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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) 2017 Unified Planning Work Program (UPWP) describes the transportation planning work and associated funding for the Hampton Roads MPA for the period from July 1, 2016 to June 30, 2017. The UPWP is developed by the HRTPO in coordination with Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (DRPT).

ACKNOWLEDGMENTS

This document was prepared by the Hampton Roads Transportation Planning Organization (HRTPO) in cooperation with the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), Hampton Roads Transit (HRT) and the Williamsburg Area Transit Authority (WATA). The contents of this work program reflect the views of the HRTPO. The HRTPO staff 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, FTA, VDOT, or DRPT. This document does not constitute a standard, specification, or regulation. FHWA, FTA, VDOT, or DRPT acceptance of this document as evidence of fulfillment of the objectives of this work program 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

- 8/4/16 UPWP revised to reflect final carryover Section 5303 (CO5303) funding. The budgets for the following tasks have been revised to account for the actual carryover funding. Task 10.0 HRTPO Administration: increase the CO5303 budget by \$4,872 in FY 2016 5303 funds; Task 11.8 TDCHR Transit Development Plan: increase the CO5303 budget by \$52,274 in FY 2016 5303 funds. This revision also included updates to Tables A-E to account for the change in funding.
- 11/8/16 UPWP revised to reflect the transfer of \$9,000 FY 2017 PL funds from Task 13.0 HRTPO Contingency Funding to Task 3.0 Performance Management to cover the acquisition of cycling data to enhance the HRTPO transportation database in support of the HRTPO's active transportation and multimodal mobility planning activities outlined in the UPWP. This revision also included updates to Tables C, D, and E to reflect the transfer of funds.
- 12/21/16 UPWP revised to reflect the transfer of \$9,500 FY 2017 PL funds from Task 13.0 HRTPO Contingency Funding to Task 3.0 Performance Management to cover the acquisition of Virginia Employment Commission (VEC) data and the annual maintenance fee for the REMI model in support of the HRTPO's Long Range Transportation Plan activities outlined in the UPWP and the transfer of \$13,500 FY 2017 PI funds from Task 13.0 HRTPO Contingency Funding to Task 10.0 HRTPO Administration for three replacement computers to maintain the technical capability necessary to carry out the activities described in the UPWP. This revision also included updates to Tables C, D, and E to reflect the transfer of funds.
- 5/11/17 UPWP revised to adjust task budgets to reflect updated estimates of the personnel cost necessary to carry out the following tasks: transfer \$50,000 of FY 2017 PL funds from Task 9.3, Candidates for Conversion of One-Way Streets in Hampton Roads to Two-Way, to Task 10.0, HRTPO Administration; transfer \$70,000 of FY 2017 PL funds from Task 8.0, Multimodal Mobility, to Task 10.0, HRTPO Administration; transfer \$35,000 of FY 2017 PL funds from Task 9.5, Regional and Local Planning Implications of Connected and Automated Vehicles, to Task 9.1, Technical Support, Research, and Coordination. This revision also included updates to Tables C, D, and E to reflect the transfer of funds.

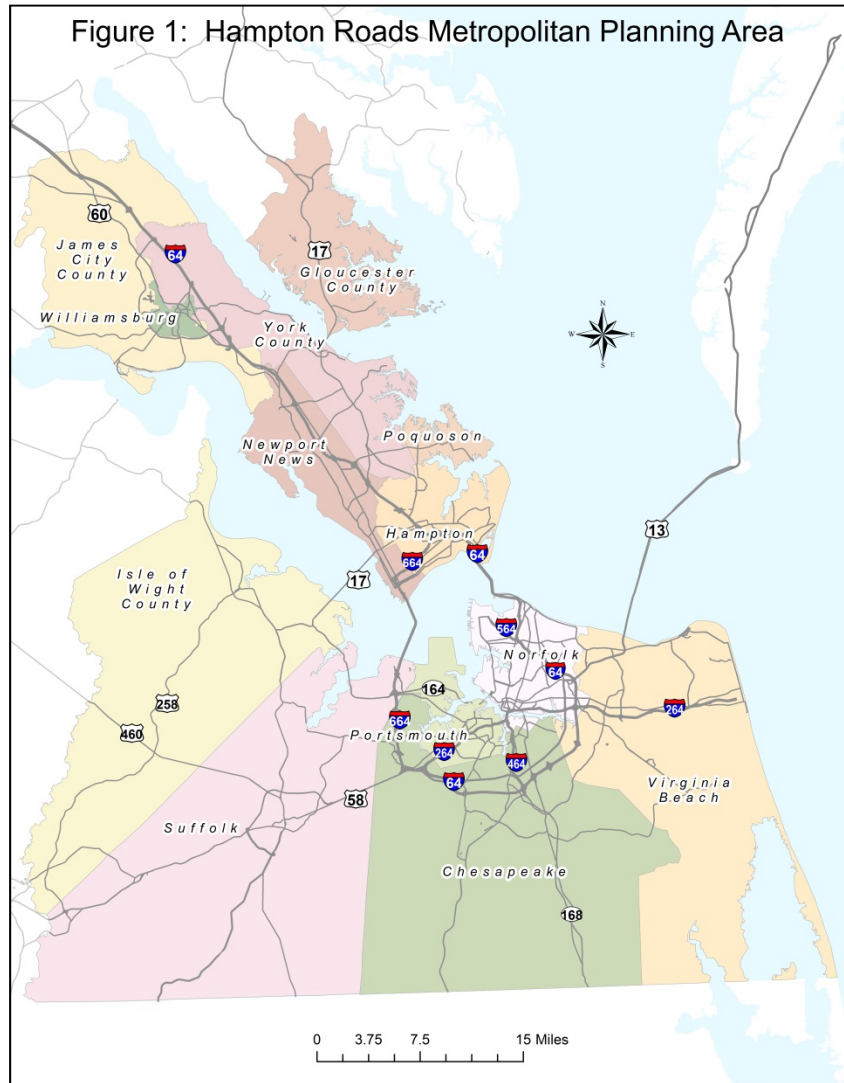
INTRODUCTION

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) 2017 Unified Planning Work Program (UPWP) describes the transportation planning work and associated funding for the Hampton Roads MPA for the period from July 1, 2016 to June 30, 2017. The UPWP is developed by the HRTPO in coordination with Hampton Roads Transit (HRT), Williamsburg Area Transit Authority (WATA), 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**.

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 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 14.0, which accounts for the work done by the HRTPO staff for the City of Franklin, the Counties of Southampton and Surry, and the portion of Gloucester County that lies 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 2017, the planning priorities for the HRTPO include better integrating the following issues into HRTPO planning and programming:

Scenario Planning

Scenario planning involves the development of various alternatives to meet the needs and goals of the region. Each alternative accounts for a number of issues (health, transportation, economic, environmental, land use, etc.) that affect growth. Comparing the alternatives and their trade-offs helps decision-makers select the scenario that best meets their goals and the selected scenario guides the development of the Long-Range Transportation Plan.

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 new 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 – can encourage people to use non-motorized options to reach their destinations.

Connected and Autonomous Vehicles

Connected vehicles use a variety of technologies to communicate with the driver, other vehicles, roadside infrastructure, and the internet. *Autonomous vehicles* are capable of navigating the roadway system without human input. Such vehicles detect the surroundings – obstacles, signage, other vehicles, appropriate navigation paths – and interpret that information to allow the vehicle to safely drive itself. Although many issues and questions will have to be resolved before connected and autonomous vehicles become commonplace, it is important to take the potential effects of these technologies into account in regional transportation planning.

Planning Factors

The **Fixing America's Surface Transportation (FAST) Act**, signed into law on December 4, 2015, added 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 2017 UPWP. **Table A** provides an overview of the amount of funding provided by the federal and state governments 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 2017 UPWP budget attributable to the following entities: HRTPO, VDOT, HRT, and WATA.

TABLE A

FUNDS FOR REGIONAL TRANSPORTATION PLANNING AND PROGRAMMING SUMMARIZED BY SOURCE OF FUNDS				
Federal	State	Local Match	Transit Agency Match	TOTAL
\$15,716,688	\$11,108,651	\$300,793	\$665,727	\$27,791,861
56.55%	39.97%	1.08%	2.40%	100.00%

TABLE B

BUDGET FOR REGIONAL TRANSPORTATION PLANNING AND PROGRAMMING SUMMARIZED BY ENTITY				
HRTPO	VDOT	HRT	WATA	TOTAL
\$3,071,434 ¹	\$546,650	\$23,973,777 ²	\$200,000	\$27,791,861
11.05%	1.97%	86.26%	0.72%	100.00%

¹ Includes: \$2,512,013 FHWA Planning (PL) funds received via Virginia Department of Transportation
\$350,921 FTA Section 5303 funds received via Virginia Department of Rail and Public Transportation
\$136,000 Hampton Roads Transportation Fund for HRTPO staff support to Hampton Roads Transportation
Accountability Commission
\$72,500 State Planning and Research (SPR) funds received via Virginia Department of Transportation

² Includes: \$11,760,000 RSTP funds and \$10,640,000 in other state/local funds associated with three Transit Extension Studies

Last Revised 8/4/16. See List of Revisions, Page vi, for details.

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, and WATA). The funding shown in Tables C and D comes 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 2017 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 Program (STP) provides federal funding that may be used by states and localities for a wide variety of highway and transit projects. RSTP funds are STP 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 Program (TAP) Funds:

The TAP 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) and the Williamsburg Area Transit Authority (WATA) 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.

Table C : Funding Sources by Task
Hampton Roads Transportation Planning Organization
FY 2017 Unified Planning Work Program
(Funding in Dollars)

Task #	Task Title	FHWA SPR Funds			FHWA PL Funds			FTA Section 5303 Funds			FTA Section 5307 Funds			Other Federal Funds (See Footnotes)			FTA Section 5303 Carryover Funds			Total			Grand Total	
		Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match	Federal	State Match	Local Match		
1.0	Long Range Transportation Plan				195,440	24,430	24,430	35,360	4,420	4,420									230,800	28,850	28,850	288,500		
2.0	Transportation Project Programming				140,880	17,610	17,610	35,120	4,390	4,390									176,000	22,000	22,000	220,000		
3.0	Performance Management				67,920	8,490	8,490	19,040	2,380	2,380									86,960	10,870	10,870	108,700		
4.0	Public Participation				239,120	29,890	29,890	25,360	3,170	3,170									264,480	33,060	33,060	330,600		
5.0	Unified Planning Work Program				39,680	4,960	4,960	11,040	1,380	1,380									50,720	6,340	6,340	63,400		
6.0	Regional Freight Planning				79,760	9,970	9,970												79,760	9,970	9,970	99,700		
7.0	Safety, Security, & Resiliency Planning				30,560	3,820	3,820												30,560	3,820	3,820	38,200		
8.0	Multi-Modal Mobility				57,440	7,180	7,180	61,120	7,640	7,640									118,560	14,820	14,820	148,200		
9.1	Technical Support, Research & Coordination				155,840	19,480	19,480	32,640	4,060	4,060									188,480	23,560	23,560	235,600		
9.2	Hampton Roads Active Transportation Plan				25,680	3,210	3,210	23,200	2,900	2,900									48,880	6,110	6,110	61,100		
9.3	Candidates for Converting One-Way Streets to Two-Way Streets				24,080	3,010	3,010												24,080	3,010	3,010	30,100		
9.4	Military Transportation Needs Study Update				41,680	5,210	5,210												41,680	5,210	5,210	52,100		
9.5	Regional & Local Planning Implications of Connected & Automated Vehicles				43,440	5,430	5,430												43,440	5,430	5,430	54,300		
10.0	HRTPO Administration				623,693	77,962	77,962	33,959	4,245	4,245								3,897	487	487	661,549	82,694	82,694	826,937
11.1	TDCHR - Performance Monitoring and Evaluation							120,000	15,000	15,000									120,000	15,000	15,000	150,000		
11.2	WATA - Performance Monitoring and Evaluation							160,000	20,000	20,000									160,000	20,000	20,000	200,000		
11.3	Feasibility/Corridor Studies																		11,760,000	10,332,000	308,000	22,400,000		
11.4	Disadvantaged Business Enterprise Planning							8,000	1,000	1,000									8,000	1,000	1,000	10,000		
11.5	Regional Transportation Demand Management Program - TRAFFIX																		789,202	197,301	197,301	986,503		
11.6	Financial Planning																				150,000	150,000		
11.7	TDCHR Public Involvement/Public Information/Publications																				140,000	140,000		
11.8	TDCHR Transit Development Plan							52,000	6,500	6,500								41,819	5,227	5,227	93,819	11,727	31,727	137,274
12.0	VDOT Regional Planning				437,320	109,330	0												437,320	109,330	0	546,650		
13.0	HRTPO Contingency Funding				58,000	0	14,500												244,398	30,550	30,550	305,497		
14.0	Rural Transportation Planning																		58,000			72,500		
15.0	HRTAC Administration				495,320	109,330	14,500	2,009,611	251,201	251,201									12,549,202	10,685,301	618,000	11,108,651	968,521	27,791,861
	Total																							

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

(In) = Footnote - See below:

- (1) = CMAQ Funds
- (2) = DRPT Technical Assistance Funds
- (3) = RSTP Funds
- (4) = HRTF Funds
- (5) = State/Local Funds
- (6) = Section 5307 Funds

Table C last revised 5/1/17. See List of Revisions, Page vi, for details.

Table D: Budget by Recipient
Hampton Roads Transportation Planning Organization
FY 2017 Unified Planning Work Program
(Funding in Dollars)

Task #	Task Title	HRTPO				VDOT			HRT			WATA			TOTAL					
		FHWA PL Funds	FTA Section 5303 Funds	(fn)	Other Funds (See Footnote)	FHWA SPR Funds	FHWA SPR Funds	FTA Section 5303 Funds	Other Funds (See Footnote)	FTA Section 5303 Funds	FTA Section 5307 Funds	Other Funds (See Footnote)	(fn)	FHWA PL Funds	FHWA SPR Funds	FTA Section 5303 Funds	Other Funds (See Footnote)	(fn)	FTA Section 5307 Funds	GRAND TOTAL
1.0	Long-Range Transportation Plan	244,300	44,200										244,300		44,200					288,500
2.0	Transportation Project Programming	176,100	43,900										176,100		43,900					220,000
3.0	Performance Management	84,900	23,800										84,900		23,800					108,700
4.0	Public Participation	298,900	31,700										298,900		31,700					330,600
5.0	Unified Planning Work Program	49,600	13,800										49,600		13,800					63,400
6.0	Regional Freight Planning	99,700											99,700							99,700
7.0	Safety, Security, & Resiliency Planning	38,200											38,200							38,200
8.0	Multi-Modal Mobility	71,800	76,400										71,800							148,200
9.1	Technical Support, Research & Coordination	194,800	40,800										194,800		40,800					235,600
9.2	Hampton Roads Active Transportation Plan	32,100	29,000										32,100		29,000					61,100
9.3	Candidates for Converting One-Way Streets to Two-Way Streets	30,100											30,100							30,100
9.4	Military Transportation Needs Study Update	52,100											52,100							52,100
9.5	Regional & Local Planning Implications of Connected & Automated Vehicles	54,300											54,300							54,300
10.0	HRTPO Administration	779,616	42,449	(5)	4,872								779,616		42,449	(5)	4,872			826,937
11.1	TDCHR - Performance Monitoring and Evaluation							150,000							150,000					150,000
11.2	WATA - Performance Monitoring and Evaluation									200,000					200,000					200,000
11.3	Feasibility/Corridor Studies								(2,3)	22,400,000						(2,3)	22,400,000			22,400,000
11.4	Disadvantaged Business Enterprise Planning							10,000							10,000					10,000
11.5	Regional Transportation Demand Management Program - TRAFFIX								(1)	986,503						(1)	986,503			986,503
11.6	Financial Planning								(3)	150,000						(3)	150,000			150,000
11.7	TDCHR Public Involvement/Public Information/Publications								(3)	140,000						(3)	140,000			140,000
11.80	TDCHR Transit Development Plan								(3,5)	72,274						(3,5)	72,274			72,274
12.0	VDOT Regional Planning							546,650							546,650					546,650
13.0	HRTPO Contingency Funding	305,497											305,497							305,497
14.0	Rural Transportation Planning							72,500							72,500					72,500
15.0	HRTAC Administration			(6)	136,000													(6)	136,000	136,000
Total		2,512,013	346,049		140,872	72,500	546,650	225,000	23,748,777	0	200,000	0	2,512,013	619,150	771,049	23,889,649				27,791,861

(fn) = Footnote - See below:
(1) = CMAQ Funds
(2) = RSTP Funds
(3) = State/Local Funds
(4) = DRPT Technical Assistance Funds
(5) = Section 5303 Carryover Funds
(6) = HRTF Funds

Comparison of UPWP Tasks – FY 2017 versus FY 2016

The following table provides a comparison of the FY 2017 and FY 2016 UPWP tasks and budgets associated with work performed by HRTPO staff.

Table E includes the following information:

- FY 2017 UPWP Task Number, Task Title, and Task Budget
- FY 2016 UPWP Task Budget
- Change in budget (FY 2017 budget – FY 2016 budget)
- Comments on Changes in Task Budgets

Table E: Comparison of UPWP Tasks - FY 2017 versus FY 2016

FY 2017 Task #	FY 2017 Task Title	FY 2017 Budget	FY 2016 Budget	Change in Task Budget	Comments on Changes in Task Budgets
1.0	Long-Range Transportation Plan	\$288,500	\$356,000	-\$67,500	Adjusted to better reflect work anticipated under this task.
2.0	Transportation Project Programming	\$220,000	\$244,700	-\$24,700	Adjusted to better reflect work anticipated under this task.
3.0	Performance Management	\$108,700	\$96,600	\$12,100	Adjusted to better reflect work anticipated under this task.
4.0	Public Participation	\$330,600	\$433,600	-\$103,000	Adjusted to better reflect work anticipated under this task.
5.0	Unified Planning Work Program	\$63,400	\$88,200	-\$24,800	Adjusted to better reflect work anticipated under this task.
6.0	Regional Freight Planning	\$99,700	\$100,000	-\$300	Adjusted to better reflect work anticipated under this task.
7.0	Safety, Security, and Resiliency Planning	\$38,200	\$130,800	-\$92,600	Adjusted to better reflect work anticipated under this task.
8.0	Multi-Modal Mobility	\$148,200	\$233,200	-\$85,000	Adjusted to better reflect work anticipated under this task.
9.1	Technical Support, Research, and Coordination	\$235,600	\$233,200	\$2,400	Adjusted to better reflect work anticipated under this task.
9.2	Hampton Roads Active Transportation Plan	\$61,100	\$0	\$61,100	New task in FY 2017.
9.3	Candidates for Conversion of One-Way Streets to Two-Way	\$30,100	\$0	\$30,100	New task in FY 2017.
9.4	Military Transportation Needs Study Update	\$52,100	\$0	\$52,100	New task in FY 2017.
9.5	Planning Implications of Connected and Automated Vehicles	\$54,300	\$0	\$54,300	New task in FY 2017.
10.0	HRTPO Administration	\$826,937	\$496,262	\$330,675	Adjusted to better reflect work anticipated under this task.
12.0	HRTPO Contingency Funding	\$305,497	\$289,209	\$16,288	NA
13.0	Rural Transportation Planning	\$72,500	\$72,500	\$0	No Change.
14.0	HRTAC Administration	\$136,000	\$57,000	\$79,000	Adjusted to better reflect work anticipated under this task.
	Total	\$3,071,434	\$2,831,271		

Table E last revised on 5/11/17 (See List of Revisions, Page vi, for details)

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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. All projects included in the LRTP have been and will be vetted through the HRTPO prioritization process.

In order for the LRTP to be compliant with Title VI, it is essential that the information that is 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 in the process. The main long-range planning efforts anticipated for FY 2017 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 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 2017 include:
 - a) Maintaining and updating a comprehensive schedule covering the development of the 2045 LRTP from beginning to end.
 - b) Complete development of 2045 Regional Socioeconomic Forecast (initiated in FY 2016). HRTPO staff, in cooperation with staff from the Hampton Roads Planning District Commission, will complete the process of developing the 2045 Regional Socioeconomic Forecast to include a forecast for the region's population, households, employment, workers, and passenger vehicles. The forecast will consist of regional, sub-regional, and jurisdictional control totals for member localities. The development of the socioeconomic forecast was initiated at the end of FY 2016 and will be completed in the beginning of FY 2017. This work product will be conducted in concert with member jurisdictions and will comply with the regulations mandated by the FHWA.
 - c) Conduct scenario planning in regards to forecasted growth and visioning for the horizon year 2045.
 - d) 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. Comprehensive review of Transportation Analysis Zones (TAZs). TAZs are the base geographic unit of analysis for the travel demand model and should comply with state requirements regarding population and employment densities, infrastructure and geographic considerations, etc. Current TAZ structures will be reviewed for compliance and updated as needed.
5. Upgrade the HRTPO Project Prioritization Tool – Re-evaluate the data, measures, and weighting factors, as necessary, to keep the tool current and ready for use. This includes incorporating new measures to evaluate social equity and environmental considerations – including climate change impacts such as sea level rise and recurrent flooding – as appropriate. This also includes looking at how the region Tool aligns with the State HB2 prioritization methodology.

6. 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.).
7. Continue to improve the integration of multimodal transportation planning in the long-range transportation planning process. In addition to the specific multimodal mobility planning efforts outlined in Task 8.0 – Multimodal Mobility, the HRTPO Project Prioritization Tool will be reviewed and improved, as necessary, with regard to evaluation criteria of multimodal and active transportation projects.
8. 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 2017 include:
 - a) Collaborate in the process of developing MAP-21 performance measures
 - b) Align federal/statewide goals and performance measures with the long-range transportation plan
 - c) Assist in gathering data, if necessary, to quantify performance measures
 - d) Make any necessary changes to the HRTPO Project Prioritization Tool
 - e) Study performance trends and work with localities and agencies towards developing performance targets
9. Continue to improve the integration of the Title VI/Environmental Justice (EJ) methodology in the LRTP planning process. Efforts will include identifying and collecting relevant data and incorporating aspects of the methodology into the HRTPO Project Prioritization Tool, as appropriate.
10. HRTPO staff will continue to maintain the 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. Year 2045 socioeconomic data estimates by locality.
 - c. A Vision statement and accompanying Goals for the 2045 LRTP. Planning scenarios to accommodate forecasted growth for the plan horizon year 2045.
 - d. Ongoing public participation efforts.
 4. WE 4 – Up-to-date Transportation Analysis Zones.
-

5. WE 5 – A revised and maintained project prioritization tool.
6. WE 6 – A maintained and up-to-date regional travel demand model.
7. WE 7 – Updated HRTPO Project Prioritization Tool to account for multimodal and active transportation projects.
8. WE 8 – Performance management methodology application to the long-range transportation planning process.
9. WE 9 – EJ methodology application to the long-range transportation planning process.

D. Schedule

1. WE 1 – Ongoing
2. WE 2 – Ongoing
3. WE 3 –
 - a. Ongoing
 - b. Second Quarter
 - c. Fourth Quarter
 - d. Ongoing
4. WE 4 –Fourth Quarter
5. WE 5 – Ongoing
6. WE 6 – Ongoing
7. WE 7 – Ongoing
8. WE 8 – Ongoing
9. WE 9 - Ongoing
10. 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	\$244,300	\$44,200		\$288,500

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 Transportation Improvement Program 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 adherence to the 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 result was *Virginia TIP Preparation Guidance*, 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, other projects must be deferred, or new revenues must be identified.

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, and transit 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.

House Bill 2 (HB2) Statewide Prioritization Process

Legislation commonly referred to as House Bill 2, or HB2, was signed into law in 2014 and requires the Commonwealth Transportation Board (CTB) to develop a statewide prioritization process for capacity expansion projects based on a comparison of a project's relative benefits to its cost. The HB2 process has a direct impact on Step 2 of the TIP Development Process outlined above.

Additional information regarding HB2 may be accessed at: <http://www.virginiahb2.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 under two federal funding programs – 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 and has been designated an attainment area for all current NAAQS.

The Surface Transportation Program (STP) provides federal funding that may be used by States and localities for a wide variety of highway and transit projects. Regional STP (RSTP) funds are STP 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. Any project ideas received from the public are forwarded to eligible applicants for consideration. Projects proposed by eligible recipients 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, and DRPT, along with input from advisory committees including the Transportation Technical Advisory Committee 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 Program (TAP) Project Selection Process

MAP-21 established a new program to provide for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The Transportation Alternatives Program (TAP) replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs. Half of a state’s TAP apportionment is sub-allocated to areas based on their relative share of the total state population, while the other half is available for use in any area of the state. The FAST Act, the current Federal transportation funding legislation, has folded the TAP into the new Surface Transportation Block Grant Program (STBGP), which is a conversion of the

Surface Transportation Program (STP) designed to maximize the flexibility of STP funding for local and state governments.

For urbanized areas with populations over 200,000, the MPO, through a competitive process, selects the TAP 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 TAP project selection procedures, including the *Guide to the HRTPO TAP Project Selection Process*, may be accessed on the HRTPO website at: <http://www.hrtpo.org/page/transportation-alternatives-program/>.

Additional information on the TAP 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 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. The new regional revenues are being directed to the Hampton Roads Transportation Fund (HRTF), which is controlled by the Hampton Roads Transportation Accountability Commission (HRTAC).

House Bill 2 (HB2), signed into law in 2014, directed the Commonwealth Transportation Board (CTB) to develop and use a prioritization process to select transportation projects. The legislation is intended to improve the transparency and accountability of project selection, as well as improve stability in the Six-Year Improvement Program (SYIP). The process is to score projects based on an objective analysis and provide guidance to the CTB for project selection and funding. More information on HB2 may be accessed via the HRTPO website at [http://www.hrtpo.org/page/house-bill-2-\(hb2\)/](http://www.hrtpo.org/page/house-bill-2-(hb2)/).

House Bill 1887 (HB1887), signed into law in 2015, established a new construction funding formula to be in full effect in FY 2021. The HB1887 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 (DG)

The HPP and DG programs are subject to the HB2 prioritization process. Projects submitted under the HPP program compete with other HPP project proposals statewide. Projects submitted under the DG program compete with other projects proposed within the same construction district. The SGR program will fund the rehabilitation of structurally-deficient bridges and deteriorating pavement. Project selection for the SGR program will be needs-based using a separate prioritization process from that of HB2.

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 2015-2018) TIP.
2. Conduct public reviews of proposed amendments to the current TIP.
3. Maintain and update the web visualization for the TIP to provide easy public access.
4. Coordinate the development of the next full update of the TIP (2018-2021).
5. 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.
6. Lead and coordinate the annual Project Selection Process for CMAQ and RSTP projects.
7. Monitor and update CMAQ/ RSTP Project Selection Process methodologies as deemed necessary.
8. Maintain electronic spreadsheets to keep track of CMAQ and RSTP allocations and transfers.
9. 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.
10. Conduct a quarterly review of the status of projects in the Hampton Roads TIP.
11. Coordinate with VDOT Local Assistance Division staff in carrying out the project selection process for the Transportation Alternatives Program.

12. Coordinate with state agencies on the development and implementation of the HB2 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 – A full TIP update in coordination with the full update of the STIP.
4. WE 5 – Annual Obligation Report.
5. WE 6 – A summary report on the annual CMAQ/RSTP project selection process.
6. WE 7 – An updated *Guide to the HRTPO CMAQ/RSTP Project Selection Process*, as necessary.
7. WE 9 – Presentation to HRTPO Board, as necessary.
8. WE 10 – Presentation to TTAC and HRTPO Board, as appropriate.
9. WE 11 – TAP project selection and recommended allocations.
10. WE 12 – Presentation to TTAC and HRTPO Board, as necessary.

D. Schedule

1. WE 1-3 – Ongoing
2. WE 4 – New TIP to go into effect October 2017
3. WE 5 – No later than 90 calendar days following the end of the federal fiscal year
4. WE 6 – July – December 2016
5. WE 7 – As necessary
6. WE 8 – Ongoing
7. WE 9 – As necessary
8. WE 10 - Quarterly
9. WE 11 – Third Quarter
10. WE 12 – As necessary

E. Participants

HRTPO, local governments, HRT, WATA, 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	\$176,100	\$43,900		\$220,000

3.0 PERFORMANCE MANAGEMENT

A. Background

According to FHWA, performance management is a strategic approach that uses system information to make investment and policy decisions to achieve performance goals. While FHWA and federal legislation has emphasized performance management in recent years, HRTPO has based its planning and programming process on performance management for many years. This description provides an overview of the HRTPO performance management process, including work to be completed under Task 3.0 and other UPWP tasks as well.

A key feature of MAP-21 (and continued under the FAST Act) is 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. MAP-21 requires the Secretary of Transportation, in consultation with states, metropolitan planning organizations (MPOs), and other stakeholders, to establish performance measures in the following areas:

- Pavement condition on the Interstate System and the remainder of the National Highway System (NHS)
- Performance of the Interstate System and the remainder of the NHS
- Bridge condition on the NHS
- Rate and number of fatalities and serious injuries on all public roads
- On-road mobile source emissions and traffic congestion for CMAQ Program
- Freight movement on the Interstate System

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

1. Monitoring Performance of the Regional Transportation System

The following work is conducted annually by HRTPO staff to monitor transportation performance in the region:

a. 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, American Community Survey (ACS) data, fuel prices, etc. In addition, databases are maintained for other areas – such as freight movement and safety – that are covered in other UPWP tasks.

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, speeds, reliability, trucks, and congestion levels.

b. *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.

c. *System Performance Measures Reports*

Starting in 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 mentioned previously, MAP-21 established performance measures in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. As these performance measures become established by FHWA, HRTPO staff will calculate these measures and determine progress towards regional targets on an annual basis.

2. **Measuring Performance of the Roadway Network**

The following work is conducted by HRTPO staff to monitor the performance of the regional roadway network, and in some cases propose measures designed to improve transportation performance:

a. *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 regionwide. 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 the cycle of the LRTP increasing from four to five years, the next CMP - System Performance and Mitigation Report will be produced in FY 2019.

b. *Annual Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads Report*

Each year, HRTPO staff produces a report documenting the volumes, speeds, and congestion levels of each segment of the CMP roadway network. Staff analyzes travel time data collected by INRIX to measure congestion levels on roadways where it is available, and uses volumes and roadway characteristics to estimate congestion levels on roadways where INRIX data is not available.

c. *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 2017 are included in Task 8.0 – Multimodal Mobility and Task 9.0 – Technical Support, Research, and Special Studies.

3. 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 will also include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the established performance targets.

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 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. CMAQ and RSTP Project Selection:

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. TAP Project Selection:

Projects proposed by eligible recipients for Transportation Alternatives Program (TAP) 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 metropolitan planning organizations. 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.

4. Capacities of Regional Bridges and Tunnels

Bridges and tunnels are some of the most congested transportation facilities in Hampton Roads. One of the reasons for this congestion is that tunnels, and to a lesser extent bridges, accommodate fewer vehicles before reaching congested conditions than typical roadway segments due to geometric characteristics and other factors.

As part of HRTPO's planning efforts, staff analyzes the level of congestion of roadways throughout the region, including the major bridges and tunnels. Although existing capacity analyses are generally performed using travel time and speed data, future capacity analyses are performed by comparing projected volumes with the capacity of the roadway. While HRTPO staff has analyzed the

capacities of bridges and tunnels in the past, it has not been done as part of a comprehensive effort.

This study will examine the capacities of major bridges and tunnels throughout Hampton Roads.

B. Work Elements (WE)

Work activities include the following:

1. Monitoring Performance of the Regional Transportation System

a. Maintaining Databases of Transportation Performance Data

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

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

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

c. Annual System Performance Measures Report

HRTPO staff plans to conduct its annual calculation of system performance measures in FY 2017 using the measures established by the MAP-21 and FAST Act legislation – if these final performance measures have been established – and, as in previous years, the performance measures identified by state legislation.

2. Measuring Performance of the Roadway Network

a. Annual *Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads* Report

HRTPO staff will produce an update to the *Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads* report.

b. Work related to Special Transportation Studies is described under Task 8.0 – Multimodal Mobility and Task 9.0 – Technical Support, Research, and Special Studies.

3. Performance-Based Project Selection

Work related to the LRTP Project Selection (Task 1.0), CMAQ and RSTP Project Selection (Task 2.0), and TAP Project Selection (Task 2.0) is included in those sections of the UPWP.

4. Capacities of Regional Bridges and Tunnels

- a. Use traffic count data from continuous count stations to determine the hourly and daily capacities of major bridges and tunnels in the region, including the Downtown Tunnel, Hampton Roads Bridge-Tunnel, High Rise Bridge, James River Bridge, Midtown Tunnel, and Monitor-Merrimac Memorial Bridge-Tunnel.
- b. Determine whether capacities vary by lane where data is available.

Determine whether improvements, such as the recent renovations at the Downtown Tunnel, have had an impact on the capacity of the facility.

C. End Products

1. WE 1a – Transportation databases
2. WE 1b – State of Transportation in Hampton Roads report
3. WE 1c – System Performance Measures report
4. WE 2a – Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads report
5. WE 2b – Special Transportation Studies are included under Task 8.0 – Multimodal Mobility and Task 9.0 – Technical Support, Research, and Special Studies.
6. WE 3 – LRTP Project Selection (Task 1.0), CMAQ & RSTP project selection (Task 2.0), and TAP project selection (under Task 2.0) are included in those sections of the UPWP.
7. WE 4 – Capacities of Regional Bridges and Tunnels final report

D. Schedules

1. WE 1a - Ongoing
2. WE 1b – Fourth Quarter
3. WE 1c – Fourth Quarter
4. WE 2b – Fourth Quarter
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	\$84,900	\$23,800		\$108,700

Budget revised on 12/21/16 (See List of Revisions, Page vi, for details)

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 continued to be recognized in the federal transportation act, *Moving Ahead for Progress in the 21st Century (MAP-21)*. 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 legislation, 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 2016 the HRTPO further updated its Public Participation Plan (PPP) in coordination with current federal regulations and area jurisdictions. The updated PPP, released in November 2015, 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 2016, 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 2015 were evaluated and refined to further support the operations, policies, and procedures of the HRTPO. Accomplishments in FY 2016 related to public participation include:

- Expansion of the HRTPO Facebook Page
- Expansion of the HRTPO Twitter Campaign
- Expansion of the HRTPO Community Web Pages on the HRTPO Website
- Further Development of the HRTPO Title VI/EJ Methodology
- Development of the HRTPO Community Asset Mapping App
- Revamping of the HRPTO Citizen 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 process. 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 long-range planning.
- 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.

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 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. Respond to information requests from the general public.
6. Implement, review, and update the HRTPO Title VI Plan and the HRTPO LEP Plan which includes Title VI, Environmental Justice and related authorities.
7. Provide training for public involvement staff to build, enhance, and broaden public involvement techniques.

8. Develop and implement outreach activities tailored to engage low-income and/or minority communities or households. Key activities include partnering with regional agencies that advocate for and/or provide services for traditionally underserved persons and creating a community impact assessment tool.
9. Update the Public Participation Plan.
10. Provide staff support for the Citizen Transportation Advisory Committee (CTAC). This includes providing information about MPO processes, coordinating and facilitating meetings, developing meeting materials, responding to questions as necessary.
11. Provide translation and/or interpreter services on an as-requested basis.
12. 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.
13. Provide and/or facilitate training for HRTPO staff and CTAC members to enhance public involvement efforts.
14. Revamp and refine the Citizen Transportation Advisory Committee.
15. Assess the region's transportation investments relative to the needs of disadvantaged populations, including but not limited to low income and minority populations.
16. Enhance and refine 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).
17. Create an expanded Public Involvement Process aimed at addressing potential disparate impacts of transportation planning projects and policies.
18. Investigate the state of accessibility and mobility for disadvantaged populations, with a focus on safety, transit and alternative transportation modes.
19. Refine mechanisms for the ongoing Title VI/Environmental Justice review of the TIP and Long-Range Transportation Plan.
20. Refine mechanisms for the ongoing Title VI/Environmental Justice Methodology as it pertains to the LRTP and TIP. Incorporate Title VI/EJ analysis into individual studies, programs and plans contained in the HRTPO UPWP, such as corridor studies and long-range planning.

C. End Products

1. WE 1 – Citizen Feedback and survey results for development of the 2045 LRTP. Documentation of outreach activities.
2. WE 6 – Updated Title VI and LEP Plans. Response to Title VI complaints, as appropriate. Report to VDOT in accordance with their reporting procedures.
3. WE 8 – Updated Community Impact Assessment Guide.
4. WE 9 – Updated Public Participation Plan.
5. WE 16-20 – Refined HRTPO Title VI/EJ Benefits and Burdens Methodology.

D. Schedule

1. WE 1-5 – Ongoing
2. WE 6 – Third Quarter
3. WE 7 – Ongoing
4. WE 8 – Fourth Quarter
5. WE 9 – Fourth Quarter
6. WE 10-15 – Ongoing
7. WE 16-20 – Ongoing

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	\$398,900	\$31,700		\$330,600

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), and Williamsburg Area Transit Authority (WATA), 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 2017 UPWP.
2. WE 2 – Produce the FY 2018 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	\$49,600	\$13,800		\$63,400

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, over the last year the emphasis on freight planning on the federal level has increased. In 2015, the USDOT released the draft version of 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 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 2016. The Regional Freight Study is generally updated in conjunction with the development of the 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 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 freight aspects of the Project Prioritization Tool and the 2040 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 regional truck data collected by VDOT and update 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. This could include assisting the Port of Virginia with a study looking at the economic impacts of regional transportation connectivity.

4. Truck Delay Impacts of the 2040 Long-Range Transportation Plan and Regional Priority Projects

In September 2013, HRTPO staff completed the Existing and Future Truck Delay in Hampton Roads study, which used the new truck component and time-of-day capability of the regional travel demand model to forecast truck volumes and congestion to be faced by trucks in the next 20 years. In June 2015, HRTPO staff completed the Truck Delay Impacts of Key Planned Highway Projects in Hampton Roads study that expanded previous truck delay studies, measuring future truck delay impacts in the next 20 years for six key planned highway projects. Within this study, each key planned highway project was tested individually, but not as an entire system.

This study will utilize the truck component of the regional travel demand model to estimate system-wide truck delay impacts of all of planned highway projects anticipated to be in place in 20 years. It will include all transportation projects contained in the 2040 Long-Range Transportation Plan and Regional Priority Projects that are currently under the purview of the Hampton Roads Transportation Accountability Commission (HRTAC). These results will show both strengths and weaknesses of the future highway network, which will form a baseline for freight planning for the next LRTP.

5. Geography of Truck Movements in Hampton Roads

Staff plans two related efforts toward identifying the location of truck movements in the region:

A. Origins and Destinations of Trucks Using Key Highway Facilities

As part of the long-range transportation planning process, HRTPO produces maps showing the existing and projected origins and destinations of trips using the regional travel demand model. These maps, which reflect major facilities such as the bridges and tunnels throughout the region, have been used to graphically display origin-destination patterns and assist with the prioritization of regional projects.

This study will build on these maps by differentiating trips by trip mode and type at major facilities (such as the High Rise Bridge, HRBT, etc.) using the freight component of the regional travel demand model. This will help HRTPO and the Port of Virginia with future freight planning efforts.

B. Highways Used by Port Trucks

HRTPO staff awards points—via the HRTPO Project Prioritization Tool—to those projects which “increase access to port facilities”. Not having data on the routes that port trucks take to and from port facilities, staff, to-date, has awarded these points using assumed impact of projects on access.

To remedy this situation, HRTPO staff has acquired GPS-based truck movement data for Hampton Roads gathered by the American Transportation Research Institute (ATRI), part of the American Trucking

Associations Federation. Staff plans to use this data to determine local highway segments frequented by trucks moving to and from the state ports in Hampton Roads. Following this analysis, HRTPO staff can base the awarding of points to those projects which “increase access to port facilities” on this actual truck movement data. As a result, the HRTPO Board will be able to better promote projects which help one of the three main economic engines of Hampton Roads – the Port.

C. End Products

1. WE 1 – FTAC – Documentation of 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 4 – Truck Delay Impacts of the 2040 Long-Range Transportation Plan and Regional Priority Projects final report
5. WE 5 – Geography of Truck Movements in Hampton Roads final report

D. Schedule

1. WE 1 – As necessary
2. WE 2 – Ongoing
3. WE 3 – Ongoing
4. WE 4 – Fourth Quarter
5. 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	\$99,700			\$99,700

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 system resiliency and reliability.

Safety Planning

HRTPO staff maintains a database and GIS shapefile of crashes throughout the region to support regional safety planning efforts, including the *Regional Safety Study* and usage of the Project Prioritization Tool. This crash database and shapefile is updated by HRTPO staff annually as VDOT and DMV release the previous year's raw crash data.

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 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. The original study included general crash data and trends, a detailed analysis of the locations of crashes throughout the region, and an analysis of high crash locations with crash countermeasures. The Regional Safety Study is generally updated in conjunction with the Long-Range Transportation Plan.

In FY 2016, the HRTPO followed up on the *Regional Safety Study* by preparing the *Hampton Roads Active Transportation Safety Study*. This study examined safety issues related to walking and bicycling, including determining the location of active transportation crashes throughout the region.

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 staff also participates on a number of committees related to planning for sea level rise and climate change. These committees currently include the Hampton Roads Sea Level Rise Intergovernmental Planning Pilot Project Infrastructure Working Group, HRPDC’s Coastal Resiliency Committee, and the Joint Land Use Study (JLUS) for Joint Base Langley-Eustis (JBLE) Technical Advisory Group. HRTPO staff also provides assistance to other stakeholders in their climate change and sea level rise planning efforts, such as local and statewide universities and VIMS.

B. Work Elements (WE)

Safety

1. Update crash databases and GIS shapefiles using the previous year’s VDOT and DMV raw crash data.
2. Assist VDOT with the development of the 2016 update to the Strategic Highway Safety Plan (SHSP). This will include participating on the SHSP steering committee, attending SHSP workshops, participating in safety emphasis area groups, and reviewing draft SHSP chapters.
3. Participate on safety-related committees such as DMV’s Traffic Records Coordinating Committee (TRCC).
4. Assist VDOT and localities with Road Safety Audits (RSAs) as requested.

5. Safety Performance Measures – Work related to FAST Act national performance goals and safety performance measures is included under Task 3.0 – Performance Management.

Security

6. Provide transportation/emergency management analysis for updates to VDOT’s “Hurricane Lane Reversal Plan” as those updates occur.
7. Provide transportation/emergency management recommendations to VDEM for its work, including the Regional Catastrophic Planning Team (RCPT) effort.
8. Provide transportation recommendations to the Virginia Center for Transportation Innovation and Research (VCTIR) for its evacuation analyses, as those analyses occur.

Resiliency

9. Participate on committees related to planning for sea level rise and climate change. These committees currently include the Hampton Roads Sea Level Rise Intergovernmental Planning Pilot Project Infrastructure Working Group, HRPDC’s Coastal Resiliency Committee, and the Joint Land Use Study (JLUS) for Joint Base Langley-Eustis (JBLE) Technical Advisory Group.
10. Provide assistance to other stakeholders in their climate change and sea level rise planning efforts, such as local and statewide universities and VIMS.

C. End Products

1. WE 1 – Updated crash databases and GIS shapefiles
2. WE 2 – Updated VDOT Strategic Highway Safety Plan
3. WE 4 – Road Safety Audit Project reports by VDOT, localities, or their consultants
4. WE 6 – Written analysis of and recommended improvements to VDOT’s “Hurricane Lane Reversal Plan”, as updates are issued.
5. WE 7 – Written transportation/emergency management recommendations to VDEM, e.g. for its RCPT effort.
6. WE 8 – Written transportation recommendations to VCTIR for its hurricane analyses, as draft documents are issued.

D. Schedule

1. WE 1 – Ongoing
2. WE 2 – Ongoing
3. WE 3 – Ongoing
4. WE 4 – As needed

- 5. WE 6 – As needed
- 6. WE 7 – Ongoing
- 7. WE 8 – As needed
- 8. WE 9 – Ongoing
- 9. WE 10 – Ongoing

E. Participants

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

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303		TOTAL
HRTPO	\$38,200			\$38,200

8.0 MULTIMODAL MOBILITY

A. Background

Multimodal means having a number of ways or methods of accomplishing an action. *Mobility* refers to the movement of people and goods. So *Multimodal Mobility* means having a number of options for accomplishing the movement of people and goods.

Multimodal transportation planning involves taking into account a variety of options for providing mobility – roads, public transportation, bicycle and pedestrian facilities, rail, etc. – and the ways these options are interconnected.

In FY 2017, the Multimodal Mobility task will focus on the following:

- **Regional Public Transit Planning**
 - Work with local transit providers on strategies to encourage choice or discretionary riders to opt for using public transit.
- **Transportation Connectivity Gap Analysis**
 - Complete any unfinished tasks related to Transportation Connectivity Gaps Analysis initiated in FY 2016.
- **On-Demand Ride Services (Ridesourcing)**
 - Complete any unfinished tasks related to On-Demand Ride Services Exploratory Study on the usage and impacts of ridesourcing options like Uber and Lyft initiated in FY 2016.
 - Future research will build on the exploratory study with a more detailed look at the impact of ridesourcing on labor, social equity, the environment, and public policy.
- **Complete Streets**
 - Identify underused vehicular lanes that could be repurposed to enable safe access and travel for users of all travel modes.

B. Work Elements (WE)

Work activities include the following:

1. Respond to research requests from HRTPO Rail and Public Transportation Task Force.
2. Regional Public Transit Planning – Following up on the Regional Transit Benchmarking work completed in FY 2016, HRTPO staff will work with HRT and WATA to develop strategies for encouraging choice or discretionary riders to opt for using public transit.
3. Transportation Connectivity Gap Analysis – Complete any unfinished tasks related to Transportation Connectivity Gaps Analysis initiated in FY 2016.

4. On-Demand Ride Services (Ridesourcing) – Complete any unfinished tasks related to the On-Demand Ride Services Exploratory Study on the usage and impacts of ridesourcing options like Uber and Lyft initiated in FY 2016.
5. Complete Streets – The goal of Complete Streets is for pedestrians, bicyclists, motorists, transit users, and travelers of all ages and abilities to be able to move along the street network safely. One strategy for implementing complete streets is to repurpose underused vehicular lanes as dedicated or shared bike, transit, or parking lanes.

Proposed tasks for this project include:

- Identify streets in Hampton Roads with:
 - vehicular demand significantly below capacity
 - proximity to land use suited for active transportation and public transit trips
 - Create maps of candidate complete-streets' showing:
 - existing pedestrian, bike, and transit facilities, schools, parks, and land use
 - proposed repurposing
6. Supporting Active Transportation (AT) in Hampton Roads:
 - Hosting monthly webinars of the Association of Pedestrian and Bicycle Professionals (APBP).
 - Maintaining the Active Transportation portion of the HRTPO website.
 - Posting AT updates on Facebook.
 - Assist VDOT and localities with bicycle and pedestrian planning efforts.

C. End Products

1. WE 1 – Research, as requested.
2. WE 2 – Standard HRTPO report
3. WE 3 – Standard HRTPO report
4. WE 4 – Standard HRTPO report
5. WE 5 – Standard HRTPO report
6. WE 6 – Webinars, website, posts, reports, and maps

D. Schedule

1. WE 1 – As requested.
2. WE 2 – Fourth Quarter.
3. WE 3 – Fourth Quarter.
4. WE 4 – Fourth Quarter.
5. WE 5 - Fourth Quarter
6. WE 6 – Ongoing.

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	\$71,800	\$76,400		\$148,200

Budget revised on 5/11/17 (See List of Revisions, Page vi, for details)

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9.0 TECHNICAL SUPPORT, RESEARCH, AND SPECIAL STUDIES

9.1 Technical Support, Research, and Coordination

A. Background

Over the course of the fiscal years, event-driven topics often emerge to which HRTPO staff must respond by conducting research and analysis for the HRTPO board. Past examples of such topics 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

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.

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
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closures, update the volumes in the spreadsheet developed for estimating the impact of closures.

6. Regional Highway Projects and Fixed Guideway Evaluations - Evaluations of major regional projects and fixed-guideway transit are ongoing (feasibility studies, Environmental Impact Statement development, etc.). HRTPO staff will participate in these evaluations as needed.
7. Conduct a research scan on how public health outcomes are being incorporated into the transportation planning process.
8. 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 9.1 Technical Support.

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 – Documentation of research scan.
5. WE 8 – For special work for TTAC and HRTPO, documentation will be prepared as necessary.

D. Schedule

WE 1-8 – The emerging nature of this work precludes the establishment of a schedule.

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	\$194,800	\$40,800		\$235,600

Budget revised on 5/11/17 (See List of Revisions, Page vi, for details)

9.2 Hampton Roads Active Transportation Plan

A. Background

The importance of active transportation 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 Regional Active Transportation Plan (ATP) 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.

B. Work Elements (WE)

Planned multi-year tasks include:

1. In collaboration with the Pedestrian and Bicycle Advisory Committee (PABAC), develop guiding principles and criteria for evaluating network alternatives that include equity, health, safety, economic vitality, accessibility, and mobility—consistent with the LRTP—using the principles in the existing AT component of the HRTPO Project Prioritization Tool as a starting point.
 2. Using the above criteria:
 - a. Identify the Principal Regional Active Transportation Network, integrating walking, bicycling, and public transportation and creating a contiguous network or on- and off-street regional pedestrian and bicycle parkways and paths connecting the region.
 - b. Recommend, as needed, adjustments to the AT component of the Prioritization Tool.
 3. Given the above development of a Principal Network, use best practices from other pedestrian, bicycle, and transit plans to develop regional Active Transportation Policies, Performance Targets, and Design Standards that will assist localities in updating existing local policies, performance targets, and design concepts.
 4. Use the AT component of the Project Prioritization Tool to prioritize projects. Develop an implementation plan (including a funding strategy) that clearly articulates state, regional, and local roles and responsibilities.
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5. Compile reports produced under Work Elements 1-4 into a final report.

C. End Products

1. WE 1 – Standard HRTPO report
2. WE 2 – Standard HRTPO report
3. WE 3 – Standard HRTPO report
4. WE 4 – Standard HRTPO report and project list for the LRTP
5. WE 5 – Standard HRTPO report combining reports for WE 1-4 above

D. Schedule

1. WE 1 – FY 2017
2. WE 2 – FY 2017 or FY 2018
3. WE 3 – FY 2018
4. WE 4 – FY 2018 or FY 2019
5. FY 2019.

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	\$32,100	\$29,000		\$61,100

9.3 Candidates for Conversion of One-Way Streets in Hampton Roads to Two-Way

A. Background

In addition to studying *new* transportation projects—such as road widenings, multi-use path construction, and public transportation impacts—the HRTPO is also concerned with learning whether *current* roadway infrastructure is being used efficiently. Consequently, the improvement in crashes, crime, and property values reported in other metros following the conversion of certain one-way streets to two-way operation, led staff to propose the study of such one-way to two-way conversions for our region.

According to the Traffic Engineering Handbook, developed by the Institute of Transportation Engineers (ITE), one-way streets have been implemented as means to improve traffic operations by:

- Reducing intersection delays
- Reducing cut-through traffic
- Improving safety

With regards to one-way streets the ITE also states,

“In many cases, improved traffic movement and increased safety can produce economic benefits both to adjacent land users and to the general public.”

Upon a brief examination, HRTPO staff located over 100 one-way streets in eight cities across Hampton Roads. The majority of the one-way streets found are situated in denser urban neighborhoods. HRTPO staff intends to investigate which of any of these 100 one-way streets would perform better as two-way streets.

B. Work Elements (WE)

1. Review the literature concerning general benefits associated with one-way and two-way streets and previous conversion studies.
2. Develop a method to determine whether a conversion is recommended, taking into account issues including:
 - What is likely the original reason for the existing one-way designation?
 - Does that reason still apply?
 - Could a conversion handle expected traffic demand?
 - Are the benefits of conversion to two-way operation experienced in other metros expected at this location?
 - Reduced crashes
 - Reduced crime
 - Increased property values

C. End Products

Standard HRTPO report.

D. Schedule

Completion in FY 2017

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			TOTAL
HRTPO	\$30,100			\$30,100

Budget revised on 5/11/17 (See List of Revisions, Page vi, for details)

9.4 Military Transportation Needs Study Update

A. Background

Phase I of the Hampton Roads Military Transportation Needs Study was completed and approved by the HRTPO Board in September 2011. In this first phase, HRTPO staff worked with various stakeholders – local military representatives, state and federal agencies, port officials and local jurisdictions – to determine transportation concerns and needs of the local military. HRTPO staff identified a roadway network that includes both the Strategic Highway Network (STRAHNET) and additional roadways that serve the military sites and intermodal facilities not included in the STRAHNET. STRAHNET (developed by the U.S. Department of Defense) serves as the minimum national defense public highway network needed to support a defense emergency and are used for day-to-day military cargo movement.

Staff analyzed this “Roadways Serving the Military” network to determine deficient locations, such as congested segments, deficient bridges, and inadequate geometrics. The study made numerous recommendations to address existing deficiencies and to accommodate future military travel needs, including revisions to current STRAHNET designations, increasing vertical clearance of tunnels, expanding the width of highway lanes to accommodate military vehicles, rehabilitating or replacing structurally deficient bridges, extending light rail transit to Naval Station Norfolk and high-speed passenger rail service to Washington, D.C.

The purpose of this task is to update the Phase I report with the most recent data.

B. Work Elements (WE)

Work activities may include the following:

1. Coordinate with local military and transportation stakeholders.
2. Review and update Military and Supporting Sites in Hampton Roads.
3. Review existing STRAHNET and “Roadways Serving the Military” and make revisions as necessary.
4. Determine deficient locations on “Roadways Serving the Military” (e.g. congested segments, deficient bridges, inadequate geometrics).
5. Develop recommendations to address deficiencies and to accommodate future military travel needs.

C. End Products

Hampton Roads Military Transportation Needs Study Update final report.

D. Schedule

Second Quarter

E. Participants

HRTPO, VDOT, FHWA, TTAC, and Military Stakeholders.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL	5303	CMAQ	TOTAL
HRTPO	\$52,100			\$52,100

9.5 Regional and Local Planning Implications of Connected and Automated Vehicles

A. Background

One of HRTPO's vital functions is producing the fiscally constrained Hampton Roads Long-Range Transportation Plan (LRTP). The 2040 LRTP will be approved by the HRTPO Board in 2016. Following approval, staff will begin the planning process for the 2045 LRTP.

By 2045, transportation may be very different than it is today. The most significant change will likely be the arrival 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 where the operation occurs 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 will provide a number of benefits. The benefits likely include:

- 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.

Prior to the arrival of connected and automated vehicles, there are several issues and unknowns regarding this new technology, such as:

- 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 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:

1. Introduce the concept of connected and automated vehicles.
2. Describe the benefits, impacts, and unknowns related to connected and automated vehicles.
3. Detail national and statewide efforts to address connected and automated vehicles, and any efforts made by other MPOs throughout the country.
4. Model various scenarios, such as the impacts of increased capacity on the regional roadway network.
5. 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, HRTO, VTRC.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	PL			TOTAL
HRTPO	\$54,300			\$54,300

Budget revised on 5/11/17 (See List of Revisions, Page vi, for details)

10.0 HRTPO ADMINISTRATION

A. Background

This task accounts for the administrative support necessary for the maintenance of the Hampton Roads Transportation Planning Organization (HRTPO) processes.

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 three replacement computers at an average cost of \$4,500 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) Citizen 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
 - j) TRAFFIX Oversight Subcommittee (TOS) – administrative work to be performed by TRAFFIX and HRTPO staffs
 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) System Operations Research Advisory Committee (SORAC)
 - c) 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	\$779,616	\$42,449	\$4,872	\$826,937

Budget revised on 5/11/17 (See List of Revisions, Page vi, for details)

11.0 PLANNING BY TRANSIT AGENCIES

11.1 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 list of capital improvements and the use of flexible funding for innovative and experimental service implementation. The TDCHR staff will continue to coordinate with city and HRTPO staff to develop service and capital improvement plans through the TSP and TIP planning process.

C. End Products

1. WE 1 – Year-end Service Consumption and Performance Report
2. WE 2 – Annual Transportation Service Program
3. WE 3 – Monthly and Annual Reports

D. Schedule

1. WE 1 – Year-end Performance Report – 12/31/16

2. WE 2 - Annual Transportation Service Program (TSP): Draft 10/1/2016; Final 5/30/2017
3. WE 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		TOTAL
HRT	\$150,000		\$150,000

11.2 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 for a seamless regional system.

Initiatives planned has resulted in nearly 2.5 million trips in fiscal year 2015 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 and the Historic Triangle. Initiatives include the following:

- Continued appropriate Trolley service connecting commercial/residential areas of Merchants Square (Colonial Williamsburg), High Street (City of Williamsburg) and New Town (James City County).
- Continue evaluation of labor movement strategies 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 labor required for the food service, retail, warehousing, tourism, and hospitality industries. Evaluation to include transit bus options, active transportation and carpools/vanpools.
- Continue to develop the AVL/GPS; improving safety and security, customer service, communications, management and efficiency.
- Planning, environmental assessment, and development of a staging and financing plan for WATA Transit Facilities. WATA currently leases a facility.
- Continue evaluation of collaboration efforts 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 Transportation Development 6-year Plan completed in FY 15 and FY16.
- Actively planning with the Peninsula Agency on Aging and the Williamsburg Faith in Action for the establishment of a “one-call” center for the elderly and disabled.

The collection and analysis of information to ensure this unprecedented system growth meets the needs of the region and communicates 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 Strategic Management 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 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) is collecting 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 establish goals and objectives for the Regional Authority.

- 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.

Implementation of recommended service changes based on the Comprehensive Operational Analysis and Transit Development Plan conducted in FY 15-16.WATA will be determining our current and future needs, via planning support, as a separate activity to conduct a Comprehensive Operational Analysis and Transit Development Plans.

- 4. Bus Stop Improvements-** Two new shelters were constructed in FY 2015. 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 the Authority's assets' condition (bus stop 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, pedestrian safety and ADA accessibility will be analyzed. Additional resources for shelters through grants and VDOT shelter engineering standards require policy decisions on locations.

5. **System Revenue/Partnership Evaluation-** Review of WATA's fare structure, including daily, weekly and monthly passes. Assessing the use of an Automated Ticket Vending Machine and 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 in order to support ridership and increase revenue.
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 our customer's experience and coordination with James City County. 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 has transferred from the TEAM data system to the TrAMS data system in FY 2016. Reports 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 will prepare for the Triennial Review.
8. **Facility Feasibility Study-** WATA is one of the fastest growing Urban Regional Systems that does not own an operational/administrative facility. In preparing for the future, WATA must continue to evaluate direct ownership of its facilities to meet current and future needs. Collaborative efforts with the WATA Board, regional stakeholders, the general public and the Department of Rail and Public Transportation (DRPT) have led to the completion of a Project Feasibility Study. In FY 2016, WATA updated the 2010 Facility Feasibility Study which included updating the location and breadth of new or improved facilities and steps to move forward. A location has been determined and an environmental assessment, appraisal, the development of staging and finance plan, land acquisition, project management and a draft schedule for facility design and engineering has begun. Inclusion in the Hampton Roads Transportation Planning Organization (TPO) Transportation Improvement Program (TIP), Hampton Roads Long Range Transportation Plan and State Transportation Improvement Program (STIP) remains necessary.

C. End Products

1. WE 1 – FY 2016 WATA Strategic Plan Summary and FY 2015 WATA Strategic Plan updates for mid-year and annual review by staff and the Board of Directors. These reports will promote efficient management and operation of regional transit. 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 for enhanced provisions of a regional network. Reports generated from data will demonstrate to the public, Board, and local, state, and federal partners the efforts to continue to promote efficient and effective management of transit services.
3. WE 3 – Annual Transportation Development Plan update coordinated with the COA in coordination with HRTPO funded projects support the implementation of phased improvements that will double service delivery over a two year period (FY 16-17), provide transit to underserved and areas without service, and provide transit oriented development alternatives and active transportation (i.e. Trolley service, connection between transit and bicyclist) decreasing the number of single occupancy vehicles on our roadways. Service plans include evaluation of additional connections to other transit systems (HRT) and adjoining regions, and supporting economic development to help meet the labor needs and increase the number of customers.

WATA Transportation Development Plan annual update supports 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
- 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, 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.

5. WE 5 – Monitoring and evaluation of WATA's restructured pass program for riders. Execution 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 theme park, entertainment, and hotel industries in order 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 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 will update its Procurement Manual to ensure its contents reflect the Virginia Public Procurement Act (VPPA) and the Federal Transit Authority (FTA) requirements and guidelines.
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 has hired a Project Manager or Firm to ensure FTA guidelines for building a facility are met in addition to Local and State regulations.

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
 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 – Hired Project Manager to oversee Facility Development. Project Manager reports monthly to WATA Board and as requested for public input.
-

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

11.3 TDCHR Feasibility/Corridor Studies

A. Background

Feasibility and corridor studies will be conducted for the corridors specified under Work Elements. This will involve the HRTPO, 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 HRTPO 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. **Virginia Beach Transit Extension (VBTE)** - Activities include the completion of the Systems Design and Preliminary Engineering (PE) of the VBTE Locally Preferred Alternative. This design and engineering work will update the designs of the alignment based on the LPA decision, develop mitigation strategies as appropriate to identified impacts and regulatory agreements, and advance designs to an average of 30% engineering. This activity will also include development of bridging documents for advancement of the designs into a Design Build project.
2. **Naval Station Norfolk Transit Extension Study (NSNTES)** - Activities include the initiation of a Draft Environmental Impact Statement under the National Environmental Policy Act (NEPA) regulations based on recommendations from the pre-NEPA corridor level study. The DEIS will continue analysis of reasonable alternatives for a fixed guideway transit extension between the TIDE light rail system and Naval Station Norfolk. This planning work will advance the previously identified Purpose and Need and will refine corridors into study alignments with reasonable transit technologies. The study will include the numerous technical planning elements to directly support the Draft Environmental Impact Statement under the National Environmental Policy Act (NEPA) regulations and potential entry into FTA Project Development. These studies will also provide extensive information necessary to further advance planning of the project. Associated bus service improvements and park and ride facilities will be included in these analyses.
3. **Peninsula Multi-Modal Development Corridor Study (PMDCS)** - Continue the initial pre-NEPA study for fixed guideway corridors on the Hampton Roads Peninsula. The corridor planning project will define identify areas in need of high capacity, fixed guideway transit connectivity in Hampton and Newport News Virginia. The study will define areas of high commercial and residential growth

and density as well as areas limited by increasing roadway congestion. Project is needed to solve mobility connectivity 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 possibly including the Third Crossing connection to the Southside and Commuter Rail connection to Williamsburg.

This planning work will develop the projects' Purpose and Need and will identify and recommend potential alignments and transit technologies in Hampton and Newport News with possible connections between Newport News Shipbuilding, Hampton Coliseum area, Downtown Hampton, Oyster Point Area of Newport News, and the proposed new Amtrak Station in Newport News. The study will include the numerous technical planning elements to directly support initiation of a Draft Environmental Impact Statement under the National Environmental Policy Act (NEPA) regulations and entry into FTA Project Development. These studies will also provide extensive information necessary to further advance planning of the project. Associated bus service improvements and park and ride facilities will be included in these analyses.

C. End Products

1. WE 1 – VBTE Work Element end product is the 30% designs estimated for late CY 2016.
2. WE 2 – NSNTES Work Element end product is the DEIS estimated for completion in mid CY 2019. Future end products may include a FEIS, and Engineering work elements.
3. WE 3 – PMDCS Work Element end product is the Pre-NEPA Report on Potential Alternatives for Future Study. This work element is estimated for completion in late CY 2017. Future end products may include a DEIS, FEIS, and Engineering work elements.

D. Schedule

1. WE 1 – VBTE Work Element end product PE is estimated for completion in fourth quarter CY 2016.
2. WE 2 – NSNTES Work Element end Product DEIS is estimated for completion in mid CY 2019. Schedules for future end products including a FEIS, and Engineering work elements are dependent on identification of funding sources and the results of the DEIS.
3. WE 3 – PMDCS Work Element end product Pre-NEPA Report on Potential Alternatives for Future Study is estimated for completion in fourth quarter CY 2017. 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 Pre-NEPA Report.

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 and local matching funds)

ENTITY	ELEMENT	RSTP	STATE	LOCAL	TOTAL
HRT	VBTES	\$9,600,000	\$2,400,000		\$12,000,000
HRT	NSNTES	\$500,000	\$7,700,000		\$8,200,000
HRT	PMDCS	\$1,760,000	\$440,000		\$2,200,000

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11.4 HRT Disadvantaged Business Enterprise Planning

A. Background

On a tri-annual basis, Hampton Roads Transit (HRT) is required to update its DBE Plan and Program for the Federal Transit Administration (FTA). As part of this recurring federal requirement, it is necessary for HRT to measure and 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. As part of the compliance monitoring process on an ongoing basis, HRT is required to review, measure, and evaluate actual performance/compliance with the DBE Program requirements in order to plan realistic DBE participation goals. DBE participation on relevant procurements must also be reviewed as a part of FTA compliance. The ongoing assessment/evaluation process is critical to full compliance with the federal requirements and continuation of funding from the FTA.

B. Work Elements (WE)

Work activities include the following:

1. Annually conduct an internal study of compliance with the DBE Program/Plan requirements. The study will include collaboration with the Virginia small Business and Supplier and Metropolitan Airport Authority to determine areas of improvement related to providing guidance to small businesses seeking to become certified as Virginia DBE firms. The study should identify any areas of non-compliance and recommend strategies to ensure Agency-wide implementation and compliance with the DBE Program requirements and procedures; it will be an ongoing effort with results measured in the increased number of DBE certified firms within the Virginia UCP database.
2. 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 people are 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. Plan outreach initiatives to ensure that there are ready, willing and capable DBEs available to participate in new economic initiatives for the Hampton Roads Transit Metropolitan Statistical Area.
3. Development and research into the determination of the agency's overall tri-annual goal and means by which to realize such an established goal. Due to changes made with the federal requirements, the annual overall goal should be submitted every three years; however, HRT will work continually to ensure that the goal remains feasible on a year to year basis.

4. Conduct a review of the procurement opportunities for DBE firms on the new procurements and set competitive and feasible individual contract goals.
5. Conduct periodic DBE Commercially Useful Function (CUF) reviews to make sure that DBEs are participating and performing the assigned tasks on procurement contracts.
6. Submit semi-annual reports via FTA TrAMS: June 1st and December 1st.

C. End Products

1. WE 1 – Assign additional tasks that support findings of Internal DBE study. Example: Evaluation of DBE Best Practices with subsequent push out to procurement and HRT.
2. WE 2 – Increase in the number of DBE certified firms in the Virginia UCP resulting in more opportunities for area businesses within both the Hampton Roads area and Virginia. Established relationships with area business development centers and increased awareness of are opportunities through Hampton Roads Transit. Additional certified DBEs as a result of outreach events based on HRT support and guidance.
3. WE 3 – Assurance that the agency’s overall goal matches federal requirements. While the goal is submitted tri-annually, the DBE goal is evaluated internally on a monthly and annual basis.
4. WE 4 – Improved tools, certified DBE vendor database, and attainable goals for use in procurement activities of the agency for use by HRT procurement to include Virginia Beach Transit Extension Study project.
5. WE 5 – Documented compliance for DBE participation on HRT procurements.
6. WE 6 – Accountability via Semi-Annual Reporting via FTA’s TrAMS.

D. Schedule

The completion of the items is scheduled as follows:

1. WE 1 – Internal DBE Study/Organizational Education: Ongoing
2. WE 2 – DBE Outreach Events: Quarterly (based on need): Mar, Jun, Sep, Dec
3. WE 3 – Continued evaluation of DBE goals
 - i. Monthly: 15th of each month.
 - ii. Annually: Aug 1
4. WE 4 – FTA TrAM DBE Report Submission: Semi-Annually: Jun 1 and Dec 1
5. WE 5 – DBE CUF Reviews: Ongoing
6. WE 6 – Overall Agency DBE Goal: Aug 1

E. Participants

HRT staff and consultants.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

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

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11.5 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 to maintain or improve the quality of life for residents by encouraging ridesharing, 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 Hampton Roads, James City County, Virginia's Eastern Shore, Isle of Wight County, and the northern counties of North Carolina. TRAFFIX has been functionally organized as follows:

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

The Transportation District Commission of Hampton Roads administers TRAFFIX. It receives and administers program grants. A 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 members of the TTAC. They provide policy guidance regarding program management. TRAFFIX Program management includes organizational development, strategic planning, program budget and funding, program development, program implementation, coordination, supervision, and special task-oriented discussions.

- The TOS reviews the annual work program, provides input, monitors budgets and implementation progress, evaluates program results and suggests changes for more efficient and/or effective operation.
- The TOS meets three times a year.
- 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 carpooling, van pooling, teleworking, walking/biking to and from work or school in an overarching effort to reduce or mitigate congestion, reduce pollution, provide a more stress free commute, and enhance the overall quality of life in Hampton Roads.
- 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 employer- 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 members, Tidewater Community College, has entered into its second year membership with three 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 2014, TOS approved a Park and Ride Specialist position. We will be interviewing candidates for this position in the early part of 2016.

2. Marketing

The Traffix Director will be looking at newer and more creative types of advertising with more emphasis on Millennials, Generation Y and X type of advertising and marketing. Traffix will create a “flight plan” for marketing and advertising by the end of February, 2016.

Traffix will lead a Marketing effort to market and advertise, with the help of the Navy, a Transportation Incentive Program throughout the region. In concert with the Navy, Traffix will advertise the merits of the Transportation Incentive Program through newspapers, bus wraps, Light Rail articulated wraps, billboards, the Navy newspaper Flagship, and other creative methods.

3. Research, Management, Planning and Evaluation

Organization development must continue to be necessary for TRAFFIX. This 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 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 four months of 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 ensure 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 TOS in the winter, summer and fall months. Report to TTAC once a year. Annual Report within four months of the conclusion of the previous year.
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, and TRAFFIX Management.

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

E. Participants

Internal Participants:

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

External Participants:

- Local Governments
- State Governments
- Colleges and Universities
- 421 major Hampton Roads Employers in FY 2012
- Contacted/contacting over 100,000 employees (employee base) annually (FY 2013) through radio, TV, billboards and/or flyers.
- Participants encompassing the Hampton Roads Metropolitan Planning Area, the Virginia Eastern Shore, and Northeastern North Carolina
- Institutes of higher learning (TCC, ODU, NSU, CNU, HU, TNCC, Everest College, Bryant and Stratton College, Kaplan College, Centura College), Newport News Shipbuilding, and the area's military reservations.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

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

11.6 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 biennially (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: Adopted 5/30/17
2. WE 2 – Financial Analysis: Monthly
3. WE 3 – Short and Long-range Capital Plans: draft 1/31/17, final 5/30/17
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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11.7 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

11.8 HRT Transit Development Plan

A. Background

The Virginia Department of Rail and Public Transportation (DRPT) has an emphasis on investing in transit systems that are meeting the existing demand for public transportation and desire to meet the growing demand for improved bus, rail, and ferry service through careful coordination of transit and land use planning. As such, DRPT requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a six-year Transit Development Plan (TDP) which is to be updated annually. As a result, HRT will complete a TDP with assistance from DRPT. This is an annual requirement.

B. Work Elements (WE)

Work activities include the following:

1. **Overview of Transit System:** Provide an overview of the following elements: History of transit property, Governance structure, Organizational structure, transit services provided and areas served, fare structure, description of revenue and non-revenue vehicle/vessel fleet, existing facilities, transit security program, public outreach.
2. **Describe Goals, Objectives and Standards:**
 - Describe the current goals, objectives and standards, and the process for establishing, reviewing, and updating these goals, objectives, and standards.
 - Discuss new or revised goals and related objectives and standards, and identify changes from prior TDPs.
3. **Service and System Evaluation**
 - Describe the evaluation process and evaluate route-level and system-wide performance against current performance standards for each mode and/or type of service (e.g. local, express, or commuter service) for both fixed-route and demand-responsive services.
 - Evaluate the most recent year for which complete data is available.
 - Prepare a retrospective analysis of performance (e.g., prior five years) if appropriate for certain evaluation measures.
 - Include a peer review of at least three other Virginia transit systems with similar operating parameters where such data is available.
 - Conduct appropriate onboard ridership surveys (either passengers filling out a survey form or an on/off ride check) to assist in the existing service evaluation process.
 - Conduct User / Stakeholder / Public Input Process.
 - Conduct an Origin-Destination survey across the Hampton Roads Transit system to better understand customer travel patterns and demographics and use the results as part of service evaluation across the system.
 - Evaluate recent changes in patronage, operating costs, and operating revenue.
 - Identify deviations from currently adopted service standards (if they exist for the system) and describe proposed remedies, including service

- expansion and/or contraction. Use narrative, tables and other graphic formats as warranted. Describe specific solutions to any gaps or service deficiencies for fixed-route and demand-responsive services.
- Describe equipment and facility deficiencies, and describe proposed remedies. Provide a summary of the agency's most recent federal Title VI Report and FTA Triennial Review if available. Discuss any deficiencies found, and describe related remedial actions. If they are available, attach the most recent Title VI Report and the FTA Triennial Review to the TDP in the appendix.
 - Discuss current transit supportive development land use activities or relevant changes in land use policy. Document existing and proposed Land Use Plans. Identify areas with transit supportive land use, map and compare the existing transit services and how well they serve these land uses (utilize DRPT's Transit Design Guidelines), identify special generators and destinations and identify community developments scheduled to be built within the TDP six-year timeframe.
 - Document community bicycle and pedestrian plans (if plans are developed).
 - Document and map existing and future population and employment densities (including existing transit service alignments).
 - Discuss and document any current or planned ITS projects and programs.
4. **Service Expansion Project Descriptions**
- Describe each proposed service expansion project.
 - Ridership estimation.
 - Estimate each project's capital and operating cost, including: description of secured and/or programmed funds, the conditions imposed on the use of funds, and when the funds must be expended.
 - Capital and operating cost estimates.
 - Explain any changes in secured or anticipated funding from prior TDPs.
 - Show project cash flow needs.
 - Provide current schedule for projects.
 - Provide anticipated operating expenses and revenue projections.
 - Discuss any other current or anticipated policy, planning, funding or operating issues that may affect the operations of the existing transit system.
 - Discuss whether the proposed service expansion project (s) is currently contained in the STIP, SYIP, TIP and/or CLRP, and if not, determine when the project is expected to be submitted for inclusion in these documents.
 - Document the transit service expansion plans on the existing and future land use, population and employment density maps and identify how these transit services support transit support land uses.
5. **Operations Plan**
- Describe fixed-route and demand-response services the operator intends to provide over the TDP Period.
 - From current base operations, the plan will incorporate changes that reflect the ongoing evaluation of services/systems with respect to adopted goals, objectives, standards, etc.
-

6. **Capital Improvement Program:** Evaluate the system's existing Capital Improvement Program (CIP) to ensure any major capital items are listed in the program document, including but not limited to the following:
 - Vehicle/Vessel replacement, rehabilitation, retrofit, expansion, and reduction policies.
 - Major system maintenance and operations facilities: replacement, upgrade, and expansion.
 - Passenger Amenities such as bus stop improvements or waiting shelters.
 - Tools and equipment: replacement and/or upgrade.
 - System expansion: Identify new systems (bus, streetcar, LRT, BRT) route service, operation /capital costs associated with new services.

7. **Financial Plan**
 - Develop a financial plan consisting of the capital and operating budget forecasts; federal, state, regional, and local revenue projections; fare policies, etc.
 - Develop six-year operating and CIP budgets.
 - State all capital and operating expenses and revenues in year of expenditure dollars, as identified in DRPT's Six-Year Improvement Program.
 - Explain any major changes in service hours and miles due to deployment of new service or major service reductions; changes in fare revenue, etc.
 - Separately identify funding sources and amounts to support operating and capital budgets for fixed-route and demand-responsive services.

8. **Connect Hampton Roads**
 - Develop a vision of integrated mobility options plan to connect the HRT TDP efforts (as discussed above) to the greater Hampton Roads region to match or exceed the Region's Long-Range Transportation Plan horizon year.
 - Determine economic benefit, economic viability, and fiscal constraint of plan elements based on a range of existing and future fiscal scenarios.

9. **TDP Monitoring and Evaluation**
 - Describe the process that will be undertaken to periodically monitor and evaluate the progress that has been made towards successfully implementing the TDP and integrating it with other internal and external planning documents.

C. End Products

1. An annual update to the TDP 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.
2. Every sixth year a full TDP 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

1. The Annual update to the TDP is anticipated to be completed in 6 months with an estimated completion date of December 2016.

2. The Full TDP is anticipated to be completed in 12 months with an estimated completion date of December 2017.

E. Participants

HRT, DRPT, and associated Consultants.

F. Budget, Staff, Funding

(Funding information includes applicable state/local matching funds)

ENTITY	5303	CO 5303	Local	TOTAL
HRT/Consultant	\$65,000	\$52,274	\$20,000	\$137,274

Budget revised on 8/4/16. (See List of Revisions, Page vi, for details)

12.0 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 Bicycle and Pedestrian Advisory committee 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 MAP-21.

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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13.0 HRTPO CONTINGENCY FUNDING

A. Background

The HRTPO Contingency Funding task has been included in the FY 2016 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 2016.

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	\$305,497		\$305,497

Budget revised on 12/21/16. (See List of Revisions, Page vi, for details)

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14.0 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 the City of Franklin and the Counties of Southampton and Surry.

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 2017 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 2017, 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. During FY 2016, HRTPO staff updated the RL RTP to the horizon year 2040. In FY 2017, HRTPO staff will continue to maintain the current 2040 RL RTP.

2. Congestion Management Process

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 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.

Since 2012, HRTPO has also prepared the *Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads* report on an annual basis. This 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.

In FY 2016, HRTPO followed up on the Regional Safety Study by preparing the *Hampton Roads Active Transportation Safety Study*. This study examined safety issues related to walking and bicycling, including determining the location of active transportation crashes throughout the region.

All of these safety planning efforts included roadways in the rural localities.

4. Regional Freight Planning

In FY 2016, 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. 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.

6. 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.

2. Congestion Management Process

- Update the CMP database with the most current traffic counts and roadway characteristics.

- 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 *Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads* report, which will include an analysis of rural roadways based on 2016 archived volume and speed data.
3. Regional Safety Planning
- 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 databases detailing the condition of bridges in the rural areas.
6. Technical Assistance and Coordination
- Continue to compile all available current and future land use GIS layers / attribute data from local comprehensive plans from rural localities within the HRPDC boundary. As part of this task, VDOT has requested that the GIS tool provided by VDOT-TMPD be utilized to geo-reference local transportation plan recommendations (VDOT-TMPD will provide technical assistance on an as-needed basis in accomplishing this task). Information gathered will be used to update existing land use data within the Statewide Planning System and will be used to augment data for the Statewide Travel Demand Model that is currently under development. For localities that do not have GIS layers / attribute data for current and future land use plans, VDOT requests staff to develop a schedule and identify resources needed that would allow this data to be captured via GIS. VDOT-TMPD will provide detail instructions and templates to be used to provide consistency across the state.
 - 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, HB2 regional meetings, Title VI/Environmental Justice compliance meetings with VDOT staff, and the Fall Transportation meeting.
-

- Participate in outreach meetings and review data as requested by VDOT throughout the fiscal year.

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 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. Congestion Management Process
 - An updated CMP database
 - Updated transportation databases
 - An updated *Volumes, Speeds, and Congestion on Major Roadways in Hampton Roads* report
3. Regional Safety Planning
 - An updated crash database/shapefile for the region
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 2016 tasks related to rural transportation
 - Current and future land use GIS data
 - Up-to-date transportation and land use components for Surry County Comprehensive Plan
 - Active Transportation Master Plan for Southampton County

D. Schedule – Program Activities

1. Rural Long-Range Transportation Plan
 - Up-to-date RLRTP – Ongoing throughout FY 2017
 2. Congestion Management Process
 - Updated CMP database – Ongoing throughout FY 2017
-

- Updated transportation databases - Ongoing throughout FY 2017
- Updated *Volumes, Speeds, and Congestion* report – Quarter 4
- 3. Regional Safety Planning
 - Updated crash database/shapefile – Ongoing throughout FY 2017
- 4. Regional Freight Planning
 - Updated truck volume database – Ongoing throughout FY 2017
- 5. Regional Bridge Planning
 - Updated bridge condition database – Ongoing throughout FY 2017
- 6. Technical Assistance and Coordination
 - Current and future land use GIS data – Quarter 4
 - Transportation and Land Use Component of Comprehensive Plan Update – Quarter 4
 - Active Transportation Master Plan – Quarter 4
 - Other tasks as needed – Ongoing throughout FY 2017
- 7. Technical Assistance to the Multimodal Planning Office – Ongoing throughout FY 2017

E. Participants

HRTPO, VDOT, DRPT, FHWA, HRPDC, Consultant, 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

15.0 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 his designee
 - The Commissioner of Highways or his designee
 - The Executive Director of the Virginia Port Authority or his 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			\$136,000	\$136,000