

Cape Cod Unified Planning Work Program

Federal Fiscal Year 2024

Endorsed: May 22, 2023





This report was funded in part through grants from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), United States Department of Transportation (USDOT). The views and opinions of the Cape Cod Metropolitan Planning Organization (MPO) expressed herein do not necessarily state or reflect those of the USDOT.

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If this information is needed in another language, please contact the MPO's Title VI Coordinator by phone at (508)362-3828.

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI da MPO pelo telefone 508-744-1299.

The public discussion of the Unified Planning Work Program (UPWP) at CCJTC, MPO, and transportation meetings satisfies the Program of Projects (POP) public hearing requirements of the Federal Transit Administration (FTA).

Cape Cod Unified Planning Work Program (UPWP) prepared by the

Cape Cod Metropolitan Planning Organization (MPO) Members:

- Gina Fiandaca, Chair, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)
- Jonathan Gulliver, Administrator, MassDOT Highway Division
- Robert Lawton, Chair, Cape Cod Regional Transit Authority
- Harold Mitchell, Cape Cod Commission
- Matthew Levesque, President, Barnstable Town Council
- Mark Forest, Barnstable County Commissioners
- Judith MacLeod-Froman, Bourne Selectmen Chair, Sub Region A Representative (Bourne, Falmouth, Mashpee, and Sandwich)
- Sheryl McMahon, Dennis Select Board member, Sub Region B Representative (Dennis and Yarmouth)
- Kevin Galligan, Orleans Select Board Chair, Sub Region C Representative (Brewster, Chatham, Harwich, and Orleans)
- Robert Weinstein, Truro Select Board Chair, Sub Region D Representative (Eastham, Provincetown, Truro, and Wellfleet)
- Brian Weeden, Chairman, Mashpee Wampanoag Tribal Council

MPO Ex-Officio Members:

- Jay Norton, Chairman, Cape Cod Joint Transportation Committee
- Brian Carlstrom, National Park Service/Cape Cod National Seashore
- Lawrence T. Davis, US Army Corps of Engineers/Cape Cod Canal
- Robert B. Davis, Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority
- Joi Singh, Federal Highway Administration
- Peter Butler, Federal Transit Administration

and the

Cape Cod Joint Transportation Committee

- Jay Norton, Chairman, Wellfleet
- Griffin Ryder, Vice-Chairman, Brewster

Cape Cod Commission UPWP Staff Contact:

David Nolan, Senior Transportation Planner, Cape Cod Commission

Cape Cod Metropolitan Planning Organization

Endorsement of the Federal Fiscal Years 2024 Cape Cod Unified Planning Work

Program (UPWP)

The signature below certifies that the Cape Cod Metropolitan Planning Organization (MPO), at their meeting on May 22, 2023, hereby approved the following action in accordance with the Comprehensive, Cooperative and Continuous transportation planning process. In accordance with the requirements of 23 CFR Part 450 Section 308(c) of Federal Regulations, the MPO for Cape Cod has completed its review and hereby endorses the Cape Cod Unified Planning Work Program for Transportation Planning Activities for October 1, 2023, through September 30, 2024.

1 and Moly for

Gina Fiandaca, Secretary/Chief Executive Officer – Massachusetts Department of Transportation (MassDOT)

MPO Members:

- Gina Fiandaca, Chair, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)
- Jonathan Gulliver, Administrator, MassDOT Highway Division
- Robert Lawton, Chair, Cape Cod Regional Transit Authority
- Harold Mitchell, Cape Cod Commission
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- Sheryl McMahon, Dennis Select Board member, Sub Region B Representative (Dennis and Yarmouth)
- Kevin Galligan, Orleans Select Board Chair, Sub Region C Representative (Brewster, Chatham, Harwich, and Orleans)
- Robert Weinstein, Truro Select Board Chair, Sub Region D Representative (Eastham, Provincetown, Truro, and Wellfleet)
- Brain Weeden, Chairman, Mashpee Wampanoag Tribal Council

MPO Ex-Officio Non-Voting Members:

- Jay Norton, Chairman, Cape Cod Joint Transportation Committee
- Brian Carlstrom, National Park Service/Cape Cod National Seashore
- Lawrence T. Davis, US Army Corps of Engineers/Cape Cod Canal
- Robert B. Davis, Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority
- Joi Singh, Federal Highway Administration
- Peter Butler, Federal Transit Administration

Certification of the Cape Cod MPO Transportation Planning Process

The Cape Cod 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.
- 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.
- 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 CFR 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.

May 22, 2023

Gina Fiandaca, Secretary and Chief Executive Officer

Massachusetts Department of Transportation

Chair, Cape Cod MPO

310 CMR 60.05: Global Warming Solutions Act Requirements for Transportation

This will certify that the Transportation Improvement Program and Air Quality Conformity Determination for the Cape Cod Long Range Transportation Plan is in compliance with all applicable requirements in the State Regulation 310 CMR 60.05: Global Warming Solutions Act Requirements for Transportation. The regulation requires the MPO to:

- 1. 310 CMR 60.05(5)(a)1.: Evaluate and report the aggregate transportation GHG emissions impacts of RTPs and TIPs;
- 2. 310 CMR 60.05(5)(a)2.: In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs and TIPs based on factors that include aggregate transportation GHG emissions impacts;
- 3. 310 CMR 60.05(5)(a)3.: Quantify net transportation GHG emissions impacts resulting from the projects in RTPs and TIPs and certify in a statement included with RTPs and TIPs pursuant to 23 CFR Part 450 that the MPO has made efforts to minimize aggregate transportation GHG emissions impacts;
- 4. 310 CMR 60.05(5)(a)4.: Determine in consultation with the RPA that the appropriate planning assumptions used for transportation GHG emissions modeling are consistent with local land use policies, or that local authorities have made documented and credible commitments to establishing such consistency;
- 5. 310 CMR 60.05(8)(a)2.a.: Develop RTPs and TIPs;
- 6. 310 CMR 60.05(8)(a)2.b.: Ensure that RPAs are using appropriate planning assumptions;
- 7. 310 CMR 60.05(8)(a)2.c.: Perform regional aggregate transportation GHG emissions impact analysis of RTPs and TIPs;
- 8. 310 CMR 60.05(8)(a)2.d.: Calculate aggregate transportation GHG emissions impacts for RTPs and TIPs;
- 9. 310 CMR 60.05(8)(a)2.e.: Develop public consultation procedures for aggregate transportation GHG emissions impact reporting and related GWSA requirements consistent with current and approved regional public participation plans;
- 10.310 CMR 60.05(8)(c): Prior to making final endorsements on the RTPs, TIPs, STIPs, and projects included in these plans, MassDOT and the MPOs shall include the aggregate transportation GHG emission impact assessment in RTPs, TIPs, and STIPs and provide an opportunity for public review and comment on the RTPs, TIPs, and STIPs; and
- 11.310 CMR 60.05(8)(a)1.c.: After a final GHG assessment has been made by MassDOT and the MPOs, MassDOT and the MPOs shall submit MPO-endorsed RTPs, TIPs, STIPs or projects within 30 days of endorsement to the Department for review of the GHG assessment.

Doul (Moly	for
Cina Fianda	ca Secretary	and CEO

Gina Fiandaca, Secretary and CEO
Massachusetts Department of Transportation (MassDOT);
Chair, Cape Cod Metropolitan Planning Organization (CCMPO)

May 22, 2023

Date

Executive Summary

The Cape Cod Metropolitan Planning Organization's (MPO) staff work plan, known as the Unified Planning Work Program (UPWP), lists planning activities anticipated to be performed by MPO staff and others over the next year.

The MPO is made up of eleven voting members with representatives of state agencies, regional organizations, and Cape Cod towns. Discussions at MPO meetings help select planning studies to be included in the UPWP. Members of the public are welcome and encouraged to attend these meetings and voice opinions.

Contents of the Plan

The Unified Planning Work Program discusses coordination with the federal Bipartisan Infrastructure Law (BIL) of 2021, and its predecessor the Fixing America's Surface Transportation (FAST) Act and is organized by a series of tasks and corresponding subtasks. Each sub-task includes a scope of work with the following components: objectives, previous work, procedures, products, beneficiary communities, schedule, and funding breakdown.

FY 2024 Tasks

Unified Planning Work Program tasks and sub-tasks are listed below along with the associated funding for each task.

- Task #1 Management and Support of the Planning Process and Certification Activities (\$230,000)
 - Task 1.1 Unified Planning Work Program (Certification Activity)
 - Task 1.2 Transportation Improvement Program (Certification Activity)
 - Task 1.3 CCJTC and MPO Activities
 - Task 1.4 Environmental Justice/Title VI
 - o Task 1.5 Public Participation Plan
 - Task 1.6 Regional Transportation Plan/Canal Bridges Program Coordination
- Task #2 Data Collection and Analysis Activities (\$236,250)
 - Task 2.1 Cape Cod Transportation Data Collection Program
 - o Task 2.2 Performance Standards
 - Task 2.3 Transportation Database Management
 - Task 2.4 Pavement Management/Stormwater Management
 - Task 2.5 Healthy Transportation/Complete Streets Support
 - Task 2.6 Geographic Information System
- Task #3 Short- And Long-Range Transportation Planning (\$310,000)

- Task 3.1 Downtown Parking & Circulation Study Chatham
- Task 3.2 Transportation Safety: RSAs/Interchange Safety Analysis
- Task 3.3 Sidewalk Connections to Bus Stops & Multi-Family Housing
- o Task 3.4 Climate Action Plan Implementation
- Task 3.5 Regional Safety Action Plan
- Task 3.6 Follow-Up on Previous Transportation Planning Studies
- Task #4 Technical Assistance Activities (\$179,962)
 - Task 4.1 Transit Planning
 - Task 4.2 Support for Passenger Rail Service
 - Task 4.3 Transit Data Collection and Analysis
 - Task 4.4 Other Technical Assistance Requests

The Unified Planning Work Program also includes other transportation planning activities such as those directly funded by the Cape Cod Commission. Additionally, the UPWP includes a detailed breakdown of funding source and dollar amount for each sub-task, with the exception of projects funded by the Cape Cod Commission.

How to get involved

The Cape Cod MPO voted to release the draft UPWP for the public review/comment period at their 1:00 PM virtual meeting on April 24, 2023, officially beginning the 21-calendar-day public comment period.

Meetings featuring a short presentation on the document, followed by an opportunity for public comments, will be held in-person on Wednesday, April 26, 2023, at 11:00 AM at the Hyannis Transportation Center and virtually on Wednesday, April 26, 2023, at 6:00 PM.

Additionally, a number of additional in-person opportunities for public comment will be scheduled across the region. and staff will be available in-person, while in-person public comment opportunities will be held on the following dates and locations:

Presentation and public comment opportunity:

- Wednesday, April 26, 2023, at 11:00 AM (at the Hyannis Transportation Center)
- Wednesday, April 26, 2023, at 6:00 AM (virtual)

Public comment opportunity:

- May 9, 2023, from 3:00 PM 5:00 PM (at the Cape Cod Rail Trail Parking Lot on Station Avenue in Yarmouth)
- May 11, 2023, from 9:00 AM 11:00 AM (in Chatham, on the Old Colony Rail Trail)
- May 17, 2023, from 7:30 AM 9:30 AM (Shining Sea Bikeway at Depot Ave.)

A virtual public meeting of the Cape Cod MPO is scheduled for Monday, May 22, 2023, at 1:00 PM to hear additional public comments and consider endorsement of this document.

Details on the online public comment opportunities and the virtual public meeting available at www.capecodcommission.org/mpo

Comments on this plan were accepted through May 15, 2023, via mail, by facsimile, or via e-mail, as follows:

Mailed:

Cape Cod Commission Transportation Program David Nolan, Senior Transportation Planner 3225 Main Street (Route 6A) | PO Box 226 Barnstable MA 02630-0226

Sent by facsimile to the attention of David Nolan, Senior Transportation Planner: FAX: 508-362-3136

Electronic mail "email"—please put "UPWP" in the subject line and send to: david.nolan@capecodcommission.org

Table of Contents

Executive Summary	vi
Table of Contents	ix
Introduction	1
Coordination with Federal Transportation Planning Factors	2
Staff Development	5
UPWP Amendment/Adjustment Procedures	6
Task #1 – Management and Support of the Planning Process and	
Certification Activities	7
TASK 1.1 - UNIFIED PLANNING WORK PROGRAM	7
TASK 1.2 - TRANSPORTATION IMPROVEMENT PROGRAM	8
TASK 1.3 - CCJTC AND MPO ACTIVITIES	10
TASK 1.4 – TITLE VI/ENVIRONMENTAL JUSTICE	11
TASK 1.5 – PUBLIC PARTICIPATION PLAN	12
TASK 1.6 – REGIONAL TRANSPORTATION PLAN/CANAL BRIDGES PROGRACOORDINATION	
Task #2 – Data Collection and Analysis Activities	
TASK 2.1 – CAPE COD TRANSPORTATION DATA COLLECTION PROGRAM.	16
TASK 2.2 – PERFORMANCE MEASURES	18
TASK 2.3 – TRANSPORTATION DATABASE MANAGEMENT/MODELING	24
TASK 2.4 – PAVEMENT MANAGEMENT	26
TASK 2.5 – HEALTHY TRANSPORTATION/COMPLETE STREETS SUPPORT	27
TASK 2.6 – GEOGRAPHIC INFORMATION SYSTEM	28
Task #3 – Short- and Long-range Transportation Planning	30
TASK 3.1 – DOWNTOWN PARKING & CIRCULATION STUDY - CHATHAM	30
TASK 3.2 – TRANSPORTATION SAFETY/ROAD SAFETY ALIDITS	33

	TASK 3.3 – SIDEWALK CONNECTIONS TO BUS STOPS & MULTI-FAMILY	
	HOUSING	34
	TASK 3.4 – CLIMATE ACTION PLAN IMPLEMENTATION	35
	TASK 3.5 - REGIONAL SAFETY ACTION PLAN COORDINATION	36
	TASK 3.6 – FOLLOW-UP ON PREVIOUS TRANSPORTATION PLANNING	
	STUDIES	37
I	ask #4 – Technical Assistance Activities	38
	TASK 4.1 – TRANSIT PLANNING	38
	TASK 4.2 – SUPPORT FOR CCRTA FLEET ELECTRIFICATION	39
	TASK 4.3 – TRANSIT DATA COLLECTION AND ANALYSIS	40
	TASK 4.4 – OTHER TECHNICAL ASSISTANCE REQUESTS	40
T	ask #5 – Cape Cod Commission Transportation Planning and	
F	Regulatory Activities	42
	TASK 5.1 – REGULATORY	42
	TASK 5.2 – PLANNING	43
	TASK 5.3 – OTHER TRANSPORTATION ACTIVITIES	43
С	Distribution of UPWP Efforts	45
C	Glossary	50
	Appendices	
		52
	APPENDIX A: REGIONALLY SIGNIFICANT TRANSPORTATION PLANNING STUDIES FUNDED BY OTHER SOURCES	52
	APPENDIX B: FEDERAL FISCAL YEAR 2024 PL FORMULA ALLOCATION	
	APPENDIX C: COMMENTS ON PUBLIC DRAFT	
	APPENDIX D: LIST OF STAFF AND ESTIMATED PERCENTAGE OF TIME	00
	ALLOCATED TO MASSDOT FUNDED (PL) TASKS IN THE FY 2024 UPWP	56
	APPENDIX E: FFY 2024 FUNDING SUMMARY	57
	APPENDIX F. AMENDMENTS/ADJUSTMENTS	59

Introduction

The Unified Planning Work Program (UPWP) is developed annually by the Cape Cod Commission transportation staff on behalf of the Cape Cod Metropolitan Planning Organization, in accordance with the requirements in the federal Bipartisan Infrastructure Law of 2021.

Planning activities of the Metropolitan Planning Organization (MPO) are detailed in the Memorandum of Understanding (MOU) available at <u>capecodcommission.org/mpo.</u> The MOU was updated May 23, 2022, to reflect the most recent MPO certification review.

The UPWP describes all significant transportation planning activities for Cape Cod over the twelve (12) month period of October 2023 through September 2024, regardless of lead organization and funding source. The following are the major transportation planning areas:

- 1. Management and Support of the Planning Process and Certification Activities the efforts required for coordinating transportation planning activities between CCC and Metropolitan Planning Organization (MPO) member communities, local, regional, state and federal agencies; efforts required to maintain the public participation process; Environmental Justice strategies; efforts required for the administration of the CCC contract with the Massachusetts Department of Transportation (MassDOT); development and approval of the UPWP and the Transportation Improvement Program (TIP); and enhancement of the technical capacity of the planning process.
- 2. Data Collection and Analysis Activities to continually gather and update traffic, crash, and road data necessary for transportation planning and analysis; to maintain databases; to develop and update Cape Cod's travel demand forecasting model; and to review safety data, goals, objectives, and strategies to promote safety.
- 3. Short- and Long-Range Transportation Planning includes efforts to perform special planning studies of corridor safety/traffic flow and transit and integration of special studies into the regional transportation plan. Emphasis areas include identification of strategies to support the economic vitality of the metropolitan area, transportation security, emergency planning, strategies to promote smart growth and economic development patterns, environmental protection and energy conservation, and preservation of the existing transportation system.

- 4. Other Technical Activities to provide other technical assistance to the region, including assistance in the design and implementation of projects, participating in special studies, coordination with transit agencies and assistance in the planning, design, and development of the Intelligent Transportation System for Cape Cod. Special emphasis areas include 1.) Enhancing the integration and connectivity of the transportation system, across and between modes, for people and freight; and 2.) Promotion of Operation and Management Strategies.
- Regulatory Review and Planning Assistance to the Towns review of Developments of Regional Impact (DRIs) and assistance in the development and implementation of Local Comprehensive Plans and Districts of Critical Planning Concern.

All tasks detailed in the UPWP will be conducted by Cape Cod Commission staff unless otherwise indicated.

Other transportation planning efforts that are being performed outside of the MPO budget process (e.g., Cape Cod transportation planning studies being performed by the state) are detailed in the Appendices. The Appendices also include funding information, summary of comments, and a checklist of UPWP elements.

Federal and state guidance recommend that at least 1/3 of PL funds are used on tasks that result in tangible products. Every task in the UPWP results in a report or includes documentation available to stakeholders, including the public. The subtasks of the UPWP most directly leading to transportation improvement projects are those included in Task 3 (Short- and Long-Range Transportation Planning), corresponding to a 30% (\$282,500/\$956,212) level of effort.

Coordination with Federal Transportation Planning Factors

All tasks of the UPWP will be implemented with consideration of federal transportation planning factors. This discussion relates to the general topic of Cape Cod MPO transportation planning and is intended to provide an overview to the public. Each planning factor may apply to a varying degree to each specific UPWP task. Cape Cod MPO transportation planning goals are manifested in the Cape Cod Regional Transportation Plan (RTP) referenced in the discussion below. The UPWP is developed in coordination with the ten federal transportation planning factors, identified in 23 CFR 450.306, as follows:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

The Cape Cod MPO staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to changes of delay and emissions. Reduction in traffic delay has a direct consequence on economic vitality both through the timely arrival of commuters and goods, and the reduction in fuel expenses and other losses caused by air pollution. The RTP directly supports these efforts through the goal: "Maintain, protect, and enhance the natural environment while strengthening the economy." The CCC also supports regional productivity through its economic development mission manifested in the Regional Policy Plan and support of the Cape Cod Economic Development Council's initiatives, including support of the federally approved Cape Cod Comprehensive Economic Development Strategy priority projects.

2. Increase the safety of the transportation system for motorized and nonmotorized users.

The Cape Cod MPO staff shall apply specific criteria in the review of transportation strategies. This focus on safety is echoed in the RTP; indeed, the primary goal of the RTP is to provide safe travel options for all users."

3. Increase the security of the transportation system for motorized and nonmotorized users.

Goals of the RTP related to security include: "Provide safe travel options for all users" and "Preserve, maintain, and modernize the existing transportation system." One area of additional security planning that applies to Cape Cod is that of traffic impacts due to weather events such as hurricanes. CCC staff is continuing to participate in the Massachusetts Emergency Management Agency (MEMA) Massachusetts State Police efforts regarding the "Cape Cod Emergency Traffic Plan."

4. Increase the accessibility and mobility of people and freight.

The Cape Cod MPO staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through the following two goals: "Provide a variety of healthy transportation options to all users" and "Improve efficiency and reliability of freight movement." The RTP also includes an appendix addressing freight issues.

5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

The RTP directly supports this planning factor through two goals: "Maintain, protect, and enhance the natural environment while strengthening the economy" and "Support

livable communities and village centers that strengthen the long-term sustainability of the region." The RTP, and therefore the UPWP, include a focus on addressing climate change. Where appropriate, UPWP tasks will include assessments of vulnerabilities and negative risks that climate change effects or extreme weather events pose to the Cape's transportation infrastructure. These vulnerabilities and risks will be seriously considered when planning future improvements. Where appropriate, UPWP tasks will also develop adaptation strategies that will enable the Cape Cod region to implement improvements appropriately. The reduction of greenhouse gas emissions (GHG) remains an important goal in addressing climate change. UPWP tasks that reduce VMT and congestion are encouraged.

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

The Cape Cod MPO staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through the following two goals: "Provide a variety of healthy transportation options to all users" and "Improve efficiency and reliability of freight movement." Where appropriate, UPWP tasks will support the enhancement of the movement of goods throughout the Cape Cod region. To further this goal, Cape Cod MPO staff will continue to develop knowledge and skills regarding the integration of goods movement. The RTP also includes an appendix addressing freight issues.

7. Promote efficient system management and operation.

The RTP supports this planning factor through two goals: "Reduce congestion and improve travel time reliability" and "Preserve, maintain, and modernize the existing transportation system." Relevant objectives from these goals include:

- Reduce delay for all modes.
- Improve connectivity and reliability for all modes of transportation.
- Minimize the impacts of construction delays on all users, particularly impacts of Cape Cod Canal Bridge maintenance.
- Improve the condition of all state and municipally owned bridges.
- Improve the pavement condition on all federal-aid eligible roadways.
- Maintain and improve on and off-road bicycle and pedestrian facilities.
- Use modern technology to improve the efficiency of the transportation system.
- Improve coordination and cooperation between agencies throughout all phases of project development and implementation for all improvement and maintenance projects.

The RTP includes specific performance targets for each of the above objectives.

8. Emphasize the preservation of the existing transportation system.

The RTP supports this planning factor through the goal: "Preserve, maintain, and modernize the existing transportation system." Through the CCC regulatory process, development projects are required to provide traffic mitigation. Additionally, a significant amount of developable land has been conserved through the CCC regulatory process — thereby protecting against future transportation impacts.

9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

The RTP includes a key effort to integrate resiliency into transportation planning. Goals within this effort include:

- Identify critical transportation infrastructure on Cape Cod.
- Identify transportation infrastructure vulnerable to the impacts of sea level rise.
- Improve vulnerability and risk assessment practices for planners and town officials.
- Formulate effective adaptation strategies for Cape Cod.
- Foster local support and input on climate change vulnerability assessments.

Additionally, the RTP includes a section on stormwater management, including a set of "best management practices" that have applicability to the Cape's roadways.

10. Enhance travel and tourism.

For many years, tourism has been a major component of the Cape's economy. As such, an RTP section on scenario planning includes a discussion of tourism and its impacts on the Cape's future transportation needs.

Staff Development

Throughout the year, staff will be provided with opportunities for professional development in support of the various UPWP tasks. For example, to attend a workshop that focuses on reducing crashes at hazardous intersections, the workshop fee and staff time will be billed to the UPWP task related to safety.

<u>UPWP Amendment/Adjustment Procedures</u>

Due to unforeseen circumstances, the UPWP may need to be modified from its original MPO endorsed form. There are different actions that may be taken in order to modify the endorsed UPWP. These actions vary, depending on the extent of the modification, and have different impacts on the UPWP. All proposed Amendments and Adjustments are presented to the MPO for consultation prior to endorsement. The procedures for modifying the UPWP are as follows:

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 21-day public review period, endorsement by the MPO, and approval by FHWA. The Cape Cod 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 UPWP Amendments include:

- The addition or removal of UPWP sub-tasks
- 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
- 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 UPWP Adjustments include:

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

Task #1 – Management and Support of the Planning Process and Certification Activities

TASK 1.1 - UNIFIED PLANNING WORK PROGRAM

(Certification Activity)

Objectives: To develop a Unified Planning Work Program (UPWP), in accordance with the requirements in federal transportation planning regulations, and to obtain MPO endorsement of the UPWP. Progress reports will be prepared as needed.

Previous Work: Previous UPWPs (most recent MPO-endorsed FY 2023 UPWP; endorsement of FY 2024 UPWP expected May 2023)

Procedures: In conformance with applicable Federal and State guidelines, prepare a UPWP which describes all significant transportation and transportation-related planning activities anticipated to be carried out in the region during the period, regardless of funding sources or lead organization. Maintain the UPWP and make amendments as necessary. Active reviewers and contributors to UPWP development include MassDOT (Office of Transportation Planning and District 5), the CCJTC and the CCMPO.

Products: Unified Planning Work Program for Transportation Planning Activities for the period October 1, 2023, to September 30, 2024. Amendments to the current UPWP will be submitted as necessary. Monthly progress reports on PL activities performed under the UPWP and an annual report of transportation planning activities.

Schedule:

- Draft FFY 2025 UPWP anticipated submission to MPO and CCJTC [April 2024]
- Final FFY 2025 UPWP anticipated submission to MPO [May 2024]
- Monthly and quarterly progress reports
- Annual Report

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$31,500

TASK 1.2 - TRANSPORTATION IMPROVEMENT PROGRAM

(Certification Activity)

Objectives: To prepare a program of transportation improvement projects that is consistent with the federal Bipartisan Infrastructure Law of 2021 the region's transportation plan, the State Implementation Plan, EPA's Air Quality Conformity Regulations, and FHWA/FTA's Planning Regulations. The Transportation Improvement Program (TIP) will include a five-year program of projects. The TIP will be presented for endorsement by the Metropolitan Planning Organization (MPO) in accordance with federal regulations and the region's Public Participation Plan.

The recent success of the Cape Cod Bicycle Infrastructure Program has demonstrated that strategic use of a small amount of the annual TIP regional allocation can have significant benefits to the region. Commission staff will begin to investigate the creation of another such program(s) to implement specific regional priorities, performance metrics, or goals. This will be accomplished by developing a draft framework including: 1) identification of a regional goal to accomplish or priority to address through the RTP; 2) defining a budget; 3) identifying eligible project types; 4) setting project selection criteria; 5) selection of projects; and 6) process evaluation. The program will likely address project types that have historically been challenging to program in the TIP potentially including, but not limited to:

- Small bicycle/pedestrian projects that improve conditions and/or level of accommodation.
- Small bicycle/pedestrian projects that close gaps in the multi-modal network
- Small transit projects to improve connections to transit stops.
- Technology updates for traffic signals
- Projects consistent with the "Climate Change Adaptation and Mitigation" funding share identified in the Cape Cod RTP.

Previous Work: "Cape Cod Transportation Improvement Programs (TIPs)," and amendments as needed, 1988 to present.

- Latest endorsed TIP FFY 2023-2027 [endorsed May 2022]
- FFY 2024-2028 TIP [endorsement expected May 2023]

Procedures: To continue to participate in a committee of Regional Planning Agency (RPA) Directors, Federal and State officials to cooperatively develop financial estimates, evaluate projects, and create a schedule of TIP development.

TIP Development Process: The Cape Cod Transportation Improvement Program (TIP) is a listing of federal aid eligible transportation projects for Cape Cod prepared under

the direction of the Cape Cod Metropolitan Planning Organization (MPO). The plan is prepared by the Cape Cod Commission (CCC) transportation staff, the Cape Cod Regional Transit Authority (CCRTA) staff, Massachusetts Department of Transportation (MassDOT) staff (Boston and District 5), and the Cape Cod Joint Transportation Committee (CCJTC), with input from the public and in cooperation with multiple state and federal agencies.

The TIP is developed based on a vision defined in the Cape Cod Regional Transportation Plan (RTP) and includes the transportation projects proposed for implementation in the next five years. Each year of the TIP must be financially constrained; anticipated project costs cannot exceed available funding. The TIP must conform to a host of federal and state requirements and polices including air quality and equity programs.

The inclusion of a project in the TIP is one step on the path towards construction. Inclusion on this list does not guarantee funding; the project proponent is responsible for completing the steps toward implementation within the program. For a highway project, the obligation of the federal and state funds occurs when the project is advertised for construction by MassDOT. For a transit project, the obligation of the funding is through an electronic approval system by FTA.

TIP Development Schedule: The Cape Cod MPO process follows an annual schedule for development of the Transportation Improvement Program (TIP) to be compatible with the development schedule of the State Transportation Improvement Program (STIP), as is required under 23 CFR 450.326. The STIP includes projects lists in the Cape Cod TIP, projects listed in the TIP from other planning regions, and projects that span multiple planning regions. The Cape Cod TIP is generally endorsed by the Cape Cod MPO each May, with the STIP being submitted for federal approvals prior to the beginning of the Federal Fiscal Year on October 1.

TIP Public Participation Process: Pursuant to Federal Highway Administration 23 CFR Part 450 and Federal Transit Administration 49 CFR, the Cape Cod Transportation Improvement Program (TIP) was developed locally and is based on the latest Regional Transportation Plan (RTP) following the process detailed in the Public Participation Plan (PPP).

Products:

- TIP consistent with the State Implementation Plan and the Regional Transportation Plan
- Modifications/amendments to the TIP as required.

Schedule: As determined by the MPO, FHWA, FTA, and MassDOT

- Presentations of potential new projects to the CCJTC/CCMPO [Fall 2023]
- Scoring of potential projects; development of potential program of projects [Winter/Spring 2023-2024]
- Release of public comment draft TIP [April 2024]
- Final draft TIP [May 2024]
- Administrative Adjustments/Amendments [as needed]

Beneficiary Communities: All

Funding source	<u>Amount</u>
-	
FHWA/MassDOT	\$50,000

TASK 1.3 - CCJTC AND MPO ACTIVITIES

Objectives: To maintain an open comprehensive, cooperative and continuous (3C) transportation planning and programming process involving the local, regional, state, and federal levels of government in conformance with applicable federal and state requirements and guidelines.

Previous Work: Past maintenance of 3C process, including support to the CCJTC, the MPO, and member agencies.

Procedures:

- 1. Provide administrative and technical support to the 3C regional planning process, such as:
 - a. Community liaison and assistance on transportation planning matters
 - b. Review of federal and state transportation programs and related documents as required.
- 2. Provide for and support the public participation process in transportation planning for Cape Cod
 - a. Support Cape Cod Joint Transportation Committee (CCJTC)
 - b. Develop, support and participate in local parking, traffic, bikeway, and environmental committee meetings.
 - c. Preliminary and follow-up work for meetings as required.
- 3. Present transportation plans and programs (e.g., UPWP, Regional Transportation Plan, and TIP) developed through the public participation process to the Cape Cod Joint Transportation Committee and the Metropolitan Planning Organization (MPO) for appropriate action.

- 4. Conduct efforts in conformance with federal, state, and local requirements.
- 5. Review and address recommendations and corrective actions from the most recent MPO recertification review.

Products:

- Certification review documentation
- Viable 3C process, including CCJTC and public outreach.
- Website updates, notices to news media, meeting notices
- Transportation program annual report
- Minutes and reports on CCJTC meetings
- Letters, memoranda, and notes as required.
- Other products as required.

Schedule: JTC and MPO meetings typically held monthly

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$45,000

TASK 1.4 - TITLE VI/ENVIRONMENTAL JUSTICE

Objectives: To achieve Title VI nondiscrimination program requirements while also maintaining awareness and achievement of principles of Environmental Justice into the 3C Transportation Planning Process. To develop and maintain a Title VI Civil Rights program for the Cape Cod MPO. To incorporate Title VI nondiscrimination requirements while ensuring maintenance of Environmental Justice principles within each task as appropriate.

Previous Work:

- Attendance at preliminary meetings with MassDOT and FHWA to discuss Title VI program requirements and receive guidance on ensuring compliance.
- Preparation of updates to the Cape Cod Regional Transportation Plan including information and strategies to ensure compliance with Title VI requirements while also ensuring maintenance of Environmental Justice principles.
- Annual Title VI Report

Procedures: Coordination with the Cape Cod Regional Transit Authority and MassDOT, as required.

Products:

- Application of Title VI Civil Rights program for the Cape Cod MPO
- Update demographic maps showing traditionally underserved and "at risk" populations.
- Update maps with housing affordability indicators and affordable housing developments.
- Update contacts in the MassDOT Community Contacts Database.
- Enhanced outreach procedures to engage Title VI communities and other underserved populations to ensure awareness and participation in the MassDOT 3C planning process on current and proposed projects.

Pre- and post-analysis of projected and ongoing improvement projects should ensure that no Title VI discrimination will/is occurring, while also considering and avoiding disproportionally high adverse human health and environmental effects on minority and low-income populations on Cape Cod.

Schedule:

- Update maps [Fall 2023]
- Update contacts [Winter 2024/as needed]
- Engage Title VI communities (during MPO outreach TIP & UPWP) [Spring 2024]

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$30.000

TASK 1.5 - PUBLIC PARTICIPATION PLAN

Objectives: To ensure that all segments of the population can fully participate in transportation planning processes and have access to transportation facilities. To engage the Mashpee Wampanoag Tribe in transportation planning.

Continuation of the update to the Public Participation Plan (PPP) to address virtual public engagement, new EJ guidance and, as necessary, ensure conformity with the latest MassDOT Public Participation Plan.

Previous Work:

- Preparation of updates to the Cape Cod Regional Transportation Plan including information and strategies to ensure a viable public outreach process.
- Public Participation Plan (2022, 2015, 2009, 2007)

Procedures:

- Continue update to the PPP.
- Coordination with the Cape Cod Regional Transit Authority and MassDOT.
- Research/discover additional tools to enhance public outreach.
- Research best practices on virtual public meetings and virtual public engagement.

Products/Activities:

- UPWP projects with a public outreach requirement that complies with the PPP.
- TIP public meetings that comply with the outreach and accessibility requirements of the PPP.
- An evaluation of the effectiveness of the procedures outlined in the PPP will be performed and summarized in a presentation to the MPO.
- Revisions to the PPP, as necessary.

Schedule:

Updates to the PP as needed.

Beneficiary Communities: All

Funding Source	Amount
-	
FHWA/MassDOT	\$30,000

TASK 1.6 – REGIONAL TRANSPORTATION PLAN/CANAL BRIDGES PROGRAM COORDINATION

(Certification Activity)

Objectives: To maintain and update the Regional Transportation Plan for Cape Cod providing greater integration of land use, transportation, and climate change data, in conformance with the federal Bipartisan Infrastructure Law of 2021 and consistent with the goals and requirements of the Cape Cod Commission, towns, MassDOT, FTA, and the FHWA. Consider all modes of transportation and both short- and long-range

elements. Expand public accessibility to RTP effort in accordance with the Commission's Title VI program.

Commission staff will continue to support the Cape Cod Canal Bridges program. Staff will continue to provide updates to MPO and JTC as needed. The Canal Bridges program received a planning grant of \$1.6 million from the United States Department of Transportation (USDOT) to assist with the planning of the replacement Bourne and Sagamore Bridges.

Previous Work:

- Cape Cod 2024 Regional Transportation Plan
- Updates on the CC Canal Bridges Program to the CCMPO, CCJTC, etc.
- Cape Cod 2020 Regional Transportation Plan
- Regional Policy Plan for Cape Cod, 2018
- Living Streets Design Manual for Cape Cod, 2013
- UPWP FFY14 Climate Change Risk and Vulnerability Assessment of Transportation Infrastructure, November 2013
- UPWP FFY15 Climate Change Mitigation & Adaptation Strategy for Critical Transportation Infrastructure, under development 2014
- INVEST sustainable highways self-evaluation tool 2014
- 2014 GIS-based Infrastructure Vulnerability Tool
- 2014 Freight Study
- 2014 "Section 208 Area-Wide Water Quality Management Plan for Cape Cod"

Procedures:

- Provide updates on the Canal Bridges Program to the CCMPO and CCJTC
- Better integrate housing and economic development in transportation planning efforts in accordance with the Bipartisan Infrastructure Law.
- Updates to the Regional Transportation Plan as needed.
- Work closely with MassDOT's Environmental Services section to ensure that any
 proposed projects have support and approval of MPO. Continue to develop
 partnerships and conduct outreach with community groups and the Mashpee
 Wampanoag Tribe.
- Continue to work with communities to identify Growth Incentive Zones and areas
 for higher Development of Regional Impact (DRI) thresholds designated through
 Chapter H of the Commission's regulations to promote research and
 development/light manufacturing and identify appropriate transportation
 infrastructure to support these areas.

Cape Cod Unified Planning Work Program for FFY2024

- Strengthen procedures to incorporate stormwater and nutrient management from transportation rights-of-way.
- Staff will work with regional and statewide organizations and stakeholders, including other MPOs and MassDOT, to identify strategies to incorporate analytic tools to monitor congestion in the region and inform transportation planning process. MPO staff will apply these strategies to the development of the next CMP (as part of the 2024 RTP) and the development of TIP following the 2024 RTP.
- Continue to integrate Performance Standards into the RTP.

Products:

- Interim updates and amendments as necessary
- Presentation materials, maps, website downloads for meetings and workshops
- Public engagement tools

Schedule:

Updates as necessary [Ongoing]

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$ 43.750

Task #2 – Data Collection and Analysis Activities

TASK 2.1 – CAPE COD TRANSPORTATION DATA COLLECTION PROGRAM

Objectives: To create and maintain databases of transportation data for Cape Cod to be used for transportation planning. To monitor growth in traffic volumes and to determine existing traffic volumes on Cape Cod roads. To perform the coverage counts for MassDOT. To perform bicycle and pedestrian activity counts in selected locations. To obtain data on road geometry, when necessary, as part of the traffic counting efforts. To monitor and display Park and Ride data on a regular basis to show trends and usage of the Park and Ride facilities on Cape Cod.

Note: It is a goal of the region to install permanent traffic counters to provide continuous reliable data on traffic volumes, vehicle types, and speed on all major roads. Permanent stations with remote access capabilities are a safe and cost-effective manner to collect data.

Previous Work: Annual traffic counting programs, 1984–2022. Traffic counting reports and appendices:

- Cape Cod Traffic Counting Report
- Intersection Turning Movement Counts
- Bicycle Pedestrian Counts
- Park and Ride Lot Counts

Procedures: For the summer of 2024, roughly 200 automated traffic recorder (ATR) counts will be scheduled across Cape Cod's 15 towns. Additional counts, in coordination with or at the request of the towns and MassDOT, will be taken as schedule and weather permits. Where possible, FHWA traffic monitoring guide procedures will be followed. Police details, if required for the additional count locations, shall be the responsibility of the towns for local roads and MassDOT for state roads and locations requested by MassDOT. Turning movement counts will also be taken at selected intersections. Bicycle and pedestrian counts will also be performed on selected paths throughout Cape Cod, including the Cape Cod Canal Bike Path, the Shining Sea Bikeway, The Cape Cod Rail Trail, and the Old Colony Rail Trail. Commission staff will do manual bicycle and pedestrian counts as well as deploy bicycle and pedestrian counters to collect data across the region.

Where possible, FHWA traffic monitoring guide procedures will be followed.

Work activities under this task include:

Cape Cod Unified Planning Work Program for FFY2024

- Placement of counters
- Retrieval of counters
- Routine checks of counters
- Equipment inventory and maintenance
- Data tabulation
- Data factoring
- Data analysis/recording
- Coordination of counters
- Coordination of safety measures with towns
- Coordination of external program counts
- Periodic calibration/verification of equipment per MassDOT guidelines
- Obtain necessary permits from towns and MassDOT
- Development of traffic count file and data base
- Data mapping
- Program evaluation
- Computer data entry and maintenance
- Updated geometric information, as needed. Gather information to include sidewalks, shoulders, and bicycle lanes.

Products:

- Cape Cod Traffic Counting Report for 2023. The report will contain information on study design, count location, date/time of peak-hour volume, average daily traffic, and factored average daily traffic. The most recent 10 years of counts conducted by CCC will be included in this report.
- Online database that includes date of counts, general weather and traffic
 conditions, average daily traffic, factored average daily traffic, peak hour traffic
 volume. Breakdown of traffic by hour over period studied kept on file. Information
 provided via a map-based search tool for ease of use by the public and other
 stakeholders.
- Factored counts for MassDOT
- Expanded seasonal traffic counting data.
- Turning movement counts at intersections, including bicycle and pedestrian counts.
- An analysis of traffic growth trends over the past 10-year period for Cape Cod, subregions, and major routes
- Counts accessible at website: http://www.capecodcommission.org/counts

Schedule: Report on counts taken in 2023, submitted Spring 2024

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$60,000

TASK 2.2 – PERFORMANCE MEASURES

Background: The previous FAST Act emphasized performance-based planning as an integral part of the metropolitan planning process: states were to develop performance goals, guided by the national goals, and then MPOs would work with state departments of transportation to develop MPO performance targets. The TIP integrates the MPOs' performance measures and links transportation-investment decisions to progress toward achieving performance goals. The FAST Act identified the following national goal areas:

- **Safety**: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- **Infrastructure condition**: To maintain the highway infrastructure asset system in a state of good repair
- Congestion reduction: To achieve a significant reduction in congestion on the National Highway System
- System reliability: To improve the efficiency of the surface transportation system
- Freight movement and economic vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- **Environmental sustainability**: To enhance the performance of the transportation system while protecting and enhancing the natural environment, including mitigation strategies for stormwater management and nutrient loading.
- Reduced project delivery delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The new Bipartisan Infrastructure Law includes Planning Emphasis Areas (PEAs), around which states and MPOs should orient their planning efforts. These emphasis areas are listed below. For all goals, the document notes that FHWA Division and FTA regional offices should work with State DOTs, MPOs, and other relevant parties.

Tackling the Climate Crisis – Transitioning to a Clean Energy, Resilient
 Future: Ensure that our transportation plans and infrastructure investments help

- achieve the national greenhouse gas reduction goals of 50-52% below 2005 levels by 2030, and net-zero emissions by 2050.
- Equity and Justice40 in Transportation Planning: Advance racial equity and support for underserves and disadvantaged communities."
- Complete Streets: Review current policies, rules, and procedures to determine their impact on safety for all users. This effort should work to include provisions for safety in future transportation infrastructure, particularly those outside automobiles.
- Public Involvement: Increase meaningful public involvement in transportation
 planning by integrating Virtual Public Involvement (VPU) tools into the overall
 public involvement approach while ensuring continued public participation by
 individuals without access to computers and mobile devices.
- Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD)
 Coordination: Coordinate with representatives from DOD in the transportation
 planning and project programming process on infrastructure and connectivity
 needs for STRAHNET routes and other public roads that connect to DOD
 facilities.
- Federal Land Management (FLMA) Coordination: Coordinate with FLMAs in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands.
- Planning and Environment Linkages (PEL): Implement PEL as part of the
 transportation planning and environmental review process. The use of PEL is a
 collaborative and integrated approach to transportation decision-making that
 considers environmental community, and economic goals early in the
 transportation planning process, and uses the information, analysis, and products
 developed during planning to inform the environmental review process.
- **Data in Transportation Planning:** Incorporate data sharing and consideration into the transportation planning process.

The RTP vision statement established the overarching vision of the document and is as follows:

The Cape Cod Metropolitan Planning Organization, informed by public input, envisions a transportation system that supports the environmental and economic vitality of the region through infrastructure investment that focuses on livability, sustainability, equity, and preservation of the character that makes our special place special.

The 2024 Regional Transportation Plan (RTP) is a community-driven, performance-based plan that considers the unique challenges and opportunities of the region and establishes spending priorities to allocate available surface transportation funding

towards transportation infrastructure. The goals of the RTP expand on the vision statement in seven areas of emphasis. The goals are:

- **Safety**: Provide safe travel options for all users
- **Environmental and Economic Vitality**: Maintain, protect, and enhance the natural environment while strengthening the economy
- **Livability and Sustainability**: Support livable communities and village centers that strengthen the long-term sustainability of the region
- **Multimodal Options/Healthy Transportation**: Provides a variety of healthy transportation options to all users
- Congestion Reduction: Reduce congestion and improve travel time reliability
- **System Preservation**: Preserve, maintain, and modernize the existing transportation system
- Freight Mobility: Improve efficiency and reliability of freight movement

Federally Required Performance Measure Summary:

The US Department of Transportation (USDOT), in consultation with states, MPOs, and other stakeholders, established measures in performance areas relevant to the national goals. Table 1 lists federally required performance measures for the highway system and Table 2 lists federally required performance measures for the transit system.

Table 1. Federally Required Highway Performance Measures

NATIONAL GOAL	HIGHWAY PERFORMANCE AREA	PERFORMANCE MEASURE
Safety	Injuries and Fatalities	 Number of fatalities Fatality rate per 100 million vehicle-miles traveled Number of serious injuries Serious injury rate per 100 million vehicle-miles traveled Number of non-motorized fatalities and non-motorized serious injuries
Infrastructure Condition	Pavement Condition	 Percent of pavements on the Interstate System in good condition Percent of pavements on the Interstate System in poor condition Percent of pavements on the non-Interstate NHS in good condition Percent of pavements on the non-Interstate NHS in poor condition
Infrastructure Condition	Bridge Condition	 Percent of NHS bridges by deck area classified as in good condition Percent of NHS bridges by deck area classified as in poor condition
System Reliability	Performance of the National Highway System	 Percent of person-miles traveled on the Interstate System that are reliable Percent of person-miles traveled on the non- Interstate NHS that are reliable
System Reliability, Freight Movement, and Economic Vitality	Freight Movement on the Interstate System	Truck Travel Time Reliability Index
Congestion Reduction	Traffic Congestion	Annual hours of peak hour excessive delay per capita (for travel on NHS roadways) Percent of non-single-occupant vehicle travel
Environmental Sustainability	On-Road Mobile Source Emissions	Total emissions reductions

Table 2. Federally Required Transit Performance Measures

NATIONAL GOAL	TRANSIT PERFORMANCE AREA OR ASSET CATEGORY	PERFORMANCE MEASURE
Safety	Fatalities	Total number of reportable fatalities and rate per total vehicle revenue-miles by mode
Safety	Injuries	Total number of reportable injuries and rate per total vehicle revenue-miles by mode
Safety	Safety Events	Total number of reportable events and rate per total vehicle revenue-miles by mode
Safety	System Reliability	Mean distance between major mechanical failures by mode
Infrastructure Condition	Equipment	Percent of vehicles that have met or exceeded their Useful Life Benchmark (ULB)
Infrastructure Condition	Rolling Stock	Percent of revenue vehicles within a particular asset class that have met or exceeded their ULB
Infrastructure Condition	Infrastructure	Percent of track segments with performance restrictions
Infrastructure Condition	Facilities	Percent of facilities within an asset class rated below 3.0 on the Federal Transit Administration's Transit Economic Requirements Model scale

Targets for federally required performance measures must be set according to timelines established in the current federal transportation legislation. Regarding federally required performance measures, to date the Cape Cod MPO has chosen to adopt:

 The statewide safety performance measure targets set by MassDOT for Calendar Year (CY) 2024),

- the 2-year (2020) and 4-year (2022) statewide bridge and pavement performance measure targets set by MassDOT,
- the 2-year (2020) and 4-year (2022) statewide reliability, congestion, and emissions performance measure targets set by MassDOT, and the
- Cape Cod Regional Transit Authority's Transit Asset Management (TAM) targets at the target for the Cape Cod region.
- Cape Cod Regional Transit Authority's Public Transportation Agency Safety Plan (PTASP) targets.

Objectives: To work with MassDOT to support the above federal transportation goals at the state level. To work with MassDOT and the CCRTA on tracking progress on federally required performance measures and updating targets as required. Track performance on regional performance measures established in the Cape Cod Regional Transportation Plan. To integrate performance management activities with other regional plans and initiatives including the Regional Policy Plan, Comprehensive Economic Development Strategy, Climate Action Plan, Stats Cape Cod, and Data Cape Cod. To leverage available tools and data sets, including the MassDOT Tracker and the RITIS platform, to expand the breath of performance management activities.

Previous Work:

- Development of transportation databases for vehicle counts, bicycle and pedestrian counts, and crash records
- Online mapping of traffic counting data
- Online tool for reviewing and analyzing crash trends (Cape Cod Crash Dashboard)
- Transportation models developed in 1999/2000 for base year of 1997
- Transportation model updated in 2010

Procedures: Collect, compile, and analyses data to support performance measure tracking. Update the Cape Cod Joint Transportation Committee and the Cape Cod Metropolitan Planning Organization on regional progress towards meeting performance targets. Develop an online dashboard to report on regional progress towards meeting performance targets. Integrate performance measures and targets into other planning efforts including the Regional Transportation Plan, Regional Policy Plan, Comprehensive Economic Development Strategy, and Climate Action Plan.

Products: Staff will develop a performance measure dashboard to report on progress towards achieving regional and federal targets. MPO staff will launch the dashboard as part of the development of the 2024 RTP. The dashboard will be updated at a regular interval which will vary based on data availability, but no less than once every four years.

Schedule:

- Summary of performance standards will be presented to the MPO [Winter 2024]
- Updated presentation on updated FHWA performance measures [Spring 2024]
- Continue work on a performance based dashboard [Ongoing]

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$35,000

TASK 2.3 – TRANSPORTATION DATABASE MANAGEMENT/MODELING

Objectives: To maintain and improve databases of Cape Cod transportation information including roadway geometry, traffic volumes (motor vehicles, bicycles, pedestrian), and other issues. To provide transportation information for Cape Cod to local and state officials, transportation professionals, and the public. To perform highway capacity analyses as needed. To continue to develop and calibrate computerized travel demand forecasting databases and models for Cape Cod. To continue integration with Geographic Information System (GIS) data to provide a platform for GIS-based traffic counts, congested link summaries, and crash summaries.

Previous Work:

- Transportation databases for vehicle counts, bicycle and pedestrian counts, and crash records.
- Online mapping of traffic counting data
- With the support of a consultant, converted the previous traffic count database to a Microsoft SQL platform while maintaining and improving its functionality and increasing its accessibility (2020-2021).

Procedures:

Integrate new records when available; maintain database, develop subroutines
for analysis. When details are needed for specific locations, town crash records
may be obtained and reviewed. CCC staff will contact MassDOT to request the
latest crash records. Conduct public outreach to member communities. Respond
to data and information requests from the public, transportation professionals,
and local, regional, and state officials. Obtain the latest planimetric data and
software and use these tools to conduct detailed analyses.

- Review and utilize available socio-economic, employment, population, and housing data for base year and forecast year data. Utilize existing traffic volume and transit data to determine existing travel demands. Utilize existing transportation models for sub-regions of Cape Cod. Improve transfer methods of data between CCC Geographic Information System (GIS) services and transportation modeling effort. Expand transportation demand model to include Saturday morning element and to explicitly include public transportation used. Additional modeling efforts include the use of Synchro/Sim-Traffic software. Construction of Synchro models includes development of a computerized roadway/intersection network. Inputs include turning movements and roadway link traffic volumes, roadway and intersection geometry, and signal timing and phasing.
- Review the growth areas that were identified in the Cape Cod Regional Policy
 Plan including Community and Industrial Activity Centers and the regional
 walkability and bikeability indicators and consider refinements to the analysis to
 incorporate new datasets such as of Accessibility Observatory (AO) data
 provided by MassDOT and other new datasets in future analysis refinements.
- Review sidewalk and other transportation infrastructure layers that will be available following a Cape Cod Commission-led regional flyover exercise.
- Funding may be allocated to consultants for follow-up tasks on the new transportation databases that were implemented in previous years.

Products:

- Crash, roadway geometry, roadway traffic volumes, intersection turning movements data, and planimetric information database.
- Reports, letters, and memoranda as required.
- Updated regional transportation model based on latest available demographic information, reports of results, and summaries.
- Models will be used to support Task 3 and other regional planning and TIP activities.
- New Microsoft SQL database platform for storing and importing traffic count data.
- Revisions to regional walkability and bikeability indicators, as appropriate.

Schedule:

- Integrating data into databases [year-round]
- Year-end traffic counting data entry [Winter 2023/2024]

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$35,000

TASK 2.4 – PAVEMENT MANAGEMENT

Objectives: To collect data and implement a regional pavement management system for Cape Cod to provide an objective rating of pavement conditions and needs. To collect other roadway attribute data as part of the pavement management system.

Previous Work:

 Pavement Management Status Reports (2011 - 2022). Corridor-based pavement assessments for 33% of the municipally-owned federal-aid roadway network – outputs include updated databases and mapping.

Procedures:

• Existing roadway conditions will be identified through observations made from motor vehicles. Approximately 33% of the municipally owned federal-aid eligible roadways will be surveyed and results will be used to update databases and produce pavement condition maps and reports. Additional information may be provided by individual towns; some towns maintain pavement management databases. Existing data will be requested from individual towns. The proposed pavement rating system will be determined in coordination with the towns and MassDOT based on the Office of Transportation Planning research task on pavement management.

Products: Assessment of pavement management needs and inventory of other roadway attributes such as sidewalk availability and serviceability. Assessment and inventory of the public unpaved road network on Cape Cod.

Schedule:

- Evaluation of existing data, coordination with communities, review of methodologies [January-March 2024]
- Schedule & coordination of data collection [March-April 2024]
- Data Collection [May-August 2024]
- Status Report [Fall 2024]

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$ 26,250

TASK 2.5 – HEALTHY TRANSPORTATION/COMPLETE STREETS SUPPORT

Background: The goal of this task is to support the MassDOT Complete Streets and Safe Routes to School programs. Six Cape Cod towns have had Complete Streets prioritization plans approved to date: Sandwich; Eastham; Mashpee; Orleans; Bourne; and Falmouth. Additionally, Harwich has recently been approved for a Safe Routes to School project. The Cape Cod Commission works closely with the towns and programs to ensure Cape Cod communities are competitive for available funds. Commission staff is currently working with Barnstable to finalize the Towns prioritization plan and preparing to assist Brewster with a Complete Streets Prioritization Plans in the upcoming year.

Objectives: To assist towns with applying for Complete Streets and Safe Routes to School funding.

Procedures: Provide assistance to municipalities that have not yet registered to be a part of the Complete Street program. Commission staff expect to continue engagement with the town of Brewster. Continue to support the existing prioritization plans of Sandwich, Eastham, Mashpee, Orleans, Bourne, and Falmouth. Coordinate with towns to retrieve MAPIT credentials and assist them with Project Information Forms and Project Need Forms to secure Safe Routes to School projects. Provide outreach opportunities and coordination for regional bicycle planning projects including 'Vision 88', a continuous separated shared use path from Woods Hole to Provincetown.

Previous Studies/Work:

- Monthly updates to bicycle advocates on ongoing Commission work, meeting opportunities, and more - Ongoing.
- Barnstable Complete Streets Prioritization Plan Ongoing
- Bourne Complete Streets Prioritization Plan
- Falmouth Complete Streets Prioritization Plan
- Orleans Complete Streets Prioritization Plan
- Eastham Complete Streets Prioritization Plan
- Town centers bicycle and pedestrian connections study
- Pedestrian and Bicycling sections of Regional Transportation Plan
- 2012 bicycle route/transit route connectivity report
- Technical support for town-based bicycle routing
- Cape Cod National Seashore Integrated Bicycle Plan, 2010
- Outer Cape Bicycle and Pedestrian Master Plan

Products: Draft and final reports

Schedule:

- Assistance to towns as requested [Oct. 2023-Sept 2024]
- Updates to bicycle advocate groups as need [Oct. 2023-Sept 2024]

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$30,000

TASK 2.6 – GEOGRAPHIC INFORMATION SYSTEM

Objectives: To maintain and improve the Geographic Information System for Cape Cod to provide an analysis tool for transportation decision-making.

Ongoing Work:

- Integration of Massachusetts DOT Roadway Inventory Files
- Development of geographic land use information for transportation planning
- EV Charging Station Data viewer
- Updates to Cape Cod Crash Dashboard

Procedures: Importing of transportation-related geographic information from state, federal, local and other sources into Cape Cod's Geographic Information System; editing as needed; provide database, digital, and graphic outputs of geographic information as required. Staff will also continue to expand and support virtual public engagement tools to ensure ease for users and to keep the public involved in the planning process.

Previous Studies/Work

- Cape Cod Crash Dashboard
- Cape Cod Census Data Viewer
- Preparation and analysis of pavement data
- Study area maps for RSAs, corridor studies, and other technical assistance projects

Products: Digital files for input into specialized transportation analyses; graphic output of maps (paper, .jpg, .pdf as required).

Schedule:

Cape Cod Unified Planning Work Program for FFY2024

• Study area maps and online mapping tools [as needed]

Beneficiary Communities: All

Funding Source Amount

FHWA/MassDOT \$50,000

Task #3 – Short- and Long-range Transportation Planning

The Cape Cod MPO includes a close partnership between member agencies and the Cape Cod Regional Transit Authority. Many of the planning strategies resulting from Task 3 efforts will capitalize on the services that the Cape Cod RTA has to offer.

Livability Statement

Livability refers to the social and environmental quality of an area as perceived by residents, workers, and visitors. The U.S. Department of Transportation considers the principle of Livability to be essential to the success of regional transportation planning. Livability directly benefits people who live in, work in or visit Cape Cod, increases property values and business activity, and it improves public health and safety. Livability is largely affected by conditions in our public spaces, places where people naturally interact with each other and their community, including roads, conservation lands, transportation hubs and other public facilities, and so is affected by public policy and planning decisions.

Transportation decisions can have a major impact on Livability. Streetscapes that are attractive, safe and suitable for a variety of transportation modes (particularly walking) are a key factor in Livability. Traffic safety, traffic noise and local air pollution, affordability, impervious surface coverage (i.e., the portion of land devoted to roads and parking), preservation of environmental and cultural structures, and opportunities for recreation are all Livability factors often affected by transportation policies and practices. Transportation decisions can also affect social interactions and community cohesion. Pedestrian-friendly streets create opportunities for people to meet and interact, helping to create community networks. The MPO continues to support Livability through the following planning tasks in this UPWP.

TASK 3.1 – DOWNTOWN PARKING & CIRCULATION STUDY - CHATHAM

Background: Downtown Chatham is home to numerous commercial and recreational activity sites and faces challenges with parking and circulation around the Main Street area. Along with on-road parking on Main Street, there are several other lots that provide free parking for residents and visitors, including:

- Colonial Building Parking Lot (behind the colonial Building near the Rotary) off Stage Harbor Road
- Town Hall (Main Street)

- Chatham Bars Avenue (next to the Impudent Oyster Restaurant)
- Veterans Field (next to the Red Nun Bar & Grill on Main Street)
- Chatham Community Center on Main Street
- Chatham Light & Overlook (30-minute limit)
- Oyster Pond (Stage Harbor Road)
- Chatham Elementary School (Depot Road)
- Behind the Chatham Squire Restaurant and Yellow Umbrella Books
- Daily rate paid parking is available at Eldredge Tax Parking Lot at 365 Main Street. Shuttle service to Lighthouse Beach is offered.

There are several roadways that are affected by the congestion of Main Street including Chatham Bars Avenue, Seaview Street and Shore Road.

Objectives: The Cape Cod Commission, under the Unified Planning Work Program, will work with the Town of Chatham to conduct a parking and circulation study to identify existing parking trends and better understand motorist and non-motorist circulation in the downtown Chatham area.

Task A: Project Initiation

Commission staff will gather past studies and develop a plan for analysis of the study area. This task will include a meeting with Commission staff and a consultation meeting with Town of Chatham staff.

Task A Product: Final Scope of Work and Public Participation Plan and kickoff meeting summary

Task B: Data Collection/Mapping

Commission staff will gather data including an analysis of current parking stock and utilization for both motorists and bicyclists and overall circulation in Downtown Chatham.

A data inventory including, at the minimum, the following information will be established:

- Parking lot information
 - Number of spaces
 - Ownership
 - o Pricing scheme
 - Utilization
 - Number of Bike Racks
- Traffic counts (including vehicle, bicyclists, and pedestrians) on major roadways and intersections.
- Existing roadway configuration including available bicycle and pedestrian accommodations.

Commission staff will visit the study area to evaluate and photograph conditions. Town staff will be invited to attend the site visit.

Task C: Meetings with the Chatham Parking Solutions Working Group

Commission staff will provide bi-monthly updates on the project to the Chatham Parking Working Group to review data collection efforts, and potential solutions as the project advances

Task D: Concept Development and Refinement

Commission staff will develop a set of potential parking improvements aimed at improving the safety and efficiency of moving people and goods throughout Downtown Chatham. This may include options for revisions to parking policy or pricing, developing new parking options, information technology options for parking management and/or options aimed at reducing parking demand such as transit. Commission staff will work to identify estimated costs, anticipated benefits, and likely obstacles to implementation for each potential improvement.

Commission staff will also develop a set of potential roadway improvements aimed at improving the safety and efficiency of moving people and goods throughout Downtown Chatham. This may include options for changing circulation patterns, improvements at select intersections, and/or options aimed at reducing circulating volumes within the study area. Commission staff will work to identify estimated costs, anticipated benefits, and likely obstacles to implementation for each potential improvement.

Task D Product: Preliminary Concepts and Summary of Feedback

Task E: Public Review of Concepts

After review of the preliminary concepts by Commission and Town staff, the preliminary concepts will be presented at a public meeting. Feedback on the preliminary concepts will be used to refine those concepts.

Task E Product: Summary of Public Meeting

Task F: Draft and Final Report

Concepts will be refined based on public comments and feedback from Town and Commission staff.

Refined concepts will be prepared as part of a draft report. The draft report will also include an analysis of each alternative's impact on traffic flow and safety.

Product: All the information and comments received will be compiled into a final report document and delivered to MassDOT, the Town of Chatham, FHWA and FTA.

Schedule: The schedule for this effort allows for completion by October 2024. Milestones include coordination meetings with the Cape Cod Joint Transportation Committee and updates to the Cape Cod Metropolitan Planning Organization.

- Needed data collection (FY 2023) [Summer of 2023 and Fall 2023, as needed]
- Review of methodology/project initiation [Ongoing]
- Meetings with Chatham Parking Solutions Working Group: [Ongoing]
- Problem identification and development of alternatives [Spring 2024]
- Analysis of Alternatives [Summer 2024]
- Draft report/public meeting [Fall 2024]
- Final report [Fall 2024]

Beneficiary Community: Chatham

Previous Corridor Studies:

- Station Avenue Corridor Study
- East Hyannis Route 28 Corridor Study
- Mashpee Rotary Corridor Study
- Route 6 Eastham Corridor Study
- Route 6 Safety Study: Ramp and Shoulder Design
- Route 28 Cotuit Corridor Study
- Route 28 Eastern Mashpee Corridor Study

Funding Source Amount
FHWA/MassDOT \$60,000

TASK 3.2 – TRANSPORTATION SAFETY/ROAD SAFETY AUDITS

Objectives: To conduct and assist with Roadway Safety Audits (RSA) at identified high crash locations across Cape Cod, as well as assisting municipalities with any other small technical assistance needs that arise. To conduct an interchange safety study at the intersections of local roadways and the entrance and exit ramps to regional highways.

Previous Work: Commission staff conduct several RSAs every year, while also participating in RSAs hosted by other agencies. A full list of completed RSAs with report links can be found here: https://www.capecodcommission.org/our-work/transportation-safety/

The 2022 Barnstable County High Crash Locations Report (top fifty crash location report) provided analysis based on frequency, crash rate, Equivalent Property-Damage

Only (EPDO), and EPDO rate using geo-located crash data to the extent available. The creation of the report also included an interactive portal, Cape Cod Crash Dashboard, which will help identify high crash intersections across Cape Cod and help inform future Roadway Safety Audits.

Procedures: With town and state staff members present, RSAs will be conducted. A review of the crash history as well as the existing layout of the study area will be conducted. RSA team members will visit the roadway locations and strategize solutions for making the roadway safer for all users.

Commission staff will also study the intersections of entrance and exit ramps at the local intersections in the region. The purpose of the study is to identify crash history at these locations and review the existing conditions (stop control, pedestrian accommodations, etc.) and prepare a report with the findings and recommendations.

Products:

- Recommendations will be published in a written report to be made available online. Other study materials will be produced and made available via the internet including maps and charts, handouts, and crash diagrams.
- Reports and memoranda published to include analyses and recommendations for improvements at other safety problem locations as appropriate.
- Final report outlining crash history and recommendations at the intersection of entrance and exit ramps and local roadways.

Schedule: Anticipated RSA Schedule-

- Attend Roadway Safety Audits as needed.
- Conduct Roadway Safety Audits when applicable.
- Presentation of non-motorized crash analysis [Spring 2023]

Beneficiary Communities: All communities

Funding source Amount
FHWA/MassDOT \$65,000

TASK 3.3 – SIDEWALK CONNECTIONS TO BUS STOPS & MULTI-FAMILY HOUSING

Background: To identify gaps and needs in the sidewalk network by completing an inventory of all existing and non-existing sidewalks and pedestrian amenities near Cape Cod Regional Transit Authority (CCRTA) bus stops and multi-family housing facilities. In 2023 Commission staff finalized a report inventorying bus stop amenities along three major CCRTA routes, and this study looks to expand on the inventory with a focus on pedestrian accommodations.

Objectives: The goal of the inventory is to provide recommendations that will improve safety for all users as well as identifying locations for potential funding opportunities.

Procedures:

- Commission staff will begin data collection activities in the summer of 2023 and continue into the fall of 2023 as needed.
- Staff will take the collected data and begin to complete an analysis of existing conditions and prepare a report to highlight the existing conditions and offer recommendations.

Products: A final report outlining existing conditions and recommendations

Beneficiary Communities: All

Schedule:

- Data collection [Summer/Fall 2023]
- Report/mapping tool [Winter/Spring 2024]

Funding Source Amount
FHWA/MassDOT \$45,000

TASK 3.4 – CLIMATE ACTION PLAN IMPLEMENTATION

Background: Completed in 2020, the Cape Cod Commission performed an Electric Vehicle (EV) Charging Infrastructure inventory and siting analysis and is updating the siting analysis in 2023 (ongoing). Building off these inventories, Commission staff will work to provide guidance to municipalities looking to purchase, install, maintain, or upgrade EV charging infrastructure. Commission staff will also review the long-term maintenance and costs associated with EV charging infrastructure.

Products:

- Data and Information
 - Updating data for the regional EV charging station siting tool
 - Collecting and analyzing data from new EV charging stations
- Technical Support and Engagement
 - Support municipalities in the implementation or expansion of infrastructure to support EV charging.
- Low Lying Roads data set
 - o To assist in seeking funding opportunities to address priority locations.

Schedule:

- EV Charging Data viewer updates [Summer 2024]
- Ongoing technical support and engagement

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$50,000

TASK 3.5 – REGIONAL SAFETY ACTION PLAN COORDINATION

Background: The Cape Cod Commission has been awarded \$240,000 in federal grant funding to support the Cape Cod Regional Safety Action Plan through the Safe Streets and Roads for All (SS4A) Grant Program, an initiative designed to improve roads and address traffic fatalities nationwide.

Over the past decade, motor vehicle crashes on Cape Cod have resulted in over 1,400 serious injuries and fatalities. In 2022 alone, fifteen individuals lost their lives in motor vehicle crashes on Cape Cod roads. On average, one in five fatalities was a pedestrian or bicyclist, and one in three fatalities was an individual over the age of 65. The region's transportation system must safely accommodate all users, including non-motorists and aging populations. Progress has been made, with crash rates decreasing in recent years, but further action is required.

Objectives: To complete a Regional Safety Action Plan for Cape Cod with the assistance of a consultant. Commission staff will work with a consultant to provide outreach and other tasks necessary for completing the plan.

Commission staff are also planning to work with municipalities on speed limit regulations on municipally owned roadways.

Procedures:

- Assist the consultant on the Regional Safety Action Plan through public outreach and more [as needed]
- Assist municipalities with speed limit regulations.
 - Conduct speed studies.
 - o Provide recommendations when necessary.

Products: Public comments from outreach events as part of the Regional Safety Action Plan development. Speed study data prepared for municipalities.

Schedule: As needed, October 2023-September 2024

Beneficiary Communities: All

<u>Funding source</u> <u>Amount</u>

FHWA/MassDOT \$50,000

<u>TASK 3.6 – FOLLOW-UP ON PREVIOUS TRANSPORTATION</u> PLANNING STUDIES

During the development of UPWP studies, unforeseen external factors may cause delay of completion within a particular fiscal year. The most common cause of delay is the need for additional public outreach or an expanded scope due to the discovery of factors such as environmental constraints. In some cases, projects are delayed due to the need for additional review by outside agencies. Even upon study completion, additional staff time may be required as a project moves into the design and TIP funding phases.

Objectives: To allow for completion of and/or follow-up work on special transportation studies of prior UPWPs.

Procedures:

- Incorporate additional public review into UPWP study, produce final reports.
 - Task 2.1 (Cape Cod Traffic Data Collection Program)
 - Task 3.1 (Station Avenue Corridor Study)
 - Task 3.2 (Non-Motorist Crash Analysis)
- Participate in study implementation efforts with state and local agencies.

Products: 2022 & 2023 Traffic Counting Reports. Technical analysis (memorandums and emails) to Town staff/committees on implementation of past studies.

Schedule: As needed, October 2023-September 2024

Beneficiary Communities: Towns comprising follow-up studies.

Funding source Amount

FHWA/MassDOT \$40,000

Task #4 – Technical Assistance Activities

TASK 4.1 – TRANSIT PLANNING

Objective: To provide transit planning and technical assistance services in coordination with the Cape Cod Regional Transit Authority and Cape Cod towns receiving transit service from the CCRTA or other transit organizations. Objectives include identifying unmet needs of the transit community and keeping the Cape's transit system in compliance with federal, state and local policy and legislation.

Procedures:

- Research the potential for a Transportation Management Association (TMA) for Cape Cod.
- Work with the CCRTA on the installation of fix-it stations at key locations.
- Identify opportunities to implement Transit Priority Treatments and improvements identified in the eliminating Transit Barriers, Closing the Gaps Report, and the recent bus stop inventory.

Additional tasks may be identified by the Cape Cod Commission, CCRTA and Cape Cod Towns follows:

- Evaluate and develop proposed transit services.
- Integrate transit planning into corridor studies.
- Evaluate existing routes for demographic coverage as presented in the Comprehensive Service Assessment
- Provide guidance on regulatory compliance with Title VI, Environmental Justice and other federal or local requirements.
- Assist in making digital and paper maps or schedules.
- Assist in coordinating marketing and outreach efforts.
- Assist in Transit Oriented Development planning of the Hyannis Transportation Center
- Support the CCRTA in supporting the evolving transportation demands caused by COVID-19

Coordination will be facilitated by regular meetings with CCRTA staff to discuss ongoing transit studies and inclusion of transit in Cape Cod Commission corridor studies. Projects may be reviewed and assisted by consultants in coordination with CCRTA staff.

Previous Work: Previous transit planning has been performed under specific tasks included in corridor and other regional transportation studies. Projects specific to transit performed by the Cape Cod Commission are listed but not limited to as follows:

Cape Cod Unified Planning Work Program for FFY2024

- 2023 Bus Stop Inventory Report
- 2023 Coordinated Public Transit Human Service Transportation Plan
- 2016 Eliminating Transit Barriers
- 2015 Comprehensive Service Assessment
- 2015 Buzzards Bay Commuter Rail Local Impacts Report

Proposed Products:

- Updated GIS transit route planned application.
- Emails/memorandums on opportunities to implement Transit Priority Treatments and improvements identified in the eliminating Transit Barriers, Closing the Gaps Report, and the recent bus stop inventory.
- Recommendations for a TMA on Cape Cod.

Schedule:

- Coordination on fixit station installation [Fall/Winter 2023]
- Emails/memorandums on opportunities [Winter 2023/24]
- TMA Research Recommendations [Fall 2024]
- Other coordination efforts ongoing

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$ 62,500

TASK 4.2 – SUPPORT FOR CCRTA FLEET ELECTRIFICATION

Objective: To support and assist the CCRTA with the Zero Emission Vehicle (ZEV) Transition Plan and Regional Support Study. Cape Cod is one of the most vulnerable locations in America to rising sea levels caused by climate change. Transitioning CCRTA's vehicle fleet to ZEVs is an important step in combating climate change here on Cape Cod. The CCRTA has hired a consultant to perform the analysis and feasibility of transitioning to ZEVs, the Commissions role is to sit on the steering committee to receive updates and provide feedback on the study as it progresses.

 Sit on the steering committee for the ZEV Transition Plan and Regional Support Study.

Products: Dependent on requests; October 2023 to September 2024

Schedule: Dependent on requests; October 2023 to September 2024

Beneficiary Community: All

Funding Source Amount

FHWA/MassDOT \$25,000

TASK 4.3 – TRANSIT DATA COLLECTION AND ANALYSIS

Objective: Working with the CCRTA, the goal is to collect and map data on bus stops, routes, and ridership necessary to continually improve service. Consideration and inclusion of the MassDOT engineering directives and design guidelines and Transit Asset Management (TAM) plans will be explored.

Procedures: Commission staff will use this task to collect additional data needed for the sidewalk to CCRTA bus stops and multi-family housing study. Staff may also use funding in this task for other transit data collection needs; including bus stop amenities, ferry ridership surveys, and more.

Commission staff has also begun assisting the CCRTA with purchasing and locating bus stops that would be good candidates for simme-seats. Simme-seats are a seat attached to a new or existing CCRTA bus stop sign that allows transit users to more comfortably wait for their bus.

Commission staff will collect and analyze data in support of the CCRTA fleet ZEV transition study.

Products:

- Inventory of all sidewalks and pedestrian amenities at or near CCRTA bus stops and multi-family housing facilities.
- · Simme-seat location identification, etc. [Ongoing]

Schedule:

- Data collection [Summer 2023-Spring 2024]
- Other data collection needs as necessary

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$50,116

TASK 4.4 - OTHER TECHNICAL ASSISTANCE REQUESTS

Objectives: To provide the state, the towns, and the region with technical transportation assistance, as needed.

Previous Work:

- Parking Study in Town of Sandwich (2021)
- Support communities in preparation of grant requests (i.e., MassTrails, Shared Spaces, and Bottleneck grants)
- Supported MVP and EDA grant funded project to work with 9 Cape towns to identify low-lying roads, develop criticality of road segments, and identify potential solutions to improve climate resiliency for selected low-lying roads.
- Queen Anne Road Speed Study (2019) and follow up letter and analysis for Town of Harwich

Procedures: Assist towns with infrastructure improvements including pedestrian, bicycle, transit rider shelter locations, roadway reconfigurations, corridor studies, etc. Commission staff will assist towns applying for grants and offer support on smaller technical requests.

Products: Letters, reports, memoranda, and analyses

Schedule: Continuous throughout the year as requested; October 2023 to September 2024

Beneficiary Communities: All

Funding Source Amount
FHWA/MassDOT \$ 42.346

Task #5 – Cape Cod Commission Transportation Planning and Regulatory Activities

TASK 5.1 – REGULATORY

Objectives: The primary purpose of the CCC regulatory program is mitigation of transportation impacts in a manner consistent with Barnstable County's Regional Policy Plan. Additional goals are as follows:

- Ensure proper review and analysis of traffic impacts of major residential and commercial developments throughout the region.
- Provide such information to the CCC, MassDOT, EOEA-MEPA Unit, town officials, and other interested parties, as required.
- Recommend mitigation measures and work with interested parties in applying conditions to projects.
 - Assist the Cape Cod Commission regulatory staff in the review of developments of regional impact.
- Review and comment on Environmental Notification Forms (ENFs),
 Environmental Impact Reports (EIRs), and Developments of Regional Impact (DRI).

Previous Work: Previous work includes analysis, review, and comment on ENFs, EIRs, and Cape Cod Commission regulatory review.

Procedures:

- Review ENF, EIR, EIS, MIS and/or traffic analyses
- Compute trip generation estimates
- Review traffic counts on adjacent street network; conduct special traffic counts
- Perform preliminary site visit
- Compute LOS at site drive and area intersections, as necessary
- Attend MEPA site visit, if applicable
- Discuss project with interested parties
- Identification of appropriate mitigation measures
- Review mitigation measures for compliance and consistency with the Regional Policy Plan
- Written and oral comments and testimony to the Cape Cod Commission,
 MassDOT District 5, MEPA, the towns, and other interested organizations as required

Products:

Cape Cod Unified Planning Work Program for FFY2024

- Discussions with MEPA, MassDOT, project proponents, and town officials provide written comments
- Testimony at DRI and other meetings as required
- Advancement of measures to mitigate traffic impacts
- Analysis and recommendation on transportation improvements necessary to mitigate impacts

Schedule: As required to meet CCC, MEPA, MassDOT, and local deadlines

Beneficiary Communities: All

The funding amount for this task varies on the number and scale of projects submitted for review.

TASK 5.2 – PLANNING

Objectives: To assist communities and the region in the development and implementation of Local Comprehensive Plans (LCPs), Districts of Critical Planning Concern (DCPCs), and economic development in designated growth centers.

Previous work:

- Regional Policy Plan updates
- Past assistance in the development of LCPs in various Cape Cod towns

Procedures: Advisory and analytical assistance

Products: Testimony, letters, LCPs, DCPCs, and Technical Memoranda as required

Schedule: As established by the Cape Cod Commission and the Towns and legislated requirements

Beneficiary Communities: All

The funding amount for this task varies on the number of municipal requests.

TASK 5.3 – OTHER TRANSPORTATION ACTIVITIES

Objectives: To perform other transportation activities and transportation program management.

Previous Work: Past transportation program management

Procedures:

Cape Cod Unified Planning Work Program for FFY2024

- Commission staff will assist towns in local transportation planning efforts including intersection safety analysis, trip generation calculations for small scale development, and TIP guidance.
- Commission staff will evaluate the impact of TIP project requirements relative to community character and environmental impacts
- Commission staff will also direct town in the appropriate MassDOT official/MassDOT department to address local concerns.

Products: Technical memoranda, email responses, telephone responses to member communities and stakeholders.

Schedule: Continuous throughout the year

Beneficiary Communities: All

The funding amount for this task varies on the number of stakeholder and agency requests.

Distribution of UPWP Efforts

Equity Analysis by Community

The table below identifies the affected communities by UPWP efforts included in UPWPs for the past five years, as well as this current UPWP. Individual UPWP subtasks may affect one or more towns, or in some cases, all fifteen communities of Barnstable County. The map on the following page shows the affected locations of these studies within Barnstable County.

Table 3 - Geographic Distribution of UPWP Efforts

Town	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total FY2019-24
Barnstable	1	2	1	1	1	1	7
Bourne	1	2	0	1	0	1	5
Brewster	0	0	0	0	1	1	2
Chatham	1	0	0	0	0	1	2
Dennis	0	2	0	0	0	1	3
Eastham	0	0	0	0	0	0	0
Falmouth	0	0	0	1	0	1	2
Harwich	0	0	0	0	0	1	1
Mashpee	1	0	0	0	0	0	1
Orleans	0	1	0	0	0	1	2
Provincetown	0	0	0	0	0	0	0
Sandwich	1	0	0	0	0	1	2
Truro	0	0	0	0	0	1	1
Wellfleet	0	0	0	0	0	0	0
Yarmouth	0	0	1	1	1	1	4
All Towns	18	19	22	23	25	23	130

The regional nature of many of the UPWP efforts encompasses all fifteen communities at an average of over twenty studies per year. The table above cites regional ("All Towns") and the smaller-scale efforts for the individual towns or groups of towns (e.g., an Outer Cape study may be counted in two or more Outer Cape towns). Commission staff acknowledges that improving safety in all Cape communities is a priority and will continue to assist and follow up with municipalities that have yet to see TIP funding in their town. For example, the Commission conducted a corridor study along Route 6 in Eastham, staff will continue to aid the town in seeking funding opportunities for improvements for this crucial, regional corridor.

These efforts are tailored to problem identification and are scaled accordingly. For example, a single effort in Barnstable (e.g., Hyannis Access Study Implementation) may

lead to a \$50 million-dollar transportation improvement while three studies in a smaller community may reflect small-scale intersection improvements costing much less.

Equity Analysis by Impacted Population

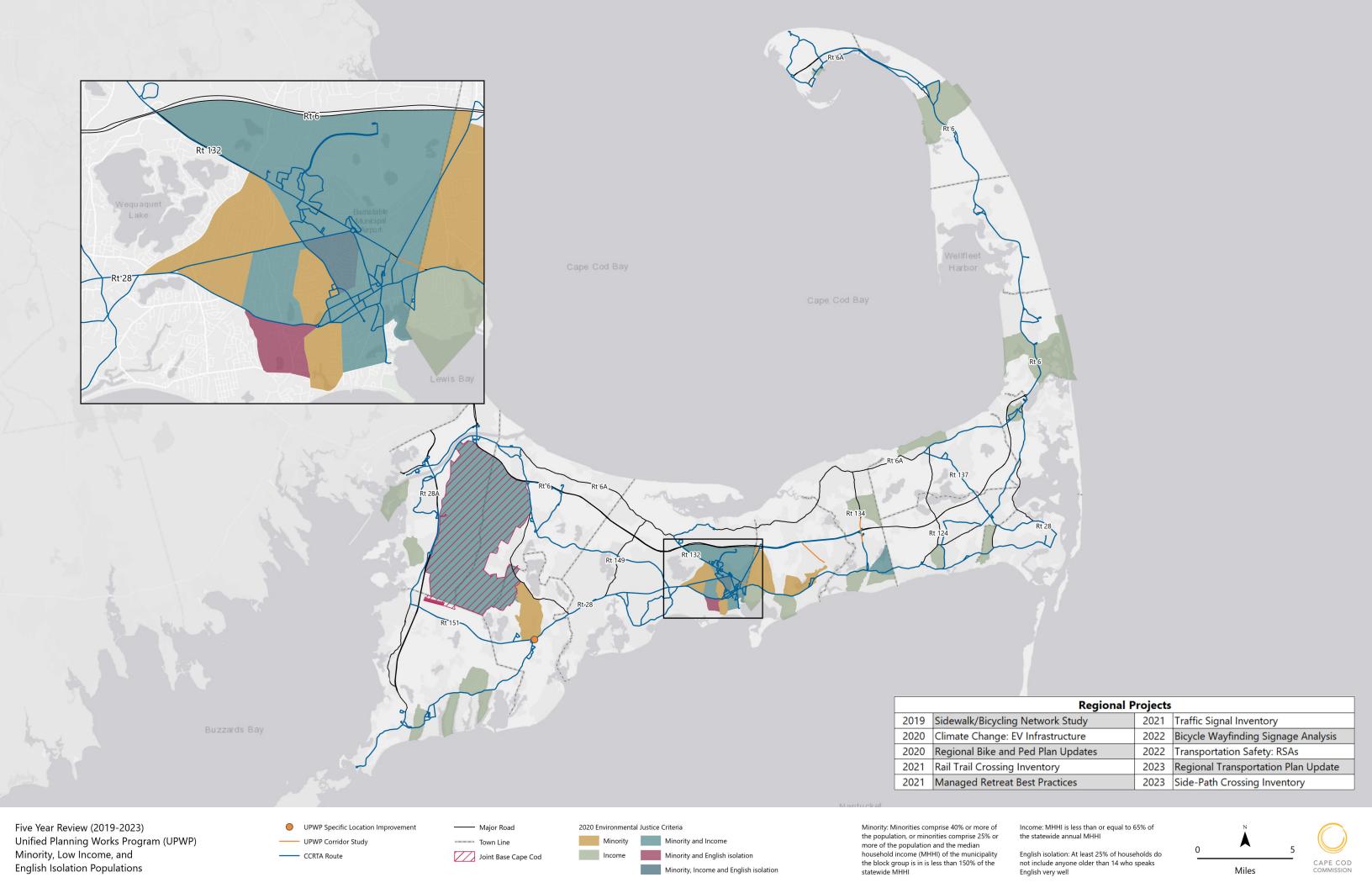
An equity analysis of UPWP subtasks was conducted with respect to anticipated impacts on minority, low income, and limited English proficiency populations over the last five years and the current year. The maps at the end of this Appendix show the locations of projects in relation to identified concentrations of these populations both for the current UPWP and the five-year look back.

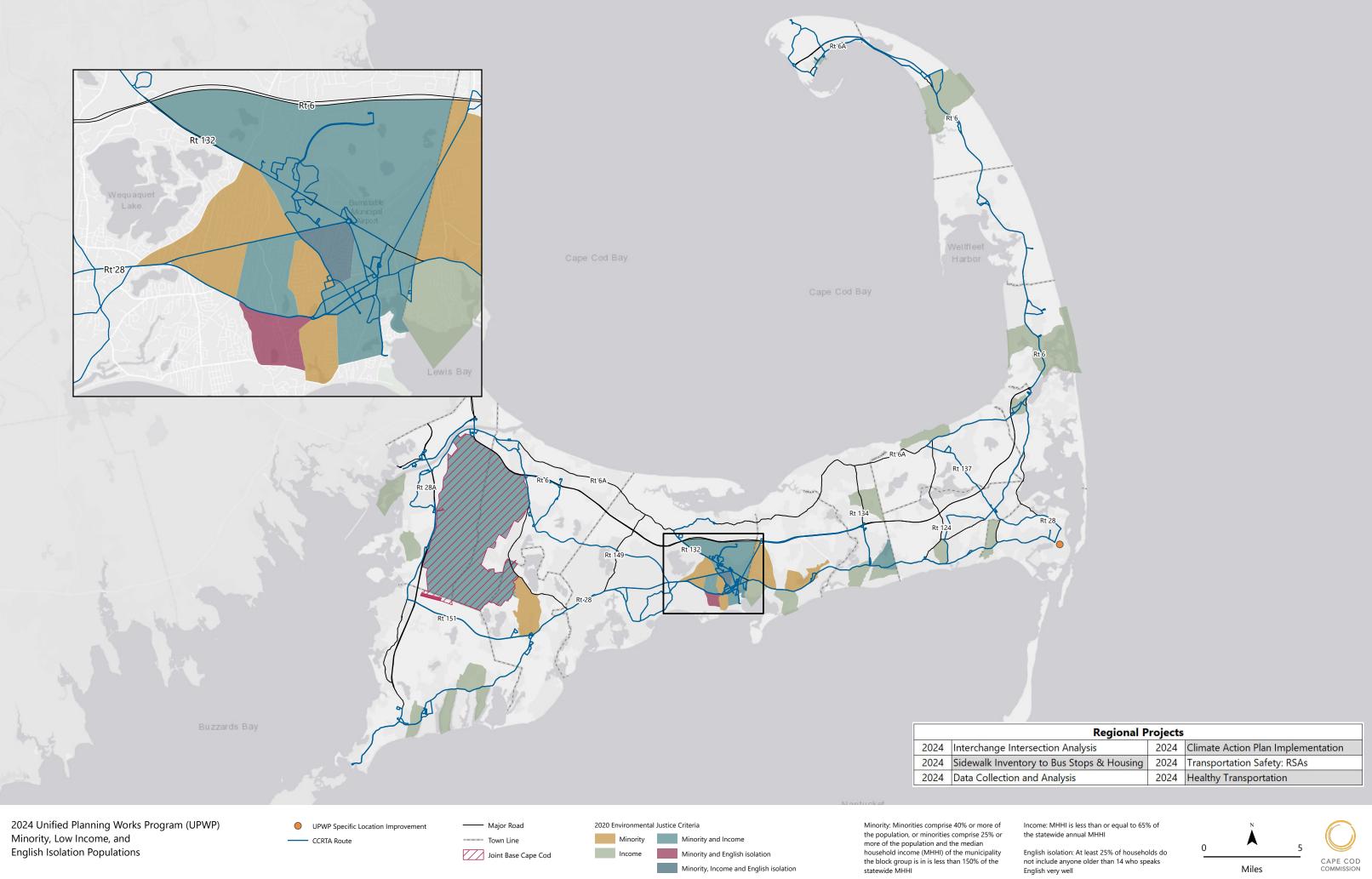
The only geographically specific study in 2023 is the Station Avenue Corridor Study in Yarmouth. This study will positively benefit all impacted populations as noted above. In the figure below, all geographically specific UPWP studies are outlined to identify the impacted populations they benefit. The majority of geographically specific locations do benefit from these impacted locations. These estimates exclude regional projects that have the potential to benefit all transportation users on Cape Cod.

Table 4 - Geographic Distribution of UPWP Efforts

Project	Year	Impacted Population
Sidewalk Inventory near	FFY 2024	I, M, LEP
Bus Stops & Multi-Family		
Housing		
Station Ave. Corridor	FFY 2023	I, M
Study		
Bicycle Wayfinding	FFY 2022	I, M, LEP
Analysis		
Route 28 East Hyannis	FFY 2021/2022	I, M, LEP
Corridor Study		
Route 134 Dennis Corridor	FFY 2020	I, M, LEP
Study		
Bourne Bike Plan	FFY 2020	I, LEP
Mashpee Rotary Study	FFY 2019	M, LEP

Note: Based on projects within 3 miles of the populations identified on the maps on the following page.





Minority, Income and English isolation

not include anyone older than 14 who speaks English very well





Table 5 - Complete Streets Funding Efforts

Task	UPWP Task Budget (Total)	% assigned to Complete Streets	Complete Streets Budget
2.5 – Healthy Transportation	\$30,000	100%	\$30,000

^{*} Other tasks such as Task 3.1, Task 3.3 & Task 4.1 will all include Complete Streets elements throughout their project development

Glossary

Table 1. Acronyms

4.00011/44	
ACRONYM	MEANING
AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
BIL	Bipartisan Infrastructure Law
CAAA	Clean Air Act Amendments of 1990
CCC	Cape Cod Commission
CCJTC	Cape Cod Joint Transportation Committee
CCMPO	Cape Cod Metropolitan Planning Organization
CCRTA	Cape Cod Regional Transit Authority
CIP	(MassDOT) Capital Investment Plan
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMP	Congestions Management Plan/Process
CMR	Code of Massachusetts Regulations
СО	Carbon Monoxide
CO ₂	Carbon Dioxide
CTPS	Central Transportation Planning Staff
CZM	(Massachusetts) Coastal Zone Management
DEP	Department of Environmental Protection
DOT	United States Department of Transportation
DRI	Development of Regional Impact
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EOEA	(Massachusetts) Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
FA	Federal Aid
FAST	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY, FFY	Fiscal Year, Federal Fiscal Year
GPS	Global Positioning System
HSIP	Highway Safety Improvement Program
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System(s)
LOS	Level of Service
LRTP	Long Range Transportation Plan (see RTP)
MAP	Mobility Assistance Program
MAP-21	Moving Ahead for Progress in the 21st Century
MassDOT	Massachusetts Department of Transportation

ACRONYM	MEANING
MEPA	Massachusetts Environmental Protection Act
IVIEFA	
MHD	Massachusetts Highway Department or MassHighway (now
MOLL	MassDOT/Highway Division)
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization (see CCMPO)
NAAQS	National Ambient Air Quality Standards
NFA	Non-Federal Aid
NHPP	National Highway Performance Program
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NOx	Nitrogen Oxides
PEA	Planning Emphasis Area
PPP	Public Participation Plan
PTASP	Public Transportation Agency Safety Plan
RPA	Regional Planning Agency
RPP	Regional Policy Plan
RSA	Roadway Safety Audit
RTA	Regional Transit Authority (see CCRTA)
RTP	Regional Transportation Plan
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAM	Transit Asset Management
TAP	Transportation Alternatives Program
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TSM	Transportation Systems Management
UPWP	Unified Planning Work Program
USGS	United States Geographical Survey
UZA	Urbanized Area
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
VPD	Vehicles Per Day
VPH	Vehicles Per Hour
VIII	VOLIDIOS I OI FIOUI

Appendices

<u>APPENDIX A: REGIONALLY SIGNIFICANT TRANSPORTATION</u> PLANNING STUDIES FUNDED BY OTHER SOURCES

Cape Cod Bridges Program

MassDOT Highway Division has started on one the most important transportation programs in the region: addressing the aging Sagamore and Bourne bridges and making improvements to the surrounding roadway networks. There are still many important factors under consideration, such as defining the program's purpose and need and the development of bridge and roadway alternatives.

Program schedule:

- Phase 1:
 - Data collection including environmental conditions and traffic patterns.
 - Public outreach and involvement efforts are underway.
- Phase 2: Based on public input, MassDOT develops and refines bridge and roadway options (approximately 2 years).
- Phase 3: MassDOT identifies preferred options. Environmental documentation process begins. Design development (approximately 4 years).
- Phase 4: MassDOT completes preliminary design and environmental permitting (approximately 3 years).
- Phase 5: Construction underway (approximately 7 years).
- Delivery: The Cape Cod Bridges Program is completed.

*There are many factors that will influence schedule, including but not limited to: identification of construction funding, determination of the National Environmental Policy Act (NEPA) Class of Action, public feedback, packaging of construction contracts and construction procurement methodology, and more.

Low Lying Roads

Low lying roads are areas prone to flooding from the combined effects of hazards such as sea level rise, storm surge, and erosion. Upstream freshwater flooding events that have no ocean-based component are not included in the low-lying roads project. Cape Cod is especially vulnerable to coastal storms because of its unique geography and roadways that travel through ever-changing environments. Flooding is currently a regular event on several road segments during extreme high tides and storm events. As seas rise and storms intensify the impact to our coastlines and flooding occurrences will increase in frequency and depth.

Cape Cod Commission staff are working with the towns of Barnstable, Bourne, Brewster, Dennis, Eastham, Orleans, Sandwich, Wellfleet, Truro, and Yarmouth to

examine vulnerabilities in the roadway network and identify adaptation alternatives. With funding support from the U.S. Economic Development Administration and the Massachusetts Municipal Vulnerability Preparedness program, the Commission has contracted with the Woods Hole Group to conduct a vulnerability assessment of roadway segments, bridges, and culverts due to flooding from the combined effects of sea level rise and storm surge. The project employs state of the art modeling and community engagement to identify and prioritize low lying roads to target for coastal resiliency action.

The project kicked-off in September 2021 and will be complete in Spring 2023. Efforts are being made to attain funding to replicate this analysis for the remaining five Cape Cod towns in 2023/2024.

Project details can be found here: https://www.capecodcommission.org/our-work/low-lying-roads-project/

Complete Streets Prioritization Plans

Several communities on Cape Cod have recently completed Complete Streets Prioritization Plans and others intend too soon. Commission staff recently assisted the Towns of Bourne and Falmouth with their Prioritization Plans which were approved by MassDOT. In the coming year Commission staff may assist the Town of Brewster with Prioritization Plans. Outreach and online tools will be provided throughout the projects with the goal of having an approved Prioritization Plan for both towns to seek construction funding.

APPENDIX B: FEDERAL FISCAL YEAR 2024 PL FORMULA ALLOCATION

	23 (PL)		Δ
apportionment	\$ 12,095,567	\$ 11,858,399	
obligation authority	90.0%	90.0%	0.00/
federal PL funds only	\$ 10,886,010	\$ 10,672,559	2.0%
matching funds added	\$ 13,607,513	\$ 13,340,699	
Total funds (PL funds+ 5303)*	\$ 18,287,935	\$ 17,929,945	2.0%

PL funds are provided to the MPOs from the previous year's federal-aid ("forward funded")

Notes 5303 funding will be transferred from FTA to FHWA and be administered as a Combined Planning Grant

Updated population numbers are based on SFY 2023 Chapter 90 apportionments

The recommended PL Allocation Formula was developed by the Massachusetts Association of Regional Planning Agencies and recommended by MassDOT to FHWA, is based upon the following three factors: 40% of available funds divided equally among the ten MPOs, 30% is allocated based on each MPO's relative share of Massachusetts population, and 30% is allocated based on each MPO's relative share of urbanized population. These factors result in the percentages shown.

		% of total ids/ten						30% of funding for	relative size	of urbanized	§5303 Full Amount w/	§5303 Full Amount w/Match	Total FFY 23	Total FFY 24 funding by MPO (2020	ΔFFY23-2 (2020	24
	MP	0s	30% of funding	for relative size o	fpopulation			population			Match (FFY 23)	FFY 24	funding by MPO	Population)	Populatio	on)
	Т			2010 Population	2020 Population	2010 Population	2020 Population									
MPOs PL funded	\$	5,443,005		(%)	(%)	(\$)	(\$)			\$4,082,25	4					
						\$4,082,254	\$4,082,254									
Berkshire**	\$	544,301	131,219	2.03%	1.86%	\$ 83,055	\$ 75,930	88,795	1.49%	\$ 60,901	\$ 77,358	\$ 77,191	\$ 752,120	\$ 758,322	\$	6,203
Boston	\$	544,301	3,087,975	47.88%	48.49%	\$ 1,954,539	\$ 1,979,485	3,026,176	50.84%	\$ 2,075,536	\$ 2,470,364	\$ 2,517,632	\$ 6,955,046	\$ 7,116,954	\$ 10	161,907
CTPS*	\$	440,883				\$ 1,583,177	\$ 1,603,383			\$ 1,681,184	\$ 2,037,574	\$ 2,076,561	\$ 5,670,167	\$ 5,802,012	\$ 13	131,844
MAPC	\$	103,417				\$ 371,362	\$ 376,102			\$ 394,352	\$ 432,790	\$ 441,071	\$ 1,284,879	\$ 1,314,942	\$:	30,063
Cape Cod	\$	544,301	215,888	3.35%	3.31%	\$ 136,647	\$ 135,123	198,826	3.34%	\$ 136,367	\$ 137,616	\$ 140,422	\$ 938,904	\$ 956,212	\$ '	17,308
Central Mass	\$	544,301	556,698	8.63%	8.73%	\$ 352,363	\$ 356,381	462,724	7.77%	\$ 317,364	\$ 323,722	\$ 333,563	\$ 1,513,945	\$ 1,551,609	\$:	37,663
Merrimack Valley	\$	544,301	333,748	5.17%	5.34%	\$ 211,246	\$ 217,992	316,362	5.32%	\$ 216,980	\$ 213,344	\$ 220,609	\$ 1,166,802	\$ 1,199,882	\$:	33,080
Montachusett	\$	544,301	236,475	3.67%	3.62%	\$ 149,677	\$ 147,778	171,236	2.88%	\$ 117,444	\$ 131,526	\$ 134,544	\$ 927,037	\$ 944,066	\$ 1	17,029
Northern Middlesex	\$	544,301	286,901	4.45%	4.48%	\$ 181,594	\$ 182,885	277,474	4.66%	\$ 190,309	\$ 193,105	\$ 197,883	\$ 1,091,344	\$ 1,115,377	\$ 2	24,034
Old Colony	\$	544,301	362,406	5.62%	5.68%	\$ 229,386	\$ 231,872	342,110	5.75%	\$ 234,640	\$ 207,883	\$ 214,223	\$ 1,196,437	\$ 1,225,035	\$:	28,598
Pioneer Valley	\$	544,301	621,570	9.64%	9.07%	\$ 393,424	\$ 370,260	537,074	9.02%	\$ 368,358	\$ 408,131	\$ 410,462	\$ 1,688,604	\$ 1,693,381	\$	4,778
Southeastern Mass	\$	544,301	616,670	9.56%	9.42%	\$ 390,322	\$ 384,548	531,236	8.93%	\$ 364,354	\$ 426,198	\$ 433,893	\$ 1,699,705	\$ 1,727,096	\$:	27,391
	\$	5,443,005	6,449,550	100.00%	100.00%	\$ 4,082,254	\$ 4,082,254	5,952,013	100.00%	\$ 4,082,254	\$ 4,589,246	\$ 4,680,422	\$ 17,929,945	\$ 18,287,935		

before (fe	ederal	FFY 23 total	FFY	7.24 total			
				24 total			
RPAs SPR funded		funding by RP	A fund	ding by RPA	Δ		
Franklin** 2.0% \$	521,684	\$ 652,1	105 \$	664,891	12,786		
Martha's Vineyard** 2.0% \$	299,173	\$ 373,5	966 \$	381,299	7,333	1	
Nantucket** 2.0% \$	254,485	\$ 318,	106 \$	324,343	6,237		

The SPR funding provided to the RPAs not officially recognized as MPOs is adjusted year-to-year based on the change in funding experienced by the MPOs for their PL funds.

*CTPS 5303 includes MassDOT 5303

Figure 1 – Unified Planning Work Program Funding (Source: MassDOT)

APPENDIX C: COMMENTS ON PUBLIC DRAFT

The Cape Cod MPO voted to release the draft UPWP for the public review/ comment period at their 1:00 PM virtual meeting on April 24, 2023, officially beginning the 21-calendar-day public comment period.

Public comment opportunities were held in-person on Wednesday, April 26, 2023, at 11:00 AM at the Hyannis Transportation Center and at a virtual public meeting on Wednesday, April 26, 2023, at 6:00 AM. These meetings featured a short presentation on the document followed by an opportunity for public comments. Additional opportunities for public comments were gathered at outreach tables located along the region's bike path network. A virtual public meeting of the Cape Cod MPO is scheduled for Monday, May 22, 2023, at 1:00 PM to hear additional public comments and consider endorsement of this document. Details on the online public comment opportunities and the virtual public meeting available at www.capecodcommission.org/mpo.

Comments on this plan were accepted through May 15, 2023, via mail, by facsimile, or via e-mail, as follows:

Mailed:

Cape Cod Commission Transportation Program David Nolan, Senior Transportation Planner 3225 Main Street (Route 6A) PO Box 226 Barnstable MA 02630-0226

Sent by facsimile to the attention of David Nolan, Senior Transportation Planner:

FAX: 508-362-3136

Electronic mail "email"—please put "UPWP" in the subject line and send to: david.nolan@capecodcommission.org

Comments / Questions received on this UPWP:

A Public Comment Summary Grid will be attached that presents a summary of the comments received during the 21-day public comment period. The comments will be presented in their entirety to the Cape Cod MPO during their May 22, 2023, meeting where the body considered the comments. Consideration of the comments will be detailed in the meeting minutes for that meeting. The response and any action taken by the MPO will be summarized in this table. Discussion of UPWP activities was also included in the previous MPO and CCJTC meetings.

APPENDIX D: LIST OF STAFF AND ESTIMATED PERCENTAGE OF TIME ALLOCATED TO MASSDOT FUNDED (PL) TASKS IN THE FY 2024 UPWP

Staff Name and Position	Percentage of Time
Steven Tupper, Deputy Director/Transportation Director	65%
Colleen Medeiros, Transportation Program Manager	70%
David Nolan, Senior Transportation Planner	75%
Evan Costa, Transportation Planner	75%
Joyia Smikle, Transportation Planner	75%
Martha Hevenor, Planner II	8%
Elisabeth Kellam, Community Design Planner	8%
Philip Detjens, Applications Manager	8%
Anne Reynolds, GIS Director	12%
Gary Prahm, GIS Analyst	6%
Deb Ricotta, GIS Analyst	10%
Michele White, Special Projects Coordinator	8%
Helaine Goudreau, Special Projects Coordinator	8%
Jessica Wielgus, Commission Counsel	12%
Seasonal Traffic Technicians	100%

APPENDIX E: FFY 2024 FUNDING SUMMARY

Commission staff has updated budget allocations based off a review of previous funding lines from past UPWP years and incorporating increased funding.

Appendix E: Federal Fiscal Year 2024 Funding Summary

		FHWA	MDOT	FTA	Task Total	Percent
		PL funds	(match)	Sec 5303		
Task 1	Mgt & Support of the Planning Process					
	& Certification Activities					
1.1	Unified Planning Work Program	\$25,000	\$6,250		\$31,250	3.3%
1.2	Transportation Improvement Program	\$40,000	\$10,000		\$50,000	5.2%
1.3	CCJTC and MPO Activities	\$36,000	\$9,000		\$45,000	4.7%
1.4	Environmental Justice/Title VI	\$24,000	\$6,000		\$30,000	3.1%
1.5	Public Participation Plan	\$24,000	\$6,000		\$30,000	3.1%
1.6	Regional Transportation Plan/Canal Bridges Coordination	\$35,000	\$8,750		\$43,750	4.6%
	Total for Task 1	\$184,000	\$46,000		\$230,000	24.1%
Task 2	Data Collection & Analysis Activities					
2.1	Transportation Data Collection Program	\$48,000	\$12,000		\$60,000	6.3%
2.2	Performance Measures	\$28,000	\$7,000		\$35,000	3.7%
2.3	Transportation Database Management/Modeling	\$28,000	\$7,000		\$35,000	3.7%
2.4	Pavement Management/Stormwater	\$21,000	\$5,250		\$26,250	2.7%
2.5	Healthy Transportation/Complete Streets Support	\$24,000	\$6,000		\$30,000	3.1%
2.6	Geographic Information Systems	\$40,000	\$10,000		\$50,000	5.2%
	Total for Task 2	\$189,000	\$47,250		\$236,250	24.7%
		·				
Task 3	Short and Long Range Planning					
3.1	Downtown Chatham Parking & Circulation Study	\$48,000	\$12,000		\$60,000	6.3%
3.2	Transportation Safety: RSAs/Interchange Safety Analysis	\$52,000	\$13,000		\$65,000	6.8%
3.3	Sidewalk Connections to Bus Stops & Multi-Family Housing	\$36,000	\$9,000		\$45,000	4.7%
3.4	Climate Action Plan Implementation	\$40,000	\$10,000		\$50,000	5.2%
3.5	Regional Safety Action Plan Coordination	\$40,000	\$10,000		\$50,000	5.2%
			\$8,000		\$40,000	4.2%
	Follow up on Previous Studies	\$32 000 I			$\psi \rightarrow 0,000$	7.2 /0
3.6	Follow up on Previous Studies Total for Task 3	\$32,000 \$248,000			\$310,000	32 4%
	Follow up on Previous Studies Total for Task 3	\$32,000 \$248,000	\$62,000		\$310,000	32.4%
3.6	Total for Task 3				\$310,000	32.4%
3.6 Task 4	Total for Task 3 Technical Assistance Activities		\$62,000	\$50,000		
3.6 Task 4 4.1	Total for Task 3 Technical Assistance Activities Transit Planning (TMA Research)		\$62,000 \$12,500	\$50,000	\$62,500	6.5%
3.6 Task 4 4.1 4.2	Total for Task 3 Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification		\$62,000 \$12,500 \$5,000	\$20,000	\$62,500 \$25,000	6.5%
3.6 Task 4 4.1 4.2 4.3	Total for Task 3 Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis	\$248,000	\$62,000 \$12,500 \$5,000 \$10,023		\$62,500 \$25,000 \$50,116	6.5% 2.6% 5.2%
3.6 Task 4 4.1 4.2	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests	\$248,000 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469	\$20,000 \$40,093	\$62,500 \$25,000 \$50,116 \$42,346	6.5% 2.6% 5.2% 4.4%
3.6 Task 4 4.1 4.2 4.3	Total for Task 3 Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis	\$248,000	\$62,000 \$12,500 \$5,000 \$10,023	\$20,000	\$62,500 \$25,000 \$50,116	6.5% 2.6% 5.2%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests	\$248,000 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469	\$20,000 \$40,093	\$62,500 \$25,000 \$50,116 \$42,346	6.5% 2.6% 5.2% 4.4%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4	\$248,000 \$33,877 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992	\$20,000 \$40,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests	\$248,000 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469	\$20,000 \$40,093	\$62,500 \$25,000 \$50,116 \$42,346	6.5% 2.6% 5.2% 4.4%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4	\$248,000 \$33,877 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992	\$20,000 \$40,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4	\$248,000 \$33,877 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992	\$20,000 \$40,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key:	\$248,000 \$33,877 \$33,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992	\$20,000 \$40,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key:	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key: MDOT = Massachusetts Department of Transportation FHWA = Federal Highway Administration *consolidated planning	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key: MDOT = Massachusetts Department of Transportation FHWA = Federal Highway Administration *consolidated planning CCC = Cape Cod Commission	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key: MDOT = Massachusetts Department of Transportation FHWA = Federal Highway Administration *consolidated planning CCC = Cape Cod Commission CCRTA = Cape Cod Regional Transit Authority	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key: MDOT = Massachusetts Department of Transportation FHWA = Federal Highway Administration *consolidated planning CCC = Cape Cod Commission CCRTA = Cape Cod Regional Transit Authority PL = Planning funds	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%
3.6 Task 4 4.1 4.2 4.3	Technical Assistance Activities Transit Planning (TMA Research) Support for CCRTA Fleet Electrification Transit Data Collection and Analysis Other Technical Assistance Requests Total for Task 4 Totals Key: MDOT = Massachusetts Department of Transportation FHWA = Federal Highway Administration *consolidated planning CCC = Cape Cod Commission CCRTA = Cape Cod Regional Transit Authority	\$248,000 \$33,877 \$33,877 \$654,877	\$62,000 \$12,500 \$5,000 \$10,023 \$8,469 \$35,992 \$191,242	\$20,000 \$40,093 \$110,093 \$110,093	\$62,500 \$25,000 \$50,116 \$42,346 \$179,962	6.5% 2.6% 5.2% 4.4% 18.8%

APPENDIX F: AMENDMENTS/ADJUSTMENTS

Amendments/Adjustments to the plan are presented in this appendix.

Analyses presented in the body of the document and the preceding appendices reflect the projects and funding amounts as May 22, 2023, the endorsement date of the plan.

Cape Cod Unified Planning Work Program for FFY2024

