ENDORSED BY THE OLD COLONY MPO ON JUNE 21, 2022

PREPARED UNDER MASSDOT CONTRACT #114676 OLD COLONY PLANNING COUNCIL 70 SCHOOL STREET, BROCKTON, MA 02301

TABLE OF CONTENTS

INTRODUCTION	1
1.1 - National Planning Factors	2
1.2 - Title VI and Americans with Disabilities Act (ADA)	6
1.3 - Funding Sources	7
1.4 - Administrative Modification and Amendment Procedures	8
1.5 - Geographic Distribution of Major UPWP Funded Studies	8
TASK 1000: MANAGEMENT AND SUPPORT OF PLANNING PROCESS AND CERTIFICATION ACTIVITIES	11
1100 - 3C Program Support	12
1200 - Unified Planning Work Program (UPWP)	14
1300 - Public Participation Program (PPP)	15
1400 - Transportation Improvement Program (TIP)	17
1500 - Title VI and Environmental Justice (EJ)	19
TASK 2000: DATA RECONNAISSANCE, ACQUISITION, AND ANALYSIS ACTIVITIES	21
2100 - Demographic and Land Use Surveillance	22
2200 - Multi-Modal Transportation System Data Surveillance and System Monitoring	24
2300 - System Planning Resource Activities	26
2400 - Geographic Information System (GIS)	28
2500 - Management Systems (Congestion, Pavement & Safety), and Travel Demand Modeling	29
TASK 3000: SHORT RANGE AND LONG-RANGE TRANSPORTATION PLANNING ACTIVITIES	35
3100 - Regional Multimodal Transportation Planning and Studies	36
3200 - Local Highway Transportation Technical Assistance	39
3300 - Route 18 Corridor Study (Bridgewater & East Bridgewater)	41
3400 - 2024 Long Range Transportation Plan (LRTP)	43
3500 - Coordinated Human Services Transportation (CHSTP) Plan	45
3600 - Performance Based Planning	47
TASK 4000: OTHER TRANSPORTATION TECHNICAL ACTIVITIES, STAFF, ESTIMATED BUDGET	40
4100 - Transit Technical Assistance, and Seniors and Individuals with Disabilities Support	49 50
4200 - BAT Planning and Technical Studies	50
Transportation Planning Staff	53
Estimated FFY 2023 Budget	54
Litillateu III 2025 buuget	54
APPENDICES	
A. FFY 2023 Old Colony Unified Planning Work Program Endorsement	Appendix A
B. §450.336 - Self Certification Compliance Statement - 3C Process Endorsement	Appendix B
C. Estimates of Other Funding Sources, and Other Transportation Planning Activities	Appendix C
D. Glossary of Terms and Acronyms	Appendix D
E. Public Review Period and Public Comments	Appendix E

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DISCLAIMER

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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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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 U.S. 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**.

ADDITIONAL INFORMATION

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

Old Colony Planning Council Title VI/ Nondiscrimination Coordinator Mary Waldron 70 School Street Brockton, MA 02301 508-583-1833 Extension 202 <u>mwaldron@ocpcrpa.org</u>

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

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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

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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。

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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.

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

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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 December 2019 Old Colony Planning Council

1. INTRODUCTION

The Old Colony Metropolitan Planning Organization (MPO) conducts and implements a federally certified, continuing, cooperative, and comprehensive transportation planning process (3C) that results in plans, programs, and projects that encompass all transportation modes and that support the region's vision and goals that are articulated in the Old Colony Long Range Transportation Plan (LRTP). 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, and plans for the connections linking these modes.

The FFY 2023 Old Colony 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 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 2023 Old Colony UPWP describes the planning to be undertaken by the Old Colony MPO. Transportation planning activities are described as procedures under specific tasks. For each task, the anticipated accomplishment or product is provided. For each task, budget, and sources of funding are also provided. For management convenience, similar tasks are grouped into the following tasks:

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

The Old Colony UPWP is a planning and budgeting tool that is used by Brockton Area Transit (BAT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Massachusetts Department of Transportation (MassDOT), and Old Colony Planning Council, as the Scope of Services for the contracting for planning services, and may be amended, and/ or administratively modified during the program year with approval of the Old Colony MPO. All relevant tasks will be performed with input from MassDOT District 5.

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 Old Colony Long Range Regional Transportation Plan 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 LRTP includes goals and objectives, 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 freight. The LRTP identifies the region's transportation project needs for the next twenty years. The principal way in which LRTP 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 covers a five-year period, is updated annually, and is based on reasonable estimates of funds available to the region.

The FFY 2023 Old Colony UPWP continues to expand on several major tasks that are specifically targeted to implement provisions of several pieces of federal legislation, such as the Bipartisan Infrastructure Law (BIL), 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 BIL Planning Factors. The federal transportation act, the BIL identifies ten (10) Planning Factors 23 CFR § 450.306(b) that Metropolitan Planning Organizations, such as the Old Colony MPO, must consider in their Unified Planning Work Programs. Each planning factor may apply to a varying degree to each specific UPWP task

1.1 National Planning Factors

The BIL requires MPOs to implement a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process. To meet this requirement, the Old Colony MPO develops the LRTP, TIP, and UPWP that facilitate the safe and efficient movement of safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight (including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity bus facilities and commuter van pool providers) and that fosters economic growth and development within and between States and urbanized areas, and take into consideration resiliency needs while minimizing transportation-related fuel consumption and air pollution in all areas of the region.

The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors:

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

The BIL continues to emphasize performance-based planning as an integral part of the metropolitan planning process: states are to develop performance goals, guided by the national goals, and then MPOs will work with state departments of transportation to develop MPO performance measures and targets, or adopt the statewide performance measures and targets. The TIP and UPWP integrates MassDOT's and the MPOs' performance measures and link transportation-investment decisions to progress toward achieving performance targets. The MPOs, MassDOT, and providers of public transportation jointly agree and have developed specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance to be used in tracking progress towards attainment of

critical outcomes for the MPO regions and the collection of data for the MassDOT Asset Management Plan.

The Old Colony MPO develops the UPWP with consideration of planning activities within the metropolitan area and utilizes a process that provides for the design and delivery of transportation services within the metropolitan planning area. The following is an overview of the Old Colony MPO specific goals, performance measures, and targets that reflect the national planning factors and performance-based planning. Some of these planning factors essentially have entire tasks devoted to them, while others have their intent woven throughout the composition of various undertakings. Accomplishment of these planning objectives occurs in multiple tasks simultaneously, in several tasks independently, and in general techniques and approaches used in more than one task.

The work tasks selected for inclusion in the FFY 2023 UPWP document attempt to address each of the region's identified planning priorities, in the spirit of the BIL and more recent federal and state emphasis areas. The following describes the four main Elements of the UPWP and identifies the previously listed Federal Planning Factors that are heavily supported by number in parentheses (note that each Element supports all factors, but some support other factors more heavily).

UPWP Task 1000 - Management and Support of Planning Process and Certification Activities provides for the management of the transportation planning process and the development of the annual work program. The Transportation Improvement Program (TIP) effort allows for the development of a prioritized listing (driven by performance measurement) of improvement projects, programmed for federal-aid funding, which are brought forth through the Management Systems (National Planning Factors 1,2,4,5,6,7) as well as the proactive public outreach process. The TIP development process considers both the maintenance of existing multi-modal transportation infrastructure as well as a limited number of expansion projects (particularly in the healthy transportation modes), and is prepared in consultation with various stakeholder groups, including modal and Environmental Justice (EJ)/ Title VI communities (National Planning Factors 1,5,7).

UPWP Task 2000 - Data Reconnaissance, Acquisition, and Analysis Activities includes the collection & analysis of quality transportation data is integral to the MPO's ongoing planning efforts. Element 2 focuses, in part, on obtaining and analyzing traffic count data, vehicle crash research, and the assessment of sidewalk conditions. Although most of these efforts involve federal-aid roadways, study locations identified by the communities are also included, as well as data collection on transit, bike, and pedestrian modes (National Planning Factors 6, 7, 8). Additionally, this element also supports ongoing work on incorporating the various mode data and performance analysis using the regional transportation network simulation model, and other data integration techniques.

UPWP Task 3000 - Short Range and Long-Range Transportation Planning Activities work tasks include performance analysis of integrated Management Systems (safety, congestion, and pavement) for use in corridor studies and bottleneck reduction efforts as well as to assist in the development, selection and prioritization of potential TIP projects (National Planning Factors 2, 3, 4, 7, 8). Transportation system security, including identification of vulnerable transportation infrastructure and evacuation planning, is addressed under Safety and Security. Also, drawing on the Management Systems, this UPWP includes short & medium range management & operations implementation efforts, as recommended from previous studies. Further, this element supports continued efforts to introduce ITS technologies to the region as well as expand local awareness of freight issues - both truck and rail - and their respective impacts on highway congestion and efforts to increase Commuter Rail service (Factors 6,7). The

development of the 2020 LRTP has identified new projects and initiatives, most notably tracking performance management data, assisting communities in developing projects for implementation in one of the four program areas identified in the plan, working with potential project proponents on multi-mode projects, and assisting freight partners in securing grant funds. The LRTP and therefore the TIP includes a focus on addressing Climate Change. Where appropriate, TIP projects 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, TIP projects include 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. Planning for livability, sustainability and promotion of alternative mode, including strategies for greenhouse gas reduction and health linkages, as well as, identifying gaps and solutions to fill the gaps in Access to Essential Services and making linkages to enhance travel and tourism are also included in Element 3 (National Planning Factors 1,4,5,6,9,10).

UPWP Task 4000 - Other Transportation Technical Activities also considers intermodal planning (Factor 6), general public transportation planning, the transportation needs of transportation-disadvantaged populations, as well as the coordination of public transit with various human service agencies (Factor 4). The work outlined in this FFY 2023 UPWP will be fully undertaken by Old Colony MPO staff.

In addition to the above planning factors, this UPWP covers work in several additional federal and state policy emphasis areas.

Federal Planning Policy Emphasis Areas

- Tackling the Climate Crisis Transition to a Clean Energy, Resilient Future
- Equity and Justice40 in Transportation Planning
- Complete Streets
- Public Involvement
- Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination
- Federal Land Management Agency (FLMA) Coordination
- Planning and Environment Linkages (PEL)
- Data in Transportation Planning

Statewide Planning Areas

MassDOT's 2014 Long-Range Transportation Plan ('WeMove Massachusetts', or WMM) was its first multimodal plan covering the work of its individual modal divisions - i.e. aeronautics, highway, rail & transit, and others. It was developed to implement goals set during the Commonwealth's Transportation Reform Initiative (2009) and operationalized performance management in its investment decision-making process for the first time. WMM also provided MassDOT a lead in meeting federal MAP-21 performance management requirements. WMM, and the subsequent state Capital Investment Plan (CIP), connect MassDOT's policies, investments, and funding with the public's stated transportation priorities in the name of increased safety and efficiency. MassDOT has recently launched the Beyond Mobility, the Massachusetts 2050 Transportation Plan, which is a planning process that will result in a blueprint for guiding transportation decision-making and investments in Massachusetts in a way that advances MassDOT's goals and maximizes the equity and resiliency of the transportation system.

Also on the statewide level, MassDOT has completed various multi-modal plans, such as the Statewide Bicycle Plan, Pedestrian Plan, Freight Plan, and Rail Plan.

The Statewide Bicycle Plan was completed in 2018. The vision of this plan is to provide a safe, comfortable, and well connected bicycle network that will increase access for both transportation and recreational purposes. The plan will also advance bicycling statewide for everyday travel to the broadest base of users and free of geographic inequities. The Statewide Pedestrian Plan was also completed in 2018. This plan defines a vision for Massachusetts in which all people have a safe and comfortable walking option for short trips. The plan also establishes a comprehensive approach for MassDOT to lead by example to better operate and maintain the walking infrastructure under its authority and to make investments in new facilities.

The Statewide Freight Plan was completed in 2017. The plan documents target specific actions, particularly trucking rest stop and permitting needs. It also specifies the use of future year funding in a reasonably phased manner. The Statewide Rail Plan was completed in 2018. The plan lists a number of future year improvement projects that seek to address needs across the entire Commonwealth in a balanced fashion. Also, it addresses the need to both fund and complete already underway rail projects.

In addition, state officials signed the Healthy Transportation Compact, and established a Healthy Transportation Compact Advisory Council, with an interagency group consisting of the MassDOT, Executive Office of Health and Human Services, and the Office of Energy and Environmental Affairs, as required in recent transportation reform legislation. The purposes of the group are to 1) address transportation needs; 2) promote public health, and 3) promote a clean environment. The group developed goals that promote access to healthy transportation in various ways. The essence of these federal/state initiatives on promoting livability, addressing climate change, creating healthy environments, reducing energy demands, and establishing a performance-based transportation planning process are integrated into this UPWP.

MassDOT created the "Municipal Complete Streets Funding Program" in February 2016 to advance its commitment to increase mode shift and provide safe and accessible options for all travel modes for people of all ages and abilities. MassDOT is committed to the Complete Streets principles in policy and in practice. MassDOT is promoting Complete Streets throughout the Commonwealth through training, design guidance and funding. This UPWP emphasizes efforts that move communities to create Complete Streets policies, prioritize locations, and finalize design and implementation of priorities.

This year's UPWP efforts focus on the development of Road safety Audits at multiple locations, the 2024 Long Range Transportation Plan (LRTP), the Route 18 Corridor Study in the communities of Bridgewater and East Bridgewater, the Coordinated Human Services Transportation (CHSTP) Plan, the BIL 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, and the development of the Transportation Improvement Program. Attention is also focused on the regional multi-modal data surveillance program (including counting of bicycles and pedestrians, developing an inventory of gaps in the bicycle network, and developing an index of regional bikeability), 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. The safety of our transportation network continues to be a priority, and a key consideration in the selection and prioritization of future projects. Tasks within the UPWP are consistent with the goals of the LRTP. As an example, the LRTP 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 that include the Management Systems of Congestion, Pavement, and Safety, along with the TIP.

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.

1.2 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

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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, because 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.

U.S. DOT Order 1000.12C - Title VI Program overriding objective is to ensure all DOT assisted programs are implemented in compliance with Title VI so that all members of the public enjoy equality of opportunity, regardless of race, color, or national origin (including limited English proficiency).

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 places and MPO materials must be made available in accessible formats.

1.3 FUNDING SOURCES

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

- FHWA PL/ MassDOT; FTA 5303/ MassDOT: October 2022 through September 2023
- BAT: July 2022 through June 2023

For the contract beginning October 1, 2022, the FHWA PL (\$988,554) and FTA 5303 funds (\$207,883) will be combined into one appropriation to MassDOT to fund Old Colony MPO activities. FHWA and FTA will

provide 80% of the funds (\$957,150), while MassDOT will provide the 20% match (\$239,287). MassDOT will annually work with the Old Colony MPO through a single contract that combines these two federal funding sources.

1.4 ADMINISTRATIVE MODIFICATION AND AMENDMENT PROCEDURES

Unified Planning Work Programs, no matter how well planned, may need to be modified from their original MPO endorsed form. There are different actions that may be taken to modify the endorsed UPWP. These actions vary, depending on the extent of the modification, and have different impacts on the UPWP. All proposed administrative adjustments and amendments are presented to the MPO for consultation prior to endorsement. The procedures for modifying 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 change to undergo a twenty-one (21) day public review period and requires MPO endorsement. 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. Examples of actions that require an Amendment include:

- Addition or deletion of a UPWP task or sub-task;
- Major changes to UPWP task descriptions, activities, and other information;
- Funding increase above the originally approved UPWP overall budget;
- Funding transfers between tasks equal to or greater than 25% of the UPWP task budget; and
- Funding increase or decrease equal to or greater than 25% of the UPWP task budget.

UPWP Administrative Modification (Adjustment)

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

- Minor changes to UPWP task descriptions, activities, and other information;
- Funding transfers between UPWP tasks less than 25% of the UPWP task budget; and
- Funding increase or decrease less than 25% of the UPWP task budget.

1.5 GEOGRAPHIC DISTRIBUTION OF MAJOR UPWP FUNDED STUDIES

The Old Colony Planning Council staff monitors the geographic distribution of UPWP funded studies over time. Table 5 provides the distribution of Major UPWP Studies over the period of 2004 through 2023. To assist with providing context to the distribution, included in the table is 2020 Population and 2019 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 as 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 2004 through 2023, 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 have 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 feature higher pedestrian, bicyclist and vehicle trips, and the need for additional multimodal and infrastructure.

Geograp	nic Distributi	on of Major UP	wP Funded St	udies (Task 300	JU) FFYS 2004-2	023
Community	2020 Population	2020 Title VI Minority Population	Percent Title VI Minority	Median Household Income, 2019	Number of Major Studies, 2004 - 2023	Percentage of Total Studies, 2004 - 2023
			-		2004 - 2023	
Brockton	105,643	74,569	71%	\$58,469	7	8.6%
Stoughton	29,281	11,088	38%	\$83,519	5	6.2%
Avon	4,777	1,685	35%	\$85,200	4	4.9%
Bridgewater	28,633	4,997	17%	\$95,675	8	9.9%
Abington	17,062	2,910	17%	\$99,381	4	4.9%
Easton	25,058	4,025	16%	\$112,268	1	1.2%
Whitman	15,121	1,969	13%	\$86,570	3	3.7%
West Bridgewater	7,707	968	13%	\$97,404	3	3.7%
Plymouth	61,217	6,673	11%	\$90,279	4	4.9%
East Bridgewater	14,440	1,560	11%	\$90,528	5	6.2%
Hanson	10,639	844	8%	\$96,693	1	1.2%
Kingston	13,708	1,069	8%	\$96,104	4	4.9%
Hanover	14,833	1,140	8%	\$127,981	2	2.5%
Pembroke	18,361	1,285	7%	\$103,905	2	2.5%
Duxbury	16,090	1,081	7%	\$128,173	2	2.5%
Halifax	7,749	519	7%	\$92,774	3	3.7%
Plympton	2,930	162	6%	\$94,167	2	2.5%
Region wide	393,249	116,544	30%	\$96,417	21	25.9%
					81	100.0%

 Table 1

 Geographic Distribution of Major LIPWP Funded Studies (Task 3000) FEVs 2004-2023

Table 2Geographic Distribution of Local Technical Assistance UPWP Funded Studies (Elements 2200 and 3200)FFYs 2015-2021

				FFI3Z	012-2021					
					UPWP T	ask 2200	UPWP Ta	ask 2200	UPWP T	ask 3200
					Automatic T	raffic Counter	Turning Mov	ement Count	Local Techni	cal Assistance
					Recorder (A	ATR) Locations	(TMC) Locations			(LTA) Studies
										Percentage
					Number of	Percentage	Number of	Percentage	Number of	of LTA
		2020 Title VI		Median	ATR Counts	of ATR	TMCs	of TMCs	LTA Studies	Studies
	2020		Percent Title VI	Household	FFYs 2015-	Counts FFYs	FFYs 2015-	FFYs 2015-	FFYs 2015-	FFYs 2015-
Community	Population	Population	Minority	Income, 2019	2021	2015-2021	2021	2021	2021	2021
Brockton	105,643	74,569	71%	\$58,469	169	22.3%	80	28.6%	11	10.6%
Stoughton	29,281	11,088	38%	\$83,519	46	6.1%	6	2.1%	11	10.6%
Avon	4,777	1,685	35%	\$85,200	26	3.4%	5	1.8%	5	4.8%
Bridgewater	28,633	4,997	17%	\$95,675	31	4.1%	7	2.5%	1	1.0%
Abington	17,062	2,910	17%	\$99,381	66	8.7%	19	6.8%	7	6.7%
Easton	25,058	4,025	16%	\$112,268	50	6.6%	5	1.8%	9	8.7%
Whitman	15,121	1,969	13%	\$86,570	23	3.0%	8	2.9%	7	6.7%
West Bridgewater	7,707	968	13%	\$97,404	39	5.1%	7	2.5%	5	4.8%
Plymouth	61,217	6,673	11%	\$90,279	87	11.5%	27	9.6%	17	16.3%
East Bridgewater	14,440	1,560	11%	\$90,528	17	2.2%	10	3.6%	2	1.9%
Hanson	10,639	844	8%	\$96,693	10	1.3%	3	1.1%	3	2.9%
Kingston	13,708	1,069	8%	\$96,104	32	4.2%	20	7.1%	4	3.8%
Hanover	14,833	1,140	8%	\$127,981	34	4.5%	32	11.4%	3	2.9%
Pembroke	18,361	1,285	7%	\$103,905	15	2.0%	13	4.6%	6	5.8%
Duxbury	16,090	1,081	7%	\$128,173	75	9.9%	22	7.9%	8	7.7%
Halifax	7,749	519	7%	\$92,774	15	2.0%	11	3.9%	3	2.9%
Plympton	2,930	162	6%	\$94,167	23	3.0%	5	1.8%	2	1.9%
	393,249	116,544	30%	Totals:	758	100.0%	280	100.0%	104	100.0%

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

To properly support and effectively control the transportation planning activities of the Old Colony Metropolitan Planning Organization, 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.

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

TASK 1100 - 3C PROGRAM SUPPORT

OBJECTIVE:

To manage, support, and provide the capability to maintain a Comprehensive, Cooperative, and Continuing 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, programs studies; Technical assistance and information related to transportation planning to the public, local, state and federal agencies; Review and updates to memorandums of understandings, and agreements; Participation in the Transportation Program Managers Group; Timely response to planning studies and initiatives by local, state, and federal agencies; and Contract administration.

PREVIOUS WORK:

- 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 and work products.
- Assistance with statewide transportation planning programs.
- Distribution of information on federal and state rules and regulations.
- Input and support for economic and community development programs.
- Maintenance and federal certification of a viable and ongoing 3C Transportation Planning Process.
- Maintenance and operation of the Old Colony Metropolitan Planning Organization and Old Colony Joint Transportation Committee.
- Preparation of 3C certification documents.
- Provision of ongoing technical assistance to departments, agencies, authorities, and communities.
- Support for public participation and private involvement in the 3C process, Federal Highway Administration, Federal Transit Administration, and air-quality programs.

PROCEDURES:

- Provide administrative and technical support to the 3C regional planning process; Provide community liaison activities and short term planning assistance to 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; and Participate in informational programs on transportation, air quality, hazardous waste, energy conservation, accessibility, gaming, and other planning.
- 2. Provide and maintain coordination for Old Colony MPO activities including the preparation and presentation of certification documents, transportation plans and programs developed through the public participation process. Develop documents necessary for the certification reviews and the self-certification process; and Maintain all Old Colony MPO documentation records, and files.
- 3. Provide for participation of staff in professional development programs and conferences, and provide for coordination with BAT, GATRA, FHWA, FTA, MassDOT, MBTA, and other agencies as applicable.
- 4. Provide inter-agency coordination with other transportation agencies, including FHWA, FTA, MassDOT, MBTA, RPAs, and RTAs on an ongoing, regular basis; and Coordinate highway-planning activities with local officials and MassDOT District 5.

- 5. Provide financial management of the transportation planning contracts with FHWA/ MassDOT, BAT, GATRA, and MBTA, and staff supervision and work assignments; and 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.
- 6. Follow up on recommendations of previous transportation planning studies by attending and participating in public meetings or making presentation of study results.
- 7. Coordinate planning activities within the Barnstable Urbanized Area and the Boston Urbanized Area with MassDOT, the common MPOs, and the providers of public transportation to ensure that there are effective processes for cross-jurisdictional communication to foster collaboration, policy implementation, technology use, and performance management.
- 8. Review and implement 2019 Transportation Planning Certification Review recommendations. Implementation of recommendations will be guided by the Action Plan and reported on quarterly.
- 9. Prepare for and participate in 2023 Transportation Planning Certification Review.

PRODUCTS:

Maintenance and federal certification of a viable 3C Transportation Planning Process and Old Colony MPO operation; Support of community development and environmental planning; Memorandums of Understandings reviews including 3C Memorandum of Understanding review and amendments; Information on BIL 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; Attendance and participation in Transportation Program Managers Group; and Administration of contracts and invoices.

SCHEDULE:

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

FHWA PL	MassDOT			TOTAL
\$60,350	\$15,087			\$75,437

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 include funding sources and agency responsibility. Endorsement of this document shall be consistent with the procedures documented in the Public Participation Plan.

PREVIOUS WORK:

UPWPs prepared and endorsed annually by the Old Colony MPO; Monthly Invoices; and Quarterly Progress Reports, and Year End Progress Reports.

PROCEDURES:

- 1. Maintain the current UPWP and prepare related invoicing; and 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 require formal Old Colony MPO consultation.
- 3. Develop the FFY 2024 UPWP for the Old Colony region covering the upcoming federal fiscal 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 public review and comment. The Old Colony MPO will endorse the final document by July 2023.

PRODUCTS:

Maintain the current UPWP and prepare invoices; Prepare FFY 2023 UPWP Annual Report; Prepare and submit Adjustments and Amendments, as needed; and Prepare the FFY 2024 UPWP.

SCHEDULE:

FFY 2023 UPWP Annual Report to be developed and submitted by December 30, 2023. FFY 2024 UPWP to be developed and endorsed by July 2023.

FHWA PL	MassDOT			TOTAL
\$14,400	\$3,600			\$18,000

TASK 1300 - PUBLIC PARTICIPATION PROGRAM

OBJECTIVE:

To continue to support, implement, review, and amend the 2021 Old Colony MPO's Public Participation as needed. 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 to 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 engagement, social media, and 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 LRTP and TIP.

To conduct outreach activities related to the development of BIL performance measures and targets.

PREVIOUS WORK:

Measures of Effectiveness (MOE) Reports; Newsletters and Articles; Social Media Postings; News Releases and Articles for the Media; OCPC Annual Reports; Old Colony JTC meetings; Old Colony LRTPs; Old Colony TIPs and Implementation; Public Engagement; Title VI Reports; and Public Participation Plans.

PROCEDURES:

- 1. Provide a proactive public involvement process that provides complete information, timely public notice, full public access to decisions, and support continuing involvement of the public in the developing Plans, Transportation Improvement Programs, and other documents; and 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 (virtual, hybrid and potentially in-person) of the JTC and MPO.
 - Work with the Old Colony JTC, working towards expanding and developing the membership.
 - Modify and expand the Transportation Advisory Network (TAN) as appropriate.
 - Maintain and update comprehensive mailing lists of interested groups, local, state, and federal agencies, Old Colony JTC, minority and low-income groups, individuals, and other relevant stakeholders, who should be informed of regional plans, programs, and accomplishments in comprehensive transportation and environmental planning and development.
 - Ensure early and continuing engagement and involvement of the public in the development of plans and other documents. Utilize visualization techniques and publish or announce the availability of plans and/ or document for review and comments.
 - Review and evaluate the effectiveness of the public participation plan; identify innovative public involvement techniques and/ or programs that enhance public participation.
 - Implement the public involvement process with particular emphasis on the LRTP and the TIP.
 - Continue to prepare mailings, newspaper announcements, public notices, and public service announcements, as outlined in the Public Participation Plan.

- Continue to identify and engage 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.
- 3. Prepare articles and documentation related to transportation planning including Articles for the 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). Staff will continue to implement and/or update the PPP based on new virtual public involvement tools and software, as well as the U.S. DOT's June 2021 Title VI Executive Order.
- 5. Present transportation plans and programs (Long Range Transportation Plan, Transportation Improvement Program, Public Participation Plan, and Unified Planning Work Program, etc.) developed through the public participation process to the Old Colony MPO for appropriate action.
- 6. Maintain, adjust, and/ or amend the current PPP and ensure that the interested parties and the public engage in developing outreach procedures and will have 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 BIL performance measures.
- 8. Prepare Annual Measures of Effectiveness (MOE) Report that qualitatively and quantitatively measures the effectiveness of the public participation process.

PRODUCTS:

Measures of Effectiveness (MOE) Annual Report; Old Colony MPO meetings; Old Colony JTC meetings and documents; Old Colony MPO meetings and documents; Website Notices; Legal Notices; Articles in OCPC Annual Report and News Releases; Participation in public meetings; Public Engagement; Newsletter Articles; Social Media Postings; Outreach activities related to the development of performance measures and thresholds; Maintenance of a viable Public Participation Process; and Public Participation Plan Amendments, and refinements for the website.

SCHEDULE:

To be conducted throughout the program year.

FHWA PL	MassDOT			TOTAL
\$53,600	\$13,400			\$67,000

TASK 1400 - TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

OBJECTIVE:

To develop and maintain a multi-year, financially constrained, program of transportation improvement projects and operational assistance that is consistent with the Old Colony MPO's LRTP, the State Implementation Plan (SIP), the Environmental Protection Agency's Air Quality Conformity Regulations, and US DOT Planning Regulations. The TIP will include a program of highway and transit projects for FFY 2024-2028. 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. Projects and service implemented through the TIP will help to achieve the performance targets for Safety (PM 1), Bridge and Pavement Condition (PM 2), System Performance Measures (PM 3), Public Transportation Agency Safety Plan (PTASP), and Transit Asset Management State of Good Repair.

The FFY 2023-2027 TIP will be maintained, and any amendments will be conducted in accordance with the PPP. The FFY 2024-2028 TIP will be developed and endorsed.

PREVIOUS WORK:

Transportation Improvement Programs have been developed and endorsed annually; Public Participation Process; Transportation Improvement Program Amendments and Administrative Modifications; Transportation Evaluation Criteria Analyses and Applications; CMAQ Analysis and CMAQ Committee Participation; GHG Tracking and Evaluations; Technical Assistance and formulation, implementation, and coordination of TIP Subcommittee; and Preparation of related products.

PROCEDURES:

- 1. Develop a program of projects: In developing the FFY 2024-2028 TIP, staff will update the list of all transit, highway, and bridge projects that are expected to require federal and state transportation funds for planning and engineering, construction, or purchase during FFYs 2024-2028. This work will include:
 - All transportation projects or programs that require FHWA or FTA approval.
 - For informational purposes, all projects to be funded with Federal funds other than those from FHWA or FTA.
- 2. Provide the following information: 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; and Identification of the recipient/ sub recipient and state and local agencies responsible for conducting the project, and project phase. In addition, the total costs of projects seeking Federal funds in each program year shall not exceed reasonably anticipated Federal funds.
- 3. Prepare the Draft FFY 2024-2028 TIP. The following tasks and procedures will be performed during the development of the Draft FFY 2024-2028 TIP:
 - Include involvement of the communities, officials, and the public through the public participation process.
 - Provide technical assistance to municipalities and transit providers in developing projects and priorities.
 - Meet with communities, MassDOT District 5, and MassDOT in developing project information, and utilizing Transportation Evaluation Criteria.

- Solicit and analyze Congestion Mitigation and Air Quality Projects.
- 4. The Transportation Improvement Program will also include sections relative to:
 - Funding categories and amounts of federal funding proposed to be obligated during each program year.
 - An Annual Listing of Obligated Projects, programs, and an explanation of any significant delays in the planned implementation of major projects. The Annual List for the preceding FFY will be prepared and posted to the website by December 31, 2022.
 - A description of the transportation evaluation criteria and process for prioritizing projects.
 - Air quality significance and relationship of the TIP, State Transportation Improvement Program, and State Implementation Plan.
 - Reporting of Greenhouse Gas (GHG) Emission Analyses.
 - A financial plan that compares revenue needs to revenue sources for highway and transit programs.
- 5. Public Participation: There will be reasonable public engagement and opportunity for public comment on the Draft FFY 2024-2028 TIP in accordance with the PPP. Public meetings of the JTC and MPO will be held 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. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
- 9. TIP Endorsement: The TIP will be reviewed and endorsed by the Old Colony MPO. Once endorsed, the TIP will include the required air quality conformity documentation necessary for U.S. DOT and EPA conformity determinations.

PRODUCTS:

Maintenance of the FFY 2023-2027 TIP, and Amendments and Administrative Modifications, as needed; Preparation and endorsement of the FFY 2024-2028 TIP.

SCHEDULE:

FFY 2022 Annual Obligation of Projects posted to website by December 31, 2022. FFY 2024-2028 TIP will be developed and endorsed by June 2023.

FHWA PL	MassDOT			TOTAL
\$44,000	\$11,000			\$55,000

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, and Limited English Proficiency 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 engages with these populations throughout all transportation planning related activities.

PREVIOUS WORK:

Old Colony LEP Plan; Old Colony PPP; Newsletter Articles; Social Media Postings; News Releases and Articles for the Media; OCPC Annual Reports; Website; Old Colony JTC meetings; 2020 LRTP Public Participation Process; TIP and Implementation Process; and 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 the public participation plan for engaging transportationdisadvantaged communities in the transportation decision-making process.
 - Regional maps using the U.S. Census illustrating where environmental justice populations are located.
 - Regional maps using the U.S. Census identifying where highway Transportation Improvement Projects are in relation to environmental justice populations.
 - Regional maps using the U.S. Census illustrating the existing transit routes, fatal crash locations, pavement conditions, safe routes to school buffers, and future capital transit projects.
 - Examination of mobility issues using the U.S. Census, access to jobs and services, and levels of service for both transit services and automobiles.
 - Promote access to the planning process to those with limited English proficiency by developing and utilizing techniques and strategies such as visualizations, graphics, posters, interpreters, and providing information via ethnic media and community-based organizations.
 - 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.

PRODUCTS:

Title VI and Environmental Justice planning for the Old Colony Region; 2023 Title VI Annual Report; Maintain an outreach contact list of minority groups, low-income groups, and community based organizations; Develop maps identifying environmental justice populations, transit route maps, and 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; and Utilize MassDOT Title VI Tool.

SCHEDULE:

To be conducted throughout FFY 2023.

FHWA PL	MassDOT			TOTAL
\$36,000	\$9,000			\$45,000

TASK 2000 - DATA RECONNAISSANCE, ACQUISITION, AND ANALYSIS ACTIVITIES

A major requirement of planning is to know what is 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.

Task 2100 - Demographic and Land Use Surveillance

Task 2200 - Multi-Modal Data Surveillance and System Monitoring

Task 2300 - System Planning Resource Activities

Task 2400 - Geographic Information System (GIS)

Task 2500 - Management Systems (Congestion, Pavement & Safety), and Travel Demand Modeling

TASK 2100 - DEMOGRAPHIC AND LAND USE SURVEILLANCE

OBJECTIVE:

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

PREVIOUS WORK:

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

PROCEDURES:

- 1. Review and continue to maintain, update, and develop where appropriate existing demographic files based on the U.S. Census information, and the 2011 Massachusetts Household Transportation Survey.
 - Attend and participate in workshops and courses (U.S. Census, CTPP, etc.) sponsored by FHWA, FTA, MassDOT, Baystate Roads, and other agencies or groups.
 - Develop traffic analysis zones for the travel demand model with the most recent census data.
 - Develop, update, and revise socioeconomic forecasts for use in refinement of the regional model, Geographic Information Systems, scenario planning, and the Long-Range Transportation Plan.
 - Provide and respond to requests for U.S. Census Data and demographic data.
 - Review and analyze the U.S. Census Data and demographic data.
 - Review, maintain and periodically update physical data and prepare data maps, including land use, zoning, etc.
 - Review, update, and add development projects in MassBuilds.
- 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 U.S. Census, and the 2011 Massachusetts Household Transportation Survey.
- 3. Monitor 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 to update the land use and zonal forecasts, and to use as inputs into the MassBuilds, congestion management process, and mitigation activities.

PRODUCTS:

Updated Socio-Economic Data Files; Journey-to-Work Data Tables and Reports; Technical assistance regarding the 2020 U.S. Census, and the 2011 Massachusetts Household Transportation Survey; Updates to MassBuilds; Development of Priority Development Areas and Priority Preservation Areas.

SCHEDULE:

To be conducted throughout FFY 2023.

FHWA PL	MassDOT			TOTAL
\$26,000	\$4,000			\$30,000

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 Program).

To respond to requests for traffic (vehicle, bicycle, pedestrian, and transit) counts from state and municipal 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 counts, bicyclist counts, vehicle counts, and transit counts, and prepare measures such as levels of service.

To respond to planning needs and requests for aerial photography and/or videography through the OCPC Drone Program.

PREVIOUS WORK:

Annual Old Colony Traffic Volume Reports; Maintenance of database of local, state, and other traffic counts, and MS2 upload; Turning movement counts and Travel Time Studies; Collection and analysis of data previously performed for other transportation studies; Speed and vehicle classification studies requested by member communities; Drone Missions for aerial photography and/or videography; Review of technical studies and reports; and MassDOT/ RPA Traffic Count Program (vehicle, bicycle, pedestrian, and transit). In addition, a count program of strategic road/ locations within the region has been developed to provide information for implementation of the regional growth factors, and 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 bicycle and pedestrian counts, as appropriate.
 - Conduct directional traffic counts as part of the MassDOT Statewide Traffic Coverage Counts, and upload to MS2.
 - Conduct traffic counts using mechanical recorders and conduct manual turning movement counts within the region, and/or as needed for planning purposes.
 - Conduct transit passengers and vehicle counts.
 - Conduct turning movement counts and upload to MS2.
 - Develop bikeability measures and/ or quality of service metrics.
 - Maintain and continue to expand on an ongoing region wide traffic count database for use in monitoring regional VMT growth rate.
 - Maintain interactive traffic count database.
 - Measure levels of service for all modes (vehicle, pedestrian, bicycle, and transit).
 - Prepare reports summarizing the traffic counting activities in the region (includes distribution to MassDOT), as appropriate.
 - Prepare inventory of gaps within the regional bicycle network.

- 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.
- Verify and calibrate traffic counters according to MassDOT Procedures.
- 2. Conduct additional transportation system (vehicle, bicycle, pedestrian, and transit) counts as needed to refine and update the traffic count database for the travel demand model.
- 3. Undertake travel time and vehicle occupancy study in the Old Colony region as needed for the Regional Transportation Model, the LRTP, 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.
 - U.S. Census Place of Work and Residence Data.
 - 2011 Massachusetts Household Transportation Survey.
- 5. Conduct drone missions for aerial photography and/or videography as needed and requested, and provide the results of the missions. Purchase equipment and supplies as needed.

PRODUCTS:

Transportation System Counting Program; Bikeability measures and/ or quality of service metrics; Highway Data Displays; speed and classification reports; Turning movement counts; MS2 Upload; Drone missions for aerial photography and/or videography as needed; Vehicle Occupancy and Travel Time Reports as needed and updated 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; Replacement, maintenance, and, purchase of traffic counters, equipment, and software; Annual Traffic Volumes Report; Traffic Count Interactive Database; Turning Movement Count Interactive Database; and Traffic Volume Growth/ Decline Rates.

SCHEDULE:

To be conducted typically from January to December (weather permitting). Year End Traffic Volume Report to be completed during spring 2023.

FHWA PL	MassDOT			TOTAL
\$81,600	\$20,400			\$102,000

TASK 2300 - SYSTEM PLANNING AND RESOURCE ACTIVITIES

OBJECTIVE:

To continually improve the staff'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 Transportation Department's computer systems 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; Use of TransCAD, Geographic Information System, HCS, Pavement Management, McTrans Highway Capacity Software, SYNCHRO, CMAQ Analysis, GHG Analysis, and other transportation analysis software packages; Purchase, installation, and upgrade of computer systems, software, and equipment, as needed; and Purchase of relevant reference materials and documents.

PROCEDURES:

- 1. Staff professional 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 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 Department'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 U.S. DOT supported research and other public agencies as well as private companies.
 - Provide necessary support for the effective operation of the staff's computers.
 - 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 inventory of programs and data files.
 - Maintain and update website.

PRODUCTS:

Staff professional 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; and Application of new forecasting techniques and transportation analysis techniques.

SCHEDULE:

To be conducted throughout FFY 2023.

FHWA PL	MassDOT			TOTAL
\$54,400	\$13,600			\$68,000

TASK 2400 - GEOGRAPHIC INFORMATION SYSTEM (GIS)

OBJECTIVE:

To improve, develop, and utilize the digital data and geographic tools of the GIS for various tasks within the UPWP. The GIS provides the ability to store, display, manage, and analyze data for different work tasks. This includes land use projections for the LRTP; 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 provision of technical assistance on geographic matters.

PREVIOUS WORK:

Development of public outreach tools; roadway classification; technical assistance for member communities; buildout analysis; regional intersection database; regional crash database; Regional land use map; Regional growth maps; Priority Development Areas (PDAs) and Priority Preservation Areas (PPAs); Parcel Maps; Crash Cluster Maps; Stormwater Maps.

PROCEDURES:

- 1. Collect and map information on the built environment, zoning, and land use.
- 2. Collect, develop and maintain regional transportation data inclusive of all modes of travel from road and rail to pedestrian infrastructure as well as the regulatory limitations, usage amounts, and events affecting the transportation network.
- 3. Collect, map and interpret data on populations, with a focus on identifying inequalities.
- 4. Enter demographic, economic, environmental, stormwater, drainage, and traffic data into the GIS as needed to provide increased abilities for organization, analysis, and retrieval.
- 5. Identify and map affordable housing, Priority Development Areas (PDAs), and 43D Priority Development Sites.
- 6. Incorporate data collected in the field (drone photos, traffic count data, etc.) into GIS.
- 7. Provide GIS, Global Positioning System, and technical assistance to regional communities.
- 8. Review, select, and purchase additional software and hardware as needed.
- 9. 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 long range transportation plans, special studies, road inventories, roadway functional classifications, crash location analyses, travel demand models, and transit routes; etc.

PRODUCTS:

Base maps; Web applications to serve data and maps to public stakeholders; GIS layers that can be utilized for tasks including travel demand modeling, traffic counting program, management systems, road inventory; PDAs and PPAs maps; 43D Priority Development Sites maps; Crash data processing; Transit routing; Vulnerable population maps; Environmentally sensitive areas; Data models for advanced geoprocessing; and Traffic signal and intersection inventory.

SCHEDULE:

To be conducted throughout FFY 2023.

FHWA PL	MassDOT			TOTAL
\$69,600	\$17,400			\$87,000

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

OBJECTIVE:

Congestion Management Process (CMP)

To continue to implement a congestion management process. Considered an ongoing effort, staff 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 2020 Old Colony LRTP.

Pavement Management System (PMS)

To continue to implement a pavement management system on a continual basis in keeping with objective driven, performance-based planning. Staff will implement a planned update of its Pavement Management System to reflect changes in ease of data collection, data condition input, and cloud-based technology for collecting, storing, and reporting on pavement surface conditions and recommendations. Staff will utilize the updated PMS for informing the LRTP regarding the pavement needs of federal-aid roads, including existing conditions, potential future conditions, and potential costs. Staff will continue to collect and analyze road surface data on federal aid eligible roadways and update the PMS database on an ongoing basis. Staff will also continue to assist and provide technical assistance to local communities interested in developing a local Pavement Management Program. Staff will continue research in updating and/ or replacing the existing the pavement management system software.

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 roads, reducing transit crashes, and reducing crashes and injuries involving vulnerable road users (reducing pedestrians, bicyclists, and those who use personal conveyances). Staff will incorporate the Safe System Approach encompassing required roadway safety interventions that work toward achieving the goal of zero fatalities. The Safe System Approach incorporates the following principles: Death and Serious Injuries are Unacceptable, Humans Make Mistakes, Humans Are Vulnerable, Responsibility is Shared, Safety is Proactive, and Redundancy is Crucial.

Recommended actions include providing information for selecting and implementing effective safety strategies and projects. The safety management system incorporates roadway, human, and vehicle safety elements. Considered an ongoing effort, staff 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 regarding safety. This includes identifying high hazard locations by evaluating intersections using Equivalent to Property Damage Only (EPDO) and crash rate methodologies; monitoring crashes and injuries on roadway 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 Travel Demand Model by using latest version of TransCAD and other supplemental tools and software, and provide assistance in the development of the Statewide Model;

Continue refinement, calibration, development, maintenance, and application of the Old Colony Regional Travel Demand Model used in the development of the Long Range Transportation Plan; and 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 build out, upcoming 20 years in the Old Colony region. The transportation model enables forecasting of traffic impacts caused by population and economic growth, identifies 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. Incorporate MassDOT Socio-economic data projection efforts.

Development of OCPC Travel Demand Model become mainly through in-house effort and collaboration with other regional modeling agencies. The model will also be used to assist in identifying future problem areas and in the development of strategies for the ongoing CMP. Staff will utilize the model in testing of the transit alternatives as part of the refinement of the LRTP and transit studies as appropriate. Staff will continue to work with the MassDOT in developing the statewide travel demand model as needed. Model calibration process will follow FHWA modeling and simulation guidance and other various resources of best practice. Staff continue to expand modeling application and functionalities to assist regional transportation studies.

PREVIOUS WORK:

Congestion Management Process

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; Data collection, consisting of numerous travel time runs on roads identified as having existing congestion; and Analyzation of Brockton Area Transit's route ridership data. Staff also identified and analyzed the park and ride lots and commuter rail lots in the region and identified problematic bottleneck areas to be studied.

Pavement Management System

Maintenance of a PMS on the federal aid eligible roadways miles in the region (approximately 642 miles); Report On Roadway Condition; Road Inventory Update; Technical assistance to 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; and Revisions to the PMS database to reflect changes in road classifications, and cost of materials for developing budgets.

Safety Management System

Participation in development of Highway Safety Improvement Program; Safety analyses as part of Transportation Evaluation Criteria application; Crash Rate processing; Annual inventory of EPDO values for intersections on the federalOaid eligible roadway network; Road Safety Audits (RSAs); and Studies for communities warranting specific attention to safety.

Travel Demand Modeling

The Regional Transportation Model was used as an analytical tool during the development of the LRTP. Staff utilized a regional traffic simulation model that encompasses every community in the region. 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

- 1. 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; and Develop and monitor a system of performance measures and thresholds.
- 3. Continue to identify areas of congestion, and measure identified congested areas 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, utilize INRIX. RITUS platforms, 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, 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 bicycle and pedestrian connectivity gaps.
- 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.

Pavement Management System

- 1. Continue to use the pavement management software to maintain and update the Old Colony Pavement Management Program as needed. Pavement management data collection and analyses will be used to develop estimated 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 LRTP. Staff 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. Pavement management tasks include:
 - Conducting windshield surveys to determine severity and extent of pavement distresses.
 - Developing conditions analysis and recommended repairs and costs, and reports to municipalities.
 - Developing a system of performance measures and thresholds.
 - Continuing to implement update of PMS Software.
- 2. Provide technical assistance to member communities interested in the Pavement Management Program.
- 3. Meet with MassDOT, RPAs, and committees to coordinate regional and statewide efforts and to compare programs and strategies for improvement of data collection, analysis, and assistance to local communities.

Safety Management System

- 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. Calculation of crash rates (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. Produce a list of locations, including both intersections and corridors, with elevated EPDO, based on MassDOT criteria to develop a list of unsafe hazardous locations from a regional perspective. Maintain an inventory of EPDO values for intersections on the federal-aid eligible roadway network.
- 3. Conduct RSAs and develop both site specific and generalized recommendations 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.
- 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, 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 and develop both general and corridor specific recommendations for addressing safety on selected corridors, as well as incorporating the Safe System Approach encompassing required roadway safety interventions that work toward achieving the goal of zero fatalities.
- 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. 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.
 - Continuing to identify, evaluate, and select strategies that address safety.
 - Updating status of performance measures at locations where safety improvements have been implemented.

Travel Demand Modeling

- 1. The products developed from the model, i.e., the base 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 LRTP and TIP.
- 2. Continue to refine and update the Old Colony travel demand model to include the block group demographic data from U.S. Census. This information will be used to calibrate the.
- 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 Long-Range Transportation Plan and other transportation or corridor.
- 6. Analyze forecast information to identify deficiencies as required for the LRTP and Air Quality Conformity. Evaluate improvement strategies. Incorporate findings in the LRTP as appropriate.
- 7. Assist MassDOT in the preparation of statewide modeling efforts as needed. Integrate the U.S. Census Block Group data and MassDOT Road Inventories Files into TransCAD model for use with the statewide travel demand model.
- 8. 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.
- 9. Collect data on needs 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.

PRODUCTS:

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; and Measures to reduce greenhouse gas emissions, VMT, and congestion.

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; Development of specificsafety 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; and 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; and 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 conducted throughout FFY 2023. Annual Reports, Road Safety Audits, and analyses to be completed by end of September 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$84,800	\$21,200			\$106,000

TASK 3000 - SHORT- AND LONG-RANGE TRANSPORTATION PLANNING ACTIVITIES

Task 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 seniors and individuals with disabilities.

Task 3100 - Regional Multimodal Transportation Planning and Studies
Task 3200 - Local Highway Transportation Technical Assistance
Task 3300 - Route 18 Corridor Study (Bridgewater & East Bridgewater)
Task 3400 - 2024 Long Range Transportation Plan (LRTP)
Task 3400 - Coordinated Human Services Transportation (CHSTP) Plan

Task 3600 - Performance Based Planning and Management

TASK 3100 - REGIONAL MULTIMODAL TRANSPORTATION PLANNING AND STUDIES

OBJECTIVE:

To provide planning services for highway, bicycle, pedestrian, transit, and movement of goods in the region designed to address immediate traffic and safety problems identified in the LRTP. The LRTP identifies deficiencies in the region's transportation network. The deficiencies shown in the plan include deficient bridges, hazardous intersections, congested highway corridors, extreme weather events, and overcrowded transit facilities. Where projects have not been developed to correct these deficiencies, studies and intermodal planning are necessary to be undertaken to evaluate each problem in more extensive 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.

To conduct traffic studies and intermodal planning to assist member communities and agencies in developing the appropriate solutions for any identified local transportation deficiencies. Staff anticipates undertaking traffic studies at selected intersections and along selected roadway corridors identified in the Old Colony LRTP or as part of the CMP, as warranting further study.

To review Statewide Modal Plans connections and coordinate and connect planning efforts with such plans where appropriate (<u>https://www.mass.gov/statewide-plans</u>).

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 28 Corridor Study; Route 27 Corridor Study; Route 18 Corridor Study; Route 58 Corridor Study; Route 106 Corridor Study; Route 123 Corridor Study; 2020 Route 139 Corridor Study; 2020 Main Street Brockton 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; and Avon and Halifax Stormwater Management System Mapping and Database.

PROCEDURES:

- 1. The following is an illustrative list of potential projects that could be undertaken as part of this task:
 - Bicycle and Pedestrian Planning, Levels of Service, Technical Assistance, and Education
 - Brockton Area Transit Planning and Technical Assistance
 - City/ town center circulation studies

- Climate change and extreme weather events adaptation strategies to enable the region to implement improvements
- Collection and mapping of data on bus stops, routes, and ridership
- Complete Streets Technical Assistance
- Corridor travel time analysis
- Crash and Safety Studies
- Follow-up studies to the Congestion, Land Use, Pavement, and Safety Management Systems
- Freight Planning and Related Analyses
- Geographic analyses and attribute analyses of drainage facilities that includes capacity and adequacy structures regarding extreme weather events and climate change
- Identification and demarcation of roadway drainage and stormwater management systems
- Greenhouse Gas (GHG) Reduction analysis and technical assistance
- Identification of transportation connectivity gaps in accessing essential services
- Intermodal Connector Analysis
- Intersection and corridor modeling and simulation analysis
- Inventory of critical infrastructure vulnerable to extreme weather events and climate change
- Inventory of gaps within the regional bicycle and pedestrian network
- Meetings with stakeholders representing the freight community, to understand inefficiencies
- Origin and destination analysis
- Public Health Assessments
- Regional Casino/ Gaming Impact Study
- Roundabout analysis
- Safe Routes to School (SRTS) Technical Assistance
- Site impact analysis
- Traffic Calming alternatives analysis
- Transit Prioritization planning analysis
- Transportation Equity analysis
- Travel time contour analysis
- Trip Generation Study
- Various corridor-wide traffic studies and Sub-area Traffic Studies
- 2. 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. Staff will collaborate with community officials, MassDOT, and MassDOT District 5, and stakeholders to develop a scope of service for the proposed study.
- 3. Potential corridor studies have been identified in the UPWP Universe of Projects; however, with the completion of the High Priority Corridor Study Screening Assessment, (UPWP FFY 2022), the screening of potential corridors for study has been expanded. The High Priority Corridor Study Screening Assessment identified and ranked major corridors in the region for potential study. The evaluation process included use of a matrix of evaluation criteria. Potential corridor studies were evaluated using number of categories, (Safety Conditions, Congested Conditions, Multimodal Significance, Regional Significance, Regional Equity, and Implementation Potential). For each corridor study, staff will prepare a draft report, which outlines the Study's findings and recommendations. The report will then

be circulated for review and comment. 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 LRTP.

- 5. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning; and 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; Develop bikeability measures and/ or quality of service metrics; and Coordinate activities within the MassDOT's bicycle and pedestrian planning efforts.

PRODUCTS:

Bicycle and Pedestrian Planning and Technical Assistance; Inventory of gaps within the regional bicycle network; Brockton Area Transit Planning and Technical Assistance; 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; Safe Routes to School Technical Assistance; Bicycle and Pedestrian Planning, Levels of Service and Education; Participation in updates to Regional Intelligent Transportation System Architectures; 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; Bikeability measures and/ or quality of service metrics; and Climate Change Adaptation.

SCHEDULE:

To be conducted throughout FFY 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$73,600	\$18,400			\$92,000

TASK 3200 - LOCAL 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 communities, regional authorities, state agencies, and federal agencies, of detail technical data, analyses, and reports that will assist in improving the region's transportation infrastructure.

PREVIOUS WORK:

Heavy Commercial Vehicle Exclusion (HCVE) Analysis for Multiple Roadways, Abington; Summer Street Traffic Study, Abington; Hancock Street at Chestnut Street Road Safety Audit, Abington; Heavy Commercial Vehicle Exclusion (HCVE) for West Spring Street, Avon; Traffic Safety Study of West Main Street at South Street and School Street, Avon; Bedford Street (Route 18) at Grove Street Traffic Study, Bridgewater; Quincy Street Corridor Intersections Safety and Congestion Study, Brockton; Route 123/ Linwood/ Lorraine/ VA Hospital/ and Manley Streets Intersection analysis in Brockton; Effectiveness of 25 MPH Speed Limits (Adoption of Chapter 90 Section 17C) on Multiple Roadways, Duxbury; Powder Point Bridge Traffic, Duxbury; East Street Traffic Study, East Bridgewater; Pedestrian Counts Central Street, Easton; Washington Street (Route 138) and Elm Street Intersection Study in Easton; Route 138 and Route 106 Intersection Study in Easton; Technical Analysis of Implementation of Left Turn Lanes on Plymouth Street (Route 106), Halifax; Analysis of Crosswalks on Route 106, Halifax; Woodland Drive Neighborhood Traffic Study, Hanover; Mill Street at Hanover Mall Drive/ YMCA Drive Study, Hanover; Safety Analysis of Route 58 Curvature and Alignment, Hanson; East Washington Street Speed Study, Hanson; Identification of Thickly Settled and Business District Areas, Kingston; Green Street Heavy Commercial Vehicle Exclusion Analysis, Kingston; Kingston Historic District Traffic Study; Pembroke Center Traffic Study; Chapel Street Traffic Study, Pembroke; Clark Road/ Beaver Damn Road Traffic Study, Plymouth; Carver Road at Montgomery Drive Traffic Study, Plymouth; Long Pond Road Speed Study in Plymouth; Main Street Traffic Study, Plympton; Speed Safety Zones and HCVE Zones Analysis, Plympton; Turnpike Street Speed Limits Study, Stoughton; Island Street Traffic Study and Road Safety Audit, Stoughton; Canton Street (Route 27) at School Street and Summer Street, Stoughton; Park Street (Route 27) at Turnpike Street Traffic Study, Stoughton; Traffic Study for Walnut Street, Howard Street, and Prospect Street, West Bridgewater; River Street Traffic Study, West Bridgewater; Traffic Study of Pleasant Street, South Avenue, and Franklin Street, Whitman;

PROCEDURES:

1. Provide technical planning analysis assistance to communities and MassDOT on highway, pedestrian, and bicycle transportation planning related matters in the form of meetings, data, analyses, and reports. The 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; and Other short-range studies to determine the need for traffic signals, traffic signs, traffic markings and the use of one-way streets.

PRODUCTS:

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.

SCHEDULE:

To be conducted throughout the program year.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$69,600	\$17,400			\$87,000

TASK 3300 - ROUTE 18 CORRIDOR STUDY (BRIDGEWATER & EAST BRIDGEWATER)

OBJECTIVE:

To study the Route 18 Corridor, approximately 9 miles, in the towns of Bridgewater and East Bridgewater. To develop short-term and long-term recommendations and strategies that focus on transportation equity, improved circulation, improved mobility, reduced congestion, reduced collisions, improvements in air quality, traffic flow efficiency, and improved safety for all transportation modes, including bicycle, pedestrian, and transit accommodation. The corridor study area includes Route 18 from the Whitman town line with East Bridgewater and ends at the Bridgewater/Middleborough town line. Staff will review volume to capacity ratios, levels-of-service, crash analyses, bus routes and transit access, and include public participation as part of the process. The Route 18 Corridor Study will align with industry standards based on Federal and State guidelines and practices, with the consideration of local ordinance and statutes. The study will determine system needs and identify operational deficiencies and will coordinate improvements that support regional objectives, adjacent land use, and future land use development. The study will consolidate and formalize driveway access, improve intersection design, improve air quality, and reduce emissions. Suggested further evaluation, such as intersection Road Safety Audits, Site Impact Analysis, housing demand and supply analysis, before and after analysis, Origin and Destination survey etc. will be discussed.

PREVIOUS WORK:

Route 18 Corridor Study for Abington, Bridgewater, Plymouth, and East Bridgewater in 2009. High Priority Corridor Assessment; Congestion Management Process; Regional Traffic Count Program; Level of Service Analyses; Regional Corridor Studies; Access Management Plan; Long Range 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 123 Corridor Study; and Route 28 Corridor Study. Road Safety Audit at Bridgewater and Central Square& Bedford Street (Route 28/Route 18) at Grover Street, Bridgewater (Prepared by McMahon Associates, Inc); Road Safety Audit at Bedford Street (Route 18) at West Street (Route 106) and East Street, East Bridgewater (Prepared by Toole Design); Route 18 (Bedford Street) from Whitman Street to Central Square, East Bridgewater (Prepared by BETA Group, Inc)

PROCEDURES:

1. Documentation of Existing Conditions: Gather and compile existing transportation data along Route 18 within the study area. Data, such as, average daily traffic, peak period volumes and levels-ofservice, truck, and heavy vehicle volumes, MassDOT truck exclusions, MassDOT speed permits, traffic signal timing and phasing designs/plans, crashes rates, trip generators, land uses, bus routes (transit and passenger rail), will be compiled. The data and analyses compiled for the existing conditions will be assessed to document the deficiencies along the corridor and vicinity area, 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. The study will consider public health outcomes as part of ongoing planning and performance measures planning. Consider the anticipated housing needs such as transit oriented development and affordable housing, and provide suggestions for recommendations if applicable. The process shall utilize the CMP, SMS, LUMS, the 2020 LRTP, 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. Conveyal, RITIS, Google Traffic, GeoDOT, IMPACT and other resources will be utilized to verify and support analyses. Photos of key locations will be recorded by camera or Small Unmanned Aircraft (Drone) will be deployed as appropriate. Information on Land use, business, and landmark locations will be gathered and

compiled. Comprehensive existing condition map layers including but not limited to network, land use, business, physical environments etc., by using GIS software will be compiled and developed.

- 2. Short-Term and Long-Term Improvements Development: Conduct traffic modeling and simulation analysis with proposed alternatives for mitigation or congestion alleviation developed specific to problems identified in the critical areas. Provide consideration for potential bicycle and pedestrian improvements to ready the project recommendations for compliance with the Healthy Transportation Policy Directive and alignment with municipal future land use and transportation plans. 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 Transportation Systems Management Operations (TSMO) and maintenance, the incidental and routine causes of congestion, Complete Streets, and access management. The promotion of efficient system management and operations is one of the Bipartisan Infrastructure Law (BIL) planning factors seeking to integrate this concept in the planning process. Consider project improvement air quality impact and environmental impact.
- 3. Prepare Conclusions and Recommendations: The product of this Task is a report that provides a framework for the alleviation of traffic congestion and the improvement of safety throughout the corridor, and to provide the necessary information for stakeholders to move projects forward in the project funding and implementation phases. OCPC will prepare a final report, which will include an outline for implementation and identifies potential funding sources. Short-term and long-term recommendations will be discussed with MassDOT and including projects in the region's TIPs, LRTPs, and beyond.
- 4. Public Participation: Staff will be presenting at public meetings and workshops, developing surveys, and coordinating with the towns of Bridgewater and East Bridgewater, Brockton Area Transit Authorities (BAT), Old Colony Joint Transportation Committee, Old Colony Planning Council, Mass DOT, and adjacent RPAs as applicable. Staff will obtain stakeholder input from citizens, community-based organizations, business community, special interest groups, state, 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 Route 18 Corridor Transportation Planning Study Report, which will include conclusions and recommendations. Included in study will be data, congestion and safety analysis, traffic flow and safety improvement recommendations (intersection geometric improvement, signal upgrade, bicycle and pedestrian accommodation, transit planning improvement, access management plan, location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Initiation Form Data for MaPIT, as appropriate.

SCHEDULE:

To be conducted throughout the year and completed by the end of September 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$76,800	\$19,200			\$96,000

TASK 3400 - 2024 LONG RANGE TRANSPORTATION PLAN (LRTP)

OBJECTIVE:

To amend the 2020 Long Range Transportation Plan (LRTP) as needed and develop the 2024 Long Range Transportation Plan (LRTP). The LRTP identifies transportation issues/concerns and problems that will require improvements now or are expected to need additional attention in the future, and outline possible courses of action designed to facilitate these improvements. The LRTP will be submitted to the Old Colony JTC, local officials, MassDOT, FHWA, FTA, and the public for review and comments, and the Old Colony MPO for endorsement. The LRTP will be consistent with regional growth policies, public investment decisions, the Bipartisan Infrastructure Law (BIL), the amended Clean Air Act (CAA), Americans with Disabilities Act, and state air quality regulations. The LRTP will include emphasis on the areas of safety and traffic congestion management.

PREVIOUS WORK:

2020 Long Range Transportation Plan, surveys, public participation and consultation, and preparation of analyses and draft chapters.

PROCEDURES:

- 1. Develop the 2024 Long Range Transportation Plan that will be consistent with State Transportation Plans.
 - Review and Refine Regional Goals, Policies and Objectives.
 - Review and update Regional Profile and Socio-Economic Data.
 - Review and refine the population, household, and employment forecasts.
 - Develop land use component of the plan and include recommendations.
 - Refine plan based on improved modeling efforts and Journey-to-Work data and other new data inputs.
 - Develop regional highway and regional transit sections. This shall include identifying existing and future needs. Evaluate current and future demand, identify deficiencies, and evaluate alternative improvement strategies and recommendations for all facilities.
 - Assess regional congestion and identify priority locations for in-depth study in the FFY 2020 Unified Planning Work Program.
 - Develop bicycle and pedestrian section.
 - Develop freight and goods mobility section.
 - Develop performance measures and thresholds section.
 - Develop short and long-range transportation improvement and incorporate transportation evaluation criteria.
 - Review State Transportation Plans and include goals, policies, and procedures as appropriate.
 - Develop recommendations of the plan in relation to the recommended strategies in the State Implementation Plan and State Transportation Plan.
 - Develop financial section and provide cost estimates for short and long-range recommendations.
- 2. Include recommendations from other transportation studies conducted during the previous years; including but not limited to corridor studies; transit studies; OCPC's Regional Transportation and Land Use Policy Plan; Kingston, Plymouth and Plympton Transportation Induced Growth Impact Study; and Brockton Central Area Traffic Study.
- 3. Develop and refine the financial section of the plan. Each project and/ or program appearing in the transportation plan will have an identified source of funding that can reasonably be assumed available

for implementation. Staff will develop cost estimates for projects appearing in the long-range element of the plan. Additionally, the financial section will define projects that are designed to preserve the existing transportation infrastructure. Staff will also examine in detail the following activities required to produce the Long Range Transportation Plan:

- Assessment of current financial condition.
- Projections of future financial requirements for operation and maintenance.
- Assessment of ability to meet future financial requirements, based on analysis of existing revenue sources.
- Identification of potential revenue sources to meet possible future shortfalls, including innovative financing methodologies.
- Analyses of existing and future revenue sources, to include long-term availability and sensitivity to external factors.
- Forecasts of baseline transportation system costs for use in making service and investment decisions.
- 4. Combine revised working papers into a comprehensive Long Range Transportation Plan; Conduct public outreach and meetings in accordance to the Public Participation Plan; and Distribute plan to federal and state agencies for review and comment.
- 5. Public Participation: Conduct public meetings, workshops, surveys; Coordinate with the Old Colony Joint Transportation Committee and Old Colony Planning Council, which will assist in obtaining input from citizens, business community, special interest groups, and local officials on the transportation issues facing the region; and Provide expansive and inclusive public outreach will be in accordance with the Public Participation Plan.

PRODUCTS:

2024 Long Range Transportation Plan.

SCHEDULE:

To be conducted throughout the year and completed by September 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$100,000	\$25,000			\$125,000

TASK 3500 - COORDINATED HUMAN SERVICES TRANSPORTATION (CHSTP) PLAN

OBJECTIVE:

To prepare the 2023 Coordinated Public Transit - Human Service Transportation Plan (CHSTP) that will identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, and provide strategies for meeting these needs, and prioritize transportation services for funding and implementation.

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.

PREVIOUS WORK:

<u>BAT</u> - Aging in Place Studies; Comprehensive Regional Transit Plan; Fare Elasticity and Equity Study; Fixed Route Ridership Analyses; Service Change Equity Analysis; 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.

<u>GATRA</u> - Ridership analysis; Human Services Coordination Plan.

<u>Other</u> – Assistance to Communities, COAs and other public and private agencies with the Section 5310, 5317, and MAP programs; Transit Directories; RTA Fare Comparison; Queset Commons Transit Study, Rockland Transit Study; Community Transit Grant solicitations, reviews, rankings, and related coordination.

2019 Coordinated Public Transit - Human Service Transportation Plan (CHSTP) Senior and Individuals with Disabilities Neighborhood Sourcebook; Technical assistance to public and private non-profit organizations in preparing Federal Transit Administration applications for Section 5310, and Mobility Assistance; Participation in Regional Coordinating Councils; Regional map of the OCPC area showing the locations with high density of senior population (60+); Compilation of US Census data of senior population; BAT Route Ridership Analysis; BAT Title VI Study; Brockton Area Transit Fare Elasticity Study; Air quality analysis for CMAQ proposals; Brockton -Taunton Fixed Route Options Study; Abington Transportation Study.

PROCEDURES:

- 1. Develop and approve that CHSTP through a process that includes participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers and other members of the public utilizing transportation services
- 2. Acquire and review paratransit data from BAT and GATRA.
- 3. Identify needs and gaps in human transportation services for seniors and individuals with disabilities. Additionally, assess medical and aging in place transportation needs.
- 4. Coordinate plan development with Area Agency on Aging, BAT, GATRA, SSCAC, Regional Coordinating Councils, and Councils on Aging.
- 5. Review past Community Transit Grant Program projects to assist with determination regional needs.

- 6. Provide technical assistance to public and private non-profit agencies in the development, maintenance, and expansion of senior and/ or individuals with disabilities services in the region.
- 7. Consider applicability of public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
- 8. Develop Draft CHSTP and provide opportunity for public review and comment. Following public review and comment period, prepare Final CHSTP.

PRODUCTS:

Coordinated Public Transit - Human Service Coordination Plan; and Technical assistance to BAT, GATRA, MBTA, SSCAC, and to area communities and public providers of transportation entities, as needed.

SCHEDULE:

To be conducted throughout the year and completed by September 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$47,200	\$11,800			\$59,000

TASK 3600 - PERFORMANCE BASED PLANNING AND MANAGEMENT

The cornerstone of the Federal transportation program transformation is the implementation of a performance-based outcome program. States and regions invest in projects to achieve 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 Long-Range Transportation Plan. Projects and service implemented through the TIP will help to achieve the performance targets for Safety (PM1), Bridge and Pavement Condition (PM2), System Performance Measures (PM3), Public Transportation Agency Safety Plan (PTASP), and Transit Asset Management State of Good Repair.

Performance based planning and 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. The BIL supports and continues an overall performance management approach, within which states invest resources in projects that collectively will make progress toward national goals.

The national planning factors include:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- 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;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

PREVIOUS WORK:

MPO coordination, review and adoption of Statewide Performance Measures and Targets (PM1, PM2, and PM3, and Performance Measures and Targets for Public Transportation Agency Safety Plan Transit Asset Management (BAT); Long Range 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 MEPA 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 performance measures developed and included in the 2020 Long Range Transportation Plan, and review and include in 2024 Long Range 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 (e.g. RITIS Platform with INRIX Data, and transit automated passenger counter (APC) and Automatic Vehicle Location (AVL)) 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. Consider utilizing INVEST TOOL Projects will also be potentially evaluated on their sustainability through the FHWA web-based tool known as Infrastructure Voluntary Evaluation Sustainability Tool. Although voluntary, this information will be useful to determine the long-term effectiveness of improvement projects.

PRODUCTS:

Development and refinement of Performance Measures and Targets for the Old Colony Region; Review and comment on traffic studies submitted to member municipalities by developers under the Massachusetts Environmental Protection Agency; and Public Health Assessments. Performance measurement progress will be documented in the 2024-2050 Old Colony LRTP, 2024-2028 Old Colony TIP, contained within relevant 3C planning documents.

SCHEDULE:

To be conducted throughout the year and completed by the end of September 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$31,200	\$7,800			\$39,000

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

While 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.

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

TASK 4100 - TRANSIT TECHNICAL ASSISTANCE, AND SENIOR 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 to provide an accurate basis for future forecasting, planning and program analysis, and project evaluation.

To maintain and update the 2019 Coordinated Public Transit - Human Service Transportation Plan.

To ensure the accessibility to public transit services for seniors and individuals with disabilities; Attend meetings of the senior and disability committees; 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 provide Community Transit Grant support, technical assistance, related coordination.

To maintain and operate a Congestion Management Process.

PREVIOUS WORK:

<u>BAT</u> - Aging in Place Studies; Comprehensive Regional Transit Plan (CRTP); Fare Elasticity and Equity Study; Fixed Route Ridership Analyses; Service Change Equity Analysis; 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; Brockton -Taunton Fixed Route Options Study; Regional Coordinating Committee participation; and Human Services Coordination Plans.

<u>GATRA</u> - Ridership analysis; Human Services Coordination Plan.

<u>Other</u> - 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; Senior and Individuals with Disabilities Neighborhood Sourcebook; Technical assistance to public and private non-profit organizations in preparing Federal Transit Administration applications for Section 5310, and Mobility Assistance; Regional map showing the locations with high density of senior population (60+); Compilation of U.S Census data of senior population; Air quality analysis for CMAQ proposals; Abington Transportation Study; Human Services Coordination Plan; and Community Transit Grant support, technical assistance, and related coordination.

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 and in assessing and evaluating routes; Title VI update; Fare change and service change equity analyses; Schedule and fare changes; Assessment of human and capital needs; Provide and improve BAT's analytical and forecasting capabilities; Assist BAT with the Americans with Disabilities Act Plan update; Title VI Trend Analysis; and Service Area Demographic Trend Profiles.
- 2. Provide technical planning assistance to area communities outside the transit authority service areas, 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; and Census and journey-to-work technical assistance, etc.

- 3. Prepare information as needed for FTA reports, State Implementation Plan submissions, MassDOT reports, and other required reporting.
- 4. Provide transit inputs into regional transit and transportation modeling efforts, and conduct air quality analysis as needed for transit projects.
- 5. Continue to aid and guidance to applicants for Community Transit Grant Program in preparing applications and coordinating service.
- 6. Provide technical assistance to public and private non-profit agencies in the development, maintenance, and expansion of senior and/ or individuals with disabilities services in the region.
- 7. Continue to provide support for the replacement of paratransit vehicles.
- 8. Develop updates for the Coordinated Public Transit Human Service Coordination Plan in coordination with communities, transit providers, and regional coordination committees, as appropriate.
- 9. Operate and maintain a Congestion Management Process.
- 10. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
- 11. Collection and mapping of data on bus stops, routes, and ridership.
- 12. Attend and participate at Boston Region Transit Working Group meetings and similar coordination and engagement programs.

PRODUCTS:

OCPC staff to: Provide technical assistance to BAT, GATRA, MBTA, SSCAC, and to area communities as needed; Develop information for compliance with federal and state requirements for the TIP; 2019 Coordinated Public Transit - Human Service Coordination Plan Updates; Community Transit Grant Program support and technical assistance; and Travel Demand Model, and LRTP updates, as appropriate.

SCHEDULE:

To be conducted throughout FFY 2023.

FUNDING:

FHWA PL	MassDOT			TOTAL
\$36,000	\$9,000			\$45,000

TASK 4200 - BAT PLANNING, TECHNICAL ASSISTANCE, AND STUDIES

OBJECTIVE:

To provide transit-planning services, prepare technical studies, comprehensive service assessments, and aid 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 (CRTP); BAT Fixed-Route Ridership analyses; Brockton Area Transit Farebox Analyses; Title VI Reports; BAT Service Change Equity Study: BAT Fare Equity and 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; Brockton-Taunton Fixed Route Options Study; and Human Services Coordination Plan.

PROCEDURES:

- Develop a detail study(s) design/ estimated work time effort and cost for planning tasks requested by Brockton Area Transit. 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; Service Change Study; Title VI Report; Title VI Trend Analysis; Transfer Study; Demographic/ Urban Area Analysis; Manley Street Industrial Park Route Analyses; Technical assistance to BAT, as needed, on the Intermodal Facility; Avon/ Stoughton Route extension planning; Fare Modeling Study; Massasoit Study; Comprehensive Regional Transit Plan (CRTP); Planning assistance and alternatives analyses as identified in the CRTP; and Stoughton Fixed Route Study.
- 2. Prepare analyses, reports, maps, charts, as appropriate.
- 3. Coordinate with BAT on the identification and prioritization of potentially needed rider amenities.
- 4. Undertake planning, studies, and comprehensive service assessments in accordance with study requirements and available funding.

PRODUCTS:

OCPC staff to undertake and prepare studies such as: Fixed Route Evaluation Study; Fixed Route Ridership Report; Fare Change Equity Study; Service Change Equity Study; South Shore Medical Transportation Options Study; Avon/ Stoughton Route Extension Planning Study; Bridgewater State University Transit Route Expansion Study; Massasoit Reverse Commute Study; BAT Comprehensive Regional Transit Plan (CRTP); and Provision of planning assistance and alternatives analyses as identified in the CRTP.

SCHEDULE:

To be conducted throughout FFY 2023. Schedules and scopes are contract dependent and will vary throughout FFY 2023.

FUNDING:

FHWA PL	MassDOT	BAT*		TOTAL
		\$25,000		\$25,000

*The source of funds is contract specific and may be either federal, state or local funds.

TRANSPORTATION PLANNING STAFF

The following OCPC staff members will be working on the FFY 2023 Unified Planning Work Program. The expected Task Areas are also provided. The percent effort represents the approximate time devoted to the FFY 2023 UPWP.

Name	Task Areas	% Effort Estimates
Shawn Bailey,	1000, 2000, 3000, 4000	95%
Senior Transportation Planner Raymond Guarino,		(1,436 Hours) 100%
Principal Transportation Planner	1000, 2000, 3000	(1,596 Hours)
Charles Kilmer, AICP, Assistant Director &	1000, 2000, 3000, 4000	100%
Transportation Program Manager	1000, 2000, 0000, 1000	(1,596 Hours)
Guoqiang Li, PTP, Principal Transportation Planner	1000, 2000, 3000	100% (1,596 Hours)
William McNulty, PTP, Principal Transportation Planner	1000, 2000, 3000, 4000	100% (1,596 Hours)
Kyle Mowatt, Senior Transportation Planner	1000, 2000, 3000, 4000	95% (1,516 Hours)
Vacant, Senior Transportation Planner	1000, 2000, 3000, 4000	100% (1,596 Hours)
Andrew Vidal, GIS Manager	2000, 3000, 4000	95% (1,436 Hours)

 Table 3

 Transportation Planning Staff, Task Areas, and % Effort Estimates

FFY 2023 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP) Table 4 Estimated FFY 2023 Budget

TASK DESCRIPTION	FHWA PL	Ma	ssDOT NFA		BAT								TOTAL
TASK													
1000 - Management & Support of Planning and Certification Act	ivities												
1100 3C Program Support	\$ 60,350	\$	15,087	\$	-	\$	-	\$	-	\$	-	\$	75,437
1200 Unified Planning Work Program (UPWP)	\$ 14,400		3,600	\$	-	\$	-	\$	-	\$	-	\$	18,000
1300 Public Participation Program (PPP)	\$ 53,600		13,400		-	\$	-	\$	-	\$	-	\$	67,000
1400 Transportation Improvement Program (TIP)	\$ 44,000		11,000	\$	-	\$	-	\$	-	\$	-	\$	55,000
1500 Title VI and Environmental Justice (EJ)	\$ 36,000	\$	9,000	\$	-	\$	-	\$	-	\$	-	\$	45,000
Element 1000 Subtotals	\$ 208,350	\$	52,087	\$	-	\$	-	\$	-	\$	-	\$	260,437
TASK													
2000 - Data Reconnaissance, Acquisition, and Analysis Activities													
2100 Demographic Surveillance & Road Inventory Update	\$ 24,000		6,000	\$	-	\$	-	\$	-	\$	-	\$	30,000
2200 Multi-Modal Data Surveillance and System Monitoring	\$ 81,600		20,400		-	\$	-	\$	-	\$	-	\$	102,000
2300 System Planning and Resource Activities	\$ 54,400	\$	13,600	\$	-	\$	-	\$	-	\$	-	\$	68,000
2400 Geographic Information System (GIS)	\$ 69,600	\$	17,400	\$	-	\$	-	\$	-	\$	-	\$	87,000
2500 Management Systems and Travel Demand Modeling	\$ 84,800	\$	21,200	\$	-	\$	-	\$	-	\$	-	\$	106,000
						\$	-						
Element 2000 Subtotals	\$ 314,400	\$	78,600	\$	-	\$	-	\$	-	\$	-	\$	393,000
TASK													
3000 - Short and Long Range Transportation Planning Activities	+ == ===												
3100 Regional Multimodal Transportation Planning and Studies	\$ 73,600		18,400		-	\$	-	\$	-	\$	-	\$	92,000
3200 Local Highway Transportation Technical Assistance (LTA)	\$ 69,600		17,400		-	\$	-	\$	-	\$	-	\$	87,000
3300 Route 18 Corridor Study (Bridgewater & East Bridgewater)	\$ 76,800		19,200		-	\$	-	\$	-	\$	-	\$	96,000
3400 2024 Long Range Transportation Plan (LRTP)	\$ 100,000		25,000		-	\$	-	\$	-	\$	-	\$	125,000
3500 Coordinated Human Services Transportation (CHSTP) Plan	\$ 47,200		11,800		-	\$	-	\$	-	\$	-	\$	59,000
3600 Performance Based Planning	\$ 31,200	Ş	7,800	\$	-	\$	-	\$	-	\$	-	\$	39,000
Element 3000 Subtotals	\$ 398,400	\$	99,600	\$	-	\$	-	\$	-	\$	-	\$	498,000
TASK													
4000 - Other Transportation Technical Activities		1											
4100 Transit Technical Assistance and Coordination, and Seniors and Individuals with Disabilities Support	\$ 36,000	\$	9,000	\$	-	\$	-	\$	-	\$	-	\$	45,000
4200 BAT Planning, Technical Assistance, and Studies	\$-	\$	_	ć	25,000	\$	_	\$	_	\$	-	\$	25,000
	- ب	ç	-	Ļ	23,000	ç		ç	-	ç	-	ç	23,000
Flamout 4000 Cables 1	¢ 25.000		0.000	<u> </u>	25.000			ć					70.000
Element 4000 Subtotals	Ş 36,000	Ş	9,000	Ş	25,000	\$	-	\$	-	\$	-	\$	70,000
Total of All Elements	\$ 957,150	\$	239,287	\$	25,000	\$	-	\$	-	\$	-	\$	1,221,437
		1											

APPENDICES

<u>Appendix A</u> FFY 2023 Old Colony Unified Planning Work Program Endorsement

<u>Appendix B</u> §450.336 - Self-Certification Compliance Statement - 3C Process Endorsement

<u>Appendix C</u> Estimates of Other Funding Sources, and Other Transportation Planning Activities

Appendix D Glossary of Terms and Acronyms

Appendix E Public Review Period and Public Comments

APPENDIX A - FFY 2023 OLD COLONY UNIFIED PLANNING WORK PROGRAM ENDORSEMENT

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

FFY 2022-2026 OLD COLONY TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

ENDORSEMENT OF FFY 2022-2026 OLD COLONY TRANSPORTATION IMPROVEMENT PROGRAM (TIP) ADJUSTMENT 1

This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization, at their Old Colony MPO meeting on June 21, 2022, hereby approve and endorse the FFY 2022-2026 Old Colony Transportation Improvement Program (TIP) Adjustment 1 in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.

Stephen Woeld for

Jamey Tesler, Secretary and CEO Massachusetts Department of Transportation (MassDOT); Chair, Old Colony Metropolitan Planning Organization (OCMPO)

Date

APPENDIX B - §450.336 - SELF CERTIFICATION COMPLIANCE STATEMENT - 3C PROCESS ENDORSEMENT

Certification of the Old Colony MPO Transportation Planning Process

The Old Colony Metropolitan Planning Organization certifies that its conduct of the metropolitan transportation planning process complies with all applicable requirements, which are listed below, and that this process includes activities to support the development and implementation of the Regional Long-Range Transportation Plan and Air Quality Conformity Determination, the Transportation Improvement Program and Air Quality Conformity Determination, and the Unified Planning Work Program.

- 1. 23 USC 134, 49 USC 5303, and this subpart.
- 2. Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 USC 7504, 7506 (c) and (d) and 40 CFR part 93 and for applicable State Implementation Plan projects.
- 3. Title VI of the Civil Rights Act of 1964, as amended (42 USC 2000d-1) and 49 CFR Part 21.
- 4. 49 USC 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity.
- 5. Section 1101 (b) of the Fast Act (Pub. L. 114-357) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in U.S. DOT-funded projects.
- 6. 23 CFR part 230, regarding implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts.
- 7. The provisions of the US DOT and of the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.) and 49 CFR Parts 27, 37, and 38.
- 8. The Older Americans Act, as amended (42 USC 6101), prohibiting discrimination on the basis of age in programs or activities receiving federal financial assistance.
- 9. Section 324 of Title 23 USC regarding the prohibition of discrimination based on gender.
- 10. Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.
- 11. Anti-lobbying restrictions found in 49 USC Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, or a member of Congress, in connection with the awarding of any federal contract.

Jamey Tesler, Secretary and CEO Massachusetts Department of Transportation (MassDOT) Chair, Old Colony Metropolitan Planning Organization (OCMPO)

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.	Building Resilient Infrastructure and Communities (BRIC)	\$	50,000
2.	Community Septic Management Program	\$	10,000
3.	Economic Development Administration (EDA)	\$	70,000
4.	Executive Office Elder Affairs (EOEA)	\$5	36,834
5.	District Local Technical Assistance (DLTA)	\$2	03,705
6.	Green Communities	\$	15,000
7.	Housing Production Plan - Easton	\$	15,000
8.	Housing Production Plan - Stoughton	\$	15,000
9.	Municipal Vulnerability Preparedness (MVP)	\$	14,835
10.	Regional Energy Planning Assistance (REPA)	\$	35,000
11.	Utility Allowances	\$	6,831

APPENDIX D - GLOSSARY OF TERMS AND ACRONYMS

List of Acronyms

3C:	Comprehensive, Cooperative, and Continuing Planning Process
ADA:	Americans with Disabilities Act
BAT:	Brockton Area Transit Authority
BIL:	Bipartisan Infrastructure Law
CAAA:	Clean Air Act Amendments of 1990
CIP:	Capital Investment Plan
CMAQ:	Congestion Mitigation and Air Quality Improvement Program
CMP:	Congestion Management Process
CTGP:	Community Transit Grant Program
DEP:	Department of Environmental Protection
EIR:	Environmental Impact Report
EJ:	Environmental Justice
ENF:	Environmental Notification Form
EPA:	Environmental Protection Agency
EV:	Electric Vehicle
FAST ACT:	Fixing America's Surface Transportation Act
FHWA:	Federal Highway Administration
FTA:	Federal Transit Administration
GATRA:	Greater Attleboro-Taunton Regional Transit Authority
GHG:	Greenhouse Gases
GWSA:	Global Warming Solutions Act
HPMS:	Highway Performance Monitoring System
HSIP:	Highway Safety Improvement Program
IRI:	International Roughness Index
JTC:	Joint Transportation Committee
LAP:	Language Access Plan
LEP:	Limited English Proficient
LOS:	Level of Service
LRTP:	Long Range Transportation Plan
MCAD:	Massachusetts Commission Against Discrimination
MAP:	Mobility Assistance Program
MARPA:	Massachusetts Association of Regional Planning Agencies
MassDOT:	Massachusetts Department of Transportation
MBTA:	Massachusetts Bay Transportation Authority
MOU:	Memorandum of Understanding
MPO:	Metropolitan Planning Organization
NAAQS:	National Ambient Air Quality Standards
NBIS:	National Bridge Inventory Standards
NFA:	Non-Federal Aid
NFP:	National Freight Program

NHPP:	National Highway Performance Program
NHS:	National Highway System
NOx:	Nitrogen Oxides
0&M:	Operations and Maintenance
P&B:	Plymouth and Brockton Bus Company
PM1:	Safety Performance Measures
PM2:	System Preservation Performance Measures
PM3:	System Performance Measures (Congestion, Reliability, and Emissions)
PMS:	Pavement Management System
POP:	Programming of Projects
PPP:	Public Participation Plan
PRC:	Project Review Committee
PSI:	Pavement Serviceability Index
PTASP:	Public Transit Agency Safety Plan
SGR:	State of Good Repair
SIP:	State Implementation Plan
SMS:	Safety Management System
SOV:	Single Occupant Vehicle
SSCAC:	South Shore Community Action Council
STBG:	Surface Transportation Block Grant Program
TAM	Transit Asset Management
TAMP	Transportation Asset Management Plan
TAN:	Transportation Advisory Network
TAP:	Transportation Alternatives Program
TCM:	Transportation Control Measure
TEC:	Transportation Evaluation Criteria
TERM:	Transit Economic Requirements Model
TIP:	Transportation Improvement Program
TITLE VI:	Title VI of the Civil Rights Act of 1964, 42 U.S.C. 2000d
TMA:	Transportation Management Area
ULB:	Useful Life Benchmark
VMT:	Vehicle Miles Traveled
VOCs:	Volatile Organic Compounds

APPENDIX E - PUBLIC REVIEW PERIOD AND PUBLIC COMMENTS



Christine Joy, President Mary Waldron, Executive Director

(508) 583-1833

70 School Street, Brockton, MA 02301

www.ocpcrpa.org

May 17, 2022

NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD FFY 2022-2026 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AMENDMENT 2 FFY 2023 UNIFIED PLANNING WORK PROGRAM (UPWP)

Old Colony Planning Council (OCPC) is making the FFY 2022-2026 TIP Amendment 2 and the FFY 2023 UPWP available for a Public Review and Comment. Copies will be available at http://www.ocpcrpa.org/, and/or upon request. This process will be used as Brockton Area Transit Authority's (BAT) public participation process. BAT, the Federal Transit Administration (FTA) Section 5307(c) applicant, has consulted with the Old Colony Metropolitan Planning Organization (MPO) and concurs that the public involvement process adopted by the MPO for development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for the regular Section 5307, Urbanized Area Formula Program, grant applications including the provisions for public notice and the time established for public review and comment. Public notice of public involvement activities and time established for public review and comments on the TIP will satisfy the program of projects (POP) requirements. The public discussion of the TIP at meetings of the Old Colony Joint Transportation Committee (JTC) and Old Colony MPO satisfy the Program of Projects (POP) public hearing requirements of the Old Colony MPO satisfy the Program of Projects (POP) public hearing requirements of the Old Colony MPO is scheduled for June 21, 2022 at 10. Please contact Charles Kilmer at 508-583-1833 Extension 206 for information.

Please send written comments to: Charles Kilmer Old Colony Planning Council 70 School Street Brockton, MA 02301 <u>ckilmer@ocpcrpa.org</u>

LEGAL ADVERTISEMENTS

Notice of Twenty-One Day Public Review and Comment Period appeared in the following:

- The Brockton Enterprise May 17, 2022
- The Patriot Ledger May 17, 2022

LOCALIQ NEW ENGLAND

PROOF OF PUBLICATION

Old Colony Planning Council Attn: Pat Ciaramella 70 School St Brockton MA 02301-4097

STATE OF MASSACHUSETTS, COUNTY OF PLYMOUTH

The Enterprise, a newspaper printed and published in the city of Brockton, and of general circulation in the County of Plymouth, State of Massachusetts, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

05/17/2022

and that the fees charged are legal.

Sworn to and subscribed before on 05/17/2022

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Notary, State of WI,	County of Brown			
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TRANSPORTA-2022-2026 2022-2026 TRANSPORIA-TION IMPROVEMENT PROGRAM LEGAL NOTICE NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD FFY 2022-2026 TRANSPORTATION IMPROVEMENT PROGRAM (UPWP) OBC Colony Planning Council (OCPC) is making the FFY 2022-2026 TIP Amendment 2 and the FFY 2023 UNIFIED PLANNING WORK PROGRAM (UPWP) Old Colony Planning Council (OCPC) is making the FFY 2022-2026 TIP Amendment 2 and the FFY 2023 UPWP available for a Public Review and Comment. Copies will be available at http://www.opccrpa.org/. and/or upon request. This process will be used as Brockton Area Transit Authority's (BAT) public participation process. BAT, the Federal Transit Adminis-tration (FTA) Section 5307(c) applicant, has consulted with the Old Colony Metropolitan Plan-ning Organization (MPO) and concurs that the public involvement process adopted by the MPO for development of the TIP satisfies the public hearing requirements that pertain to the develop-ment of the Program of Projects for the regular Section 5307, Urbanized Area Formula Program of Projects for the regular beto for bublic notice involvement activities and time established for public review and comment. Public notice of public review and comments on the TIP will satisfy the program of projects (POP) require-ments. The public discussion of the TIP at meetings of the Old Colony MPO satisfy the Program of Projects (POP) public maring requirements of the Old Colony JTC is scheduled for June 21, 2022 at 10 PM, and a public meeting of the Old Colony MPO satisfy the 10. Please contact Charles Kilmer at 508-583-1833 Exten-sion 206 for information.

AD#7280941 BE 5/17/2022

PO Box 631210 Cincinnati, OH 45263-1210

LOCALIQ NEW ENGLAND

PROOF OF PUBLICATION

Old Colony Planning Council 70 School Street Brockton MA 02401-4097

STATE OF MASSACHUSETTS, COUNTY OF NORFOLK

The Patriot Ledger, a newspaper printed and published in the city of Quincy, and of general circulation in the County of Norfolk, State of Massachusetts, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

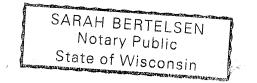
05/17/2022

and that the fees charged are legal.

Sworn to and subscribed before on 05/17/2022

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LEGAL NOTICE NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD FFY 2022-2026 TRANS-PORTATION IMPROVE-MENT PROGRAM (TIP) AMENDMENT 2 FFY 2023 UNIFIED PLAN-NING WORK PROGRAM (UPWP)

Old Colony Planning Council (OCPC) is making the FFY 2022-2026 TIP Amendment 2 and the FFY 2023 UPWP available for a Public Review and Comment. Copies will be available at http://www.ocpcreaors/. and/or upon request. This process will be used as Brockton Area Transit Authority's (BAT) public participation process. BAT, the Federal Transit Administration (FTA) Section 5307(c) applicant, has consulted with the Old Colony Metropolitan Planning Organization (MPO) and concurs that the public involvement process adopted by the MPO for development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Proiects for the regular Section 5307, Urbanized Area Formula Program, grant applications including the provisions for public notice and the time established for public notice of public review and comment. Public notice of public review and comment for public notice of public review and comment. Public lossions of public involvement activities and time established for public review and comments on the TIP will satisfy the program of proiects (POP) requirements. The public discussion of the TIP at meetings of the Old Colony JPC satisfy the Program of Proiects (POP) public hearing requirements of the Old Colony JTC is scheduled for June 2, 2022 at 12 PM, and a public meeting of the Old Colony MPO is scheduled for June 2, 2022 at 10. Please contact Charles Kilmer at 508-583-1833 Extension 206 for information.

AD# 7283689 PL 05/17/2022

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PUBLIC COMMENTS

Draft FFY 2023 Old Colony Unified Planning Work Program (UPWP)

Public Comment Matrix

Date	Name	Representation	Comment or Summary	Response
5/20/2022	Raissah Kouame	MassDOT - Office of Transportation Planning	Reviewed and provided MPO Liaison UPWP Review Checklist. Please see attached checklist for detail.	Noted. Thank you for the review and provision of Checklist and Comments. Staff will work to align Final UPWP with provided comments and suggestions.
5/25/2022	Old Colony Planning Council (OCPC) Board of Directors	Old Colony Region	The OCPC Board of Directors, at their public meeting on May 25, 2022, reviewed and approved the FFY 2023 UPWP.	Noted.
6/2/2022	Old Colony Joint Transportation (JTC)	Old Colony Region	The Old Colony JTC, at their public meeting on June 2, 2022, reviewed and approved the FFY 2023 UPWP.	Noted.
6/6/2022	Andrew Reovan	FHWA	Reviewed and provided comments and suggestions. Please see attached comment list for detail.	Noted. Thank you for the review and comments. Staff will work to align Final UPWP with provided comments and suggestions.

Comments as of Close of Business (COB) on June 10, 2022



	MPO Liaison UPWP Review Checklist			
		Desidence House	Completeness	P. (
	× *	Review Item Table of Contents is accurate and internally-linked.	Comments Please add a new line for tasks 3300, 3400, and 3600 in the table of contents	Reference ✓ for use in column B
		Document has no broken links.		X for use in column B
		Document has no text or image placeholders.		
A3 A4		Charts, tables, and maps are legible and properly annotated.		
A4				
A5		Document passes an accessible check.		
A6		New federal emphasis areas from the Bipartisan Infrastructure		https://www.transit.dot.gov/regulations-and-
		Law (BIL) are referenced.		programs/transportation-planning/2021-planning-
				emphasis-areas
A7	√ *	Document is available in relevant languages per the MPO's Title VI Plan.		
A8		List of MPO members is current.		
		Signatory sheet is included and accurate.		
		Acronyms and partner agency lists are up to date.		
	•		Narrative	
ID		Review Item	Comments	Reference
	<mark>√</mark> *	UPWP is comprehensible to the general public.	Please review the sentence at the end of the first paragraph which may be missing a word	Page 2
B2		UPWP refers directly to vision, goals, and objectives from		
		RTP.		
B3		UPWP Amendment/Adjustment procedures are explicit and		
_		align with latest federal guidance (see MAPRA materials)		
B4		Governing MOUs between MassDOT, MPO, RTAs, and		
		neighboring MPOs have been reviewed for potential		
B5		improvements or updates. Planning efforts are coordinated with MassDOT modal plans.		https://www.mass.gov/statewide-plans
			UPWP Tasks	
ID		Review Item	Comments	Reference
C1	√ *	Individual tasks include detailed scopes, budgets, and	Task 1300 : Please add other relevant stakeholders to point 2. about mailing lists. Task 3100 : Please	
		schedules.	update event to extreme weather events if relevant. Task 3300 : Please list a few anticipated housing	
			needs in point 1 of the procedures (i.e transit oriented development and affordable housing).	
C2	√ *	Individual tasks outline community beneficiaries.		
		Transit-related tasks are specific.		
C4	√ *	Includes a task on performance-based planning.		
		Includes a task for an update to any congestion mitigation		Required for TMA MPOs if current CMP is out of
		planning efforts.		date.
C6	√ *	UPWP includes a summary of available staff hours.	Includes a summary of staff effort	Page 53
C7	✓	Individual tasks anticipate needed staff-hours / consulting	Anticipated consulting resources included	Page 17, 30, and 33
		resources.		
C8	\checkmark	Tasks from previous UPWPs have been analyzed for past		
		utilization.		
ID		Review Item	Impacts Analysis Comments	Reference
D1	J *	UPWP includes a geographic equity distribution table showing		
		2017–2021 and current UPWP-funded studies by municipality		
		and number of tasks.		
D2	√ *	UPWP includes a social equity distribution table of past and		· · · · · · · · · · · · · · · · · · ·
		current UPWP-funded studies considering language access		
		and EJ populations.		
-				



D3 🗸 * Public involvement and comment are explicitly documented and in line with MPO's Public Participation Plan.	
 indicates required by state or federal regulation. 	

Prepared by Raissah Kouame 5/20/2022

Summary of Comments on Old Colony

Page: 11

Author: Andrew.Reovan Subject: Highlight Date: 6/1/2022 9:53:56 AM Should this abbreviation read "LRTP"?

Author: Andrew.Reovan Subject: Sticky Note Date: 6/1/2022 11:51:15 AM Are table numbers updated for this document? I believe this is the first table, but it is numbered Table 5.

Author: Andrew.Reovan Subject: Highlight Date: 6/1/2022 10:25:24 AM Should this be the 2024-2028 TIP?

Author: Andrew.Reovan Subject: Highlight Date: 6/9/2022 2:36:20 PM Does this refer to funding from FTA (5307 etc)? Or is it from state/BAT funding? Would be helpful to know if it's Federal, if possible.

Author: Andrew.Reovan Subject: Sticky Note Consider table numbers on this and following pages.

Date: 6/1/2022 11:52:25 AM