE 1-11 – Ongoing
2. WE 12 – Fourth Quarter
3. WE 13 – Ongoing
4. WE 14 – Third Quarter
5. WE 15-20– Ongoing
6. WE 21 – Third Quarter
7. WE 24 – Fourth Quarter
8. WE 25-26 – Fourth Quarter

E. Participants

HRTPO, HRT, WATA, VDOT, DRPT, FHWA, FTA, CNU, local governments, general public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	CO 5303	TOTAL
HRTPO	\$320,812	\$57,527		\$372,339

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5.0 UNIFIED PLANNING WORK PROGRAM (UPWP)

A. Background

The Unified Planning Work Program (UPWP) is developed each year by the HRTPO, in cooperation with the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), and Suffolk Transit to document the regional transportation planning work proposed to be carried out by the HRTPO, HRT, WATA, and VDOT over the next one or two year period. This task provides for the preparation and maintenance of the UPWP.

B. Work Elements (WE)

Work activities include the following:

1. Maintain the current UPWP. Post any revisions to the current UPWP on the HRTPO website, as necessary.
2. Produce the UPWP for the next fiscal year, as follows:
 - a. Review the latest federal and state information and requirements related to UPWP preparation.
 - b. Identify regional planning priorities.
 - c. Prepare work tasks, staff work assignments, schedules, direct costs, and budgets.
 - d. Secure commitments for local funds to match federal planning funds, as necessary.
 - e. Provide opportunities for public review and comment on the draft UPWP document.
 - f. Prepare the final UPWP document.
 - g. Post the final UPWP document on the HRTPO website.

C. End Products

1. WE 1 – Prepare and process amendments and administrative modifications, as necessary, to the approved FY 2020 UPWP.
2. WE 2 – Produce the FY 2021 UPWP document.

D. Schedule

1. WE 1 – Ongoing
2. WE 2 – Third or Fourth Quarter

E. Participants

HRTPO, local governments, HRT, WATA, VDOT, DRPT, FHWA, FTA, other stakeholders

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$69,958	\$8,659		\$78,617

6.0 REGIONAL FREIGHT PLANNING

A. Background

Freight transportation influences every aspect of our daily lives and keeps our industries competitive in the global economy. This is especially true in Hampton Roads, which is not only home to the third largest port on the East Coast but also the home of airports, rail, private trucking, shipping and warehouse distribution facilities, as well as a network of road and rail corridors for the delivery of freight, goods, and services.

There has been a federal emphasis on freight movement, particularly on the integration and connectivity of the transportation system across and between modes. However, in recent years the emphasis on freight planning on the federal level has increased. In 2015, the USDOT released the National Strategic Freight Plan. This plan describes the freight transportation system, assesses the various barriers to improvement, and highlights strategies to help support the freight transportation system through improved planning, dedicated funding streams, and innovative technologies. The plan also includes a Multimodal Freight Network (MFN) that encompasses not only highways but also the local roads, railways, navigable waterways, pipelines, key seaports, airports, and intermodal facilities necessary for the efficient and safe movement of freight.

In addition, the FAST Act establishes both formula and discretionary grant programs to fund critical transportation projects that would benefit freight movements. This provides a dedicated source of Federal funding for freight projects for the first time.

Regional Freight Study

Due to the importance of freight movement in the regional transportation system, HRTPO staff prepares the *Hampton Roads Regional Freight Study* on a regular basis. The Regional Freight Study includes an analysis of foreign and domestic freight movement to, from, and within Hampton Roads for all transportation modes by weight and value for existing and future conditions. It also includes an analysis of the movement of trucks both within Hampton Roads as well as through the gateways of the region, and identifies bottleneck locations with high truck delay levels. HRTPO staff prepared the first Intermodal Management System (IMS) report in 1996, with updates to the IMS/Regional Freight Study released in 2001, 2007, 2012, and 2017. The Regional Freight Study is generally updated every five years in conjunction with the development of the regional Long-Range Transportation Plan.

Maintaining Databases of Freight Data

In order to support both the Regional Freight Study and other HRTPO freight planning and performance management efforts, HRTPO staff maintains a number of databases and shapefiles. These include regional truck volume data collected by VDOT, freight volumes and characteristics handled by the Port of Virginia, and freight levels at competing East Coast ports.

Prioritizing Projects that Improve Freight Movement

Freight movement is accounted for in the HRTPO Project Prioritization Tool, which is used in the selection of projects for Regional Surface Transportation Program (RSTP) funding and inclusion in the Long-Range Transportation Plan.

Freight Transportation Advisory Committee (FTAC)

In 2009, the HRTPO created the Freight Transportation Advisory Committee (FTAC), a body comprised of freight experts from public agencies and private companies. According to HRTPO bylaws, the purpose of the FTAC is to 1) “...advise the HRTPO Board on regional freight transportation requirements”, and 2) “conduct public outreach activities that help HRTPO efforts to explain and help raise awareness of the importance of freight transportation to the region and to collect region-wide public input on these matters.”

The FTAC has a number of accomplishments, including producing a video – “A Region United” – that presents the importance of freight, co-sponsoring the Virginia Freight Transportation Summit, and assisting HRTPO staff with the Regional Freight Study and freight aspects of the Project Prioritization Tool and the LRTP. The FTAC also requested and assisted with the *Economic Assessment of Tolls on Freight Transportation in the Hampton Roads Region* study that was completed in 2015.

B. Work Elements (WE)

Work activities include the following:

1. Freight Transportation Advisory Committee (FTAC)

Virginia Port Authority (VPA) staff will administer the day-to-day operations of the Freight Transportation Advisory Committee (FTAC), including preparation of agendas, note taking during meetings and preparation of minutes, etc.

HRTPO staff will advise VPA staff regarding HRTPO procedures; post FTAC documents to the HRTPO website; forward FTAC information and recommendations to the HRTPO Board; and prepare technical research and analysis for the FTAC, as necessary.

2. Measure freight performance by:

- Obtaining and analyzing regional truck data collected by VDOT and updating databases and shapefiles.
- Tracking freight volumes and characteristics handled by the Port of Virginia and freight levels at competing East Coast ports.

3. Assist the Port of Virginia and other local, state, and federal agencies with their freight planning efforts.

4. Freight Performance Measures and Targets – Work related to FAST Act freight performance measures and targets is included under Task 3.0 – Performance Management.
5. Hampton Roads Freight Facilities Inventory

The Hampton Roads region is home not only to the third largest port on the East Coast but also to a number of other freight generators such as private marine terminals, airports, distribution centers, manufacturing facilities, and military bases. These freight generators are connected by an extensive network of waterways, railroads, and highways.

This task involves creating a detailed data and mapping inventory of freight facilities in Hampton Roads. This inventory would include – but not be limited to – the types of freight-generating facilities described above as well as other critical freight generators. The inventory will also include waterways, railroads, and highways that are critical to moving freight into, out of, and throughout the region. Information on truck bottlenecks and intermodal conflict points (such as highway-rail crossings and movable bridges) will also be included.

The Hampton Roads Freight Facilities Inventory will likely be GIS or web-based and interactive, which will allow users to obtain detailed information on each freight facility. An example of a similar freight facility inventory is the Philly Freight Finder, which was created by the Delaware Valley Regional Planning Commission.

C. End Products

1. WE 1 – FTAC – Technical research and analysis activities as requested
2. WE 2 – Updated freight databases and GIS shapefiles
3. WE 3 – Freight planning products, as requested
4. WE 5 – Hampton Roads Freight Facilities Inventory and documentation

D. Schedule

1. WE 1 – Ongoing
2. WE 2 – Ongoing
3. WE 3 – Ongoing
4. WE 5 – Fourth Quarter

E. Participants

HRTPO, FTAC, VDOT, Localities, VPA, Navy, FHWA, Private Freight Stakeholders

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$25,677			\$25,677

7.0 SAFETY, SECURITY PLANNING, AND RESILIENCY PLANNING

A. Background

The FAST Act and Federal regulations state that the metropolitan planning process shall provide for consideration and implementation of projects, strategies, and services that will address the following factors related to safety and security:

- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users

In addition, a new planning factor was created under the FAST Act related to improving the resiliency and reliability of the transportation system.

Safety Planning

HRTPO staff maintains a database and GIS shapefile of crashes throughout the region to support regional safety planning efforts, including the *Hampton Roads Regional Safety Study* and the Project Prioritization Tool. This crash database and shapefile is updated by HRTPO staff annually using VDOT and DMV raw crash data and shapefiles.

HRTPO staff supports VDOT and DMV in their safety planning efforts. This includes participating on safety-related committees such as the Strategic Highway Safety Plan (SHSP) steering committee, SHSP safety emphasis area teams, and the Traffic Records Coordinating Committee (TRCC). HRTPO also participates on Road Safety Audits (RSAs) conducted by VDOT and the localities (and their consultants) as requested.

The first Hampton Roads *Regional Safety Study* was released in 2004, and an update was released in 2013/2014. The Regional Safety Study includes information on regional crash data and trends, a detailed analysis of the locations of crashes, and an analysis of high crash locations with crash countermeasures. The Regional Safety Study is updated every five years in conjunction with the Long-Range Transportation Plan. Work on an update to the Hampton Roads Regional Safety Study began in FY 2019 and will continue in FY 2020.

Security Planning

The security planning aspect of this task primarily entails HRTPO staff analysis and recommendations associated with the transportation components of local, state, and federal hurricane evacuation studies and plans. Note that the bulk of the regional emergency preparedness planning is funded outside the HRTPO UPWP and conducted by Hampton Roads Planning District Commission (HRPDC) staff.

Resiliency Planning

The resiliency planning aspect of this task primarily includes HRTPO staff work associated with climate change/sea level rise planning. This planning largely began in FY 2015, when

staff completed the *Hampton Roads Military Transportation Needs Study: Roadways Serving the Military and Sea Level Rise/Storm Surge* report. This report expanded upon work and methodologies developed by HRPDC and the Virginia Institute of Marine Science (VIMS) by identifying military roadway segments vulnerable to submergence. Additionally, submergence of other local roadways that provide access to and from the “Roadways Serving the Military” which may be vulnerable to flooding were identified.

HRTPO expanded on this effort in FY 2016 with the *Sea Level Rise and Storm Surge Impacts to Roadways in Hampton Roads* study. HRTPO staff partnered with HRPDC staff to conduct a vulnerability analysis for potential sea level rise/storm surge impacts to regional roadways by 2045 (next Long-Range Transportation Plan horizon year). This report includes a methodology for incorporating sea level rise and storm surge impacts to roadways into the HRTPO Long-Range Transportation Plan Project Prioritization Tool. Furthermore, it contains adaptation strategies, design considerations, best practices, and lessons learned from other coastal regions that are also vulnerable to sea level rise and storm surge.

HRTPO completed an update to the *Hampton Roads Military Transportation Needs Study (2018 Update)* in FY 2018 that included a flooding vulnerability analysis for “Roadways Serving the Military” by 2045. Regional and subarea maps were created to show roadways to/from military and supporting sites that may be vulnerable to flooding.

HRTPO staff also participates on a number of committees related to planning for sea level rise and climate change. These committees currently include HRPDC’s Coastal Resiliency Committee, and the Joint Land Use Studies (see Task 8.3). HRTPO staff also provides assistance to other stakeholders in their climate change and sea level rise planning efforts, such as the USDOT Hampton Roads Climate Impact Quantification Initiative, local and statewide universities and VIMS.

B. Work Elements (WE)

Safety

1. Produce an update to the Hampton Roads Regional Safety Study. The Hampton Roads Regional Safety Study – 2019/2020 Update will build on the previous Regional Safety Study (2013/2014) and will include the following tasks:
 - Report the recent trends in regional roadway safety.
 - Provide detailed characteristics of crashes throughout the region.
 - Analyze the number and/or rate of crashes on freeway and roadway segments and at major intersections throughout Hampton Roads.
 - Use measures such as the Potential for Safety Improvement (PSI) to prioritize high crash locations.
 - Detail efforts to improve roadway safety.
 - Document general crash countermeasures and Crash Modification Factors (CMFs).
 - Analyze high crash locations in detail and recommend countermeasures.
2. Update crash databases and GIS shapefiles using VDOT and DMV raw crash data.

3. Assist with the implementation of the current Virginia Strategic Highway Safety Plan (SHSP). This will include continuing to participate on the SHSP steering committee, attending SHSP workshops, and participating in safety emphasis area group meetings.
4. Participate on safety-related committees such as DMV's Traffic Records Coordinating Committee (TRCC).
5. Assist VDOT and localities with Road Safety Audits (RSAs) as requested.
6. Safety Performance Measures and Targets – Work related to FAST Act safety performance measures and targets is included under Task 3.0 – Performance Management.

Security

1. Provide transportation/emergency management analysis for updates to VDOT's "Hurricane Lane Reversal Plan" as those updates occur.
2. Provide transportation/emergency management recommendations to VDEM for its work, including participation in Hurricane Evacuation Coordination Workgroup (HECW).
3. Provide transportation recommendations to the Virginia Center for Transportation Innovation and Research (VCTIR) for its evacuation analyses, as those analyses occur.

Resiliency

1. Participate on committees related to planning for sea level rise and climate change. These committees currently include the HRPDC's Coastal Resiliency Committee, the Norfolk and Virginia Beach Joint Land Use Study (JLUS) and the Portsmouth and Chesapeake Joint Land Use Study.
2. Provide assistance to other stakeholders in their climate change and sea level rise planning efforts, such as the USDOT Hampton Roads Climate Impact Quantification Initiative, local and statewide universities and VIMS.

C. End Products

1. WE 1 – Hampton Roads Regional Safety Study – 2019/2020 Update
2. WE 2 – Updated crash databases and GIS shapefiles
3. WE 6 – Safety Performance Measures and Targets included under Task 3.0 - Performance Management
4. WE 7 – Written analysis of and recommended improvements to VDOT's "Hurricane Lane Reversal Plan", as updates are issued.
5. WE 8 – Written transportation/emergency management recommendations to VDEM, e.g. for its RCPT effort.

6. WE 9 – Written transportation recommendations to VCTIR for its hurricane analyses, as draft documents are issued.

D. Schedule

1. WE 1 – 4th quarter
2. WE 2 – Ongoing
3. WE 3 – Ongoing
4. WE 4 – Ongoing
5. WE 5 – As requested
6. WE 6 – See Task 3.0 – Performance Management
7. WE 7 – Ongoing
8. WE 8 – As needed
9. WE 9 – Ongoing
10. WE 10 – Ongoing
11. WE 11 – Ongoing

E. Participants

HRTPO, HRPDC, local governments, VDOT, DMV, VDEM, and other interested parties.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$78,612			\$78,612

8.0 TECHNICAL SUPPORT, RESEARCH, AND SPECIAL STUDIES

8.1 Technical Support, Research, and Coordination

A. Background

The Federal government has mandated that regional transportation planning be cooperative, continuing, and comprehensive. HRTPO staff regularly coordinates with other agencies in carrying out the metropolitan transportation planning process.

Past examples of event-driven and on-going topics which HRTPO staff must address—in coordination with other agencies—by conducting research and analysis for the HRTPO Board have included:

- Unsolicited Public-Private Transportation Act (PPTA) proposals
- Passenger Rail (in response to new federal funding)
- Transit Vision Plan
- Fast Ferry service
- Value Pricing
- Regional Operations Planning
- Mega-Projects (e.g. HRBT)

(For HRTPO support of VDOT's VRTC, see section 9.0)

B. Work Elements (WE)

Work activities include the following:

1. Event-Driven Topics
 - a. Define the problem or question that has emerged.
 - b. Research the experience of others in responding to the problem/question.
 - c. Conduct research and analyses of local issues or event-driven topics such as federal and/or state transportation-related policy and legislation, federal, state, and regional transportation funding, and congestion/value pricing.
 - d. Prepare and analyze alternative solutions.
 - e. Recommend actions to the HRTPO board.
2. Assist federal, state, and local governments with projects, as requested. Typical work includes evaluation of PPTA proposals and preparing project level planning studies.
3. Serve on the Project Steering Team and assist the Hampton Roads Transportation Operations Subcommittee (HRTTO) with oversight of the preparation of the Operations Strategy for Hampton Roads.
4. Work with HRTTO, VDOT, and other stakeholders on any modifications or amendments to the Eastern Region ITS Architecture as necessary.

5. Administer Procedures for Closures at River Crossings – monitor usage of procedures established in FY 2014 for operators to follow when closing river crossings, maintain the email list used by operators to notify others of planned closures, update the volumes in the spreadsheet developed for estimating the impact of closures.
6. Regional Highway and Fixed Guideway Studies - Studies of major regional projects and fixed-guideway transit (feasibility studies, Environmental Impact Statement development, etc.) are being conducted by other organizations: VDOT, HRT, etc. HRTPO staff assists its sister agencies with these studies by participating in stakeholder meetings and providing written reviews of interim work.
7. Special Work for TTAC and HRTPO – HRTPO staff will conduct analyses requested by TTAC and HRTPO. When such analyses do not fall under any other UPWP sections, staff time will be charged to 8.1 Technical Support.
8. Coordinate with military stakeholders and continue planning efforts that build upon the Hampton Roads Military Transportation Needs Study: 2018 Update.
9. Support improvement of intercity rail service, including:
 - a. Develop/modify/analyze alternative models/schedules for 3rd train for Norfolk station.
 - b. Work with DRPT to develop/modify/analyze alternative improvements to existing Hampton Road train service, targeting on travel time, on-train amenities, pricing, etc.

C. End Products

1. WE 1 – Documentation of event driven research and analysis, as necessary.
2. WE 2 – For federal, state, and locality-led initiatives, HRTPO staff will share data and provide written analyses, as requested.
3. WE 6 – For evaluations of major regional projects, HRTPO staff will prepare written comments.
4. WE 7 – For special work for TTAC and HRTPO, documentation will be prepared as necessary.
5. WE 8 – Documentation of coordination efforts, as necessary.
7. WE 9 – Webinars, website updates, social media posts, maps.

D. Schedule

WE 1-9 – The emerging nature of this work precludes establishment of schedules.

E. Participants

HRTPO, VDOT, DRPT, VDEM, locality staffs, and other federal, state, and local agencies.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	CO 5303	TOTAL
HRTPO	\$252,633	\$20,522		\$273,155

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8.2 Active Transportation Planning

A. Background

The importance of active transportation (AT) to a complete multimodal transportation system has been recognized in federal, state, and local policies. Numerous policies, plans, codes, and regulations support increased focus on active transportation to provide health, low cost, and equitable transportation choices for all users of the regional transportation network.

The Linking Hampton Roads (LHR) study will be a multi-year effort, culminating in the region's first stand-alone active transportation plan. The project will identify the region's Principal Regional Active Transportation Network. The Network will enable regional active transportation travel, while benefiting local active transportation trips. The Principal Network will be comprised of regional pedestrian and bicycle parkways and paths and pedestrian activity districts. It will be the highest level classification for bicycling and walking facilities in regional transportation plans, and will include both on- and off-street bicycling and walking facilities. The Principal Network will encourage walking, bicycling, and taking transit by providing safe, comfortable, efficient, and environmentally-friendly ways to get around the region without a car.

In FY20, staff plans to serve the localities and the regional active transportation system by 1) completing the LHR plan, 2) preparing web-based toolbox to promote active transportation, and 3) conducting studies for improving aspects of the AT system.

B. Work Elements (WE)

Planned tasks include:

1. Complete “**Linking Hampton Roads**” (LHR), the regional active transportation plan begun in FY2018:
 - a. Chapter Four: Recommendations
 - b. Chapter Five: Prioritization
 - c. Compile chapters into final report
2. Prepare the Hampton Roads **Active Transportation Toolbox** to promote active transportation by being the go-to website for planners and citizens regionally, state-wide, and nationally with active transportation information:
 - a. The toolbox will provide our local constituents with a place to research funding sources, existing facilities, planned facilities and best practices. The best practices section will include national best applications for active transportation facilities and auxiliary parts, local and statewide examples, and links to national guides and federal regulations.
 - b. The toolbox will also include interactive GIS maps including places to bike/walk across the region.
 - c. It will also provide links to other key stakeholders including local active transportation related advocacy groups and trail foundations.

3. Under guidance from the Active Transportation Subcommittee (ATS), prepare documents to help localities implement the LHR plan and improve aspects of the AT system, e.g.:
 - a. Safe Routes to Schools analysis near elementary and middle schools
 - b. First Mile / Last Mile AT facility analysis for transit stops
 - c. First Mile / Last Mile AT facility analysis for economic centers
 - d. Incorporation of LHR into the 2045 LRTP
 - e. Planning and engineering guidelines for regional bicycle facilities

C. End Products

1. WE 1 – Linking Hampton Roads study - chapters and final report
2. WE 2 – Active Transportation Toolbox
3. WE 3 – AT reports

D. Schedule

1. WE 1 – Second Quarter
2. WE 2 – Fourth Quarter
3. WE 3 – to be determined

E. Participants

HRTPO, VDOT, locality staffs, transit agencies, and the public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$75,505	\$30,906		\$106,411

8.3 Hampton Boulevard Corridor Study

A. Background

Over recent decades, the citizens and government of Norfolk have been concerned about the interaction of modes on the heavily used Hampton Blvd corridor serving the world's largest naval base, one of the two main Virginia ports, a major university, a regional medical center, and multiple neighborhoods:

- Residents have been concerned about the number of trucks using Hampton Blvd., particularly container trucks serving the Port of Virginia.
- ODU and Norfolk schools have been concerned about the safety of pedestrians (especially children) crossing Hampton Blvd.
- Auto and truck drivers have been concerned about delays caused by container trains blocking Hampton Blvd before and after serving the port.

In response, the city and port have taken several actions, including:

- The city has restricted trucks on Hampton Blvd during certain hours.
- The city and port successfully pursued the construction of a grade-separation of the rail line crossing Hampton Blvd near Greenbrier Ave.
- The city and port successfully pursued the construction of the Intermodal Connector, opening 12-21-17 for direct port truck access to/from the interstate.
- The port reconstructed the North Gate complex, allowing trucks direct access to/from the port via the Intermodal Connector.

Recently, the city worked with a Hampton Blvd Task Force (comprised of Port of Virginia, U.S. Navy, Old Dominion University, and civic league representatives) to propose several safety measures along the corridor, implementing some (e.g. protected left-turn signal phases) and not implementing others (including the reduction of regular travel lanes from six to four north of ODU).

In February 2019, the city asked the HRTPO to conduct a corridor study to address the following issues:

- Number of trucks using Hampton Blvd (e.g. impact of Intermodal Connector)
- Safety
- Excessive vehicle speeds

A. Work Elements (WE)

Work activities for the subject corridor—Admiral Taussig Blvd to Redgate Ave—include the following:

1. Review Hampton Blvd studies (provided by the City of Norfolk), including the recent analysis conducted by Norfolk's Department of Public Works.
2. Review the recent improvements proposed and/or implemented by the city.
3. Port trucks:
 - a) Determine the impact of the opening of the Intermodal Connector and the North Gate on Hampton Blvd truck volume (using StreetLight data).
 - b) Estimate port truck travel times on Hampton Blvd. and alternative routes (using StreetLight data).

4. Port trains blocking 3 locations- Hampton Blvd, Granby St, and Little Creek Rd:
 - a. Estimate the vehicle hours of delay due to trains blocking Hampton Blvd. using the city's preemption data from the signal at Terminal Blvd.
 - b. Variable message signs:
 - i. Recommend locations for variable message signs warning drivers of trains blocking the 3 locations.
 - ii. Estimate the cost of these signs (including linkage to the Port) using VDOT planning-level cost guidance.
5. Analyze recent vehicular (as opposed to pedestrian) crash and speed data for the subject corridor and recommend safety and speed improvements as needed.
 - Crash data source: DMV and VDOT
 - Speed data source: INRIX data for corridor segment speeds
6. Coordinate this study with the Hampton Blvd. portion of the ongoing Norfolk – Virginia Beach Joint Land Use Study (JLUS), including any impacts of contemplated concepts on Level-of-Service (LOS) in this corridor.
7. Estimate the impact of a hypothetical lowering of speed limits by 5 mph on travel times for the subject corridor divided into segments north and south of Terminal Blvd.

B. End Products

Hampton Boulevard Corridor Study

C. Schedule

Fourth Quarter

D. Participants

City of Norfolk, Port of Virginia, military, and HRTPO.

E. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$75,384			\$75,384

8.4 Regional and Local Planning Implications of Connected and Automated Vehicles

A. Background

One of the HRTPO core functions is producing a fiscally-constrained Long-Range Transportation Plan (LRTP). The 2040 LRTP was approved by the HRTPO Board in 2016 and staff is in the process of producing the 2045 LRTP.

By 2045, transportation will likely be very different than it is today. One of the most significant changes will involve the use of connected and automated (or autonomous) vehicles. Connected vehicles are vehicles that use any of a number of communication technologies to communicate with the driver, other vehicles on the road (also known as vehicle-to-vehicle communication), roadside infrastructure (also known as vehicle-to-infrastructure communication), or the internet. Automated vehicles – which are also referred to as self-driving vehicles – are vehicles that transport people and goods without direct driver input to control the steering, acceleration, and braking and are designed so that the driver does not need to constantly monitor the roadway.

Connected and automated vehicles are expected to provide a number of benefits, including:

- increasing the capacity of the existing transportation system
- improving safety
- increasing mobility of non-drivers such as the elderly and the disabled, and
- allowing travelers to be more productive.

There are currently a number of issues and unknowns regarding connected and automated vehicles, including:

- the security and privacy of the system,
- funding needed for new transportation infrastructure (especially on the local level)
- the operation of the transportation system when the vehicle fleet is a mix of non-automated, semi-automated, and fully-automated vehicles
- how they will impact vehicle ownership levels
- public transportation usage
- land use planning, and
- how they will impact important facets of the regional economy such as the shipping industry.

This study, which was initiated in FY 2018, and continued in FY 2019, will examine the regional and local planning implications of connected and automated vehicles in Hampton Roads and address many of the benefits, issues, and unknowns addressed above.

B. Work Elements (WE)

Work activities may include the following:

- i. Introduce the concept of connected and automated vehicles.
- ii. Describe the benefits, impacts, and unknowns related to connected and automated vehicles.
- iii. Detail national and statewide efforts to address connected and automated vehicles and any efforts made by other MPOs throughout the country.
- iv. Model various scenarios such as the impacts of increased capacity on the regional roadway network.
- v. Develop recommendations for how the HRTPO and localities should account for connected and automated vehicles in the planning process.

C. End Products

Regional and Local Planning Implications of Connected and Automated Vehicles final report.

D. Schedule

Second Quarter

E. Participants

HRTPO, VDOT, TTAC, Localities, HRTD, VTRC.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL			TOTAL
HRTPO	\$14,258			\$14,258

8.5 Impact of Trails and Sidewalks on Nearby Home Values

A. Background

Staff from Isle of Wight County requested a study of the impact of multi-use paths on “property values along or with direct access to trails” using Hampton Roads data. They noted that such information would be important to:

- Elected officials concerned about real estate taxes (based on property values)
- Citizens concerned about potential negative impacts on their property value

Currently, HRTPO staff plans to compare the sale values of homes sold during the few years prior to trail construction to those of homes sold during the few years after trail construction, controlling for other factors which impact a change in value (e.g. inflation, home type) for the following trails:

- The Virginia Capital Trail (James City County)
- The Elizabeth River Trail (Norfolk)
- The Seaboard Trail (Suffolk)

Therefore, execution of this study is subject to HRTPO staff obtaining real estate sales data for these three localities. Given that real estate sales data is public information, staff assumes that it will successfully obtain the needed data, although localities may charge for their time in preparing the data. (A line item for such expense has been included in the FY20 HRTPO budget.)

In its “Signature Paths in Hampton Roads” study (2016), HRTPO staff employed two studies which found a positive impact of trails on home values:

- “Property Values, Recreation Values, and Urban Greenways” (Lindsey et al., 2004) for trails in Indianapolis region
- “The Impact of Greenways on Property Values” (Nichols & Crompton, 2005) for trails in Austin region

Staff plans to use these and similar studies to develop the final methodology for the subject Hampton Roads study.

In addition, Isle of Wight staff inquired about the impact of neighborhood sidewalks on the value of homes. HRTPO staff plans to meet this need via a review of U.S. literature.

B. Work Elements (WE)

Based on the above preliminary methodology, the following work will be done:

1. Research existing trail impact studies to develop HRTPO methodology.
2. For each subject locality, gather and join a) raw real estate data and b) GIS parcel maps.
3. For each trail, separate sales data into two sets: a) properties near trail, and b) *comparable* properties away from the trail.

4. Calculate change in value for each set, and draw conclusions. Note that a small sample of sales could severely limit the statistical significance of any changes in value due to trails.
5. Review and summarize U.S. literature concerning the impact of neighborhood sidewalks on the value of homes.

C. End Products

A report documenting purpose, background research, methodology, results, and findings.

D. Schedule

Fourth Quarter

E. Participants

Isle of Wight, James City, Norfolk, and Suffolk.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$49,379			\$49,379

8.6 Analyzing and Mitigating the Impact of Tolls at the Midtown and Downtown Tunnels – 2019 Update

A. Background

The Midtown and Downtown Tunnels have been two of the most congested facilities in the Hampton Roads area of Virginia. Traffic queues nearly four miles long were daily occurrences at both facilities during the peak travel periods. To relieve this congestion, construction began in 2012 of an additional two-lane tube at the Midtown Tunnel, rehabilitation of the Downtown Tunnel and the original Midtown Tunnel, and an extension to Martin Luther King (MLK) Freeway. In order to finance the project – which was completed in 2017 – tolling began at the Midtown and Downtown Tunnels on February 1, 2014.

In relation to this construction project, HRTPO staff prepared the *Analyzing and Mitigating the Impact of Tolls at the Midtown and Downtown Tunnels* report. The goal of the study, approved by the HRTPO Board in June 2015, was to compare traffic and transit conditions before and after tolls were implemented at the Midtown and Downtown Tunnels to discover the impact of tolling these facilities on the regional transportation system. In order to achieve this goal, HRTPO staff analyzed:

- Projected traffic impacts (via the Hampton Roads Travel Demand Model)
- Traffic volume impacts
- Impacts on traffic queues and queue clearance times
- Impacts on segment travel times and speeds
- Public transportation impacts

The 2015 study included a post-tolling analysis of traffic conditions prior to the full completion of the construction project. The new Midtown Tunnel, MLK Extension and Downtown Tunnel Rehabilitation have been completed and the rehabilitation of the original Midtown Tunnel was completed in 2017.

The goal of this study is to perform a similar analysis of travel conditions conducted in the FY2015 study to discover the post-construction travel impacts. Work began on this task in FY 2019 and will continue in FY 2020.

B. Work Elements (WE)

Work activities may include the following:

1. Determine traffic volume impacts:
 - a. Weekday volumes
 - b. Peak and off-peak period volumes
 - c. Weekend volumes
 - d. Truck Volumes
2. Determine Traffic Queues and Queue Clearance Times using in-vehicle travel runs.

3. Collect photographs and videos of traffic conditions in the study area.
4. Determine impacts on segment travel times and speeds using INRIX travel time/speed data.
5. Determine public transportation impacts for key routes in the study area.

C. End Products

Analyzing and Mitigating the Impact of Tolls at the Midtown and Downtown Tunnels
– 2019 Update final report.

D. Schedule

Second Quarter

E. Participants

HRTPO, Norfolk, Portsmouth, Chesapeake, VDOT, FHWA, ERC and the public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$35,271			\$35,271

8.7 Economic Impact of Bicycle Facilities in Hampton Roads – Phase Two

A. Background

For FY19, HRTPO staff received a request from Williamsburg to prepare a study of the economic impact of investment in bicycling facilities in Hampton Roads.

In FY19, Phase One of the study was completed, in which staff:

- Studied the techniques of analyses of trails in other regions
- Reported key findings from analyses of trails in other regions
- Calculated the income of local people who bike to work
- Measured existing path lengths in Hampton Roads and competitor cities
- Calculated spending of visitors attending bike events
- Determined and mapped the home location of visitors to local trails
- Enumerated the bike shops in the area and competitor cities

Given that most of the impact studies reviewed in Phase One estimated economic impacts using surveys, staff is proposing—as Phase Two of the study—to conduct a survey with which to estimate the annual amount of money spent locally by visitors drawn to Hampton Roads by the Virginia Capital Trail (VCT).

B. Work Elements (WE)

Under the guidance of the Project Steering Team (PST) established for Phase One, HRTPO staff intends to conduct a survey of users of the Virginia Capital Trail to estimate the annual amount of money spent locally by visitors drawn to Hampton Roads by the VCT.

Count and Survey Location:

In order to estimate annual spending, the survey results will be applied to an estimate of annual trail users. The Virginia Capital Trail Foundation (VCTF) maintains several permanent counters along the trail. Staff intends to use the 2018 annual count from the only counter located in Hampton Roads: the counter located one mile from the Jamestown end of the trail. Given that this count will be applied to the survey results to calculate annual spending, the on-site survey of trail users should be conducted at the location of the counter.

Survey:

- For believability of results, staff proposes a statistically-valid sample size.
- To control the cost of collecting surveys, staff proposes that the survey be conducted when the trail has many users, possibly Summer 2019.

In order to estimate money coming into the region and due to the subject trail, staff proposes that only persons a) who live outside of Hampton Roads, and b) who are visiting primarily to use the trail be asked to complete the surveys.

C. End Products

1. WE 1 – Standard HRTPO report

D. Schedule

1. WE 1 – 4th quarter

E. Participants

HRTPO and members of the Project Steering Team (currently representing Williamsburg, York, Hampton, and Va. Beach).

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	TOTAL
HRTPO	\$43,860		\$43,860

Budget Revised 9-19-19 (See List of Revisions, Page vi)

8.8 Regional Connectors Study

A. Background

During the HRTPO Board Meeting on October 20, 2016, the Board unanimously voted to recommend Alternative A of the alternatives presented in the draft Hampton Roads Crossing Study (HRCs) Supplemental Environmental Impact Statement (SEIS) to the Commonwealth Transportation Board (CTB) as the Region's Preferred Alternative. As part of the same action, the HRTPO Board also requested that the Hampton Roads Transportation Accountability Commission (HRTAC) allocate up to \$7 million toward the cost of further study of the HRCs-SEIS components not included the Preferred Alternative – specifically the I-564/I-664 Connectors, I-664 widening from the I-64/I-264/I-664 interchange at Bowers Hill to the I-64/I-664 interchange in Hampton, including the Monitor-Merrimac Memorial Bridge-Tunnel (MMMBT), and the Virginia Route 164/164 Connector, and to include these projects in the Hampton Roads 2040 Regional Transportation Vision Plan. The HRTAC, at its meeting on October 20, 2016, passed a resolution approving up to \$7 million from the Hampton Roads Transportation Fund (HRTF) for this study.

On December 7, 2016, the CTB passed a resolution that the location of the HRCs SEIS project be approved as presented under Alternative A in the Draft SEIS. The CTB further directed VDOT to work with the HRTPO, HRTAC, and other partners to advance separate studies resolving access issues around Craney Island for the I-564/I-664 Connectors, I-664/MMMBT, and VA-164/164 Connector.

At its meeting on January 19, 2017, the HRTPO Board authorized and directed HRTPO staff to initiate the study and work with VDOT, HRTAC, and other partners to develop a Memorandum of Understanding (MOU) supporting studies on how to move forward with the remaining segments of the SEIS and the Bowers Hill Interchange. During its meeting on March 16, 2017, the HRTAC approved a resolution to provide up to an additional \$4 million in contingency funding to complete the work under the MOU.

B. Work Elements (WE)

In accordance with the MOU, work activities include the following:

1. HRTPO management of "Additional Feasibility Studies" (cost not to exceed \$3 million) to evaluate the following corridors:
 - a. VA-164 – from the VA-164 Connector to I-664
 - b. I-564 Connector – from I-564 to the VA-164 Connector
 - c. VA-164 Connector – from the I-564 Connector to VA-164
 - d. I-664 Connector – from the junction of the I-564 Connector and the VA-164 Connector to I-664 just south of the Monitor-Merrimac Memorial Bridge-Tunnel
 - e. I-664 – from the I-64/I-264 interchange at Bowers Hill to the I-64 interchange in Hampton

2. VDOT management of a study (cost not to exceed \$4 million) under the National Environmental Policy Act (NEPA) process for the Bowers Hill Interchange (the “Bowers Hill Study”).

C. End Products

1. WE 1 – Documentation – including studies, designs, funding analyses – necessary to determine feasibility, permit-ability, and transportation benefits necessary to advance the corridors listed.
2. WE 2 – Completed NEPA documentation for the Bowers Hill Study.

D. Schedule

1. WE 1 – To be determined
2. WE 2 – To be determined.

E. Participants

HRTPO, VDOT, HRTAC, impacted localities, U.S. Army Corps of Engineers, U.S. Navy, Virginia Port Authority, private consultants

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	HRTF	TOTAL
HRTPO			\$1,684,000	\$1,684,000
VDOT			\$2,000,000	\$2,000,000

9.0 HRTPO ADMINISTRATION

A. Background

This task accounts for the administrative support necessary for the maintenance of the Hampton Roads Transportation Planning Organization (HRTPO) processes, including participation in technical committees led by federal, state, and local governments.

Under the *Intermodal Surface Transportation Efficiency Act (ISTEA)* of 1991, the planning and programming responsibilities of metropolitan planning organizations were significantly increased – becoming broader and more comprehensive. Most of the new requirements were continued and others were added or expanded in the *Transportation Equity Act for the 21st Century (TEA-21)*, signed into law on June 9, 1998; as well as the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*, signed into law on August 10, 2005; *Moving Ahead for Progress in the 21st Century (MAP-21)*, signed into law on July 6, 2012; and the current federal transportation act, *Fixing America's Surface Transportation (FAST) Act*, signed into law on December 4, 2015.

The FAST Act, like the previous federal transportation acts, charges the HRTPO with developing transportation plans and programs that provide for transportation facilities and services that function as an intermodal system. The process for developing these plans and programs is commonly referred to as the 3-C Process. The 3-C Process requires that a Continuing and Comprehensive transportation planning process be carried out Cooperatively by states and local governments.

The HRTPO Board has recognized the importance of proactively advising state and national legislators regarding developing legislation related to transportation. The Board created the Legislative Ad-hoc Committee in January 2010 to focus on legislative issues and advise the Board. HRTPO staff monitors developing legislation and works to keep the Board well-informed with regard to potential impacts of such legislation.

This task includes the purchase of four replacement computers at an average cost of \$2700 each to maintain the technical capability necessary to carry out the activities described in the UPWP.

Work under this task includes preparation of agendas, minutes, and other materials associated with meetings of the HRTPO Board and its advisory committees, as well as staff participation in such meetings.

B. Work Elements (WE)

Work activities include the following:

1. Administration of PL, SPR, and Section 5303 grants.
2. Administration of pass-through agreements with Hampton Roads Transit (HRT) and Williamsburg Area Transit Authority (WATA.)

3. Monitoring and providing HRTPO Board briefings on developing and approved federal and state legislation related to transportation.
4. Preparation of an Annual Legislative agenda for submission to the General Assembly.
5. Preparation of a summary of pre-filed General Assembly legislation.
6. Preparation of a summary of approved General Assembly legislation.
7. Coordination of HRTPO attorney comments and recommendations on legislation.
8. Preparation of quarterly and annual financial reports and summaries of progress during the fiscal year.
9. Preparation of intergovernmental reviews, as necessary.
10. HRTPO staff training – may include technical training as well as participation in workshops and conferences.
11. HRTPO participation in statewide and national organizations including the Virginia Association of Metropolitan Planning Organizations (VAMPO) and the Transportation Research Board (TRB).
12. HRTPO participation in meetings of the Commonwealth Transportation Board (CTB).
13. Updating and revising the HRTPO Board Member Handbook, as necessary.
14. Preparation of agendas, minutes, and associated materials for HRTPO Board meetings.
15. Preparation of agendas, minutes, and associated materials for meetings of HRTPO advisory committees and subcommittees, including the following:
 - a. Transportation Technical Advisory Committee (TTAC)
 - b. Transportation Advisory Committee (TAC)
 - c. Community Transportation Advisory Committee (CTAC)
 - d. Freight Transportation Advisory Committee (FTAC) – administrative work to be performed by Virginia Port Authority and HRTPO staffs
 - e. Legislative Ad-Hoc Committee
 - f. Transportation Programming Subcommittee (TPS)
 - g. Hampton Roads Transportation Operations (HRTO) Subcommittee
 - h. Long-Range Transportation Plan (LRTP) Subcommittee
 - i. Passenger Rail and Public Transportation Task Force (PRPTTF)
 - j. Active Transportation Subcommittee (ATS)
 - k. TRAFFIX Subcommittee (TS)

HRTPO staff will provide support to the TS as it oversees TRAFFIX annual budget and work, format and content of TRAFFIX annual report, budget and work revision requests, etc. HRTPO staff support will include:

- Calling meetings with TS chair and TRAFFIX leader to plan agendas.
 - Preparing and transmitting TS meeting agendas.
 - Providing meeting space and lunches for post-TTAC meetings.
16. Participation in technical committees led by federal, state, and local governments. These include, but are not limited to:
 - a. Transportation Research Board (TRB) committees
 - b. VTRC's System Operations Research Advisory Committee (SORAC)
 - c. VTRC's Transportation Planning Research Advisory Committee (TPRAC)
 - d. Regional Concept for Transportation Operations – Traffic Incident Management (RCTO-TIM) Committee
 17. Participation on advisory committees, as appropriate.
 18. Coordination of orientation and other training for HRTPO Board members and members of advisory committees.
 19. Provision of interagency coordination and attending meetings of local governments, local transit operators, and state transportation departments, as well as other agencies, as appropriate.

C. End Products

1. WE 1 – Processed and signed PL, Section 5303, and SPR agreements
2. WE 2 – Processed and signed pass-through agreements
3. WE 3 – Presentation to HRTPO Board, as necessary
4. WE 4 – Annual Legislative Agenda
5. WE 5 – Summary of pre-filed General Assembly legislation
6. WE 6 – Summary of approved General Assembly legislation
7. WE 8 – Quarterly and annual financial and progress reports delivered to VDOT
8. WE 13 – Updates to the HRTPO Board Member Handbook, as necessary
9. WE 14 – Agendas, minutes, and associated materials for monthly HRTPO Board meetings
10. WE 15 – Agendas, minutes, and associated materials for meetings of advisory committees and subcommittees

D. Schedule

1. WE 1 – Grant agreements are generally processed one to two months prior to the beginning of the next state fiscal year
2. WE 2 – Pass-through agreements are generally processed one to two months prior to the beginning of the next federal fiscal year
3. WE 3 – Ongoing
4. WE 4 – Second Quarter
5. WE 5 – Third Quarter
6. WE 6 – Third Quarter
7. WE 7 - Ongoing
8. WE 8 – Quarterly
9. WE 9-13 – Ongoing
10. WE 14 – Monthly
11. WE 15 – As needed
12. WE 16-19 – Ongoing

E. Participants

HRTPO, local governments, HRT, WATA, VDOT, DRPT, FHWA, FTA, other state and federal agencies.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	CO 5303	TOTAL
HRTPO	\$616,090	\$79,425	\$	\$695,515

10.0 TRANSIT PLANNING

10.1 HRTPO Coordination of Regional Transit Planning Process

A. Background

Chapter 856 of the Virginia Acts of Assembly approved May 18, 2018 includes the following description of regional transit planning to be done by HRTPO (§ 33.2-286 Urban transit agency strategic plans, section D):

“In addition to developing and updating a strategic plan pursuant to this section, in all planning districts with transit systems collectively serving population areas of not less than 1.5 million nor more than 2 million, such **transit systems shall develop** a regional transit planning process **coordinated by the federally designated Metropolitan Planning Organization**. Such planning process shall include the identification and prioritization of projects, the establishment of performance benchmarks that incorporate state and federal requirements, the development and implementation of a regional subsidy allocation model, and the distribution of funds solely designated for transit and rail and that are **administered by a regional body** authorized by this Code to enter into agreements for the operation and maintenance of transit and rail facilities.”

B. Work Elements (WE)

For FY20, the Scope of Work for this project includes the following tasks for the HRTPO:

1. Concerning HRT’s **Strategic Transformation Project**:
 1. Facilitating CAO input for the project.
 2. Supporting the project, e.g. via the Regional Transit Backbone prepared in FY19.
2. Lead transit group and/or subgroups (comprised of transit agencies and member jurisdictions) to consensus in developing a **method of conducting a regional transit planning process**, including (but not limited to) division of responsibilities for legislative requirements (from above):
 1. the identification and prioritization of projects
 2. the establishment of performance benchmarks
 3. the development and implementation of a regional subsidy allocation model, and
 4. the distribution of funds solely designated for transit and rail

C. End Products

1. As needed, e.g. CAO meeting administration, backbone preparation.
2. Written method of conducting regional transit planning process (possibly in form of memorandum of agreement between HRTPO, HRTAC and transit agencies)

D. Schedule

1. Per HRT Strategic Transformation Project schedule, planned completion Nov. 2019.
2. Written method of conducting regional transit planning process – 4th quarter

E. Participants

HRTPO, HRTAC, HRT, WATA, Suffolk Transit, DRPT, localities, and others.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	TOTAL
HRTPO	\$18,854	\$60,250	\$79,104

10.2 TDCHR Performance Monitoring and Evaluation

A. Background

The Transportation District Commission of Hampton Roads (TDCHR) is required to meet the demands for public transportation in an effective and efficient manner. The collection of information related to ridership and service efficiencies supports the evaluation of services that, in turn, supports the modification and improvement of existing services and supports the implementation of new services.

B. Work Elements (WE)

The Scope of Work for this project includes the following tasks.

1. **Service Consumption and Performance:** A year end performance report will be developed that Monitor services, collect and assemble information on service characteristics, operating statistics, financial results, service quality, performance measures and ridership data for fixed route, commuter (Express and Work trips) ferry, special services, trolley services, light rail transit, and paratransit services, etc. Data will be used to make adjustments to existing services and to develop recommendations for future services. Data will include boarding and alighting counts, schedule adherence checks, electronic fare box readings, and field surveys
2. **Recommendations and Documentation:** The annual Transportation Service Program (TSP) proposes specific service modifications and new services to each of our six-member cities. Continued compliance with the Americans with Disabilities Act, and Title VI of the Civil Rights Act will also be monitored and evaluated
3. **Monthly and Annual Reports:** These reports include the update to the monthly ridership reports, annual Transit Development Program, and the annual Transportation Improvement Program which contains a capital improvement and the use of flexible funding for innovative and experimental service implementation. The TDCHR staff will continue to coordinate with city and TPO staff to develop service and capital improvement plans through the TSP and TIP planning process.

C. End Products

1. Yearend Service Consumption and Performance Report
2. Annual Transportation Service Program
3. Monthly and Annual Reports

D. Schedule

1. Annual Transportation Service Program (TSP) draft 10/1/2019-- Final 5/30/2020
2. Yearend Performance Report – 12/31/19

3. Monitoring and Ridership report - monthly

E. Participants

HRT and consultant staff as needed

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303	CO5303	TOTAL
HRT	\$150,000	\$19,434	\$169,434

Budget Revised 9-19-19 (See List of Revisions, Page vi)

10.3 WATA Performance Monitoring and Evaluation

A. Background

The Williamsburg Area Transit Authority (WATA), comprised of the Counties of York and James City, the City of Williamsburg, and the Colonial Williamsburg Foundation, was created on August 28, 2008 to provide planning support for the vision of a seamless regional system.

Initiatives planned have resulted in over 2.4 million trips in fiscal year 2017 to citizens, guests and students of the City of Williamsburg, James City County, York County, Surry County, and the College of William and Mary, also connecting service to Hampton Roads Transit in Newport News. Planned initiatives include the following:

- Continue appropriate Trolley service connecting commercial/residential areas of Merchants Square (Colonial Williamsburg), High Street (City of Williamsburg) and New Town (James City County) areas.
- Continue evaluation of workforce commuting patterns for connections between the City of Newport News and the Counties of Charles City, New Kent and Surry to Greater Williamsburg to address a shortage of future workforce required for the food service, retail, warehousing, and tourism and hospitality industries. Evaluation to include transit bus options, active transportation and carpool/vanpools.
- Continue to develop the AVL/GPS to improve safety and security, customer service, communications, management and efficiency.
- Development of a plan for WATA transit facilities. WATA currently leases a facility.
- Continue evaluation of collaboration with other complementary transportation providers in the area for greater mobility for the residents, visitors and tourists in the Greater Williamsburg area.
- Implement initiatives based on the Comprehensive Operational Analysis recommendations and the Transit Development Plan completed in FY 16.
- Actively planning with the Peninsula Agency on Aging and Williamsburg Faith in Action for the establishment of a “one-call” center for mobility services.
- Finalize negotiations for purchase of the administrative and maintenance facility and begin design for site development.
- Finalize site selection for a potential new transfer station in the northern section of James City County.
- Implement an Automated Passenger Counting system.
- The collection and analysis of information to ensure system growth and change meets the needs of the region and communicating the importance of our system’s programs to our local, regional, state and federal partners.

B. Work Elements (WE)

The scope of work that supports this need follows.

1. **Objectives and Measures-** Objectives, goals, and strategies are formulated and established as part of the Transit Development Plan for the Williamsburg Area Transit Authority, as well as to meet planning requirements of our local, state and federal partners. Quantifiable measures and strategies to develop these objectives are established and monitored on a month-to-month basis and incorporated in monthly, quarterly, mid-year, and annual reports to the Board, respective Advisory committees and State and Federal partners.
2. **Service Consumption and Performance -** Service monitoring and data collection on service characteristics (i.e. trip purpose, fares, revenue miles, passenger miles, etc.), service efficiency (cost per mile, revenue to expense ratio, etc.), service effectiveness (riders per mile and hour, etc.), and service quality (i.e. service disruptions and accidents, customer complaints, vehicle support, etc.) will increase our information database to help the Board shape policy and meet new State and Federal requirements. The utilization and administration of the Authority's Intelligent Transportation System (ITS) provides more data and information, which will support the Authority's performance efforts.

Attention to vehicle support will result in an emphasis on performance standards improving customer convenience and safety. Maintenance support standards for ramps/lifts, heating and air conditioning, passenger information and distance between in-service failures will be evaluated. Data is collected with the assistance of administrative and operations personnel on a daily, weekly, and monthly basis, and incorporated in monthly, quarterly, and annual reports. Data is used to adjust established goals and objectives.

Implementing an Automatic Passenger Counter (APC) system beginning January 2019 and scheduled for completion early FY2020.

3. **Evaluate Proposed and Existing Service -** Annual evaluation of the performance of existing services entails the computation of performance data and ratios to determine service effectiveness and efficiency, congestion mitigation, and air quality improvement measures. Performance data developed will be in line with accountability measures reported to the Virginia Department of Rail and Public Transportation and for the Federal Transit Administration's National Transit Database. These values are analyzed on a trend basis as needed.

Continued evaluation of service changes based on the Comprehensive Operational Analysis and Transit Development Plan completed in FY 16. Providing training to several key staff from WATA and localities on transit service planning through the National Transit Institute.

4. **Bus Stop Improvements-** Safe, convenient stop locations conducive to customer needs require continued evaluation and partnerships with the localities, business community, and VDOT. Evaluation includes an annual review of Authority's assets' condition (bus stops poles, placards, benches, pull-offs, shelters, and bus signage) and the location of those assets, to be then used for a management and replacement plan. Other aspects of this annual review will include an assessment of amenities in and around stops and evaluating the need for pedestrian

improvements, such as crosswalks, lighting and bike racks. Such factors as engineering, environmental, usage, and pedestrian safety and ADA accessibility will be analyzed. Additional resources for shelters through grants and VDOT shelter engineering standards require policy decisions as to locations.

5. **System Revenue/Partnership Evaluation-** WATA implemented a fare increase in FY 17. WATA will continue to review the fare structure, including, daily, weekly and monthly passes. Encouraging the use of the WATA Customer Service Center & Store should reduce the bus dwell time, driver cash handling, and reduce customer service incidents, while increasing total fare income. Quarterly review of WATA's current bus advertising and plans for private support and revenue alternatives will be presented for Board approval to reduce the dependency on governmental support. Partnerships with local agencies and businesses will be maintained and developed to support ridership and increase revenue. Explore more convenient payment options either online, kiosk-based, or both.
6. **Develop Organization Internal Support** – WATA has assumed functions once provided by local government including risk management, safety, and information technology. Special emphasis is placed on introducing technology to absorb components of these functions. The development of an updated staffing plan to meet future organizational needs will improve staff effectiveness and our customers' experience. WATA has hired staff that has the skills to begin to develop and implement a formal internal training structure. This expertise will afford WATA the ability to implement training and documentation for national mandates for safety, security, and emergency preparedness. This also includes formalizing and revising employee evaluations with supporting documentation accrued throughout the year. Evaluation of new processes is needed to ensure the most efficient and effective management of these functions.
7. **Federal Data Requirements-** The federal reporting system continues in the TrAMS data system. Reports are developed in a number of formats to accommodate local, state, and federal government needs are provided on a monthly, quarterly, and annual basis. These mandated reports are necessary to show resource usage to various levels of government that support transportation. Federal requirements for Limited English Proficiency, Disadvantaged Business Enterprise and Title VI will require continued attention. In FY 2017, WATA prepared several documents for the Triennial Review, which was finalized and officially closed by FTA. WATA will begin preparing for the next Triennial Review in FY2020.
8. **Administration Facility and Transfer Station Facility** - In FY 2017, WATA updated the 2010 Facility Feasibility Study which included updating the location and breadth of new or improved facilities and steps to move forward. Negotiations are underway for purchase of the administration facility property and information is being exchanged with FTA regarding potential Incidental Use of the property after purchase. Inclusion in the Hampton Roads Transportation Planning Organization Transportation Improvement Program (TIP), Hampton Roads 2040 Long Range Transportation Plan and State Transportation Improvement Program (STIP) remains necessary. WATA has engaged a consultant for site selection of

property for a transfer station facility in the northern section of the WATA service area.

C. End Products

1. WE 1 – FY 2017 WATA completed the Transit Development Plan (TDP) and Comprehensive Operating Analysis. The TDP is updated by staff annually as required and provided to the WATA Board of Directors for approval. These reports will promote efficient management and operation of the Authority. Quarterly rider advisory committee meetings will ensure that the Authority is quantitatively and qualitatively meeting the performance requirements of the public and our riders.
2. WE 2 – Staff performance reports to help measure efficiency (i.e. cost per mile and per hour, revenue to expense ratio, etc.), service effectiveness (i.e. trips per mile and per hour), and service quality (i.e. revenue service interruptions and accidents) for the Authority to evaluate and plan the effective operation of a regional network. Reports generated from data will demonstrate to the public, Board, and local, state, and federal partners the efforts taken to ensure efficient and effective management of transit services. Implement APC system for all buses.
3. WE 3 –Annual Transit Development Plan update in coordination with HRTPO funded projects supports enhanced delivery of services across the service area, provides transit to underserved and areas without service, plus provides transit - oriented development alternatives and active transportation (i.e. Trolley service, connection between transit and bicyclist) decreasing the single occupancy cars on our roadways. Service designs include additional amenities to encourage rider support and economic development. In FY 17, WATA implemented system route changes and new fare structure. WATA is currently studying the redesign of its system to provide better transit options for customers and to eliminate long travel and wait times.

The Transit Development Plan annual update continues to support the following:
a) Increase integration and connectivity between regions and transit properties to meet growth exceeding local, state and national trends
b) supports federal job initiatives policy and comprehensive plans of supporting local governments
c) Protect environmental objectives for mixed use transit-oriented development and
d) increase mobility of people across regions that may have limited auto access and/or transportation options.

Continued monitoring and utilization of the ITS system will enhance reporting capabilities. This will provide the Authority additional and “real time” information for its use in becoming more efficient and effective for our customers and localities. Additional service (Trolley, Sunday, and Frequency) will be regularly monitored with data and statistics to ensure services are effective and they reduce road congestion in the region.

4. WE 4 – Annual inventory of all WATA assets (bus stops, shelters, facilities) with summary providing condition, security and safety assessment, replacement need and requirements for expanding public amenities. Summary report will aid resource planning for Federal, State and local entities and ensure that public transit

assets are preserved and distributed equitably in accordance with Title VI. Quarterly meetings with the region's government planning staffs will ensure key factors are initiated in a manner that best meets the growing demand of these assets for the region. Utilizing DRPT Transit Asset Management (TAM) system to comply with Federal regulations.

5. WE 5 – Monitoring and evaluation of WATA's restructured pass program for riders. Monitoring of WATA's vehicle advertising program for interior and exterior vehicle advertisement. Products developed promote management efficiency by helping contain contribution requirements by local, state and federal partners. Continued work with major employers, including those in the tourism, entertainment, and hotel industry to increase economic development and revenue, share costs, and increase service awareness and usage.
6. WE 6 – Staffing plans for WATA have progressed. The purpose is to ensure that organization functions continue to be managed in an efficient and effective manner. WATA continues to operate with support for functions previously managed through the umbrella of local government. With the implementation of the ITS System, WATA will phase in the use of Dispatch personnel to regularly monitor and manage the system. The Authority updated its Procurement Manual to ensure its contents reflect the Virginia Public Procurement Act (VPPA) and the Federal Transit Administration (FTA) requirements and guidelines. Employee training development plans continue to be implemented and updated.
7. WE 7 - DRPT performance reports and National Transit Database on-going monthly and annual reports. Updates of Limited English Program, Disadvantaged Business Program and Title VI. Title VI updates will include GIS mapping of services ensuring equitable distribution of service mobility to all populations.
8. WE 8 – WATA is currently in negotiation and site selection phases for facility properties and intend to develop and A Request for Proposal (RFP) for Architectural/Engineering Services for facilities.

D. Schedule

1. WE 1 –Quarterly, mid-year, and annual reports.
 2. WE 2 – Ongoing monthly, quarterly, mid-year, and annual reports/presentations to WATA Board. Finalize implementation of APC system July 2019.
 3. WE 3 - Ongoing quarterly, mid-year, and annual Transit Development Plan reports/presentations updates
 4. WE 4 – Bi-annual internal review of replacement/expansion needs in Capital Improvement Program and inclusion in twenty year update of operating/capital needs. Quarterly meeting with planning departments.
 5. WE 5 – Continued updates of ITS System Implementation. Monitoring of the Authority's advertising Program.
 6. WE 6 – Ongoing review of staffing needs.
 7. WE 7 – Ongoing activity
-

8. WE 8 – Monthly reports to Board. Finalize administration property purchase June 2019. Finalize site selection for northern transfer and begin property negotiations July 2019. RFP for A&E services released in July 2019.

E. Participants

WATA Board, Advisory Committee, Consultant, General Public, regional stakeholders, HRTPO, DRPT, HRT, FTA, and other local, state, and federal agencies staff.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303		TOTAL
WATA	\$200,000		\$200,000

10.4 Suffolk Transit Performance Monitoring

A. Background

Suffolk, Virginia is a mixed used community of approximately 429 square miles and a population of approximately 90,400. The City is comprised of a downtown central district comprised of commercial, industrial and residential areas, a predominately suburban, commercial and tech district in the northeast and agricultural areas in the south and west. The City is experiencing significant growth and has a strong, vibrant economy.

The City of Suffolk currently operates a transit system (Suffolk Transit) in the downtown and northeastern parts of the City with connecting service between. Suffolk Transit (ST) is a division of the Department of Public Works and provides public transit service and paratransit service for its citizens. The City owns the buses but utilizes a service contractor as the service provider for operations.

Suffolk Transit's system currently operates six (6) routes identified as Green, Orange, Red, Yellow, Purple and Pink on the weekdays. Beginning in July of 2018 Suffolk Transit extended weekday hours on the Yellow Route, the Red Route and the Pink Route. Suffolk Transit also began operating five (5) route identified as Green, Orange, Blue, Purple and Pink on Saturdays. Weekday service runs from 6:30 am to 6:30 pm and Saturday service runs from 7:30 am to 4:30 pm.

The City maintains a fleet of eight (8) Champion Challenger 19 passenger body-on-chassis buses and two (2) Starcraft Allstar 19 passenger body-on-chassis buses. The Vehicles are equipped an Intelligent Transportation System (ITS) that is contracted through ETA Transit. This system provides for vehicle tracking and Automated Passenger Counters (APCs).

The current service contractor works closely with City staff to provide the best transit service possible. Suffolk Transit reported 113,084 unlinked passenger trips and logged over 244,000 revenue miles for FY2017 and 110,659 unlinked passenger trips with roughly the same number of revenue miles for FY2018.

Funding sources include Federal and State transit grants, local contributions, vehicle advertisement revenue and fare box recovery.

B. Work Elements (WE)

The Scope of Work for this project includes the following tasks.

1. WE 1 – Routine Service Consumption and Performance Monitoring– Service monitoring and data collection on service characteristics (i.e. trip purpose, fares, revenue miles, etc.), service efficiency (cost per mile), service effectiveness (riders per mile and hour, etc.) and service quality (i.e. service disruptions and accidents, customer complaints, etc.). Information gathered will allow staff to identify developing issues and increase our ability to help Suffolk Transit shape policy, improve customer service and meet State and Federal requirements. Through the utilization of Suffolk Transit's Intelligent Transportation System

(ITS) and Automated Passenger Counters (APCs) more data is being collected, which will support the agency's performance efforts.

2. WE 2 – Annual financial and performance reporting – Information collected from performance monitoring, financial system information and the annual Comprehensive Annual Financial Report (CAFR) will be used to compile reports required by state and federal agencies. Annual financial audit for NTD.
3. WE 3 –Evaluation of Existing, Proposed and Potential Service – Annual evaluation of the performance of existing service and coordination with the most recent Transit Development Plan. Performance data developed will be in line with accountability measures reported to the Virginia Department of Rail and Public Transportation and for the Federal Transit Administration's National Transit Database (NTD).

C. End Products

1. WE 1 – Internal performance reports to help measure service efficiency, service effectiveness, and service quality which will allow Suffolk Transit to monitor ongoing system and financial performance and compile reports as requested for other departments or outside agencies. APCs will also be evaluated through these performance reports to ensure compliance with NTD reporting regulations.
2. WE 2 – Compliance with annual State audit and National Transit Database reporting to demonstrate compliance, financial condition and performance metrics to state, and federal partners.
3. WE 3 – Coordination with contractors while the FY 19 Transit Development Plan is being developed. Continued monitoring of the ITS system will enhance reporting capabilities. Additional service will be regularly monitored with data to ensure services are effective.

D. Schedule

1. WE 1 – Ongoing departmental monthly reports and annual reports/presentation to City Council and outside organizations upon request.
2. WE 2 – The State Audit and NTD have monthly, quarterly and annual reporting requirements. Additional requirements upon request.
3. WE 3 – Suffolk Transit is still in the development of a new Transit Development Plan in FY18. It is anticipated to be completed in late FY19. Updates to this plan will be performed annually. Additional activities may be completed upon request.

E. Participants

City of Suffolk, HRTPO, DRPT, FTA and other local, state, and federal agencies staff.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303		TOTAL
SUFFOLK TRANSIT	\$10,000		\$10,000

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10.5 HRT Disadvantaged Business Enterprise (DBE) Planning

A. Background

As a recipient of over \$250,000 in Federal Transit Administration (FTA) grant funds, Hampton Roads Transit (HRT) is required to have a DBE program in place and submit any significant changes in the program for approval. As a result, it is necessary for HRT to measure/identify the availability and utilization of DBEs in the external procurement practices of HRT. Procurement opportunities should also be reviewed and projected on an annual basis. There is also a need to review on a continuing basis HRT's compliance with the DBE program requirements codified at 49 CFR Part 26. In particular, HRT is required to establish a monitoring and enforcement mechanism to ensure that work committed to DBEs at contract award or subsequently is actually performed by the DBEs to which the work was committed. DBE participation on relevant procurements must also be reviewed to determine if the DBE is performing a commercially useful function as a part of DBE program compliance. The ongoing assessment/evaluation process is critical to ensure full compliance with the federal requirements and continuation of funding from the FTA.

B. Work Elements (WE)

Work activities include the following:

1. Identify DBE procurement opportunities and plan outreach initiatives to recruit local and specialty DBE firms to participate in HRT's procurement process. As procurements become available, the DBE office will work with area development centers to conduct workshops which focus on the opportunities available and how one is able to position themselves to do business with Hampton Roads Transit. This process will continue throughout the year and its frequency is based on HRT's need for contracted services at any given time or community requests for HRT's participation in minority business outreach initiatives.
2. Development and research into the determination of the agency's overall triennial goal and means by which to realize such an established goal. Although the goal should be submitted once every three years, HRT will work continuously to ensure that the goal remains feasible on a year to year basis.
3. Conduct a review of the subcontracting opportunities for DBE firms on new procurements and set feasible individual contract goals.
4. Conduct periodic DBE Commercially Useful Function (CUF) reviews to make sure that DBEs are participating and performing the assigned tasks on procurements with established DBE goals.
5. Conduct a review of payments to ensure that prime contractors promptly pay DBE subcontractors for satisfactory performance of their contracts no later than 10 days from receipt of each payment HRT makes to the prime contractor.
6. Submit semi-annual reports via FTA TrAMS: June 1st and December 1st.

C. End Products

1. Increase in the number of DBE certified firms in the Virginia UCP resulting in more contracting opportunities for small businesses within both the Hampton Roads region and the Commonwealth of Virginia.
2. Established relationships with area business development centers and increased awareness of DBE opportunities at Hampton Roads Transit.
3. Assurance that the agency's overall goal satisfies federal requirements.
4. Documented compliance for DBE participation on HRT procurements.
5. Documented compliance for DBE prompt payment on HRT procurements with DBE goals.
6. Accountability via Semi-Annual Reporting via FTA's TrAMS.

D. Schedule

The completion of the items detailed is as follows:

- | | |
|--|-----------------------------------|
| 1. DBE Outreach Events | Ongoing |
| 2. Establish Contract Specific DBE Goals | Ongoing |
| 3. FTA TrAM DBE Report Submission | Semi-Annually (June 1 and Dec. 1) |
| 4. DBE CUF Reviews | Ongoing |
| 5. DBE Prompt Payment Reviews | Ongoing |
| 6. Overall Agency DBE Goal | Annual Evaluation: Dec. 1 |

E. Participants

HRT staff.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303	CO5303	TOTAL
HRT	\$10,000	\$582	\$10,582

Budget Revised 9-19-19 (See List of Revisions, Page vi)

10.6 Regional Transportation Demand Management (TDM) Program (TRAFFIX)

A. Background

The transportation demand management program for Southeastern Virginia (TRAFFIX) is a coordinated regional approach to the mitigation of traffic and traffic congestion and to maintain or improve the quality of life for residents by encouraging ridesharing (carpooling/vanpooling), transit and ferry usage, telecommuting, and working with city/regional comprehensive planning agencies for incorporation of TDM alternatives in land use in policy decisions.

This program covers an extensive geographic area to include all Hampton Roads cities and counties, Virginia's Eastern Shore, and the northern counties of North Carolina. TRAFFIX has been functionally organized as follows:

- Sales/Outreach (to include GoPass365 and Vanpools)
- Marketing
- Research, Management, Planning, and Organization
- Administration

The Transportation District Commission of Hampton Roads administers TRAFFIX. It receives and administers program grants. A TDM Traffix Oversight Subcommittee (TOS) is comprised of staff members of HRT, FHWA, VDOT, DRPT, HRTPO, and the region's cities and counties. All are voting member of the TTAC. They provide policy guidance regarding program management. TRAFFIX Program management includes organizational development, strategic planning, program budget/funding, program development, program implementation, coordination, supervision, and special task oriented discussions.

- The TOS reviews the annual work program, provides input, monitor budgets and implementation progress, evaluate program results and suggest changes for more efficient and/or effective operation.
- The TOS-meets three times a year, specifically:
 - i. Feb/March meeting: Ideas for upcoming FY work programs
 - ii. May/June meeting: Work program and budget for approval
 - iii. Oct/Nov meeting: Annual Report (from Ron Hodges)
- The TOS consists of the aforementioned representation and oversees the administration of the TRAFFIX contract, which will be issued through DRPT.

Defined activities for the year include the development of detailed Forecast for GoPass365, Goals and Objectives including a description of work activities, associated staff requirements, budget and evaluation criteria for each activity. The Goals and Objectives are approved by the TOS. The Goals and Objectives are presented and approved by the HRTPO Transportation Technical Advisory Committee. The Goals and Objectives are presented and approved by HRT's Commissioners. Updates will be provided at each TOS meeting. The report will include the following: Activity Description, Progress Update, Budget, and percent complete, as well as periodic reports and program updates will be made to stakeholder groups through various social media components and newsletters.

B. Work Elements (WE)

Work activities include the following:

1. Sales (Outreach)

- a. Identify employers, public and private schools, and any other entity that can benefit from ridesharing (carpooling/vanpooling), teleworking, using public transit, walking/biking to and from work or school in an overarching effort to reduce or mitigate congestion, reduce pollution, provide a more stress free ride to and from work, and enhance the overall quality of life in Southeastern Virginia.
- b. GoPass365: Originally this program was designed to teach young riders and choice riders how to use public transportation through a unique program designed to enhance ridership and remove significant numbers of SOV off the road, reduce pollution and provide a more stress free ride to work. This is done through an employee or school paid program that does not cost the rider a fare. This program continues to grow in membership with a very large potential customer base of over 100,000 GoPass365 riders. One of our largest member, Tidewater Community College, has entered into its third year membership with two more years to go before renewal. TCC and Newport News Shipyard together offers more than 50,000 potential users (students and employees) for ridership. These are two of our largest GoPass365 customers.
- c. In 2016, TRAFFIX has merged the job duties associated with finding new park and ride locations with the job description for the Commuter Outreach positions. The result has been one outreach staff member balancing a merged job description that encompasses both the Outreach Commuter position and a Park and Ride position.
- d. Vanpool Subsidies: TRAFFIX is collaborating with vanpool vendors vRide and Enterprise to solicit new vanpools in the area. Subsidies have been given to start and continue vanpools and increase ridership.

2. Marketing

The TRAFFIX Program Director will be looking at more creative types of marketing with more emphasis on Millennials, Generation Y and X type as well as employers.

TRAFFIX will lead a Marketing effort to market and advertise, in conjunction with the Navy, a Transportation Incentive Program throughout the region. TRAFFIX will advertise the merits of the TIP program through newspapers, bus wraps, Light Rail articulated wraps, billboards, the Navy newspaper *Flagship*, and other creative methods.

TRAFFIX will advertise and market all special events throughout the year to include:

- Earth Day
- Bike Month/Day
- Try Transit Week
- Dump the Pump Day
- Rideshare Month
- Transportation Fairs
- Other events with the community

3. Research, Management, Planning and Evaluation

Organization development must continue to be necessary for TRAFFIX and will include staff recruitment (if necessary), training, and development of support materials. Coordination within HRT and with other transit and non-transit agencies, best practices, and feedback from on-the-job learning will present minor challenges.

C. End Products

1. Prepare a report to the TRAFFIX Oversight Subcommittee a minimum of three times a year and to the TTAC once a year reflecting the identification of employers and schools who are participating in the TDM effort to include VMT's not traveled, pollution not going into the air, etc. GoPass365 information about the GP365 is also reported. TRAFFIX also completes an Annual Report which is completed within the first quarter after the conclusion of the previous Fiscal Year.
2. To provide a report and information to the TOS and TTAC once a year on the advertising "flight plan" for advertising and the actual visuals to review. These include TV and Radio Commercials, creative brochures, billboards, flyers, WEB Banners and other media opportunities that brand the TRAFFIX name.
3. Develop a tracking report reflecting all alternatives used by employees through the outreach program. Daily reporting by staff will insure Outreach goals and objectives are met. These reports filter into the overall TTAC and TOS reports as noted in "End Products" item 1 above.

D. Schedule

1. Report to TS in the winter, summer and fall months with topics shown in "Background". Report to TTAC in January/February for Annual Report.
2. Marketing and Advertising "Flight Plan" begins in February and continues until October of any given year. The "flight plan" is a schedule of marketing and advertising activity to include radio and TV commercials, Internet banners, billboards advertising, flyers, brochures and a host of other media-type advertising.

3. This is an on-going mission with clear benchmarks along the way to assure compliance with Goals and Objectives of the Outreach Coordinators, TRAFFIX Administrator, TRAFFIX Management.

Note: It is important to know that the activities of the TRAFFIX staff is very fluid with continuous motion designed to convince Single Occupancy drivers NOT to drive alone or to help them make decisions why it's best to work from home, to walk, ride a bike or join the NuRide data base and be matched with other like riders looking for ways to save money and reduce stress through carpooling, vanpooling, or teleworking.

E. Participants

Internal Participants:

- Three Outreach Coordinators
- One TRAFFIX Administrator
- One Van Pool Manager/Administrator
- One Director of the TRAFFIX Program
- Marketing Staff
- Customer Service Staff

External Participants:

- Local Governments
- State Governments
- Area Colleges, Universities, and Institutes of Higher Learning
- 176 major Hampton Roads Employers in FY 2017
- Contacted/contacting over 100,000 employees (employee base) annually (FY 2017) through radio, TV, billboards and/or flyers.
- Participants encompassing the Hampton Roads Metropolitan Planning Area, the Virginia Eastern Shore, and Northeastern North Carolina
- Newport News Shipbuilding and the area's military installations

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	CMAQ		TOTAL
HRT	\$986,503		\$986,503

10.7 TDCHR Financial Planning

A. Background

This task provides the administrative support necessary for the management of capital programs, financial planning, and grant administration.

B. Work Elements (WE)

Work activities include the following:

1. Prepare budgets and financial documents for the various grants and program requests that HRT submits
2. Perform financial analysis and reviews affecting cost and revenue structures
3. Prepare financial documentation in connection with short and long-range service and capital plans
4. HRT is supposed to review its fare policy and pricing on a biennial (every other year). Staff will review its fare pricing structure and make recommendations to the TDCR at the conclusion of the fare analysis

C. End Products

1. WE 1 – Annual Budgets
2. WE 2 – Financial Analysis
3. WE 3 – Short and Long-range Capital Plans
4. WE 4 - Fare change analysis Report

D. Schedule

1. WE 1 – Annual Budgets – to be adopted by 5/30/20
2. WE 2 – Financial Analysis – monthly analysis
3. WE 3 – Short and Long-range Capital Plans – draft by 1/31/20, final by 5/30/20
4. WE 4 – Fare change analysis – As needed

E. Participants

HRT and Consultants

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	LOCAL		TOTAL
HRT	\$150,000		\$150,000

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10.8 TDCHR Public Involvement/Public Information/Publications

A. Background

The Transportation District Commission of Hampton Roads (TDCHR) will continue to develop, establish, and carry out a public involvement process as part of the metropolitan transportation planning process pursuant to the requirements of 23 CFR 450; 49 CFR 613, 635; and 49 U.S.C. Chapter 53, Section 5307.

B. Work Elements

1. Develop and execute public participation activities to inform, engage and involve the public in decision making processes related to the planning and delivery of public transportation services.
2. Disseminate information to the general public and local agencies regarding regional public transit, and assist in coordinated information dissemination through cooperation and collaboration with other stakeholders.
3. Develop and implement strategies, tools and tactics to provide information to HRT customers, specific communities of interest, and the public-at-large concerning public transit services and the processes and programs that support the development and delivery of those services.
4. Develop opportunities to educate the public on HRT and public transportation initiatives and projects (including daily operations; fare and service changes; transit development plans and corridor studies; capital projects; and human services transportation) through regular participation in public forums, workshops, special events, community activities, focus groups, and use of surveys, Web 2.0, and other means.
5. Create and maintain a computer database to facilitate the public involvement and information process.
6. Provide information based on requests from the general public.

C. End Products

WE 1-6 – Public communications materials, a computer database, and educational programs to be produced by HRT/TDCHR.

D. Schedule

WE 1-6 – Ongoing activities.

E. Participants

HRT, general public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	LOCAL			TOTAL
HRT	\$140,000			\$140,000

10.9 HRT Transit Strategic Plan (TSP)

A. Background

The Virginia General Assembly passed legislation in 2018 that requires transit agencies operating in urbanized areas to develop a Transit Strategic Plan (TSP) to ensure that transit services are planned in a way that better meets the mobility needs of their communities. This gives those agencies an opportunity to evaluate and update their services and networks to respond to changes in demand.

The main goal of a TSP is to create a strategic blueprint outlining desired changes that will improve the provision of transit services throughout each agency's service area within existing funding structures. This is an opportunity for each agency to look at their system as a blank slate, re-examine the priorities of stakeholders and riders, and make difficult choices concerning where and how to provide services in an efficient and cost-effective manner.

The TSP is intended to replace the previously required Transit Development Plan (TDP) for agencies that are required to complete one. With this in mind, the TSP will provide a foundation for future funding requests, directly advising each agency's programming process in the years that follow its adoption. The planning horizon for a TSP is 10 years; this includes the fiscal year for which funds are being sought and the subsequent nine (9) years

As a result of this new legislation, HRT has been selected as one of two transit agencies in the Commonwealth of Virginia to prepare a TSP.

The purposes of the TSP are as follows:

1. To serve as a strategic planning, management, and policy document for transit operators in urbanized areas;
2. To identify areas for improved operational efficiency;
3. To assess the type of operating services for different service areas and needs;
4. To review and assess the performance of routes, route design standards, and schedule standards;
5. To examine transit needs in order to identify ways to improve access for underserved areas;
6. To inform DRPT of transit operators' capital, operating and maintenance needs;
7. To provide the basis for inclusion of an operator's capital and operating programs in planning and programming documents such as: the Six Year Improvement Program (SYIP), Statewide Transportation Improvement Program (STIP), Transportation Improvement Program (TIP) and Constrained Long Range Plan (CLRP);
8. To provide a clear understanding of unmet or unfunded needs;
9. To develop and track the progress of short-term, mid-term and long-term goals for transit in the region;
10. To continually aim to improve efficiency and effectiveness of public transportation services.

B. Work Elements (WE)

Work activities include the following:

Plan Requirements

The TSP will follow the chapter structure specified below. It should be noted that the Commonwealth Transportation Board (CTB) may periodically modify the guidance document requirements below to reflect changes in legislative mandates, other legislative changes, new organizational needs, or federal or state trends.

Chapter 1: System Overview and Strategic Vision

This chapter will provide a high-level overview the HRT and provide an overview of HRT's strategic priorities.

System Overview

This section should include the following basic overview information:

1.1.1 History:

A brief history of the HRT system (e.g., year of formation, facilities and fleet development, changes in service focus areas, key milestones and events).

1.1.2 Services Provided and Areas Served:

A description of all fixed route, demand response and connecting services for each transit mode provided (i.e. light rail, bus rapid transit, express bus, local bus, ferry service).

1.1.3 Current/Recent Initiatives:

A description of ongoing initiatives that HRT is currently undertaking that affect the provision of transit services in the service area. This will include the introduction of new infrastructure or guideway (e.g. light rail or bus rapid transit systems), reconfiguring the bus transit network, the introduction of new technology and/or propulsion systems (such as hybrid or electric vehicles), upgrading stops and station, etc.

Strategic Vision

This section will set the stage for the chapters that follow by determining the overall vision for transit services adopted by the agency, as well as its goals, objectives, and service standards. This will include discussion of the provision of transit service, including, but not limited to:

- **Ridership vs. Coverage** – description of the agency's priorities for striking a balance between services designed for high ridership and services designed for high geographic coverage;

- Walking vs. Waiting – how HRT balances service quantity (i.e. the number of routes accessible from any given location) and service frequency (i.e. minimizing wait times on a few select routes);
- Boardings vs. Distance Travelled – a discussion of whether the number of passenger boardings or the total number of passenger miles are better determinates of ridership success;
- Peak Hour vs. All-Day Service – a discussion of how the agency values service during different time periods, and whether frequent, peak-hour service or less frequent, all-day service is a priority;
- Serving Specific Population Groups – a discussion of whether certain population groups are targeted and how best to reach them.

1.2.1 Goals and Objectives

Taking into account the topic areas mentioned above, HRT will review and update its service goals and objectives, as well as the process for establishing and reviewing them. The updates will reference agency specific goals and objectives, as well as statewide funding and capital goals.

1.2.2 Service Design Standards

This section will present adopted service design standards for all modes and service types (i.e. rail, local bus, commuter bus, demand response, etc.) based on adopted goals and objectives. The service design standards will address all facets of transit such as scheduling and route planning; service reliability; system efficiency; safety and security; customer service; multimodal connectivity; and regulatory compliance.

Chapter 2: System Performance and Operations Analysis

This chapter will provide an in-depth evaluation of the existing transit system and how it performs when compared to the Strategic Vision. The analysis will identify strengths and areas for improvements that will be addressed by specific improvements or modifications listed in the following chapter. This also includes the opportunity for agencies to rethink the design of their existing transit network in order to identify ways to improve operational efficiency.

Transit needs that are identified through this analysis will be addressed by “opportunities for improvement” in each step listed below. Each of the “opportunities for improvement” will be focused on maximizing system performance, efficiency, or coverage within existing funding structures.

2.1 System and Service Data

A summary of the existing transit system and service standards, including results from intercept surveys, and documentation of local support for public transit. This will include the following items:

- Current fiscal year data on the system, including: service area population and density, service area square mileage, operating costs, number of vehicles in peak

service, number of vehicles available for peak service, ridership, revenue hours, total hours, revenue miles, level of service (days of the week operated, trips per day and average headway) and directional route mileage;

- Description of route design standards;
- Description of schedule standards;
- Survey Results: (To be completed at least once within each 5-year TSP update cycle) Includes information on customer demographics, customer satisfaction, Title VI compliance related information, and origin-destination data;
- Support for transit: If necessary, consult with key regional stakeholders (e.g. MPO/PDC staff, local elected officials and other stakeholders) and the public to determine the level of support for transit within the community and to identify transit needs.

1.2 Evaluation of Transit Market Demand and Underserved Areas

2.2.1 Transit Demand and Underserved Area Evaluation

This section will provide an overview of factors influencing demand for transit within and outside of the existing service areas. This will include the following elements:

- An analysis of existing land use, employment, population, and demographics (e.g. the location and prevalence of population groups including: minority groups, older adults, those with limited English proficiency, and persons with disabilities), and discussion of how these groups effect transit demand and/or the propensity to utilize public transit services;
- Projected employment and population growth over the next 10 years, and a discussion of how this may be change transit needs in and around the existing service area;
- An analysis of opportunities to expand service to underserved areas, including:
 - An analysis of areas within the existing service area; and
 - An analysis of areas outside of the existing service areas.

2.2.2 Transit Demand and Underserved Area Opportunities for Improvement

Based on the evaluation of transit demand and underserved areas provide “*Opportunities for Improvement*” which include the following:

- A description of areas with high transit demand and underserved areas that would benefit from additional service and a description of areas with low transit demand that may have too much service;
- A description of specific solutions to any gaps or service deficiencies for fixed-route and demand response services, which will be incorporated into Chapter 3.

2.3 Performance Evaluation

2.3.1 Performance Evaluation

The development of performance standards based on adopted goals and objectives for both fixed-route and demand response services, and measure the existing performance of the system against these standards:

- System-wide and route-level performance standards for each mode and/or type of service (e.g. local, express, or commuter service) for fixed route and demand response service.
- A three-year retrospective analysis of performance including trend analysis for the performance measures defined by statewide policy for state operating assistance.

2.3.2 Performance Based Opportunities for Improvement

Based on the performance evaluation, an analysis of “*Opportunities for Improvement*” focused on maximizing ridership within existing funding structures which includes the following:

- A description of deviations from adopted service standards and describe proposed remedies, including service expansion and/or contraction;
- A description of specific solutions to any gaps or service deficiencies for fixed-route and demand response services, which will be incorporated into Chapter 3.

2.4 Operating and Network Efficiency Evaluation

2.4.1 Efficiency Evaluation

Provides a comprehensive analysis of operating efficiency, including an assessment of the existing transit network. At a minimum, this must include the following material:

- An analysis of the *frequency*, *span*, and *ridership during different time periods* for fixed route service;
- An analysis of *recorded speeds* of fixed route service;
- An analysis of the *reliability* and *on-time performance* of fixed route service;
- An analysis of *reliability*, *on-time performance*, and *ridership during different time periods* for demand response service;
- An analysis of the transit network design and network connectivity as it relates to these measures of operating efficiency and the Strategic Vision presented in Chapter 2.

2.4.2 Efficiency Based Opportunities for Improvement

Based on the operating and network efficiency evaluation, provide “*Opportunities for Improvement*” focused on maximizing efficiency within existing funding structures, which include the following:

- A description of deviations from adopted service standards and describe proposed remedies, including service expansion and/or contraction;
- A description of specific solutions to any gaps or service deficiencies for fixed-route and demand response services, which will be incorporated into “Chapter 3: Strategic Plan.”

2.5 Analysis of Opportunities to Collaborate with Other Transit Providers

2.5.1 Collaboration Analysis

This section will include a discussion of opportunities to further coordinate and collaborate with other transit providers operating services in the vicinity, including:

- A description of other service providers with nearby or overlapping service areas;
- The identification of additional coordination and collaboration activities that could improve efficiency in the provision of transit services (e.g. mergers, transfers, or deduplication of services; providing a regional fare media and/or payment system; providing joint training to personnel; developing joint procurement agreements; providing shared customer service and/or administrative functions; etc.).

2.5.2 Collaboration Based Opportunities for Improvement

If specific opportunities are identified, HRT will provide “*Opportunities for Improvement*” which include the following:

- A description of each opportunity for collaboration, the parties that would need to be involved, and the processes that would need to take place to implement such changes, which will be incorporated into Chapter 3;
- Demonstration of buy-in from all of the transit agencies involved.

Chapter 3: Planned Improvements and Modifications

This chapter will contain a prioritized list of improvements and modifications to existing services that HRT plans to make over the following ten (10) years. The improvements outlined here should directly address the “opportunities for improvement” identified in the previous chapter, along with other known needs that address agency goals and regulatory requirements.

3.1 Planned Service Improvements

A description of fixed route and demand response services HRT intends to provide over the next 10 years, and identify necessary improvements to service.

- Transit service improvements will address transit needs identified by:
 - Adopted goals, objectives, and standards
 - “Opportunities for Improvement” identified in Chapter 2, and
 - State and Federal legal and regulatory requirements

- Each planned service improvement will include a separate description showing how it will support an identified need from one of sources listed above;
- An estimate of future ridership should be provided using either of the following approaches:
 - A model for any proposed fixed route or demand response services for other similar type and size systems in Virginia; or
 - By applying one or more generally employed ridership proxies, such as the number of riders per bus-hour that is based on actual transit agency ridership characteristics.

3.2 Prioritization of Planned Service Improvements

HRT will assign a desired time-frame for implementation of each project and estimate capital and operations costs. Focus will be placed on projects that can be funded under existing funding structures. If a desired project will require additional funds, the source of additional funds (SMART SCALE, Discretionary Grant Programs, etc.) will be noted.

- Time-frames will be organized into the following categories
 - Short-term transit improvements (1 to 3 years)
 - Mid-term transit improvements (3 to 10 years)
 - Long-term transit improvements (beyond 10 years)
- Capital and operating cost estimates associated with any potential service expansions or modifications should be prepared using standard vehicle acquisition and operating cost information for systems of a similar type and size;
- Description of any planned facility improvements or capital projects to improve operations;
- Discussion of whether or not the planned or proposed capital and/or service project(s) are currently contained in the STIP, SYIP, and/or CLRP and if not, when the project is expected to be submitted for inclusion in these documents;
- Mid- and long-term projects will be considered part of the agency's long term vision;
- Large Urban Requirement: In addition, HRT will coordinate with the HRTPO on planning and include prioritization and regional funding allocations for transit and rail in the region.

3.3 Service Development

A description the levels of service planned using a table to show service hours and service miles.

- Separately identify fixed route service (by mode and type of service), demand responsive service (by type of service), and expansion services (by mode and type of service):
 - The table will clearly identify service expansion and/or reduction by the year of planned deployment and/or elimination.
 - There will be a rational relationship between the information portrayed and Chapter 2 of the TSP.

- Where reductions in service levels are required to achieve a balanced operating budget, a description of the reductions and an assessment of their impact on the affected service areas and communities;
- Description of any planned service changes in response to the most recent federal Title VI report and/or FTA Triennial Review;
- Discussion of any additional, current, or anticipated policy, planning, funding, or operating issues that may affect the operations of the existing or planned transit system;
- A current schedule for projects, showing completed and anticipated milestone dates.
- Description of any new programs to coordinate with TNCs, and discuss any policy changes, funding or capital projects needed for implementation.

Chapter 4: Implementation Plan

The Implementation Plan lists steps required to carry out the operations and services described in Chapter 4. The implementation plan also will reference the approved Transit Asset Management plan to guide the schedule for replacing and/or increasing rolling stock and facilities to maintain a State of Good Repair (SGR).

4.1 Asset Management

Since HRT receives federal funding from the Federal Transit Administration (FTA), we will maintain a Transit Asset Management (TAM) plan for their rolling stock, non-revenue vehicles, and facilities, and other equipment. A description of the policies set forth in the applicable TAM plan for HRT, including the following:

- Policies for replacement, rehabilitation, retrofitting, expansion and reduction of the revenue and non-revenue fleet to carry out the implementation plan above.
- Policies for maintenance or replacement of the vehicle maintenance and operations facilities.
- Policies for passenger facilities, infrastructure, or amenities such as bus stops, shelters, or stations.
- Policies for updating technology and ITS such as CAD/AVL systems, APCs, scheduling software, fare processing equipment, and data processing hardware or software.

4.2 Capital Implementation Plan (CIP)

The CIP will provide a detailed implementation plan for meeting the capital needs of the agency. This plan will take into account the current asset plan detailed above and the planned service developments outlined in Chapter 3. Other than state of good repair or replacement bus purchases, which will also be detailed within the implementation plan, each implementation step will be tied directly to a planned service improvement or development and identified fund source.

Chapter 5: Financial Plan

In the financial plan, service costs are projected and financial resources are identified. Consequently, it is through the development of the TSP's financial plan that HRT

determine which service improvements can be realistically achieved and when those service improvements should be implemented. The financial plan will include:

- “Baseline” level of service at the time of the TSP preparation. Committed service changes will also be defined, with their expenses and revenue separately identified in the operating and capital financial plan tables;
- Capital and operating budget forecasts; federal, state, regional, and local revenue projections; fare policies, labor or service agreements, competitive demands on funding, and regional priorities and policies;
 - Show projected cash flow needs, including any anticipated difficulties, and approved or anticipated decisions on bond financing.
 - Identify funds that have been programmed, allocated or received, and funds that have not been secured;
 - Include the source of funds and amount from each source for the last five years;
 - Use the recently approved Six Year Improvement Program (SYIP) to help with current and future estimates.
- The capital and the operations budget must be sustainable and generally balanced each year over the period of the TSP, using currently available or reasonably projected revenues;
- All capital and operations expenses and revenues stated in year of expenditure dollars, with the assumed escalation factor of at least three percent per year;
 - All sources of revenue shown in the operations and capital plans should be identified individually;
 - All assumptions that relate to expenditure and revenue estimates must also be documented;
- A narrative explaining any major changes in service hours and miles due to deployment of new service or major service reductions; changes in fare revenue due to changes in the level of service; changes in expenses due to changes in the level of service, and changes in expenses due to a labor or service contract changes;
- Where increases in revenues (e.g., fares, sales taxes, general fund revenues) are required in order to sustain service levels, the steps and timelines needed to achieve the revenue increases, and the policies and actions that will be taken if the proposed revenues do not materialize;
- Planned fare increases and decreases, and/or changes in fare policies, including the years these changes are planned to take effect. Also describe planned changes in inter-operator transfer agreements and/or regional policy on fare coordination;
- Significant service expansion or reduction, and the introduction of new service;
- Reserves available for operations and changes to reserves over the period of the TSP, including anticipated unallocated reserves;
- In addition to future year forecasts, the Appendix should include a three-year retrospective of operating and capital expenses and revenues (provide audited budgets if available).

Appendix A: Agency Profile and System Overview

The appendix will provide a detailed overview of the transit agency and system. This should including the following elements:

A.1 History

Provide a brief history of the transit system (e.g., year of formation, facilities and fleet development, changes in service focus areas, key milestones and events).

A.2 Governance

Provide an overview of the governance process, governing body, and decision makers involved in the transit system. This should include:

- Type of governance (e.g., city, joint powers authority, transit district);
- The composition and nature of representation of the governing body (including the number of members). Indicate if members are elected or appointed and if appointed, how; what agencies and/or groups do members represent (e.g., cities, county, general public);
- A list of current members and their terms; and
- A description of any advisory committees that provide direct input to the governing body.

A.3 Organizational Structure

Provide a brief description of the organizational structure and staffing including:

- An organizational chart that identifies departments and reporting relationships. The names of key management personnel should be provided in the organizational chart;
- Identification of all contracted transportation services (including the name of contractors and length of current contracts); and
- Identification of the labor unions representing agency employees (including the length of current contracts).

A.4 Services Provided and Areas Served

Describe all fixed route, demand response and connecting services for each transit mode provided (i.e., commuter rail, heavy rail, light rail, bus rapid transit, express bus, local bus, ferry service) including:

- The areas served and the peak vehicle requirement for each type of service provided (i.e. any express bus, radial, circulator services);
- Details of any services provided with funding and/or oversight partnerships with other agencies or organizations;
- Any bicycle or pedestrian accommodations provided;
- How the service is deployed to meet the Americans with Disabilities Act (ADA) requirements;
- Any bus stop and shelter placement guidelines; and
- Additional transportation services in the area that may impact transit and its connections.

A.5 Fare Structures, payments, and purchasing

Describe the fare structure and payment methods for each mode of transit provided for both fixed route and demand responsive services. Describe how and where customers can purchase fare media. Include information on the following:

- Single fare (e.g., adults, seniors, student/youth);
- Discounted or multi-ride fares/passes (e.g., adults, seniors, student/youth);
- Changes in fares since the last TDP (include the date instituted) and the reason the fare structure was changed;
- Transfer agreements if applicable;
- Customer payment methods (Cash, magnetic strip paper fare cards, smartcards, credit cards, mobile apps, etc.); and
- Fare media purchase locations (website, mobile app, ticket vending machines, commuter store, etc.).

A.6 Transit Asset Management – Existing Fleet and Facilities

On July 26, 2016, FTA published a Final Rule for Transit Asset Management in Federal Register Volume 81, Number 143. The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure. Transit providers have the option to develop their own plans or, depending on their characteristics, use DRPT's Transit Asset Management group plan.

In this subsection, provide status of provider's Transit Asset Management plan or, if applicable, reference the use of the state Transit Asset Management Plan as the chosen alternative.

Provide a high level overview of existing fleet and facilities, including:

- Type number of vehicles used;
- The location of maintenance, storage, and parking facilities;
- The presence of guideways and their location;
- The location fueling stations.

A.7 Transit Security Program

Describe all security plans and programs that are in place to protect riders, employees and general public, including:

- System security and emergency preparedness plan(s);
- Fare inspection;
- Security features on vehicles;
- Security features at transit stations and facilities;
- Security training programs and drills or exercises; and
- Public Awareness programs and campaigns.

A.8 Intelligent Transportation Systems (ITS) Programs

Describe any intelligent transportation systems (ITS) programs for the agency and any technology projects to improve efficiency and operations and provide information to customers.

Include information on:

- Computer aided dispatch (CAD) or automatic vehicle locator (AVL) systems;
- Automatic passenger counters (APC);
- Traffic signal priority (TSP) system;
- On-board cameras;
- Trip planners;
- Scheduling and run cutting software;
- Maintenance, operations and yard management systems;
- Information displays;
- Real time arrival; and
- Information to mobile devices or applications.

A.9 Data Collection and Ridership/Revenue Reporting Method

Describe the agency policies for collecting, processing, verifying, storing and reporting ridership and revenue service data. Include information on:

- Electronic registering fireboxes (ERF);
- Cash fare boxes (rural systems only);
- Automatic passenger counters (APC) and status of any APC calibration/validation efforts made for NTD reporting;
- Manual count including free fares;
- Scheduling software;
- Accounting/payroll systems;
- Mobile data terminals (MDT) for demand response service;
- Automatic vehicle locator (AVL) system;
- Odometer readings or driver logs if used for mileage and hours;
- Operating expense and revenue data including fares and revenue from leases, advertising, contract service and other sources;
- Agency accountability policy;
- On-Line Grant Administration (OLGA) performance data submission;
- Executive director or board certification of adherence to standards and accuracy of data submitted to OLGA;
- National Transit Database (NTD) data submission practices (or explanation of why agency does not submit data to the NTD); and
- Financial audit review of verification method.

A.10 Coordination with Other Transportation Service Providers

Describe any coordination with transit service providers in adjacent jurisdictions, Transportation Network Companies (TNC), taxi companies, human service providers, bikeshare systems, carshare companies, etc. including designating pickup and drop off at stations or transit centers, schedule coordination, fare agreements, programs to subsidize fares, programs to utilize TNCs for senior or disabled service, or other initiatives.

A.11 Public outreach/ engagement/ involvement

Describe your agency's public outreach and involvement process including outreach relative to service schedule or fare changes, service expansion, and reduction.

A.12 Current Initiatives

Describe any ongoing initiatives that your agency is currently undertaking that affect the provision of transit services in your area. This can include the introduction of new infrastructure or guideway (e.g. light rail or bus rapid transit systems), systematically reconfiguring the bus transit network, the introduction of new technology and/or propulsion systems (such as hybrid or electric vehicles), upgrading stops and station, etc.

C. End Products

1. Full TSP and related CIP for FY2020-FY2029 will be developed to reflect the results of the tasks above and follow the report format as stated in the DRPT Transit Strategic Plan Requirements document.
2. Annual update to the TSP/CIP will be developed to reflect the results of the tasks above and follow the report format as stated in the DRPT Transit Development Plan Requirements document.

D. Schedule

The ten-year TSP is anticipated to be completed in 12 months with an estimated completion date of January 2020.

E. Participants

HRT, DRPT, HRTPO and associated Consultants.

A. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303 CO	5303	State/Local	TOTAL
HRT/Consultant	\$9,558	\$65,000	\$1,020,000	\$1,094,558

Budget Revised 9-19-19 (See List of Revisions, Page vi)

10.10 TDCHR Feasibility/Corridor Studies

A. Background

Feasibility and corridor studies will be conducted for the corridors specified under Work Elements. This will involve the TPO, VDOT, DRPT, HRT, local governments, FHWA, FTA and environmental, resource and permit agencies. The funding amounts reflect the total estimate to complete the respective studies, which may be multi-year tasks. There will also be a reasonable opportunity for citizen participation in this cooperative process.

Feasibility and Corridor Studies are continuing for the evaluation of transportation improvements within the TDCHR Service Area. Continued project development and planning are based on TPO and FTA approval, with the potential for project funding agreements between HRT, City and State Governments, and FTA for construction.

B. Work Elements (WE)

Work activities include the following:

1. Peninsula Multi-Modal Development Corridor Study (PMDCS)

The corridor planning project identified areas in need of high capacity, fixed guideway transit connectivity in Hampton and Newport News, Virginia. The study defines Bus Rapid Transit (BRT) as the transportation technology and focuses on BRT's benefits of mobility, infrastructure, and placemaking in planned high commercial and residential density areas and areas limited by increasing roadway congestion. The project needed to solve mobility challenges for existing and future development on the Peninsula as well as to provide better high-performance transit connectivity to other cities in the Hampton Roads region.

The planning work initiates and completes the Documented Categorical Exclusion (CE) under the National Environmental Policy Act (NEPA) regulations for fixed guideway corridors on the Hampton Roads Peninsula. This effort provides extensive information necessary to further advance planning of the project. The effort will evaluate the potential environmental impacts of alignments with potential connections between Newport News Shipbuilding, Hampton Coliseum area, Downtown Hampton, Peninsula Town Center, Oyster Point Area of Newport News and other areas as identified by stakeholders and data analysis. The planning work includes the refinement of the project's Purpose and Need and the identification and selection of the locally preferred alternative (LPA) for Bus Rapid Transit on the Peninsula. Associated bus service improvements and park and ride facilities will be included in the analysis.

2. West Corridor Alternatives Analysis (WCAA) for Naval Station Norfolk High Capacity Transit Extension Study (Naval Station Norfolk Transit Extension Study – NSNTES)

Utilizing guidance from the FTA, HRT has completed planning activities for the Alternatives Analysis in the West Corridor of Norfolk. The final report for the Norfolk Westside Transit Study was completed in 2018. HRT's efforts to identify a viable alternative in the West Corridor led to a "No-Build" solution on the West side of Norfolk. With the results from this Study, HRT initiated a Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA). The DEIS on the East side of the City of Norfolk continued the analysis of reasonable alternatives for a fixed guideway transit extension between the TIDE light rail system and Naval Station Norfolk.

3. Naval Station Norfolk Transit Extension (NSNTE) DEIS

Activities included the work to develop a Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA) regulations based on recommendations from the pre-NEPA corridor level studies. The DEIS continues the analysis of reasonable alternatives for a fixed guideway transit extension between the TIDE light rail system and Naval Station Norfolk and the identification and the selection of the locally preferred alternative (LPA). These efforts will advance the work identified in the NSNTES Study (2015) and the WCAA Study (2018), refine the alignment in the selected corridor, and identify the transit technology. The DEIS under the NEPA regulations will support future work for potential entry into FTA Project Development. This work will also provide extensive information necessary to further advance planning and development of the project. Associated bus service improvements and park and ride facilities will be included in these analyses.

C. End Products

1. PMDCS Work Element end product is the Documented Categorical Exclusion/NEPA Report. Future end products may include engineering and design work elements. The project is estimated for completion in FY2020.
2. WCAA Work Element – project completion.
3. NSNTE Work Element end product is the DEIS estimated for completion in FY2021. Future end products may include a FEIS, and Engineering work elements.

D. Schedule

1. PMDCS Work Element end product Pre-NEPA Report on Potential Alternatives for Future Study was completed in third quarter CY2018. Schedules for future end products including a CE, and Engineering work elements are dependent on identification of funding sources and the results of the NEPA Report.
2. WCAA Work Element project completed in FY2019.

3. NSNTES Work Element End Product DEIS is estimated for completion in late FY2021. Schedules for future end products including a DEIS, FEIS, and Engineering work elements are dependent on identification of funding sources and the results of the DEIS.

E. Participants

Participants for Work Elements 1-3 include HRT, associated consultants, DRPT, and/or FTA.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	CMAQ/RSTP	Other City/State Funding	ELEMENT	TOTAL
HRT	2,746,000	-	PMDCS	2,746,000
HRT	80,000	-	WCAA	80,000
HRT	-	7,700,000	NSNTE -DEIS	7,700,000

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11.0 VDOT REGIONAL PLANNING

A. Background

The Transportation and Mobility Planning division (TMPD) is responsible for ensuring the development of long range transportation plans across the Commonwealth that promote a safe, efficient and effective transportation system. TMPD's planning focus is at the statewide level, addressing the accessibility and mobility needs of people and freight on the interstate and primary highway systems. However, with TMPD support, VDOT's Hampton Roads District Planning Office is responsible for maintaining the federal metropolitan planning process, conducting small urban area transportation studies, and conducting corridor-level planning studies that support the project development process. The Hampton Roads District Planning section carries out the charge of maintaining the federal metropolitan process through the review of, and assistance with, the development and execution of related work elements in the HRTPO's UPWP. Those specific required tasks are noted in the following work elements.

B. Work Elements (WE)

Work activities include the following:

1. Highway System Monitoring and Review

Maintain highway inventory, provide traffic data, check highway construction plans for conformance with approved HRTPO CLRP Plan and consistency with other HRTPO documents, intergovernmental review process, site plan reviews, review transportation studies, work cooperatively with HRTPO on development of traffic forecast for existing and proposed facilities.

Develop and maintain a current inventory of the existing regional highway system. Provide traffic data for input to the transportation plan update process, corridor studies, highway projects and environmental impact studies. Review and comment relative to the conformance of highway construction plans with current transportation plan. Process Notices of Intent and Applications as required by the Intergovernmental Review Process. Address transportation impacts associated with site plan proposals. Review transportation studies and other documents developed as part of the transportation planning process. Review and monitor the data as this system is a data resource to various planning activities.

2. Vehicle Occupancy Counts Conducted at Selected Locations on the Major Highway Facilities Throughout the Region

These vehicle occupancy counts will provide a measure of the results the regional ride-sharing efforts are having on vehicle occupancy and help in planning HOV programs. Occupancy counts will be provided at various locations at different times to be used for auto occupancy factors to adjust the person trips in the long range planning process throughout the Hampton Roads Region as requested annually.

3. Monitor HOV Facilities and Congestion on the Virginia Beach-Norfolk Expressway (I-264) and I-64

Several data items will be collected to evaluate and monitor the HOV lanes on I-264 and I-64 for effectiveness. Since the HOV restrictions have returned on I-264, and the new HOV lanes have opened on I-64, this activity involves the following:

- Hold meetings of the TRAFFIX Oversight Subcommittee
- Conduct vehicle occupancy counts on I-264 and I-64, four locations on the Peninsula and eight locations on the Southside
- Conduct travel time and delay runs on I-264 and I-64, Southside and Peninsula
- Prepare reports containing comparative data items

4. Provide assistance to HRTPO, local jurisdictions, and other agencies, via technical support and coordination, concerning transportation (including bicycle and pedestrian issues) to support the HRTPO process.

- Monthly coordination meetings with local jurisdictions
- Hold quarterly Hampton Roads District Pedestrian and Bicycle Advisory Committee (PABAC) meetings
- Prepare and present reports regarding VDOT-sponsored transportation activities as requested.

5. Provide Review, Assistance, Support, Processing or Coordination of:

- HRTPO Quarterly and Annual Financial Reports
- Function Classification Updates
- Congestion Management Process
- Regional/Freight Planning activities
- Project-level planning, environmental and alternatives assessment
- Long-Range Planning process
- Regional Long-Range Plan and State Plan consistency
- Transportation Improvement Program
- Unified Planning Work Program
- Transportation Air Quality and Planning activities
- Transportation Database management activities, including GIS data
- Transit Planning Activities
- Public participation program, including Title VI
- Bicycle and Pedestrian Activity
- Preparation of Annual Progress Report
- Support on various HRTPO committees and subcommittees

C. End Products

Effective and Efficient Hampton Roads TPO process that is fully certifiable by FHWA and FTA according to the federal regulations as outlined in the FAST Act.

D. Schedule

Ongoing Activity

E. Participants

HRTPO, VDOT, DRPT, HRT, WATA, FHWA, and local governments

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	SPR		TOTAL
VDOT	\$546,650		\$546,650

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12.0 HRTPO CONTINGENCY FUNDING

A. Background

The HRTPO Contingency Funding task has been included in the FY 2020 UPWP to provide a source of contingency funding for unforeseen activities related to public participation, potential filling of vacant staff positions during the year, or consultant contracts associated with UPWP tasks. This item may also be used as a source of funding for new UPWP tasks that may be approved by the HRTPO Board during the course of FY 2020.

B. Work Elements

Work elements associated with HRTPO contingency funding will be included under the appropriate UPWP task. New UPWP tasks may be created at the discretion of the HRTPO Board, in which case the associated work elements will be included under the new task.

C. End Products

End products associated with HRTPO contingency funding will be included under the appropriate UPWP task. New UPWP tasks may be created at the discretion of the HRTPO Board, in which case the associated end products will be included under the new task.

D. Schedule

Schedules associated with HRTPO contingency funding will be included under the appropriate UPWP task. New UPWP tasks may be created at the discretion of the HRTPO Board, in which case the associated schedules will be included under the new task.

E. Participants

Participants associated with HRTPO contingency funding will be included under the appropriate UPWP task. New UPWP tasks may be created at the discretion of the HRTPO Board, in which case the participants will be included under the new task.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL		TOTAL
HRTPO	\$742,051		\$742,051

Budget Revised 9-19-19 (See List of Revisions, Page vi)

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13.0 Rural Transportation Planning

A. Background

The HRTPO, in cooperation with VDOT, will continue to develop an ongoing transportation planning process for the rural areas of Hampton Roads, including Surry County and portions of the City of Franklin and the Counties of Gloucester and Southampton.

VDOT allocates part of the State Planning and Research (SPR) funding to provide annual transportation planning assistance for non-urbanized areas within the Commonwealth. The Rural Transportation Planning (RTP) Program was created to aid the State in fulfilling the requirements of the State Planning Process to address the transportation needs of non-metropolitan areas. SPR funds appropriated under 23 U.S.C. 307(c) are used in cooperation with VDOT and the Commonwealth of Virginia for transportation planning as required by Section 135, Title 23, U.S. Code. These Federal funds provide 80% of the funding and require a 20% local match.

In FY 2020 each planning district commission or regional commission will receive \$58,000 from VDOT's Rural Transportation Planning Assistance Program and each planning district commission or regional commission will provide a local match of \$14,500 to conduct rural transportation planning activities. This resource may be supplemented with additional planning funds, but note that the arrangement of all such funds involves development of a scope of work, approval, and other coordination in the VDOT Transportation Mobility and Planning Division (TMPD) administrative work programs.

The scope of work shall include specific activities as requested by VDOT and/or the Federal Highway Administration. The scope of work may also include activities or studies addressing other transportation planning-related issues that may be of specific interest to the region. The criteria for the determination of eligibility of studies for inclusion as part of this work program are based on 23 U.S.C. 307 (c), State Planning and Research.

During FY 2020, the HRTPO will carry out the following activities:

Program Administration

Rural Transportation Planning (RTP) Administration

The RTP program is designed to facilitate regional participation and build consensus on transportation-related issues through a continuing, comprehensive, and coordinated planning process. This task provides the administrative support necessary for the management and maintenance of the RTP program activities.

This task includes the training of staff as well as the maintenance of GIS software licenses, data, and equipment in order to maintain the technical capability necessary to carry out the activities described in this task.

Program Activities

1. Rural Long-Range Transportation Plan

The HRTPO, in cooperation with VDOT, will continue the statewide initiative begun in FY 2007 to develop and maintain regional long-range transportation plans in rural areas that complement those in the metropolitan areas of the State.

In January 2012, the HRTPO Board approved and adopted the Hampton Roads 2035 RL RTP. In FY 2017, HRTPO staff updated the RL RTP to the horizon year 2040, approved by the HRTPO Board in September 2017. In FY 2020, HRTPO staff will continue to maintain the current 2040 RL RTP.

2. Performance Management

Based on VDOT's 2005 proposal to use the Rural Transportation Planning Assistance Program to achieve regional long-range planning for rural areas that complement efforts in the metropolitan areas of the State, the HRTPO will continue including its rural localities in its Performance Management efforts, including the regional Congestion Management Process (CMP).

An update to the *Congestion Management Process - System Performance and Mitigation* report was released in October 2014. This update included an analysis of traffic volumes and speeds, historical trends, congestion, travel time reliability, and related issues on the rural CMP network. HRTPO began preparing an update to the Hampton Roads *Congestion Management Process* report in FY 2019 and will continue this work in FY 2020. Similar to the previous Congestion Management Process report, this study will include roadways in the rural localities.

Since 2012, HRTPO has also prepared the *Hampton Roads Annual Roadway Performance Report*. This annual report includes average weekday traffic volumes, an analysis of roadway speed data collected by INRIX, and an analysis of peak period roadway congestion levels. This document also includes major roadways in the rural localities.

3. Regional Safety Planning

In October 2013, HRTPO released the Hampton Roads Regional Safety Study: Crash Trends and Locations report, which updated the trends in crashes at the jurisdictional and regional levels, and detailed the number and rate of crashes on Interstates and at intersections throughout the region. HRTPO followed in July 2014 with the Hampton Roads Regional Safety Study: Crash Analysis and Countermeasures report, which analyzed high-crash locations and recommended countermeasures to improve safety.

HRTPO began preparing an update to the Hampton Roads Regional Safety Study report in FY 2019 and will continue this work in FY 2020. Similar to the previous safety planning efforts, this study will include roadways in the rural localities.

4. Regional Freight Planning

In FY 2018, HRTPO released an update to the Hampton Roads Regional Freight Study report. The Regional Freight Study includes an analysis of the movement of freight to, from, and within Hampton Roads for all transportation modes, and the movement of trucks both within Hampton Roads as well as through the gateways of the region. Both of these components included the rural localities.

5. Regional Bridge Planning

In FY 2018, HRTPO prepared an update to the Hampton Roads Regional Bridge Study report. The Regional Bridge Study includes an analysis of bridge characteristics and conditions, deficient bridges, bridge funding and projects, and costs related to bridge maintenance and replacement. All of these components include the bridges within the rural localities.

6. Technical Assistance and Coordination

Upon request, and in coordination with VDOT and/or local governments, the HRTPO will provide technical assistance in transportation planning and analysis in accordance with needs identified by rural localities. This task will also include the cost to print any materials related to rural transportation planning.

7. Technical Assistance to the Multimodal Planning Office

In addition, HRTPO will provide support to the Office of Intermodal Planning and Investment, a division of the Office of the Secretary of Transportation.

B. Work Elements

Work activities may include the following:

Program Administration

Rural Transportation Planning Administration

- Administer transportation planning work program activities.
- Complete necessary contracts, invoices, progress reports, correspondence, and grant applications in support of the work program.
- Prepare agendas, minutes, and other materials associated with meetings related to Rural Transportation Planning, as well as staff participation in such meetings.
- Maintain GIS software licenses, data, and equipment.
- HRTPO staff will attend GIS and other technical training as it relates to rural transportation planning.

Program Activities

1. Rural Long-Range Transportation Plan
 - Maintain and update the 2040 RL RTP as needed.
 - Assist rural localities in conducting outreach in order to increase awareness of the transportation planning process as needed.
2. Performance Management
 - Update the CMP database with the most current traffic counts and roadway characteristics, including those roadways in the rural areas.
 - Update the various transportation databases that cover all aspects of the transportation system including roadway use, bridges, aviation, rail, American Community Survey (ACS) data, etc.
 - Update the *HRTPO Congestion Management Process Report*, which will include an analysis of rural roadways.
3. Regional Safety Planning
 - HRTPO staff will produce an update to the *Hampton Roads Regional Safety Study*, which will include major roadways in the rural areas.
 - HRTPO staff will continue to maintain and update crash databases and shapefiles for major roadways in the rural areas.
 - HRTPO staff will participate in statewide and regional safety-related committees, including the steering committee for the Strategic Highway Safety Plan update.
 - HRTPO staff will participate in roadway safety audits conducted by the State and its consultants as requested.
4. Regional Freight Planning
 - HRTPO staff will continue to maintain and update a database of truck volumes and percentages for roadways in rural areas.
5. Regional Bridge Planning
 - HRTPO staff will continue to maintain and update the bridge condition database for bridges in the rural areas.
6. Technical Assistance and Coordination
 - Assist localities as needed in the development of detailed transportation plans as part of the local comprehensive plan update.
 - Provide technical assistance as needed to rural localities in the areas of multimodal planning, transportation GIS planning, project prioritization, etc.
 - Assist VDOT as needed in the development of transportation plans relating to the rural localities in Hampton Roads.
 - Participate in VTrans webinars and SMART SCALE regional meetings as necessary.

- Participate in meetings with VDOT staff regarding Title VI and Environmental Justice compliance.
- Participate in outreach meetings and provide/review data as requested by VDOT throughout the fiscal year; this includes participating in the Fall Transportation Meeting.
- Participate with MPOs and VDOT on meeting performance measure goals.
- Provide VDOT's Transportation Mobility and Planning Division – Central Office with updated Travel Demand Management Plans when submitted to DRPT.
- Assemble bicycle and pedestrian recommendations from comprehensive plans and standalone bicycle and pedestrian plans into a GIS shapefile. TMPD will provide a standardized format
- Assist VDOT's Transportation Mobility and Planning Division with updating a database with information from localities comprehensive plans.

7. Technical Assistance to the Multimodal Planning Office

- Coordinate, as appropriate, with the Office of Intermodal Planning and Investment regarding rural transportation issues.

C. End Products

Program Administration

Rural Transportation Planning Administration

- Preparation of agendas, minutes, and associated materials for meetings of the Rural Transportation Technical Advisory Committee
- Purchase of materials, equipment, and services as needed to assist staff in work activities.

Program Activities

1. Rural Long-Range Transportation Plan
 - An up-to-date Rural Long-Range Transportation Plan (RLRTP) for the region
2. Performance Management
 - An updated CMP database
 - Updated transportation databases
 - An updated *HRTPO Congestion Management Process Report*
3. Regional Safety Planning
 - An updated crash database/shapefile for the region
 - An updated *Hampton Roads Regional Safety Study* report
4. Regional Freight Planning
 - An updated truck volume database
5. Regional Bridge Planning
 - An updated bridge condition database

6. Technical Assistance and Coordination
 - Complete any unfinished FY 2019 tasks related to rural transportation
 - GIS shapefile of bicycle and pedestrian recommendations from comprehensive plans and standalone bicycle and pedestrian plans.
 - Up-to-date database of information from localities comprehensive plans

D. Schedule – Program Activities

1. Rural Long-Range Transportation Plan
 - Up-to-date RL RTP – Ongoing throughout FY 2020
2. Performance Management
 - Updated CMP database – Ongoing throughout FY 2020
 - Updated transportation databases - Ongoing throughout FY 2020
 - Updated *HRTPO Congestion Management Process* report – Third Quarter
3. Regional Safety Planning
 - Updated crash database/shapefile – Ongoing throughout FY 2020
 - Updated *Hampton Roads Regional Safety Study* report – Fourth Quarter
4. Regional Freight Planning
 - Updated truck volume database – Ongoing throughout FY 2020
5. Regional Bridge Planning
 - Updated bridge condition database – Ongoing throughout FY 2020
6. Technical Assistance and Coordination
 - GIS shapefile of bicycle and pedestrian recommendations from comprehensive plans and standalone bicycle and pedestrian plans – Fourth Quarter
 - Up-to-date database of information from localities comprehensive plans – Fourth Quarter
 - Other tasks as needed – Ongoing throughout FY 2020
7. Technical Assistance to the Multimodal Planning Office – Ongoing throughout FY 2020

E. Participants

HRTPO, VDOT, DRPT, FHWA, HRPDC, Consultants, local governments, local transit agencies, other state and local agencies, and the public.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	SPR	TOTAL
HRTPO			\$72,500	\$72,500

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14.0 HRTAC Administration and Support

A. Background

In February 2013, the General Assembly approved the first comprehensive overhaul of the way Virginia pays for its transportation system since 1986. The new transportation funding legislation, referred to as HB2313, is expected to generate hundreds of millions in new transportation dollars annually statewide and includes regional components that will result in significant new funding each year to be used specifically in Hampton Roads. These new regional transportation funds are being placed in the Hampton Roads Transportation Fund (HRTF).

On March 8, 2014, the General Assembly passed legislation included in House Bill 1253 (HB 1253) and related Senate Bill 513 (SB 513), thereby creating the Hampton Roads Transportation Accountability Commission (HRTAC). In accordance with this new legislation, the moneys deposited in the HRTF shall be used solely for new construction projects on new or existing highways, bridges, and tunnels in the localities comprising Planning District 23 as approved by the HRTAC. The legislation further states that the HRTAC shall give priority to those projects that are expected to provide the greatest impact on reducing congestion for the greatest number of citizens residing within Planning District 23 and shall ensure that the moneys shall be used for such construction projects.

The HRTAC consists of 23 members as follows:

- The chief elected officer of the governing body of each of the 14 counties and cities embraced by the HRTAC
- Three members of the House of Delegates who reside in different counties or cities embraced by the HRTAC, appointed by the Speaker of the House
- Two members of the Senate who reside in different counties or cities embraced by the HRTAC, appointed by the Senate Committee on Rules
- The following four nonvoting ex officio members:
 - A member of the Commonwealth Transportation Board who resides in a locality embraced by the HRTAC, appointed by the Governor
 - The Director of the Virginia Department of Rail and Public Transportation or their designee
 - The Commissioner of Highways or their designee
 - The Executive Director of the Virginia Port Authority or their designee

In accordance with the legislation, the HRTAC has the authority to issue bonds and other evidences of debt. In addition, the HRTAC shall control and operate and may impose and collect tolls in amounts established by the HRTAC for the use of any new or improved highway, bridge, or tunnel, to increase capacity on such facility or to address congestion within Planning District 23. The HRTAC is also a responsible public entity under the Public-Private Transportation Act of 1995.

The passed legislation includes the following statement:

...the staff of the Hampton Roads Transportation Planning Organization and the Virginia Department of Transportation shall work cooperatively to assist the proper formation and effective organization of the Hampton Roads Transportation Accountability Commission. Until such time as the Commission is fully established and functioning, the staff of the Hampton Roads Transportation Planning Organization shall serve as its staff, and the Hampton Roads Transportation Planning Organization shall provide the Commission with office space and administrative support. The Commission shall reimburse the Hampton Roads Transportation Planning Organization for the cost of such staff, office space, and administrative support as appropriate.

B. Work Elements (WE)

Work activities include the following:

1. Providing staff support to the Hampton Roads Transportation Accountability Commission (HRTAC), per the stipulation included in HB 1253 or SB 513. Staff support may include:
 - a. Technical support on transportation planning, prioritization, and programming.
 - b. Tracking of revenues and expenditures of funds for which the HRTAC is the responsible entity.
 - c. Administrative support – coordinating meetings, payroll, accounting, etc.

C. End Products

1. WE 1 – Reports of revenues and expenditures of funds for which HRTAC is responsible.

D. Schedule

1. WE 1 – Ongoing.

E. Participants

HRTAC, HRTPO, local governments, VDOT, DRPT, VPA, FHWA, other stakeholders.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	HRTF	TOTAL
HRTPO			\$114,000	\$114,000

APPENDIX A
HRTPO ADVISORY COMMITTEES

HRTPO BOARD AND ADVISORY COMMITTEES

HRTPO Board

The Hampton Roads Transportation Planning Organization (HRTPO) is the metropolitan planning organization (MPO) for the Hampton Roads metropolitan planning area. As such, the HRTPO Board is a federally-mandated transportation policy-making organization comprised of representatives from local, state, and federal governments; transit agencies; and other stakeholders. The voting and non-voting members of the HRTPO Board are listed inside the front cover of this document and on the HRTPO website at www.hrtpo.org.

Transportation Advisory Committee

The Transportation Advisory Committee (TAC) is composed of the chief administrative officer of each HRTPO member locality and local transit agency, plus representatives from VDOT, the Virginia Department of Rail and Public Transportation (DRPT), the Virginia Port Authority (VPA), FHWA, FTA, and other stakeholders. The TAC meets from time to time to act upon matters referred to it by the HRTPO Board.

Transportation Technical Advisory Committee

The Transportation Technical Advisory Committee (TTAC) is composed of transportation engineers and planners from each HRTPO member locality, plus representatives from the local transit agencies, VDOT, DRPT, VPA, FHWA, FTA, and other stakeholders. The TTAC reviews virtually all items that are to come before the HRTPO Board and provides recommendations on actions to be considered by the HRTPO Board.

Community Transportation Advisory Committee

The Community Transportation Advisory Committee (CTAC) is composed of residents of HRTPO-member localities. CTAC members are appointed by the HRTPO Board. The CTAC serves as an advisory committee to the HRTPO Board.

Freight Transportation Advisory Committee

The Freight Transportation Advisory Committee (FTAC) is composed of people involved in the freight transportation industry. FTAC members are appointed by the HRTPO Board. The FTAC serves as an advisory committee to the HRTPO Board.

Legislative Ad-Hoc Committee

The Legislative Ad-Hoc Committee is composed of appointed HRTPO Board members, including representatives from the Virginia General Assembly and elected officials from Hampton Roads localities, plus local legislative liaisons. The mission of the Committee is: to pursue legislative items that have overwhelming support from the HRTPO Board, to educate the General Assembly and other regions of the State regarding the challenges that face a water area such as Hampton Roads, and to optimize the strengths of the region.

Rail and Public Transportation Task Force

The Rail and Public Transportation Task Force is composed of appointed members of the Transportation Technical Advisory Committee, plus representatives from the local transit agencies, railroads, the Virginia Department of Rail and Public Transportation and other stakeholders. The Task Force serves as an advisory group to the HRTPO Board.

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APPENDIX B
DEFINITIONS

DEFINITIONS

Metropolitan Planning Organization (MPO)

A Metropolitan Planning Organization (MPO) is planning and programming body required by federal law for urbanized areas with populations of 50,000 or greater. The MPO Board is a policy board designated by the Governor and, together with the State and local public transit agencies, is responsible for carrying out the continuing, cooperative, and comprehensive (3-C) metropolitan transportation planning process. Any highway or transit project or program to be constructed or conducted within the Metropolitan Planning Area (MPA) and to be paid for with federal funds must receive approval by the MPO Board before any federal funds can be expended. In addition, any highway or transit project deemed to be regionally-significant, regardless of the source(s) of funding, must receive MPO approval to proceed.

MPOs have five core functions:

1. Establish and manage a fair and impartial setting for effective regional decision-making with regard to metropolitan transportation planning and programming;
2. Evaluate transportation alternatives appropriate to the region in terms of its unique needs, issues, and realistically available options;
3. Develop and maintain a fiscally-constrained, Long-Range (at least 20 years) Transportation Plan for the metropolitan planning area ;
4. Develop and maintain a fiscally-constrained Transportation Improvement Program;
5. Involve the public in the four functions listed above.

The Hampton Roads Transportation Planning Organization (HRTPO) is one of fourteen MPOs in the Commonwealth of Virginia. Voting membership of the HRTPO includes elected officials from each of the cities and counties within the metropolitan planning area (MPA), two members of the Virginia Senate and two members of the Virginia House of Delegates, plus one representative from each of the following: the Transportation District Commission of Hampton Roads (TDCHR), the Williamsburg Area Transit Authority (WATA), the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), and the Virginia Port Authority (VPA). Non-voting membership of the HRTPO includes the chairs of the Community Transportation Advisory Committee (CTAC) and the Freight Transportation Advisory Committee (FTAC), the chief administrative officers (CAOs) from each of the cities and counties within the MPA, and one representative from each of the following: the Virginia Department of Aviation (VDOA), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Aviation Administration (FAA), the Peninsula Airport Commission, and the Norfolk Airport Authority.

Metropolitan Planning Area (MPA)

The Metropolitan Planning Area (MPA) is the geographic area determined by agreement between the MPO for the area and the Governor. The MPA is the area for which the metropolitan transportation planning and programming process is carried out. The Hampton Roads MPA includes the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg, and a portion of Franklin; the counties of Isle of Wight, James City, and York, and portions of Gloucester and Southampton Counties.

Transportation Management Area (TMA)

A Transportation Management Area (TMA) is an urbanized area with a population over 200,000, as defined by the Bureau of the Census and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the Secretary of Transportation. In addition to meeting all the federal requirements for MPOs, TMAs are responsible for developing a Congestion Management Process (CMP) and are subject to a joint federal certification review of the planning process at least every four years. The Hampton Roads MPA is also a TMA.

Hampton Roads Planning District Commission (HRPDC)

The Hampton Roads Planning District Commission (HRPDC) is one of 21 planning district commissions (PDCs) in the Commonwealth of Virginia. PDCs were created in 1969 pursuant to the Virginia Area Development Act and a regionally executed charter agreement. According to Section 15.2-4207 of the Code of Virginia, the purpose of PDCs is “. . . to encourage and facilitate local government cooperation and state-local cooperation in addressing on a regional basis problems of greater than local significance.”

The Hampton Roads Planning District includes the cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg and the counties of Gloucester, Isle of Wight, James City, Southampton, Surry, and York.

The Executive Director/Secretary of the HRPDC manages the daily operations of the HRPDC's professional staff. The HRPDC staff serves as a resource of technical expertise to its member jurisdictions on issues pertaining to economics, physical and environmental planning, and transportation.

The HRPDC provides staff to the HRTPO, pursuant to a memorandum of understanding between the two organizations and the federally-required Metropolitan Planning Agreement. The Executive Director of the HRPDC serves as the Executive Director of the HRTPO. In this role, the Executive Director provides staff support to the HRTPO Board and its committees and plans, organizes, and directs the activities of staff in support of the mission and directions of the HRTPO Board.

Metropolitan Transportation Plan

The metropolitan transportation plan, also called the Long-Range Transportation Plan (LRTP), is the official multimodal transportation plan addressing a planning horizon of at least 20 years. Any transportation project that is regionally significant and/or utilizes federal funding must be included in the LRTP. In addition, the LRTP must be financially constrained – meaning it must be shown that there will be sufficient funds to complete the projects included in the plan.

The LRTP is developed and adopted by the HRTPO through a multi-step process every four to five years.

Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is a short-range fiscal programming document that covers a period of no less than four years. The TIP must be updated at least every four years. The cycle for updating the TIP must be compatible with the Statewide Transportation Improvement Program (STIP) development and approval process. Projects that are included in the TIP must be selected from or be consistent with an approved Long-Range Transportation Plan (LRTP). After approval by the MPO and the Governor, the TIP must be included without change, directly or by reference, in the STIP.

Air Quality Conformity Analysis (Conformity)

Conformity is a requirement of the Clean Air Act that ensures that federal funding and approval are given to transportation plans, programs, and projects that are consistent with the air quality goals established by the State Implementation Plan (SIP). For areas that have been designated as nonattainment or maintenance areas for one or more of the National Ambient Air Quality Standards (NAAQS), the LRTP and TIP must satisfactorily meet air quality conformity requirements before they can receive final approval by the HRTPO Board. With respect to the SIP (State Implementation Plan), conformity means that transportation activities will not cause new air quality violations or delay timely attainment of the NAAQS.

Other frequently used terms include:

Allocation	The distribution by the Commonwealth Transportation Board (CTB) of federal and state transportation funds to the projects contained in the SYIP. Also, the distribution of Congestion Mitigation and Air Quality (CMAQ) Improvement Program and Regional Surface Transportation Program (RSTP) funds by the MPO.
Attainment	A term that means an area is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the Clean Air Act (CAA). If an area has been a Nonattainment Area for a particular pollutant and then achieves Attainment, it is usually classified as a Maintenance Area for that pollutant. There are six atmospheric pollutants covered under the CAA. The Hampton Roads area is currently designated as an attainment area for all National Ambient Air Quality Standards.
CMAQ	Congestion Mitigation and Air Quality Improvement Program - federal funding program created under ISTEA (1991) and continued through the current federal transportation act, the FAST Act. The program directs funds to projects that contribute to meeting the National Ambient Air Quality Standards. CMAQ funds generally may not be used for projects that result in the construction of new highway capacity for single occupant vehicles. CMAQ funds may be available for eligible planning activities that lead to and result in project implementation.

Fiscal Year	Fiscal Year (FY) is a term used to differentiate a budget or financial year from the calendar year. The HRTPO uses the fiscal year used by the Commonwealth of Virginia, which begins on July 1 of one year and ends on June 30 of the following year. The federal fiscal year begins on October 1 of one year and ends on September 30 of the following year. The fiscal year designator typically indicates the year in which the fiscal year ends, for example FY 2010 is usually used to identify the fiscal year that begins in 2009 and ends in 2010.
Local Match	Funds typically required to be provided by recipients of federal or state grant funds in order to obtain such grants. For example (FTA) Section 5303 and (FHWA) PL funds require a 10 percent local match (to be provided by a locality, MPO, or transit agency), plus a 10 percent state match (provided by VDOT or DRPT) in order to match the remaining 80 percent provided by the federal source.
NOx	Nitrogen Oxides – ground level ozone is produced by a chemical reaction between NOx and Volatile Organic Compounds in the presence of sunlight.
Obligations	Commitments made by USDOT agencies to pay out money for federal-aid transportation projects. The TIP serves as the MPO's program of transportation projects for which federal funds have been obligated.
PL	Planning funds available from FHWA for MPO program activities.
Regionally Significant	A transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA's transportation conformity regulation) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the transportation network for the metropolitan planning area. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.
Section 5303	Planning funds available from the FTA for MPO program activities.
SIP	State Implementation Plan – identifies control measures and processes for achieving and maintaining the NAAQS.
SPR	State Planning and Research – federal funds allocated to VDOT and sub-allocated to the HRTPO in support of regional transportation planning activities.
STBG	Surface Transportation Block Grant Program – flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel

	projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
STIP	Statewide Transportation Improvement Program – covers all areas of the State. For each metropolitan area of the State, the STIP shall be developed in cooperation with the MPO designated for the metropolitan area. Each metropolitan TIP shall be included without change in the STIP, directly or by reference, after approval of the TIP by the MPO and the Governor.
Study Area	Also known as the Metropolitan Planning Area (MPA), this is the area projected to become urbanized within the next 20 years. The MPA defines the area for MPO plans, programs, and studies.
SYIP	Six Year Improvement Program – an annual document approved by the CTB that provides the state's list of federal and state funded transportation projects and programs administered by VDOT and DRPT.
"3-C" Process	Refers to the Continuing, Cooperative and Comprehensive language from the federal legislation that established MPOs; used in reference to the regional transportation planning and programming process.
TCM	Transportation Control Measures used to improve air quality.
TDM	Transportation Demand Management – various transportation control strategies and measures used in managing highway demand.
TAZ	Transportation Analysis Zone – generally defined as areas of homogeneous activity served by one or two major highways. TAZs serve as the base unit for socioeconomic data characteristics used in various plans, models, and studies.
Urbanized Area	Term used by the U.S. Census Bureau to designate urban areas. These areas generally contain population densities of at least 1,000 persons per square mile in a continuously built-up area of at least 50,000 persons. Factors such as commercial and industrial development, and other types and forms of urban activity centers are also considered.
UPWP	Unified Planning Work Program – a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.
VOC	Volatile Organic Compounds – ground level ozone is produced by a chemical reaction between VOCs and nitrogen oxides (NO _x) in the presence of sunlight.

APPENDIX C
FREQUENTLY USED ABBREVIATIONS

FREQUENTLY USED ABBREVIATIONS

5303	Section 5303 (Transit) Planning Funds
5307	Section 5307 (Transit) Capital/Operating Funds
AA	Alternatives Analysis
ACS	American Community Survey
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMP	Congestion Management Process
COE	U.S. Army Corps of Engineers
COMPARE	Congestion Management Plan: A Regional Effort
CTAC	Community Transportation Advisory Committee
CTB	Commonwealth Transportation Board
CTPP	Census Transportation Planning Package
DBE	Disadvantaged Business Enterprises
DEIS	Draft Environmental Impact Statement
DRPT	Virginia Department of Rail and Public Transportation
EJ	Environmental Justice
EMS	Environmental Management System
EPA	Environmental Protection Agency
ETC	Employee Transportation Coordinator
FAA	Federal Aviation Administration
FAST ACT	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTAC	Freight Transportation Advisory Committee
FY	Fiscal Year (July 1 – June 30)
FFY	Federal Fiscal Year (October 1 – September 30)
GIS	Geographic Information System
HB2	House Bill 2 (Now Referred to as SMART SCALE)
HOT	High-Occupancy Toll
HOV	High-Occupancy Vehicle
HRHIM	Hampton Roads Incident Management Committee
HRPDC	Hampton Roads Planning District Commission
HRT	Hampton Roads Transit
HRTF	Hampton Roads Transportation Fund
HRTAC	Hampton Roads Transportation Accountability Commission
HRTAC FSAC	HRTAC Funding Strategies Advisory Committee
HRTO	Hampton Roads Transportation Operations Subcommittee
HRTPO	Hampton Roads Transportation Planning Organization
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITS	Intelligent Transportation System

ITSOP	Intelligent Transportation System and Operations Planning Committee
JARC	Job Access and Reverse Commute Program
LEP	Limited English Proficiency
L RTP	Long Range Transportation Plan
LRT	Light Rail Transit
MAP-21	Moving Ahead for Progress in the 21 st Century (2012)
MBE	Minority Business Enterprises
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHS	National Highway System
NHTS	National Household Travel Survey
PAC	Peninsula Airport Commission
PL	Planning Funds (FHWA)
PPP	Public Participation Plan
RCTO	Regional Concept of Transportation Operations
RL RTP	Rural Long-Range Transportation Plan
RPTTF	Rail and Public Transportation Task Force
RSTP	Regional Surface Transportation Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
SIP	State Implementation Plan
SMART SCALE	SMART – System for the Management and Allocation of Resources for Transportation SCALE – Safety, Congestion Mitigation, Accessibility, Land Use, and Economic Development and Environment (Previously Known as HB2)
SPR	State Planning and Research Funds
STBG	Surface Transportation Block Grant Program
STIP	Statewide Transportation Improvement Program
SYIP	Six-Year Improvement Program
TAC	Transportation Advisory Committee
TAZ	Transportation Analysis Zone
TDCHR	Transportation District Commission of Hampton Roads (HRT)
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21 st Century (1998)
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TPO	Transportation Planning Organization
TTAC	Transportation Technical Advisory Committee
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
VDEM	Virginia Department of Emergency Management

VDEQ	Virginia Department of Environmental Quality
VDOA	Virginia Department of Aviation
VDOT	Virginia Department of Transportation
VFAC	Virginia Freight Advisory Committee
VGIN	Virginia Geographic Information Network
VPA	Virginia Port Authority
VTRANS2025/2035	Virginia Statewide Multimodal Transportation Plan
WATA	Williamsburg Area Transit Authority
WBE	Women Business Enterprises

APPENDIX D
FEDERAL REGULATIONS APPLICABLE TO MPOS

Subpart A—Transportation Planning and Programming Definitions

§ 450.100 Purpose.

The purpose of this subpart is to provide definitions for terms used in this part.

§ 450.102 Applicability.

The definitions in this subpart are applicable to this part, except as otherwise provided.

§ 450.104 Definitions.

Unless otherwise specified, the definitions in 23 U.S.C. 101(a) and 49 U.S.C. 5302 are applicable to this part.

Administrative modification means a minor revision to a long-range statewide or metropolitan transportation plan, Transportation Improvement Program (TIP), or Statewide Transportation Improvement Program (STIP) that includes minor changes to project/ project phase costs, minor changes to funding sources of previously-included projects, and minor changes to project/ project phase initiation dates. An administrative modification is a revision that does not require public review and comment, re-demonstration of fiscal constraint, or a conformity determination (in nonattainment and maintenance areas).

Amendment means a revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a, re-demonstration of fiscal constraint. If an amendment involves “non-exempt” projects in nonattainment and maintenance areas, a conformity determination is required.

Asset management means a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the life of the assets at minimum practicable cost.

Attainment area means any geographic area in which levels of given criteria air pollutant (e.g., ozone, carbon monoxide, PM₁₀, PM_{2.5}, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant. An area may be an attainment area for one pollutant and a nonattainment area for others. A “maintenance area” (see definition below) is not considered an attainment area for transportation planning purposes.

Available funds means funds derived from an existing source dedicated to or historically used for transportation purposes. For Federal funds, authorized and/or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered “available.” A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes.

Committed funds means funds that have been dedicated or obligated for transportation purposes. For State funds that are not dedicated to transportation purposes, only those funds over which the Governor has control may be considered “committed.” Approval of a TIP by the Governor is considered a commitment of those funds over which the Governor has control. For local or private sources of funds not dedicated to or historically used for transportation purposes (including donations of property), a commitment in writing (e.g., letter of intent) by the responsible official or body having control of the funds may be considered a commitment. For projects involving 49 U.S.C. 5309 funding, execution of a Full

Funding Grant Agreement (or equivalent) or an Expedited Grant Agreement (or equivalent) with the USDOT shall be considered a multi-year commitment of Federal funds.

Conformity means a Clean Air Act (42 U.S.C. 7506(c)) requirement that ensures that Federal funding and approval are given to transportation plans, programs and projects that are consistent with the air quality goals established by a State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS or any required interim emission reductions or other milestones in any nonattainment or maintenance area. The transportation conformity rule (40 CFR part 93, subpart A) sets forth policy, criteria, and procedures for demonstrating and assuring conformity of transportation activities.

Conformity lapse means, pursuant to section 176(c) of the Clean Air Act (42 U.S.C. 7506(c)), as amended, that the conformity determination for a metropolitan transportation plan or TIP has expired and thus there is no currently conforming metropolitan transportation plan or TIP.

Congestion management process means a systematic approach required in transportation management areas (TMAs) that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C., and title 49 U.S.C., through the use of travel demand reduction and operational management strategies.

Consideration means that one or more parties takes into account the opinions, action, and relevant information from other parties in making a decision or determining a course of action.

Consultation means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken. This definition does not apply to the “consultation” performed by the States and the MPOs in comparing the long-range statewide transportation plan and the metropolitan transportation plan, respectively, to State and Tribal conservation plans or maps or inventories of natural or historic resources (see § 450.216(j) and § 450.324(g)(1) and (g)(2)).

Cooperation means that the parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective.

Coordinated public transit-human services transportation plan means a locally developed, coordinated transportation plan that identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes, provides strategies for meeting those local needs, and prioritizes transportation services for funding and implementation.

Coordination means the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate.

Design concept means the type of facility identified for a transportation improvement project (e.g., freeway, expressway, arterial highway, grade-separated highway, toll road, reserved right-of-way rail transit, mixed-traffic rail transit, or busway).

Design scope means the aspects that will affect the proposed facility’s impact on the region, usually as they relate to vehicle or person carrying capacity and control (e.g., number of lanes or tracks to be constructed or added, length of project, signalization, safety features, access control including approximate number and location of interchanges, or preferential treatment for high-occupancy vehicles).

Designated recipient means an entity designated, in accordance with the planning process under 49 U.S.C. 5303 and 5304, by the Governor of a State, responsible local officials, and publicly owned operators of

public transportation, to receive and apportion amounts under 49 U.S.C. 5336 that are attributable to urbanized areas of 200,000 or more in population, or a State regional authority if the authority is responsible under the laws of a State for a capital project and for financing and directly providing public transportation.

Environmental mitigation activities means strategies, policies, programs, and actions that, over time, will serve to avoid, minimize, rectify, reduce or eliminate impacts to environmental resources associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan.

Expedited Grant Agreement (EGA) means a contract that defines the scope of a Small Starts project, the Federal financial contribution, and other terms and conditions, in accordance with 49 U.S.C 5309(h)(7).

Federal land management agency means units of the Federal Government currently responsible for the administration of public lands (e.g., U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management, and the National Park Service).

Federally funded non-emergency transportation services means transportation services provided to the general public, including those with special transport needs, by public transit, private non-profit service providers, and private third-party contractors to public agencies.

Financial plan means documentation required to be included with a metropolitan transportation plan and TIP (and optional for the long-range statewide transportation plan and STIP) that demonstrates the consistency between reasonably available and projected sources of Federal, State, local, and private revenues and the costs of implementing proposed transportation system improvements.

Financially constrained or Fiscal constraint means that the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. For the TIP and the STIP, financial constraint/fiscal constraint applies to each program year. Additionally, projects in air quality nonattainment and maintenance areas can be included in the first 2 years of the TIP and STIP only if funds are “available” or “committed.”

Freight shippers means any entity that routinely transports cargo from one location to another by providers of freight transportation services or by their own operations, involving one or more travel modes.

Full Funding Grant Agreement (FFGA) means an instrument that defines the scope of a project, the Federal financial contribution, and other terms and conditions for funding New Starts projects as required by 49 U.S.C. 5309(k)(2).

Governor means the Governor of any of the 50 States or the Commonwealth of Puerto Rico or the Mayor of the District of Columbia.

Highway Safety Improvement Program (HSIP) means a State safety program with the purpose to reduce fatalities and serious injuries on all public roads through the implementation of the provisions of 23 U.S.C. 130, 148, and 150 including the development of a Strategic Highway Safety Plan (SHSP), Railway-Highway Crossings Program, and program of highway Safety improvement projects.

Illustrative project means an additional transportation project that may be included in a financial plan for a metropolitan transportation plan, TIP, or STIP if reasonable additional resources were to become available.

Indian Tribal government means a duly formed governing body for an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, Public Law 103–454.

Intelligent transportation system (ITS) means electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

Interim metropolitan transportation plan means a transportation plan composed of projects eligible to proceed under a conformity lapse and otherwise meeting all other applicable provisions of this part, including approval by the MPO.

Interim transportation improvement program (TIP) means a TIP composed of projects eligible to proceed under a conformity lapse and otherwise meeting all other applicable provisions of this part, including approval by the MPO and the Governor.

Long-range statewide transportation plan means the official, statewide, multimodal, transportation plan covering a period of no less than 20 years developed through the statewide transportation planning process.

Maintenance area means any geographic region of the United States that the Environmental Protection Agency (EPA) previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended (42 U.S.C. 7505a).

Management system means a systematic process, designed to assist decision makers in selecting cost effective strategies/actions to improve the efficiency or safety of, and protect the investment in the nation's infrastructure. A management system can include: Identification of performance measures; data collection and analysis; determination of needs; evaluation and selection of appropriate strategies/actions to address the needs; and evaluation of the effectiveness of the implemented strategies/actions.

Metropolitan Planning Agreement means a written agreement between the MPO, the State(s), and the providers of public transportation serving the metropolitan planning area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan transportation planning process.

Metropolitan Planning Area (MPA) means the geographic area determined by agreement between the MPO for the area and the Governor, in which the metropolitan transportation planning process is carried out.

Metropolitan Planning Organization (MPO) means the policy board of an organization created and designated to carry out the metropolitan transportation planning process.

Metropolitan Transportation Plan means the official multimodal transportation plan addressing no less than a 20-year planning horizon that MPO develops adopts, and updates through the metropolitan transportation planning process.

National Ambient Air Quality Standard (NAAQS) means those standards established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409).

Nonattainment area means any geographic region of the United States that EPA designates as a nonattainment area under section 107 of the Clean Air Act (42 U.S.C. 7407) for any pollutants for which an NAAQS exists.

Nonmetropolitan area means a geographic area outside a designated metropolitan planning area.

Nonmetropolitan local officials means elected and appointed officials of general purpose local government in a nonmetropolitan area with responsibility for transportation.

Obligated projects means strategies and projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 for which the State or designated recipient authorized and committed the supporting Federal funds in preceding or current program years, and authorized by the FHWA or awarded as a grant by the FTA.

Operational and management strategies means actions and strategies aimed at improving the performance of existing and planned transportation facilities to relieve congestion and maximize the safety and mobility of people and goods.

Performance measure refers to “Measure” as defined in 23 CFR 490.101.

Performance target refers to “Target” as defined in 23 CFR 490.101.

Project selection means the procedures followed by MPOs, States, and public transportation operators to advance projects from the first 4 years of an approved TIP and/or STIP to implementation, in accordance with agreed upon procedures.

Provider of freight transportation services means any entity that transports or otherwise facilitates the movement of *cargo* from one location to another for others or for itself.

Public transportation agency safety plan means a comprehensive plan established by a State or recipient of funds under Title 49, Chapter 53 and in accordance with 49 U.S.C. 5329(d).

Public transportation operator means the public entity or government-approved authority that participates in the continuing, cooperative, and comprehensive transportation planning process in accordance with 23 U.S.C. 134 and 135 and 49 U.S.C. 5303 and 5304, and is a recipient of Federal funds under title 49 U.S.C. Chapter 53 for transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include sightseeing, school bus, charter, certain types of shuttle service, intercity bus transportation, or intercity passenger rail transportation provided by Amtrak.

Regional ITS architecture means a regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects or groups of projects.

Regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA’s transportation conformity regulations (40 CFR part 93, subpart A)) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area’s transportation network. At a minimum, this includes all principal arterial highways and all fixed guide-way transit facilities that offer an alternative to regional highway travel.

Regional Transportation Planning Organization (RTPO) means a policy board of nonmetropolitan local officials or their designees created to carry out the regional transportation planning process.

Revision means a change to a long-range statewide or metropolitan transportation plan, TIP, or STIP that occurs between scheduled periodic updates. A major revision is an “amendment,” while a minor revision is an “administrative modification.”

Scenario planning means a planning process that evaluates the effects of alternative policies, plans and/or programs on the future of a community or region. This activity should provide information to decision makers as they develop the transportation plan.

State means any one of the fifty States, the District of Columbia, or Puerto Rico.

State implementation plan (SIP) means, as defined in section 302(q) of the Clean Air Act (CAA) (42 U.S.C. 7602(q)), the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110 of the CAA (42 U.S.C. 7410), or promulgated under section 110(c) of the CAA (42 U.S.C. 7410(c)), or promulgated or approved pursuant to regulations promulgated under section 301(d) of the CAA (42 U.S.C. 7601(d)) and which implements the relevant requirements of the CAA.

Statewide Transportation Improvement Program (STIP) means a statewide prioritized listing/program of transportation projects covering a period of 4 years that is consistent with the long-range statewide transportation plan, metropolitan transportation plans, and TIPs, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

Strategic Highway Safety Plan means comprehensive, multiyear, data-driven plan, developed by the State DOT in accordance with the 23 U.S.C. 148.

Transit Asset Management Plan means a plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

Transit Asset Management System means a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

Transportation Control Measure (TCM) means any measure that is specifically identified and committed to in the applicable SIP, including a substitute or additional TCM that is incorporated into the applicable SIP through the process established in CAA section 17(c)(8), that is either one of the types listed in section 108 of the CAA (42 U.S.C 7408) or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures that control the emissions from vehicles under fixed traffic conditions are not TCMs.

Transportation Improvement Program (TIP) means a prioritized listing/ program of transportation projects covering a period of 4 years that is developed and formally adopted by an MPO as part of the metropolitan transportation planning process, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

Transportation Management Area (TMA) means an urbanized area with a population over 200,000, as defined by the Bureau of the Census and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the Secretary of Transportation.

Unified Planning Work Program (UPWP) means a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.

Update means making current a long-range statewide transportation plan, metropolitan transportation plan, TIP, or STIP through a comprehensive review. Updates require public review and comment, a 20-year horizon year for metropolitan transportation plans and long-range statewide transportation plans, a 4-year program period for TIPs and STIPs, demonstration of fiscal constraint (except for long-range

statewide transportation plans), and a conformity determination (for metropolitan transportation plans and TIPs in nonattainment and maintenance areas).

Urbanized area means a geographic area with a population of 50,000 or more, as designated by the Bureau of the Census.

Users of public transportation means any person, or groups representing such persons, who use transportation open to the general public, other than taxis and other privately funded and operated vehicles.

Visualization techniques means methods used by States and MPOs in the development of transportation plans and programs with the public, elected and appointed officials, and other stakeholders in a clear and easily accessible format such as GIS- or web-based surveys, inventories, maps, pictures, and/or displays identifying features such as roadway rights of way, transit, intermodal, and non-motorized transportation facilities, historic and cultural resources, natural resources, and environmentally sensitive areas, to promote improved understanding of existing or proposed transportation plans and programs.

Subpart C – Metropolitan Transportation Planning and Programming

§ 450.300 Purpose.

The purposes of this subpart are to implement the provisions of 23 U.S.C. 134, 23 U.S.C. 150, and 49 U.S.C. 5303, as amended, which:

- (a) Set forth the national policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process, including the development of a metropolitan transportation plan and a TIP, that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways bicycle transportation facilities and intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities and commuter vanpool providers) fosters economic growth and development, and takes into consideration resiliency needs, while minimizing transportation-related fuel consumption and air pollution; and
- (b) Encourages continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth in 23 U.S.C. 134(h) and 49 U.S.C. 5303(h).

§ 450.302 Applicability.

The provisions of this subpart are applicable to organizations and entities responsible for the transportation planning and programming processes in metropolitan planning areas.

§ 450.304 Definitions.

Except as otherwise provided in subpart A of this part, terms defined in 23 U.S.C. 101(a) and 49 U.S.C. 5302 are used in this subpart as so defined.

§ 450.306 Scope of the metropolitan transportation planning process.

- (a) To accomplish the objectives in § 450.300 and §450.306(b), metropolitan planning organizations designated under § 450.310, in cooperation with the State and public transportation operators, shall develop long-range transportation plans and TIPs through a performance-driven, outcome-based approach to planning for metropolitan areas of the State.
- (b) The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors:
 - (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
 - (2) Increase the safety of the transportation system for motorized and non-motorized users;
 - (3) Increase the security of the transportation system for motorized and non-motorized users;
 - (4) Increase accessibility and mobility of people and freight;
 - (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - (7) Promote efficient system management and operation; and
 - (8) Emphasize the preservation of the existing transportation system.
 - (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
 - (10) Enhance travel and tourism.
- (c) Consideration of the planning factors in paragraph (b) of this section shall be reflected, as appropriate, in the metropolitan transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment (including Section 4(f) properties as defined in 23 CFR 774.17), and housing and community development.
- (d) *Performance-based approach.*
- (1) The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals described in 23 U.S.C. 150(b) and the general purposes described in 49 U.S.C. 5301(c).
 - (2) Establishment of performance targets by metropolitan planning organizations.
 - (i) Each metropolitan planning organization shall establish performance targets that address the performance measures or standards established under 23 CFR part 490 (where applicable), 49 U.S.C. 5326(c), and 49 U.S.C. 5329(d) to use in tracking progress toward attainment of critical outcomes for the region of the metropolitan planning organization.
 - (ii) The selection of targets that address performance measures described in 23 U.S.C. 150(c) shall be in accordance with the appropriate target setting framework established at 23 CFR part 490, and shall be coordinated with the relevant State(s) to ensure consistency, to the maximum extent practicable.
 - (iii) The selection of performance targets that address performance measures described in 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d) shall be coordinated, to the maximum extent practicable, with public transportation providers to ensure consistency with the performance targets that public transportation providers establish under 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d).
 - (3) Each MPO shall establish the performance targets under paragraph (d)(2) of this section not later than 180 days after the date on which the relevant State or provider of public transportation establishes the performance targets.

- (4) An MPO shall integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program including:
 - (i) The State asset management plan for the NHS, as defined in 23 U.S.C. 119(e) and the Transit Asset Management Plan, as discussed in 49 U.S.C. 5326;
 - (ii) Applicable portions of the HISP, including the SHSP, as specified in 23 U.S.C. 148;
 - (iii) The Public Transportation Agency Safety Plan in 49 U.S.C. 5329(d);
 - (iv) Other safety and security planning and review processes, plans, and programs, as appropriate;
 - (v) The Congestion Mitigation and Air Quality Improvement Program performance plan in 23 U.S.C. 149(l), as applicable;
 - (vi) Appropriate (metropolitan) portions of the State Freight Plan (MAP-21 section 1118);
 - (vii) The congestion management process, as defined in 23 CFR 450.322, if applicable; and
 - (viii) Other State transportation plans and transportation processes as part of a performance-based program.
- (e) The failure to consider any factor specified in paragraph (b) or (d) of this section shall not be reviewable by any court under title 23 U.S.C., 49 U.S.C. Chapter 53, subchapter II of title 5, U.S.C. Chapter 5, or title 5 U.S.C. Chapter 7 in any matter affecting a metropolitan transportation plan, TIP, a project or strategy, or the certification of a metropolitan transportation planning process.
- (f) An MPO shall carry out the metropolitan transportation planning process in coordination with the statewide transportation planning process required by 23 U.S.C. 135 and 49 U.S.C. 4304.
- (g) The metropolitan transportation planning process shall (to the maximum extent practicable) be consistent with the development of applicable regional intelligent transportation systems (ITS) architectures, as defined in 23 CFR part 940.
- (h) Preparation of the coordinated public transit-human services transportation plan, as required by 49 U.S.C. 5310, should be coordinated and consistent with the metropolitan transportation planning process.
- (i) In an urbanized area not designated as a TMA that is an air quality attainment area, the MPO(s) may propose and submit to the FHWA and the FTA for approval a procedure for developing an abbreviated metropolitan transportation plan and TIP. In developing proposed simplified planning procedures, consideration shall be given to whether the abbreviated metropolitan transportation plan and TIP will achieve the purposes of 23 U.S.C. 134, 49 U.S.C. 5303, and this part, taking into account the complexity of the transportation

problems in the area. The MPO shall develop simplified procedures in cooperation with the State(s) and public transportation operator(s).

§ 450.308 Funding for transportation planning and unified planning work programs.

- (a) Funds provided under 23 U.S.C. 104(d), 49 U.S.C. 5305(d), and 49 U.S.C. 5307, are available to MPOs to accomplish activities described in this subpart. At the State's option, funds provided under 23 U.S.C. 104(b)(2) and 23 U.S.C. 505 may also be provided to MPOs for metropolitan transportation planning. At the option of the State and operators of public transportation, funds provided under 49 U.S.C. 5305(e) may also be provided to MPOs for activities that support metropolitan transportation planning. In addition, an MPO serving an urbanized area with a population over 200,000, as designated by the Bureau of the Census, may at its discretion use funds sub-allocated under 23 U.S.C. 133(d)(4) for metropolitan transportation planning activities.
- (b) An MPO shall document metropolitan transportation planning activities performed with funds provided under title 23 U.S.C. and title 49 U.S.C. Chapter 53 in a unified planning work program (UPWP) or simplified statement of work in accordance with the provisions of this section and 23 CFR part 420.
- (c) Except as provided in paragraph (d) of this section, each MPO, in cooperation with the State(s) and public transportation operator(s), shall develop a UPWP that includes a discussion of the planning priorities facing the MPA. The UPWP shall identify work proposed for the next one- or two-year period by major activity and task (including activities that address the planning factors in § 450.306(b)), in sufficient detail to indicate who (e.g., MPO, State, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, the proposed funding by activity/task, and a summary of the total amounts and sources of Federal and matching funds.
- (d) With the prior approval of the State and the FHWA and the FTA, an MPO in an area not designated as a TMA may prepare a simplified statement of work, in cooperation with the State(s) and the public transportation operator(s), in lieu of a UPWP. A simplified statement of work shall include a description of the major activities to be performed during the next 1- or 2-year period, who (e.g., State, MPO, public transportation operator, local government, or consultant) will perform the work, the resulting products, and a summary of the total amounts and sources of Federal and matching funds. If a simplified statement of work is used, it may be submitted as part of the State's planning work program, in accordance with 23 CFR part 420.
- (e) Arrangements may be made with the FHWA and the FTA to combine the UPWP or simplified statement of work with the work program(s) for other Federal planning funds.
- (f) Administrative requirements for UPWPs and simplified statements of work are contained in 23 CFR part 420 and FTA Circular C8100, as amended (Program Guidance for Metropolitan Planning and State Planning and Research Program Grants).

§ 450.310 Metropolitan planning organization designation and redesignation.

- (a) To carry out the metropolitan transportation planning process under this subpart, an MPO shall be designated for each urbanized area with a population of more than 50,000 individuals (as determined by the Bureau of the Census).
- (b) MPO designation shall be made by agreement between the Governor and units of general purpose local government that together represent at least 75 percent of the affected population (including the largest incorporated city, based on population, as named by the

Bureau of the Census) or in accordance with procedures established by applicable State or local law.

- (c) The FHWA and the FTA shall identify as a TMA each urbanized area with a population of over 200,000 individuals, as defined by the Bureau of the Census. The FHWA and the FTA shall also designate any urbanized area as a TMA on the request of the Governor and the MPO designated for that area.

(d) TMA structure:

- (1) Not later than October 1, 2014, each metropolitan planning organization that serves a designated TMA shall consist of:

- (i) Local elected officials;
- (ii) Officials of public agencies that administer or operate major modes of transportation in the metropolitan area, including representation by providers of public transportation; and
- (iii) Appropriate State officials.

- (2) An MPO may be restructured to meet the requirements of this paragraph (d) without undertaking a redesignation.

(3) *Representation*

- (i) Designation or selection of officials or representatives under paragraph (d)(1) of this section shall be determined by the MPO according to the bylaws or enabling statute of the organization.
- (ii) Subject to the bylaws or enabling statute of the MPO, a representative of a provider of public transportation may also serve as a representative of a local municipality.
- (iii) An official described in paragraph (d)(1)(ii) shall have responsibilities, actions, duties, voting rights, and any authority commensurate with other officials described in paragraph (D)(1) of this section.

- (4) Nothing in this section shall be construed to interfere with the authority, under any State law in effect on December 18, 1991, of a public agency with multimodal transportation responsibilities –

- (i) To develop the plans and TIPs for adoption by an MPO; and
- (ii) To develop long-range capital plans, coordinate transit services and projects, and carry out other activities pursuant to State law.

- (e) To the extent possible, only one MPO shall be designated for each urbanized area or group of contiguous urbanized areas. More than one MPO may be designated to serve an urbanized area only if the Governor(s) and the existing MPO, if applicable, determine that the size and complexity of the urbanized area make designation of more than one MPO appropriate. In those cases where two or more MPOs serve the same urbanized area, the MPOs shall establish official, written agreements that clearly identify areas of coordination and the division of transportation planning responsibilities among the MPOs.

- (f) Nothing in this subpart shall be deemed to prohibit an MPO from using the staff resources of other agencies, non-profit organizations, or contractors to carry out selected elements of the metropolitan transportation planning process.
- (g) An MPO designation shall remain in effect until an official redesignation has been made in accordance with this section.
- (h) An existing MPO may be redesignated only by agreement between the Governor and units of general purpose local government that together represent at least 75 percent of the existing metropolitan planning area population (including the largest incorporated city, based on population, as named by the Bureau of the Census).
- (i) For the purposes of redesignation, units of general purpose local government may be defined as elected officials from each unit of general purpose local government located within the metropolitan planning area served by the existing MPO.
- (j) Redesignation of an MPO (in accordance with the provisions of this section) is required whenever the existing MPO proposes to make:
 - (1) A substantial change in the proportion of voting members on the existing MPO representing the largest incorporated city, other units of general purpose local government served by the MPO, and the State(s); or
 - (2) A substantial change in the decisionmaking authority or responsibility of the MPO, or in decisionmaking procedures established under MPO by-laws.
- (k) Redesignation of an MPO serving a multistate metropolitan planning area requires agreement between the Governors of each State served by the existing MPO and units of general purpose local government that together represent at least 75 percent of the existing metropolitan planning area population (including the largest incorporated city, based on population, as named by the Bureau of the Census).
- (l) The following changes to an MPO do not require a redesignation (as long as they do not trigger a substantial change as described in paragraph (j) of the section):
 - (1) The identification of a new urbanized area (as determined by the Bureau of the Census) within an existing metropolitan planning area;
 - (2) Adding members to the MPO that represent new units of general purpose local government resulting from expansion of the metropolitan planning area;
 - (3) Adding members to satisfy the specific membership requirements described in paragraph (d) of this section for an MPO that serves a TMA; or
 - (4) Periodic rotation of members representing units of general-purpose local government, as established under MPO by-laws.
- (m) Each Governor with responsibility for a portion of a multistate metropolitan area and the appropriate MPOs shall, to the extent practicable, provide coordinated transportation planning for the entire MPA. The consent of Congress is granted to any two or more States to:
 - (1) Enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under

23 U.S.C. 134 and 49 U.S.C. 5303 as the activities pertain to interstate areas and localities within the States; and

- (2) Establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective.

§ 450.312 Metropolitan planning area boundaries.

- (a) The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor.
 - (1) At a minimum, the MPA boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.
 - (2) The MPA boundaries may be further expanded to encompass the entire metropolitan statistical area or combined statistical area, as defined by the Office of Management and Budget.
- (b) An MPO that serves an urbanized area designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 *et seq.*) as of August 10, 2005, shall retain the MPA boundary that existed on August 10, 2005. The MPA boundaries for such MPOs may only be adjusted by agreement of the Governor and the affected MPO in accordance with the redesignation procedures described in § 450.310(h). The MPA boundary for an MPO that serves an urbanized area designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 *et seq.*) after August 10, 2005 may be established to coincide with the designated boundaries of the ozone and/ or carbon monoxide nonattainment area, in accordance with the requirements in § 450.310(b).
- (c) An MPA boundary may encompass more than one urbanized area.
- (d) MPA boundaries may be established to coincide with the geography of regional economic development and growth forecasting areas.
- (e) Identification of new urbanized areas within an existing metropolitan planning area by the Bureau of the Census shall not require redesignation of the existing MPO.
- (f) Where the boundaries of the urbanized area or MPA extend across two or more States, the Governors with responsibility for a portion of the multistate area, the appropriate MPO(s), and the public transportation operator(s) are strongly encouraged to coordinate transportation planning for the entire multistate area.
- (g) The MPA boundaries shall not overlap with each other.
- (h) Where part of an urbanized area served by one MPO extends into an adjacent MPA, the MPOs shall, at a minimum, establish written agreements that clearly identify areas of coordination and the division of transportation planning responsibilities among and between the MPOs. Alternatively, the MPOs may adjust their existing boundaries so that the entire urbanized area lies within only one MPA. Boundary adjustments that change the composition of the MPO may require redesignation of one or more such MPOs.
- (i) The MPO (in cooperation with the State and public transportation operator(s)) shall review the MPA boundaries after each Census to determine if existing MPA boundaries meet the minimum statutory requirements for new and updated urbanized area(s), and shall be adjusted as necessary. As appropriate, additional adjustments should be made to reflect the most comprehensive boundary to foster an effective planning process that ensures

connectivity between modes, improves access to modal systems, and promotes efficient overall transportation investment strategies.

- (j) Following MPA boundary approval by the MPO and the Governor, the MPA boundary descriptions shall be provided for informational purposes to the FHWA and the FTA. The MPA boundary descriptions shall be submitted either as a geo-spatial database or described in sufficient detail to enable the boundaries to be accurately delineated on a map.

§ 450.314 Metropolitan planning agreements.

- (a) The MPO, the State(s), and the providers of public transportation shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State(s), and the providers of public transportation serving the MPA. To the extent possible, a single agreement between all responsible parties should be developed. The written agreement(s) shall include specific provisions for the development of financial plans that support the metropolitan transportation plan (see § 450.324) and the metropolitan TIP (see § 450.326) and development of the annual listing of obligated projects (see § 450.334).
- (b) The MPO, the State(s), and the providers of public transportation should periodically review and update the agreement, as appropriate, to reflect effective changes.
- (c) If the MPA does not include the entire nonattainment or maintenance area, there shall be a written agreement among the State department of transportation, State air quality agency, affected local agencies, and the MPO describing the process for cooperative planning and analysis of all projects outside the MPA within the nonattainment or maintenance area. The agreement must also indicate how the total transportation-related emissions for the nonattainment or maintenance area, including areas outside the MPA, will be treated for the purposes of determining conformity in accordance with the EPA's transportation conformity rule (40 CFR part 93, subpart A). The agreement shall address policy mechanisms for resolving conflicts concerning transportation-related emissions that may arise between the MPA and the portion of the nonattainment or maintenance area outside the MPA.
- (d) In nonattainment or maintenance areas, if the MPO is not the designated agency for air quality planning under section 174 of the Clean Air Act (42 U.S.C. 7504), there shall be a written agreement between the MPO and the designated air quality planning agency describing their respective roles and responsibilities for air quality related transportation planning.
- (e) If more than one MPO has been designated to serve an urbanized area, there shall be a written agreement among the MPOs, the State(s), and the public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent metropolitan transportation plans and TIPs across the MPA boundaries, particularly in cases in which a proposed transportation investment extends across the boundaries of more than one MPA. If any part of the urbanized area is a nonattainment or maintenance area, the agreement also shall include State and local air quality agencies. The metropolitan transportation planning processes for affected MPOs should, to the maximum extent possible, reflect coordinated data collection, analysis, and planning assumptions across the MPAs. Alternatively, a single metropolitan transportation plan and/or TIP for the entire urbanized area may be developed jointly by the MPOs in cooperation with their respective planning partners. Coordination efforts and outcomes shall be documented in subsequent transmittals of the UPWP and other planning products, including the metropolitan transportation plan and TIP, to the State(s), the FHWA, and the FTA.

- (f) Where the boundaries of the urbanized area or MPA extend across two or more States, the Governors with responsibility for a portion of the multistate area, the appropriate MPO(s), and the public transportation operator(s) shall coordinate transportation planning for the entire multistate area. States involved in such multistate transportation planning may:
 - (1) Enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section as the activities pertain to interstate areas and localities within the States; and
 - (2) Establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective.
- (g) If part of an urbanized area that has been designated as a TMA overlaps into an adjacent MPA serving an urbanized area that is not designated as a TMA, the adjacent urbanized area shall not be treated as a TMA. However, a written agreement shall be established between the MPOs with MPA boundaries including a portion of the TMA, which clearly identifies the roles and responsibilities of each MPO in meeting specific TMA requirements (e.g., congestion management process, Surface Transportation Program funds suballocated to the urbanized area over 200,000 population, and project selection).
- (h)
 - (1) The MPO(s), State(s), and the providers of public transportation shall jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO (see §450.306(d)), and the collection of data for the State asset management plan for the NHS for each of the following circumstances:
 - (i) When one MPO serves an urbanized area,
 - (ii) When more than one MPO serves an urbanized area, and
 - (iii) When an urbanized area that has been designated as a TMA overlaps into an adjacent MPA serving an urbanized area that is not a TMA.
 - (2) These provisions shall be documented either:
 - (i) As part of the metropolitan planning agreements required under (a), (e), and (g), of this section, or
 - (ii) Documented in some other means outside of the metropolitan planning agreements as determined cooperatively by the MPO(s), State(s), and providers of public transportation.

§ 450.316 Interested parties, participation, and consultation.

- (a) The MPO shall develop and use a documented participation plan that defines a process for providing individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public

transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

- (1) The MPO shall develop the participation plan in consultation with all interested parties and shall, at a minimum, describe explicit procedures, strategies, and desired outcomes for:
 - (i) Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP;
 - (ii) Providing timely notice and reasonable access to information about transportation issues and processes;
 - (iii) Employing visualization techniques to describe metropolitan transportation plans and TIPs;
 - (iv) Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;
 - (v) Holding any public meetings at convenient and accessible locations and times;
 - (vi) Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;
 - (vii) Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;
 - (viii) Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues that interested parties could not reasonably have foreseen from the public involvement efforts;
 - (ix) Coordinating with the statewide transportation planning public involvement and consultation processes under subpart B of this part; and
 - (x) Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.
- (2) When significant written and oral comments are received on the draft metropolitan transportation plan and TIP (including the financial plans) as a result of the participation process in this section or the interagency consultation process required under the EPA transportation conformity regulations (40 CFR part 93, subpart A), a summary, analysis, and report on the disposition of comments shall be made as part of the final metropolitan transportation plan and TIP.
- (3) A minimum public comment period of 45 calendar days shall be provided before the initial or revised participation plan is adopted by the MPO. Copies of the approved

participation plan shall be provided to the FHWA and the FTA for informational purposes and shall be posted on the World Wide Web, to the maximum extent practicable.

- (b) In developing metropolitan transportation plans and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, tourism, natural disaster risk reduction, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, the MPO shall develop the metropolitan transportation plans and TIPs with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the area that are provided by:
 - (1) Recipients of assistance under title 49 U.S.C. Chapter 53;
 - (2) Governmental agencies and nonprofit organizations (including representatives of the agencies and organizations) that receive Federal assistance from a source other than the U.S. Department of Transportation to provide non-emergency transportation services; and
 - (3) Recipients of assistance under 23 U.S.C. 201-204.
- (c) When the MPA includes Indian Tribal lands, the MPO shall appropriately involve the Indian Tribal government(s) in the development of the metropolitan transportation plan and the TIP.
- (d) When the MPA includes Federal public lands, the MPO shall appropriately involve the Federal land management agencies in the development of the metropolitan transportation plan and the TIP.
- (e) MPOs shall, to the extent practicable, develop a documented process(es) that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies, as defined in paragraphs (b), (c), and (d) of this section, which may be included in the agreement(s) developed under § 450.314.

§ 450.318 Transportation planning studies and project development.

- (a) Pursuant to section 1308 of the Transportation Equity Act for the 21st Century, TEA-21 (Pub. L. 105-178), an MPO(s), State(s), or public transportation operator(s) may undertake a multimodal, systems-level corridor or subarea planning study as part of the metropolitan transportation planning process. To the extent practicable, development of these transportation planning studies shall involve consultation with, or joint efforts among, the MPO(s), State(s), and/ or public transportation operator(s). The results or decisions of these transportation planning studies may be used as part of the overall project development process consistent with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*) and associated implementing regulations (23 CFR part 771 and 40 CFR parts 1500-1508). Specifically, these corridor or subarea studies may result in producing any of the following for a proposed transportation project:
 - (1) Purpose and need or goals and objective statement(s);
 - (2) General travel corridor and/or general mode(s) definition (e.g., highway, transit, or a highway/transit combination);

- (3) Preliminary screening of alternatives and elimination of unreasonable alternatives;
 - (4) Basic description of the environmental setting; and/or
 - (5) Preliminary identification of environmental impacts and environmental mitigation.
- (b) Publicly available documents or other source material produced by, or in support of, the transportation planning process described in this subpart may be incorporated directly or by reference into subsequent NEPA documents, in accordance with 40 CFR 1502.21, if:
- (1) The NEPA lead agencies agree that such incorporation will aid in establishing or evaluating the purpose and need for the Federal action, reasonable alternatives, cumulative or other impacts on the human and natural environment, or mitigation of these impacts; and
 - (2) The systems-level, corridor, or subarea planning study is conducted with:
 - (i) Involvement of interested State, local, Tribal, and Federal agencies;
 - (ii) Public review;
 - (iii) Reasonable opportunity to comment during the metropolitan transportation planning process and development of the corridor or subarea planning study;
 - (iv) Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document; and
 - (v) The review of the FHWA and the FTA, as appropriate.
- (c) By agreement of the NEPA lead agencies, the above integration may be accomplished through tiering (as described in 40 CFR 1502.20), incorporating the subarea or corridor planning study into the draft Environmental Impact Statement (EIS) or Environmental Assessment, or other means that the NEPA lead agencies deem appropriate.
- (d) Additional information to further explain the linkages between the transportation planning and project development/NEPA processes is contained in Appendix A to this part, including an explanation that it is nonbinding guidance material. The guidance in Appendix A applies only to paragraphs (a)-(c) in this section.
- (e) In addition to the process for incorporation directly or by reference outlined in paragraph (b) of this section, an additional authority for integrating planning products into the environmental review process exists in 23 U.S.C. 168. As provided in 23 U.S.C. 168(f):
- (1) The statutory authority in 23 U.S.C. 168 shall not be construed to limit in any way the continued use of processes established under other parts of this section or under an authority established outside of this part, and the use of one of the processes in this section does not preclude the subsequent use of another process in this section or an authority outside of this part.
 - (2) The statute does not restrict the initiation of the environmental review process during planning.

§ 450.320 Development of programmatic mitigation plans.

(a) An MPO may utilize the optional framework in this section to develop programmatic mitigation plans as part of the metropolitan transportation planning process to address the potential environmental impacts of future transportation projects. The MPO, in consultation with the FHWA and/or the FTA and with the agency or agencies with jurisdiction and special expertise over the resources being addressed in the plan, will determine:

(1) *Scope*

- (i) An MPO may develop a programmatic mitigation plan on a local, regional, ecosystem, watershed, statewide, or similar scale.
- (ii) The plan may encompass multiple environmental resources within a defined geographic area(s) or may focus on a specific type(s) of resource(s) such as aquatic resources, parkland, or wildlife habitat.
- (iii) The plan may address or consider impacts from all projects in a defined geographic area(s) or may focus on a specific type(s) of project(s).

(2) *Contents.* The programmatic mitigation plan may include:

- (i) An assessment of the existing condition of natural and human environmental resources within the area covered by the plan, including an assessment of historic and recent trends and/or any potential threats to those resources.
- (ii) An identification of economic, social, and natural and human environmental resources within the geographic area that may be impacted and considered for mitigation. Examples of these resources include wetlands, streams, rivers, stormwater, parklands, cultural resources, historic resources, threatened or endangered species, and critical habitat. This may include the identification of areas of high conservation concern or value and this worthy of avoidance.
- (iii) An inventory of existing or planned environmental resource banks for the impacted resource categories such as wetland, stream, stormwater, habitat, species, and an inventory of federally, State, or locally approved in-lieu-of-fee programs.
- (iv) An assessment of potential opportunities to improve the overall quality of the identified environmental resources through strategic mitigation for impacts of transportation projects which may include the prioritization of parcels or areas for acquisition and/or potential resource banking sites.
- (v) An adoption or development of standard measures or operating procedures for mitigating certain types of impacts; establishment of parameters for determining or calculating appropriate mitigation for certain types of impacts, such as mitigation ratios, or criteria for determining appropriate mitigation sites.
- (vi) Adaptive management procedures, such as protocols or procedures that involve monitoring actual impacts against predicted impacts over time and adjusting mitigation measures in response to information gathered through the monitoring.

- (vii) Acknowledgement of specific statutory or regulatory requirements that must be satisfied when determining appropriate mitigation for certain types of resources.
- (b) A MPO may adopt a programmatic mitigation plan developed pursuant to paragraph (a), or developed pursuant to an alternative process as provided for in paragraph (f) of this section through the following process:
 - (1) Consult with each agency with jurisdiction over the environmental resources considered in the programmatic mitigation plan;
 - (2) Make available a draft of the programmatic mitigation plan for review and comment by appropriate environmental resource agencies and the public;
 - (3) Consider comments received from such agencies and the public on the draft plan;
 - (4) Address such comments in the final programmatic mitigation plan.
- (c) A programmatic mitigation plan may be integrated with other plans, including watershed plans, ecosystem plans, species recovery plans, growth management plans, State Wildlife Action Plans, and land use plans.
- (d) If a programmatic mitigation plan has been adopted pursuant to paragraph (b), any Federal agency responsible for environmental reviews, permits, or approvals for a transportation project shall give substantial weight to the recommendations in the programmatic mitigation plan when carrying out its responsibilities under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) (NEPA) or other Federal environmental law.
- (e) Nothing in this section limits the use of programmatic approaches for reviews under NEPA.
- (f) Nothing in this section prohibits the development, as part of or separate from the transportation planning process, of a programmatic mitigation plan independent of the framework described in paragraph (a) of this section. Further, nothing in this section prohibits the adoption of a programmatic mitigation plan in the metropolitan planning process that was developed under another authority, independent of the framework described in paragraph (a).

§ 450.322 Congestion management process in transportation management areas.

- (a) The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction (including intercity bus operators, employer-based commuting programs such as a carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), job access projects, and operational management strategies.
- (b) The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP.
- (c) The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or

subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, improve transportation system management and operations, and improve efficient service integration within and across modes, including highway, transit, passenger and freight rail operations, and non-motorized transport. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

- (d) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:
 - (1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the underlying causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;
 - (2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area, including providers of public transportation;
 - (3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;
 - (4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:
 - (i) Demand management measures, including growth management and congestion pricing;
 - (ii) Traffic operational improvements;
 - (iii) Public transportation improvements;
 - (iv) ITS technologies as related to the regional ITS architecture; and
 - (v) Where necessary, additional system capacity.

- (5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and
 - (6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decisionmakers and the public to provide guidance on selection of effective strategies for future implementation.
- (e) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.
- (f) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.
- (g) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.
- (h) *Congestion management plan.* A MPO serving a TMA may develop a plan that includes projects and strategies that will be considered in the TIP of such MPO.
- (1) Such plan shall:
 - (i) Develop regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households;
 - (ii) Identify existing public transportation services, employer based commuter programs, and other existing transportation services that support access to jobs in the region; and
 - (iii) Identify proposed projects and programs to reduce congestion and increase job access opportunities.

- (2) In developing the congestion management plan, an MPO shall consult with employers, private and nonprofit providers of public transportation, transportation management organizations, and organizations that provide job access reverse commute projects or job-related services to low-income individuals.

§ 450.324 Development and content of the metropolitan transportation plan.

- (a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In formulating the transportation plan, the MPO shall consider factors described in § 450.306 as the factors related to a minimum 20-year forecast period. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.
- (b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.
- (c) The MPO shall review and update the transportation plan at least every 4 years in air quality nonattainment and maintenance areas and at least every 5 years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The MPO shall approve the transportation plan (and any revisions) and submit it for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.
- (d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP).
- (e) The MPO, the State(s), and the public transportation operator(s) shall validate data used in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.
- (f) The metropolitan transportation plan shall, at a minimum, include:
 - (1) The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;
 - (2) Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., pedestrian walkways and bicycle facilities), and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.

- (3) A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d).
- (4) A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including –
 - (i) Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and
 - (ii) For metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.
- (5) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.
- (6) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide.
- (7) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system.
- (8) Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate.
- (9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity rule (40 CFR part 93, subpart A). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates.
- (10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and

regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation.

- (11) A financial plan that demonstrates how the adopted transportation plan can be implemented.
- (i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).
 - (ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under § 450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.
 - (iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.
 - (iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).
 - (v) For the outer years of the metropolitan transportation plan (i.e., beyond the first 10 years), the financial plan may reflect aggregate cost ranges/ cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.
 - (vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.
 - (vii) For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.
 - (viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA

and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

- (12) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g).
- (g) The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:
- (1) Comparison of transportation plans with State conservation plans or maps, if available; or
 - (2) Comparison of transportation plans to inventories of natural or historic resources, if available.
- (h) The metropolitan transportation plan should integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including SHSP required under 23 U.S.C. 148, the Public Transportation Agency Safety Plan required under 49 U.S.C. 5329(d), or an Interim Agency Safety Plan in accordance with 49 CFR part 659, as in effect until completion of the Public Transportation Agency Safety Plan, and may incorporate or reference applicable emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, to safeguard the personal security of all motorized and non-motorized users.
- (i) An MPO may, while fitting the needs and complexity of its community, voluntarily elect to develop multiple scenarios for consideration as part of the development of the metropolitan transportation plan.
- (1) An MPO that chooses to develop multiple scenarios under this paragraph (i) is encouraged to consider:
 - (i) Potential regional investment strategies for the planning horizon;
 - (ii) Assumed distribution of population and employment;
 - (iii) A scenario that, to the maximum extent practicable, maintains baseline conditions for the performance areas established in § 450.306(d) and measures established under 23 CFR part 490;
 - (iv) A scenario that improves the baseline conditions for as many of the performance measures identified in § 450.306(d) as possible.
 - (v) Revenue constrained scenarios based on the total revenues expected to be available over the forecast period of the plan; and
 - (vi) Estimated costs and potential revenues available to support each scenario.

- (2) In addition to the performance areas identified in 23 U.S.C. 150(c), 49 U.S.C. 5326(c), and 5329(d), and the measures established under 23 CFR part 490, MPOs may evaluate scenarios developed under this paragraph using locally developed measures.
- (j) The MPO shall provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under § 450.316(a).
- (k) The MPO shall publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.
- (l) A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(11) of this section.
- (m) In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93, subpart A). A 12-month conformity lapse grace period will be implemented when an area misses an applicable deadline, in accordance with the Clean Air Act and the transportation conformity regulations (40 CFR part 93, subpart A). At the end of this 12-month grace period, the existing conformity determination will lapse. During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

§ 450.326 Development and content of the transportation improvement program (TIP).

- (a) The MPO, in cooperation with the State(s) and any affected public transportation operator(s), shall develop a TIP for the metropolitan planning area. The TIP shall reflect the investment priorities established in the current metropolitan transportation plan and shall cover a period of no less than 4 years, be updated at least every 4 years, and be approved by the MPO and the Governor. However, if the TIP covers more than four years, the FHWA and the FTA will consider the projects in the additional years as informational. The MPO may update the TIP more frequently, but the cycle for updating the TIP must be compatible with the STIP development and approval process. The TIP expires when the FHWA/FTA approval of the STIP expires. Copies of any updated or revised TIPs must be provided to the FHWA and the FTA. In nonattainment and maintenance areas subject to transportation conformity requirements, the FHWA and the FTA, as well as the MPO, must make a conformity determination on any updated or amended TIP, in accordance with the Clean Air Act requirements and the EPA's transportation conformity regulations (40 CFR part 93, subpart A).

- (b) The MPO shall provide all interested parties with a reasonable opportunity to comment on the proposed TIP as required by § 450.316(a). In addition, in nonattainment area TMAs, the MPO shall provide at least one formal public meeting during the TIP development process, which should be addressed through the participation plan described in § 450.316(a). In addition, the MPO shall publish or otherwise make readily available the TIP for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web, as described in § 450.316(a).
- (c) The TIP shall be designed such that once implemented, it makes progress toward achieving the performance targets established under § 450.306(d).
- (d) The TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets.
- (e) The TIP shall include capital and non-capital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation alternatives; associated transit improvements; Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects; HSIP projects; trails projects; accessible pedestrian walkways; and bicycle facilities), except the following that may be included:
 - (1) Safety projects funded under 23 U.S.C. 402 and 49 U.S.C. 31102;
 - (2) Metropolitan planning projects funded under 23 U.S.C. 104(d) and 49 U.S.C. 5305(d);
 - (3) State planning and research projects funded under 23 U.S.C. 505 and 49 U.S.C. 5305(e);
 - (4) At the discretion of the State and MPO, metropolitan planning projects funded with Surface Transportation Program funds;
 - (5) Emergency relief projects (except those involving substantial functional, locational, or capacity changes);
 - (6) National planning and research projects funded under 49 U.S.C. 5314; and
 - (7) Project management oversight projects funded under 49 U.S.C. 5327.
- (f) The TIP shall contain all regionally significant projects requiring an action by the FHWA or the FTA whether or not the projects are to be funded under title 23 U.S.C. Chapters 1 and 2 or title 49 U.S.C. Chapter 53 (e.g., addition of an interchange to the Interstate System with State, local, and/ or private funds and congressionally designated projects not funded under 23 U.S.C. or 49 U.S.C. Chapter 53). For public information and conformity purposes, the TIP shall include all regionally significant projects proposed to be funded with Federal funds other than those administered by the FHWA or the FTA, as well as all regionally significant projects to be funded with non-Federal funds.
- (g) The TIP shall include, for each project or phase (e.g., preliminary engineering, environment/NEPA, right-of-way, design, or construction), the following:
 - (1) Sufficient descriptive material (i.e., type of work, termini, and length) to identify the project or phase;

- (2) Estimated total project cost, which may extend beyond the four years of the TIP;
 - (3) The amount of Federal funds proposed to be obligated during each program year for the project or phase (for the first year, this includes the proposed category of Federal funds and source(s) of non-Federal funds. For the second, third, and fourth years, this includes the likely category or possible categories of Federal funds and sources of non-Federal funds);
 - (4) Identification of the agencies responsible for carrying out the project or phase;
 - (5) In nonattainment and maintenance areas, identification of those projects which are identified as TCMs in the applicable SIP;
 - (6) In nonattainment and maintenance areas, included projects shall be specified in sufficient detail (design concept and scope) for air quality analysis in accordance with the EPA transportation conformity regulations (40 CFR part 93, subpart A); and
 - (7) In areas with Americans with Disabilities Act required paratransit and key station plans, identification of those projects that will implement these plans.
- (h) Projects that are not considered to be of appropriate scale for individual identification in a given program year may be grouped by function, work type, and/or geographic area using the applicable classifications under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93. In nonattainment and maintenance areas, project classifications must be consistent with the “exempt project” classifications contained in the EPA transportation conformity regulations (40 CFR part 93, subpart A). In addition, projects proposed for funding under title 23 U.S.C. Chapter 2 that are not regionally significant may be grouped in one line item or identified individually in the TIP.
- (i) Each project or project phase included in the TIP shall be consistent with the approved metropolitan transportation plan.
- (j) The TIP shall include a financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs. In developing the TIP, the MPO, State(s), and public transportation operator(s) shall cooperatively develop estimates of funds that are reasonably expected to be available to support TIP implementation, in accordance with § 450.314(a). Only projects for which construction or operating funds can reasonably be expected to be available may be included. In the case of new funding sources, strategies for ensuring their availability shall be identified. In developing the financial plan, the MPO shall take into account all projects and strategies funded under title 23 U.S.C., title 49 U.S.C. Chapter 53 and other Federal funds; and regionally significant projects that are not federally funded. For purposes of transportation operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(6)) and public transportation (as defined by title 49 U.S.C. Chapter 53). In addition, for illustrative purposes, the financial plan may include additional projects that would be included in the TIP if reasonable additional resources beyond those identified in the financial plan were to become available. Revenue and cost estimates for the TIP must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

- (k) The TIP shall include a project, or a phase of a project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project. In nonattainment and maintenance areas, projects included in the first two years of the TIP shall be limited to those for which funds are available or committed. For the TIP, financial constraint shall be demonstrated and maintained by year and shall include sufficient financial information to demonstrate which projects are to be implemented using current and/or reasonably available revenues, while federally supported facilities are being adequately operated and maintained. In the case of proposed funding sources, strategies for ensuring their availability shall be identified in the financial plan consistent with paragraph (h) of this section. In nonattainment and maintenance areas, the TIP shall give priority to eligible TCMs identified in the approved SIP in accordance with the EPA transportation conformity regulations (40 CFR part 93, subpart A) and shall provide for their timely implementation.
- (l) In cases that the FHWA and the FTA find a TIP to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint. However, in such cases, the FHWA and the FTA will not act on an updated or amended TIP that does not reflect the changed revenue situation.
- (m) Procedures or agreements that distribute suballocated Surface Transportation Program funds to individual jurisdictions or modes within the MPA by pre-determined percentages or formulas are inconsistent with the legislative provisions that require the MPO, in cooperation with the State and the public transportation operator, to develop a prioritized and financially constrained TIP and shall not be used unless they can be clearly shown to be based on considerations required to be addressed as part of the metropolitan transportation planning process.
- (n) As a management tool for monitoring progress in implementing the transportation plan, the TIP should:
 - (1) Identify the criteria and process for prioritizing implementation of transportation plan elements (including multimodal trade-offs) for inclusion in the TIP and any changes in priorities from previous TIPs;
 - (2) List major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects; and
 - (3) In nonattainment and maintenance areas, describe the progress in implementing any required TCMs, in accordance with 40 CFR part 93.
- (o) In metropolitan nonattainment and maintenance areas, a 12-month conformity lapse grace period will be implemented when an area misses an applicable deadline, according to the Clean Air Act and the transportation conformity regulations (40 CFR part 93, subpart A). At the end of this 12-month grace period, the existing conformity determination will lapse. During a conformity lapse, MPOs may prepare an interim TIP as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim TIP consisting of eligible projects from, or consistent with, the most recent conforming metropolitan transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim TIP containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

- (p) Projects in any of the first 4 years of the TIP may be advanced in place of another project in the first 4 years of the TIP, subject to the project selection requirements of § 450.332. In addition, the MPO may revise the TIP at any time under procedures agreed to by the State, MPO(s), and public transportation operator(s) consistent with the TIP development procedures established in this section, as well as the procedures for the MPO participation plan (see § 450.316(a)) and FHWA/FTA actions on the TIP (see § 450.330).

§ 450.328 TIP revisions and relationship to the STIP.

- (a) An MPO may revise the TIP at any time under procedures agreed to by the cooperating parties consistent with the procedures established in this part for its development and approval. In nonattainment or maintenance areas for transportation-related pollutants, if a TIP amendment involves non-exempt projects (per 40 CFR part 93), or is replaced with an updated TIP, the MPO and the FHWA and the FTA must make a new conformity determination. In all areas, changes that affect fiscal constraint must take place by amendment of the TIP. The MPO shall use public participation procedures consistent with § 450.316(a) in revising the TIP, except that these procedures are not required for administrative modifications.
- (b) After approval by the MPO and the Governor, the TIP shall be included without change, directly or by reference, in the STIP required under 23 U.S.C. 135. In nonattainment and maintenance areas, the FHWA and the FTA must make a conformity finding on the TIP before it is included in the STIP. A copy of the approved TIP shall be provided to the FHWA and the FTA.
- (c) The State shall notify the MPO and Federal land management agencies when it has included a TIP including projects under the jurisdiction of these agencies in the STIP.

§ 450.330 TIP action by the FHWA and the FTA.

- (a) The FHWA and the FTA shall jointly find that each metropolitan TIP is consistent with the metropolitan transportation plan produced by the continuing and comprehensive transportation process carried on cooperatively by the MPO(s), the State(s), and the public transportation operator(s) in accordance with 23 U.S.C. 134 and 49 U.S.C. 5303. This finding shall be based on the self-certification statement submitted by the State and MPO under § 450.336, a review of the metropolitan transportation plan by the FHWA and the FTA, and upon other reviews as deemed necessary by the FHWA and the FTA.
- (b) In nonattainment and maintenance areas, the MPO, as well as the FHWA and the FTA, shall determine conformity of any updated or amended TIP, in accordance with 40 CFR part 93. After the FHWA and the FTA issue a conformity determination on the TIP, the TIP shall be incorporated, without change, into the STIP, directly or by reference.
- (c) If an MPO has not updated the metropolitan transportation plan in accordance with the cycles defined in § 450.324(c), projects may only be advanced from a TIP that was approved and found to conform (in nonattainment and maintenance areas) prior to expiration of the metropolitan transportation plan and meets the TIP update requirements of § 450.326(a). Until the MPO approves (in attainment areas) or the FHWA and the FTA issue a conformity determination on (in nonattainment and maintenance areas) the updated metropolitan transportation plan, the MPO may not amend the TIP.
- (d) In the case of extenuating circumstances, the FHWA and the FTA will consider and take appropriate action on requests to extend the STIP approval period for all or part of the TIP in accordance with § 450.220(b).

- (e) If an illustrative project is included in the TIP, no Federal action may be taken on that project by the FHWA and the FTA until it is formally included in the financially constrained and conforming metropolitan transportation plan and TIP.
- (f) Where necessary in order to maintain or establish operations, the FHWA and the FTA may approve highway and transit operating assistance for specific projects or programs, even though the projects or programs may not be included in an approved TIP.

§ 450.332 Project selection from the TIP.

- (a) Once a TIP that meets the requirements of 23 U.S.C. 134(j), 49 U.S.C. 5303(j), and § 450.326 has been developed and approved, the first year of the TIP shall constitute an “agreed to” list of projects for project selection purposes and no further project selection action is required for the implementing agency to proceed with projects, except where the appropriated Federal funds available to the metropolitan planning area are significantly less than the authorized amounts or where there are significant shifting of projects between years. In this case, the MPO, the State, and the public transportation operator(s) if requested by the MPO, the State, or the public transportation operator(s) shall jointly develop a revised “agreed to” list of projects. If the State or public transportation operator(s) wishes to proceed with a project in the second, third, or fourth year of the TIP, the specific project selection procedures stated in paragraphs (b) and (c) of this section must be used unless the MPO, the State, and the public transportation operator(s) jointly develop expedited project selection procedures to provide for the advancement of projects from the second, third, or fourth years of the TIP.
- (b) In metropolitan areas not designated as TMAs, the State and/or the public transportation operator(s), in cooperation with the MPO shall select projects to be implemented using title 23 U.S.C. funds (other than Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects) or funds under title 49 U.S.C. Chapter 53, from the approved metropolitan TIP. Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects shall be selected in accordance with procedures developed pursuant to 23 U.S.C. 201, 202, 203 and 204.
- (c) In areas designated as TMAs, the MPO shall select all 23 U.S.C. and 49 U.S.C. Chapter 53 funded projects (excluding projects on the NHS and Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program) in consultation with the State and public transportation operator(s) from the approved TIP and in accordance with the priorities in the approved TIP. The State shall select projects on the NHS in cooperation with the MPO, from the approved TIP. Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects shall be selected in accordance with procedures developed pursuant to 23 U.S.C. 201, 202, 203 and 204.
- (d) Except as provided in § 450.326(e) and § 450.330(f), projects not included in the federally approved STIP are not eligible for funding with funds under title 23 U.S.C. or 49 U.S.C. Chapter 53.
- (e) In nonattainment and maintenance areas, priority shall be given to the timely implementation of TCMs contained in the applicable SIP in accordance with the EPA transportation conformity regulations (40 CFR part 93, subpart A).

§ 450.334 Annual listing of obligated projects.

- (a) In metropolitan planning areas, on an annual basis, no later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop a listing of projects (including investments in pedestrian walkways and

bicycle transportation facilities) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year.

- (b) The listing shall be prepared in accordance with § 450.314(a) and shall include all federally funded projects authorized or revised to increase obligations in the preceding program year, and shall at a minimum include the TIP information under § 450.326(g)(1) and (4) and identify, for each project, the amount of Federal funds requested in the TIP, the Federal funding that was obligated during the preceding year, and the Federal funding remaining and available for subsequent years.
- (c) The listing shall be published or otherwise made available in accordance with the MPO's public participation criteria for the TIP.

§ 450.336 Self-certifications and Federal certifications.

- (a) For all MPAs, concurrent with the submittal of the entire proposed TIP to the FHWA and the FTA as part of the STIP approval, the State and the MPO shall certify at least every 4 years that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:
 - (1) 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
 - (2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
 - (3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
 - (4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
 - (5) Section 1101(b) of the FAST Act (Pub. L. 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in DOT funded projects;
 - (6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
 - (7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
 - (8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
 - (9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
 - (10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.
- (b) In TMAs, the FHWA and the FTA jointly shall review and evaluate the transportation planning process for each TMA no less than once every 4 years to determine if the process meets the requirements of applicable provisions of Federal law and this subpart.
 - (1) After review and evaluation of the TMA planning process, the FHWA and FTA shall take one of the following actions:

- (i) If the process meets the requirements of this part and the MPO and the Governor have approved a TIP, jointly certify the transportation planning process;
 - (ii) If the process substantially meets the requirements of this part and the MPO and the Governor have approved a TIP, jointly certify the transportation planning process subject to certain specified corrective actions being taken; or
 - (iii) If the process does not meet the requirements of this part, jointly certify the planning process as the basis for approval of only those categories of programs or projects that the FHWA and the FTA jointly determine, subject to certain specified corrective actions being taken.
- (2) If, upon the review and evaluation conducted under paragraph (b)(1)(iii) of this section, the FHWA and the FTA do not certify the transportation planning process in a TMA, the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the MPO for projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 in addition to corrective actions and funding restrictions. The withheld funds shall be restored to the MPA when the metropolitan transportation planning process is certified by the FHWA and FTA, unless the funds have lapsed.
- (3) A certification of the TMA planning process will remain in effect for 4 years unless a new certification determination is made sooner by the FHWA and the FTA or a shorter term is specified in the certification report.
- (4) In conducting a certification review, the FHWA and the FTA shall provide opportunities for public involvement within the metropolitan planning area under review. The FHWA and the FTA shall consider the public input received in arriving at a decision on a certification action.
- (5) The FHWA and the FTA shall notify the MPO(s), the State(s), and public transportation operator(s) of the actions taken under paragraphs (b)(1) and (b)(2) of this section. The FHWA and the FTA will update the certification status of the TMA when evidence of satisfactory completion of a corrective action(s) is provided to the FHWA and the FTA.

§ 450.338 Applicability of NEPA to metropolitan transportation plans and programs.

Any decision by the Secretary concerning a metropolitan transportation plan or TIP developed through the processes provided for in 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart shall not be considered to be a Federal action subject to review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*).

§ 450.340 Phase-in of new requirements.

- (a) Prior to May 27, 2018, an MPO may adopt a metropolitan transportation plan that has been developed using the SAFETEA-LU requirements or the provisions and requirements of this part. On or after May 27, 2018, an MPO may not adopt a metropolitan transportation plan that has not been developed according to the provisions and requirements of this part.
- (b) Prior to May 27, 2018 (2 years after the publication date of this rule), FHWA/FTA may determine the conformity of, or approve as part of the STIP, a TIP that has been developed using SAFETEA-LU requirements or the provisions and requirements of this part. On or after May 27, 2018 (2 years after the publication date of this rule), FHWA/FTA may only determine the conformity of, or approve as part of the STIP, a TIP that has been developed

according to the provisions and requirements of this part, regardless of when the MPO developed the TIP.

- (c) On or after May 27, 2018 (2 years after the publication date of this rule), the FHWA and the FTA will take action (i.e., conformity determinations and STIP approvals) on an updated or amended TIP developed under the provisions of this part, even if the MPO has not yet adopted a new metropolitan transportation plan under the provisions of this part, as long as the underlying transportation planning process is consistent with the requirements in the MAP-21.
- (d) On or after May 27, 2018 (2 years after the publication date of this rule), an MPO may make an administrative modification to a TIP that conforms to either the SAFETEA-LU or the provisions of this part.
- (e) Two years from the effective date of each rule establishing performance measures under 23 U.S.C. 150(c), 49 U.S.C. 5326, and 49 U.S.C. 5329 FHWA/FTA will only determine the conformity of, or approve as part of a STIP, a TIP that is based on a metropolitan transportation planning process that meets the performance based planning requirements in this part and in such a rule.
- (f) Prior to 2 years from the effective date of each rule establishing performance measures under 23 U.S.C. 150(c), 49 U.S.C. 5326, or 49 U.S.C. 5329, an MPO may adopt a metropolitan transportation plan that has been developed using the SAFETEA-LU requirements or the performance-based planning requirements of this part and in such a rule. Two years on or after the effective date of each rule establishing performance measures under 23 U.S.C. 150(c), 49 U.S.C. 5326, or 49 U.S.C. 5329, an MPO may only adopt a metropolitan transportation plan that has been developed according to the performance-based planning requirements of this part and in such a rule.
- (g) A newly designated TMA shall implement the congestion management process described in § 450.322 within 18 months of the designation of a new TMA.

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APPENDIX E
STATE CODE APPLICABLE TO MPOS

Below is the state code applicable to MPOs:

CHAPTER 554

An Act to amend and reenact § 33.1-23.03:01 of the Code of Virginia and to amend the Code of Virginia by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:25, relating to duties and responsibilities of Metropolitan Planning Organizations.

[§ 1112]

Approved March 25, 2011

Be it enacted by the General Assembly of Virginia:

1. That § 33.1-23.03:01 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:25 as follows:

§ 33.1-23.03:01. Distribution of certain federal funds.

Metropolitan Planning Organizations (MPOs) as defined under Title 23 U.S.C. 134 and Section 8 of the Federal Transit Act shall be authorized to issue contracts for studies and to develop and approve transportation plans and improvement programs to the full extent permitted by federal law.

The Commonwealth Transportation Board (CTB), Virginia Department of Transportation, and Department of Rail and Public Transportation are directed to develop and implement a decision-making process that provides MPOs and regional transportation planning bodies a meaningful opportunity for input into transportation decisions that impact the transportation system within their boundaries. Such a process shall provide the MPOs and regional transportation planning bodies with the CTB priorities for development of the Six-Year Improvement Program and an opportunity for them to identify their regional priorities for consideration.

§ 33.1-223.2:25. Transportation planning duties and responsibilities of Metropolitan Planning Organizations.

The Metropolitan Planning Organizations (MPOs) of Virginia shall be responsible for the development of regional long-range transportation plans for the regions they represent in accordance with federal regulation. Each such long-range plan shall include a fiscally constrained list of all multimodal transportation projects, including those managed at the statewide level either by the Virginia Department of Transportation or the Virginia Department of Rail and Public Transportation. The purpose of the plan is to comply with federal regulations and provide the MPOs and the region a source of candidate projects for the MPOs' use in developing regional Transportation Improvement Programs (TIPs) and serving as an input to assist the Commonwealth with the development of the statewide Long-Range Plan (VTrans).

The MPOs shall develop amendments for their regional TIPs in accordance with federal regulations. The MPOs shall be required to coordinate planning and programming actions with those of the Commonwealth and duly established public transit agencies in accordance with federal regulations.

The MPOs shall examine the structure and cost of transit operations within the regions they represent and incorporate the results of these inquiries in their plans and shall endorse long-range plans for assuring maximum utilization and integration of mass transportation facilities throughout the Commonwealth.

The MPOs shall conduct a public involvement process focused on projects and topics that will best enable them to develop and approve Long Range Transportation Plans (LRTPs) that shall be submitted for approval by their board and forwarded to the Commonwealth Transportation Board and updated as required by federal regulations.

APPENDIX F
PUBLIC COMMENTS ON FY 2020 UPWP

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**HRTPO Public Comment**  
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RE: FY 2020 Unified Planning Work Program (UPWP)

Name: Mr. Caleb Brooks – Virginia Department of Transportation (Hampton Roads District)

Date: April 17, 2019

Subject: Regional Freight Planning

Public Comment Input (Via E-Mail)

Just one comment from the District on the 2020 UPWP Draft:

Should the FTAC portion (page 40) be updated to include any new developments with the recent reconvening of this subcommittee?

Thanks

Staff Response

Thank you for your comment. In response, TPO staff members have re-reviewed the full text for Task 6.0 – Regional Freight Planning in the Draft FY 2020 Unified Planning Work Program (UPWP) and believe that the existing language adequately covers and addresses the anticipated work of the Freight Transportation Advisory Committee (FTAC) for the upcoming fiscal year. We will continue to closely monitor the progress of FTAC during the year and be ready to incorporate any new items or issues from the group into an amended or future UPWP. Your input will be included in the Public Comments section on the final FY 2020 UPWP document. – Keith Nichols, Principal Transportation Engineer