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PREPARED UNDER:

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OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

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U.S. Code.

The views and opinions of the Old Colony Planning Council expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.



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DISCLAIMER

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Updated April 2015 Old Colony Planning Council

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INTRODUCTION

The Old Colony Metropolitan Planning Organization (MPO) implements and conducts a continuing, cooperative, and comprehensive transportation planning process (3C) that results in programs, plans, and projects that encompass all transportation modes and that support the region's vision and goals. The Old Colony MPO plans for the movement of both people and goods within the region by all modes of travel, including highways, rail, public transportation, bicycles, and foot. It also plans for the connections linking these modes.

The FFY 2018 Unified Planning Work Program (UPWP) describes and provides budgetary information for the transportation planning tasks and activities, which are to be conducted in the region during the federal fiscal year. The UPWP is a federally required certification document, which is prepared and endorsed annually by the Old Colony MPO, prior to the start of the planning program. The Old Colony Planning Council (OCPC) has the responsibility of preparing the UPWP and implementing the tasks contained here within.

The FFY 2018 UPWP describes the planning to be accomplished by the Old Colony MPO. Transportation planning activities are described as procedures under specific tasks. For each task, the anticipated accomplishment or product and the estimated work force resources needed are provided. For each task, budget, and sources of funding are also provided. For management convenience, similar tasks are grouped into the following elements:

- 1000 Management and Support of the Planning Process and Certification Activities
- 2000 Data Reconnaissance, Acquisition, and Analysis Activities
- 3000 Short Range and Long Range Transportation Planning Activities
- 4000 Other Transportation Technical Activities

The UPWP is a planning and budgeting tool that is used by OCPC, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Brockton Area Transit (BAT), and Massachusetts Department of Transportation (MassDOT) as the Scope of Services for the contracting for planning services, and may be amended during the program year with approval of the Old Colony MPO.

Continued growth in population, employment, and housing and the associated increases in travel demand continue to place pressure on the transportation system in the Old Colony Region and beyond. The Regional Transportation Plan (RTP) represents the Old Colony MPO's effort to create a document and a process that will meet the challenges of preserving and expanding a truly intermodal transportation system. The RTP includes goals and policies, performance measures, analyses and recommendations necessary to build and maintain an efficient, effective, and affordable regional transportation system. It is the intention of the Old Colony MPO to build on the current system, striving to make it comprehensive and multi-modal. The goal is a balanced range of well-connected transportation options that will optimize each travel mode: automobile, transit, rail, bicycle, and pedestrian, boat, air, and truck. The RTP identifies the region's transportation project needs for the next twenty years. The principal way in which RTP recommendations will be translated into action is through the Transportation Improvement Program (TIP). The TIP is a multimodal list of investments for which federal surface transportation funds will be used. The TIP spans a five-year period, is updated annually, and is based on reasonable estimates of funds available to the region.

The FFY 2018 UPWP continues to expand on several major tasks that are specifically targeted to implement provisions of several pieces of federal legislations, such as the Fixing America's Surface

Transportation (FAST) Act, the Clean Air Act Amendments of 1990, and the Americans with Disabilities Act. The Old Colony MPO develops its programs with regional needs in mind, and in alignment with the FAST Act Planning Factors. The federal transportation act, the FAST Act identifies nine (19) Planning Factors that Metropolitan Planning Organizations, such as the Old Colony MPO, must consider in their Unified Planning Work Programs. During the development of the 2016 Regional Transportation Plan, goals and objectives were developed to guide the region's transportation planning activities through the near future, as were the performance measures that work towards achieving these goals and objectives. Planning staff collaborated with stakeholders in an attempt to develop realistic and achievable targets and performance measures for each individual objective. The Old Colony MPO will continue to collaborate with its planning partners and refine the development of targets and performance measures for Objectives as they are applicable. Additionally, planning staff will continue to self-evaluate on progress towards all objectives and report to its planning partners and to the public as appropriate. The following is a listing of the national planning factors with information provided on the related 2016 RTP objectives and performance measures.

FAST-ACT: National Planning Factors

1. **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads. Increase the safety of the transportation system for motorized and non-motorized users. Review safety data, goals, objectives, and strategies to promote safety.

In addition, the Strategic Highway Safety Plan should be incorporated into the long-range plan. OCPC shall apply specific criteria in the review of transportation strategies. These criteria are applied to estimated changes in safety. The primary goal of the RTP is focused on safety and security: "Enhance Safety and Security." Safety is of such importance that it is recognized in its own chapter of the RTP. Increase the security of the transportation system for motorized and non-motorized users. MPOs should look at both transit and highways networks and develop appropriate goals and strategies. Review current plans for emergency planning and security elements, identify critical facilities and transportation systems, and help define the roles of the various players in promoting security. The primary goal of the RTP is focused on safety and security: "Enhance Safety and Security." Security is of such importance that it is recognized in its own chapter of the RTP. One area of additional security planning that applies is that of traffic impacts due to extreme weather events such as impending hurricanes, and climate changes. OCPC has participated in the Massachusetts Emergency Management Agency (MEMA) Massachusetts State Police efforts regarding the Cape Cod Evacuation Plan.

Goal 1: Safety and Security: To ensure that the transportation system and its users are safe and secure.

Objectives:

- Reduce the number and rates of fatalities and serious injuries
 - Target and Performance Measure: Reduce motor vehicle, pedestrian, and bicyclist fatalities, hospitalizations, and crashes by 10 percent in 10 years
 - Target and Performance Measure: Conduct Road Safety Audits for a minimum of 3 high crash locations (MassDOT Top 5% Crash Clusters) per year, including minimum of 1 pedestrian/walkability audit and one bicycle audit per year

- Target and Performance Measure: Fully program minimum HSIP targets each TIP year and seek to program Statewide HSIP funds when available/feasible for priority safety related projects
- Provide and maintain safe fixed route service (e.g. Preventable Accidents per 100K miles)
 - Target and Performance Measure: Maintain fixed route service preventable accidents/ 100k miles below 2 (FY 2014 actual is 1.02) (from BAT Performance Dashboard)
- Provide and maintain safe demand response service (Preventable accidents/ 100k miles)
 - Target and Performance Measure: Maintain demand response service preventable accidents/ 100k miles below 2 (FY 2014 actual is 1.20) (from BAT Performance Dashboard)
- Protect the viability of transportation infrastructure to accommodate emergency response and evacuations
- Protect transportation system users from safety and security threats
- Increase number of Safe Routes to School Partner Schools
 - Target and Performance Measure: Increase percentage of SRTS Partner Schools to 85% in 10 years. Currently, 70% of eligible partner schools are partner schools
- 2. Infrastructure Condition (Pavement and Bridge) To maintain a highway infrastructure asset system in a state of good repair. Emphasize the preservation of the existing transportation system. The RTP supports this planning factor through this goal: Enhance and Protect Regional Mobility. The RTP also supports this performance measure: Maintaining and preserving transit, highway, and bridge infrastructure. As part of the RTP development, OCPC utilities a pavement management system to develop costs and recommended repair for operation, preservation, and maintenance of the federal aid network.

Objectives:

- Provide and maintain fixed route and demand response state of good repair
 - Target and Performance Measure: Increase miles between breakdowns with passenger interruption on fixed route to 20,000 (standard) within 10 years (currently 18,020) (from BAT Performance Dashboard)
 - Target and Performance Measure: Increase miles between breakdowns with passenger interruption on demand response to 10,000 (standard) within 10 years (currently 6,452) (from BAT Performance Dashboard)
- Improve bridge conditions
 - Target and Performance Measure: Maintain percentage of bridges categorized "structurally deficient" below 5% and increase overall average AASHTO rating (current 79) by 10 percent by 2040
- Improve pavement conditions and state of good repair
 - Target and Performance Measure: Achieve 50% of federal-aid eligible roadways in the region with a PCI-based pavement ranking of "Good" of "Excellent" within 10 years
- 3. Congestion Reduction To achieve a significant reduction in congestion on the NHS. Enhance the integration and mobility of the transportation system, across and between modes, for people and freight. OCPC shall apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these

efforts through its goal: "Enhance and Protect Regional Mobility, and Foster Sustainable, Healthy, and Livable Communities."

Objectives

- Promote Mode Shift by increasing use of transit, carpool/vanpool, and non-motorized transportation modes such as bicycling and walking
 - Target and Performance Measure: Achieve 15% of commuters in the Old Colony region using healthy transportation modes (transit, walking, bicycling, etc.) within 10 years (10.5% of surveyed commuters in Old Colony Region were using transit, walking, or bicycling in the 2010 Massachusetts Travel Survey)
- Reduce traffic congestion, and improve level of service and access management
 - Target and Performance Measure: Monitor congestion levels on federal-aid eligible highway network annually, and highlight corridors with volume to capacity (v/c) ratios of 0.8 or greater for targeted study and/or improvements
- Maintain and improve transit system efficiency and capacity
 - Target and Performance Measure: Achieve average on-time ranking on fixed-route system of 98% by 2040 (from BAT Performance Dashboard)
- Increase automobile and bicycle parking capacity and usage at transit stations and commuter lots
 - Target and Performance Measure: 100% of intermodal facilities with adequate bicycle parking by 2040
- Eliminate bottlenecks on limited access highways and on the freight network
- Improve and expand human service coordination, mobility, and accessibility for all modes
- Reduce number and size of gaps in the ADA-accessible sidewalk network
- Increase use of traffic signal priority (hold current green light) for transit vehicles and traffic signal pre-emption for emergency vehicles (override programmed phasing to provide approaching emergency vehicles a green light)
- Monitor utilization and congestion levels at commuter rail and Park & Ride parking facilities
 - Target and Performance Measure: Record utilization data twice annually and report data to MassDOT
- Improve accessibility for all modes to all users
 - Target and Performance Measure: 50% of communities with Complete Streets policies within 10 years
 - Target and Performance Measure: 50% of available Transportation Improvement Program (TIP) funding allocated to projects that significantly improve bicycle and pedestrian mobility
- 4. System Reliability To improve the efficiency of the surface transportation system. Promote efficient system operation and management. The Old Colony MPO supports Operation and Management Strategies (O and M) for both the transit and highway networks. The RTP supports this planning factor through this performance measure: "Maintaining and preserving transit, highway, and bridge infrastructure." As part of the RTP development, OCPC utilities a pavement management system to develop costs and recommended repair for operation, preservation, and maintenance of the federal aid network. Additionally, the Old Colony TIP contains operation and maintenance costs for the federal aid network and BAT.

Objectives

- Provide and maintain fixed route reliability: Miles between breakdown w/ passenger interruption
 - Target and Performance Measure: Achieve average of 20K miles between breakdowns with passenger interruptions by 2025; and 25K miles by 2040 (from BAT Performance Dashboard)
- Provide and maintain demand response reliability: Miles between breakdown w/ passenger interruption
 - Target and Performance Measure: Achieve average of 10K miles between breakdowns with passenger interruptions by 2025; and 15K miles by 2040 (from BAT Performance Dashboard)
- Provide and maintain highway network travel time reliability
- Protect and strengthen transportation systems vulnerable to climate change through identification of at-risk transportation assets and development of protection measures for each category of asset
- 5. Freight Movement and Economic Vitality To improve the nation freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency. OCPC staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to changes of delay and emissions. Reduction in traffic delay has a direct consequence on economic vitality both through the timely arrival of commuters and goods and reduction in fuel expenses and losses due to air pollution. The RTP directly supports these efforts through the goal: "Promote Policies that Ensure Economic Vitality and Sustainability." OCPC directly supports regional productivity through its economic development mission manifested in the Regional Policy Plan, including support of the federally approved Old Colony Comprehensive Economic Development Strategy priority projects.

Objectives

- Reduce delay along identified freight routes
 - Target and Performance Measure: Address minimum of (2) freight corridors through UPWP every four years
- Improve safety along freight routes
- Mitigate and improve key arterial (such as Route 106) and freeway (Routes 3 and 24) bottlenecks that inhibit efficient freight movement by truck
- Identify opportunities for promoting intermodal freight movement and uses for the Brockton CSX site
- Increase access to major employment centers
 - Target and Performance Measure: Minimum of 2 planning studies in UPWP every 4 years that address access to employment centers
- Increase viaduct clearance to improve freight movement, emergency response, and reduce delay
 - Target and Performance Measure: 100% of underpasses on freight corridors have highway standard vertical clearance by 2040
- Plan and prioritize transportation investments that serve targeted development areas

6. Environmental Sustainability - To enhance the performance of the transportation system while protecting and enhancing the natural environment. 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. The RTP supports this planning factor through three goals: "Promote Environmental Protection and Climate Change Adaptation, and Pursue the GreenDOT Vision and achieve the three GreenDOT goals." The RTP and therefore the UPWP includes a focus on addressing Climate Change. Where appropriate, UPWP tasks will include assessments of vulnerabilities and negative risks that climate change effects or extreme weather events pose, to the region's transportation infrastructure. These vulnerabilities and risks will be seriously considered when planning future improvements. Where appropriate, UPWP tasks will develop adaptation strategies that will enable the region to implement improvements appropriately. The reduction of greenhouse gas emissions (GHG) remains an important goal in addressing climate change. UPWP tasks are encouraged that reduce VMT and congestion.

Objectives

- Minimize negative environmental impacts of the transportation system
 - Target and Performance Measure: Program a minimum of 100% of Congestion Mitigation and Air Quality (CMAQ) Program funding targets
- Reduce greenhouse gas emissions and ground level ozone (NOx and VOCs) by all transportation modes
 - Target and Performance Measure: 50% of TIP projects reduce GHGs while also reducing negative impacts on the natural environment (such as improved storm water management or the addition of green space)
- Increase the usage of clean alternative fuels and recyclable material for new transportation infrastructure
- Increase coordination of transportation and housing programs to promote affordable housing near transit
- Develop and support transportation policies that support healthy lifestyles
- Support investments that clean up brownfields and avoid investments that increase pressure to develop greenfields
- Support livable communities and smart growth development patterns through the creation of a balanced multi-modal transportation system
- 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.

Objectives

- Continue to utilize transportation evaluation criteria in screening potential TIP projects
 - Target and Performance Measure: 100% of all potential projects undergo initial evaluation to determine if project is realistic, viable, and implementable
- Enhanced careening and evaluation of projects to determining Year 1 readiness for TIP
 - Target and Performance Measure: 100% of potential Year 1 TIP projects are screened for implementation readiness

- Target and Performance Measure: At least 80% of Year 1 TIP Projects are advertised
- Continue to maintain annual participation at TIP Day with MassDOT
 - Target and Performance Measure: 100% attendance and participation at TIP Day
 - Target and Performance Measure: At 25% design stage, work with stakeholders on 100% of potential projects to determine ROW, environmental permitting, and other potential challenges to project development and implementation
- Reduce time of transit contracting
- 8. **Resiliency and Reliability of the Transportation System** improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation. Promote efficient system operation and management.

Objectives

- Provide and maintain fixed route reliability: Miles between breakdown w/ passenger interruption
 - Target and Performance Measure: Achieve average of 20K miles between breakdowns with passenger interruptions by 2025; and 25K miles by 2040 (from BAT Performance Dashboard)
- Provide and maintain demand response reliability: Miles between breakdown w/ passenger interruption
 - Target and Performance Measure: Achieve average of 10K miles between breakdowns with passenger interruptions by 2025; and 15K miles by 2040 (from BAT Performance Dashboard)
- Provide and maintain highway network travel time reliability
- Protect and strengthen transportation systems vulnerable to climate change through identification of at-risk transportation assets and development of protection measures for each category of asset

The Old Colony MPO supports Operation and Management Strategies (O&M) for both the transit and highway networks. The RTP supports this planning factor through this performance measure: "Maintaining and preserving transit, highway, and bridge infrastructure." As part of the RTP development, OCPC utilities a pavement management system to develop costs and recommended repair for operation, preservation, and maintenance of the federal aid network. Additionally, the Old Colony TIP contains operation and maintenance costs for the federal aid network and BAT.

9. Travel and Tourism - Enhance travel and tourism.

The Old Colony MPO is working on efforts to enhance travel and tourism through Element 3000 Major UPWP Studies. Opportunities to monitor, analyze, and development recommendations will be undertaken.

Consistent with U.S. Department of Transportation's strategic objectives for the Surface Transportation Program, the FFY 2018 UPWP emphasizes the planning emphasis areas of the FAST Act Implementation, Regional Models of Cooperation, and Ladders of Opportunity.

- FAST Act Implementation The Old Colony MPO continues to develop its performance management approach to transportation planning and programming. Performance-based planning and programming includes using transportation performance measures, setting targets, reporting performance, and programming transportation investments directed toward the achievement of transportation system performance outcomes. Appropriate UPWP work tasks include working with local planning partners to identify how to implement performance-based planning provisions such as collecting performance data, selecting and reporting performance targets for the metropolitan area, and reporting actual system performance related to those targets. Such activities are included in the FFY 2018 through tasks such as the Management Systems (Congestion, Pavement, Safety, and Land Use), and the Performance Management efforts.
- Regional Models of Cooperation The Old Colony MPO seeks to ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination across MPO and Transit Agency Boundaries. To improve the effectiveness of transportation decision making, the Old Colony MPO thinks beyond traditional borders and conducts a coordinated approach to transportation planning. A coordinated approach supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across boundaries. Improved multi-jurisdictional coordination by MassDOT, MPOs, and providers of public transportation can reduce project delivery times and enhance the efficient use of resources, particularly in urbanized areas that are served by multiple MPOs. During FFY 2018, the Old Colony MPO will continue to coordinate planning activities within the Boston Urbanized Area (UZA) with MassDOT and the common MPOs, and seek to update the Boston UZA Coordination Memorandum of Understanding (MOU) to ensure that there are effective processes for cross-jurisdictional communication to improve collaboration, policy implementation, technology use, and performance management.
- Ladders of Opportunity The Old Colony MPO, as part of the transportation planning process, identifies transportation connectivity gaps in accessing essential services. Essential services include employment, health care, schools/education, and recreation. The FFY 2017 UPWP includes efforts to develop and implement methods to identify gaps in the connectivity of the transportation system and developing infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to essential services. As such, examples include the Bicycle and Pedestrian Connectivity and Safety Study (assessing the connectivity and safety and condition of pedestrian and bicycle facilities; and evaluating compliance with Americans with Disabilities Act, particularly around schools, concentrations of disadvantaged populations, social services, medical, and transit facilities), the Congestion Management Process, the Route 123 Corridor Study (Abington and Brockton), and the Route 53 Corridor Study (Hanover, Pembroke, Duxbury, and Kingston). The FFY 2017 UPWP also includes tasks to develop the 2017 Public Participation Plan, evaluate the effectiveness of public participation plan for engaging transportation-disadvantaged communities in the transportation decision-making process, and to review and update the Section 5310 Coordinated Human Service Public Transportation Plan, as appropriate.

This year's UPWP efforts focus on the development of the Route 106 Corridor Study (West Bridgewater, East Bridgewater, Halifax, Plympton, and Kingston), the Old Colony Regional Policy Plan, the FAST Act Performance Management and related Performance Measures and Target development, continued development of the Regional Travel Demand Model (TransCAD), operation of the Congestion

Management Process, operation of the Safety Management System, operation of the Pavement Management System, operation of the Land Use Management System, and the development of the Transportation Improvement Program. Attention is also focused on the regional highway data surveillance program (including counting of bicycles and pedestrians), maintaining regional databases, adjusting and amending certification documents as needed, and implementing the management systems. OCPC continues to integrate the Geographic Information Systems into various tasks and plans undertaken. As indicated in the title of the Federal transportation act, the safety of our transportation network has become an increasing priority, and a key consideration in the selection and prioritization of future projects. Tasks within the UPWP are consistent with the goals of the RTP. As an example, the Plan supports efforts to reduce congestion, improve safety, and develop capital projects that represent an efficient expenditure of public dollars. Such efforts are addressed in this UPWP under multiple tasks such as the Management Systems of Congestion, Land Use, Pavement, and Safety, along with the TIP.

Federal transportation legislation continues to prioritize the concept of Sustainability and Livability within the transportation planning process. This concept is addressed in the 2016 Regional Transportation Plan, and in the Bicycle – Pedestrian Connectivity and Livability Study. Beyond those efforts, one method for measuring the sustainability of a highway project is to assess the project against existing best practices. With this in mind, FHWA has developed and released a web-based tool known as the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). As such, the Old Colony MPO will continue to consider sustainability and livability, and seek to utilize the INVEST Tool during the implementation of the FFY 2018 UPWP.

Public participation continues to be a vital element of the transportation planning process. The encouragement of participation and provision of meaningful access to all local citizens in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. Community and transit representatives of the Old Colony Joint Transportation Committee (JTC) typically meet monthly on the first Thursday to discuss transportation investments and issues of regional importance. The Old Colony MPO meets several times per year to discuss and coordinate transportation planning issues, and to review and endorse certification documents. A Public Participation Program (PPP) was developed to solicit input to the various tasks and programs undertaken. This process will continually be reviewed and refined as necessary.

The FFY 2018 UPWP is consistent with Federal Planning Regulations and Other Federal Legislative Requirements.

Fixing America's Surface Transportation (FAST) Act

This legislation requires all MPOs to carry out the 3C process. Activities the MPOs must perform to meet this requirement are:

- Preparation of the RTP, the TIP, and the UPWP
- Establishment and oversight of the public participation process
- Maintenance of transportation models and data resources to support air quality conformity determinations as well as long-range and short-range planning efforts

Title VI and the Americans with Disabilities Act (ADA)

Title VI of the 1964 Civil Rights Act, Executive Order 12898, Executive Order 13166, and Executive Order 13330

Federal "Title VI/Nondiscrimination" Protections

The Old Colony Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of **race**, **color**, or **national origin** (including **limited English proficiency**), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administrated by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of **age**, **sex**, and **disability**. These protected categories are contemplated within the Old Colony MPO's Title VI Programs consistent with federal interpretation and administration. Additionally, the Old Colony MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

The Old Colony MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Old Colony MPO complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

Executive Order 12898, dated February 11, 1994, expands upon Title VI, requiring each federal agency to achieve environmental justice by identifying and addressing any disproportionately high adverse human health or environmental effects, including interrelated social and economic effects, of its programs, policies, and activities on minority or low-income populations.

On April 15, 1997, the U.S. Department of Transportation issued its Final Order to Address Environmental Justice in Minority Populations and Low-Income Populations. Among other provisions, this order requires programming and planning activities to:

- Explicitly consider the effects of transportation decisions on minority and low-income
- populations
- Provide meaningful opportunities for public involvement by members of minority and low income populations
- Gather (where relevant, appropriate, and practical) demographic information such as the race.
- color, national origin, and income level of the populations affected by transportation decisions
- Minimize or mitigate any adverse impact on minority or low-income populations

Executive Order 13166, dated August 11, 2000, is intended to ensure compliance with Title VI of the Civil Rights Act of 1964 by specifically calling for improved access to federally conducted and federally

assisted programs and activities for persons who, as a result of national origin, have limited English proficiency (LEP). To comply with the order, MPOs are required to develop and implement a system by which LEP persons can meaningfully participate in the transportation planning process.

FTA Environmental Justice Policy Guidance For Federal Transit Administration Recipients Circular 4703.1 (2012) provides recommendations on how to fully engage environmental justice populations in the public transportation decision-making process; how to determine whether environmental justice populations would be subjected to disproportionately high and adverse human health or environmental effects as a result of a transportation plan, project, or activity; and how to avoid, minimize, or mitigate these effects.

FTA Title VI Circular to 4702.1B (2012) provides guidance to grantees on how to comply with Title VI regulations, as well as to ensure grantees provide meaningful language access to persons who are limited English proficient.

The Americans with Disabilities Act (ADA)

Title III of the Americans with Disabilities Act requires all transportation projects, plans, and programs to be accessible to people with disabilities. At the MPO level, this means that public meetings must be held in accessible buildings and MPO materials must be made available in accessible formats.

Funding Sources

The period covered by each contract described in this UPWP by funding source is as follows:

FHWA PL/ MassDOT	October 2017 through September 2018
FTA 5303/ OCPC	April 2017 through March 2018
BAT	July 2017 through June 2018

Administrative Modification and Amendment Procedures

Unified Planning Work Programs, no matter how well planned, may need to be changed from their original MPO endorsed form. There are different actions that may be taken in order to change the endorsed UPWP. These actions vary, depending on the extent of the change, and have different impacts on the UPWP.

The procedures for changing the UPWP are:

UPWP Amendment

A UPWP Amendment is the most extensive change procedure that a UPWP may undergo. A UPWP Amendment requires the proposed changes to undergo a twenty-one (21) day public review period and be formally endorsed by the MPO. However, the Old Colony MPO, at their discretion, may vote to abbreviate the public comment period under what they consider extraordinary circumstances beyond the MPO's control.

 Specifically, UPWP Amendments with 21-day public comment period occur when there is an addition of a new task and/or deletion of a previously programmed task.

UPWP Administrative Modification (Adjustment)

A UPWP Administrative Modification (Adjustment) is a minor Amendment. The Adjustment procedure requires an administrative action (the change), consultation with the MPO, and MassDOT-OTP approval through the utilization of a Budget Reallocation Request Form.

 Specifically, UPWP Administrative Modifications (Adjustments) with an approval vote from the MPO and sign-off from MassDOT-OTP occur when there is a modification of budget or scope to an already programmed task.

Geographic Distribution of Major UPWP Funded Studies

The Old Colony Planning Council staff monitors the geographic distribution of UPWP funded studies over time. Table 1 provides the distribution of Major UPWP Studies over the time period of 2004 through 2018. To assist with providing context to the distribution, included in the table is 2010 Population and 2010-2014 Median Household Income. For the purposes of the analysis, a Major UPWP Study is defined as a study programmed in the UPWP under Element 3000 – Short Range and Long Range Transportation Planning Activities. Major studies under this element typically involve the in-depth study and analysis of roadway corridors within a community or may include a roadway corridor that spans multiple communities. Major UPWP studies also may include studies such region wide bicycle and pedestrian connectivity studies, climate change transportation studies, and priority development areas/ priority preservation areas studies.

From an examination of the distribution of Major UPWP Studies from 2003 through 2016, the following observations may be made:

- There are higher concentrations of studies within the more populated urban areas (i.e. Brockton and Stoughton). Such concentrations tend to follow areas with elevated levels of congestion and crash clusters.
- The towns of Bridgewater, Plymouth, and Stoughton also had higher concentration of studies. A potential explanation for such a trend is that these populous communities feature proximity to limited access highways, commuter rail, and academic institutions of higher learning. Such features, while beneficial in many respects, also lead to higher pedestrian, bicyclist and vehicle trips, and the need for additional multimodal and infrastructure.
- The town of Hanover had no Major UPWP Studies over the 2003 through 2018 time period. It is noted that Hanover recently became an Old Colony Planning Council member community in 2015, and that as part of the UPWP Task 3200 Local Community Technical Assistance Program (LTA), OCPC recently completed transportation study for the Intersection of Pleasant Street at Cedar Street and Whiting Street in Hanover. OCPC also worked towards adding the federal aid eligible roadways in Hanover into the pavement management system. Additionally, included in the 2017 UPWP was a study that included the Route 53 in Hanover.

Table 1 - Geographic Distribution of Major UPWP Funded Studies

			Number of Major	
			Old Colony UPWP	Percentage
		Median Household	Studies, 2003	of Total
Community	2010 Population	Income, 2010-2014	through 2018	Studies
Abington	15,985	\$81,500	4	6.3%
Avon	4,356	\$78,750	4	6.3%
Bridgewater	26,563	\$88,481	4	6.3%
Brockton	93,810	\$48,569	6	9.4%
Duxbury	15,059	\$120,253	2	3.1%
East Bridgewater	13,794	\$88,534	4	6.3%
Easton	23,112	\$95,372	1	1.6%
Halifax	7,518	\$69,917	3	4.7%
Hanover	13,879	\$98,750	1	1.6%
Hanson	10,209	\$93,771	1	1.6%
Kingston	12,629	\$86,339	4	6.3%
Pembroke	17,837	\$89,954	2	3.1%
Plymouth	56,468	\$76,925	4	6.3%
Plympton	2,820	\$94,505	2	3.1%
Stoughton	26,962	\$74,688	5	7.8%
West Bridgewater	6,916	\$81,573	3	4.7%
Whitman	14,489	\$76,494	3	4.7%
Region wide	362,406	\$84,963	11	17.2%
			64	100.0%

1000 - MANAGEMENT AND SUPPORT OF THE PLANNING PROCESS AND CERTIFICATION ACTIVITIES

In order to properly support and effectively control the transportation planning activities of the Old Colony Metropolitan Planning Organization (MPO), program support activities must be undertaken. These tasks allow for the functioning and the continued certification of the Old Colony MPO in accordance with the Commonwealth of Massachusetts and U.S. DOT requirements.

- 1100 3C Program Support
- 1200 Unified Planning Work Program (UPWP)
- 1300 Public Participation Program (PPP)
- 1400 Transportation Improvement Program (TIP)
- 1500 Title VI and Environmental Justice (EJ)

TASK 1100 - 3C PROGRAM SUPPORT

OBJECTIVE:

To manage, support, and provide the capability to maintain an open, comprehensive, cooperative and continuing (3C) transportation planning and programming process at all levels in conformance with applicable Federal and State requirements and guidelines. Tasks include preparation and presentation of transportation plans and programs (i.e. Regional Transportation Plan (RTP), Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), Public Participation Plan (PPP), and other transportation studies); technical assistance and information related to transportation planning to the public, local, state and federal agencies; timely response to relevant planning studies by local, state, and federal agencies; and administer contracts.

PREVIOUS WORK:

- Maintenance and operation of the Old Colony Metropolitan Planning Organization (MPO) and Old Colony Joint Transportation Committee (JTC).
- Maintenance and federal certification of a viable and ongoing 3C Transportation Planning Process.
- Distribution of information on federal and state rules and regulations.
- Administration of Massachusetts Department of Transportation, Federal Highway Administration, Federal Transit Administration, Brockton Area Transit, Greater Attleboro-Taunton Transit Authority, and Executive Office of Energy and Environmental Affairs contract needs.
- Assistance with statewide transportation planning programs.
- Input and support for economic and community development programs.
- Preparation of 3C certification documents.
- Support for public participation and private involvement in the 3C process, Federal Highway
 Administration, Federal Transit Administration, and air-quality programs.
- Provision of ongoing technical assistance to departments, agencies, authorities, and communities.

PROCEDURES:

- 1. Provide administrative and technical support to the 3C regional planning process such as: Provide community liaison activities and short term planning assistance to OCPC communities on transportation planning matters; Review Federal and State transportation programs, guidelines, circulars and manuals, plans and regulations as may be required or necessary; Provide for and support public and private involvement in the 3C Planning Process; Participate in informational programs on transportation, air quality, hazardous waste, energy conservation, accessibility, casinos/gaming, and other planning.
- 2. Provide and maintain coordination for Old Colony MPO activities including the preparation and presentation of transportation plans and programs (e.g. Unified Planning Work Program, Regional Transportation Plan, Transportation Improvement Program, Amendments, etc., Public Participation Plan), developed through the public participation process. Distribute documents/amendments to the Old Colony MPO for appropriate action and/or endorsement as needed. Develop documents necessary for the certification reviews and the self-certification process. Maintain all Old Colony MPO documentation records, and files.

- 4. Provide for participation of staff in educational development programs and conferences with coordination of BAT, GATRA, FHWA, FTA, MassDOT, MBTA, and other agencies as needed.
- 5. Provide inter-agency coordination with other transportation agencies, including MassDOT, FHWA, FTA, RPAs, MBTA, and RTAs on an ongoing, regular basis. Coordinate highway-planning activities with local officials and MassDOT District 5. Provide certification documents in accordance with the UZA Coordination MOU and participate in review and related update activities.
- 6. Participate in the South Coast Rail Task Force for the New Bedford/ Fall River Commuter Rail Restoration Project.
- 7. Provide financial management of the transportation planning contracts with FHWA/ MassDOT, FTA/ MassDOT, Executive Office of Energy and Environmental Affairs, BAT, GATRA, and MBTA staff supervision and work assignment. Prepare applications, contracts, time sheets, progress reports, invoices, request forms, and perform other contract administration activities necessary to the conduct of the 3C Transportation Planning Process.
- 8. Follow up on recommendations of previous transportation planning studies by attending and participating in public meetings or making presentation of study results.
- 9. Coordinate planning activities within the Boston Urbanized Area (UZA) with MassDOT and the common MPOs, and seek to update the Boston UZA Coordination Memorandum of Understanding (MOU) to ensure that there are effective processes for cross-jurisdictional communication to improve collaboration, policy implementation, technology use, and performance management.
- 10. Review and provide consideration and implementation of MPO certification review recommendations. Implementation of recommendations will be guided by an action plan.

PRODUCT:

Maintenance and federal certification of a viable 3C Transportation Planning Process and Old Colony MPO operation (ongoing); Input and Support Community Development and Environmental Planning (ongoing); Memorandums of Understanding; Information on FAST Act and the Clean Air Act (CAA) as needed; Consideration and implementation of MPO certification review recommendations; Inter-agency meetings, memorandum and correspondence on various aspects of the transportation planning program (ongoing); Updated and endorsed MOUs; attendance and participation in Transportation Managers Group; and administration of contract needs.

SCHEDULE:

Management and support activities to be carried on a continuing basis throughout the program year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,800	\$10,200	\$4,533	\$1,133			\$56,667

TASK 1200 - UNIFIED PLANNING WORK PROGRAM (UPWP)

OBJECTIVE:

To develop, endorse and maintain an annual UPWP that provides a description of the overall transportation related planning activities that are ongoing and anticipated in the region, during the forthcoming year and including funding sources and agency responsibility. Endorsement of this document shall be consistent with the Public Participation Plan.

PREVIOUS WORK:

UPWPs prepared and endorsed annually by the Old Colony MPO; monthly invoices; quarterly progress reports, and year end progress reports.

PROCEDURES:

- 1. Maintain the existing UPWP and prepare related invoicing. Review and adjust and/ or amend the UPWP when necessary and circulate revisions to the Old Colony MPO, Old Colony JTC, OCPC, and other appropriate agencies for review, adjustments, and/or endorsement, as appropriate.
- 2. Follow the Old Colony MPO endorsement process for amendments. Other revisions to the Unified Planning Work Program, such as changes in the existing level of effort or funding of a specific task or the addition/deletion of a task and procedures within the current contract/grant programs, etc., will be made as required throughout the program year upon mutual agreement of the agencies involved. Such revisions/ adjustments will be conducted by the OCPC staff and distributed to the appropriate agencies, as appropriate. These revisions/adjustments do not require formal Old Colony MPO endorsement.
- 3. Develop the FFY 2019 UPWP for the Old Colony region covering the next program year. The UPWP will be developed in conformance with the latest federal and state regulations and guidelines. The UPWP describes transportation, air quality and transportation related planning activities anticipated within the region during the upcoming year. The staff will prepare the UPWP in coordination with the Old Colony JTC and submit it in draft version to BAT, GATRA, FHWA, FTA, OCPC, and MassDOT for review and comments. The Old Colony MPO will endorse the final document by September 2018.

PRODUCT:

Maintain the existing UPWP and prepare invoices; Prepare quarterly and year- end progress reports; Prepare and submit Adjustments and Amendments, as needed; Prepare the FFY 2019 UPWP.

SCHEDULE:

FFY 2019 UPWP to be developed and endorsed by September 2018.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$10,800	\$2,700	\$1,200	\$300			\$15,000

TASK 1300 - PUBLIC PARTICIPATION PROGRAM

OBJECTIVE:

To continue to support and implement the Old Colony MPO's Public Participation Plan (PPP) that was developed and endorsed in 2017. This process is designed to ensure that key public agencies at all levels of government, private and nonprofit organizations and interested citizens will be kept apprised of transportation planning activities and opportunities to participate in the region. The encouragement of participation and provision of meaningful access the metropolitan transportation planning for the public is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. The Public Participation Plan is reviewed and updated as deemed appropriate.

To provide staff support and actively encourage public and private participation in the 3C planning process through the old Colony JTC, Old Colony MPO, and OCPC.

To continue monitoring the effectiveness of its public participation program. The process outlines the public outreach procedures that will be followed by the Old Colony MPO in developing and amending the Region's RTP and TIP.

To conduct outreach activities related to the development of FAST Act performances measures and targets.

PREVIOUS WORK:

Old Colony JTC Newsletters, OCPC Newsletters, News Releases and Articles for the Media, OCPC Annual Reports, Old Colony JTC meetings, 2007, 2012, and 2016 Old Colony RTPs, TIPs and Implementation, Title VI Reports, 2007 Public Participation Plan, and 2017 Public Participation Plan.

PROCEDURES:

- Provide a proactive public involvement process that provides complete information, timely public notice, full public access to decisions, and supports early and continuing involvement of the public in the developing Plans and Transportation Improvement Programs and other documents. Employ social media as a meaningful and effective communication medium.
- 2. Provide staff support and actively encourage public and private participation in the 3C planning process through the Old Colony Joint Transportation Committee including:
 - Host meetings of the Old Colony JTC and Old Colony MPO.
 - Work with the Old Colony JTC, working towards expanding and educating the membership.
 - Modify and expand the Transportation Advisory Network (TAN) as appropriate.
 - Continue to maintain and update comprehensive mailing lists of interested groups, local, state, and federal agencies, Old Colony JTC, minority and low-income groups, and individuals who should be informed of regional plans, programs, and accomplishments in the area of comprehensive transportation and environmental planning and development.
 - Ensure early and continuing involvement of the public in the development of plans and other documents. Old Colony Planning Council shall utilize visualization techniques and will publish or announce the availability of plans and/or document for review and comments.
 - Continue to review and evaluate the effectiveness of the public participation plan; identify innovative public involvement techniques and/or programs that enhance public participation.
 - Continue to implement the public involvement process with particular emphasis on the RTP and the TIP. During the year, OCPC will continue to prepare mailings, newspaper announcements,

public notices, and public service announcements, as outlined in Old Colony MPO's Public Participation Plan.

- Continue to identify under-served and under-represented groups in the Old Colony region, continue to make efforts to reach out, attempt to get them interested, and involved in the transportation planning process. OCPC will continue efforts to broaden public participation especially reaching out to the limited English proficient, minority, and low-income population groups.
- Provide staff support and actively encourage both public and private minority groups/agencies participation in the 3C planning process through the Old Colony JTC.
- 3. Prepare articles and documentation related to transportation planning including: Articles for OCPC Annual Report, newsletters, website, and other media outlets, as appropriate.
- 4. Address Title VI and Environmental Justice as part of the public participation process and ensure that there is equity in the distribution of transportation resources in the Old Colony region. This process is designed to ensure that public and private minority agencies, organizations, and interested residents will be kept apprised of transportation planning milestones in the region. The encouragement of meaningful participation of local minority groups, organizations, and citizens in metropolitan transportation planning is one of the most important goals of the "3C" process (comprehensive, cooperative, and continuing).
- 5. Present transportation plans and programs (e.g. Regional Transportation Plan, Transportation Improvement Program, Public Participation Plan, and Unified Planning Work Program) developed through the public and private participation process to the Old Colony MPO for appropriate action (endorsement as needed).
- 6. Maintain, adjust, and/ or amend the current PPP. OCPC seeks to ensure that the interested parties and the public are involved in developing new outreach procedures and will have many opportunities to voice their opinions on these changes once proposed. Endorsement procedures will be conducted in a manner acceptable to the FHWA and FTA.
- 7. Conduct outreach activities related to the development of FAST Act performances measures.

PRODUCT:

Old Colony MPO meetings; Old Colony JTC meetings; Old Colony MPO documents; Old Colony JTC documents; Website Notices; Legal Notices; Articles in OCPC Annual Report and News Releases; Participation in public meetings; newsletters; outreach activities related to the development of MAP-21 performances measures maintenance of a viable Public Participation Process; 2018 Old Colony Title VI Report; Public Participation Plan amendments, and refinements for the website.

SCHEDULE:

To be carried out throughout the program year. Publication of newsletters may be quarterly.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$42,400	\$10,600	\$4,711	\$1,178			\$58,889

TASK 1400 - TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

OBJECTIVE:

To develop and maintain a multi-year, financially constrained, program of transportation/ air quality improvement projects that is consistent with the Old Colony MPO's RTP, the State Implementation Plan (SIP), the Environmental Protection Agency's Air Quality Conformity Regulations, and FHWA and FTA Planning Regulations. The TIP will include a program of highway and transit projects for FFY 2019-2023. Any project, which is to be implemented, using federal funding, must appear in this document and any project, which is to be implemented in the current fiscal year, must appear in the annual element.

The Old Colony MPO's FFY 2018-2022 TIP will be maintained and any future amendments to the TIP will be conducted in accordance with the PPP. The FFY 2019-2023 TIP will be developed and endorsed.

PREVIOUS WORK:

Transportation Improvement Programs have been developed and endorsed annually. Public Participation Process, Transportation Improvement Program Amendments & Administrative Modifications, Evaluation Criteria Analyses, GHG Tracking and Evaluations, Project Evaluations, Technical Assistance and formulation, implementation and coordination of TIP Subcommittee, and preparation of related products.

PROCEDURES:

- Develop a program of projects: In developing the FFY 2019-2023 TIP, staff will update the list of all transit, highway, or air quality projects that are expected to require federal and state transportation funds for planning and engineering, construction or purchase during FFY 2019-2023. This work will include:
 - All transportation projects or programs that require FHWA or FTA approval that are not using Federal transportation funds.
 - For informational purposes, all projects to be funded with Federal funds other than those from FHWA or FTA
 - For informational purposes, all projects to be funded with Non-Federal Funds.
- 2. Include the following information in this multi-year list of projects: The MassDOT identification number: Project description; Transportation Evaluation Criteria Scores; Estimated total cost expressed in year of expenditure dollars; Amount of federal funds proposed to be obligated during each program year; Proposed source of Federal and Non-Federal funds; Identification of the recipient/sub recipient and state and local agencies responsible for carrying out the project; and project phase. In addition, the total costs of projects seeking Federal funds in each program year shall be in line with reasonably anticipated Federal funds.
- 3. Prepare Draft FFY 2019-2023 TIP for the Old Colony Region: The following tasks and procedures will be performed by the OCPC transportation planning staff in developing the Draft FFY 2019-2023 TIP:
 - Early involvement of local legislators, chief local elected officials, and citizens through the public participation process.
 - Provide technical assistance to municipalities and private interests in developing projects and priorities.
 - Meet with communities, MassDOT District 5, MassDOT, and consultants in developing project information, and utilizing transportation evaluation criteria regularly.
 - Utilize transportation evaluation criteria.

- Solicit and analyze Congestion Mitigation and Air Quality Projects.
- 4. The draft Transportation Improvement Program will also include sections relative to:
 - The relationship to the TIP to the RTP.
 - Funding categories and amounts of federal funding proposed to be obligated during each program year.
 - Previously funded projects, programs, and an explanation of any significant delays in the planned implementation of major projects.
 - A description of the transportation evaluation criteria and process for prioritizing projects.
 - Air quality significance and relationship of the TIP, STIP, and SIP.
 - A financial plan that compares revenue needs to revenue sources for highway and transit programs.
- 5. Public Participation: There will be a reasonable opportunity for public comment on the Draft FFY 2019-2023 TIP in accordance with the Old Colony PPP. OCPC will hold at least one public meeting during the TIP development process and both the proposed and approved TIP will be published or otherwise made readily available for informational purposes via various media outlets, and website.
- 6. TIP Administrative Modifications/ Amendments: Amendments to the TIP will require Old Colony MPO endorsement. Administrative Modifications to the TIP typically require approval of the Old Colony JTC and notification of the Old Colony MPO.
- 8. TIP Project Impact Before and After Evaluation to identify the effectiveness of selected TIP projects. Typically, for intersection improvement projects, intersection operations and safety will be evaluated using turning movement counts, operational performance measures, and crash data.
- 9. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
- 10. TIP Endorsement: The completed document will be reviewed and endorsed by the Old Colony MPO, and once endorsed, will serve as the required air quality conformity documentation necessary for U.S. DOT and EPA conformity determinations.

PRODUCT:

Maintenance of the FFY 2018-2022 TIP, and Administrative Modifications/ Amendments to the FFY 2018-2022 TIP, as needed; and, Preparation of TIP Project Impact Before and After Evaluation.

SCHEDULE:

The FFY 2019-2023 TIP will be developed and endorsed by September 2018. TIP Project Impact Before and After Evaluation to be completed by September 2018.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$33,325	\$8,331	\$3,703	\$925			\$46,284

TASK 1500 - TITLE VI AND ENVIRONMENTAL JUSTICE

OBJECTIVE:

To ensure that there is equity in the distribution of transportation resources in the Old Colony region. Ensuring that the 3C planning process is accessible to the public, including members of the Title VI, Environmental Justice (EJ), and Limited English Proficiency (LEP) communities is a central federal, state, and regional priority. This process is designed to ensure that public and private minority agencies, organizations, and interested citizens will be kept apprised of and involved in the transportation planning milestones in the region. The encouragement of participation and provision of meaningful access to all local citizens in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. The MPO process must engage these populations and reach out to them throughout all transportation planning related activities. As such, data collection and data analysis practices throughout the UPWP will reflect the needs of these populations.

PREVIOUS WORK:

Old Colony LEP Plan, Old Colony PPP, Old Colony JTC Newsletters, OCPC Newsletters, News Releases and Articles for the Media, OCPC Annual Reports, Website, Old Colony JTC meetings, Public Participation process (Old Colony 2016 RTP), Old Colony TIP and Implementation Process, Annual Old Colony Title VI Reports.

PROCEDURES:

- 1. Ensure that there is equity in the distribution of transportation resources and that there is reasonable access to the planning process, OCPC will continually conduct Title VI and Environmental Justice planning for the Old Colony Region. The planning includes the following:
 - Evaluate the effectiveness of public participation plan for engaging transportation-disadvantaged communities in the transportation decision-making process.
 - Regional maps using the 2010 Census illustrating where high concentrations of minority and low-income persons are located.
 - Regional maps using the 2010 Census identifying where highway Transportation Improvement Projects are located in relation to minority population and low-income areas.
 - Regional maps using the 2010 Census illustrating the existing transit routes, fatal crash locations, pavement conditions, safe routes to schools buffers, and future capital transit projects.
 - Examination of mobility issues using the 2010 Census, access to jobs and services, and levels of service for both transit services and automobiles.
 - Analysis and documentation using the 2010 Census of project benefits and impacts.
 - Efforts to address those that are limited English proficient.
 - Analyze the outcomes of processes and plans by assessing the geographic distribution of the benefits and burdens of the regional transportation system to protected populations
- 2. Provide staff support and actively encourage both public and private minority groups/agencies/community based organizations participation in the 3C planning process through the Old Colony Joint Transportation Committee.

PRODUCT:

Preparation of the Title VI and Environmental Justice planning for the Old Colony Region, and 2018 Title VI Report. Maintain an outreach contact list of minority groups and community based organizations, develop maps identifying minority and low-income populations, develop transit route maps, and

develop maps showing existing and future location of Transportation Improvement Program and Transportation Plan projects. Conduct benefits, burden analysis, and include in TIP. Continue to expand outreach process and methods. Obtain and secure on-call interpreters. Utilization of MassDOT Title VI Tool.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$33,600	\$8,400	\$3,733	\$933			\$46,667

2000 - DATA RECONNAISSANCE, ACQUISITION, AND ANALYSIS ACTIVITIES

A major requirement of planning is to know what is actually happening in the real world. Surveillance activities are designed to do just that by gathering data on transportation resources, their use, and demand for their use. This information is used to locate and define problems for further study and analysis, define requirements for plans and designs, develop programming priorities and evaluate the success of projects after implementation.

- 2100 Demographic Surveillance and Road Inventory Update
- 2200 Highway Data Surveillance and System Monitoring
- 2300 System Planning Resource Activities
- 2400 Geographic Information System (GIS)
- 2500 Management Systems (Congestion, Land Use, Pavement & Safety), and Travel Demand Modeling

TASK 2100 - DEMOGRAPHIC SURVEILLANCE AND ROAD INVENTORY UPDATE

OBJECTIVE:

To continue to develop, update, and maintain current demographic information and data to ensure that transportation planning, programming analyses, and forecasting methods are based on the most current information. This includes analyzing social, economic, and land use data, including historic, current, and forecast information, and the development, update and revision of socioeconomic forecasts, and the update the road inventory for use in refinement of the regional transportation model and the RTP.

PREVIOUS WORK:

Population, employment, land use, building permits, build out analyses, Journey to Work data, forecasts, and GIS data analyses. Road Inventory Updates; Regional demographic data book preparations; U.S. Census Participant Statistical Areas Program (PSAP).

PROCEDURES:

- 1. Review and continue to maintain, update, and develop where appropriate existing demographic files based on the 2010 U.S. Census information, and the 2011 Massachusetts Household Transportation Survey.
 - Review, maintain and periodically update physical data and prepare data maps, including land use, zoning, etc.
 - Develop, update, and revise socioeconomic forecasts for use in refinement of the regional model, the Geographic Information System, and the Regional Transportation Plan.
 - Develop traffic analysis zones for the Transportation Model with the most recent census data, as
 it becomes available.
 - Review and analyze the 2010 U.S. Census Data and demographic data.
 - Review and analyze the 2011 Massachusetts Household Transportation Survey.
 - Provide and respond to requests for U.S. Census Data and demographic data.
 - Attend and participate in workshops and courses (US Census, CTPP, etc.) sponsored by Federal Highway Administration, Federal Transit Administration, Massachusetts Department of Transportation, Baystate Roads, and other agencies or groups.
- 2. Socio-Economic forecasting
 - Develop, update, and revise socioeconomic forecasts for use in refinement of the regional travel demand model.
 - Obtain the necessary information to revise the population and employment projections based on the 2010 U.S. Census, and the 2011 Massachusetts Household Transportation Survey.
 - Participate in process to develop socio-economic forecasts for 2020 RTP.
- 3. Continue to collect and update attributes of the Massachusetts Department of Transportation's Road Inventory File that have not been updated:
 - Assist communities with the documentation needed in order to add newly constructed accepted streets or to change an existing street from unaccepted to an accepted roadway.
 - Meet with local officials to discuss the Road Inventory Data Files and the changes identified during the Pavement Management survey process.
 - Continue to maintain the Road Inventory on the Geographic Information System.
 - Investigate the feasibility of using a Global Positioning System to plot and update the Road inventory files with new roads created from new subdivision development. Additionally,

OCPC will also use the Global Positioning System to plot both existing pedestrian and bicycling trails within the region.

PRODUCT:

Updated Socio-Economic Data Files; Updated Physical Data Files; 1990-2010 Journey-to-Work data tables; Journey-to-Work Reports; technical assistance with regard to the 2010 U.S. Census, and the 2011 Massachusetts Household Transportation Survey; Priority Development Areas and Priority Preservation Areas; and, provide technical assistance and maintain and update Road Inventory Files.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$20,000	\$5,000	\$2,222	\$556			\$27,778

TASK 2200 - MULTI-MODAL TRANSPORTATION SYSTEM SURVEILLANCE AND SYSTEM MONITORING

OBJECTIVE:

To develop and maintain a region-wide, multi-modal transportation system monitoring program (includes OCPC Program and MassDOT). To respond to requests for traffic (vehicle, bicycle, pedestrian, and transit) counts from state, city, and town officials within the region. To preserve up-to-date files of traffic - specific data characteristics of the multi-modal transportation system, demand, and its use. To conduct pedestrian, bicyclist counts, and transit counts and measures such as levels of service.

PREVIOUS WORK:

Annual Old Colony Traffic Volume Reports. Maintenance of comprehensive computer file inventory of local, state and other traffic counts. Turning movement counts and Travel Time Studies. Collection and analysis of data previously performed for other Transportation Plans and Studies. Numerous speed and vehicle classification studies requested by member communities. Review of studies and reports prepared by agencies and consultants. Routine MassDOT/ RPA Traffic Count Program (vehicle, bicycle, pedestrian, and transit). In addition, a three-year count program of strategic road/locations within the region has been developed to provide information for implementation of the regional growth factors, model inputs, etc.

PROCEDURES:

- 1. Undertake a transportation system counting program (vehicle, bicycle, pedestrian, and transit) in coordination with municipal and MassDOT officials including:
 - Conduct traffic counts using mechanical recorders and conduct manual turning movement counts at the request of the municipalities within the region, and/or as needed for planning purposes.
 - Conduct directional traffic counts as part of MassDOT's Statewide Traffic Coverage Counts.
 - Conduct turning movement counts, as appropriate.
 - Conduct bicycle and pedestrian counts, as appropriate.
 - Conduct transit counts, as appropriate.
 - Verify and calibrate traffic counters according to MassDOT Procedures.
 - Prepare and report primary data collected to host municipalities and MassDOT.
 - Maintain and continue to expand on an ongoing region wide traffic count database for use in monitoring regional VMT growth rate.
 - Provide maintenance, payments, and replacements of all traffic counters, and traffic counting related equipment, as needed.
 - Purchase equipment and supplies as needed to continue the traffic count program.
 - Maintain interactive traffic count database.
 - Measure levels of service for all modes (vehicle, pedestrian, bicycle, and transit).
 - Prepare and distribute reports summarizing the traffic counting activities in the region (includes distribution to MassDOT), as appropriate.
- 2. Conduct additional transportation system (vehicle, bicycle, pedestrian, and transit) counts throughout the region as needed in order to refine and update the traffic database for the Regional Transportation Model.
- 3. Undertake travel time and vehicle occupancy study in the Old Colony region as needed for the Regional Transportation Model, the RTP, and/or other planning activities.

- 4. Review, monitor and update the following transportation systems data as needed including:
 - Average Daily Traffic and transportation growth trends and seasonal adjustments (vehicle, pedestrians, bicycles, and transit).
 - Commuter rail parking lots and park and ride facilities (inventory) and utilization study.
 - Traffic crash and crash rate documentation.
 - Traffic control devices.
 - 2010 U.S. Census Place of Work and Residence Data.
 - 2011 Massachusetts Household Transportation Survey.
- 5. Develop and maintain staff awareness of Intelligent Transportation System Technology, and promote Intelligent Transportation System solutions in the region and participate in the implementation of Intelligent Transportation System Architectures.

PRODUCT:

Transportation system counting program; Highway Data Displays; speed and classification reports; Turning movement counts; MS2 Upload; Vehicle Occupancy and Travel Time Reports as needed and updated computer files of traffic counts on a community/ roadway basis and a data layer of regional counts with Geographic Information System and Commuter Rail Parking Lots and MassDOT Park and Ride Utilization documentation; and, the replacement, maintenance, and, purchase of traffic counters, equipment, and software. Other products include Annual Traffic Volumes Report, traffic count interactive database, turning movement count interactive database, and traffic volume growth/ decline rates.

SCHEDULE:

To be carried out typically from January to December (weather permitting). Year End Traffic Volume Report to be completed during spring 2018.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$51,200	\$12,800					\$64,000

TASK 2300 - SYSTEM PLANNING AND RESOURCE ACTIVITIES

OBJECTIVE:

To continually improve the region's capability for estimating and evaluating impacts of existing and proposed regional and multi-modal transportation facilities and to provide support for the day to day operation of the OCPC Transportation Department's computer system and to expand the utility of the computers to other areas of transportation planning. Additionally, to provide for staff development, training, and their related participation in educational development programs, seminars, conferences, and courses.

PREVIOUS WORK:

Staff development and participation in courses, seminars, and workshops (on-going project). Use of TransCAD, Geographic Information System, HCS, Pavement Management, McTrans Highway Capacity Software, SYNCHRO, Pictometry, CMAQ Analysis, GHG Analysis, and other transportation analysis software packages. Purchase, installation, and upgrade of computer systems, software, and equipment, as needed. Purchase of relevant reference materials and documents.

PROCEDURES:

- Staff development, attendance and participation in transportation courses, trainings, seminars and workshops sponsored by BAT, GATRA, DEP, EOEEA, EPA, FHWA, FTA, MassDOT, and others. This will assist staff in continued and ongoing development, maintenance, and application, sketch planning, quick response and other forecasting methods. This will also encompass all activities that are directed to the production of new computer procedures that support OCPC analytical, administrative and documentation tasks.
- 2. Computer hardware and software acquisition, maintenance, and updates.
 - Purchase, update/upgrade, and maintenance of all hardware equipment/supplies and software applications that are needed for the Transportation Section's computer facilities.
 - Integrate computer capabilities into all practical aspects of the transportation planning process. This effort entails the acquisition, testing, and refinement of additional hardware and transportation related software from US DOT supported research and other public agencies as well as private companies.
 - Provide necessary support for the effective operation of the OCPC Transportation staff's computer facilities.
 - Monitor technological development in the field of computer hardware and software for potential use in planning activities. Continue ongoing planning, evaluation, and implementation of computer software and hardware.
 - Familiarize the Transportation Staff with the computer facilities and applications through informal and formal training sessions.
 - Continue to maintain and update the library of programs and data files.
 - Develop a database that will archive data from past projects and provide current GIS and tabular data in an online format searchable by the public.
 - Maintain website.

PRODUCT:

Staff development of enhanced technical and multi-modal planning capabilities. Attend courses/workshops etc., maintain, and update website, computer hardware and software, and

knowledge bases, as needed. Purchase of relevant software, reference materials, and documents. Application of new forecasting techniques and transportation analysis techniques.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$34,400	\$8,600	\$3,822	\$956			\$47,778

TASK 2400 - GEOGRAPHIC INFORMATION SYSTEM (GIS)

OBJECTIVE:

To improve, develop, and utilize the digital data and geographic tools of the GIS, GPS, and Pictometry for various tasks within the UPWP. The GIS allows OCPC to store, display, manage, and analyze data for different work tasks. This includes land use projections for the RTP; road inventory files; travel demand modeling; traffic volume; high-crash locations; roadway functional classification; transit route analysis; and pavement management analysis. This task will also include collaboration with communities and regional organizations, and provide general technical assistance on geographic matters.

PREVIOUS WORK:

Roadway Classification; technical assistance program for member communities; regional crash database; regional land use map; regional growth map; regional build out analyses; Parcel Maps; Pictometry Installation and Technical Assistance; Priority Development Areas (PDAs) and Priority Preservation Areas (PPAs); Crash Cluster Maps; Stormwater Maps; Developed Land as of 2009.

PROCEDURES:

- 1. Collect, maintain, and analyze data on an ongoing and continuing basis.
- 2. Train staff and enhance system abilities and develop regional databases and geodatabases.
- 3. Integration of existing databases such as road inventory, hydrology, and bicycle and pedestrian infrastructure into Geographic Information System.
- 4. Utilize GIS and GPS capabilities in maintaining traffic data, mapping pavement condition information, mapping existing and projected land use data for use in various transportation projects such as the revisions to the long range plan and special studies, road inventory; roadway functional classification; crash location analysis; travel demand model; and transit routes; etc.
- 5. Review and prepare Priority Development Areas and Priority Preservation Areas, as appropriate.
- 6. Enter relevant demographic, economic, environmental, stormwater, drainage, and traffic data into the GIS as needed to provide increased abilities for organization, analysis, and retrieval. Establish new database and map overlays on a continual basis as projects develop.
- 7. Continue the expansion of GIS and GPS technology from a mapping tool to an analytical tool through various project needs.
- 8. Develop and/or adapt, as appropriate, computer programs for various transportation-planning applications.
- 9. Develop the interactive capabilities of web-based GIS to serve communities.
- 10. Support Unified Planning Work Program tasks and special reports as appropriate.
- 11. Review, select, and purchase additional software and hardware as needed.
- 12. Provide GIS, Global Positioning System, and technical assistance to regional communities.

PRODUCT:

Base maps; overlay files, and photography that can be utilized for tasks including travel demand modeling, traffic counting program, management systems, road inventory; PDAs and PPAs; crash data processing; transit routing; plan updates; environmentally sensitive areas; data models for advanced geoprocessing; and traffic signal & intersection inventory.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	ОСРС	BAT	MassDOT SCR	TOTAL
\$38,000	\$9,500	\$4,222	\$1,056			\$52,778

TASK 2500 - MANAGEMENT SYSTEMS (CONGESTION, LAND USE, PAVEMENT, AND SAFETY), AND TRAVEL DEMAND MODELING

OBJECTIVE:

Congestion Management Process (CMP)

To continue to implement a congestion management process. Considered an ongoing effort, OCPC will continue to collect and maintain data needed in the estimation of refined performance measures while identifying both existing and future needs of the region's transportation system (vehicle, pedestrian, bicyclist, and transit). Subsequently, ranked regional listing of congested highways, transit facilities, pedestrian and bicycle, and park and ride parking facilities that have been established will continue to be refined. As part of this System, regional congestion will be addressed at locations identified in the 2016 Old Colony RTP.

Pavement Management System (PMS)

To continue to implement a pavement management system on a continual basis in keeping with objective driven, performance based planning. OCPC will continue to collect and analyze road surface data on federal aid eligible roadways, and update the PMS database on an ongoing basis. OCPC will also continue to assist and provide technical assistance to local communities interested in developing a local Pavement Management Program. OCPC will continue to maintain the Old Colony Pavement Management Program, as well as and provide technical assistance to local communities. OCPC will continue research in updating and/ or replacing the existing the pavement management system software.

Land Use Management System (LUMS)

To continue to implement a land use management system, and to monitor the changes in local government land use plans and regulations, land use patterns, development projects, trip generations, on and off site mitigation, and the various associated land use characteristics of the region in order to update the land use and zonal forecasts, and to use as inputs into the congestion management process and mitigation activities.

Safety Management System (SMS)

To continue to implement a safety management system. This consists of a systematic process that has the goal of reducing the number of and severity of traffic crashes on the public roads, reducing transit crashes, reducing pedestrian crashes and injuries, and reducing bicyclist crashes and injuries. Recommended actions include providing information for selecting and implementing effective safety strategies and projects. All opportunities to improve roadway safety are identified, considered, and implemented in all phases of highway planning, design, construction, maintenance, and operation. The safety management system incorporates roadway, human, and vehicle safety elements. Considered an ongoing effort, OCPC will collect and maintain data needed in the estimation of refined performance measures and the completion of road safety audits. Staff will identify both existing and future needs of the region's multi-modal transportation system with regard to safety. Subsequently, this includes development of annual regional listings and monitoring of high hazard intersections and corridors, participation and implementation of the Strategic Highway Safety Plan and the Highway Safety Improvement Program, and evaluation of potential improvements.

Travel Demand Modeling

To continue to develop staff capabilities in using the TransCAD Modeling System and provide assistance in the development of the Statewide Model. To continue refinement, calibration, development,

maintenance, and application of the Old Colony Regional Travel Demand Model used in the development of the Regional Transportation Plan, and to continue refining and calibrating the transportation demand model to meet the forecasting requirements of federal transportation and air quality laws and regulations.

The regional transportation model is an effective and comprehensive way to forecast transportation needs for the next 20 years in the Old Colony region. The transportation model enables OCPC to forecast traffic impacts caused by population and economic growth, identify congestion growth areas on highways, impacts on travel patterns and estimate Vehicle Miles Traveled. The model is a valuable transportation tool in analyzing the transportation network and evaluating alternative solution to transportation problems.

OCPC may hire a consultant to assist with model refinements, and will utilize the model in testing of the transportation alternatives as part of the refinement of the Regional Transportation Plan and traffic studies as appropriate. The model will also be used to assist in identifying future problem areas and in the development of strategies for the ongoing CMP. OCPC will utilize the model in testing of the transit alternatives as part of the refinement of the RTP and transit studies as appropriate. OCPC will continue to work with the MassDOT in developing the statewide travel demand model as needed.

PREVIOUS WORK:

Congestion Management Process

Preparation of the Annual Report. Monitoring and analysis of the parking, transit, and roadway facilities. Link V/C Ratios as part of the regional traffic-counting program. Participation on the Congestion Management Technical Team, development of strategies, and corridor studies. During previous years, the staff defined a focused roadway network for the region. Data collection, consisting of numerous travel time runs was completed on roads identified as having existing congestion. In addition, ridership data were analyzed on Brockton Area Transit's routes. Staff also identified and analyzed the park and ride lots and commuter rail lots in the region. Identification of problematic bottleneck areas to be studied in detail.

Pavement Management System

Maintenance of a PMS on the federal aid eligible roadways miles in the region (approximately 642 miles); Preparation of the Annual Report; OCPC Report On Roadway Condition; Road Inventory Update; Technical assistance to local communities interested in Pavement Management Program; Pavement Management Subcommittee; PCI development for incorporation in transportation evaluation criteria, and formation coordination and implementation of Pavement Management Subcommittee, and related products; review of consultant proposals for updating and/ or replacing the pavement management system software; and, revise the PMS database to reflect changes in road classifications, and cost of materials for developing budgets.

Land Use Management System

Preparation of GIS mapping of top employers, residential densities, employment densities; zonal forecasts for regional transportation plans; journey to work-studies; Preparation of Annual Report; MEPA Analyses, and, origin-destination surveys.

Safety Management System

Participation in development of Highway Safety Improvement Program; Safety analyses as part of Transportation Evaluation Criteria application; Crash Rate processing; OCPC Top 100 High Hazard

Intersections; Preparation of the Annual Report, and studies for communities warranting specific attention to highway safety, East Bridgewater Route 106 at Washington Street RSA, Halifax Route 36 at Oak Street RSA, Halifax Route 106 RSA, Brockton Route 123 at Manley Street and VA Hospital RSA, Route 28 at Route 106 RSA, Brockton Route 123 at Linwood and Lorraine RSA, Main Street Brockton RSA, West Elm Street Brockton RSA, and Route 28 at East/ West Spring Street RSA, Samoset Street Plymouth RSA, Nelson Street and Water Street Plymouth RSA, Route 27 Hanson RSA, Bay Road at Boulder Lane Stoughton/ Sharon RSA, and Cedar Street at Whiting Street and Pleasant Street Hanover RSA.

Travel Demand Modeling

The Regional Transportation Model was used as an analytical tool during the development of the RTP. OCPC utilized a regional traffic simulation model that encompasses every community in the region. During the past year staff has worked on refining the model to address specific deficiency detailed in the RTP. The model was used to identify and verify congested corridors/areas in the region for the CMP, Corridor Studies, and Major Bottleneck Identification Studies.

PROCEDURES:

Congestion Management Process

- Continue to work with the CMP to identify and coordinate various work tasks and to ensure
 consistency with requirements of Transportation Management Areas. Staff will continue to attend
 meetings and training as appropriate since they serve as a forum for the dissemination of data
 produced by the system and allow personnel from other RPAs to meet and share information on
 data collection, data sources, etc.
- 2. Continue to refine the established CMP network by utilizing the region-wide traffic simulation model to identify any additional facilities on which congestion exists or is predicted. Develop and monitor a system of performance measures and thresholds.
- 3. Continue to measure identified congestion on CMP corridors/ roadways/ transit/ pedestrian/ bicycle through a data collection and analysis effort, which includes, but is not limited to the following:
 - Conduct travel time, delay runs in each identified corridor, and collect traffic counts and turning movement count data, as appropriate.
 - Monitor, survey, and analyze usage at commuter parking lots throughout the region. Develop and monitor mobility and accessibility enhancement measures for the commuter parking lots within the region.
 - Extend and recalibrate the regional model for peak periods and travel time delay. Incorporate turning movement counts and phase specific signal timing information into the model.
 - Continue ongoing collection and analysis of fixed-route transit data. Also included in this process
 will be to conduct origin/ destination surveys of current transit ridership, walk to transit, and the
 development and utilization of condition measures and load factors.
 - Continue to identify, evaluate, and select strategies that address congestion, and provide administrative and technical support during the implementation of congestion management strategies.
 - Provide inputs to statewide and regional plans and transportation evaluation criteria for Transportation Improvement Programs.
 - Develop knowledge and skills, regarding the integration of goods movement. Meetings with stakeholders representing the freight community, in order to understand inefficiencies.
- 4. Continue to develop and refine congestion control strategies. Develop both general and corridor specific recommendations for relieving congestion on selected corridors.
- 5. Continue to evaluate performance measures that provide relevant and up-to-date information on the congestion status of transportation facilities.

- 6. Continue to identify transportation connectivity gaps in accessing essential services.
- 7. Continue ongoing assessment of the effectiveness of implemented strategies on alleviating congestion.
- 8. Continue ongoing monitoring and analyses that identify the underlying causes of congestion.
- 9. Provide analyses that consider non-traditional congestion management strategies (Transportation Demand Management, growth management, congestion pricing, traffic operational improvements, public transportation, and Intelligent Transportation System) to reduce transportation system congestion.
- 10. Provide in depth study of regional congestion at priority locations, and to identify potential locations for additional MassDOT Park and Ride Lots.

Land Use Management System

- 1. Continue an extensive land use review and future land use update. This will include a review with each jurisdiction regarding their existing and future land use projects. Work shall include developing an accurate depiction of existing land use, trip generation, and the capability for tracking land use changes.
- 2. Continue to review and comment on proposed and ongoing development projects, that includes, but is not limited to those undergoing the MEPA process.
- 3. Continue to develop and refine land use database and GIS mapping.
- 4. Continue to develop concepts for concurrency management programs and development and infrastructure management tools.
- 5. Investigate the representation of land use in a simulation models such as UrbanSim, and Community Viz.

Pavement Management System

- Continue to use the Road Manager software, and/or other software to maintain and update the Old Colony Pavement Management Program as needed. Pavement management data collection and analyses will be used to inform OCPC, JTC, and MPO of the regional costs associated with regional pavement conditions and needs. This information is to support the inclusion of pavement projects in the TIP and will aid in the development of realistic estimates of costs to the Region, particularly while developing the RTP. OCPC will update the PMS database to reflect the expansion of the federal aid eligible mileage due to the reclassification of roads and inclusion of new member communities.
- 2. Provide technical assistance to member communities interested in the Pavement Management Program.
 - Initiate, coordinate, and develop pavement management programs for local communities.
- 3. Meet with MassDOT, RPAs, and appropriate committees to coordinate regional and statewide efforts and to compare programs and strategies for improvement of data collection, analysis, and assistance to local communities.
 - Stay informed of pavement and roadway improvement projects completed throughout the region.
- 4. Pavement Management Procedures:
 - Conduct windshield surveys to determine severity and extent of pavement distresses.
 - Train and monitor community personnel in conducting the windshield survey.
 - Input data into pavement management program used by OCPC (Road Manager) and other software(s), as appropriate.
 - Use computer capabilities to provide conditions analysis and recommended repairs and costs, and reports to municipalities.

- Provide follow-up technical assistance, as needed.
- Train staff in use of pavement management software so that database and management program may be maintained and continued following completion of OCPC work efforts.
- Develop a system of performance measures and thresholds.

Safety Management System

- 1. Develop and work with the SMS to identify and coordinate various work tasks, and prepare and participate in Road Safety Audits. Staff will continue to attend meetings (such as SHSP and TRCC, etc.), and training as appropriate since they serve as a forum for the dissemination of data produced by the system, and allow personnel from other RPAs to meet and share information on data collection, data sources, etc.
- 2. Review local and state crash data for intersections and corridors. In addition, OCPC will provide crash data processing, upon request, to assist local police departments in the identification of high locations. Calculation of crash rate (crashes per million entering vehicles and crashes per hundred million miles) and comparison to both State and District Averages will be conducted. For corridors, the crashes per lane mile and fatality per lane mile will be used.
- 3. Develop both site specific and generalized recommendations in order to address safety deficiencies. This will include recommendations regarding geometric, speed reductions, traffic calming techniques, vegetation clearing, signage consolidation, pavement markings, pedestrian ramps and crossings, roundabouts and signalizations, as appropriate. To supplement the recommendations development, staff will utilize the Manual on Uniform Traffic Control Devices, the MassDOT Project Development and Design Guide Book, and the Governor's Highway Safety Bureau.
- 4. Incorporate safety criteria in the transportation evaluation process used in the development of the TIP. Project specific recommendations will be discussed with local, regional and state officials as appropriate, in order to address safety issues and concerns.
 - Provide administrative and technical support during the implementation of safety management strategies.
 - Provide safety inputs to statewide and regional plans and TIPs.
- 5. Continue to develop and refine safety strategies. Develop both general and corridor specific recommendations for addressing safety on selected corridors.
- 6. Develop a system of performance measures and thresholds, and document results of implemented safety measures. Such measures may include percent reduction in crash rate, percent reduction in the number of injury crashes, and percent reduction in crashes involving fatalities. Improve methods for compiling and retrieving crash data through utilization of GIS and through the improvement of information sharing with local, state, and federal partners.
- 7. Staff will continue to measure identified safety at high hazard locations through a data collection effort, which includes, but is not limited to the following:
 - Conducting turning movement counts, vehicle volume studies, vehicle speed studies, vehicle classification studies and pedestrian studies.
 - Continue to identify, evaluate, and select strategies that address safety.
 - Update status of performance measures at locations where safety improvement have been implemented.

Travel Demand Modeling

1. During the program year, the products developed from the model, i.e. the existing and future year scenarios used for network analysis of air quality and travel demand will be reviewed, evaluated, and utilized as part of any changes/updates to the RTP and TIP.

- 2. Continue to refine and update the Old Colony travel demand model to include the block group demographic data from US Census 2010; contract with consultant as needed; this information will be used to calibrate the model (this may include utilizing consultants under contract).
- 3. Continue to collect/compile, update traffic count data, and adjust as necessary to refine the accuracy of the model.
- 4. Develop external zones from external stations on the fringe areas of the region to improve the calibration of the existing conditions as appropriate.
- 5. Utilize the refined and calibrated model for analyzing alternatives in the development and refinement of the Regional Transportation Plan and other transportation or corridor studies (this may include utilizing consultants under contract).
- 6. Analyze forecast information to identify deficiencies as required for the RTP and Air Quality Conformity. Evaluate improvement strategies. Incorporate findings in the RTP as appropriate.
- 7. Assist MassDOT in the preparation of statewide modeling efforts as needed. Integrate the 2010 Census block group data and MassDOT Road Inventories Files into TransCAD model for use with the statewide travel demand model.
- 8. Maintain and update (as needed) the network model developed for the Downtown Brockton area to evaluate the one-way system.
- 9. Continue work on developing the transit network model as appropriate.
- 10. Survey of Existing Services: Collect data on existing services provided by the MBTA, BAT, and GATRA. This data collection will include route and service information provided by the respective transit providers as appropriate.
- 11. Survey of Existing Needs: Collect data on need for transit services across region. Data will be collected using a variety of techniques such as ridership surveys origin/destination, license plate surveys, and mode split analysis as appropriate.

PRODUCT:

Congestion Management Process

Annual Management System Reporting will be prepared. Data collection, intersection data survey, roadway refinement, proposal strategies, progress report preparation, and congestion management team support. In-depth study of regional congestion at priority locations. Consistency with CMP requirement of Transportation Management Areas. Transportation Evaluation Criteria inputs. Locations for expansion of existing Park and Ride Lots. Locations for additional Park and Ride Lots. Establishment of Performances Measures and thresholds. Measures to reduce greenhouse gas emissions, VMT, and congestion.

Land Use Management System

Annual Management System Reporting will be prepared. Updated Land use database and related mapping, and zoning and land use recommendations. Ongoing review and comment on proposed and ongoing development projects, that include, but are not limited to those undergoing the MEPA process. Development of concepts for concurrency management programs and development/ infrastructure management tools.

Pavement Management System

Annual Management System Reporting will be prepared. Continue data collection, analysis, and cost estimates for federal aid eligible roadways in the region and use of said data in evaluation of projects to be programmed in the TIP; Database refinement and information for incorporation into GIS; operations and maintenance cost to maintain the federal aid roadway network; technical assistance to local communities; and, Establishment of Performances Measures and Thresholds, and Transportation Evaluation Criteria inputs.

Safety Management System

Annual Management System Reporting will be prepared. Road Safety Audits. Top 100 High Hazard Intersections in Old Colony Region. Identification of data collection, intersection data survey, roadway refinement, proposal strategies, and progress report preparation. Development of specific-safety recommendations for intersections, corridors, and pedestrian crossings. Inclusion of safety analyses as a component of the Transportation Evaluation Criteria in the development of the TIP. Establishment of Performances Measures and Thresholds. Identification of safety specific projects for the Old Colony Region.

Travel Demand Modeling

A completed refined/recalibrated transportation model for the Old Colony region that can be expanded upon as needed, utilized for travel demand estimation, and forecasting. Updated network models for the Old Colony region, and refinement of the Traffic Analysis Zones.

SCHEDULE:

Management Systems and processes, and travel demand modeling to be carried out throughout the year. Annual Reports, Road Safety Audits, and analyses to be completed by end of September 2018.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$57,600	\$14,400	\$6,400	\$1,600			\$80,000

3000 - SHORT AND LONG RANGE TRANSPORTATION PLANNING ACTIVITIES

Element 3000 charts the direction for major transportation development activities in the region. As such, it is concerned with continuously updating projects dealing with the demand for transportation; development of a transportation plan which encompasses a Long Range Element and a Short-Range Element, both incorporating the concept of Transportation Systems Management; a further detailing of the broad findings and recommendations of the Plan in plan refinement; and special purpose plans addressing such items as air quality, energy and the elderly and individuals with disabilities.

- 3100 Regional Traffic Studies, ITS, and Intermodal Planning
- 3200 Local Highway Transportation Technical Assistance
- 3300 Route 106 Corridor Study (West Bridgewater, East Bridgewater, Halifax, Plympton, and Kingston)
- 3400 Old Colony Regional Policy Plan
- 3500 Performance Management

TASK 3100 - REGIONAL TRAFFIC STUDIES, ITS, AND INTERMODAL PLANNING

OBJECTIVE:

To provide planning services for highway, transit projects, and movement of goods in the region designed to address immediate traffic and safety problems, and to conduct Intelligent Transportation Systems (ITS) planning. The RTP identifies deficiencies in the region's transportation network. The deficiencies are shown in the plan including deficient bridges, dangerous intersections, congested highway corridors, and overcrowded transit facilities. Where projects have not been developed to correct these deficiencies, studies and intermodal planning will have to be undertaken to evaluate each problem in detail and to recommend the appropriate solution.

To provide a comprehensive inventory of roadway facilities that interact with the regional hydrologic network, including the condition, type, location, function, surrounding conditions, and environmental attributes of these facilities. Forthcoming EPA Phase II Stormwater Regulations will require communities to locate and map their roadway stormwater infrastructure. To update an assessment of vulnerabilities and risks that climate change, and/ or extreme weather event pose to critical transportation infrastructure.

OCPC will conduct traffic studies and intermodal planning to assist member communities and agencies in developing the appropriate solutions for any identified local transportation deficiencies. OCPC also anticipates undertaking traffic studies at selected intersections and along selected roadway corridors identified in the Old Colony RTP or as part of the CMP, as warranting further study. Continually, OCPC receives requests from communities to conduct traffic studies. For example, in the past, the town of Whitman requested that OCPC conduct a traffic study on Route 18 and for Whitman Town Center, and the town of Stoughton requested a circulation study in Stoughton center.

PREVIOUS WORK:

2011 Major Bottleneck Study (Plymouth Route 3 at Exit 6, East Bridgewater Central Square, and West Bridgewater Route 106); 2012 Major Bottleneck Study (Bridgewater Route 104 and Stoughton Route 138); 2013 Major Bottleneck Study (Stoughton Central Street and Avon Harrison Boulevard); 2014 Southwest Brockton Corridor Study; 2014 Regional Freight and Goods Movement Study; Route 53 Corridor Study; Route 58 Corridor Study; Route 139 Corridor Study; Stoughton Square By-Pass Study; Stoughton Square Origin – Destination Study; Bridgewater Center Circulation Study; Bourne Road Corridor Study; 2013 participation in development Regional Intelligent Transportation System Architecture for the Metro Boston Area and Southeastern Massachusetts Area; 2007 Old Colony ITS Plan; Complete Streets Technical Assistance; Safe Route to School (SRTS) Technical Assistance; South Coast Rail Technical Assistance; Climate Change Transportation Impact Study; Climate Change Roadway Drainage and Runoff Program; Avon and Halifax Stormwater Management System Mapping and Database.

PROCEDURES:

- 1. The following is a list of potential projects, among others, that could be undertaken as part of this task:
 - Before and After Route 44 Study
 - Bicycle and Pedestrian Planning, Levels of Service and Education
 - Brockton Main Street Corridor Study
 - City/town center circulation studies

- Climate change adaptation strategies to enable the region to implement improvements
- Complete Streets Technical Assistance
- Crash and Safety Studies
- Development knowledge and skills, regarding the integration of goods movement
- Follow-up studies to the Congestion, Land Use, Pavement, and Safety Management Systems
- Freight Plan and Related Analyses
- Geographic analyses and attribute analysis of drainage facilities that includes capacity and adequacy structures with regard to extreme weather events and climate change
- Identification and demarcation of roadway drainage and stormwater management systems
- Identify transportation connectivity gaps in accessing essential services
- Intermodal Connector Analysis (Intermodal interfaces examined for identification of necessary improvements
- Inventory of critical infrastructure vulnerable to extreme weather events and climate change
- Meetings with stakeholders representing the freight community, in order to understand ineffeciencies. Intersection Sub-area Studies
- Public health assessments
- Regional Casino/ Gaming Impact Study
- Regional Intersection Study
- Regional ITS Architecture Plan
- Route 123 Corridor Study
- Route 18 Corridor Study
- Safe Routes to School (SRTS) Technical Assistance
- Various corridor-wide traffic studies and Sub-area Traffic Studies
- Efforts will include undertaking transportation studies at locations and developing specific reports as
 products for intermodal connectors as requested by local communities, FHWA, FTA, and/or
 MassDOT. OCPC will work with community officials, MassDOT, and MassDOT District 5, and
 stakeholders to develop a scope of service for the proposed study.
- 3. For each corridor study, staff will prepare a draft report, which outlines the Study's findings and recommendations. This report will be circulated to for review and comment. These comments will be incorporated into a final report. The findings and recommendations contained in the final report will serve as the basis for including projects in the region's TIP and RTP.
- 4. For ITS, activities to include: Promote the implementation of Intelligent Transportation System solutions to regional transportation problems; Work with MassDOT, SRPEDD, BAT, MBTA, and Cape Cod on implementing and refining Intelligent Transportation System Architectures for Southeastern Massachusetts and the Metro Boston Area; Maintain Old Colony Intelligent Transportation System Plan; Compile available information, studies, and reports on Intelligent Transportation System strategies for the Old Colony Region.
- 5. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning. Assist communities in advancing bicycle and pedestrian projects into the MassDOT Highway Division project development process.

6. Promote bicycle and pedestrian initiatives in the region. Coordinate activities within the MassDOT's bicycle and pedestrian planning efforts.

PRODUCT:

Complete Streets Technical Assistance; South Coast Rail Technical Assistance; Studies to identify solutions to traffic congestion and safety deficiencies on roadways within the region; Livability Measures; Performance Measures; Walk to Transit Analysis; Regional ITS Architecture Plan; Safe Routes to School Technical Assistance; Bicycle and Pedestrian Planning, Levels of Service and Education; Participation in refinements to Regional Intelligent Transportation System Architecture for Regional Intelligent Transportation System Architectures. Included in these reports/ documents will be data, analysis and improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate; Climate Change Roadway Drainage and Runoff Report with recommendations for consideration for future implementation; Inventory of critical infrastructure vulnerable to extreme weather events and climate change; Stormwater management system mapping; Climate Change Adaptation.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$51,200	\$12,800	\$5,689	\$1,422			\$71,111

TASK 3200 - LOCAL HIGHWAY TRANSPORTATION PLANNING TECHNICAL ASSISTANCE

OBJECTIVE:

To provide a rapid and effective response mechanism to address special, short-term transportation issues and/or projects as they arise. This will include the development, upon request from local communities, regional authorities, state agencies, and federal agencies, of detail technical data and analyses and reports that will assist local communities and MassDOT in improving the region's transportation infrastructure.

PREVIOUS WORK:

Numerous Vehicle and Speed Classification Studies requested by OCPC communities; Route 123/Linwood/ Lorraine/ VA Hospital/ and Manley Streets Intersection analysis in Brockton; Washington Street (Route 138) and Elm Street Intersection Study in Easton; Route 138 and Route 106 Intersection Study in Easton; Foundry Street (Route 106) and Prospect Street Intersection Traffic Study in Easton; Heavy Vehicle Exclusion Study in Pembroke; Elm Street and Furnace Street in Halifax; Long Pond Road Speed Study in Plymouth; Kingston Pembroke Street School Zone Analyses; Plymouth Chiltonville Traffic Calming Study; Esta and Kristin Road in Plymouth; West Bridgewater Route 106 at Howard Street Traffic Study; Brockton Main Street RSA; Kingston Cranberry Road Traffic Study; Kingston Smith's Lane Traffic Study; Kingston Landing Road RSA; Pembroke Mattakeesett Traffic Study; Pembroke and Duxbury Heavy Vehicle Pattern Study; Halifax Route 36 at Oak Street Safety Study; West Bridgewater South Street Safety Study; Plymouth Complete Streets Policy; Plymouth Safe Routes to School Study; Stoughton Hansen School Circulation Study; East Bridgewater Summer Street at Belmont Street RSA; Pembroke Route 53 at Route 139 Traffic Study; Samoset Street Plymouth RSA, Nelson Street and Water Street Plymouth RSA, Route 27 Hanson RSA, Bay Road at Boulder Lane Stoughton/ Sharon RSA, Summer Street Easton Study, Pembroke Plain Street and Lake Street Study, Plymouth Standish at Alden Street Study, Plymouth Standish at Cherry Street Study, Abington Hancock Street at Chestnut Street RSA, and, numerous other intersections warrant analysis, sight distance and crash analysis, traffic impact studies of land use, speed and vehicle classification studies.

PROCEDURES:

- 1. Provide technical planning assistance to communities on highway, pedestrian, and bicycle transportation planning related matters in the form of meetings, data, analyses, and reports to communities, Massachusetts Department of Transportation, and other local, state and federal agencies as the need arises. The OCPC staff shall perform work on specific short-range highway planning tasks including but not limited to: Intersection and capacity analysis; Road Safety Audits; SYNCHRO analysis; walk to transit analysis; crash analysis; air quality analysis, both commuter and municipal parking analysis; carpool/vanpool analysis; trip generation estimation analysis, sight distance analysis, traffic impact analysis of proposed developments, traffic analysis studies, GIS, GPS, and Pictometry applications; and other short-range studies to determine the need for traffic signals, traffic signs, traffic markings and the use of one-way streets.
- 2. Maintain an up-to-date file of the Crash Data for communities. Continue the collecting and reporting of crash statistics for communities.

PRODUCT:

Local Technical Assistance Reports/ documents will be prepared. Included in these reports/ documents will be data, analyses and improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as

appropriate. Technical assistance to member communities and crash reporting for participating communities will be provided.

SCHEDULE:

To be carried out throughout the program year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$56,000	\$14,000					\$70,000

TASK 3300 - ROUTE 106 CORRIDOR STUDY (WEST BRIDGEWATER, EAST BRIDGEWATER, HALIFAX, PLYMPTON AND KINGSTON)

OBJECTIVE:

To identify, quantify, study in depth, the Route 106 Corridor (approximately 16 miles) in West Bridgewater, East Bridgewater, Halifax, Plympton, and Kingston along Route 106, from the intersection of Route 28 and Route 106 in West Bridgewater in the east to the intersection of Route 3A and Route 106 in Kingston in the west, and develop short term and long-term actions to be undertaken that will enhance circulation and traffic flow efficiency, improve safety, improve bicycle and pedestrian accommodation, and reduce gaps to essential services. Addressing and alleviating this congestion in this area system would enhance the movement of people and goods. Staff will review volume to capacity ratios, level of services, crash analyses, and public input as part of the identification process. In addition, staff will utilize the congestion management process and safety management system to assist the identification and the development of the short and long-term recommendations.

PREVIOUS WORK:

Congestion Management Process; Regional Traffic Count Program; Level of Service Analyses; Regional Corridor Studies; Access Management Plan; Regional Transportation Plans; 2011 Major Bottleneck Identification Study; 2011 Major Bottleneck In Depth Analysis Study; and, 2012 Major Bottleneck In Depth Analysis Study; 2013 Major Bottleneck In Depth Analysis Study; Route 3A Corridor Study; Route 28 Corridor Study; Route 58 Corridor Study.

PROCEDURES:

- 1. Documentation of Existing Conditions: Develop documentation of existing conditions though in depth analysis for study area. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning. The process shall utilize the CMP, SMS, LUMS, the 2016 RTP, Regional Travel Demand Models, Travel Time Studies, and Corridor Studies. All relevant and attainable data will be collected and reported during this phase of the project. Data, such as, average daily traffic, peak period volumes, and levels of service, crashes rates, trip generators, land uses, on locations will be catalogues, summarized and ranked. The data compiled for the existing conditions will be tested to document the deficiencies along the facilities, and to identify their causes and their impact on traffic flow, and accessibility. This section will validate or disprove current perceived problems within the study area.
- 2. Short Term and Long Term Improvements Development: Various alternatives for mitigation or alleviation will be developed specific to problems identified in the critical areas. Conduct review of and provide consideration for potential bicycle and pedestrian improvements to ready the project recommendations for compliance with the Healthy Transportation Policy Directive. Alternatives will include recommendations that are cost effective as well as recommendations that will produce the closest to ideal conditions. Consideration will be given to operations and maintenance techniques, the incidental and routine causes of congestion, and access management. The promotion of efficient system management and operations is one of the FAST Act planning factors seeking to integrate this concept in the existing planning process.
- 3. Prepare Conclusions and Recommendations: The product of this Task is a Plan that provides a framework for the alleviation traffic congestion and improve safety throughout the corridor, and to provide the necessary information for the stakeholders to move projects forward in the initiation phases. OCPC will prepare a final plan, which will include an implementation program that will

outline how and when recommendations of the plan will be implemented and identify potential funding sources. A short-range plan will be recommended for immediate implementation, and a long-range plan will serve as the basis for including projects in the region's TIPs, and RTPs, and beyond.

4. Public Participation: conduct public meetings, workshops, surveys, and coordinate with the Old Colony Joint Transportation Committee, Old Colony Planning Council, and Old Colony Metropolitan Planning Organization. Obtain stakeholder input from citizens, community based organizations, business community, special interest groups, and local officials, etc. on the transportation issues facing the region. Expansive and inclusive public outreach will be in accordance with Old Colony's Public Participation Plan.

PRODUCT:

Preparation of the West Bridgewater, East Bridgewater, Halifax, Plympton, and Kingston Route 106 Corridor Study, which will include conclusions and recommendations. Included in study will be data, analysis, traffic flow and safety improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate.

SCHEDULE:

To be carried out throughout the year and completed by the end of September 2018.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$64,800	\$16,200	\$7,200	\$1,800			\$90,000

TASK 3400 - OLD COLONY REGIONAL POLICY PLAN

OBJECTIVE:

To prepare a regional policy plan for the region that considers local master plans and growth strategies, 2000 Regional Policy Plan, 2011 Strategic Planning Framework Plan, 2016 Old Colony RTP, GreenDOT, South Coast Rail Corridor Plan, and Vision 2020, etc. This involves case study review, additional land use and demographic analyses, MEPA project reviews, and technical assistance to the member communities in accordance with the various regional plans, identifying the growth impacts of planned transportation improvements and the consequent transportation impacts of maximum build-out in the region. In addition, specific strategies for the realization of the recommendations of these multiple planning efforts will be provided. Strategies and programs will address the Commonwealth's Smart Growth and Sustainable Development Principles such as promoting mode shift and development through the integration of energy, environmental, housing, and transportation agencies' policies, programs, and regulations. Thus, a number of strategies can be employed that will help maximize the benefits of an effective transportation system at a variety of levels. For example, coordinated land use and transportation planning can help promote compact development patterns and village centers that support public transportation systems. In addition to land use planning that promotes public transit and other steps for effective transit planning, traffic congestion can be alleviated through strategies including highway construction, travel demand techniques, use of new techniques, and coordinated intergovernmental planning.

PREVIOUS WORK:

Updated Land Use Maps; updated Open Space Plan; developed draft Goals and Objectives; Organized and established the Technical Group and Regional Citizen's Advisory Committee; identified local and region issues; developed and updated the regional database; summarized the existing zoning; Management Systems; 2000 OCPC Regional Policy Plan; Old Colony RTPs; Build Out Analyses; Regional Bicycle and Pedestrian Connectivity and Safety Study; South Weymouth Naval Air Station Peer Review Process; Vision 2020; 2000 Comprehensive Transportation/ Land Use Policy Plan; and 2000 Growth Impacts Study - Kingston, Plymouth, and Plympton, Executive Office of Environmental Affairs 418, and Executive Office of Environmental Affairs Build-outs, 2005 Journey-to-Work Report.

PROCEDURES:

To conduct case study reviews, prepare studies and provide technical assistance for the member communities in accordance with the 2016 Old Colony RTP, the Regional Policy Plan, South Coast Rail Corridor Plan, GreenDOT, and Vision 2020 in order to realize the implementation of their respective recommendations and address the Commonwealth Sustainable Development and Smart Growth Principles. Make policy recommendations for design, zoning, open space planning, transportation planning, transit oriented development, smart growth, mode shift, bicycle and pedestrian, and land use guidance controls in communities and develop implementation strategies.

PRODUCT:

Regional Policy Plan for the region that includes principles from the 2000 Regional Policy Plan, 2016 Old Colony RTP, GreenDOT, South Coast Rail Corridor Plan, Smart Growth, and Vision 2020.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$38,400	\$9,600	\$4,267	\$1,067			\$53,333

TASK 3500 - PERFORMANCE MANAGEMENT

The cornerstone of the Federal transportation program transformation is the transition to a performance based outcome program. States and regions will invest in projects to achieve individual targets that collectively will make progress towards national goals. Therefore, the objective is to develop performance measures and targets for the Old Colony Region for utilization in the planning process and inclusion in the Regional Transportation Plan.

Performance management increases the accountability and transparency of the Federal-aid highway program and provides for a framework to support improved investment decision making through a focus on performance outcomes for key national transportation goals. A significant part of the reforms made by MAP-21 included transitioning to a performance-based program, including establishing national performance goals for Federal-aid highway programs. The FAST Act supports and continues this overall performance management approach, within which States invest resources in projects that collectively will make progress toward national goals.

The national performance goals for the Federal highway program include:

- Safety To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Infrastructure condition (pavement and bridge) To maintain a highway infrastructure asset system in a state of good repair
- Congestion reduction- To achieve a significant reduction in congestion on the NHS
- System reliability To improve the efficiency of the surface transportation system
- Freight movement and economic vitality To improve the nation freight network, strengthen
 the ability of rural communities to access national and international trade markets, and support
 regional economic development
- Environmental sustainability To enhance the performance of the transportation system while protecting and enhancing the natural environment
- 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
- Resiliency and Reliability of the Transportation System improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- Travel and Tourism Enhance travel and tourism

In March 2016, FHWA published rules on safety performance measures and integration of performance management into the Highway Safety Improvement Program (HSIP). In May 2016, FHWA and the FTA published a rule implementing changes to the planning process. And in October 2016, FHWA published a rule on asset management plans.

In January 2017, FHWA published the final rules for the last two national performance management measure regulations. One rule establishes regulations to assess the condition and performance of bridges on the NHS and of pavements on the Interstate and non-Interstate NHS. The other establishes regulations to assess the performance of the NHS, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

Performance based planning will include working with BAT, FHWA, FTA, and MassDOT, and to establish thresholds for performance measures or goals that meet state and national criteria. The objective of performance measures are to insure that investments in future transportation improvements effectively address transportation issues, are cost effective, and are implemented in a timely manner. The ultimate goal will be to develop projects that relieve congestion, improve safety, provide efficient alternative travel choices, preserve and maintain the existing system, promote economic development and protect the environment. This effort will coordinate information and studies developed in other planning tasks such as, but not limited to Congestion Management, Safety Management, Pavement Management, and ITS/Freight/Intermodal Planning. The effort will also include MEPA reviews; gaming reviews and technical assistance; coordination of transportation planning activities with other local and state agencies, and other MPOs.

Pavement and Bridge Condition Performance Measures Final Rule

The Pavement and Bridge Condition Performance Measures Final Rule establishes measures for State DOTs to use to carry out the National Highway Performance Program (NHPP) and to assess the condition of the following: Pavements on the NHS (excluding the Interstate System), bridges carrying the NHS which includes on- and off- ramps connected to the NHS, and pavements on the Interstate System. This final rule is effective February 17, 2017. This final rule:

- Requires State DOTs to maintain their bridges and pavements at or above a minimum condition level;
- Provides for greater consistency in the reporting of condition and performance;
- Requires the establishment of targets that can be aggregated at the national level;
- Improves transparency by requiring consistent reporting on progress through a public reporting system;
- Requires State DOTs to make significant progress toward meeting their targets; and
- Establishes requirements for State DOTs that have not met or made significant progress toward meeting their targets.

State DOTs and MPOs will be expected to use the information and data generated as a result of the new regulations to inform their transportation planning and programming decisions.

System Performance/ Freight/ CMAQ Performance Measures Final Rule

The System Performance/ Freight/ CMAQ Performance Measures Final Rule establishes a set of performance measures for State DOTs and MPOs to use as required by the MAP-21 and the FAST Act. The measures in this final rule will be used by State DOTs and MPOs to assess the performance of the Interstate and non-Interstate NHS for the purpose of carrying out the National Highway Performance Program (NHPP); to assess freight movement on the Interstate System; and to assess traffic congestion and on-road mobile source emissions for the purpose of carrying out the CMAQ Program. This final rule is effective February 17, 2017. This final rule:

- Provides for greater consistency in the reporting of condition and performance;
- Established specific national performance measures to be used to assess performance of the NHS, freight movement on the Interstate and CMAQ traffic congestion and on-road mobile source emissions;
- Required the establishment of targets that can be aggregated at the national level;

- Improved transparency by requiring consistent reporting on progress through a public reporting system;
- Required State DOTs to make significant progress toward meeting their targets; and
- Establishes requirements for State DOTs that have not met or made significant progress toward achieving their NHPP and NHFP targets.

State DOTs and MPOs will be expected to use the information and data generated as a result of the new regulations to inform their transportation planning and programming decisions.

HSIP and Safety Performance Management Measures Final Rule

The HSIP and Safety Performance Management Measures Final Rules adds Part 490 to title 23 of the Code of Federal Regulations to implement the performance management requirements under 23 U.S.C. 150, including the specific safety performance measure requirements for the purpose of carrying out the HSIP to assess serious injuries and fatalities on all public roads. The Safety PM Final Rule establishes the process for State DOTs and MPOs to establish and report their safety targets, and the process that FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets. The Safety PM Final Rule also establishes a common national definition for serious injuries. This final rule is effective April 14, 2016.

Planning Final Rule

The transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of Federal transportation funds. As part of this new performance-based approach, recipients of Federal-aid highway program funds and Federal transit funds are required to link the investment priorities contained in the STIP and TIP to achievement of performance targets. In a series of rulemakings, FHWA and FTA established national performance measures in key areas, including safety, infrastructure condition, congestion, system reliability, emissions, and freight movement.

States, MPOs, and operators of public transportation must use these measures to establish targets in the key national performance areas to document expectations for future performance. The final rule further establishes that States and MPOs must coordinate their respective targets with each other to ensure consistency to the maximum extent practicable. The final rule requires that for transit-related targets, States and MPOs must coordinate their selection of targets relating to transit safety and transit state of good repair to the maximum extent practicable with operators of public transportation to ensure consistency with other performance-based provisions applicable to operators of public transportation.

MPOs must identify how they will cooperatively implement these performance-based planning provisions with States and operators of public transportation. The final rule provides the option documenting it either as part of the metropolitan planning agreements, or documenting it in some other means outside of the metropolitan planning agreements as determined cooperatively by the MPO(s), State(s), and providers of public transportation. Whichever option is selected, the MPO(s), the State(s), and the providers of public transportation must jointly agree upon and document in writing the coordinated processes for the collection of performance data, the selection of performance targets for the metropolitan area, the reporting of metropolitan area targets, and the reporting of actual system

performance related to those targets. The documentation must also describe the roles and responsibilities for the collection of data for the NHS. Including this description is critical because of the new requirements for a State asset management plan for the NHS and establishment of performance measures and targets.

In the final rule, once performance targets are selected by MPOs, MPOs must reflect those targets in their MTPs. Accordingly, in their transportation plans, MPOs need to describe these performance targets, evaluate the condition and performance of the transportation system, and report on progress toward the achievement of their performance targets. States must include similar information in their transportation plans. The effective date is June 27, 2016.

Asset Management Plan Final Rule

Asset management is defined as "a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based on quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the life cycle of the assets at minimum practicable cost." The effective date is October 2, 2017.

Transit Asset Management (TAM) Final Rule

The FTA published a final rule to define the term state of good repair and to establish minimum Federal requirements for transit asset management that will apply to all recipients and subrecipients of chapter 53 funds that own, operate, or manage public transportation capital assets. This final rule requires public transportation providers to develop and implement out transit asset management (TAM) plans. TAM plans must include an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the state of good repair of their capital assets. This final rule also establishes state good repair standards and four state of good repair (SGR) performance measures. Transit providers are required to set performance targets for their capital assets based on the SGR measures and report their targets, as well as information related to the condition of their capital assets, to the National Transit Database. Effective date is October 1, 2016.

Public Transportation Safety Program Final Rule

The Public Transportation Safety Program Final Rule final rule to establish substantive and procedural rules for FTA's administration of a comprehensive safety program to improve the safety of the Nation's public transportation systems. This final rule provides the framework for FTA to monitor, oversee, and enforce transit safety, based on the methods and principles of Safety Management Systems. The effective date is September 12, 2016.

HIGHWAY PERFORMANCE

Through the federal rulemaking process, FHWA has required states and MPOs to monitor the transportation system using specific performance measures to address the national goals and performance areas identified in MAP-21. The table below lists specific measures in various performance areas for roadways and highways.

Federally Required Highway Performance Measures (as of January 18, 2017)

rederany Requir	Tea migniway renormance wi	easures (as of January 18, 2017)
NATIONAL GOAL	HIGHWAY PERFORMANCE AREA	PERFOMANCE MEASURE
Safety	Injuries & Fatalities	 Number of fatalities Fatality rate (per 100 million vehicle miles traveled) Number of serious injuries Serious injury rate (per 100 million vehicle miles traveled) Number of non-motorized fatalities and non-motorized serious injuries
Infrastructure Condition	Pavement Condition	 Percentage of pavements on the Interstate System in Good condition Percentage of pavements on the Interstate System in Poor condition Percentage of pavements on the non- Interstate NHS in Good condition Percentage of pavements on the non- Interstate NHS in Poor condition
Infrastructure Condition	Bridge Condition	 Percentage of NHS bridges classified as in Good condition Percentage of NHS bridges classified as in Poor condition
System Reliability	Performance of the National Highway System	 Percent of person miles traveled on the Interstate System that are reliable Percent of person miles traveled on the non- Interstate NHS that are reliable Percent change in tailpipe carbon dioxide emission levels on the NHS compared to the calendar year 2017 levels
Freight Movement and Economic Vitality	Freight Movement on the Interstate System	Truck Travel Time Reliability Index
Congestion Reduction	Traffic congestion	 Annual hours of peak-hour excessive delay per capita Percent of non-single-occupant vehicle travel

Environmental On-Road Mobile Sustainability Source Emissions	Total emissions reduction
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TRANSIT PERFORMANCE

Recipients of public transit funds, which can include states, local authorities, and public transportation operators, are required to establish performance targets for safety and state of good repair; to develop transit asset management and transit safety plans; and to report on their progress toward achieving targets. Public transportation operators are directed to share information with MPOs and states so that all plans and performance reports are coordinated. The table below identifies performance measures outlined in the National Public Safety Transportation Plan, released by FTA, and in the final rule for transit asset management.

Federally Required Transit Performance Measures (as of January 18, 2017)

NATIONAL GOAL	TRANSIT PERFORMANCE AREA OR ASSET CATEGORY	PERFORMANCE MEASURE
Safety	Fatalities	Total number of reportable* fatalities and rate per total vehicle revenue miles by mode
Safety	Injuries	Total number of reportable* injuries and rate per total vehicle revenue miles by mode
Safety	Safety Events	Total number of reportable* events and rate per total vehicle revenue miles by mode
Safety	System Reliability	Mean distance between major mechanical failures by mode
Infrastructure Condition (State of Good Repair: Transit Asset Management)	Equipment	Percentage of vehicles that have met or exceeded their Useful Life Benchmark (ULB)
Infrastructure Condition (State of Good Repair: Transit Asset Management)	Rolling Stock	Percentage of revenue vehicles within a particular asset class that have met or exceeded their ULB
Infrastructure Condition (State of Good Repair: Transit Asset Management)	Infrastructure	Percentage of track segments with performance restrictions

Infrastructure Condition (State of Good Repair: Transit Asset Management)	Facilities	Percentage of facilities within an asset class rated below 3.0 on the FTA Transit Economic Requirements Model scale
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^{*}Reportable as defined in the National Transit Database Safety and Security Reporting Manual.

PREVIOUS WORK:

Regional Transportation Plan, Regional Policy Plan, Congestion Management Process, Land Use Management System, Safety Management System, Pavement Management Systems, Road Safety Audits, and, Reviews, comments, and site visits relating to Environmental Notification Forms and Environmental Impact Reports/Environmental Impact Statements.

PROCEDURES:

- 1. Establish and refine performance measures and thresholds for pavement conditions and performance of the federal aid network, bridge conditions, injuries, and fatalities, traffic congestion. The federal rulemaking process will establish performance measures for each of these items. As such, this does not preclude the region from establishing additional measures for use locally, and the Old Colony MPO will continue to review the supplement the performances measures developed and included in the 2016 Regional Transportation Plan. Using information collected annually through other tasks outlined in this document, implement, and maintain a comprehensive strategy to evaluate the effectiveness of transportation improvements throughout the region.
- 2. Determine and set performance measures and thresholds in support of the performance measures framework and describe how program and project selection will help achieve the targets. With acceptable thresholds or targets for performance measures, staff will continue to maintain relevant data for safety, pavement, and congestion management and provide comparison analyses before and after the implementation of projects.
- 3. Review and comment on traffic studies submitted to member municipalities by developers under the Massachusetts Environmental Protection Agency (MEPA) process or as needed/requested for local permits. Review projects for consistency with the regional transportation goals and objectives, program consistency, etc.
- 4. Utilize INVEST TOOL Projects will also be potentially evaluated on their sustainability through the FHWA web-based tool known as Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). Although voluntary, this information will be useful to determine the long-term effectiveness of improvement projects.
- 5. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Development and refinement of Performance Measures and thresholds for the Old Colony Region. Review and comment on traffic studies submitted to member municipalities by developers under the Massachusetts Environmental Protection Agency (MEPA). Public Health Assessments.

SCHEDULE:

To be carried out throughout the year and completed by the end of September 2018.

FHWA PL	MassDOT	FTA 5303	ОСРС	BAT	MassDOT SCR	TOTAL
\$34,400	\$8,600	\$3,822	\$956			\$47,778

4000 - OTHER TRANSPORTATION TECHNICAL ACTIVITIES, PLANNING STAFF, FUNDING SOURCES, BUDGETS, AND TASKS

In the course of conducting transportation and transportation related planning activities, it is often the case that certain activities are called for which do not fit into the existing work program elements. When this is the case, those activities are programmed under the element heading of Other Transportation Technical Activities, Planning Staff, Funding Sources, Budgets, and Tasks.

4100 - Transit Technical Assistance, and Elderly and Individuals with Disabilities Support 4200 - BAT Planning and Technical Studies

TASK 4100 - TRANSIT TECHNICAL ASSISTANCE, AND ELDERLY AND INDIVIDUALS WITH DISABILITIES SUPPORT AND ASSISTANCE

OBJECTIVE:

To respond to short-range transit planning needs upon request from communities, BAT, GATRA, MassDOT, and MBTA. To maintain an understanding of the region's transit system in order to provide an accurate basis for future forecasting, planning and program analysis, and project evaluation. To maintain and update the Old Colony Human Service Coordination Plan, and to conduct Community Transit Grant solicitations, reviews, rankings, and related coordination. To maintain and operate a Congestion Management Process.

To ensure the accessibility to public transit services for the elderly and individuals with disabilities. To attend meetings of the elderly and disability committees. To provide technical assistance to BAT, GATRA, region's municipalities, human service agencies, Councils on Aging, private non-profit agencies, and other parties involved in meeting special transportation needs. To maintain and update the Old Colony Human Service Coordination Plan, and to conduct annual Community Transit Grant solicitations, reviews, rankings, and related coordination.

PREVIOUS WORK:

<u>BAT</u> – Aging in Place Studies; Comprehensive Regional Transit Plan; Fare Elasticity Study; Fixed Route Ridership Analyses; Title VI Studies; Air quality analysis for CMAQ and Transportation Demand Management proposals; Rockland Transit Feasibility Study; System Time Study; Route 2A Analysis; Abington Transportation Study; Paratransit Expansion; Regional Coordinating Committee participation; and Human Services Coordination Plan.

GATRA - Ridership analysis; Human Services Coordination Plan.

Other - Assisted Communities, COAs and other public and private agencies with the Section 5310, 5317, and MAP; Transit Directories; RTA Fare Comparison; Queset Commons Transit Study, Rockland Transit Study; Community Transit Grant solicitations, reviews, rankings, and related coordination.

Elderly and Individuals with Disabilities Neighborhood Sourcebook; Technical assistance to public and private non-profit organizations in preparing Federal Transit Administration applications for Section 5310, Section 5317, and Mobility Assistance; Regional map of the OCPC area showing the locations with high density of elderly population (60+); Compilation of 2000 and US Census data of elderly population; BAT Route Ridership Analysis; BAT Title VI Study; Brockton Area Transit Fare Elasticity Study; Air quality analysis for CMAQ proposals; Abington Transportation Study; Human Services Coordination Plan.

PROCEDURES:

- Provide technical planning assistance to transit providers and member communities on transit
 matters. This assistance may take the form of assistance in meeting federal reporting requirements;
 in assessing and evaluating routes; Title VI update; schedule and fare changes; assessing manpower
 and equipment needs; access-to-jobs; 2010 census update; needs assessment study; provide and
 improve BAT's analytical and forecasting capabilities; assist BAT with the Americans with Disabilities
 Act Plan update, Title VI Trend Analysis, Service Area Demographic Trend Profile, etc.
- 2. Provide technical planning assistance to area communities outside the transit authority district, on transit matters. This assistance can take the form of helping the communities in assessing potential

membership in a transit authority; assisting the communities in providing for private carrier service; identifying and assessing park-and-ride lots; assessing commuter rail lots; encouraging private enterprise participation; encouraging minority business participation; 2010 census and journey-towork update, etc.

- 3. Prepare information as needed for FTA reports, State Implementation Plan submissions, MassDOT reports, and other routine reporting.
- 4. Provide transit input into regional transit and transportation modeling efforts, and Conduct air-quality analysis as needed for transit projects.
- 5. Review, update, and expand transit section of the regional transportation plan as needed.
- 6. Continue to provide assistance and guidance to applicants for Community Transit Grant Program in preparing applications and coordinating service.
- 7. Provide technical assistance to public and private non-profit agencies in the development, maintenance, and expansion of the elderly and/or individuals with disabilities services in the region.
- 8. Continue to provide support for the replacement of Section 5310 and Mobility Assistance Program vehicles, which have outlived their usual life.
- 9. Continue efforts to coordinate existing transportation services for the elderly and individuals with disabilities, as provided by numerous public and private non- profit agencies in Old Colony Region.
- 10. Develop updates for the Old Colony Human Service Coordination Plan in coordination with communities, transit providers, and regional coordination committees, as appropriate. Plan shall be reflective of the FAST Act.
- 11. Operate and maintain a Congestion Management Process (CMP).
- 12. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Provide technical assistance to BAT, GATRA, MBTA, SSCAC, and to area communities as needed; Information for compliance with federal and state requirements for the TIP; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study; Updated Old Colony Human Service Coordination Plan, as appropriate; Community Transit Grant Program Education, Reviews and related Rankings; and, Regional Travel Demand Model, and RTP updates, as appropriate.

SCHEDULE:

To be carried out throughout the year.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
		\$47,802	\$11,951			\$59,753

TASK 4200 - BAT PLANNING, TECHNICAL ASSISTANCE, AND STUDIES

OBJECTIVE:

To provide transit-planning services, prepare technical studies, comprehensive service assessments, and provide assistance in other planning related activities that are called for during the year which presently are not specifically identified in work program.

PREVIOUS WORK:

BAT Aging in Place Studies; BAT Comprehensive Regional Transit Plan; BAT fixed-route ridership analyses; Brockton Area Transit Farebox Analyses; Title VI Reports; BAT Fare Elasticity Study; Air quality analysis for CMAQ and Transportation Demand Management proposals; Route 2A Study; Rockland Transit Feasibility Study; System Time Study; Abington Transportation Study; Human Services Coordination Plan.

PROCEDURES:

- 1. Develop a detail study(s) design/estimated work time effort and cost for planning tasks requested by Brockton Area Transit and agreed to by OCPC. The following is a list of planning/projects that could be undertaken as part of this task: Americans with Disabilities Act Plan Update; Route Evaluation Study/Survey; Fare Increase Analysis; Title VI Report Update; Title VI Trend Analysis; Transfer Study; Financial Plan Update; Demographic/Urban Area Analysis; Manley Street Industrial Park Route Analyses; Technical assistance to BAT, as needed, on the Intermodal Facility; BAT/ GATRA (Brockton/Taunton) Intercity Feasibility Study; Avon/Stoughton Route extension planning; Fare Modeling Study; Massasoit Study; provide planning assistance and address/ undertake alternatives analysis as identified in the CRTP; and, Stoughton Fixed Route Study.
- 2. Undertake planning, studies, and comprehensive service assessments in accordance with study requirements and available funding.
- 3. Prepare reports, maps, charts, etc. covering the work effort.

PRODUCT:

Planning services; Paratransit plan in conformity with Americans with Disabilities Act requirements; Route evaluation study; Fixed Route Ridership Report; Abington Transit Study; Hanson Transit Study; South Shore Medical Transportation Options Study; Avon/ Stoughton Route extension planning; Bridgewater State University Transit Route Expansion Study; Massasoit Reverse Commute Study; BAT/GATRA (Brockton/ Taunton) Intercity Feasibility Study; and, provision of planning assistance and alternatives analysis as identified in the CRTP.

SCHEDULE:

To be carried out throughout the year. Schedules are contract dependent.

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
				\$50,000		\$50,000

TRANSPORTATION PLANNING STAFF

The following OCPC staff members will be working on the FFY 2018 Unified Planning Work Program and the percent efforts represents the approximate time devoted to the 3C Transportation Planning Tasks.

<u>Names</u>	<u>Title</u>	% Efforts
Charles Kilmer, AICP	Assistant Director/ Transportation Program Manager	100%
Eric Arbeene, AICP	Senior Community Planner	75%
Shawn Bailey	Transportation Planner	100%
Paul Chenard	Senior Transportation Planner	100%
Raymond Guarino	Senior Transportation Planner	100%
Bruce Hughes	Economic Development/ Community Planner	25%
William McNulty	Senior Transportation Planner	100%
Kyle Mowatt	Transportation Planner	100%
Jimmy Pereira	Transportation Planner	100%
Andrew Vidal	GIS Manager/ Communications/ IT Specialist	75%

FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP) **Budget Estimates**

APPENDICES

Appendix A

FFY 2018 Old Colony Unified Planning Work Program (UPWP) Endorsement

Appendix B

§450.334 - Self Certification Compliance Statement – 3C Process

Appendix C

Estimates of Other Funding Sources, and Other Transportation Planning Activities

Appendix D

Acronyms

Appendix E

Public Comments

APPENDIX A - FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM ENDORSEMENT	

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

ENDORSEMENT OF FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization, at their Old Colony MPO meeting on May 16, 2017 hereby approve and endorse the FFY 2018 Old Colony Unified Planning Work Program (UPWP) in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.

Stephanic Pollack, Secretary and CEO
Massachusetts Department of Transportation

05/16/17 Date

The Honorable Bill Carpenter, Mayor

Date

City of Brockton

Thomas Tinlin, P.E., Highway Administrator Massachusetts Department of Transportation 3/16/17

fo

Kenneth Tavares, Chairman Plymouth, Board of Selectmen

Date

Reinald G. Ledoux, Jr., Administrator

Brockton Area Transit

5/16/17

Eldon Moreira, Clerk

West Bridgewater, Board of selectmen

Date

Frank Staffier, President

Old Colony Planning Council

5/16/17 Date

Daniel Salvucci, Vice-Chairman Whitman, Board of selectmen Date

Ex-Officio Non-Voting Members

Noreen O'Toole, Chairperson
Old Colony Joint Transportation Committee (JTC)

Jeff McEwen, Massachusetts Division Administrator Federal Highway Administration (FHWA)

Mary Beth Mello, Region 1 Administrator Federal Transit Administration (FTA)

APPENDIX B - §450.334	- SELF CERTIFICATION COMPLIANCE STATEMENT	T – 3C PROCESS

§450.334 - Old Colony MPO Self Certification Compliance Statement

This will certify that the Continuing, Cooperative, and Comprehensive performance-based multimodal transportation planning process for the Old Colony Metropolitan Planning Organization is addressing major issues facing the region and certifies that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:

- 1. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
- 2. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
- 3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- 4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- 5. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
- 6. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
- 8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- 9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
- 10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

Stephanie Pollack, Secretary and CEO Massachusetts Department of Transportation	<u>05/11/17</u> Date	The Honorable Bill Carpenter, Mayor City of Brockton	S/6/17 Date
Thomas Tinlin, P.E., Highway Administrator Massachusetts Department of Transportation	5/16/17 Date Col	Kenneth Tavares, Chairman Plymouth, Board of Selectmen	Date
Reinald G. Ledoux, Jr., Administrator Brockton Area Transit	5/16/17 Date	Eldon Moreira, Clerk West Bridgewater, Board of Selectmen	3/16/17 Date
Frank Staffier, President Old Colony Planning Council	5/16/17 Date	Daniel Salvucci, Vice-Chairman Whitman, Board of Selectmen	3/16/1 > Date

APPENDIX C - OTHER OLD COLONY PLANNING COUNCIL FUNDING SOURCES AND OTHER PLANNING STUDIES

The OCPC is a comprehensive planning agency serving communities located in Southeastern Massachusetts. In addition to the range of transportation planning studies and activities described in this report, OCPC performs land use, economic development, elder services, environmental, and, comprehensive planning.

Estimates of Other OCPC Funding Sources

- 1. Economic Development Administration (EDA) \$70,000
- 2. Executive Of Elder Affairs (EOEA)

	a. Administration	\$151,985
	b. Ombudsman Program	\$120,000
3.	District Local Technical Assistance (DLTA)	\$194,932
4.	Septic Repair Program	\$ 25,000

<u>Listing of Other Transportation Planning Activities</u>

The following is a listing of other transportation planning activities underway in the region that are not being funded with FHWA and/ or FTA funds included in the FFY 2018 Old Colony Unified Planning Work Program.

- 1. MassDOT Cape Cod Canal Area Transportation Study
- 2. MassDOT Route 3 Integrated Corridor Management Study
- 3. MassDOT South Coast Rail Project Design and Environmental Permitting
- 4. MassDOT State Bicycle Plan
- 5. MassDOT State Freight Plan
- 6. MassDOT State Pedestrian Plan
- 7. MassDOT State Rail Plan
- 8. MBTA Focus40

APPENDIX D - ACRONYMS

List of Acronyms

3C: Comprehensive, Cooperative, and Continuing Planning Process

ADA: Americans with Disabilities Act
BAT: Brockton Area Transit Authority
CAAA: Clean Air Act Amendments of 1990
CMP: Congestion Management Process

DEP: Department of Environmental Protection

EIR: Environmental Impact Report

EJ: Environmental Justice

ENF: Environmental Notification Form EPA: Environmental Protection Agency

FAST Act: Fixing America's Surface Transportation (FAST) Act

FHWA: Federal Highway Administration FTA: Federal Transit Administration

GATRA: Greater Attleboro-Taunton Regional Transit Authority

JTC: Joint Transportation Committee

LAP: Language Access Plan

LEP: Limited English Proficient

LUMS: Land Use Management System

MassDOT: Massachusetts Department of Transportation MBTA: Massachusetts Bay Transportation Authority

MOU: Memorandum of Understanding
MPO: Metropolitan Planning Organization

NHS: National Highway System

PMS: Pavement Management System

PPP: Public Participation Plan
RTP: Regional Transportation Plan
SIP: State Implementation Plan
SMS: Safety Management System
STP: Surface Transportation Program

TCM: Transportation Control Measure

TIP: Transportation Improvement Program

APPENDIX E - PUBLIC COMMENTS	

Draft FFY 2018 Old Colony Unified Planning Work Program (UPWP) Public Comment Matrix

Date	Name	Representation	Comment Summary	Response
4/26/2017	Old Colony	Old Colony	The Old Colony Planning Council	Noted.
	Planning	Region	Board of Directors have reviewed and	
	Council (OCPC)		approved the Draft FFY 2018 Old	
	Board of		Colony Unified Planning Work	
	Directors		Program (UPWP).	
5/4/2017	Old Colony	Old Colony	The Old Colony Joint Transportation	Noted.
	Joint	Region	Committee have reviewed and	
	Transportation		approved the Draft FFY 2018 Old	
	Committee		Colony Unified Planning Work	
	(JTC)		Program (UPWP).	

Comments as of Close of Business (COB) May 15, 2017

APPENDIX F - ADJUSTMENTS AND AMENDMENTS					

FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM ADJUSTMENT

PREPARED BY:

OLD COLONY PLANNING COUNCIL (OCPC)
70 SCHOOL STREET, BROCKTON, MASSACHUSETTS
508-583-1833 / <u>WWW.OCPCRPA.ORG</u>
PREPARED UNDER MASSDOT CONTRACT 88826

PREPARED FOR:

TRANSPORTATION AND TRANSPORTATION RELATED PLANNING ACTIVITIES FROM OCTOBER 1, 2017 THROUGH SEPTEMBER 30, 2018

PREPARED UNDER:

UNIFIED PLANNING WORK PROGRAM (UPWP) TASK 1200



OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

The preparation of this document has been financed in part through grant[s] from the Federal Highway
Administration and Federal Transit
Administration, U.S. Department of
Transportation, under the State
Planning and Research Program,
Section 505 [or Metropolitan Planning
Program, Section 104(f)] of Title 23,
U.S. Code.

The views and opinions of the Old Colony Planning Council expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.



ADJUSTED BY THE OLD COLONY MPO ON NOVEMBER 21, 2017

PREPARED IN
COOPERATION WITH BAT,
FHWA, FTA, AND
MASSDOT
UNDER CONTRACT 88826

Notice of Nondiscrimination Rights and Protections to Beneficiaries

Federal "Title VI/Nondiscrimination" Protections

The Old Colony Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administrated by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of age, sex, and disability. These protected categories are contemplated within the Old Colony MPO's Title VI Programs consistent with federal interpretation and administration. Additionally, the Old Colony MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

The Old Colony MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Old Colony MPO complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

<u>Additional Information</u>

To request additional information regarding Title VI and related federal and state nondiscrimination obligations, please contact:

Old Colony Planning Council
Title VI/ Nondiscrimination Coordinator
Pat Ciaramella
70 School Street
Brockton, MA 02301
508-583-1833 Extension 202
pciaramella@ocpcrpa.org

Title VI Specialist
MassDOT, Office of Diversity and Civil Rights
10 Park Plaza
Boston, MA 02116
857-368-8580

TTY: 857-368-0603

MASSDOT.CivilRights@state.ma.us

Complaint Filing

To file a complaint alleging a violation of Title VI or related federal nondiscrimination law, contact the Title VI Specialist (above) within 180 days of the alleged discriminatory conduct.

To file a complaint alleging a violation of the state's Public Accommodation Law, contact the Massachusetts Commission Against Discrimination within 300 days of the alleged discriminatory conduct at:

Massachusetts Commission Against Discrimination (MCAD) One Ashburton Place, 6th Floor Boston, MA 02109 617-994-6000

TTY: 617-994-6196

Translation

English

If this information is needed in another language, please contact the MPO Title VI Coordinator at 508-583-1833 ext. 202.

Spanish

Si necesita esta información en otro idioma, por favor contacte al coordinador de MPO del Título VI al 508-583-1833 ext. 202.

Portuguese

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI da MPO pelo telefone 508-583-1833, Ramal 202

Chinese Simple

如果需要使用其它语言了解信息,请联系Old Colony大都会规划组织(MPO)《民权法案》第六章协调员,电话508-583-1833,转202。

Chinese Traditional

如果需要使用其他語言瞭解資訊,請聯繫Old Colony大都會規劃組織(MPO)《民權法案》第六章協調員,電話508-583-1833,轉202。

Vietnamese

Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Điều phối viên Luật VI của MPO theo số điện thoại 508- 583-1833, số máy nhánh 202.

Haitian Creole

Si yon moun bezwen enfòmasyon sa a nan yon lòt lang, tanpri kontakte Koòdonatè a Title VI MPO nan 508-583-1833 ext. 202.

French Creole

Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Kowòdinatè MPO Title VI la nan nimewo 508-583-1833, ekstansyon 202.

Russian

Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь с Координатором Титула VI в MPO по тел: 508-583-1833, добавочный 202.

French

Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le coordinateur du Titre VI de MPO en composant le 508-583-1833, poste 202.

Italian

Se ha bisogno di ricevere queste informazioni in un'altra lingua si prega di contattare il coordinatore MPO del Titolo VI al 508-583-1833 interno 202

Mon-Khmer, Cambodian

ប្រសិនបើលោក-អ្នកត្រូវការបកប្រែព័ត៌មាននេះ សូមទាក់ទងអ្នកសម្របសម្រួលជំពូកទី6 របស់ MPO តាមរយៈលេខទូរស័ព្ទ 508-583-1833 រួចភ្ជាប់ទៅលេខ 202។

Arabic

إذا كنت بحاجة إلى هذه المعلومات بلغة أخرى، يُرجى الاتصال بمنسق الفقرة السادسة لمنظمة التخطيط الحضري على الهاتف: 1833-583 -508 وثم اضغط الأرقام 202.

Updated April 2015

Old Colony Planning Council

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

FFY 2018 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP) ADJUSTMENT 1 **ENDORSEMENT**

This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization, at their Old Colony MPO meeting on November 21, 2017 hereby approve and endorse the FFY 2018 Old Colony Unified Planning Work Program (UPWP) Adjustment 1 in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.

Stephanie Pollack, Secretary and CEO Massachusetts Department of Transportation

City of Brockton

Jonathan Gulliver, Highway Administrator Massachusetts Department of Transportation

Plymouth, Board of Selectmen

ald G. Ledoux, Jr. Administrator

Eldon Moreira, Clerk

Brockton Area Transit

West Bridgewater, Board of Selectmen

Frank Staffier, President

Old Colony Planning Council

Daniel Salvucci, Vice-Chairman

Whitman, Board of Selectmen

Date

Date

Ex-Officio Non-Voting Members

Noreen O'Toole, Chairperson Old Colony Joint Transportation Committee (JTC)

Jeff McEwen, Massachusetts Division Administrator Federal Highway Administration (FHWA)

Mary Beth Mello, Region 1 Administrator Federal Transit Administration (FTA)

November 21, 2017 Old Colony MPO Meeting Agenda Item 7 Draft FFY 2018 Old Colony Unified Planning Work Program (UPWP) Adjustment 1

Review and Potential Endorsement

Summary

The Unified Planning Work Program (UPWP) provides an overview and budgetary information for the transportation planning tasks and activities, which are to be conducted in the region. The UPWP is prepared and endorsed annually by the Old Colony Metropolitan Planning Organization (MPO). The Old Colony Planning Council (OCPC) has the responsibility of preparing and implementing the UPWP.

MassDOT has provided a revised FTA 5303 allocation based on the recent full apportionment of the FFY 2017 FTA 5303. The revised FTA 5303 amount is \$3,013, with OCPC providing a match of \$753. As such, there is a need to adjust the FFY 2018 Old Colony UPWP by including the additional funding for Tasks: 1300 - Public Participation Program (PPP); 1400 - Transportation Improvement Program (TIP); 2100 - Demographic Surveillance & Road Inventory Update; and, 3100 - Regional Traffic Studies, ITS, and, Intermodal Planning. The proposed FFY 2018 UPWP Adjustment 1 is as follows:

Proposed FFY 2018 Old Colony UPWP Adjustment 1

Task and Description	Existing Amount	Proposed Amount	Amount Changed	Additional Explanation
1300 - Public Participation Program (PPP)	\$58,889	\$59,472	+\$583	Budget adjustment needed due to the addition of revised 5303 and OCPC amounts.
1400 - Transportation Improvement Program (TIP)	\$46,284	\$46,449	+\$165	Budget adjustment needed due to the addition of revised 5303 and OCPC amounts.
2100 - Demographic Surveillance & Road Inventory Update	\$27,778	\$28,598	+\$820	Budget adjustment needed due to the addition of revised 5303 and OCPC amounts.
3100 - Regional Traffic Studies, ITS, and, Intermodal Planning	\$71,111	\$73,310	+\$2,199	Budget adjustment needed due to the addition of revised 5303 and OCPC amounts.

Amounts shown are the total task amount.

ELEMENT TASK DESCRIPTION	FHWA PL	MassDOT NFA	FTA 5303	ОСРС	BAT	TOTAL COST	ADJUSTMENT
1000 - Management & Support of Planning and Certification Activit	i						
1100 3C Program Support	\$ 40,800	1				\$ 56,667	
1200 Unified Planning Work Program (UPWP)	\$ 10,800	\$ 2,700	\$ 1,200	\$ 300) \$ -	\$ 15,000	L T. () C () AFO 470
1300 Public Participation Program (PPP)	\$ 42,400	\$ 10,600	\$ 5,177	\$ 1,295	5 \$ -	\$ 59,472	Increase Total Cost to \$59,472; Increase FTA 5303 to \$5,177; Increase OCPC to \$1,295
1400 Transportation Improvement Program (TIP)	\$ 33,325	\$ 8,331	\$ 3,835	\$ 959	\$ -	\$ 46,449	Increase Total Cost to \$46,449; Increase FTA 5303 to \$3,835; Increase OCPC to \$959
1500 Title VI and Environmental Justice (EJ) Element 1000 Subtotals	\$ 33,600 \$ 160,925		, -,	1		\$ 46,667 \$ 224,255	
2000 - Data Reconnaissance, Acquisition, and Analysis Activities	V 100,323	y 40,231	\$ 10,470	7 4,020	, ,	ψ <u> </u>	
2100 Demographic Surveillance & Road Inventory Update	\$ 20,000	\$ 5,000	\$ 2,878	\$ 720	\$ -	\$ 28,598	Increase Total Cost to \$28,598; Increase FTA 5303 to \$2,878;
2200 Multi-Modal Data Surveillance and System Monitoring	\$ 51,200	\$ 12,800	Ċ	\$	· \$ -	\$ 64,000	Increase OCPC to \$720
2300 System Planning and Resource Activities	\$ 31,200	1	-			\$ 64,000	
2400 Geographic Information System (GIS)	\$ 38,000	,				\$ 52,778	
2500 Management Systems and Travel Demand Modeling	\$ 57,600	\$ 14,400				\$ 80,000	
Element 2000 Subtotals		,		1		\$ 273,153	
	+ 101,100	ψ 20,000	¥ 17,010	V .,ec.	· •	¥ 270,200	
3000 - Short and Long Range Transportation Planning Activities							
3100 Regional Traffic Studies, ITS, and, Intermodal Planning	\$ 51,200	\$ 12,800	\$ 7,448	\$ 1,862	2 \$ -	\$ 73,310	Increase Total Cost to \$73,310; Increase FTA 5303 to \$7,448; Increase OCPC to \$1,862
3200 Local Highway Transportation Technical Assistance (LTA)	\$ 56,000	\$ 14,000	\$ -	\$	- \$ -	\$ 70,000	·
3300 Route 106 Corridor Study	\$ 64,800	\$ 16,200	\$ 7,200	\$ 1,800	\$ -	\$ 90,000	
3400 Old Colony Regional Policy Plan	\$ 38,400	\$ 9,600	\$ 4,267	\$ 1,067	, , -	\$ 53,333	
3500 Performance Management	\$ 34,400	\$ 8,600	\$ 3,822	\$ 956	5 \$ -	\$ 47,778	
Element 3000 Subtotals	\$ 244,800	\$ 61,200	\$ 22,737	\$ 5,684	\$ -	\$ 334,421	
4000 - Other Transportation Technical Activities							
4100 Transit Technical Assistance, and Elderly and Individuals with	\$ -	\$ -	\$ 47,802	\$ 11,951	. \$ -	\$ 59,753	
Disabilities Support 4200 BAT Planning, Technical Assistance, and Studies	\$ -	\$ -	\$ -	\$	\$ 50,000	\$ 50,000	
Element 4000 Subtotals		\$ -	\$ 47,802	1			
Element 4000 Subtotuis	- ب	, -	3 47,802	7 11,95	3 30,000	3 103,733	
							Increase Total Cost to \$941,582;
Total of All Elements	\$ 606,925	\$ 151,731	\$ 106,340	\$ 26,586	\$ 50,000	\$ 941,582	Increase FTA 5303 to \$106,340; Increase OCPC to \$26,586

Adjustments are shaded in yellow