CAPE COD
COMMISSION

Cape Cod
Transportation Improvement Program Federal Fiscal Year 2017 – 2021

Endorsed: August 1, 2016

Draft Amendment: Released January 23, 2017 for 30-calendar-day public review

Prepared by Cape Cod Commission staff on behalf of the Cape Cod Metropolitan Planning Organization and the Cape Cod Joint Transportation Committee

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.

Title VI Notice of Nondiscrimination

The Cape Cod MPO complies with Title VI of the Civil Rights Act of 1964 and related federal and state statutes and regulations. It is the policy of the Cape Cod MPO to ensure that no person or group of persons shall on the grounds of Title VI protected categories, including race, color, national origin, or under additional federal and state protected categories including sex, age, disability, sexual orientation, gender identity or expression, religion, creed, ancestry, veteran's status (including Vietnam-era veterans), or background, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity administered by the Cape Cod MPO. To request additional information about this commitment, or to file a complaint under Title VI or a related nondiscrimination provision, please contact the MPO's Title VI Coordinator by phone at (508)362-3828, TTY at 508-362-5885, fax (508) 362-3136 or by e-mail at mhevenor@capecodcommission.org.

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 Transportation Improvement Plan (TIP) at CCJTC, MPO, and transportation meetings satisfies the Program of Projects (POP) public hearing requirements of the Federal Transit Administration (FTA).

Cape Cod Transportation Improvement Program (TIP) prepared by the

Cape Cod Metropolitan Planning Organization (MPO) Members:

- Stephanie Pollack, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)
- Thomas J. Tinlin, Administrator, MassDOT Highway Division
- Tom Guerino, Chair, Cape Cod Regional Transit Authority
- Harold Mitchell, Cape Cod Commission
- Jessica Rapp Grassetti, President, Barnstable Town Council
- Leo Cakounes, Barnstable County Commissioners
- R. Patrick Ellis, Mashpee Selectman, for Bourne, Falmouth, Mashpee, and Sandwich
- Sheryl A. McMahon, Dennis Selectman, for Dennis and Yarmouth
- Sims McGrath, Orleans Selectman, for Brewster, Chatham, Harwich, and Orleans
- Robert Weinstein, Truro Selectman, for Eastham, Provincetown, Truro, and Wellfleet
- Cedric Cromwell, Chairman, Mashpee Wampanoag Tribal Council

MPO Ex-Officio Members:

- Roger Parsons, Chairman, Cape Cod Joint Transportation Committee
- George Price, National Park Service/Cape Cod National Seashore
- Lawrence T. Davis, US Army Corps of Engineers/Cape Cod Canal
- Wayne Lamson, Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority
- Jeffrey McEwan, Federal Highway Administration
- Mary Beth Mello, Federal Transit Administration

and the

Cape Cod Joint Transportation Committee

- Roger Parsons, Chairman, Barnstable
- Catherine Laurent, Vice-Chairman, Mashpee

Cape Cod Commission TIP Staff Contact:

- Glenn Cannon, P.E., Technical Services Director, Cape Cod Commission

Cape Cod Metropolitan Planning Organization
Cape Cod Transportation Improvement Program (TIP)

ENDORSEMENT, TIP

The signatures to follow certify that the Cape Cod Metropolitan Planning Organization (MPO) hereby endorses the Cape Cod Transportation Improvement Program (TIP) for Federal Fiscal Years 2017 -2021 in fulfillment of the requirements of 23 CFR Part 450.324.

CERTIFICATION:

The Cape Cod Metropolitan Planning Organization (MPO) Planning Process

The signatures to follow certify that the Comprehensive, Continuing, Cooperative Transportation Planning Process for the current local, regional, state, and federal fiscal years in the Cape Cod Metropolitan Planning Organization planning area is addressing major issues facing the region and is being conducted in accordance with the requirements of:

1. Section 134 Title 23, U.S.C., and Title 49 U.S.C. 5303, and this subpart;
2. Sections 174 and 176(c) & (d) of the Clean Air Act, as amended {42 U.S.C. 7504, 7506 (c) & (d)} and 40 CFR part 93;
3. Title VI of the Civil Rights Act of 1964, as amended {42 U.S.C. 2000d-1} and 49 CFR part 21:
4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5. Section 1101 (b) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises (DBE) in USDOT funded projects;
6. Title 23 CRF part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
7. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR Parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.
11. Anti-lobbying restrictions found in 49 USC Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, a Member of Congress, in connection with the awarding of any Federal contract.

The currently endorsed Unified Planning Work Program, Regional Transportation Plan, and the Cape Cod Transportation Improvement Program (TIP) were developed in accordance with FHWA/FTA regulations, EPA regulations, and fully incorporate the applicable requirements of the 1964 Civil Rights Act and the Americans with Disabilities Act of 1990.

Cape Cod Metropolitan Planning Organization (MPO)

Cape Cod Transportation Improvement Program (TIP)

The signatures to follow certify that the Cape Cod Metropolitan Planning Organization (MPO), at their meeting on August 1, 2016, hereby approves the following action in accordance with the Comprehensive, Cooperative and Continuing 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 Transportation Improvement Program for Federal Fiscal Year 2017 through 2021.

Stephanie Pollack, Secretary/Chief Executive Officer – Massachusetts Department of Transportation (MassDOT)

Thomas Tinlin, Administrator
Massachusetts Department of Transportation (MassDOT) Highway Division

Harold Mitchell
Cape Cod Commission

(alternate)

Tom Guerino, Chair
Cape Cod Regional Transit Authority

Leo Cakounes
Barnstable County Commissioners

Jessica Rapp Grassetti, President
Barnstable Town Council

R. Patrick Ellis
Bourne, Falmouth, Mashpee, Sandwich

Sheryl A. McMahon
Dennis, Yarmouth

Sims McGrath
Brewster, Chatham, Harwich, Orleans

Cedric Cromwell, Chairman
Mashpee Wampanoag Tribal Council

Robert Weinstein
Eastham, Provincetown, Truro, Wellfleet

Executive Summary

The Cape Cod Metropolitan Planning Organization's (MPO) transportation capital plan, the Transportation Improvement Program (TIP), lists major transportation projects planned in the next five years.

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 to establish a preference for which projects are funded through the TIP. Members of the public are welcome and encouraged to attend these meetings and voice opinions.

Contents of the Plan

The TIP includes a discussion of the transportation planning process, a discussion of the TIP development process, a table of available TIP funding, descriptions of TIP projects selected for funding, and a series of tables detailing TIP project funding allocations. The TIP also includes appendices that detail project evaluation including equity analyses, air quality conformity, projects in need of funding, the status of previous TIP projects, and public comments. Project selected for funding are presented on the following page.

How to Get Involved

The Cape Cod MPO endorsed the TIP at their August 1, 2016 public meeting. The MPO voted to release "Draft Amendment 1" to the TIP for a 30-day public review/comment period at their meeting on January 23, 2017, officially beginning the 30-day public comment period. The MPO is expected to consider endorsement of the TIP at their 1:00 PM meeting on February 27, 2017. All MPO meetings are held at the Cape Cod Commission Office at 3325 Main Street (Route 6A) Barnstable, MA 02630. Transit service is available on the Cape Cod Regional Transit Authority's Barnstable Villager Route (the Barnstable Village-Courthouse stop).

Comments on this plan may be sent by February 23, 2017 via mail, hand delivered, by facsimile, or via e-mail, as follows:
Mailed or dropped off:
Cape Cod Commission Transportation Program
Glenn Cannon, Technical Services Director
3225 Main Street (Route 6A)
PO Box 226
Barnstable MA 02630-0226
Sent by facsimile to the attention of Glenn Cannon, Technical Services Director, CCC:
FAX: 508-362-3136
Electronic mail "email"—please put "TIP" in the subject line and send to:
gcannon@capecodcommission.org

2017-2021 Projects

The following projects are included in the Cape Cod Transportation Improvement Program for Federal Fiscal Year 2017-2021, as Amended:

- Dennis, Route 28 Corridor & Streetscape Improvements (2017)
- Bourne, Route 6 & 28 Bypass Road Resurfacing and Related Work (2017)
- Harwich, Improvements at Route 124 Park and Ride (2017)
- Cape Cod, Bicycle Rack Program (2017-2021)
- Harwich-Brewster-Orleans Route 6 Resurfacing (2017)
- Hyannis Loop Demonstration Project (2017-2018)
- Barnstable, Route 28 at Osterville-West Barnstable Road (2018)
- Chatham, Route 28 - George Ryder Road to Barn Hill Road (2018)
- Yarmouth-Barnstable, Cape Cod Rail Trail Extension (2018)
- Falmouth, Route 28A at Route 151 (2019)
- Barnstable, Route 28 at Yarmouth Road (2019)
- Eastham, Doane Road pavement overlay (2019)
- Wellfleet, Route 6 at Main Street (2020)
- Bourne-Falmouth, Route 28 Guide and Traffic Sign Replacements (2019)
- Mashpee, Route 151 (2020-2021)
- Bourne, Belmont Circle Multi-modal Improvements (2020)
- Orleans, Route 28 Stormwater Improvements (2020)
- Chatham, Route 28 at Main Street, Depot Road, Queen Anne Road and Crowell Road (2021)
- Harwich, Bridge Replacement – Azalea Drive over Herring River (2021)
- Sandwich, Shared-Use Path on Service Road from Route 130 to Chase Road (2021)
- Various transit projects to allow the Cape Cod Regional Transit Authority (CCRTA) to operate their year-round and seasonal fixed-route services, operate their demand response services, and maintain the vehicles and other infrastructure. (2017-2021)

In total, the FFY2017-21 TIP includes over $133 million in funded projects.

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Chapter 1: Transportation Planning Process

Decisions about how to spend transportation funds in a metropolitan area are guided by information and ideas from a broad group of people, including elected officials, municipal planners and engineers, transportation advocates, other advocates, and other interested persons. Metropolitan Planning Organizations (MPOs) are the bodies responsible for providing a forum for this decision-making process.

Each metropolitan area in the United States with a population of 50,000 or more has an MPO, which decides how to spend federal transportation funds for capital projects and planning studies. In order to be eligible for federal funds, metropolitan areas are required to maintain a continuing, cooperative, and comprehensive (3C) transportation planning process that results in plans and programs consistent with the planning objectives of the metropolitan area. The 3C transportation-planning process on Cape Cod is the responsibility of the Cape Cod MPO.

Cape Cod Metropolitan Planning Organization (MPO)

The Cape Cod Metropolitan Planning Organization (MPO) is the regional governing body established by federal law to oversee regional transportation planning and recommend the distribution of transportation funds on Cape Cod (Barnstable County). The MPO is made up of eleven voting members as presented in Table 1. Town representation on the body is depicted in Figure 1.

Table 1. Cape Cod MPO Membership

AGENCY	MPO SIGNATORY
Massachusetts Department of Transportation (MassDOT)	Secretary of Transportation
MassDOT Highway Division	Administrator
Cape Cod Regional Transit Authority (CCRTA)	Chairman
Cape Cod Commission (CCC)	Chairman
Barnstable County Commissioners	Commissioner
Mashpee Wampanoag Tribe	Tribal Chairman
Town of Barnstable	Town Council President
Sub-region A (Bourne, Falmouth, Mashpee, Sandwich)	Selectman
Sub-region B (Dennis, Yarmouth)	Selectman
Sub-region C (Brewster, Chatham, Harwich, Orleans)	Selectman
Sub-region D (Eastham, Provincetown, Truro, Wellfleet)	Selectman

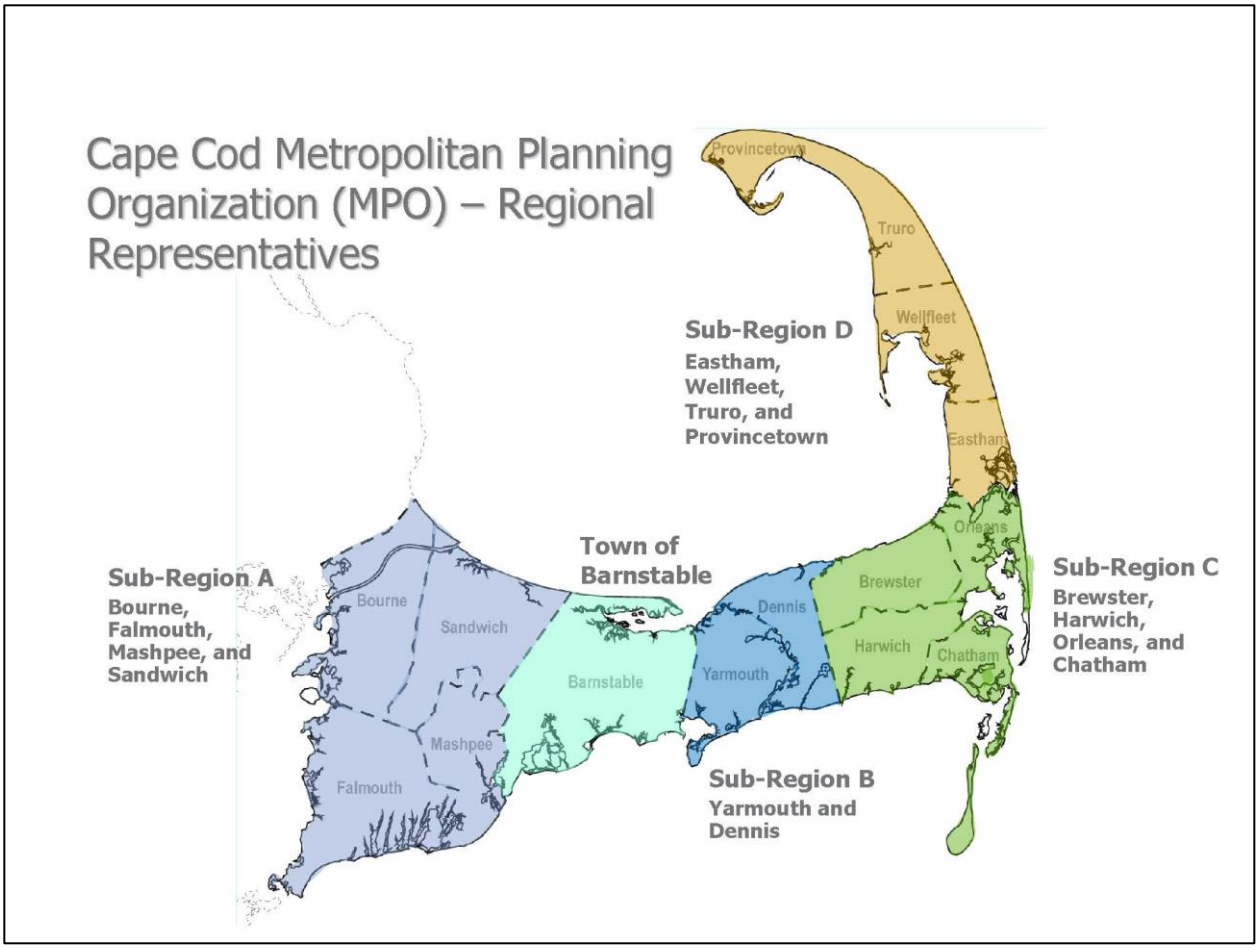

Figure 1. Map of Cape Cod Metropolitan Planning Organization Sub-regions

The Federal Highway Administration, Federal Transit Administration, Army Corps of Engineers, Cape Cod National Seashore, the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority, and the Chair of the Cape Cod Joint Transportation Committee serve as non-voting, Ex-Officio members of the MPO.

Cape Cod Joint Transportation Committee (CCJTC)

The Cape Cod Joint Transportation Committee (CCJTC) is the advisory group to the Cape Cod MPO. The CCJTC was formed more than 40 years ago with the first meeting being held in 1973. Membership on the CCJTC consists of one appointee from each town, selected by the town's highest elected officials, as well as a Bicycle Representative designated by the CCJTC. Town appointees are generally department of public work directors, town engineers, or town planners; individuals familiar with their town's transportation needs. Individuals representing MassDOT, the CCRTA, and the CCC also generally attend and participate in CCJTC meetings.

Federal Certification Documents

The MPO is required to endorse other federal certification documents including the Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP), and the Public Participation Plan (PPP).

The RTP establishes a regional vision for the transportation system; the UPWP studies investigate deficiencies in that system and identify potential solutions, and the TIP details specific transportation projects that are implemented to improve the transportation system. The PPP provides a framework to ensure public involvement and cooperative decision making throughout the transportation planning process. A summary of the primary function, time horizon, and update timeline is presented in Table 2. The table also includes links to the Cape Cod MPO webpages that contain more detailed information on each of the documents.

Table 2. Federal Certification Documents

DOCUMENT	PRIMARY FUNCTION	TIME HORIZON	UPDATE TIMELINE
Regional Transportation Plan (RTP)[1]	Establishes long-range vision and goals, identifies major projects, studies, and programs	20+ years	Every 4 years
Transportation Improvement Program (TIP)[2]	Identifies specific transportation investments (projects)	5 years	Annually
Unified Planning Work Program (UPWP)[3]	Details planning studies and tasks	1 year	Annually
Public Participation Plan (PPP)[4]	Establishes plan for public participation for transportation decision-making	Ongoing	Every 5 years or more frequently as needed

[1] The Regional Transportation Plan (RTP) is available at www.capecodcommission.org/rtp
[2] The Transportation Improvement Program (TIP) is available at www.capecodcommission.org/tip
[3] The Unified Planning Work Program (UPWP) is available at www.capecodcommission.org/upwp
[4] The Public Participation Plan (PPP) is available at www.capecodcommission.org/ppp

Transportation Legislation

Federal legislation that contains requirements for transportation plans, programs and projects includes the current legislation: Fixing America's Surface Transportation (FAST) Act and the outgoing legislation: Moving Ahead for Progress in the 21st Century (MAP-21) as well as the Clean Air Act Amendments of 1990 (CAAA).

Fixing America's Surface Transportation (FAST) Act

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) into law—the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorizes $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

Building on outgoing legislation (MAP-21), the FAST Act maintains a focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery and, for the first time, provides a dedicated source of federal dollars for freight projects. As required under this legislation, the planning process used in the development of this plan includes consideration of projects that:

(A) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
(B) increase the safety of the transportation system for motorized and nonmotorized users;
(C) increase the security of the transportation system for motorized and nonmotorized users;
(D) increase the accessibility and mobility of people and for freight;
(E) 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;
(F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
(G) promote efficient system management and operation;
(H) emphasize the preservation of the existing transportation system;
(I) improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
(J) enhance travel and tourism.

Title VI/Nondiscrimination

The Cape Cod MPO follows federal and state non-discrimination laws and seeks to ensure that all interested parties in Barnstable County have access to the MPO's activities and services and that public involvement in the MPO's decision making comes from a diverse socioeconomic group that is representative of the county's population. The MPO has developed a nondiscrimination program, in accordance with federal and state requirements, to encourage broad public participation, representation, and equity in the region's transportation planning.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin. Organizations that receive Federal funds are obligated to assure nondiscrimination in their programs and activities and are required to have a comprehensive Title VI enforcement program to prevent and eliminate discrimination in their federally funded programs. Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) set forth Title VI compliance requirements for "primary" funding recipients such as MassDOT and sub-recipients such as the MPOs to follow. Effective transportation decision making depends upon understanding and properly addressing the needs of different socioeconomic groups. The MPO's Title VI program includes identifying the demographic distribution of minority and limited English proficiency populations within the region and implementing a comprehensive strategy to ensure that the MPO conducts effective outreach to encourage their involvement in and access to the transportation planning and decision-making process.

The Massachusetts Department of Transportation (MassDOT) is responsible for ensuring that the state's MPOs comply with federal program requirements. Following MassDOT's 2013 Title VI program update, the Cape Cod MPO developed and adopted a Title VI Program in 2014. The Title VI plan provides information about beneficiaries' rights, how to file a complaint, regional demographic data, maps, a public participation plan, a language access plan, and analyses of transportation spending in the region, project locations and potential impacts from projects to ensure equity in the planning and implementation process for the region.

Although Title VI is the focal point of non-discrimination law in the United States, FHWA incorporates a broader spectrum of statutes, executive orders, and regulations into its requirements for states and MPOs. For example, Section 324 of the Federal-Aid Highway Act of 1973 prohibits discrimination based on sex; Section 504 of the Rehabilitation Act of 1973 prohibits discrimination on the basis of disability status, as does the Americans with Disabilities Act of 1990; and the Age Discrimination Act of 1975 prohibits age discrimination. In addition, the Civil Rights Restoration Act of 1987 (FHWA Notice 4720.6) clarified the original intent of Congress with respect to Title VI by restoring the broad, institution-wide scope and coverage of the nondiscrimination

statutes to include all programs and activities of federal-aid recipients and enforcing the application of the laws that include nondiscrimination on the basis of race, color, national origin, age, gender, or disability.

Other Federal and State Legislative Requirements and Policies

In addition to federal transportation legislation, the transportation planning process must comply with the Americans with Disabilities Act (ADA); the Clean Air Act; Title VI of the Civil Rights Act of 1964; Executive Order 12898; Executive Order 13330; the Global Warming Solutions Act; and MassDOT and GreenDOT Policies.

Chapter 2: 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, 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 with 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.

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 450.324. 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 June or July with the STIP being submitted for federal approvals prior to the beginning of the Federal Fiscal Year on October 1.

Adjustment and Amendment Procedures

The Cape Cod Joint Transportation Committee recommends inclusion in the statewide program of the projects as programmed in this TIP for Cape Cod, with regional consensus and endorsement by the Cape Cod MPO. Projects that are in the first years of the TIP, which have designs completed or well underway, have public support in addition to the regional support.

Analyses included in the Appendices are based on project information available at the time of endorsement of the document and do not reflect changes made in subsequent amendments and/or adjustments unless it is determined that the changes would substantially change the conclusion of these analyses. If such a determination is made, it will be clearly documented.

Administrative Adjustment Process

In the event a project in the annual element, or current Federal Fiscal Year, is not proceeding in the programmed year, the substitution of another project from the outer years of the TIP for implementation in the current year is considered by the Cape Cod MPO to be an administrative adjustment provided that the following conditions are true:

- Financial constraint of the TIP is maintained.
- The project must be an exempt project, conformity determination not required.
- A letter requesting the administrative adjustment is forwarded to the Director of the MassDOT Office of Transportation Planning to reflect the adjustment in the STIP.
- Administrative Adjustments to the TIP shall be included within the next MPO agenda. Administrative Adjustments do not require public comment periods.

Other changes that are allowed as administrative modifications include project name, scope, and/or cost estimate changes, as long as those changes are considered to be minor in nature. For example, a project cost increase within 10% of the existing amount programmed already, may be considered an administrative adjustment.

Amendment Process

In order for implementation of projects to proceed in the current year, a previously unlisted project may be amended into the TIP. An action to add a new project or remove an existing project is considered by the Cape Cod MPO to be an amendment if the following conditions are true:

- Consensus in the region for this project to be included and move forward.
- Financial constraint of the TIP is maintained.
- A Cape Cod MPO meeting to endorse the amendment(s).
- Conformity determination is required unless the amendment(s) consist(s) entirely of exempt projects.
- An outer year TIP project or a Non Federal Aid project is not considered a new project and may be an Administrative Adjustment—see above Administrative Adjustment Process.

Public Participation Process

the scoring of potential projects and development of a potential program of projects occurs in the winter and spring. Meetings related to the development of the TIP for discussion and/or endorsement in Table 3.

Table 3. Transportation Improvement Program Development Meetings

DATE	MEETING TYPE	LOCATION
March 11, 2016	CCJTC	CCC Office
March 21, 2016	Cape Cod MPO	CCC Office
April 8, 2016	CCJTC	CCC Office
April 25, 2016	Cape Cod MPO	CCC Office
May 13, 2016	CCJTC	CCC Office
May 23, 2016	Cape Cod MPO	CCC Office
June 10, 2016	CCJTC	CCC Office
June 27, 2016	Cape Cod MPO	CCC Office
July 8, 2016	CCJTC	CCC Office
August 1, 2016	Cape Cod MPO	CCC Office

In addition to discussion at CCJTC and Cape MPO public meetings, CCC staff makes efforts to reach out directly to members of the public interested in development of the TIP. Prior to the release of the draft TIP, public outreach events were held across the region including collecting comments at Bay State Bike Week events in the towns of Bourne, Barnstable, Dennis, and Orleans. Staff also made a presentation and collected comments at a Sunday service at the largest Portuguese church on Cape Cod. CCC staff received additional comments at an outreach table set up at the Hyannis Transportation Center on July 18, 2016.

CCC staff maintains an electronic mailing list of persons interested in transportation issues in the region. Notice of the public meetings where discussion of draft TIP documents is to occur is emailed at least seven days in advance. Upon approval by the MPO, a public draft of the TIP is made available for public comment for a period of at least 30 days. Public comments may be made in person or via email, telephone, fax, or regular mail.

Chapter 3: TIP Funding

This TIP was developed during a transition between two Federal transportation-funding bills. Most funding categories in this TIP are through federal sources: Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) as provided by federal legislation. The current legislation is Fixing America's Surface Transportation (FAST) Act. The outgoing federal transportation legislation is the Moving Ahead for Progress in the 21st Century (MAP-21). Table 4 and Table 5 provide brief descriptions of the funding programs used for transportation improvement projects on Cape Cod.

Table 4. Federal Highway Funding Administration Programs

PROGRAM	ELIGIBLE USES
Congestion Mitigation and Air Quality Improvement (CMAQ)	A wide range of projects in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and small particulate matter, which reduce transportation-related emissions.
Highway Safety Improvement Program (HSIP)	Implementation of infrastructure-related highway safety improvements
National Highway Performance Program (NHPP)	Improvements to interstate routes, major urban and rural arterials, connectors to major intermodal facilities, and the national defense network. Also includes replacing or rehabilitating any public bridge, and resurfacing, restoring, and rehabilitating routes on the Interstate Highway System.
Surface Transportation Block Grant (STBG) *[Surface Transportation Program (STP) under MAP-21]*	A broad range of surface transportation capital needs, including roads; transit, sea, and airport access; and vanpool, bicycle, and pedestrian facilities.
Transportation Alternatives (TA) *[Transportation Alternatives Program (TAP) under MAP-21]*	Construction of infrastructure-related projects (for example, sidewalk, crossing, and on-road bicycle facility improvements).
Bridge Replacement and Rehabilitation Program (BR)	Replacement or repair of bridges on or off the federal aid system.
Non Federal Aid (NFA)	These projects are not funded with federal dollars. Typically, projects in this category are funded through state bonding, and are generally state maintenance projects.

Table 5. Federal Transit Funding Administration Programs

PROGRAM	ELIGIBLE USES
Bus and Bus Facilities (FTA 5309)	This category is discretionary funds for capital expenditures such as buses and terminal facilities; projects need federally earmarked 5309 funds to proceed.
Urbanized Area Formula Grant Program (FTA 5307)	These funds are primarily for capital expenditures. In urbanized areas (UZA) with a population over 200,000, the use for operating assistance is limited. This funding is distributed to UZAs over 200,000 population via formula.
Elderly Persons and Persons with Disabilities Formula Program (FTA 5310)	This program funds public transit projects in rural areas.
Rural Area Formula Program (FTA 5311)	This program funds public transit projects in rural areas. MassDOT and FTA grant 5311 funds on a discretionary basis. Funds are for both capital and operating expenses. Federal share currently funds approximately 13% of total cost.
Mobility Assistance Program (MAP)	This MassDOT program funds capital improvements for transportation services for people who are elderly and/or have disabilities.
State Contract Assistance (SCA)	These funds are provided through the Commonwealth Transportation Fund (CTF) and the Massachusetts Transportation Trust Fund (MTTF) and are used as matching funds to make federal programs.

For federal fiscal years 2017-2021 the anticipated available funding from the Federal Highway Administration with the state match is presented in Table 8.

Table 6. Summary of Available Federal Highway Administration Funding with State Match

YEAR	STP	HSIP	CMAQ	TAP	TOTAL
2017	$7,433,200	$458,514	$1,432,857	$193,036	$9,517,607
2018	$8,069,313	$458,514	$1,146,285	$210,307	$9,884,419
2019	$8,086,584	$458,514	$1,146,285	$193,036	$9,884,419
2020	$8,271,336	$458,514	$1,146,285	$242,367	$10,118,502
2021	$8,193,978	$458,514	$1,146,285	$319,725	$10,118,502
2017-2021 Total	$40,054411	$2,292,570	$6,017,997	$1,158,471	$49,523,449

For federal fiscal years 2017-2021 the anticipated available funding from the Federal Transit Administration with the state match is presented in Table 8.

Table 7. Summary of Available Federal Transit Administration Funding with State Match

YEAR	Federal (5339/5307)	State Match (RTACAP/SCA)	TOTAL
2017	$9,897,688	$3,249,638	$13,147,326
2018	$8,552,254	$2,588,065	$11,140,319
2019	$8,679,314	$2,619,827	$11,299,141
2020	$9,203,611	$2,750,902	$11,954,513
2021	$8,891,477	$3,822,869	$12,714,346
2017-2021 Total	$45,224,344	$15,031,301	$60,255,645

Chapter 4: TIP Project Map and Descriptions

Map of Funded Highway Projects

Figure 2 shows the location and extent of highway projects funded in this Transportation Improvement Program (TIP). An interactive map of these projects is available on the Cape Cod TIP website at www.capecodcommission.org/tip.

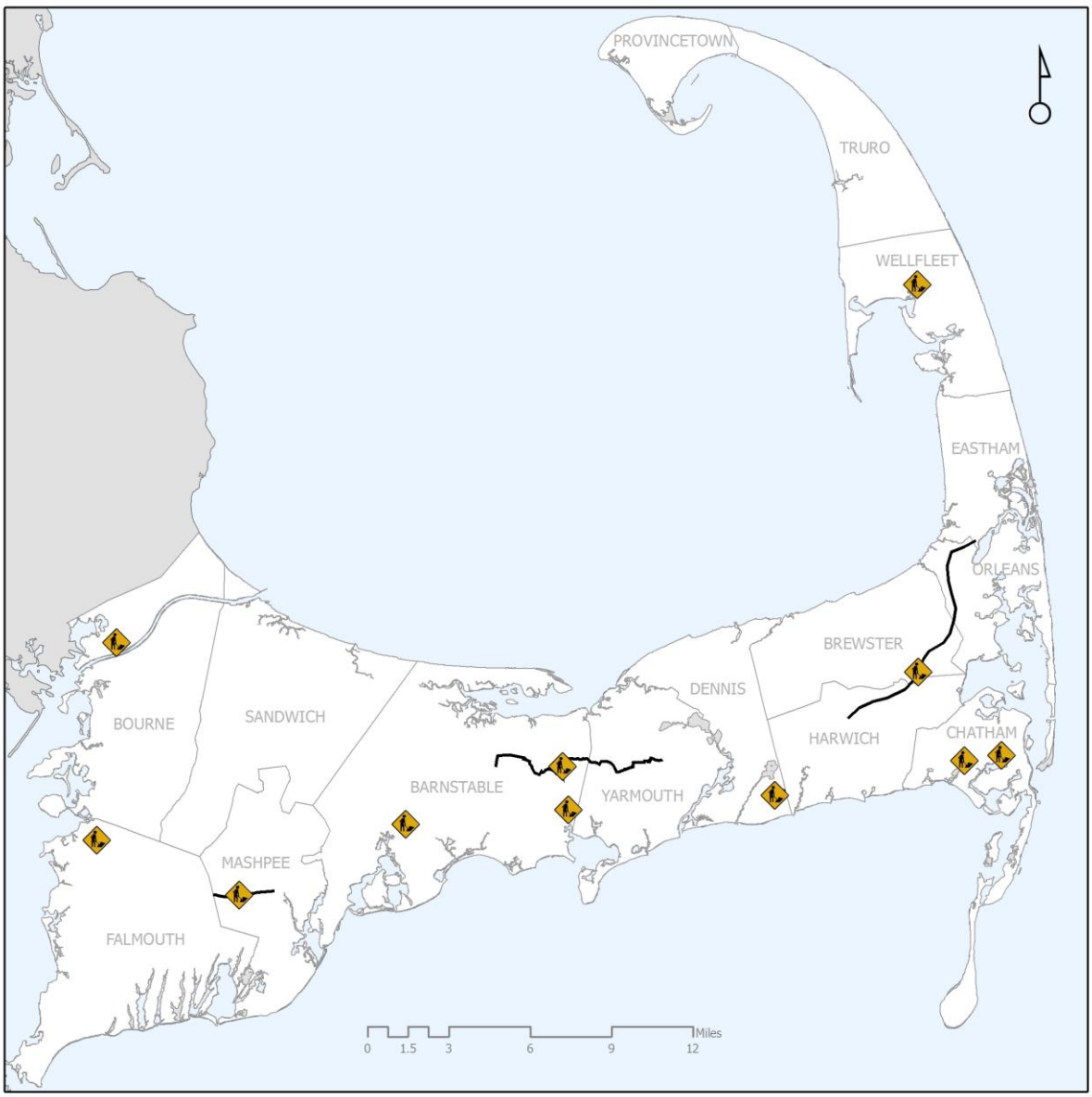

Figure 2. Map of Funded Highway Projects

Description of Funded Highway Projects

The following descriptions for highway projects were prepared by MassDOT and are subject to change as the projects are further developed.

Dennis, Rte 28 Corridor & Streetscape Improvements (#606707)

This project is intended to improve multi-modal accommodation through the reconstruction of sidewalks to ADA specification, providing wider, bicycle accommodating shoulders and streetscape elements including new plantings and street lighting.

Bourne, Route 6 & 28 Bypass Road Resurfacing and Related Work (#608544)

This project is in preliminary design.

Harwich, Improvements at Route 124 Park and Ride (#608102)

This project is in preliminary design. Improvements will include a new bus shelter.

Cape Cod, Bicycle Rack Program (#245317)

The primary objective of the program is to provide local governments with an economical and convenient source of bicycle parking equipment. A further objective is to provide a selection of racks with variety in capacity, appearance, and design. The program consists of providing full reimbursement for the purchase price of bicycle racks for all fifteen communities in the Cape COD MPO region (Barnstable County).

Barnstable, Rte 28 at Osterville-West Barnstable Rd (#607435)

This project proposes to address vehicular safety by upgrading traffic signals to include exclusive left turn lanes at the Route 28 approaches in addition to emergency vehicle pre-emption. There is also a need to improve bicycle and pedestrian accommodation at the intersection in addition to updating pavement markings and signage.

Chatham, Rte 28 - George Ryder Rd to Barn Hill Rd (#606596)

The purpose of this project is to construct safety and multimodal improvements along a 1700 foot linear segment of West Main Street (Route 28) between George Ryder Road and Barn Hill Road. The intent of the project is to provide improved safety and accessibility for bicyclists, pedestrians and motorists traveling through this corridor.

Yarmouth-Barnstable, Cape Cod Rail Trail Extension (#607398)

This project is intended to provide an extension of the Cape Cod Rail Trail multi-use path connecting the communities of Barnstable and Yarmouth.

Falmouth, Rte 28A at Rte 151 (#607444)

This project is intended to address the following needs: upgrading of traffic signals; geometric work in the form of minor widening; providing multi-modal accommodation.

Har-Brew-Orl, Route 6 Resurfacing (#608201)

Work on this project includes roadway resurfacing (mill and overlay) of the existing roadway from the east of the Route 124 interchange in Harwich to the west of the Orleans Rotary.

Barnstable, Rte 28 at Yarmouth Rd (#606272)

This project involves improving safety and congestion for all users at the intersection of Iyanough Road (Route 28) and Yarmouth Road. Additional approach turn lanes are required at the intersection to alleviate congestion and improve corridor/intersection level of service. Traffic signal upgrades are also planned, in addition to new pavement markings and signage. Sidewalks will be reconstructed to ADA standards where necessary.

Eastham, Doane Road pavement overlay (#CC1001)

This project is in preliminary design.

Wellfleet, Rte 6 at Main St (#607397)

This project proposes to address traffic safety, multi-modal accommodation and the need for updated pavement markings. Upgrading of the traffic signals to include ped activation is proposed, in addition to the construction of sidewalks and extensions at the intersection. Pavement markings are also proposed to be updated at the intersection crossings.

Mashpee, Rte 151 (#607319)

Work on this project will consist of corridor improvements on Route 151. Work will include intersection improvements, channelization, and potential exclusive left turn lanes at key driveways. In addition, traffic signals upgrading is required at key intersections such as Frank Ellis Drive/Job Fishing Rd. and Old Barnstable Rd. The project will address the lack of continuous 'complete streets' (bicycle and pedestrian accommodation) along the corridor, particularly at 2 key intersections: Frank Ellis Drive/Job Fishing Rd. and Old Barnstable Rd. Also, there is a need to update the crosswalks and pedestrian actuation equipment at the intersections to ADA compliance. Finally, signage, pavement markings and drainage need upgrading.

Bourne, Belmont Circle Multi-modal Improvements (# 606900)

This project is intended to address safety and congestion issues at Belmont Circle. Proposed improvements being considered include: reconstruction, minor widening, reconfiguration of travel/turn lanes, signalization of nodes, and improved signage and pavement markings.

Chatham, Rte 28 at Main St, Depot Rd, Queen Anne Rd and Crowell Rd (#607405)

This project is intended to address the need for geometric, safety and multimodal improvements at the intersection. Proposed improvements include realignment of approach travel lanes and traffic islands at the intersection. The existing traffic signals also need upgrading to include pedestrian activation. There is also a lack of sidewalks on the South side of the intersection in addition to bike accommodating shoulders. Existing signage and pavement markings need upgrading. New sidewalk extensions and provision of upgraded pavement markings including ADA compliant crosswalks and ramps will serve to improve multimodal accommodation.

Sandwich, Shared Use Path on Service Rd (Rte 130 to Chase Rd)

In 2013, National Grid (NGRID, an international electricity and gas company, approached the Town of Sandwich with a request to construct and maintain a 20” gas main in the roadside area between the Service Road pavement and the Mid-Cape Highway right-of-way. The Town of Sandwich, as part of the local permit process, mandated that a variety of public betterments be included in the project. One such betterment requires National Grid to include tree removal and rough grading along the proposed gas line alignment that would serve as a base for constructing this first phase of a multi-phase shared-use path project from Route 130 to Chase Road.

Bourne-Falmouth, Rte 28 Guide and Traffic Sign Replacements (# 608571)

This project is in preliminary design.

Orleans, Rte 28 Stormwater Improvements (# 608598)

This project is in preliminary design.

Harwich, Bridge Replacement - Azalea Dr over Herring River (#608617)

This project is in preliminary design.

Description of Funded Transit Projects

Transit projects funded in the TIP allow the Cape Cod Regional Transit Authority (CCRTA) to operate and maintain the fleet of vehicle and other infrastructure needed to meet the transportation needs of the Cape Cod region. The agency offers many types of services that cater to many different customer types including provides year-round and seasonal fixed-route services and a variety of demand response services. There is emphasis on providing transportation to the transit dependent demographics on Cape Cod, the elderly and individuals with disabilities.

Year-round fixed route service is offered on major roads. Stops are positioned to provide mobility and convenience for customers. Passengers may also flag down the bus between scheduled stops along the route. The FLEX route is a hybrid, which allows passengers to request a pick-up or drop off location up to ¾ of a mile from the designated route. The routes with the highest ridership are the H2O and Sealine, which travel on Route 28. Some of the fixed routes show ridership that changes seasonally, such as the FLEX route, but others show more steady year round use, including the Sandwich Line and Barnstable Villager. The newest regular services, the Sandwich Line and the Bourne Run have been meeting the fixed-route needs of previously unserved areas. Still running as a demonstration route, the Hyannis Loop is providing improved access to employment and services in Hyannis. Figure 3 shows the agencies year-round, fixed-route services.

Seasonal fixed-route services are provided in the downtown portions of Falmouth, Hyannis and Provincetown. These services have high ridership and measure well in performance during the summer months. The Provincetown shuttle has the highest ridership in the months of July and August of all the services offered. The CapeFLYER, a train from Boston targeted for vacationers traveling to Cape Cod, and the Outer Cape Bike shuttle, a vehicle with a trailer to carry bicycles, are provided in partnership with other agencies and are not included in this evaluation.

Demand response services make up a large portion of total ridership including; Dial-A-Ride Transportation (DART), Americans with Disabilities Act (ADA) paratransit services and the Boston Hospital Transportation.

Figure 3. Map of Cape Cod Regional Transit Authority Year-round, Fixed-route Services

Chapter 5: TIP Project Listing/Financial Plan

The following pages include the projects for the Cape Cod region that are in this program for Federal Aid or Non Federal Aid funding.

While it is recognized that this TIP is a planning program of projects and implementation must follow from the responsible implementing agency or agencies, the Cape Cod region expects cooperation, communication and an expeditious review process by agencies with the responsibility of overseeing steps toward implementation in order to ensure the maximum compliance with the programmed plan of projects. This effort by overseeing agencies will promote implementation of projects within the planned program and allow the financial plan to remain in balance.

Summary of Funding for Cape Cod Highway and Transit Projects

The Cape Cod federal aid target amounts, from Federal Highway Administration sources through the Commonwealth of Massachusetts, Massachusetts Highway Department, based on approximately 4.6% of the statewide amounts, are presented in Table 8, and the current amount programmed is the right column.

Table 8. Cape Cod Federal Aid Target Programmed Amounts

YEAR	TOTAL FEDERAL AID	AMOUNT PROGRAMMED
2017	$9,517,607	$9,357,476
2018	$9,590,976	$7,875,327
2019	$8,526,439	$9,227,663
2020	$9,388,112	$10,105,360
2021	$9,172,000	$10,004,000
2017-2021 Total	$46,195,134	$46,569,826

Projects programmed in years 2017-2021 reflect 2017 cost estimates. An inflation rate of 4% per year is added to project cost estimates in years 2018-2021, and therefore, the project cost estimates are by Year Of Expenditure (YOE) for the target projects.

In addition to funding of highway projects, a significant amount of TIP funding is allocated for public transportation. Table 6 shows the programming amounts for both highway and transit projects provided from the TIP. The highway totals includes projects outside of the Cape Cod TIP Target such as Cape Cod specific bridge and maintenance projects.

Table 9. Cape Cod TIP Funding Programmed for Highway and Transit Projects

YEAR	HIGHWAY	TRANSIT	TOTAL
2017	$19,221,768	$13,147,326	$32,369,094
2018	$15,225,158	$11,140,319	$26,365,477
2019	$10,555,984	$11,299,141	$21,855,125
2020	$10,512,710	$11,954,513	$22,467,223
2021	$16,848,232	$12,714,346	$29,562,578
2017-2021 Total	$72,363,852	$60,255,645	$132,619,497

The list of specific Cape Cod projects is presented on the following pages. From the system level anticipated revenues continue to fall short of anticipated needs as evidenced by the projects in need of funding listed in the Appendix C.

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TIP FY2017-21 Draft Amendment 1 (FY2017 and FY2019 highway tables with proposed changes highlighted)

2017 Cape Cod MPO Transportation Improvement Program

Amendment/Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1A / Federal Aid Target Projects										
►HSIP - Highway Safety Improvement Program										
	606707	Cape Cod	Dennis	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	5	HSIP	$ 458,514	$ 412,663	$ 45,851	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
						HSIP Subtotal ►	$ 458,514	$ 412,663	$ 45,851	◄ 90% Federal + 10% Non-Federal
►CMAQ - Congestion Mitigation and Air Quality Improvement Program										
AMENDMENT:Change Additional Information	**CC1000**	Cape Cod	Barnstable	BARNSTABLE - HYANNIS LOOP DEMONSTATION	5	CMAQ	$ 685,464	$ 685,464	$ -	$685,464 TRANSFER TO FTA, CMAQ Year 2 of 3 ($685,464 CMAQ with $685,464 CCRTA SCA match for $1,370,928 Total Cost). Score = 60.
	CC2000	Cape Cod	Regional	Cape Cod Bicycle Rack Program	5	CMAQ	$ 100,000	$ 80,000	$ 20,000	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
	606707	Cape Cod	Dennis	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	5	CMAQ	$ 647,393	$ 517,914	$ 129,479	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
						CMAQ Subtotal ►	$ 1,432,857	$ 1,283,378	$ 149,479	◄ 80% Federal + 20% Non-Federal
►TAP - Transportation Alternatives Program										
	606707	Cape Cod	Dennis	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	5	TAP	$ 193,036	$ 154,429	$ 38,607	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
						TAP Subtotal ►	$ 193,036	$ 154,429	$ 38,607	◄ 80% Federal + 20% Non-Federal
►Non-CMAQ/HSIP/TAP (Other)										
	606707	Cape Cod	Dennis	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	5	STP	$ 4,298,069	$ 3,438,455	$ 859,614	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
	608544	Cape Cod	Bourne	BOURNE- RESURFACING AND RELATED WORK ON ROUTE 6 & 28 BYPASS ROAD	5	STP	$ 2,400,000	$ 1,920,000	$ 480,000	Total programmed = $2,400,000. Score = 49.
	608102	Cape Cod	Harwich	HARWICH- IMPROVEMENTS TO PARK AND RIDE FACILITY INCLUDING A NEW BUS SHELTER AT ROUTE 124 PARK AND RIDE	5	STP	$ 575,000	$ 460,000	$ 115,000	Total programmed = $575,000. Score = 52.
						Non-CMAQ/HSIP/TAP (Other) Subtotal ►	$ 7,273,069	$ 5,818,455	$ 1,454,614	◄ 80% Federal + 20% Non-Federal

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 9,357,476	**$ 9,517,607**	**◄Total Target**	**$ 160,131**	**Target Funds Available**
Total Non-CMAQ/HSIP/TAP (Other) Programmed ►	$ 7,273,069	$ 7,433,200	◄ Max. **Non-CMAQ/HSIP/TAP**	**$ 160,131**	Non-CMAQ/HSIP/TAP (Other) Available
Total HSIP Programmed ►	$ 458,514	$ 458,514	◄ Min. **HSIP**	**$ -**	HSIP Recommended Met
Total CMAQ Programmed ►	$ 1,432,857	$ 1,432,857	◄ Min. **CMAQ**	**$ -**	CMAQ Recommended Met
Total TAP Programmed ►	$ 193,036	$ 193,036	◄ Min. **TAP**	**$ -**	TAP Recommended Met
Remaining HSIP, CMAQ, and TAP Funds	$ -				

►Section 1B / Federal Aid Bridge Projects										
►Statewide Systematic Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►On System										
				No Projects Programmed			$ -	$ -	$ -	
						On System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Off-System										
				No Projects Programmed			$ -	$ -	$ -	
						Off-System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Bridge Inspection Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Inspection Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Section 1C / Federal Aid Non-Target Projects										
►Other Federal Aid										
				No Projects Programmed			$ -	$ -	$ -	
						Other Federal Aid Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 1D / Federal Aid Major & State Category Projects										
►Regional Major Infrastructure										
				No Projects Programmed			$ -	$ -	$ -	
						Regional Major Infrastructure Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Americans with Disability Act Implementation Plan										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ADA Implementation Plan Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Congestion Mitigation and Air Quality										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide CMAQ Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide HSIP Program										
				No Projects Programmed						
						Statewide HSIP Program Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal

2017 Cape Cod MPO Transportation Improvement Program

Amendment/Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
► Statewide Infrastructure Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Infrastructure Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Interstate Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Interstate Maintenance Program Subtotal ►			$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
►Statewide Intelligent Transportation Systems										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide ITS Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Freight Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide National Freight Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Highway System Preservation Program										
AMENDMENT:Increase Cost,AMENDMENT:Change Additional Information	608201	CAPE COD	MULTIPLE	HARWICH- BREWSTER- ORLEANS- RESURFACING AND RELATED WORK ON ROUTE 6	5	NHPP	$ 9,212,911	$ 7,370,329	$ 1,842,582	Total programmed = $9,864,292 = $9,212,911 Program (NHPP) + $651,381 Statewide Stormwater Retrofits (STP-TE). Score = 48.
				Statewide NHS Preservation Program Subtotal ►			$ 9,212,911	$ 7,370,329	$ 1,842,582	◄ 80% Federal + 20% Non-Federal
►Statewide Planning Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Planning Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Railroad Grade Crossings										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide RR Grade Crossings Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Safe Routes to Schools Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Safe Routes to Schools Program Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Statewide Stormwater Retrofits										
AMENDMENT:Increase Cost,AMENDMENT:Change Additional Information	608201	CAPE COD	MULTIPLE	HARWICH- BREWSTER- ORLEANS- RESURFACING AND RELATED WORK ON ROUTE 6	5	STP-TE	$ 651,381	$ 521,105	$ 130,276	Total programmed = $9,864,292 = $9,212,911 Program (NHPP) + $651,381 Statewide Stormwater Retrofits (STP-TE). Score = 48.
				Statewide Stormwater Retrofits Subtotal ►			$ 651,381	$ 521,105	$ 130,276	◄ 80% Federal + 20% Non-Federal
►Statewide Transportation Enhancements										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Transportation Enhancements Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Other Statewide Items										
				ABP GANS Repayment			$ -	-	-	
				Award Adjustments, Change Orders, Project Value Changes, Etc.			$ -	-	-	
				DBEs, FAPO, Pavement Lab Retrofits, and Misc. Programs			$ -	-	-	
				Planning			$ -	-	-	
				Statewide Design and Right of Way			$ -	-	-	
				Statewide Recreational Trails			$ -	-	-	
				Other Statewide Items Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 2A / Non-Federal Projects										
►Non Federal Aid										
				No Projects Programmed		NFA	$ -		$ -	
				Non-Federal Aid Subtotal►			$ -		$ -	◄100% Non-Federal
►Section 2B / Non-Federal Bridge Projects										
►Section 2B / Non-Federal Bridge Projects										
				No Projects Programmed		NFA	$ -		$ -	
				Section 2B / Non-Federal Bridge Projects Subtotal►			$ -		$ -	◄100% Non-Federal

2017 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 19,221,768	$ -	$ 19,221,768	◄ Total Spending in Region
Federal Funds ►	$ 15,560,359		$ 15,560,359	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 3,661,409	$ -	$ 3,661,409	◄ Total Non-Federal Spending in Region

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701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: http://www.massdot.state.ma.us/Highway/flaggers/main.aspx

2018 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1A / Federal Aid Target Projects										
►HSIP - Highway Safety Improvement Program										
	607435	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS @ FALMOUTH ROAD (ROUTE 28) & OSTERVILLE-WEST BARNSTABLE ROAD	5	HSIP	$ 458,514	$ 412,663	$ 45,851	Total programmed with 4% Inflation applied = $2,818,568 = $458,514 HSIP, + $2,360,054 STP. RSA conducted. 25% design plans submitted. Score = 65.
						HSIP Subtotal ►	$ 458,514	$ 412,663	$ 45,851	◄ 90% Federal + 10% Non-Federal
►CMAQ - Congestion Mitigation and Air Quality Improvement Program										
	CC1000	Cape Cod	Barnstable	BARNSTABLE - HYANNIS LOOP DEMONSTATION	5	CMAQ	$ 711,828	$ 711,828	$ -	$711,828 TRANSFER TO FTA, CMAQ Year 3 of 3 ($711,828 CMAQ with $177,957 CCRTA SCA match for $889,785 Total Cost). Score = 60.
	CC2000	Cape Cod	Regional	Cape Cod Bicycle Rack Program	5	CMAQ	$ 100,000	$ 80,000	$ 20,000	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
	606596	Cape Cod	Chatham	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	5	CMAQ	$ 334,457	$ 267,566	$ 66,891	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66. Municipality is proponent.
						CMAQ Subtotal ►	$ 1,146,285	$ 1,059,394	$ 86,891	◄ 80% Federal + 20% Non-Federal
►TAP - Transportation Alternatives Program										
	606596	Cape Cod	Chatham	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	5	TAP	$ 210,307	$ 168,246	$ 42,061	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66.
						TAP Subtotal ►	$ 210,307	$ 168,246	$ 42,061	◄ 80% Federal + 20% Non-Federal
►Non-CMAQ/HSIP/TAP (Other)										
	607435	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS @ FALMOUTH ROAD (ROUTE 28) & OSTERVILLE-WEST BARNSTABLE ROAD	5	STP	$ 2,360,054	$ 1,888,043	$ 472,011	Total programmed with 4% Inflation applied = $2,818,568 = $458,514 HSIP, + $2,360,054 STP. RSA conducted. 25% design plans submitted. Score = 65.
	606596	Cape Cod	Chatham	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	5	STP	$ 3,700,167	$ 2,960,134	$ 740,033	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66. Municipality is proponent.
						Non-CMAQ/HSIP/TAP (Other) Subtotal ►	$ 6,060,221	$ 4,848,177	$ 1,212,044	◄ 80% Federal + 20% Non-Federal

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 7,875,327	**$ 9,884,419**	**◄Total Target**	**$ 2,009,092**	**Target Funds Available**
Total Non-CMAQ/HSIP/TAP (Other) Programmed ►	$ 6,060,221	$ 8,069,313	◄ Max. **Non-CMAQ/HSIP/TAP**	**$ 2,009,092**	Non-CMAQ/HSIP/TAP (Other) Available
Total HSIP Programmed ►	$ 458,514	$ 458,514	◄ Min. **HSIP**	**$ -**	HSIP Recommended Met
Total CMAQ Programmed ►	$ 1,146,285	$ 1,146,285	◄ Min. **CMAQ**	**$ -**	CMAQ Recommended Met
Total TAP Programmed ►	$ 210,307	$ 210,307	◄ Min. **TAP**	**$ -**	TAP Recommended Met
Remaining HSIP, CMAQ, and TAP Funds	$ -				

►Section 1B / Federal Aid Bridge Projects										
►Statewide Systematic Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►On System										
				No Projects Programmed			$ -	$ -	$ -	
						On System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Off-System										
				No Projects Programmed			$ -	$ -	$ -	
						Off-System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Bridge Inspection Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Inspection Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Section 1C / Federal Aid Non-Target Projects										
►Other Federal Aid										
				No Projects Programmed			$ -	$ -	$ -	
						Other Federal Aid Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 1D / Federal Aid Major & State Category Projects										
►Regional Major Infrastructure										
				No Projects Programmed			$ -	$ -	$ -	
						Regional Major Infrastructure Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Americans with Disability Act Implementation Plan										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ADA Implementation Plan Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Congestion Mitigation and Air Quality										
	607398	CAPE COD	MULTIPLE	YARMOUTH- BARNSTABLE- CAPE COD RAIL TRAIL EXTENSION, INCLUDES NEW BRIDGE OVER WILLOW STREET & RAILROAD (PHASE III)	5	CMAQ	$ 7,349,831	$ 5,879,865	$ 1,469,966	Statewide CMAQ funding total of $7,349,831. Land acquisition, survey, and design in process. Score = 82.
						Statewide CMAQ Subtotal ►	$ 7,349,831	$ 5,879,865	$ 1,469,966	◄ 80% Federal + 20% Non-Federal
► Statewide HSIP Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide HSIP Program Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
► Statewide Infrastructure Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Infrastructure Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal

►Statewide Interstate Maintenance Program

2018 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Interstate Maintenance Program Subtotal ►			$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
►Statewide Intelligent Transportation Systems										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide ITS Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Freight Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide National Freight Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Highway System Preservation Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide NHS Preservation Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Planning Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Planning Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Railroad Grade Crossings										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide RR Grade Crossings Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Safe Routes to Schools Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Safe Routes to Schools Program Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Statewide Stormwater Retrofits										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Stormwater Retrofits Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Transportation Enhancements										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Transportation Enhancements Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Other Statewide Items										
				ABP GANS Repayment			$ -	$ -	$ -	
				Award Adjustments, Change Orders, Project Value Changes, Etc.			$ -	$ -	$ -	
				DBEs, FAPO, Pavement Lab Retrofits, and Misc. Programs			$ -	$ -	$ -	
				Planning			$ -	$ -	$ -	
				Statewide Design and Right of Way			$ -	$ -	$ -	
				Statewide Recreational Trails			$ -	$ -	$ -	
				Other Statewide Items Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 2A / Non-Federal Projects										
►Non Federal Aid										
				No Projects Programmed		NFA	$ -		$ -	
				Non-Federal Aid Subtotal►			$ -		$ -	◄100% Non-Federal
►Section 2B / Non-Federal Bridge Projects										
►Section 2B / Non-Federal Bridge Projects										
				No Projects Programmed		NFA	$ -		$ -	
				Section 2B / Non-Federal Bridge Projects Subtotal►			$ -		$ -	◄100% Non-Federal

2018 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 15,225,158	$ -	$ 15,225,158	◄ Total Spending in Region
Federal Funds ►	$ 12,368,344		$ 12,368,344	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 2,856,815	$ -	$ 2,856,815	◄ Total Non-Federal Spending in Region

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701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: http://www.massdot.state.ma.us/Highway/flaggers/main.aspx

TIP FY2017-21 Draft Amendment 1 (FY2017 and FY2019 highway tables with proposed changes highlighted)

2019 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1A / Federal Aid Target Projects										
►HSIP - Highway Safety Improvement Program										
	606272	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	HSIP	$ 458,514	$ 412,663	$ 45,851	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
						HSIP Subtotal ►	$ 458,514	$ 412,663	$ 45,851	◄ 90% Federal + 10% Non-Federal
►CMAQ - Congestion Mitigation and Air Quality Improvement Program										
	CC2000	Cape Cod	Regional	Cape Cod Bicycle Rack Program	5	CMAQ	$ 100,000	$ 80,000	$ 20,000	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
	606272	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	CMAQ	$ 1,046,285	$ 837,028	$ 209,257	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
						CMAQ Subtotal ►	$ 1,146,285	$ 917,028	$ 229,257	◄ 80% Federal + 20% Non-Federal
►TAP - Transportation Alternatives Program										
	606272	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	TAP	$ 193,036	$ 154,429	$ 38,607	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
						TAP Subtotal ►	$ 193,036	$ 154,429	$ 38,607	◄ 80% Federal + 20% Non-Federal
►Non-CMAQ/HSIP/TAP (Other)										
	606272	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	STP	$ 4,408,140	$ 3,526,512	$ 881,628	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
	607444	Cape Cod	Falmouth	FALMOUTH- INTERSECTION IMPROVEMENTS & RELATED WORK AT NORTH FALMOUTH HIGHWAY (ROUTE 28A),NATHAN ELLIS HIGHWAY (ROUTE 151) AND COUNTY ROAD	5	STP	$ 3,021,688	$ 2,417,350	$ 604,338	Total programmed with 8% inflation applied = $3,021,688. 25% design under development. Possible HSIP - RSA to be conducted. Score = 63.
						Non-CMAQ/HSIP/TAP (Other) Subtotal ►	$ 7,429,828	$ 5,943,862	$ 1,485,966	◄ 80% Federal + 20% Non-Federal

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 9,227,663	**$ 9,884,419**	**◄Total Target**	**$ 656,756**	**Target Funds Available**
Total Non-CMAQ/HSIP/TAP (Other) Programmed ►	$ 7,429,828	$ 8,086,584	◄ Max. **Non-CMAQ/HSIP/TAP**	**$ 656,756**	Non-CMAQ/HSIP/TAP (Other) Available
Total HSIP Programmed ►	$ 458,514	$ 458,514	◄ Min. **HSIP**	**$ -**	HSIP Recommended Met
Total CMAQ Programmed ►	$ 1,146,285	$ 1,146,285	◄ Min. **CMAQ**	**$ -**	CMAQ Recommended Met
Total TAP Programmed ►	$ 193,036	$ 193,036	◄ Min. **TAP**	**$ -**	TAP Recommended Met
Remaining HSIP, CMAQ, and TAP Funds	$ -				

►Section 1B / Federal Aid Bridge Projects										
►Statewide Systematic Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►On System										
				No Projects Programmed			$ -	$ -	$ -	
						On System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Off-System										
				No Projects Programmed			$ -	$ -	$ -	
						Off-System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Bridge Inspection Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Inspection Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Section 1C / Federal Aid Non-Target Projects										
►Other Federal Aid										
AMENDMENT:Add Project	**CC1001**	CAPE COD	Eastham	Cape Cod National Seashore - Pavement Overlay on Doane Rd.	5	Other FA	$ 337,500	$ 270,000	$ 67,500	FHWA transfer to Eastern Federal Lands (National Park Service). Score 36.
						Other Federal Aid Subtotal ►	$ 337,500	$ 270,000	$ 67,500	◄ Funding Split Varies by Funding Source
►Section 1D / Federal Aid Major & State Category Projects										
►Regional Major Infrastructure										
				No Projects Programmed			$ -	$ -	$ -	
						Regional Major Infrastructure Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Americans with Disability Act Implementation Plan										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ADA Implementation Plan Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Congestion Mitigation and Air Quality										
	606272	CAPE COD	BANSTABLE	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	CMAQ	$ 540,800	$ 432,640	$ 108,160	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
						Statewide CMAQ Subtotal ►	$ 540,800	$ 432,640	$ 108,160	◄ 80% Federal + 20% Non-Federal
► Statewide HSIP Program										
	608571	CAPE COD	MULTIPLE	BOURNE TO FALMOUTH - GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF ROUTE 28	5	HSIP	$ 450,021	$ 405,019	$ 45,002	This project is in the preliminary design phase. Score = 38.

2019 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
				Statewide HSIP Program Subtotal ►			$ 450,021	$ 405,019	$ 45,002	◄ 90% Federal + 10% Non-Federal
► Statewide Infrastructure Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Infrastructure Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Interstate Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Interstate Maintenance Program Subtotal ►			$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
►Statewide Intelligent Transportation Systems										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide ITS Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Freight Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide National Freight Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Highway System Preservation Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide NHS Preservation Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Planning Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Planning Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Railroad Grade Crossings										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide RR Grade Crossings Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Safe Routes to Schools Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Safe Routes to Schools Program Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Statewide Stormwater Retrofits										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Stormwater Retrofits Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Transportation Enhancements										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Transportation Enhancements Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Other Statewide Items										
				ABP GANS Repayment			$ -	-	-	
				Award Adjustments, Change Orders, Project Value Changes, Etc.			$ -	-	-	
				DBEs, FAPO, Pavement Lab Retrofits, and Misc. Programs			$ -	-	-	
				Planning			$ -	-	-	
				Statewide Design and Right of Way			$ -	-	-	
				Statewide Recreational Trails			$ -	-	-	
				Other Statewide Items Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 2A / Non-Federal Projects										
►Non Federal Aid										
				No Projects Programmed		NFA	$ -		$ -	
				Non-Federal Aid Subtotal►			$ -		$ -	◄100% Non-Federal
►Section 2B / Non-Federal Bridge Projects										
►Section 2B / Non-Federal Bridge Projects										
				No Projects Programmed		NFA	$ -		$ -	
				Section 2B / Non-Federal Bridge Projects Subtotal►			$ -		$ -	◄100% Non-Federal

2019 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 10,555,984	$ -	$ 10,555,984	◄ Total Spending in Region
Federal Funds ►	$ 8,535,641		$ 8,535,641	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 2,020,343	$ -	$ 2,020,343	◄ Total Non-Federal Spending in Region

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701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: http://www.massdot.state.ma.us/Highway/flaggers/main.aspx

2020 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1A / Federal Aid Target Projects										
►HSIP - Highway Safety Improvement Program										
	607397	Cape Cod	Wellfleet	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	5	HSIP	$ 458,514	$ 412,663	$ 45,851	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
						HSIP Subtotal ►	$ 458,514	$ 412,663	$ 45,851	◄ 90% Federal + 10% Non-Federal
►CMAQ - Congestion Mitigation and Air Quality Improvement Program										
	CC2000	Cape Cod	Regional	Cape Cod Bicycle Rack Program	5	CMAQ	$ 100,000	$ 80,000	$ 20,000	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
	606900	Cape Cod	Bourne	BOURNE- TRAFFIC AND MULTI-MODAL IMPROVEMENTS @ BELMONT CIRCLE AT ROUTES 6/25/28	5	CMAQ	$ 1,046,285	$ 837,028	$ 209,257	Total programmed with 12% inflation = $5,644,800 = $1,046,285 CMQ + $4,598,515 STP. Potential HSIP - RSA to be conducted. CMAQ analysis to be conducted. Score = 82.
						CMAQ Subtotal ►	$ 1,146,285	$ 917,028	$ 229,257	◄ 80% Federal + 20% Non-Federal
►TAP - Transportation Alternatives Program										
	607397	Cape Cod	Wellfleet	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	5	TAP	$ 242,367	$ 193,894	$ 48,473	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
						TAP Subtotal ►	$ 242,367	$ 193,894	$ 48,473	◄ 80% Federal + 20% Non-Federal
►Non-CMAQ/HSIP/TAP (Other)										
	606900	Cape Cod	Bourne	BOURNE- TRAFFIC AND MULTI-MODAL IMPROVEMENTS @ BELMONT CIRCLE AT ROUTES 6/25/28	5	STP	$ 4,598,515	$ 3,678,812	$ 919,703	Total programmed with 12% inflation = $5,644,800 = $1,046,285 CMQ + $4,598,515 STP. Potential HSIP - RSA to be conducted. CMAQ analysis to be conducted. Score = 82.
	607397	Cape Cod	Wellfleet	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	5	STP	$ 1,539,567	$ 1,231,654	$ 307,913	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
	607319	Cape Cod	Mashpee	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	5	STP	$ 2,120,112	$ 1,696,090	$ 424,022	ADVANCED CONSTRUCTION: Year 1 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
						Non-CMAQ/HSIP/TAP (Other) Subtotal ►	$ 8,258,194	$ 6,606,555	$ 1,651,639	◄ 80% Federal + 20% Non-Federal

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 10,105,360	**$ 10,118,502**	**◄Total Target**	**$ 13,142**	**Target Funds Available**
Total Non-CMAQ/HSIP/TAP (Other) Programmed ►	$ 8,258,194	$ 8,271,336	◄ Max. **Non-CMAQ/HSIP/TAP**	**$ 13,142**	Non-CMAQ/HSIP/TAP (Other) Available
Total HSIP Programmed ►	$ 458,514	$ 458,514	◄ Min. **HSIP**	**$ -**	HSIP Recommended Met
Total CMAQ Programmed ►	$ 1,146,285	$ 1,146,285	◄ Min. **CMAQ**	**$ -**	CMAQ Recommended Met
Total TAP Programmed ►	$ 242,367	$ 242,367	◄ Min. **TAP**	**$ -**	TAP Recommended Met
Remaining HSIP, CMAQ, and TAP Funds	$ -				

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1B / Federal Aid Bridge Projects										
►Statewide Systematic Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►On System										
				No Projects Programmed			$ -	$ -	$ -	
						On System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Off-System										
				No Projects Programmed			$ -	$ -	$ -	
						Off-System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Bridge Inspection Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Inspection Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Section 1C / Federal Aid Non-Target Projects										
►Other Federal Aid										
				No Projects Programmed			$ -	$ -	$ -	
						Other Federal Aid Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 1D / Federal Aid Major & State Category Projects										
►Regional Major Infrastructure										
				No Projects Programmed			$ -	$ -	$ -	
						Regional Major Infrastructure Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Americans with Disability Act Implementation Plan										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ADA Implementation Plan Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Congestion Mitigation and Air Quality										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide CMAQ Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide HSIP Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide HSIP Program Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal

2020 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
► Statewide Infrastructure Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Infrastructure Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Interstate Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Interstate Maintenance Program Subtotal ►			$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
►Statewide Intelligent Transportation Systems										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide ITS Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Freight Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide National Freight Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Highway System Preservation Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide NHS Preservation Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Planning Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Planning Program Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Railroad Grade Crossings										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide RR Grade Crossings Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Safe Routes to Schools Program										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Safe Routes to Schools Program Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Statewide Stormwater Retrofits										
	608598	CAPE COD	ORLEANS	ORLEANS - STORMWATER IMPROVEMENTS ALONG ROUTE 28	5	STP-TE	$ 407,350	$ 325,880	$ 81,470	This project is in the preliminary design phase. Score = 36.
				Statewide Stormwater Retrofits Subtotal ►			$ 407,350	$ 325,880	$ 81,470	◄ 80% Federal + 20% Non-Federal
►Statewide Transportation Enhancements										
				No Projects Programmed			$ -	$ -	$ -	
				Statewide Transportation Enhancements Subtotal ►			$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Other Statewide Items										
				ABP GANS Repayment			$ -	$ -	$ -	
				Award Adjustments, Change Orders, Project Value Changes, Etc.			$ -	$ -	$ -	
				DBEs, FAPO, Pavement Lab Retrofits, and Misc. Programs			$ -	$ -	$ -	
				Planning			$ -	$ -	$ -	
				Statewide Design and Right of Way			$ -	$ -	$ -	
				Statewide Recreational Trails			$ -	$ -	$ -	
				Other Statewide Items Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 2A / Non-Federal Projects										
►Non Federal Aid										
				No Projects Programmed		NFA	$ -		$ -	
				Non-Federal Aid Subtotal►			$ -		$ -	◄100% Non-Federal
►Section 2B / Non-Federal Bridge Projects										
►Section 2B / Non-Federal Bridge Projects										
				No Projects Programmed		NFA	$ -		$ -	
				Section 2B / Non-Federal Bridge Projects Subtotal►			$ -		$ -	◄100% Non-Federal

2020 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 10,512,710	$ -	$ 10,512,710	◄ Total Spending in Region
Federal Funds ►	$ 8,456,019		$ 8,456,019	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 2,056,691	$ -	$ 2,056,691	◄ Total Non-Federal Spending in Region

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701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: http://www.massdot.state.ma.us/Highway/flaggers/main.aspx

2021 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
►Section 1A / Federal Aid Target Projects										
►HSIP - Highway Safety Improvement Program										
	607319	Cape Cod	Mashpee	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	5	HSIP	$ 458,514	$ 412,663	$ 45,851	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
						HSIP Subtotal ►	$ 458,514	$ 412,663	$ 45,851	◄ 90% Federal + 10% Non-Federal
►CMAQ - Congestion Mitigation and Air Quality Improvement Program										
	CC2000	Cape Cod	Regional	Cape Cod Bicycle Rack Program	5	CMAQ	$ 100,000	$ 80,000	$ 20,000	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
	607319	Cape Cod	Mashpee	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	5	CMAQ	$ 1,046,285	$ 837,028	$ 209,257	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
						CMAQ Subtotal ►	$ 1,146,285	$ 917,028	$ 229,257	◄ 80% Federal + 20% Non-Federal
►TAP - Transportation Alternatives Program										
	607319	Cape Cod	Mashpee	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	5	TAP	$ 319,725	$ 255,780	$ 63,945	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
						TAP Subtotal ►	$ 319,725	$ 255,780	$ 63,945	◄ 80% Federal + 20% Non-Federal
►Non-CMAQ/HSIP/TAP (Other)										
	607319	Cape Cod	Mashpee	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	5	STP	$ 5,295,476	$ 4,236,381	$ 1,059,095	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
	607405	Cape Cod	Chatham	CHATHAM- INTERSECTION IMPROVEMENTS & RELATED WORK AT MAIN STREET (ROUTE 28), DEPOT ROAD, QUEEN ANNE ROAD AND CROWELL ROAD	5	STP	$ 2,784,000	$ 2,227,200	$ 556,800	Total programmed with 16% inflation applied = $2,784,0000. Preliminary design. Municipality is proponent. Score = 76.
						Non-CMAQ/HSIP/TAP (Other) Subtotal ►	$ 8,079,476	$ 6,463,581	$ 1,615,895	◄ 80% Federal + 20% Non-Federal

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 10,004,000	**$ 10,118,502**	**◄Total Target**	**$ 114,502**	**Target Funds Available**
Total Non-CMAQ/HSIP/TAP (Other) Programmed ►	$ 8,079,476	$ 8,193,978	◄ Max. **Non-CMAQ/HSIP/TAP**	**$ 114,502**	Non-CMAQ/HSIP/TAP (Other) Available
Total HSIP Programmed ►	$ 458,514	$ 458,514	◄ Min. **HSIP**	**$ -**	HSIP Recommended Met
Total CMAQ Programmed ►	$ 1,146,285	$ 1,146,285	◄ Min. **CMAQ**	**$ -**	CMAQ Recommended Met
Total TAP Programmed ►	$ 319,725	$ 319,725	◄ Min. **TAP**	**$ -**	TAP Recommended Met
Remaining HSIP, CMAQ, and TAP Funds	$ -				

►Section 1B / Federal Aid Bridge Projects										
►Statewide Systematic Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►On System										
				No Projects Programmed			$ -	$ -	$ -	
						On System Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Off-System										
	608617	CAPE COD	HARWICH	HARWICH - BRIDGE REPLACEMENT, H-10-019, AZALEA DRIVE OVER HERRING RIVER	D5	STP-BR-OFF	$ 1,043,768	$ 835,014	$ 208,754	This project is in the preliminary design phase. Score = 36.
						Off-System Subtotal ►	$ 1,043,768	$ 835,014	$ 208,754	◄ 80% Federal + 20% Non-Federal
►Statewide Bridge Inspection Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Bridge Inspection Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Section 1C / Federal Aid Non-Target Projects										
►Other Federal Aid										
				No Projects Programmed			$ -	$ -	$ -	
						Other Federal Aid Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 1D / Federal Aid Major & State Category Projects										
►Regional Major Infrastructure										
				No Projects Programmed			$ -	$ -	$ -	
						Regional Major Infrastructure Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Americans with Disability Act Implementation Plan										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ADA Implementation Plan Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Congestion Mitigation and Air Quality										
	608422	CAPE COD	SANDWICH	SANDWICH- CONSTRUCTION OF SHARED USE PATH ALONG SERVICE ROAD FROM ROUTE 130 TO CHASE ROAD	5	CMAQ	$ 5,800,464	$ 4,640,371	$ 1,160,093	This project is in the preliminary design phase. Score = 76.
						Statewide CMAQ Subtotal ►	$ 5,800,464	$ 4,640,371	$ 1,160,093	◄ 80% Federal + 20% Non-Federal

► Statewide HSIP Program

2021 Cape Cod MPO Transportation Improvement Program

Amendment/ Adjustment Type ▼	MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
				No Projects Programmed			$ -	$ -	$ -	
						Statewide HSIP Program Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
► Statewide Infrastructure Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Infrastructure Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Interstate Maintenance Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Interstate Maintenance Program Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal
►Statewide Intelligent Transportation Systems										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide ITS Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Freight Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide National Freight Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide National Highway System Preservation Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide NHS Preservation Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Planning Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Planning Program Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Railroad Grade Crossings										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide RR Grade Crossings Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
► Statewide Safe Routes to Schools Program										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Safe Routes to Schools Program Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Statewide Stormwater Retrofits										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Stormwater Retrofits Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Statewide Transportation Enhancements										
				No Projects Programmed			$ -	$ -	$ -	
						Statewide Transportation Enhancements Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal
►Other Statewide Items										
				ABP GANS Repayment			$ -	$ -	$ -	
				Award Adjustments, Change Orders, Project Value Changes, Etc.			$ -	$ -	$ -	
				DBEs, FAPO, Pavement Lab Retrofits, and Misc. Programs			$ -	$ -	$ -	
				Planning			$ -	$ -	$ -	
				Statewide Design and Right of Way			$ -	$ -	$ -	
				Statewide Recreational Trails			$ -	$ -	$ -	
						Other Statewide Items Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source
►Section 2A / Non-Federal Projects										
►Non Federal Aid										
				No Projects Programmed		NFA	$ -		$ -	
						Non-Federal Aid Subtotal►	$ -		$ -	◄100% Non-Federal
►Section 2B / Non-Federal Bridge Projects										
►Section 2B / Non-Federal Bridge Projects										
				No Projects Programmed		NFA	$ -		$ -	
						Section 2B / Non-Federal Bridge Projects Subtotal►	$ -		$ -	◄100% Non-Federal

2021 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 16,848,232	$ -	$ 16,848,232	◄ Total Spending in Region
Federal Funds ►	$ 13,524,437		$ 13,524,437	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 3,323,795	$ -	$ 3,323,795	◄ Total Non-Federal Spending in Region

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TIP FY2017-21 Draft Amendment 1 (FY2017 Transit tables with proposed changes highlighted)

Transportation Improvement Program (TIP)
Project List (FY2017)

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC	Local Funds	Total Cost
5307										
5307	RTD0004386	Cape Cod Regional Transit Authority	117C00	NON FIXED ROUTE ADA PARA SERV	2015 - $139,370; 2016 - $382,32	$521,692	$130,423	$0	$0	$652,115
5307	RTD0004387	Cape Cod Regional Transit Authority	117A00	PREVENTIVE MAINTENANCE	2015 - $1,271,901; 2016 - $4,565,81	$5,837,716	$1,099,180	$0	$0	$6,936,896
5307	RTD0004388	Cape Cod Regional Transit Authority	117L00	MOBILITY MANAGEMENT	2015 - $450,000; 2016 - $733,20	$1,183,200	$295,800	$0	$0	$1,479,000
5307	RTD0004389	Cape Cod Regional Transit Authority	300900	OPERATING ASSISTANCE	2016 - $600,000	$600,000	$600,000	$0	$0	$1,200,000
5307	RTD0006279	Cape Cod Regional Transit Authority	114403	REHAB/RENOVATE - ADMIN/MAINT FACILITY	2015 - $111,960; 2016 - $12,950	$124,910	$31,228	$0	$0	$156,138
5307	RTD0006282	Cape Cod Regional Transit Authority	114402	REHAB/RENOVATE - MAINTENANCE FACILITY	2015 - $80,000	$80,000	$20,000	$0	$0	$100,000
5307	RTD0006283	Cape Cod Regional Transit Authority	442400	SHORT RANGE TRANSIT PLANNING	2015 - $30,532	$30,532	$7,633	$0	$0	$38,165
					Subtotal	$8,378,050	$2,184,264	$0	$0	$10,562,314
5309										
					Subtotal	$0	$0	$0	$0	$0
5310										
					Subtotal	$0	$0	$0	$0	$0
5311										
					Subtotal	$0	$0	$0	$0	$0
5337										
					Subtotal	$0	$0	$0	$0	$0
5339										
5339	RTD0004382	Cape Cod Regional Transit Authority	113400	REHAB/RENOVATE BUS STATIONS	2014 - $243,211	$243,211	$60,803	$0	$0	$304,014
5339	RTD0004383	Cape Cod Regional Transit Authority	119302	CONSTRUCTION - BUS SHELTERS	2013 - $12,800	$12,800	$3,200	$0	$0	$16,000
5339	RTD0004390	Cape Cod Regional Transit Authority	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2013 - $32,000; 2014 - $129,600	$161,600	$40,400	$0	$0	$202,000
5339	RTD0005169	Cape Cod Regional Transit Authority	114211	ACQUIRE - SUPPORT VEHICLES	2013 - $48,000	$48,000	$12,000	$0	$0	$60,000
5339	RTD0005170	Cape Cod Regional Transit Authority	114209	ACQUIRE - MOBILE SURV/SECURITY EQUIP	2013 - $61,600; 2014 - $72,000	$133,600	$33,400	$0	$0	$167,000
5339	RTD0005167	Cape Cod Regional Transit Authority	114207	ACQUIRE - ADP HARDWARE	2013 - $22,880; 2014 - $58,80	$81,680	$20,420	$0	$0	$102,100
5339	RTD0005197	Cape Cod Regional Transit Authority	117000	OTHER CAPITAL ITEMS (BUS)	2015 - $694,239	$694,239	$173,560	$0	$0	$867,799
5339	RTD0006280	Cape Cod Regional Transit Authority	114210	ACQUIRE - MOBILE FARE COLL EQUIP	2013 - $30,240	$30,240	$7,560	$0	$0	$37,800
5339	RTD0006281	Cape Cod Regional Transit Authority	114206	ACQUIRE - SHOP EQUIPMENT	2013 - $20,800; 2014 - $24,00	$44,800	$11,200	$0	$0	$56,000
5339	RTD0006284	Cape Cod Regional Transit Authority	442400	SHORT RANGE TRANSIT PLANNING	2014 - $69,468	$69,468	$17,367	$0	$0	$86,835
					Subtotal	$1,519,638	$379,910	$0	$0	$1,899,548
5320										
					Subtotal	$0	$0	$0	$0	$0
Other Federal										
					Subtotal	$0	$0	$0	$0	$0
Other Non-Federal										
Other Non-Federal	RTD0006331	Cape Cod Regional Transit Authority	300901	Hyannis Loop Demonstration (Match in HWY TIP)		$0	$685,464	$0	$0	$685,464
					Subtotal	$0	$685,464	$0	$0	$685,464
					Total	$9,897,688	$3,249,638	$0	$0	$13,147,326

Funds listed under the Carry Over column are included in the Federal Amount
Note: the following items under the 5307 funding category are to be removed

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
~~RTD0005168~~	~~CCRTA~~	~~114208~~	~~ACQUIRE - ADP SOFTWARE~~		~~$377,600~~	~~$94,400~~	~~$0~~	~~$0~~	~~$472,000~~
~~RTD0005171~~	~~CCRTA~~	~~117000~~	~~OTHER CAPITAL ITEMS (BUS)~~		~~$242,000~~	~~$60,500~~	~~$0~~	~~$0~~	~~$302,500~~

Transportation Improvement Program (TIP)
Project List (FY2018)

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC	Local Funds	Total Cost
5307										
				ACQUISITION OF BUS SUPPORT						
	5307 RTD0004393	Cape Cod Regional Transit Authority	114200	EQUIP/FACILITIES	2017 - $7,235	$7,235	$1,809	$0	$0	$9,044
	5307 RTD0004394	Cape Cod Regional Transit Authority	114207	ACQUIRE - ADP HARDWARE	2017 - $24,000	$24,000	$6,000	$0	$0	$30,000
	5307 RTD0004397	Cape Cod Regional Transit Authority	117C00	NON FIXED ROUTE ADA PARA SERV	2017 - $532,126	$532,126	$133,032	$0	$0	$665,158
	5307 RTD0004398	Cape Cod Regional Transit Authority	117L00	MOBILITY MANAGEMENT	2017 - $1,206,864	$1,206,864	$301,716	$0	$0	$1,508,580
	5307 RTD0004399	Cape Cod Regional Transit Authority	117A00	PREVENTIVE MAINTENANCE	2017 - $5,209,978	$5,209,978	$1,302,495	$0	$0	$6,512,473
	5307 RTD0004400	Cape Cod Regional Transit Authority	300900	OPERATING ASSISTANCE	2017 - $600,000	$600,000	$600,000	$0	$0	$1,200,000
	5307 RTD0005174	Cape Cod Regional Transit Authority	117000	OTHER CAPITAL ITEMS (BUS)	2017 - $520,000	$520,000	$130,000	$0	$0	$650,000
					Subtotal	$8,100,203	$2,475,052	$0	$0	$10,575,255
5309										
					Subtotal	$0	$0	$0	$0	$0
5310										
					Subtotal	$0	$0	$0	$0	$0
5311										
					Subtotal	$0	$0	$0	$0	$0
5337										
					Subtotal	$0	$0	$0	$0	$0
5339										
	5339 RTD0004391	Cape Cod Regional Transit Authority	113400	REHAB/RENOVATE BUS STATIONS	2017 - $152,000	$152,000	$38,000	$0	$0	$190,000
	5339 RTD0004396	Cape Cod Regional Transit Authority	119302	CONSTRUCTION - BUS SHELTERS	2017 - $52,800	$52,800	$13,200	$0	$0	$66,000
	5339 RTD0005172	Cape Cod Regional Transit Authority	114211	ACQUIRE - SUPPORT VEHICLES	2016 - $53,651	$53,651	$13,413	$0	$0	$67,064
	5339 RTD0005173	Cape Cod Regional Transit Authority	114209	ACQUIRE - MOBILE SURV/SECURITY EQUIP	2016 - $193,600	$193,600	$48,400	$0	$0	$242,000
					Subtotal	$452,051	$113,013	$0	$0	$565,064
5320										
					Subtotal	$0	$0	$0	$0	$0
Other Federal										
					Subtotal	$0	$0	$0	$0	$0
Other Non-Federal										
					Subtotal	$0	$0	$0	$0	$0
					Total	$8,552,254	$2,588,065	$0	$0	$11,140,319

Funds listed under the Carry Over column are included in the Federal Amount

Transportation Improvement Program (TIP)
Project List (FY2019)

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC	Local Funds	Total Cost
5307										
5307	RTD0004401	Cape Cod Regional Transit Authority	300900	OPERATING ASSISTANCE	2018 - $600,000	$600,000	$600,000	$0	$0	$1,200,000
5307	RTD0004402	Cape Cod Regional Transit Authority	117C00	NON FIXED ROUTE ADA PARA SERV	2018 - $542,769	$542,769	$135,692	$0	$0	$678,461
5307	RTD0004403	Cape Cod Regional Transit Authority	117A00	PREVENTIVE MAINTENANCE	2018 - $5,361,677	$5,361,677	$1,340,419	$0	$0	$6,702,096
5307	RTD0004404	Cape Cod Regional Transit Authority	117L00	MOBILITY MANAGEMENT	2018 - $1,231,001	$1,231,001	$307,750	$0	$0	$1,538,751
5307	RTD0004406	Cape Cod Regional Transit Authority	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2018 - $56,516	$56,516	$14,129	$0	$0	$70,645
5307	RTD0004407	Cape Cod Regional Transit Authority	114207	ACQUIRE - ADP HARDWARE	2018 - $23,765	$23,765	$5,941	$0	$0	$29,706
5307	RTD0005176	Cape Cod Regional Transit Authority	117000	OTHER CAPITAL ITEMS (BUS)	2018 - $504,000	$504,000	$126,000	$0	$0	$630,000
					Subtotal	$8,319,728	$2,529,931	$0	$0	$10,849,659
5309										
					Subtotal	$0	$0	$0	$0	$0
5310										
					Subtotal	$0	$0	$0	$0	$0
5311										
					Subtotal	$0	$0	$0	$0	$0
5337										
					Subtotal	$0	$0	$0	$0	$0
5339										
5339	RTD0004405	Cape Cod Regional Transit Authority	113400	REHAB/RENOVATE BUS STATIONS	2018 - $96,000	$96,000	$24,000	$0	$0	$120,000
5339	RTD0004409	Cape Cod Regional Transit Authority	119302	CONSTRUCTION - BUS SHELTERS	2018 - $51,200	$51,200	$12,800	$0	$0	$64,000
5339	RTD0005175	Cape Cod Regional Transit Authority	114211	ACQUIRE - SUPPORT VEHICLES	2018 - $99,586	$99,586	$24,896	$0	$0	$124,482
5339	RTD0005198	Cape Cod Regional Transit Authority	117000	OTHER CAPITAL ITEMS (BUS)	2017 - $112,800	$112,800	$28,200	$0	$0	$141,000
					Subtotal	$359,586	$89,896	$0	$0	$449,482
5320										
					Subtotal	$0	$0	$0	$0	$0
Other Federal										
					Subtotal	$0	$0	$0	$0	$0
Other Non-Federal										
					Subtotal	$0	$0	$0	$0	$0
					Total	$8,679,314	$2,619,827	$0	$0	$11,299,141

Funds listed under the Carry Over column are included in the Federal Amount

Transportation Improvement Program (TIP)
Project List (FY2020)

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC	Local Funds	Total Cost
5307										
5307	RTD0004412	Cape Cod Regional Transit Authority	117C00	NON FIXED ROUTE ADA PARA SERV	2019 - $553,624	$553,624	$138,406	$0	$0	$692,030
5307	RTD0004413	Cape Cod Regional Transit Authority	117A00	PREVENTIVE MAINTENANCE	2019 - $5,541,833	$5,541,833	$1,385,458	$0	$0	$6,927,291
5307	RTD0004414	Cape Cod Regional Transit Authority	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2019 - $80,000	$80,000	$20,000	$0	$0	$100,000
5307	RTD0004415	Cape Cod Regional Transit Authority	114207	ACQUIRE - ADP HARDWARE	2018 - $19,200; 2019 - $92,800	$112,000	$28,000	$0	$0	$140,000
5307	RTD0004416	Cape Cod Regional Transit Authority	117L00	MOBILITY MANAGEMENT	2019 - $1,255,621	$1,255,621	$313,905	$0	$0	$1,569,526
5307	RTD0004417	Cape Cod Regional Transit Authority	300900	OPERATING ASSISTANCE	2019 - $600,000	$600,000	$600,000	$0	$0	$1,200,000
5307	RTD0004420	Cape Cod Regional Transit Authority	119302	CONSTRUCTION - BUS SHELTERS	2019 - $56,000	$56,000	$14,000	$0	$0	$70,000
5307	RTD0005177	Cape Cod Regional Transit Authority	114209	ACQUIRE - MOBILE SURV/SECURITY EQUIP	2019 - $66,133	$66,133	$16,533	$0	$0	$82,666
					Subtotal	$8,265,211	$2,516,302	$0	$0	$10,781,513
5309										
					Subtotal	$0	$0	$0	$0	$0
5310										
					Subtotal	$0	$0	$0	$0	$0
5311										
					Subtotal	$0	$0	$0	$0	$0
5337										
					Subtotal	$0	$0	$0	$0	$0
5339										
5339	RTD0004419	Cape Cod Regional Transit Authority	113400	REHAB/RENOVATE BUS STATIONS	2019 - $516,000	$516,000	$129,000	$0	$0	$645,000
5339	RTD0005178	Cape Cod Regional Transit Authority	117000	OTHER CAPITAL ITEMS (BUS)	2018 - $422,400	$422,400	$105,600	$0	$0	$528,000
					Subtotal	$938,400	$234,600	$0	$0	$1,173,000
5320										
					Subtotal	$0	$0	$0	$0	$0
Other Federal										
					Subtotal	$0	$0	$0	$0	$0
Other Non-Federal										
					Subtotal	$0	$0	$0	$0	$0
					Total	$9,203,611	$2,750,902	$0	$0	$11,954,513

Funds listed under the Carry Over column are included in the Federal Amount

Transportation Improvement Program (TIP)
Project List (FY2021)

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC	Local Funds	Total Cost
5307										
5307	RTD0005179	Cape Cod Regional Transit Authority	117L00	MOBILITY MANAGEMENT	2020 - $1,274,456	$1,274,456	$318,614	$0	$0	$1,593,070
5307	RTD0005180	Cape Cod Regional Transit Authority	117C00	NON FIXED ROUTE ADA PARA SERV	2020 - $561,928	$561,928	$140,482	$0	$0	$702,410
5307	RTD0005181	Cape Cod Regional Transit Authority	117A00	PREVENTIVE MAINTENANCE	2020 - $5,624,960	$5,624,960	$1,406,240	$0	$0	$7,031,200
5307	RTD0005188	Cape Cod Regional Transit Authority	300900	OPERATING ASSISTANCE	2020 - $600,000	$600,000	$600,000	$0	$0	$1,200,000
5307	RTD0005182	Cape Cod Regional Transit Authority	114207	ACQUIRE - ADP HARDWARE	2019 - $112,000	$112,000	$28,000	$0	$0	$140,000
5307	RTD0005183	Cape Cod Regional Transit Authority	114209	ACQUIRE - MOBILE SURV/SECURITY EQUIP	2020 - $66,133	$66,133	$16,533	$0	$0	$82,666
5307	RTD0005184	Cape Cod Regional Transit Authority	119302	CONSTRUCTION - BUS SHELTERS	2020 - $56,000	$56,000	$14,000	$0	$0	$70,000
5307	RTD0005186	Cape Cod Regional Transit Authority	114220	ACQUIRE - MISC SUPPORT EQUIPMENT	2020 - $80,000	$80,000	$20,000	$0	$0	$100,000
					Subtotal	$8,375,477	$2,543,869	$0	$0	$10,919,346
5309										
					Subtotal	$0	$0	$0	$0	$0
5310										
					Subtotal	$0	$0	$0	$0	$0
5311										
					Subtotal	$0	$0	$0	$0	$0
5337										
					Subtotal	$0	$0	$0	$0	$0
5339										
5339	RTD0005185	Cape Cod Regional Transit Authority	114301	CONSTRUCT - ADMINISTRATIVE BUILDING	2020 - $516,000	$516,000	$129,000	$0	$0	$645,000
					Subtotal	$516,000	$129,000	$0	$0	$645,000
5320										
					Subtotal	$0	$0	$0	$0	$0
Other Federal										
					Subtotal	$0	$0	$0	$0	$0
Other Non-Federal										
Other Non-Federal	RTD0005187	Cape Cod Regional Transit Authority	111202	BUY REPLACEMENT 35-FT BUS		$0	$1,150,000	$0	$0	$1,150,000
					Subtotal	$0	$1,150,000	$0	$0	$1,150,000
					Total	$8,891,477	$3,822,869	$0	$0	$12,714,346

Funds listed under the Carry Over column are included in the Federal Amount

Glossary

Table 10. Definitions Used in Project Listings

LABEL	DESCRIPTION
DESCRIPTION	This column is a brief description of the project. Complete descriptions can be obtained through the project proponent.
MUNICIPALITY	This column lists the town(s) of project location, "Capewide" for a regional project. The project proponent may also be listed in this column, e.g. "CCRTA, Capewide."
SID #	(State identification number) This column contains the number of the project assigned by the state. When a MHD "PROJIS" number has been assigned to the project, this number is included.
FUND	Proposed funding category for the project (described in A6. Transportation Funding Programs)
FED FUNDS	Estimated federal share cost of the project.
STATE FUNDS	Estimated state share cost of the project.
TOTAL COST	Estimated total project cost.
STATEWIDE	Anywhere in the Commonwealth of Massachusetts.
CAPEWIDE	Anywhere on Cape Cod (Barnstable County).

Table 11. Acronyms

ACRONYM	MEANING
AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ARC	Available Reserve Capacity
BTP&D	(Massachusetts) Bureau of Transportation Planning and Development
CAAA	Clean Air Act Amendments of 1990
CEPO	Capital Expenditure and Program Office
CCC	Cape Cod Commission
CCJTC	Cape Cod Joint Transportation Committee
CCRTA	Cape Cod Regional Transit Authority
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMR	Code of Massachusetts Regulations
CO	Carbon Monoxide
CTPS	Central Transportation Planning Staff
CZM	(Massachusetts) Coastal Zone Management
DCPO	Division of Capital Planning and Operations
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
EOTPW	(Massachusetts) Executive Office of Transportation and Public Works (2007)
EPA	Environmental Protection Agency
ESC	(Massachusetts) Enhancements Steering Committee
FA	Federal Aid
FAST	Fixing America's Surface Transportation (FAST) Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year or Federal Fiscal Year
GPS	Global Positioning System
HPP	High Priority Project
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITC	Intermodal Transportation Center
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System(s)
LOS	Level of Service
LRTP	Long Range Transportation Plan
MAP	Mobility Assistance Program
MAP-21	Moving Ahead for Progress in the 21st Century
MassDOT	Massachusetts Department of Transportation
MEPA	Massachusetts Environmental Protection Act
MHD	Massachusetts Highway Department or MassHighway (now MassDOT/Highway Division)
MPO	Metropolitan Planning Organization or Cape Cod Metropolitan Planning Organization
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
PPP	Public Participation Process, or Public Participation Plan
PWED	Public Works Economic Development Program
RPA	Regional Planning Agency
RPP	Regional Policy Plan
RTA	Regional Transit Authority
RTP	Regional Transportation Plan
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
STBG	Surface Transportation Block Grant
STEA	Surface Transportation Extension Act of 1997
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TA	Transportation Alternatives

TAP	Transportation Alternatives Program
TAZ	Traffic Analysis Zone
TEA-21	Transportation Equity Act for the 21st Century
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TSM	Transportation Systems Management
USGS	United States Geographical Survey
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
VPD	Vehicles Per Day
VPH	Vehicles Per Hour

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Appendices

Appendix A: Project Evaluation

Regional Transportation Plan Consistency

All projects included in the Transportation Improvement Program (TIP) are either specifically identified in the Regional Transportation Plan (RTP) or are consistent with programs in the RTP. Looking at the first time band (2016-2020) in the RTP, phase 1 of the Hyannis Access Study (intersection of Route 28 and Yarmouth Road) appears and is programmed in TIP in FY2019. Also in the first time band is "Route 28 Multimodal Improvements." This appears as a series of projects in the 2017-2021 TIP. Other projects in the 2017-2021 TIP are consistent with programs in the RTP such as "Roadway Rehabilitation & Reconstruction" and "Bicycle/Pedestrian Projects."

Furthermore, the goals, objectives, performance measures, and recommendations of the 2016 RTP were used in the development of the TIP Transportation Evaluation Criteria.

Project Evaluation Process

All highway projects under consideration for funding through the TIP are scored using the Cape Cod Metropolitan Planning Organization (MPO)'s TIP Transportation Evaluation Criteria. These criteria were approved by the Cape Cod MPO in 2016 following the review and recommendation of the Cape Cod Joint Transportation Committee. Projects are scored each spring based on the latest information available. The resulting project scores are one of the considerations in selecting projects for funding in the TIP. Other considerations include, but are not limited to:

- Project evaluation score,
- Project readiness,
- Project cost (in relation to available funding),
- Project qualification for different funding programs,
- Greenhouse gas (GHG) impacts,
- Title VI/Equity, and
- Community support.

The following pages presents the scores for each project and the criteria used to arrive at these scores. The projects where evaluated by Cape Cod MPO staff and were reviewed by the CCJTC and the Cape Cod MPO.

Transit projects are evaluated and recommended for inclusion in the TIP by the Cape Cod Regional Transit Authority Advisory Board.

Cape Cod TIP Project Evaluation Scoring Summary

(For FFY2017-2021 TIP)

See www.capecodcommission.org/tip for a map of the projects and data layers used to score the projects.

Project#	Project	System Preservation and Modernization			Mobility			Safety		Economic Impact			Environmental and Health Effects						Cost Effectiveness	Policy Support				Total Score	Proposed TIP Year (Future = NOT funded)	Funded with statewide funds (outside of target)	Title VI Population Affected (I=Income; M = Minority; LEP = Limited English Proficiency)	Cost Estimate
		A1. Primary asset condition / effect on condition	A2. Enhancements to other assets	A3. Use of modern technology to improve efficiency and support ITS regional efforts	B1. Existing motorist congestion / effect on motorist congestion	B2. Effect on mobility / accommodation of non-motorists	B3. Effect on connectivity / access	C1. Motorist crash history and anticipated safety impact	C2. Non-motorist crash history and anticipated safety impact	D1. Effect on access to or within a regionally-designated economic development area	D2. Effect on access to or within a local designated business district	D3. Effect on connections between housing, job, cultural centers, & essential services within & beyond the region or effect on the freight network	E1. Effect on wetlands, wildlife, or other resource protection	E2. Effect on water quality through stormwater management and treatment with an emphasis on for nitrogen	E3. Effect on air quality / GHG emission	E4. Coastal Resiliency / Sea Level Rise Vulnerability	E5. Effect on cultural resources or open space	E6. Healthy Transportation Options	F1. Project cost per use	G1. Community support (as demonstrated through highest elected officials)	G2. Regional plans/policies	G3. Local plans/policies	G4. Project supports Federal or State (including MassDOT) policies and goals not accounted for in other criteria					
606272	Barnstable, Rte 28 at Yarmouth Rd	15	10	9	4	3	3	5	2	4	3	3	0	1	1	0	0	1	10	3	3	2	1	83	2019		I, M, LEP	$6,154,421
607398	Yarmouth-Barnstable, Cape Cod Rail Trail Extension	15	10	7	3	3	3	3	5	4	3	3	0	0	2	0	1	1	10	3	3	2	1	82	2018	X	I, M, LEP	$7,349,831
607397	Wellfleet, Rte 6 at Main St	15	10	9	3	3	3	5	4	3	3	3	1	1	2	0	0	1	8	3	3	1	1	82	2020		None	$2,000,400
606900	Bourne, Belmont Circle Multi-modal Improvements	12	10	5	3	3	3	5	4	4	3	3	1	1	1	0	1	1	15	2	3	1	1	82	2020		M	$5,040,000
607319	Mashpee, Rte 151 [AC Year 1 of 2]	12	10	7	4	3	3	5	4	3	3	3	1	1	1	0	1	1	12	2	2	1	1	80	2020		M, LEP	$8,250,100
606707	Dennis, Rte 28 Corridor & Streetscape Improvements	12	10	5	2	3	3	5	4	4	3	3	2	1	2	0	1	1	10	2	3	2	1	79	2017		I, M	$5,597,012
608196	Dennis, Route 28 Streetscape Improvements (Phase 2)	12	10	7	2	3	3	3	4	4	3	3	1	1	2	0	1	1	12	2	3	1	1	79	Future		I, M	$4,500,000
607405	Chatham, Rte 28 at Main St, Depot Rd, Queen Anne Rd and Crowell Rd	15	10	9	4	3	3	3	3	0	3	3	0	1	1	0	0	1	10	2	3	1	1	76	2021		None	$2,400,000
608422	Sandwich, Shared Use Path on Service Rd (Rte 130 to Chase Rd)	15	10	5	3	3	3	3	4	3	2	3	0	0	2	0	1	1	10	3	3	1	1	76	2021	X	M	$5,800,464
607394	Yarmouth, Rte 6 Exit 8 Ramps	15	7	7	3	3	2	5	2	4	3	3	0	1	1	0	0	1	10	1	1	1	1	71	Future		I, M, LEP	$5,000,400
606276	Barnstable, Route 132 at Route 6A	12	7	8	3	2	1	3	3	2	3	2	0	1	1	0	1	1	10	3	2	1	1	67	Future		I, M, LEP	$1,200,000
606596	Chatham, Rte 28 - George Ryder Rd to Barn Hill Rd	6	10	10	3	3	3	2	3	0	2	2	0	1	1	0	1	1	10	3	3	1	1	66	2018		None	$4,081,664
607435	Barnstable, Rte 28 at Osterville-West Barnstable Rd	8	10	8	3	3	2	5	2	0	0	2	0	1	1	0	0	1	12	2	3	1	1	65	2018		M, LEP	$2,710,162
607444	Falmouth, Rte 28A at Rte 151	10	10	8	1	3	3	5	2	0	3	1	0	1	1	0	0	1	8	3	1	1	1	63	2019		M	$2,797,859
608264	Yarmouth, Rte 28 Resurfacing and Related Work	15	7	0	1	2	2	2	3	2	1	1	1	1	0	0	1	1	15	1	3	1	1	61	Future		I, M, LEP	$4,000,000
CC1000	Barnstable, CCRTA Hyannis Loop Demo (Year 2 of 3)	8	3	3	3	3	3	2	2	4	3	3	0	0	1	0	0	1	15	2	2	1	1	60	2017		I, M, LEP	$659,100
606082	Bourne, Rte 6 Scenic Highway Median Installation	12	7	0	1	1	2	5	2	3	2	2	0	1	0	0	0	0	15	2	3	1	1	60	Future		M	$8,050,000
CC2000	Cape Cod, Bicycle Rack Program	15	0	0	1	2	2	0	1	2	2	1	0	0	2	0	1	1	15	3	2	1	1	52	2017		TBD	$100,000
608102	Harwich, Improvements at Rte 124 Park and Ride	15	8	0	1	2	0	1	1	0	0	2	0	0	1	0	0	1	15	1	2	1	1	52	2017		I, M, LEP	$575,000
	Maximum Possible	15	10	10	4	3	3	5	5	4	3	3	2	2	2	2	1	1	15	4	3	3	5	100				

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Cape Cod TIP Project Evaluation Scoring Summary

(For FFY2017-2021 TIP)

See www.capecodcommission.org/tip for a map of the projects and data layers used to score the projects.

Project#	Project	System Preservation and Modernization			Mobility			Safety		Economic Impact			Environmental and Health Effects						Cost Effectiveness	Policy Support				Total Score	Proposed TIP Year (Future = NOT funded)	Funded with statewide funds (outside of target)	Title VI Population Affected (I=Income; M = Minority; LEP = Limited English Proficiency)	Cost Estimate
		A1. Primary asset condition / effect on condition	A2. Enhancements to other assets	A3. Use of modern technology to improve efficiency and support ITS regional efforts	B1. Existing motorist congestion / effect on motorist congestion	B2. Effect on mobility / accommodation of non-motorists	B3. Effect on connectivity / access	C1. Motorist crash history and anticipated safety impact	C2. Non-motorist crash history and anticipated safety impact	D1. Effect on access to or within a regionally-designated economic development area	D2. Effect on access to or within a local designated business district	D3. Effect on connections between housing, job, cultural centers, & essential services within & beyond the region or effect on the freight network	E1. Effect on wetlands, wildlife, or other resource protection	E2. Effect on water quality through stormwater management and treatment with an emphasis on for nitrogen	E3. Effect on air quality / GHG emission	E4. Coastal Resiliency / Sea Level Rise Vulnerability	E5. Effect on cultural resources or open space	E6. Healthy Transportation Options	F1. Project cost per use	G1. Community support (as demonstrated through highest elected officials)	G2. Regional plans/policies	G3. Local plans/policies	G4. Project supports Federal or State (including MassDOT) policies and goals not accounted for in other criteria					
606236	Barnstable, Rte 28 Resurfacing and Related Work	15	3	0	1	1	1	2	2	2	1	1	1	1	0	0	0	0	15	1	2	1	1	51	Future		I, M, LEP	$2,875,000
608544	Bourne, Rte 6&28 Bypass Rd Resurfacing and Related Work	15	3	0	1	0	1	2	0	2	1	2	1	1	0	0	0	0	15	1	2	1	1	49	2017		M	$2,400,000
608201	Har-Brew-Orl, Route 6 Resurfacing	12	5	0	1	0	1	2	0	2	1	2	1	1	0	0	0	0	15	1	2	1	1	48	2017	X	I, M	$7,135,000
608545	Yarmouth, Rte 6 Resurfacing and Related Work	15	3	0	1	0	1	2	0	2	1	2	1	1	0	0	0	0	12	0	2	1	1	45	Future		I, M, LEP	$5,750,000
608571	Bourne-Falmouth, Rte 28 Guide and Traffic Sign Replacements	12	0	0	0	0	0	5	0	1	1	1	0	0	0	0	0	0	15	1	1	0	1	38	2019	X	M	$450,021
608598	Orleans, Rte 28 Stormwater Improvements	4	0	0	1	1	0	2	2	0	0	0	2	1	0	0	1	0	15	2	2	2	1	36	2020	X	I	$407,350
608617	Harwich, Bridge Replacement - Azalea Dr over Herring River	15	8	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	5	2	2	1	1	36	2021	X	I, M	$1,043,768
	Maximum Possible	15	10	10	4	3	3	5	5	4	3	3	2	2	2	2	1	1	15	4	3	3	5	100				

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Cape Cod TIP Project Evaluation Criteria

Category	Criteria	Points (out of 100)
System Preservation and Modernization	• Pavement and signal equipment improvement • Sidewalks and other infrastructure enhancement • Use of modern technology	35
Mobility	• Motorist congestion • Non-motorist congestion • Connectivity / access • Mobility / accommodation of non-motorists	10
Safety	• Motorist crash history and anticipated safety impact • Non-motorist crash history and anticipated safety impact	10
Economic Impact	• Access to or within a regionally-designated economic development area • Access to or within a locally-designated business district • Connections between housing, job, cultural centers, and essential services	10
Environmental and Health Effects	• Wetlands, wildlife, or other resource protection • Water quality through stormwater management and treatment • Air quality / GHG emission • Coastal Resiliency / Sea Level Rise Vulnerability • Cultural resources or open space • Healthy Transportation Options	10
Cost Effectiveness	• Project cost per user	15
Policy Support	• Regional plans/policies • Local plans/policies • State or MassDOT Policies and goals	10

Notes on Project Scoring

Points within each criterion should be seen as guides. Points should be given based on the best match and may be awarded in between increments as appropriate. Project receiving a negative score on any question should be further analyzed.

A - System Preservation and Modernization Scoring

	Criterion	Factor	Points
1	**Primary asset condition / effect on condition**	Poor or failing / substantial improvement	15
		Fair / moderate improvement	8
		Good / minor improvement	4
		Excellent / no improvement	0
2	**Enhancements to other assets** (Projects elements included in the project, but not part of the primary project focus ie. Sidewalks with repaving project)	Poor or falling / substantial improvement	10
		Fair / moderate improvement	7
		Good / minor improvement	4
		Excellent / no improvement	0
3	**Use of modern technology to improve efficiency and support ITS regional efforts** (ie. continuous traffic counting equipment, adaptive signal control, emergency preemption systems)	Use of innovative technology and/or incorporation of traffic counting technology	10
		Improvement in technology to current best practices	7
		Maintain/repair existing technology	4
		Not applicable	0
			Total Score = up to 35

B - Mobility Scoring

	Criterion	Factor	Points
1	**Existing motorist congestion / effect on motorist congestion** (Projects identified in Congestion Management Plan network are able to receive maximum points)	Location identified in the CMP network/ substantial improvement	4
		Significant existing / substantial improvement	3
		Significant existing / moderate or minor improvement	2
		Minimal existing / minor improvement	1
		No change	0
		Negative effect	-1
2	**Effect on mobility / accommodation of non-motorists**	Substantial improvement	3
		Moderate improvement	2
		Minimal improvement	1
		No effect for non-motorists	0
		Negative effect on mobility / accommodation	-1
3	**Effect on connectivity / access** (emphasis placed on key emergency and evacuation routes)	Substantial improvement to connectivity through the corridor	3
		Moderate improvement to connectivity	2
		Minimal effect on connectivity	1
		No effect on connectivity	0
		Negative effect on connectivity	-1
			Total Score = up to 10

C - Safety

	Criterion	Factor	Points
1	**Motorist crash history and anticipated safety impact** (Note: Highway Safety Improvement Program (HSIP) eligible locations are determined by MassDOT and includes the 5% percent of locations in the region based on a severity weighted crash rate)	Location is HSIP eligible and project is anticipated to improve motorist safety	5
		Location has a demonstrated crash problem and project is anticipated to improve motorist safety	3
		No demonstrated crash problem, but project is anticipated to improve motorist safety	2
		No safety improvement anticipated	0
		The project many adversely affect motorist safety	-1
2	**Non-motorist crash history and anticipated safety impact**	Location identified as a HSIP Bicycle or Pedestrian Cluster and project is anticipated to improve non-motorist safety	5
		Location has a demonstrated safety deficiencies for non-motorists and project is anticipated to improve non-motorist safety	3
		Location has a demonstrated safety deficiencies for non-motorists and project is anticipated to improve non-motorist safety	2
		No safety improvement anticipated	0
		The project many adversely affect non-motorist safety	-1
			Total Score = up to 10

D - Economic Impact Scoring

	Criterion	Factor	Points
1	**Effect on access to or within a regionally-designated economic development area** (ie. Economic Center, GIZ, etc.)	Substantial improvement	4
		Moderate improvement	3
		Minor improvement	1
		No effect	0
		Negative effect	-1
2	**Effect on access to or within a locally-designated business district**	Substantial improvement	3
		Moderate improvement	2
		Minor improvement	1
		No effect	0
		Negative effect	-1
3	**Effect on connections between housing, job, cultural centers, and essential services within and beyond the region or effect on the freight network**	Substantial improvement	3
		Moderate improvement	2
		Minor improvement	1
		No effect	0
		Negative effect	-1
			Total Score = up to 10

E - Environmental and Health Effects Scoring

	Criterion	Factor	Points
1	**Effect on wetlands, wildlife, or other resource protection**	Anticipated improvement	2
		Minor contribution to preservation	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
2	**Effect on water quality through stormwater management and treatment with an emphasis on for nitrogen** (points for anticipated improvements may also be given for projects involving culvert widening)	Anticipated improvement in stormwater management and treatment	2
		Anticipated improvement in stormwater management	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
3	**Effect on air quality / GHG emission**	Significant, quantifiable decrease in GHG anticipated	2
		Minor, quantifiable or qualitative decrease in GHG anticipated	1
		No effect on GHG anticipated	0
		Anticipated increase in GHG	-1
4	**Coastal Resiliency / Sea Level Rise Vulnerability** (Vulnerable areas include those identified as a Special Flood Hazard Area (SFHA), areas identified by the Sea, Land, and Overland Surges from Hurricanes (SLOSH) model, or areas susceptible to sea level rise	Project vulnerable area with resilient design	2
		Project in not in a vulnerable area but includes with resilient design elements	1
		Project not in vulnerable area and not special consideration given to resilient design	0
		Project in a vulnerable area and is not a resilient design	-1
5	**Effect on cultural resources or open space**	Anticipated improvement	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
6	**Healthy Transportation Options**	Increase in healthy transportation options	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
			Total Score = up to 10

F - Cost Effectiveness Scoring

	Criterion	Factor	Points
1	**Project cost per user** (Use cost/ADT/lane mile calculation as a general indicator, but flexibility is appropriate when considering unique project circumstances particularly for projects involving bicyclists and pedestrians. Low cost safety measures can be given full points.)	See reference table below, but consider unique circumstances	up to 15
		High cost project serving a small number of users	-1
			Total Score = up to 15

		Notes	Value
	Cost Estimate		
	ADT	For intersections, enter combined ADT of intersecting roads. For projects where ADT is unknown, use regional data to approximate.	
	Length (in miles)	For intersections, enter total length of all approaches within project limits.	
	Number of Lanes	Travel lanes only	
	Project Service Life	7, 14, or 21 years	

Reference

*Cost/ADT/Lane Mile**	*Points*
is less than $50	*15*
is less than $100	*12*
is less than $200	*8*
is less than $500	*4*
is less than $1000	*0*
is more than $1000	*-1*

**Multiply by 2/3, 1, or 1.5 for service life of 7, 14, or 21 years, respectively*

G - Policy Support Scoring

	Criterion	Factor	Points
1	**Community support** (as indicated through collective statements or actions of the highest elected officials in the effected communities)	Stated support of the project by the highest elected officials	3
		Actions by highest elected officials indicate general support of the project	2
		Neutral	0
		Collective opposition voiced by the highest elected officials	-1
2	**Regional plans/policies** (ie. RTP, Regional Policy Plan, CEDS)	Project specifically identified in Regional Plan	3
		Strongly supports Regional Plans/Policies	2
		Moderately supports Regional Plans/Policies	1
		Neutral	0
		Inconsistent with Regional Plans/Policies	-1
3	**Local plans/policies**(ie. LCP, local ordinances, bylaws, etc.)	Project specifically identified in Local Plan	2
		Consistent with Local Plans/Policies	1
		Neutral	0
		Inconsistent with Local Plans/Policies	-1
4	**Project supports Federal or State (including MassDOT) policies and goals not accounted for in other criteria** (GreenDOT, Healthy Transportation, Complete Streets, TZD etc.)	Project specifically identified in a existing Federal or State Plan	2
		Consistent with Federal or State Policies or Principles	1
		Neutral	0
		Inconsistent with Federal or State Policies or Principles	-1
			Total Score = up to 10

Equity Analysis by Community

An equity analysis of projects included in the TIP as well as recently completed TIP projects was conducted. The maps at the end of this Appendix show the locations of these projects in relation to the 15 Cape Cod communities. The distribution of these funds are summarized in the following tables.

Table 12. Distribution of TIP Funds by Community

Community	2017-21	2017-21 Community Share	2007-16	2007-16 Community Share
Barnstable	$10,912,635	19.1%	$15,881,621	12.1%
Bourne	$8,094,800	14.1%	$19,137,040	14.6%
Brewster	$2,122,466	3.7%	$6,714,952	5.1%
Chatham	$7,028,931	12.3%	$15,298,631	11.6%
Dennis	$5,597,012	9.8%	$25,786,700	19.6%
Eastham	$0	0.0%	$0	0.0%
Falmouth	$3,071,688	5.4%	$16,544,013	12.6%
Harwich	$1,636,233	2.9%	$7,335,079	5.6%
Mashpee	$9,240,112	16.1%	$0	0.0%
Orleans	$1,468,583	2.6%	$5,216,312	4.0%
Provincetown	$0	0.0%	$2,500,000	1.9%
Sandwich	$5,800,464	10.1%	$7,724,417	5.9%
Truro	$0	0.0%	$350,000	0.3%
Wellfleet	$2,240,448	3.9%	$150,000	0.1%
Yarmouth	$50,000	0.1%	$8,867,815	6.7%
Regional	$9,440,617	-	$50,000	-
CCRTA	$58,935,180	-	$106,141,402	-
CCNS	-	-	$860,100	-
Total	$125,639,168	100.0%	$238,558,081	100.0%

Notes: Where projects spanned multiple communities, project costs where distributed based on the approximate project length within each community.

Equity Analysis by Impacted Population

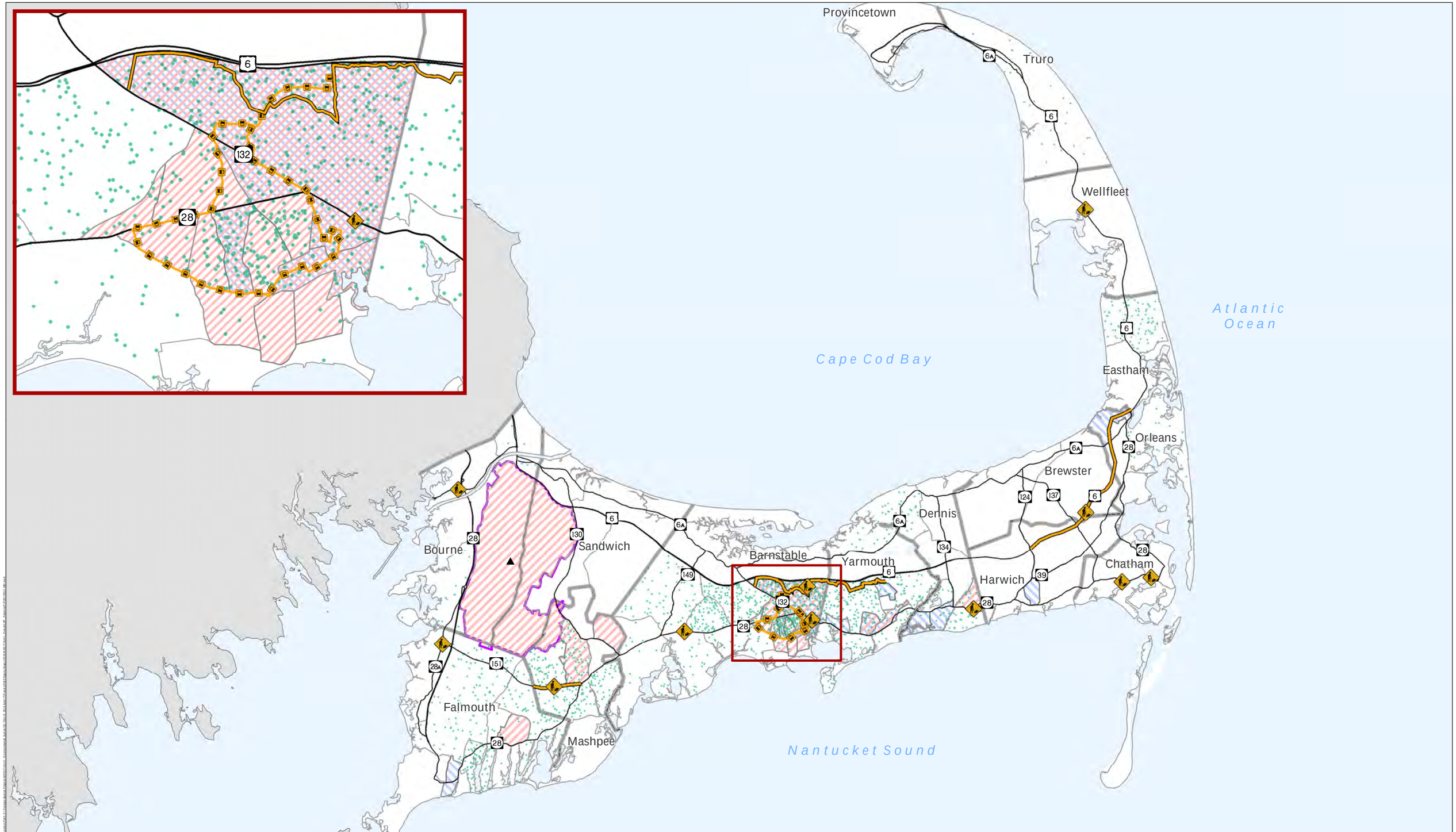
An equity analysis of projects included in the TIP was conducted with respect to anticipated impacts on minority, low income, and limited English proficiency populations. The maps at the end of this Appendix show the locations of these projects in relation to identified concentrations of these populations.

Overall, 79% of the FFY 2017-21 TIP funding in allocated to projects that will positively impact minority populations, 30% to projects that will positively impact low income populations, and 44% to projects that will positively impact limited English proficiency populations. These estimates exclude transit-funded projects. No projects are anticipated to negatively impact these identified populations. Specific projects and their anticipated impacts are presented in Table 13.

Table 13. Anticipated Impacts of TIP Projects on Minority (M), Low Income (I), and Limited English Proficiency (LEP) Populations

Project #	Year	Impacted Population	Anticipated Impact
Dennis, Rte 28 Corridor & Streetscape Improvements (#606707)	2017	I, M	Improved bicycle/ pedestrian access, safety
Bourne, Rte 6&28 Bypass Rd Resurfacing and Related Work (#608544)	2017	M	Improved pavement condition
Harwich, Improvements at Rte 124 Park and Ride (#608102)		I, M, LEP	Improved accommodation of transit users
Barnstable, CCRTA Hyannis Loop Demo (#CC1000)	2017-19	I, M, LEP	Improved transit connections
Har-Brew-Orl, Route 6 Resurfacing (#608201)	2017	I, M	Improved pavement condition
Barnstable, Rte 28 at Osterville-West Barnstable Rd (#607435)	2018	M, LEP	Improved bicycle/ pedestrian access, safety, traffic flow
Yarmouth-Barnstable, Cape Cod Rail Trail Extension (#607398)	2018	I, M, LEP	Improved bicycle/ pedestrian access, safety
Falmouth, Rte 28A at Rte 151 (#607444)	2019	M	Improved bicycle/ pedestrian access, safety, traffic flow
Barnstable, Rte 28 at Yarmouth Rd (#606272)	2019	I, M, LEP	Improved bicycle/ pedestrian access, safety, traffic flow
Bourne-Falmouth, Rte 28 Guide and Traffic Sign Replacements (#608571)	2019	M	Improved safety
Mashpee, Rte 151 (#607319)	2020/21	M, LEP	Improved bicycle/ pedestrian access, safety, traffic flow
Bourne, Belmont Circle Multi-modal Improvements (#606900)	2020	M	Improved bicycle/ pedestrian access, safety, traffic flow
Orleans, Rte 28 Stormwater Improvements (#608598)	2020	I	Improved safety
Sandwich, Shared Use Path on Service Rd (Rte 130 to Chase Rd) (#608422)	2021	M	Improved bicycle/ pedestrian access, safety
Harwich, Bridge Replacement - Azalea Dr over Herring River (#608617)	2021	I, M	Improved asset condition

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



2017-2021Transportation Improvement Program (TIP), Minority, Low Income and Limited English Proficiency Populations

The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research.

Date: 6/15/2016
User: ptierney

Joint Base Cape Cod Boundary

Barnstable County Correctional Facility

Limited English Proficiency

Represents One (1) Portuguese or Portuguese Creole speaking person who speaks English less than very well (Points have been randomly located within the Census Tract represented)

Transportation Projects

TIP Specific Location Improvements

TIP Road Segment Improvements

TIP Transit Demonstration Project

Demographics

Minority

Low Income

Low Income & Minority

Income: Median household income of census block is less than or equal to 60% Barnstable County median household income ($59,500)

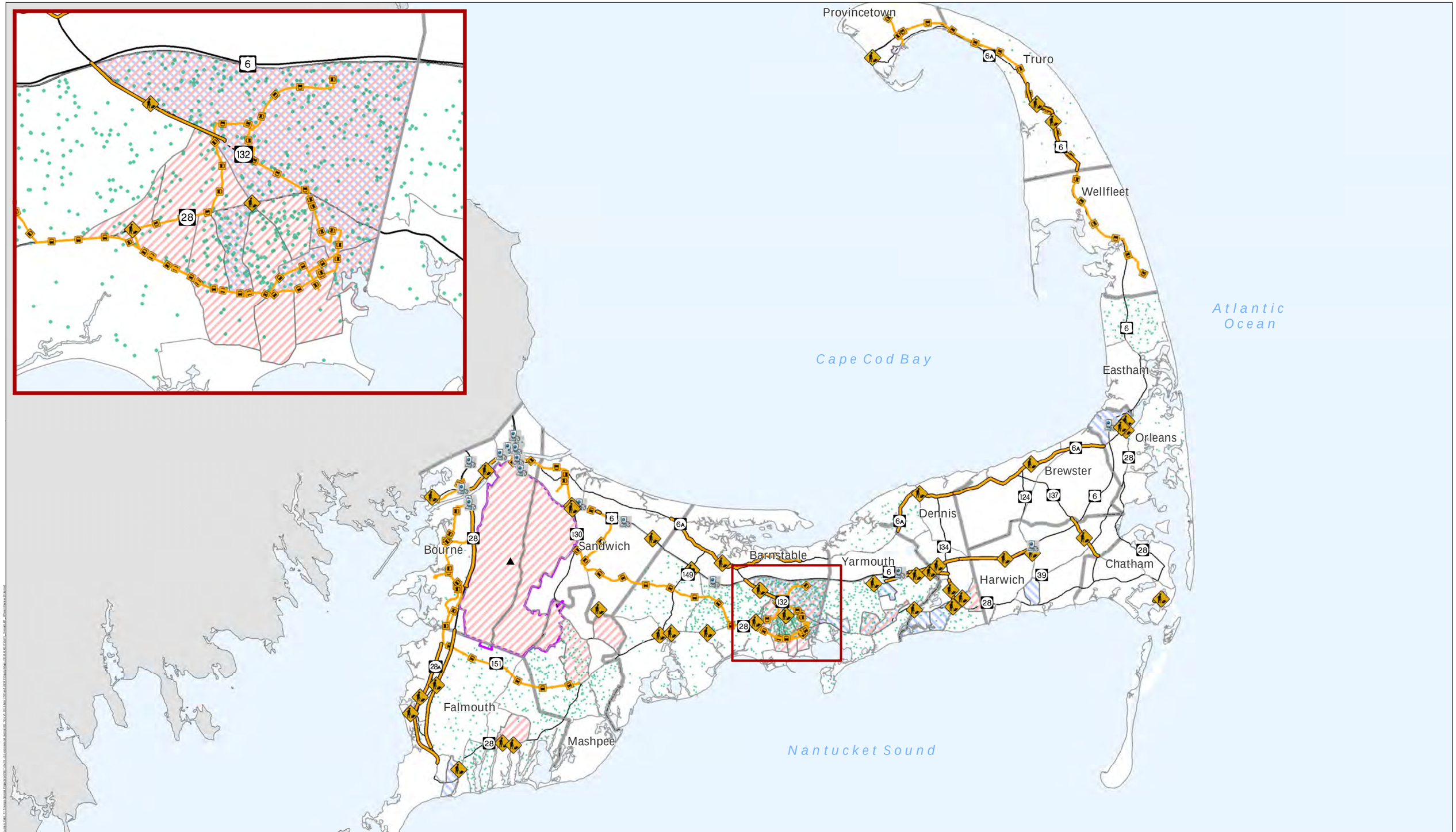
Minority: 15% or more residents of census block self-identify as a race other than white

Barnstable County
Census Block Group Minority Population
Mean percent minority: 8.45%
Median percent minority: 6.39%

Population classified as minority represents residents who self identify as a race other than white

0 1 2 4 6 Miles

CAPE COD COMMISSION



10 Years Review (2007-2016)
Transportation Improvement Program (TIP), Minority, Low Income and Limited English Proficiency Populations

The information depicted on these maps is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel level analysis. It should not substitute for actual on-site survey, or supersede deed research.

Date: 6/15/2016
User: ptierney

Joint Base Cape Cod Boundary

Barnstable County Correctional Facility

Limited English Proficiency

Represents One (1) Portuguese or Portuguese Creole speaking person who speaks English less than very well (Points have been randomly located within the Census Tract represented)

Transportation Projects

TIP Specific Location Improvements

TIP Specific Location Traffic Monitoring

TIP Road Segment Improvements

TIP Transit Demonstration Project

Demographics

Minority

Low Income

Low Income & Minority

Income: Median household income of census block is less than or equal to 60% Barnstable County median household income ($59,500)

Minority: 15% or more residents of census block self-identify as a race other than white

Barnstable County
Census Block Group Minority Population
Mean percent minority: 8.45%
Median percent minority: 6.39%

Population classified as minority represents residents who self identify as a race other than white

0 1 2 4 6 Miles

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Appendix B: Air Quality Conformity and Greenhouse Gas Emissions

Air Quality Conformity Status

Since most all of Massachusetts (with limited exceptions) was designated on 5/21/12 by the United States Environmental Protection Agency as “unclassifiable/ attainment” for the latest ozone standard, a conformity determination for the Cape Cod Metropolitan Planning Organization (MPO) is not currently required. Further details and background information are provided below:

Air Quality Conformity Background

The 1990 Clean Air Act Amendments (CAAA) require metropolitan planning organizations within nonattainment and maintenance areas to perform air quality conformity determinations prior to the approval of Long-Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs), and at such other times as required by regulation. A nonattainment area is one that the U.S. Environmental Protection Agency (EPA) has designated as not meeting certain air quality standards. A maintenance area is a nonattainment area that now meets the standards and has been re-designated as maintaining the standard. A conformity determination is a demonstration that plans, programs, and projects are consistent with the State Implementation Plan (SIP) for attaining the air quality standards. The CAAA requirement to perform a conformity determination ensures that federal approval and funding go to transportation activities that are consistent with air quality goals.

The entire Commonwealth of Massachusetts was previously classified as nonattainment for ozone, and was divided into two nonattainment areas. The Eastern Massachusetts ozone nonattainment area included Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties. Berkshire, Franklin, Hampden, and Hampshire counties comprised the Western Massachusetts ozone nonattainment area. With these classifications, the 1990 Clean Air Act Amendments (CAAA) required the Commonwealth to reduce its emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx), the two major precursors to ozone formation to achieve attainment of the ozone standard.

Legislative and Regulatory Background

The 1970 Clean Air Act defined a one-hour national ambient air quality standard (NAAQS) for ground-level ozone. The 1990 CAAA further classified degrees of nonattainment of the one-hour standard based on the severity of the monitored levels of the pollutant. The entire commonwealth of Massachusetts was classified as being in serious nonattainment for the one-hour ozone standard, with a required attainment date

of 1999.The attainment date was later extended, first to 2003 and a second time to 2007.

In 1997, the EPA proposed a new, eight-hour ozone standard that replaced the one-hour standard, effective June 15, 2005. Scientific information had shown that ozone could affect human health at lower levels, and over longer exposure times than one hour. The new standard was challenged in court, and after a lengthy legal battle, the courts upheld it. It was finalized in June 2004.The eight-hour standard is 0.08 parts per million, averaged over eight hours and not to be exceeded more than once per year. Nonattainment areas were again further classified based on the severity of the eight-hour values. Massachusetts as a whole was classified as being in moderate nonattainment for the eight-hour standard, and was separated into two nonattainment areas—Eastern Massachusetts and Western Massachusetts.

In March 2008, EPA published revisions to the eight-hour ozone NAAQS establishing a level of 0.075 ppm, (March 27, 2008; 73 FR 16483). In 2009, EPA announced it would reconsider this standard because it fell outside of the range recommended by the Clean Air Scientific Advisory Committee. However, EPA did not take final action on the reconsideration so the standard would remain at 0.075 ppm.

After reviewing data from Massachusetts monitoring stations, EPA sent a letter on December 16, 2011 proposing that only Dukes County would be designated as nonattainment for the new proposed 0.075 ozone standard. Massachusetts concurred with these findings.

On May 21, 2012, (77 FR 30088), the final rule was published in the Federal Register, defining the 2008 NAAQS at 0.075 ppm, the standard that was promulgated in March 2008. A second rule published on May 21, 2012 (77 FR 30160), revoked the 1997 ozone NAAQS to occur one year after the July 20, 2012 effective date of the 2008 NAAQS.

Also on May 21, 2012, the air quality designations areas for the 2008 NAAQS were published in the Federal Register. In this Federal Register, the only area in Massachusetts that was designated as nonattainment is Dukes County. All other Massachusetts counties were classified as unclassifiable/attainment.

Therefore, conformity for ozone in the Cape Cod MPO region is required until July 20, 2013 for only the 1997 ozone standard.

Greenhouse Gas (GHG) Monitoring and Evaluation

This section summarizes the greenhouse gas (GHG) impacts that are anticipated to result from the projects that are included in this FFY 2017 - 2021 Transportation Improvement Program (TIP). It includes a summary of the state laws and policies that

call for reducing greenhouse gas in order to mitigate global climate change, actions that are being to respond to these state laws and policies, the role of regional planning and TIP development in reducing GHG emission and tracking these reductions, and the projected GHG emission impacts from the projects programmed in the TIP.

State Policy Context

The Global Warming Solutions Act (GWSA), which Governor Deval Patrick signed into law in August 2008, makes Massachusetts a leader in setting aggressive and enforceable GHG reduction targets, and implementing policies and initiatives to achieve these targets. In keeping with the law, on December 29, 2010 the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), in consultation with other state agencies and the public, released the Massachusetts Clean Energy and Climate Plan for 2020. This implementation plan establishes targets for overall, statewide GHG emissions:

- By 2020 25 percent reduction below statewide 1990 GHG emission levels
- By 2050 80 percent reduction below statewide 1990 GHG emission levels

GreenDOT Policy

The transportation sector is the single largest emitter of greenhouse gases, accounting for over a third of GHG emissions, and therefore the transportation sector is a key focus of the Clean Energy and Climate Plan. MassDOT's approach to supporting the implementation of the plan is set forth in its GreenDOT Policy Directive, a comprehensive sustainability initiative that sets three principal objectives:

- Reduce greenhouse gas (GHG) emissions. MassDOT will achieve this by taking GHG emissions into account in all of its responsibilities, from strategic planning to project design and construction and system operations.
- Promote the healthy transportation modes of walking, bicycling, and public transit. MassDOT will achieve this by pursuing multi-modal, "complete streets" design standards; providing choice in transportation services; and by working with MPOs and other partners to prioritize and program a balance of projects that serve drivers, pedestrians, bicyclists, and public transit riders.
- To support smart growth development. MassDOT will achieve this by working with MPOs and other partners to make transportation investments that enable denser, smart growth development patterns that support reduced GHG emissions.

GreenDOT Policy and Metropolitan Planning Organizations

The Commonwealth's thirteen metropolitan planning organizations (MPOs) are integrally involved in helping to achieve the GreenDOT goals and supporting the GHG reductions mandated under the GWSA. The MPOs are most directly involved in helping to achieve the GHG emissions reductions under the second goal - to promote healthy transportation modes through prioritizing and programming an appropriate balance of roadway, transit, bicycle and pedestrian investments - and assist in the third goal by supporting smart growth development patterns through the creation of a balanced multi-modal transportation system. This will be realized through the transportation goals and policies espoused in the Regional Transportation Plans (RTPs), the major projects planned in the RTPs, and the mix of new transportation projects that are programmed and implemented through the TIPs. The GHG tracking and evaluation processes enable the MPOs to identify the anticipated GHG impacts of the planned and programmed projects, and also to use GHG impacts as a criterion in prioritizing transportation projects.

Regional GHG Tracking and Evaluation in RTPs

MassDOT coordinated with MPOs and regional planning agency (RPA) staffs on the implementation of GHG tracking and evaluation in development of each MPO's 2035 RTPs, which were adopted in September 2011.

Working together, MassDOT and the MPOs have attained the following milestones:

- Modeling and long-range statewide projections for GHG emissions resulting from the transportation sector. Using the Boston MPO's regional model and the statewide travel demand model for the remainder of the state, GHG emissions were projected for 2020 no-build and build conditions, and for 2035 no-build and build conditions.
- All of the MPOs included these GHG emission projections in their RTPs, along with a discussion of climate change and a statement of MPO support for reducing GHG emissions as a regional goal.

Project-Level GHG Tracking and Evaluation In The Transportation Improvement Program

It is also important to monitor and evaluate the GHG impacts of the transportation projects that are programmed in the MPO Transportation Improvement Programs (TIP). The TIP includes both the larger, regionally-significant projects from the RTPs, which have already had their aggregate GHG impacts calculated and reported in the RTP, as well as smaller projects that are not included in the RTP but that may nevertheless have impacts on GHG emissions. The principal objective of this tracking is to enable the

MPOs to evaluate expected GHG impacts of different projects and to use this information as a criterion for prioritizing and programming projects in future TIPs.

In order to monitor and evaluate the GHG impacts of TIP projects, MassDOT and the MPOs have developed the following approach for identifying anticipated GHG impacts and quantifying GHG impacts of projects, when appropriate, through the TIP. Different types of projects will have different anticipated GHG emissions impacts. The different project categories are outlined on the next two pages with this region's project tracking sheet on the third page.

RTP Projects - Major capacity expansion projects (e.g. Green Line Extension, I-95 Whittier Bridge Replacement) would be expected to have a significant impact on GHG emissions. However, these projects are included in the RTPs and analyzed using the statewide model or Boston regional model, which would reflect their GHG impacts. Therefore, no independent TIP calculations are required.

- Quantified Decrease in Emissions - Projects that would be expected to produce a measurable decrease in emissions. The approach for calculating these impacts is described below. These projects should be categorized in the following manner:
- Quantified Decrease in Emissions from Traffic Operational Improvement - An intersection reconstruction or signalization project that is projected to reduce delay and congestion.
- Quantified Decrease in Emissions from Pedestrian and Bicycle Infrastructure - A shared-use path that would enable increased walking and biking and decreased vehicle-miles traveled (VMT).
- Quantified Decrease in Emissions from New/Additional Transit Service - A bus or shuttle service that would enable increased transit ridership and decreased VMT
- Quantified Decrease in Emissions from a Park and Ride Lot A park-and-ride lot that would enable increased transit ridership/ increased ridesharing and decreased VMT
- Quantified Decrease in Emissions from Bus Replacement - A bus replacement that would directly reduce GHG emissions generated by that bus service.
- Quantified Decrease in Emissions from Other Improvement
- Quantified Increase in Emissions - Projects that would be expected to produce a measurable increase in emissions.

The Office of Transportation Planning at MassDOT provided the spreadsheets that are used for determining Congestion Management and Air Quality Improvement (CMAQ) eligibility. These spreadsheets require the same inputs as the CMAQ calculations, and have been adapted to provide CO2 impacts. The data and analysis required for these

calculations is available from functional design reports that should be submitted for projects that would produce a measurable GHG impact.

No Assumed Impact/Negligible Impact on Emission - Projects that do not change the capacity or use of a facility (e.g. a resurfacing project that restores a roadway to its previous condition, or a bridge rehabilitation/replacement that restores the bridge to its previous condition) would be assumed to have no GHG impact.

Assumed Nominal Decrease in Emissions - Projects that would be expected to produce a minor decrease in emissions that cannot be calculated with any precision. Examples of such projects include roadway repaving or reconstruction projects that add a new sidewalk or new bike lanes. Such a project would enable increased travel by walking or bicycling, but there may be not data or analysis to support any projections of GHG impacts. These projects should be categorized in the following manner:

- Assumed Nominal Decrease in Emissions from Sidewalk Infrastructure
- Assumed Nominal Decrease in Emissions from Bicycle Infrastructure
- Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure
- Assumed Nominal Decrease in Emissions from Intelligent Transportation Systems (ITS) and/or Traffic Operational Improvements
- Assumed Nominal Decrease in Emissions from Other Improvements
- Assumed Nominal Increase in Emissions - Projects that would be expected to produce a minor increase in emissions that cannot be calculated with any precision.

2017 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects						
►HSIP - Highway Safety Improvement Program						
606707	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	$ 458,514	Quantified	3,512	Quantified Decrease in Emissions	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
			Quantified Impact ►	3,512		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program						
CC1000	BARNSTABLE - HYANNIS LOOP DEMONSTATION	$ 685,464	Quantified	totaled in FFY2018	Quantified Decrease in Emissions	$685,464 TRANSFER TO FTA, CMAQ Year 2 of 3 ($685,464 CMAQ with $171,366 CCRTA SCA match for $856,830 Total Cost). Score = 60.
CC2000	Cape Cod Bicycle Rack Program	$ 100,000	Quantified	totaled in FFY2021	Quantified Decrease in Emissions	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
606707	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	$ 647,393	Quantified	counted above	Quantified Decrease in Emissions	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
			Quantified Impact ►	0		
►TAP - Transportation Alternatives Program						
606707	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	$ 193,036	Quantified	counted above	Quantified Decrease in Emissions	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
			Quantified Impact ►	0		
►Non-CMAQ/HSIP/TAP (Other)						
606707	DENNIS- CORRIDOR AND STREETSCAPE IMPROVEMENTS ON MAIN STREET (ROUTE 28) FROM DENNIS COMMONS DRIVE TO UPPER COUNTY ROAD.	$ 4,298,069	Quantified	counted above	Quantified Decrease in Emissions	Total programmed = $5,597,012 = $458,514 HSIP + $647,393 CMAQ $193,036 TAP + $4,298,069 STP. 75% design submitted. CMAQ analysis completed. RSA completed. Municipality is proponent. Score = 79.
608544	BOURNE- RESURFACING AND RELATED WORK ON ROUTE 6 & 28 BYPASS ROAD	$ 2,400,000	N/A	0	No assumed impact/negligible impact on emissions	Total programmed = $2,400,000. Score = 49.
608102	HARWICH- IMPROVEMENTS TO PARK AND RIDE FACILITY INCLUDING A NEW BUS SHELTER AT ROUTE 124 PARK AND RIDE	$ 575,000	Qualitative	0	Assumed Nominal Decrease in Emissions from Other Improvements	Total programmed = $575,000. Score = 52.
			Quantified Impact ►	0		
►Section 1B / Federal Aid Bridge Projects						
►Statewide Systematic Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►On System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Off-System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Bridge Inspection Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1C / Federal Aid Non-Target Projects						
►Other Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1D / Federal Aid Major & State Category Projects						
►Regional Major Infrastructure						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Americans with Disability Act Implementation Plan						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Congestion Mitigation and Air Quality						

2017 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Additional Description ▼
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide HSIP Program						
	No Projects Programmed				N/A	
			Quantified Impact ►	0		
► Statewide Infrastructure Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Interstate Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Intelligent Transportation Systems						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Freight Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Highway System Preservation Program						
608201	HARWICH- BREWSTER- ORLEANS- RESURFACING AND RELATED WORK ON ROUTE 6	$ 6,615,000	N/A	0	No assumed impact/negligible impact on emissions	Total programmed = $7,135,000 = $6,615,000 NHS + $520,000 Statewide Stormwater Retrofits. Score = 48.
			Quantified Impact ►	0		
►Statewide Planning Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Railroad Grade Crossings						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Safe Routes to Schools Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Stormwater Retrofits						
608201	HARWICH- BREWSTER- ORLEANS- RESURFACING AND RELATED WORK ON ROUTE 6	$ 520,000	N/A	0	No assumed impact/negligible impact on emissions	Total programmed = $7,135,000 = $6,615,000 NHS + $520,000 Statewide Stormwater Retrofits. Score = 48.
			Quantified Impact ►	0		
►Statewide Transportation Enhancements						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Other Statewide Items						
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2A / Non-Federal Projects						
►Non Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2B / Non-Federal Bridge Projects						
►Section 2B / Non-Federal Bridge Projects						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2017 Cape Cod MPO GHG Tracking Summary

	Total Quantified Impact ▼
Quantified Impact ►	3,512

2018 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects						
►HSIP - Highway Safety Improvement Program						
607435	BARNSTABLE- INTERSECTION IMPROVEMENTS @ FALMOUTH ROAD (ROUTE 28) & OSTERVILLE-WEST BARNSTABLE ROAD	$ 458,514	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 4% Inflation applied = $2,818,568 = $458,514 HSIP, + $2,360,054 STP. RSA conducted. 25% design plans submitted. Score = 65.
			Quantified Impact ►	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program						
CC1000	BARNSTABLE - HYANNIS LOOP DEMONSTATION	$ 711,828	Quantified	210,240	Quantified Decrease in Emissions	$711,828 TRANSFER TO FTA, CMAQ Year 3 of 3 ($711,828 CMAQ with $177,957 CCRTA SCA match for $889,785 Total Cost). Score = 60.
CC2000	Cape Cod Bicycle Rack Program	$ 100,000	Quantified	totaled in FFY2021	Quantified Decrease in Emissions	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
606596	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	$ 334,457	Quantified	175	Quantified Decrease in Emissions	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66. Municipality is proponent.
			Quantified Impact ►	210,415		
►TAP - Transportation Alternatives Program						
606596	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	$ 210,307	Quantified	counted above	Quantified Decrease in Emissions	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66. Municipality is proponent.
			Quantified Impact ►	0		
►Non-CMAQ/HSIP/TAP (Other)						
607435	BARNSTABLE- INTERSECTION IMPROVEMENTS @ FALMOUTH ROAD (ROUTE 28) & OSTERVILLE-WEST BARNSTABLE ROAD	$ 2,360,054	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 4% Inflation applied = $2,818,568 = $458,514 HSIP, + $2,360,054 STP. RSA conducted. 25% design plans submitted. Score = 65.
606596	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	$ 3,700,167	Quantified	counted above	Quantified Decrease in Emissions	Total programmed with 4% inflation applied = $4,244,931 = $210,307 TAP + $334,457 CMAQ + $3,700,167 STP. 100% design plans submitted. Score = 66. Municipality is proponent.
			Quantified Impact ►	0		
►Section 1B / Federal Aid Bridge Projects						
►Statewide Systematic Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►On System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Off-System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Bridge Inspection Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1C / Federal Aid Non-Target Projects						
►Other Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1D / Federal Aid Major & State Category Projects						
►Regional Major Infrastructure						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Americans with Disability Act Implementation Plan						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Congestion Mitigation and Air Quality						
607398	YARMOUTH- BARNSTABLE- CAPE COD RAIL TRAIL EXTENSION, INCLUDES NEW BRIDGE OVER WILLOW STREET & RAILROAD (PHASE III)	$ 7,349,831	Quantified	67,841.30	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure	Statewide CMAQ funding total of $7,349,831. Land acquisition, survey, and design in process. Score = 82.

2018 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Additional Description ▼
			Quantified Impact ►	67,841		
► Statewide HSIP Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Infrastructure Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Interstate Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Intelligent Transportation Systems						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Freight Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Highway System Preservation Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Planning Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Railroad Grade Crossings						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Safe Routes to Schools Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Stormwater Retrofits						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Transportation Enhancements						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Other Statewide Items						
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2A / Non-Federal Projects						
►Non Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2B / Non-Federal Bridge Projects						
►Section 2B / Non-Federal Bridge Projects						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2018 Cape Cod MPO GHG Tracking Summary

	Total Quantified Impact ▼
Quantified Impact ►	278,256

2019 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects						
►HSIP - Highway Safety Improvement Program						
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	$ 458,514	Quantified	623,168	Quantified Decrease in Emissions from Traffic Operational Improvement	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
			Quantified Impact ►	623,168		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program						
CC2000	Cape Cod Bicycle Rack Program	$ 100,000	Quantified	totaled in FFY2021	Quantified Decrease in Emissions	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	$ 1,046,285	Quantified	counted above	Quantified Decrease in Emissions from Traffic Operational Improvement	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
			Quantified Impact ►	0		
►TAP - Transportation Alternatives Program						
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	$ 193,036	Quantified	counted above	Quantified Decrease in Emissions from Traffic Operational Improvement	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
			Quantified Impact ►	0		
►Non-CMAQ/HSIP/TAP (Other)						
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	$ 4,408,140	Quantified	counted above	Quantified Decrease in Emissions from Traffic Operational Improvement	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
607444	FALMOUTH- INTERSECTION IMPROVEMENTS & RELATED WORK AT NORTH FALMOUTH HIGHWAY (ROUTE 28A),NATHAN ELLIS HIGHWAY (ROUTE 151) AND COUNTY ROAD	$ 3,021,688	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 8% inflation applied = $3,021,688. 25% design under development. Possible HSIP - RSA to be conducted. Score = 63.
			Quantified Impact ►	0		
►Section 1B / Federal Aid Bridge Projects						
►Statewide Systematic Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►On System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Off-System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Bridge Inspection Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1C / Federal Aid Non-Target Projects						
►Other Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1D / Federal Aid Major & State Category Projects						
►Regional Major Infrastructure						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Americans with Disability Act Implementation Plan						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Congestion Mitigation and Air Quality						

2019 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Additional Description ▼
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	$ 540,800	Quantified	counted above	Quantified Decrease in Emissions from Traffic Operational Improvement	Total programmed with 8% inflation = $6,646,775 = $1,046,285 CMAQ + $540,800 Statewide CMAQ + $458,514 HSIP + $193,036 TAP + $4,408,140 STP. 25% design sumitted. RSA performed. CMAQ analysis to be performed. Score = 83.
			Quantified Impact ►	0		
► Statewide HSIP Program						
608571	BOURNE TO FALMOUTH - GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF ROUTE 28	$ 450,021	Qualitative	0	Qualitative Decrease in Emissions	This project is in the preliminary design phase. Score = 38.
			Quantified Impact ►	0		
► Statewide Infrastructure Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Interstate Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Intelligent Transportation Systems						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Freight Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Highway System Preservation Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Planning Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Railroad Grade Crossings						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Safe Routes to Schools Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Stormwater Retrofits						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Transportation Enhancements						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Other Statewide Items						
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2A / Non-Federal Projects						
►Non Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2B / Non-Federal Bridge Projects						
►Section 2B / Non-Federal Bridge Projects						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2019 Cape Cod MPO GHG Tracking Summary

	Total Quantified Impact ▼
Quantified Impact ►	623,168

2020 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects						
►HSIP - Highway Safety Improvement Program						
607397	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	$ 458,514	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
			Quantified Impact ►	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program						
CC2000	Cape Cod Bicycle Rack Program	$ 100,000	Quantified	totaled in FFY2021	Quantified Decrease in Emissions	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
606900	BOURNE- TRAFFIC AND MULTI-MODAL IMPROVEMENTS @ BELMONT CIRCLE AT ROUTES 6/25/28	$ 1,046,285	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 12% inflation = $5,644,800 = $1,046,285 CMQ + $4,598,515 STP. Potential HSIP - RSA to be conducted. CMAQ analysis to be conducted. Score = 82.
			Quantified Impact ►	0		
►TAP - Transportation Alternatives Program						
607397	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	$ 242,367	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
			Quantified Impact ►	0		
►Non-CMAQ/HSIP/TAP (Other)						
606900	BOURNE- TRAFFIC AND MULTI-MODAL IMPROVEMENTS @ BELMONT CIRCLE AT ROUTES 6/25/28	$ 4,598,515	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 12% inflation = $5,644,800 = $1,046,285 CMQ + $4,598,515 STP. Potential HSIP - RSA to be conducted. CMAQ analysis to be conducted. Score = 82.
607397	WELLFLEET- INTERSECTION IMPROVEMENTS & RELATED WORK AT ROUTE 6 & MAIN STREET	$ 1,539,567	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 12% inflation applied = $2,240,448 = $242,367 TAP + $458,514 HSIP + $1,539,5678 STP. RSA conducted. Preliminary design. Municipality is proponent. Score = 82.
607319	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	$ 2,120,112	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	ADVANCED CONSTRUCTION: Year 1 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
			Quantified Impact ►	0		
►Section 1B / Federal Aid Bridge Projects						
►Statewide Systematic Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►On System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Off-System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Bridge Inspection Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1C / Federal Aid Non-Target Projects						
►Other Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1D / Federal Aid Major & State Category Projects						
►Regional Major Infrastructure						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Americans with Disability Act Implementation Plan						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2020 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
► Statewide Congestion Mitigation and Air Quality						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide HSIP Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Infrastructure Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Interstate Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Intelligent Transportation Systems						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide National Freight Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide National Highway System Preservation Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Planning Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Railroad Grade Crossings						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Safe Routes to Schools Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Stormwater Retrofits						
608598	ORLEANS - STORMWATER IMPROVEMENTS ALONG ROUTE 28	$ 407,350	Qualitative		No assumed impact/negligible impact on emissions	This project is in the preliminary design phase. Score = 36.
			Quantified Impact ►	0		
► Statewide Transportation Enhancements						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Other Statewide Items						
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Section 2A / Non-Federal Projects						
► Non Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Section 2B / Non-Federal Bridge Projects						
► Section 2B / Non-Federal Bridge Projects						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2020 Cape Cod MPO GHG Tracking Summary

	Total Quantified Impact ▼
Quantified Impact ►	0

2021 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects						
►HSIP - Highway Safety Improvement Program						
607319	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	$ 458,514	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
			Quantified Impact ►	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program						
CC2000	Cape Cod Bicycle Rack Program	$ 100,000	Quantified	555,319	Quantified Decrease in Emissions	Total programmed = $100,000. CMAQ analysis complete. Funds to be applied for by municipalities. Score = 52.
607319	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	$ 1,046,285	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
			Quantified Impact ►	555,319		
►TAP - Transportation Alternatives Program						
607319	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	$ 319,725	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
			Quantified Impact ►	0		
►Non-CMAQ/HSIP/TAP (Other)						
607319	MASHPEE- CORRIDOR IMPROVEMENTS & RELATED WORK ON NATHAN ELLIS HIGHWAY (ROUTE 151), FROM MASHPEE ROTARY TO FALMOUTH T.L.	$ 5,295,476	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	ADVANCED CONSTRUCTION: Year 2 of 2. Total programmed with 12% inflation applied = $9,240,112 = $2,120,112 in FFY2020 STP + $7,120,000 in FFY2021 ($319,725 TAP + $458,514 HSIP + $1,046,285 CMAQ + $5,295,476 STP). RSA conducted. CMAQ analyis to be completed. Municipality is the proponent. Score = 80.
607405	CHATHAM- INTERSECTION IMPROVEMENTS & RELATED WORK AT MAIN STREET (ROUTE 28), DEPOT ROAD, QUEEN ANNE ROAD AND CROWELL ROAD	$ 2,784,000	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk and Bicycle Infrastructure	Total programmed with 16% inflation applied = $2,784,0000. Preliminary design. Municipality is proponent. Score = 76.
			Quantified Impact ►	0		
►Section 1B / Federal Aid Bridge Projects						
►Statewide Systematic Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►On System						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Off-System						
608617	HARWICH - BRIDGE REPLACEMENT, H-10-019, AZALEA DRIVE OVER HERRING RIVER	$ 1,043,768	Qualitative		No assumed impact/negligible impact on emissions	This project is in the preliminary design phase. Score = 36.
			Quantified Impact ►	0		
►Statewide Bridge Inspection Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1C / Federal Aid Non-Target Projects						
►Other Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 1D / Federal Aid Major & State Category Projects						
►Regional Major Infrastructure						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Americans with Disability Act Implementation Plan						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2021 Cape Cod MPO TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼
► Statewide Congestion Mitigation and Air Quality						
608422	SANDWICH- CONSTRUCTION OF SHARED USE PATH ALONG SERVICE ROAD FROM ROUTE 130 TO CHASE ROAD	$ 5,800,464	Quantified	795	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure	This project is in the preliminary design phase. Score = 76.
			Quantified Impact ►	795		
► Statewide HSIP Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Infrastructure Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Interstate Maintenance Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Intelligent Transportation Systems						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Freight Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide National Highway System Preservation Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Planning Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Railroad Grade Crossings						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
► Statewide Safe Routes to Schools Program						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Stormwater Retrofits						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Statewide Transportation Enhancements						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Other Statewide Items						
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2A / Non-Federal Projects						
►Non Federal Aid						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		
►Section 2B / Non-Federal Bridge Projects						
►Section 2B / Non-Federal Bridge Projects						
0	No Projects Programmed	$ -			N/A	
			Quantified Impact ►	0		

2021 Cape Cod MPO GHG Tracking Summary

	Total Quantified Impact ▼
Quantified Impact ►	556,114

Cape Cod MPO Completed Highway Projects GHG

MassDOT Project ID ▼	MassDOT Project Description▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Additional Description ▼	Fiscal Year of Contract Award (2015 and forward) ▼
607571	DENNIS- YARMOUTH- CONSTRUCTION OF A MULTI-USE PATH OVER THE BASS RIVER, INCLUDES NEW PEDESTRIAN BRIDGE D-07-007=Y-01-010	$ 3,765,741	Quantified	3668.2	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure		2016

2018 Cape Cod Region MPO Transportation Improvement Program

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr)▼	GHG Impact Description ▼	Total Cost ▼	Additional Information▼	Fiscal Year of Contract Award (2015 and forward)▼
CC1000	BARNSTABLE - HYANNIS LOOP DEMONSTATION (Year 3 of 3)	$ 711,282	Quantified	210240	Quantified Decrease in Emissions from New/Additional Transit Service	$ 711,282	GHG impact for 3 year demonstration	2018

Cape Cod MPO Completed Transit Projects GHG

FTA Activity Line Item ▼	Transit Agency ▼	Project Description ▼	Total Cost ▼	GHG Analysis Type ▼	GHG CO_2 Impact (kg/yr) ▼	GHG Impact Description ▼	Additional Description ▼	Fiscal Year Programmed (2015 and forward) ▼
		CCNS- NEW TRANSIT SERVICE DEMONSTRATION OUTER CAPE BIKE SHUTTLE	$ 87,610	Quantified	62390.8	Quantified Decrease in Emissions from New/Additional Transit Service		2015

Appendix C: Projects in Need of Funding

PROJECTS IN NEED OF FUNDING (For Information Only)

			Estimated Cost
BARNSTABLE	Improved access for Hyannis Transportation Center	$	5,000,000
BARNSTABLE	Rte 28 Resurfacing and Related Work	$	2,875,000
BARNSTABLE	Route 132 at Route 6A	$	2,000,000
BARNSTABLE BOURNE	Improvments to Real Time Traffic Information System -- Design Build of year-round 24/7 Web based traffic information system based on cameras, sensors, with 511 to reduce road rage, congestion, and improve mobility and incident management through improved information	$	3,000,000
BARNSTABLE YARMOUTH	Hyannis Access Preferred Alternative including Airport Rotary improvements, grade separation of Route 28-Route 132 with tunnel / overpass direct connection, Rt 28/Yarmouth Rd intersection upgrade; reconstruction of sections of Yarmouth Road and Rt 28 to include addtional 2 lanes of travel with median divider, sidewalk and multiuse paths	$	90,000,000
BOURE FALMOUTH	Shining Sea Bike Path Extension	$	8,000,000
BOURNE	Bourne Rotary Improvement Project	$	50,000,000
BOURNE	Route 6 Scenic Highway Median Barrier	$	12,000,000
BOURNE	Canal Area: Route 6 Exit 1C Reconfiguration	$	10,000,000
BOURNE	Infrastructure Improvements (Platform, Parking, etc.) for Buzzards Bay Commuter Rail Service	$	5,000,000
BOURNE	Route 6 / Route 28 Bypass --Memorial Circle to Belmont Circle (1.1 miles)	$	2,000,000
BOURNE	Memorial Circle Intersection Improvement Project	$	1,125,000
BOURNE PROVINCETOWN	Regional bicycle route from Cape Cod Canal to Provincetown		
BREWSTER	Full depth reclamation Long Pond Road / Rte. 137	$	1,900,000
BREWSTER	Full depth reclamation Harwich Road / Rte. 124	$	1,500,000
CAPE COD	Route 28 Multimodal Improvements: Various Locations	$	20,000,000
CAPE COD	Cape Cod Rail Trail Expansion: S. Wellfleet to Provincetown	$	20,000,000
Cape Cod Regional Transit Authority	Intercity Seasonal Connector-demonstration	$	4,000,000
DENNIS	Route 28 Streetscape Improvements (Phase 2)	$	4,500,000
EASTHAM	Route 6 Drainage (Aerie's Avenue to Nauset Road)	$	1,500,000
EASTHAM	Route 6 and Governor Prence Road Improvements - Bicycle / Pedestrian	$	1,000,000
HARWICH	Route 39 section, 2.0 miles from Oak Street to Queen Anne Road	$	2,500,000
HARWICH	Route 39 section, 1.6 miles from Bay Road to Brewster TL	$	2,000,000
ORLEANS	Rock Harbor Road drainage improvements and roadway reconstruction	$	600,000
ORLEANS	Main Street Sidewalk extension and reconstruction of Meeting House Road intersection	$	300,000
SANDWICH	Sandwich, Shared Use Path on Servivce Rd (Rte 130 to Chase Rd)	$	5,000,000
STEAMSHIP AUTHORITY	Woods Hole Terminal Reconstruction Project	$	61,750,000
STEAMSHIP AUTHORITY	M/V Martha's Vineyard Mid-Life Refurbishment Project	$	10,000,000
STEAMSHIP AUTHORITY	Relocation of Administrative Offices	$	6,600,000
WELLFLEET	Chequessett BR Rehabilitation	$	12,000,000
YARMOUTH	Safety improvemetns atRoute 6 ramps at Exit 8 (Union Street/Station Avenue).	$	5,000,000
YARMOUTH	Rte 28 Resurfacing and Related Work	$	4,000,000
YARMOUTH	Yarmouth, Sidewalk improvements: North Main Street sidewalk of approximately 1 mile connecting existing sidewalk with major recreation area	$	650,000
	TOTAL	**$**	**355,800,000**

Appendix D: Status of Previous TIP Projects

Cape Projects Advertised and Status

Cape Cod Transportation Improvement Program (TIP)

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost, award amount, or Construction Contract Value	YEAR adver-tised (FFY)
56206	BOURNE	Bridge, Perry St, replacement/related BR# B-17-010	$857,648	BR	11/30/94	town	$857,648	1993
600326	DEN to ORL	Route 6, Install surface mount delineators	$37,717	NFA	YES	state	$37,717	1993
	Eastham, Wellfleet	Cape Cod Rail Trail (extension)	$1,239,333	CMQ	9/30/94	DEM	$1,239,333	1993
53355	FALMOUTH	Bridge, Menauhant Rd over Green Pond, BR#F-03-002	$2,274,690	BR	12/1/96	town	$2,274,690	1993
600485	HARWICH	Bridge #H-10-014, Rte 137 Br betterment over Rte 6	$564,384	NFA BR	7/15/95	state	$564,384	1993
600111	ORLEANS	Roof Replacment Orleans Depot, Bay Ridge La & 6, 6A	$68,500	NFA	done?	state	$68,500	1993
17400	SANDWICH	Bridge#S-04-02/Conrail, Old County Rd & Related	$282,240	BR	7/29/96	town	$282,240	1993
	1993	ADVERTISING PROGRAM				***TOTAL***	**$5,324,512**	
600897	BARNSTABLE	Route 132 @ Bearses Way Intersection	$357,790	NFA	6/14/96	town	$357,790	1994
600694	Barns, Bour, Sand	Route 6 Sign Update & Replacement	$590,021	NFA	11/30/95	state	$590,021	1994
600492	BOURNE	Rte 6@Bournedale & Nightingale Rds, sig & safety	$662,568	NFA	7/31/98	state	$662,568	1994
600728	Dennis, Yarmouth	Bridge Maint. Rte 6, Y-1-7,15,16, D-7-11	$1,392,855	NFA	9/16/96	state	$1,392,855	1994
600407	MASHPEE	Rte 151 Resurface & related	$145,680	NFA	10/1/95	town	$145,680	1994
	1994	ADVERTISING PROGRAM				***TOTAL***	**$3,148,914**	
	BARNSTABLE	Route 6 rest area renovations	$168,736	NFA	8/8/96	state	$168,736	1995
601219	BARNSTABLE	SSA ferry terminal & marine facilities	$4,568,000	FBD	7/9/97	SSA	$4,568,000	1995
600564	HARWICH	Rte 124 @ Rte 6, Park & Ride Lot Construction	$182,900	NFA	8/19/96	state	$182,900	1995
601039	MASHPEE	Route 130 section, resurfacing & related	$160,369	NFA	7/20/95	town	$160,369	1995
	1995	ADVERTISING PROGRAM				***TOTAL***	**$5,080,005**	
601396	BARNSTABLE	Route 28 Recons & Signals on a section	$1,249,101	STP	11/30/99	town	$1,278,140	1996
601194	Bourne / Plymouth	Route 25 EB to rest area, water service tie in	$361,495	NFA	7/13/96	state	$545,719	1996
601423	BOURNE	Buzzards Bay Train Station Improvements	$149,747	STP-E	12/31/99	town	$155,677	1996
601418	BOURNE	Monument Beach Train Station Improvements	$28,698	STP-E	completed 1999	town	$32,163	1996
601634	EASTHAM	Route 6 / Rogers Lane, drainage	readv 6/15/96	NFA	11/6/96	state	$30,950	1996
601257	FALMOUTH	Route 151 @ Sandwich Rd	$408,260	STP	7/5/97	town	$499,676	1996
601690	FALMOUTH	Construct Shining Sea Bikeway, Phase II	$299,974	NFA	7/12/97	town	$273,399	1996
600402	FALMOUTH	Route 151 Section	$1,524,864	STP	5/28/99	town	$1,622,950	1996
601563	TRURO	Cons. Two Chemical Storage Sheds	$200,000	NFA	?	state	$199,850	1996
601084	YARMOUTH	Route 6 Bridges #'s: Y-1-5, 5a, 6, 12, 13, 14	$986,000	NFA	1/14/98	state	$986,332	1996
601859	YARMOUTH	Recons railroad grade crossing Willow St	$375,222	NFA	7/30/97	state	$269,298	1996
	1996	ADVERTISING PROGRAM				***TOTAL***	**$5,894,154**	
601541	BARNS-ORLEANS	Route 6 safety improvements, signs		NFA	complete 1997	state	$659,265	1997
105701	BARNSTABLE	Route 28 section		NFA	11/30/98	state	$4,168,495	1997
600969	EASTHAM	Bridge, Bridge Rd over Boat Meadow River #E-04-001		NFA	completed 1999	town	$565,363	1997
601095	FALMOUTH	Bridge, Quaker Rd over Herring Brook #F-03-011	$1,198,203	BR	complete may00	town	$1,256,079	1997
600517	FALMOUTH	Pedestrian signal Rte 28 @ Falmouth Mall	$54,738	NFA	11/1/97	town	$51,920	1997
601465	HARWICH	Cons of Bike Path CCRT extension	$698,302	NFA	8/22/98	town	$674,451	1997
601883	MASHPEE	Great Neck Rd South section	$667,492	NFA	complete	town	$750,910	1997
601882	MASHPEE	Route 151 section		NFA	complete	town	$344,993	1997
601706	MASHPEE	Route151 @ Old Barns Rd (signal)	$279,706	NFA	complete 1999	town	$315,539	1997
601849	~~SANDWICH~~	~~Route 6 Rest Area Site Improvements WB~~			readvertised	state		1997
601849	~~SANDWICH~~	~~Route 6 Rest Area Site Improvements WB~~			readvertised 98	state		1997
117808	SANDWICH	Route 6A, Tupper Rd to Chipman Rd	$1,812,077	NFA	11/30/00	state	$2,212,787	1997
601582	BARNSTABLE	Park & Ride lot expansion, Rte 6 at Rte 132	$799,528	CMQ	8/29/98	state	$931,620	1997
600795	YARMOUTH	Route 28@ Forest Rd	$539,380	NFA	??? deobligated	state		1997
	1997	ADVERTISING PROGRAM				***TOTAL***	**$11,931,422**	
601801	BARNSTABLE	Barns, Route 132 Signal Coordination	$249,305	NFA	9/26/98	town	$290,000	1998
600966	BARNSTABLE	Bridge, Craigville Beach Rd over Centerville River #B-01-002	$834,399	BR	6/1/02	town	$906,759	1998
600967	~~Barns, Mashpee~~	~~Bridge, School St over Santuit River~~	**See 2000 Adv**	BR	**re-advertised**	town	see below	1998
601522	DENNIS	Setucket Rd (Old Bass River Rd to Rte 134)	$657,694	STP	complete	town	$706,960	1998
601849	SANDWICH	Route 6 Rest Area Site Improvements WB		NFA	?	state	$150,914	1998
600970	FALMOUTH	CHURCH ST BR#F-03-014 (timber bridge replacement)	E. T. & L. Corp.	BR	5/27/00	town	$1,170,899	1998
601966	BOURNE	Intersect Rte 6 and Nightingale Pond Dr & Scenic Dr	P.A. Landers	NFA	11/22/99	town	$251,678	1998
	1998	ADVERTISING PROGRAM				***TOTAL***	**$3,477,210**	
601422	BOURNE +	Head of the Bay Road, (also Plymouth and Wareham)		STP	advertised in 200(	town	see below	1999
	1999	ADVERTISING PROGRAM				***TOTAL***	**$0**	
600967	Barns, Mashpee	Bridge, School St, Re-advertised May 2000 (orig 11/97)	$698,584	BR	complete	town	$698,584	2000
601422	BOURNE +	Head of the Bay Road, (also Plymouth and Wareham)	$1,285,815	STP	complete	state	$1,248,879	2000
601955	DENNIS	Route 6 @ Interchang 9 -- Route 134	$2,165,316	NFA	complete	state	$3,038,500	2000
601751	YARMOUTH	Buck Island and Town Brook Roads	$1,389,680	STP	complete	town	$1,665,000	2000
no projis	PROVINCETOWN	Shank Painter Property Acquisition - statewide Enhancements	$247,000	STP-E	complete	town	$247,000	2000
	2000	ADVERTISING PROGRAM				***TOTAL***	**$6,897,963**	
	BOURNE	Academy Road Railroad crossing		NFA ?		state	$247,507	2001
602309	HARWICH, CCRT	BRIDGE, Route 6/ Cape Cod Rail Trail, H-10-020	$703,342	CMAQ	11/24/01	regional	$703,342	2001
~~602293~~	~~HARWICH~~	~~BRIDGE, Lower County Road over the Herring River~~			----------	state	see below	2001
602293	HARWICH	BRIDGE, Lower County Road over the Herring River H-10-01	$1,386,288	NFA	complete	state	$1,386,288	2001
600756	HARWICH	BRIDGE, Route 6 over Depot Street H-10-016	$1,895,284	NFA	complete	state	$1,895,284	2001
601930	MASHPEE	Route 28 FalTL to Rotary, Shoulders & Sidewalk	$959,370	STP	complete	state	$959,370	2001
603304	ORLEANS, CCRT	BRIDGE, Route 6/ Cape Cod Rail Trail	$2,754,491	CMAQ	complete	regional	$2,350,000	2001
600392	SANDWICH	Route 130 Reconstruction & related	$1,904,711	NFA		town	$1,900,000	2001
	2001	ADVERTISING PROGRAM				***TOTAL***	**$9,441,791**	
601466	CHATHAM	Bike Spur, from HarTL by airport then to downtown Chatham	$1,438,041	CMAQ		town	$1,800,000	2002
602842	Dennis Harwich	Route 28 overlay	$1,509,535	NFA	complete	state	$1,491,063	2002
602520	Eastham Wellfleet	Route 6, Traffic safety improvements	$1,038,839	NFA	complete 2004	state	$996,181	2002
602531	FALMOUTH	BRIDGE, Meadow Neck Rd over the Moonakis River #F-03-01	$861,489	BR		town/state	$861,489	2002
602562	ORLEANS	Main St, Rock Harbor Rd & Old Colony Rd	$362,181	NFA		town	$362,181	2002
	2002	ADVERTISING PROGRAM				***TOTAL***	**$5,510,914**	
603427	BARNSTABLE	Route 6 Resurfacing and drainage improvements	$4,000,000	STP	complete 2005	state	$4,000,000	2003

Cape Projects Advertised and Status

Cape Cod Transportation Improvement Program (TIP)

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost, award amount, or Construction Contract Value	YEAR adver-tised (FFY)
602559	ORLEANS	Skaket Corners, Rte. 6A @ West Rd / Eldredge Park Way	$730,000	NFA	complete 2006	town	$962,000	2003
	2003	ADVERTISING PROGRAM				***TOTAL***	**$4,962,000**	
603521	FALMOUTH	Shining Sea Bikeway Phase IIB, Skating Lane to Carlson Lane	$672,000	CMAQ	7/2/05	town	$423,450	2004
601916	BARNSTABLE	Bearse's Way, Route 28 norhterly to Pitcher's Way	$1,651,000	STP	complete	town	$1,757,596	2004
603847	BOURNE	Sagamore Rotary Area Improvements Depot & temp P&R lot	$5,000,000	STP	complete	state	$3,475,470	2004
603847	BOURNE	Sagamore Rotary Chapter 149 fire station construction		STP	complete	state	$4,065,000	2004
603847	BOURNE	Sagamore Rotary -- grade separation		STP	complete	state	$36,336,000	2004
602326	YARMOUTH	Willow Street Recons (Rte 6 to relocated Higgins Crowell Rd)	$2,652,000	STP	complete	town	$2,652,000	2004
	2004	ADVERTISING PROGRAM				***TOTAL***	**$48,709,516**	
601441	BARNSTABLE	Route 132 Boulevard	$10,000,000	STP	complete	town	$9,600,000	2005
603813	EASTHAM-ORLEANS	Route 6 Resurfacing and related	$ 2,200,000	NFA	complete	state	$2,200,000	2005
603349	FALMOUTH	WOODS HOLE BRIDGE	$ 7,800,000	BR	complete	town	$8,000,000	2005
	2005	ADVERTISING PROGRAM				***TOTAL***	**$19,800,000**	
S117 earmark	BARNSTABLE	Hyannis Gateway / Main St. Lighting etc.		S117	complete	town	$378,944	2006
604091	DENNIS	Swan River Road reconstruction	$2,395,528	CMAQ	complete	town	$2,300,000	2006
55400	FALMOUTH	Palmer Avenue BR		BR	warded-terminate	state	$1,500,000	2006
603666	ORLEANS	Route 28 and Finlay Road intersection	$645,524	STP	complete	town	$590,000	2006
604335	SANDWICH	Route 130/Water St and Main St Intersection TOWN HALL SQ	$546,657	STP	complete	town	$600,000	2006
	2006	ADVERTISING PROGRAM				***TOTAL***	**$5,368,944**	
603520	FALMOUTH	Shining Sea Bikeway Ph III	$3,631,123	CMAQ	7/09 complete	town	$4,000,000	2007
	2007	ADVERTISING PROGRAM				***TOTAL***	**$4,000,000**	
603894	BOURNE	Rte. 6 Scenic Highway at Edgehill Road	$4,935,910	STP	complete	town	$3,948,728	2008
605037	DENNIS	Rte. 28 at Rte. 134 intersection improvements	$843,000	CMAQ	complete	town	$596,000	2008
604919	HARWICH	Rte. 124 at Queen Anne Road intersection improvements	$1,200,000	CMAQ	complete	town	$859,800	2008
CCNS	PROVINCETOWN	Rte. 6 at Province Lands Rd.	$2,500,000	Parks	complete	NPS	$2,500,000	2008
602923	YARMOUTH	Packet Landing site improvements	$633,436	HPP	complete	town	$633,436	2008
	2008	ADVERTISING PROGRAM				***TOTAL***	**$8,537,964**	
604521	BARNSTABLE	Route 6A resurfacing	$3,045,000	ARRA	complete	state	$3,045,000	2009
604914	BARNSTABLE	Rte. 132 Boulevard Landscaping	$1,500,000	STP-E	REJECTED - ReADV	town	$0	2009
604914	BARNSTABLE	Rte. 132 Boulevard Landscaping	$1,100,000	STP-E	complete	town	$783,933	2009
604096	BARNSTABLE	Rte. 28 at 3 locations Rte. 149, So, County Rd., Lumbert Mill R	$3,200,000	CMAQ	complete	town	$3,200,000	2009
604224	BOURNE	Rte. 6 Scenic Highway resurfacing	$1,651,519	ARRA	complete	state	$1,651,519	2009
	CAPE Safety	Hwy Safety Improvement Program DESIGN (Sand. Cotuit Harl	$458,514	HSIP	complete	state	$458,514	2009
605214	DENNIS	Route 6A resurfacing	$1,680,620	ARRA	complete	state	$1,680,620	2009
603494	FALMOUTH	BRIDGE Chapoquoit Road BR#F-03-009 over W. Falm Harbor	$3,000,000	BR	Spring 2012	town / state	$2,667,948	2009
603609	FALMOUTH	Route 28 Section known as "Reine's Corner"	$2,000,000	STP	Spring 2011	state	$1,237,500	2009
	2009	ADVERTISING PROGRAM				***TOTAL***	**$14,725,034**	
604093	BARNSTABLE	Rte 149 at Rte 6 EB off-ramps, Roundabout construction	$1,868,000	HSIP	completed	state	$1,868,000	2010
604744	SANDWICH	Rte 130 at Rte 6 off-ramps, construct traffic signals & improv	$2,434,000	STP	completed	state	$1,521,000	2010
605943	BOURNE-SANDWICH	ITS - Camera & equipment installation at Sagamore & Bourne I	$1,000,000	STP	completed	state	$1,076,269	2010
	CCRTA	Vehicles, equipment & terminal improvements	$635,322	ARRA FTA	transferred	state	$635,322	2010
	2010	ADVERTISING PROGRAM				***TOTAL***	**$5,100,591**	
604918	HARWICH	Route 137 Reconstruct & Improve QueenAnneRd to BrewTL	$5,916,934	STP-U, CMAQ	completed	state	$5,333,643	2011
606131	SANDWICH	Intersection Cotuit Rd at Harlow / So. Sand. Rd. roundabout	$1,043,641	HSIP	completed	state	$1,098,743	2011
606295	SANDWICH	Route 6 cable barrier installation	$300,000	HSIP	completed	state	$289,867	2011
605619	FALMOUTH	Route 28 Resurfacing & Related Work	$5,686,424	NHS	completed	state	$5,369,217	2011
	2011	ADVERTISING PROGRAM				***TOTAL***	**$12,091,470**	
605243	YARMOUTH	Old Town House Rd at Forest Rd Intersection & Signal improv	$1,221,000	HSIP	completed	town	$1,221,000	2012
605375	DENNIS	Rte. 134 from Upper County Rd. to Rte. 28	$4,390,504	CMAQ TE HSIF	completed	town	$4,390,504	2012
605291	DENNIS	BR# D-007-001 UpperCountyRd, BR# D-07-006	$10,964,561	BR	completed	state	$10,964,561	2012
	CCRTA	New transit service Bourne-Sandwich	$138,580	CMAQ	transferred	CCRTA	$138,580	2012
	CCRTA	New transit service Bourne-Falmouth	$137,540	CMAQ	transferred	CCRTA	$137,540	2012
	2012	ADVERTISING PROGRAM				***TOTAL***	**$16,852,185**	
602213	ORLEANS	Roundabout at Route 28 & Route 6a	$1,331,245	CMAQ	complete	state	$1,668,830	2013
605671	FALMOUTH	Rte 28 Improvements: Davisville/Old Mtghouse & Jones/Worce	$3,308,075	CMAQ	underway	state	$3,269,348	2013
607263	BARN-BOU-SAN	Changeable Message Boards/Cameras on Rtes 6, 25 and 28	$1,500,000	STP	underway	state	$1,301,769	2013
606286	BOURNE-SANDWICH	Rte 6 Resurfacing:Sagamore Bridge - Sandwich/Barnstable T.I	$8,200,948	NHS	underway	state	$8,061,702	2013
605792	CCNS	Various Pavement Management Projects	$587,000	NHS	transferred	CCNS	$587,000	2013
	CCRTA	New transit service Bourne-Sandwich	$180,154	CMAQ	transferred	CCRTA	$180,154	2013
	CCRTA	New transit service Bourne-Falmouth	$178,803	CMAQ	transferred	CCRTA	$178,803	2013
	CCRTA	Ouer Cape Bike Shuttle	$101,250	CMAQ	transferred	CCNS	$101,250	2013
	2013	ADVERTISING PROGRAM				***TOTAL***	**$15,247,606**	
606178	BOURNE	Resurfacing and related work	$7,389,353	NHPP/HSIP	underway	state	$7,778,789	2014
604488	DENNIS-YARMOUTH	Cape Cod Rail Trail Extension	$7,234,133	CMAQ	underway	towns	$8,061,016	2014
603690	CHATHAM	Mitchell River Bridge Replacement	$13,894,007	ABP-GANS	underway	state	$15,298,631	2014
606016	BREWSTER	Route 6A resurfacing	$5,861,202	STP	underway	state	$6,714,952	2014
		Ouer Cape Bike Shuttle	$84,240	CMAQ	transferred	CCNS	$84,240	2014
	2014	ADVERTISING PROGRAM				***TOTAL***	**$37,937,628**	

Cape Projects Advertised and Status

Cape Cod Transportation Improvement Program (TIP)

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost, award amount, or Construction Contract Value	YEAR adver-tised (FFY)
606394	BARNSTABLE	Route 28 at Bearses Way	$5,509,246	TAP/STP/CMAQ/HSIP	advertised	state	$5,509,246	2015
606179	DENNIS-HARWICH	Route 6 resurfacing	$2,429,099	STP	underway	state	$2,283,272	2015
		Ouer Cape Bike Shuttle	$87,610	CMAQ	transferred	CCNS	$87,610	2015
	2015	ADVERTISING PROGRAM				***TOTAL***	**$7,880,128**	

TOTAL amount advertised or obligated **$257,919,950**

Appendix E: Statewide Tables

Massachusetts Department of Transportation - Highway Division
Summary of Operating and Maintenance Expenditures
Cape Cod Region - Part 1: Non-Federal Aid

as of May 20, 2016

Non Federal Aid Maintenance Projects - State Bondfunds

Program Group/Sub Group	Estimated SFY 2017 Expenditures	Estimated SFY 2018 Expenditures	Estimated SFY 2019 Expenditures	Estimated SFY 2020 Expenditures	Estimated SFY 2021 Expenditures
01 - Bridge Repair & Replacement					
New Bridge (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Bridge Replacement (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Bridge Reconstruction/Rehab	$0	$0	$0	$0	$0
Drawbridge Maintenance	$0	$0	$0	$0	$0
Structures Maintenance	$62,133	$43,985	$35,373	$47,164	$42,174
02 - Bridge Painting					
Painting - Structural	$0	$0	$0	$0	$0
03 - Roadway Reconstruction					
Hwy Relocation (Excluded)	n/a	n/a	n/a	n/a	n/a
Hwy Recon. - Added Capacity (Excluded)	n/a	n/a	n/a	n/a	n/a
New Construction (Excluded)	n/a	n/a	n/a	n/a	n/a
Hwy Reconstr - Restr and Rehab	$2,295	$3,060	$4,079	$3,145	$3,428
Hwy Reconstr - No Added Capacity	$0	$0	$0	$0	$0
Hwy Reconstr - Minor Widening	$0	$0	$0	$0	$0
Hwy Reconstr - Major Widening	$0	$0	$0	$0	$0
04 - Roadway Resurfacing					
Resurfacing	$0	$0	$0	$0	$0
05 - Intersection & Safety					
Impact Attenuators	$0	$0	$0	$0	$0
Safety Improvements	$0	$0	$0	$0	$0
Traffic Signals	$4,968	$6,625	$3,864	$5,152	$5,214
06 - Signs & Lighting					
Electrical	$0	$0	$0	$0	$0
Sign Installation / Upgrading	$0	$0	$0	$0	$0
Structural Signing	$0	$0	$0	$0	$0
07 - Guardrail					
Guard Rail and Fencing	$0	$0	$0	$0	$0
08 - Maintenance					
Catch Basin Cleaning	$0	$0	$0	$0	$0
Crack Sealing	$0	$0	$0	$0	$0
Landscaping	$0	$0	$0	$0	$0
Mowing and Spraying	$0	$0	$0	$0	$0
Pavement Marking	$0	$0	$0	$0	$0
Sewer and Water	$0	$0	$0	$0	$0
Process/Recycle/Trnsprt Soils	$0	$0	$0	$0	$0
Contract Hwy Maint.	$0	$0	$0	$0	$0
09 - Facilities					
Chemical Storage Sheds	$0	$0	$0	$0	$0
Vertical Construction	$0	$0	$0	$0	$0
10 - Bikeways (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
11 - Other					
Demolition	$0	$0	$0	$0	$0
Drilling & Boring	$0	$0	$0	$0	$0
Highway Sweeping	$0	$0	$0	$0	$0
Intelligent Transportation System	$0	$0	$0	$0	$0
Marine Construction	$0	$0	$0	$0	$0
Miscellaneous / No prequal	$96,607	$128,809	$171,745	$132,387	$144,313
Reclamation	$0	$0	$0	$0	$0
Underground Tank Removal Replace	$0	$0	$0	$0	$0
Unknown	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0
Grand Total NFA:	$166,003	$182,478	$215,062	$187,848	$195,129

Massachusetts Department of Transportation - Highway Division
Summary of Operating and Maintenance Expenditures
Cape Cod Region - Part 2: Federal Aid

as of May 20, 2016

Federal Aid Maintenance Projects

Program Group/Sub Group	Estimated SFY 2017 Expenditures	Estimated SFY 2018 Expenditures	Estimated SFY 2019 Expenditures	Estimated SFY 2020 Expenditures	Estimated SFY 2021 Expenditures
01 - Bridge Repair & Replacement					
New Bridge (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Bridge Replacement (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Bridge Reconstruction/Rehab	$0	$0	$0	$0	$0
Drawbridge Maintenance	$0	$0	$0	$0	$0
Structures Maintenance	$0	$0	$0	$0	$0
02 - Bridge Painting					
Painting - Structural	$0	$0	$0	$0	$0
03 - Roadway Reconstruction					
Hwy Relocation (Excluded)	n/a	n/a	n/a	n/a	n/a
Hwy Recon - Added Capacity (Excluded)	n/a	n/a	n/a	n/a	n/a
New Construction (Excluded)	n/a	n/a	n/a	n/a	n/a
Hwy Reconstr - Restr and Rehab	$0	$0	$0	$0	$0
Hwy Reconstr - No Added Capacity	$31,512	$18,149	$21,219	$23,627	$20,999
Hwy Reconstr - Minor Widening	$757,910	$333,074	$387,851	$492,945	$404,623
Hwy Reconstr - Major Widening	$0	$0	$0	$0	$0
04 - Roadway Resurfacing					
Resurfacing	$4,587,896	$4,117,215	$4,407,294	$4,370,802	$4,298,437
05 - Intersection & Safety					
Impact Attenuators	$0	$0	$0	$0	$0
Safety Improvements	$0	$0	$0	$0	$0
Traffic Signals	$711,443	$899,170	$757,821	$789,478	$815,489
06 - Signs & Lighting					
Electrical	$1,165	$388	$518	$690	$532
Sign Installation / Upgrading	$0	$0	$0	$0	$0
Structural Signing	$0	$0	$0	$0	$0
07 - Guardrail					
Guard Rail and Fencing	$2,492	$1,769	$1,420	$1,894	$1,695
08 - Maintenance					
Catch Basin Cleaning	$0	$0	$0	$0	$0
Contract Highway Maintenance	$0	$0	$0	$0	$0
Crack Sealing	$0	$0	$0	$0	$0
Landscaping	$13,192	$6,064	$8,085	$9,114	$7,755
Mowing and Spraying	$0	$0	$0	$0	$0
Pavement Marking	$0	$0	$0	$0	$0
Process/Recycle/Trnsport Soils	$0	$0	$0	$0	$0
Sewer and Water	$0	$0	$0	$0	$0
09 - Facilities					
Chemical Storage Sheds	$0	$0	$0	$0	$0
Vertical Construction	$0	$0	$0	$0	$0
10 - Bikeways (Excluded)	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
11 - Other					
Demolition	$0	$0	$0	$0	$0
Drilling & Boring	$0	$0	$0	$0	$0
Highway Sweeping	$0	$0	$0	$0	$0
Intelligent Transportation System	$416,504	$195,335	$220,066	$277,301	$230,901
Marine Construction	$0	$0	$0	$0	$0
Miscellaneous / No prequal	$0	$0	$0	$0	$0
Reclamation	$0	$0	$0	$0	$0
Underground Tank Removal Replace	$0	$0	$0	$0	$0
Unknown	$0	$0	$0	$0	$0
Grand Total Federal Aid:	**$6,522,113**	**$5,571,165**	**$5,804,276**	**$5,965,851**	**$5,780,431**

Appendix F: Comments on Public Draft

The Cape Cod Metropolitan Planning Organization (MPO) will consider release of this Draft Transportation Improvement Program (TIP) for the public review/ comment period at their June 27, 2016 meeting, officially beginning the 30-day public comment period. The MPO is expected to consider endorsement of the Cape Cod FFY 2017-2021 TIP at their August 1, 2016 meeting at the Cape Cod Commission Office at 32250 Main Street (Route 6A) in Barnstable, MA 02630. Comments on this TIP may be sent by COB on July 27, 2016 via mail, hand delivered, by facsimile, or via e-mail, as follows:

Mailed or dropped off:

Cape Cod Commission Transportation Program

Glenn Cannon, Technical Services Director

3225 Main Street (Route 6A)

PO Box 226

Barnstable MA 02630-0226

Sent by facsimile to the attention of Glenn Cannon, Technical Services Director, CCC:
FAX: 508-362-3136

Electronic mail “email”—please put “TIP” in the subject line and send to:
gcannon@capecodcommission.org

Comments / Questions received on this TIP:

A Public Comment Summary Grid presenting a summary of the comments received during the 30-day public comment, along with the comments in their entirety, are included on the following pages. The comments were presented in their entirety to the Cape Cod MPO during their August 1, 2016 meeting where the body considered the comments. Consideration of the comments is detailed in the meeting minutes for that meeting. The response and any action taken by the MPO are summarized in this table. Discussion of TIP project programming is also detailed in the meeting minutes from previous MPO and CCJTC meetings listed in Chapter 2 of this document.

2017-2021 Transportation Improvement Program - Public Comment Summary Grid

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
1	5/16/2016, 5/17/2016, 5/18/2016, 5/20/2016 Bike Week Outreach Events Comments made in person	Various	Leave bike safety gear at the sub police station on Main Street	**Action**: Some of the ideas support projects already included in the plan; others will be taken into consideration in the development of future project. Comments relating to public transportation will be shared with the CCRTA. Comments referring to a specific location will be shared with the appropriate Town.
2			Include stop again to Starmarket at High school; shuttles + trolleys; allow skateboarders + bikes to call in for help in inclement weather days; bike lanes in breakdown lanes or on doable traffic roads	
3			More bike lanes for safe riding	
4			I'm from Portuguese decent and safe biking is important to me	
5			It is important to spread awareness about biking safety. Thanks for the efforts.	
6			Bike safety awareness is extremely important along the Canal in the summer.	
7			Bike safety is extremely important!	
8			My Dad used to work for the CCRTA on Cape Cod before GPS + Cell phones, it's a valuable service!	
9			You're doing an amazing job! Keep up the good work.	
10			Bickers should be more considerate and stay on the side of the road.	
11			Increase train frequency - I won't go to Boston because I always get stuck waiting hours to get home.	
12			Glens the best I feel safe!	
13			It makes me happy when people use their blinkers!!	
14			Working with the traffic committee to make Beach Rd safe + educate public on safe walking/biking	
15			Connect Claire S. trail for road to P.Town; Better align Claire S. trail with Cape Cod Rail Trail; Improved signage	
16			Continue Cape Cod Rail Trail expansion. We love it!	
17			We love the Shining Sea Bike path!	

2017-2021 Transportation Improvement Program - Public Comment Summary Grid

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
18	5/19/2016	Various	Congratulations for the work you do	**Action**: Some of the ideas support projects already included in the plan; others will be taken into consideration in the development of future project. Comments relating to public transportation will be shared with the CCRTA. Comments referring to a specific location will be shared with the appropriate Town.
19	Comments noted		Dark roads, holes in road	
20	on surveys		Bump at pine needle ln we have many kids playing especially during summer a sign and a bump would help keep speed	
21	presentation at the Revival Presbyterian		I think that the biggest problem is the intersection of Willow Street and Route 28 where there is heavy traffic everyday; and also at the Airport Rotary	
22	Church of Cape		My street has too many holes in the pavement	
23	Cod		Allow everyone to have drivers license	
24	(predominately		Buses circulation is very limited	
25	Portuguese		I would like to have a bus route close to my street	
26	speakers) - 172		Make better roads, less holes	
27	surveys where		Too many holes on the streets, streets are too dark	
28	completed		Dark streets, low visibility on the streets, It is hard to see the pedestrians	
29			The bicycles crossing in front of the cares, they ride on the dark without lights. Should have more buses for whom doesn't drive.	
30			Have a specific line to turn on Route 28 (airport) and Route 28 Centerville (Bell Tower Mall) get better signs, so tourists will drive better on rotaries	
31			Have a bus route in Hyannis	
32			Traffic light on intersection of Old Falmouth Road and Race Lane	
33			Missing a bus route on Main Street, Hyannis	
34			Too much traffic on Route 28, the road is too narrow	
35			Bus route in Hyannis Centerville and Hyannis, Centerville and Falmouth	
36			I have no complaints, It is always good to take a walk on the streets, but there isn't much light on	
37			I've notices especially in Hyannis area the streets need improvement on pavement	
38			Sidewalk on busy streets; bike path	
39			Sidewalks, bike paths, signs for kids.	
40			More buses and more frequent.	
41			Fix all the streets.	
42			More visibility of buses on Centerville	
43			Rotary reconstruction, Yarmouth should fix pot holes - all of them	
44			Bus tickets from Hyannis to Boston are very expensive for people like me that needs to go to school over there.	
45			Telegraph Rd Hyannis Port some form of speed controls, a very fast road maybe someone on the road?	

2017-2021 Transportation Improvement Program - Public Comment Summary Grid

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
46	continued from previous page	continued from previous page	Cape Cod lacks public transportation throughout the Cape's towns. There is no information, it is very confusing.	continued from previous page
47			Hyannis area lacks public transportation	
48			Everything is great. Congratulations.	
49			I am a manager for a company and its employees utilize public transportation. However, there is no schedule set up for Brewster to attend their needs.	
50			More buses; more stop signs; more light on the streets	
51			Sidewalks for pedestrians; bike path	
52			Sidewalks on Route 28	
53			More sidewalks/bike path	
54			Buses throughout Cape Cod every 30 minutes	
55			More buses	
56			Roads lacks light, also narrow streets; too many plants diminishing visibility	
57			People can only use cars, even though, driving without a driver license make e greater risk for accidents	
58			I think there should be more buses and more bus stops	
59			Make streets longer, like double lanes to avoid traffic congestion	
60			Light pole on streets in front of my house is very dark - West Yarmouth	
61			The lack of public transportation and nor enough sidewalks for pedestrians and those who ride their bikes daily.	
62			More public transportation; more rotaries so the traffic can flow better	
63			light pole in front of my house is very dark, I have 2 children and cars keep parking at night - West Yarmouth	
64			Maybe streets should have sidewalks, should also have a better public transportation with more stops options.	
65			Route 28, between Bearse's Way and Pitcher's Way needs sidewalk.	
66			Yarmouth needs new pavements	
67			Sidewalks; bike paths	
68			public transportation; sidewalks; bikepaths/traffic light	
69			More lights on Route 28, 132 and 6A	
70			Some points need more lights on the street	
71			More streets with sidewalks	
72			The intersection of Route 28 and Camp Street should have better signs giving preferential to drivers leaving Camp Street into Route 28.	
73			Make public transportation better buses/train/metro. Shoulder in various streets	
74			Special lane for bikes, better public transportation with more buses and more frequent.	

2017-2021 Transportation Improvement Program - Public Comment Summary Grid

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
75	continued from previous page	continued from previous page	No bus availability to areas that are needed. On 28 near the train station all the way to the rotary is in very poor	continued from previous page
76			Everything is perfect.	
77			There are some road woks that start simmer time making traffic worse and our schedule more difficult	
78			Airport rotary; railroad crossing/DJ wings	
79			Make the streets better - Alicia Road - Megan Street	
80			Cape Cod is an excellent place, therefore needs a better public transportation	
81			Nothing.	
82			Lacks information to where and when to get the bus, to move our the legislation for bike and cars	
83			Exit 6 B between Exit 6 and Exit	
84			Centerville Plaza need signaling	
85			Rosary Ln in Hyannis needs repairs	
86			Pot holes	
87			Centerville Plaza is very dangerous, needs signaling	
88			Needs more buses	
89			More buses options, because one doesn't have car and needs to travel far.	
90			Thank you for reaching our Brazilian Community.	
91			Strawberry Hill Rd and Blueberry Hill Rd needs repair	
92			Too many pot holes on Blueberry Rd; Bumps on Phinneys Ln or Midway Dr	
93			Fix pot holes in heavy traffic roads.	
94			All of Rte 28 needs repair. Too many Pot holes (hard on driving)	
95			Rotary should be signaling	
96			Thank you very much for the opportunity to express out opinions. God bless you and God bless this nation.	
97			Willow Street is terrible - you guys gotta do something with that	
98			Dark streets	
99			Better paving	
100			Better buses schedules lost of people needs to be at work early, like 6 AM, Saturdays and Sundays	
101			More sidewalks	
102			More bus stops	
103			Should have more buses going to all towns on Cape Cod	
104			Traffic lights between Rte 28 and Willow Street needs to be modified with the timing to turn and to go straight	
105			I live on Mitchells Way and it is in need to repair the pot holes	

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
106	continued from previous page	continued from previous page	Thank you guys for the job. Is great how you guys working	continued from previous page
107			Better public transportation and shoulder so we can stop without disturbing traffic	
108			Sidewalks at Hyannis - I live close to Cape Cod Hospital - when the people left the Cape Cod Hospital	
109			It would be good to have pedestrian lane and bike lane; also sidewalks on Route 28 near T.J.Max	
110			On the street where a friend of mine lives doesn't have light pole	
111			Side roads are awful in Hyannis	
112			On my street there is no public lights, at night is very dark	
113			Route 28	
114			North Street with Stevens Street stop sign, Hyannis, Bearse's Way around 4pm has too much traffic	
115			More buses for whom does not drive	
116			We need a stop sign cross Bumpus Rd and Fisher Rdath the end of the street. Accidents are already happened there.	
117			Portuguese signs for drivers. Thank you	
118			Megan Rd needs new pavement and sign in Portuguese and more bike lanes	
119			We don't have enough public transportation	
120			Double Willow Street, more care on General Patton Dr	
121			Would be interesting to have more public transportation. I live in Sandwich, little far from the enter lacks access	
122	6/22/2016 email	Marcia N Burns	Notes majority opposition of project #606596 [Rte 28 - W. Chatham] from businesses and the public; notes third lanes has worked well for years; notes tax money should be spent elsewhere	Thank you for your comment.
123	6/22/2016 email	Gloria M. Freeman	Supports [FFY 2016-19] amendment; notes W. Chatham project should be removed entirely - refers to the project as unwanted, unneeded, and waste of taxpayer's money	Thank you for your comment.
124	6/22/2016 email	Bill Tuxbury	Supports [FFY 2016-19] amendment; would prefer to see W. Chatham project removed entirely; refers to project as a beatification unwarranted project based on accident or speed data; notes issues with the traffic study of the project and issues with the proposed roundabout handling large trucks; notes business impacts of the project; notes minor improvements to the corridor that could be accomplished through Ch. 90 funds	Thank you for your comment.
125	6/23/2016 email with letter attached	David E Burns MD, President of West Chatham Association, Inc.	Supports [FFY 2016-19] amendment; opposes West Chatham project; notes continued opposition to the project	Thank you for your comment.

2017-2021 Transportation Improvement Program - Public Comment Summary Grid

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
			Start of 30-day public comment period - June 27, 2016	
126	7/18/16 Outreach table at Hyannis Transportation Center	Various	Fix signal at Iyannough Road at Cape Cod Mall and Widen Route 28	**Action**: Some of the ideas support projects already included in the plan; others will be taken into consideration in the development of future project. Comments relating to public transportation will be shared with the CCRTA. Comments referring to a specific location will be shared with the appropriate Town.
127			Transit integration of modes (CCRTA, PB, Peter Pan); Next bus needs intermediate points; no incentives for Charlie Card on Cape Cod; feeder from Cape Cod to Kingston	
128			Not enough carpooling; I love the bus; alternate fuel buses/electric buses; add park and ride ads on buses	
129			Bearses Way at Route 28 is bad	
130			Should use rail ROW for rail trail extension to Provincetown; need better service to P-Town from Hyannis - express to Orleans to link to the Flex; CCRTA meetings on service have too short (48hr) notice to get attendance.	
131			Route 28 at Strawberry Hill - grade issues; Strawberry Hill at Craigsville intersection - lights or something	
132			Pet spots on bus - more bus friendly	
133			Connect sidewalk on Route 134 in Dennis over Route 6 with existing pedestrian paths	
134	7/19/2016 email	Judy Patterson	Supports [FFY 2016-19] amendment; opposes West Chatham project; notes citizen opposition, impact of business and traffic by removal of 3rd lane, waste of money	Thank you for your comment.
135	7/19/2016 email	Donna Ritvo, Janice Kurlychek, Lisa Young, Michaele Beauchemin (Owners of AT HOME AGAIN)	Supports [FFY 2016-19] amendment; notes citizen and business opposition to West Chatham project; notes project is a waste of money	Thank you for your comment.
136	7/19/2016 email	Mary McCauley	Opposes West Chatham project noting project is not necessary, is a waste of money, and has been opposed by majority of residents; notes concern with encouraging bicyclists on Rte 28	Thank you for your comment.
137	7/19/2016 email	Judith B. Kelly	Supports [FFY 2016-19] amendment; notes citizen opposition to West Chatham project; notes project is a waste of money	Thank you for your comment.
138	7/19/2016 email	minitruck2@comcast.net	Supports [FFY 2016-19] amendment; notes citizen opposition to West Chatham project; notes project is a waste of money	Thank you for your comment.
139	7/19/2016 email	David E Burns MD, President of West Chatham Association, Inc.	Supports [FFY 2016-19] amendment; opposes West Chatham project; notes citizen and business opposition; notes corridor is safe and operates well; notes project is not more than a beautification project	Thank you for your comment.
140	7/22/16 email	Rosaline Ray		Thank you for your comment. **Action**: This comment will be shared with the CCRTA.

#	Date/Format	Comment From	Summary of Comment	Potential Response/Action for Consideration
141	7/22/16 letter via email	David Mohler, Executive Director, Office of Transportation Planning, MassDOT	Typographical errors noted or clarification requested on pages i, 3, 8, 12, and 13.	**Action**: Make revisions or add clarification as suggested.
			Federal Highway Project Listing: Please do not over-program CMAQ and HSIP targets. Update project costs to reflect the most recent TFPC with appropriate YOE factor. Reorient TIP template to landscape format and increase font size. Remove BRI17 for Cape Cod HSIP as it is included in the statewide program. Updated all "additional information fields" to reflect actual costs. Adjust TAP allocation to reflect final federal targets.	**Action**: Revisions will be made as recommended.
			Appendix A: Please include scores, where appropriate, for projects that are unprogrammed, in addition to programmed projects.	Scores for all considered projects, both programmed and unprogrammed projects, are included in Appendix A. The Proposed TIP Year is listed for each project with unprogrammed projects listed as "Future."
			Appendix B: Update GHG analysis per latest guidance.	**Action**: GHG analysis will be updated as recommended.

Acronyms: AC = advanced construction; CCC = Cape Cod Commission; CCRTA = Cape Cod Regional Transit Authority; CMAQ = Congestion Mitigation and Air Quality; DPW = Department of Public Works; GHG = Greenhouse gas; HSIP = Highway Safety Improvement Program; MassDOT = Massachusetts Department of Transportation; MPO = Metropolitan Planning Organization; RTP = Regional Transportation Plan; TIP = Transportation Improvement Program; TFPC = Total Federal Participating Cost; UPWP = Unified Planning Work Program; YOE = Year of Expenditure

Note: The Public Comment Summary Grid presents a summary of the comments received during the 30-day public comment period. The comments were presented in their entirety to the Cape Cod Metropolitan Planning Organization (MPO) during a public meeting where the body considered the comments. The response and any action taken by the MPO are summarized in this table. This table will be included in the final plan and is available at www.capecodcommission.org/mpo.

From: Glenn Cannon
To: Marcia Burns
Subject: RE: MPO
Date: Thursday, June 23, 2016 10:00:02 AM

Hello Marcia,

We will include your comment in the Metropolitan Planning Organization meeting packet.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: Marcia Burns [mailto:mnburns14@gmail.com]
Sent: Wednesday, June 22, 2016 2:01 PM
To: Glenn Cannon
Subject: Fwd: MPO

To the Metropolitan Planning Organization
(C/O Glenn Cannon, Cape Cod Commission)
Dear Members:

I am writing to you as a private citizen to say that this project, proposed by proponents of 'special interests' in Chatham, has for the past number of years raised the ire of both residents and the overwhelming number of businesses in the West Chatham neighborhood center. A strong majority object and protest the proposed changes. Project #606596 is not needed; the one thousand foot stretch of Rte 28 has been functioning for 40 plus year, is proven safe, and the third lane used effectively for safe turning into resident driveways and the many businesses. Forty-six businesses oppose the proposed project; yet their objections have been ignored.
So many individuals hope that their voice is finally being heard. Spend our tax money elsewhere.

Marcia N Burns
West Chatham

From: Glenn Cannon
To: freeannie@comcast.net
Cc: Steven Tupper
Subject: RE: Draft FFY 2016-2019 TIP
Date: Wednesday, June 22, 2016 11:59:42 AM

Thank You for your comment.

Your comment will be provided to both the Cape Cod Joint Transportation Committee (CCJTC) and the Cape Cod Metropolitan Planning Organization (CCMPO).

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: freeannie@comcast.net [mailto:freeannie@comcast.net]
Sent: Wednesday, June 22, 2016 11:21 AM
To: Glenn Cannon
Subject: Draft FFY 2016-2019 TIP

To: Members, Metropolitan Planning Organization

From: Gloria Freeman, 208 Kendrick Road, North Chatham, MA 02650

Re: Draft FFY 2016-2019 TIP

Please consider this my support of this draft plan which includes TIP Project #606596 Improvements on West Main Street (Route 28), Chatham, between George Ryder Road to Barn Hill Road. I strongly believe not only that this Project should be postponed, but in fact removed from the TIP until the people's voices are heard and some amount of fiscal responsibility is ensured. The bloated proposed project has been controversial since its inception. The removal of the two-way turning lane and the construction of two roundabouts within 900 feet of each other are unwanted and unneeded and a waste of taxpayer's dollars.

Thank you for the opportunity to comment.

Gloria M. Freeman

From: Glenn Cannon
To: Bill Tuxbury
Subject: RE: 2016-2019 amendment public comment period
Date: Wednesday, June 22, 2016 4:16:09 PM

Thanks Bill,

I will forward your comments to both the Cape Cod Joint Transportation Committee and the Cape Cod Metropolitan Planning Organization for consideration at their next meetings.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: Bill Tuxbury [mailto:wtuxbury@comcast.net]
Sent: Wednesday, June 22, 2016 12:00 PM
To: Glenn Cannon
Subject: 2016-2019 amendment public comment period

To the Metropolitan Planning Organization (c/o Glenn Cannon of Cape Cod Commission):

I was under impression that another 30 days was to be extended for comments on the changes to the 2016-2019 TIP. After reviewing the agenda for the June 27 MPO meeting I am not sure, so I am sending my comments along.

The decision to move the West Chatham Roadway Project (#606596) from FY2016 to FY2018 is a good one and agreeable to me and to the West Chatham Association. In fact we believe that the project is just an expensive beautification project as accident and speeding data do not warrant the drastic changes to the short RT 28 roadway distance (approx. 1200 feet).

The project as defined by the consultant will only generate more congestion as there is no center turning lane that allows through traffic to proceed to either downtown Chatham (east bound) or to Harwich (west bound). The 2 roundabouts (only 100 feet in diameter each) will have difficulty handling the approximate 18,000 cars per day in the peak summer season and result in more congestion. The consultant opted not to do any traffic studies in the high summer season (when the local businesses must make their year) for fear that the results would dictate a 4 lane road. Instead we are getting a 2 lane road with 2 roundabouts 900 feet apart. Based on the consultants comments even he is expecting congestion in this stretch of RT 28 during the high season. This is not fair to the local businesses or the local residents. In addition it is still not clear that the roundabouts can handle the large trucks that are towed into Ron Meservey's Truck repair business.

Changes to the access to and egress from the major businesses in West Chatham will greatly

disadvantage those businesses. Shop Ahoy Plaza is losing an entrance on RT 28 and their entrance from Barn Hill has been greatly downsized. Clearly the OSJL property (KIMCO owner) is losing a convenient entrance to their store as it is now being moved north, with that entrance almost at the building itself. Besides losing over 12,000 sq ft of property, OSJL is losing over 20 parking spaces for their business. The businesses residing in the Post Office area will be disadvantaged as the entrance from and exit to RT 28 is being reduced in width preventing exiting cars to turn right while another car is trying to turn left. Additionally there is no turn lane at this entrance meaning that more congestion will result, as will more turning and rear end accidents. For a design that purports to improve safety and reduce speeding (both not proven by the consultant's own report), it will disadvantage the West Chatham businesses, which is considered the second most important commercial area in Chatham per the 2004 Comprehensive Long Range Plan.

In retrospect, all we need is a south sidewalk (use Chapter 90 dollars perhaps), restriping lanes to narrow widths (11 feet), ADA approved cross-walks, perhaps pedestrian refuge islands at the 2 or 3 crosswalks, and a joint use north sidewalk (expand current 5 foot width to 8-10 feet). This would be significantly less expensive, require no land acquisition of consequence and not adversely impact the businesses, particularly OSJL, Shop Ahoy Plaza and those businesses in the post office square where exit and entrance configurations are being significantly changed and restricted. The last thing we want is a bankrupt West Chatham business district, replaced with high density condos.

A further delay to this project beyond FY2018 is desired so that a more reasonable, less expansive and less expensive project can be agreed upon. I hope that common sense will prevail.

Sincerely,

Bill Tuxbury
West Chatham

From: Glenn Cannon
To: David Burns
Subject: RE: Concerning Delay of West Chatham Roadway Project (#606596) from FY2016 to FY2018
Date: Thursday, June 23, 2016 9:57:12 AM

Thank You Dr Burns.

We will include this letter in both the Joint Transportation Committee and Metropolitan Planning Organization packets.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

-----Original Message-----
From: David Burns [mailto:mdburns14@comcast.net]
Sent: Wednesday, June 22, 2016 2:20 PM
To: Glenn Cannon
Subject: Concerning Delay of West Chatham Roadway Project (#606596) from FY2016 to FY2018

Dear Glenn,
Please present this letter to the MPO Committee Members.
David

The West Chatham Association, Inc.
P.O Box 291
West Chatham, MA 02669-0291

June 22, 2016

Cape Cod Metropolitan Planning Organization
c/o Glenn Cannon, Technical Services Director

Members of the Cape Cod MPO:

I am writing on behalf of the Board of Directors of the West Chatham Association, Inc. to comment on and support the Draft FFY 2016-2019 TIP. Thank you for this opportunity.

We strongly support the amendment to the above-mentioned TIP Project #606596 Chatham – Improvements on West Main Street (Route 28), from George Ryder Road to Barn Hill Road. This amendment removes this project from the 2016 plan and adds it to that of 2018.

We hope for future cancellation of this Project since it is unwanted by thousands of citizens who signed a petition against it, the overwhelming number of businesses in the neighborhood center, and Town Meeting attendees who voted against it. While there are some who will counter that people have changed their minds, there is absolutely no indication of that being true. This Project has been and continues to be strongly opposed, including by two members of our Board of Selectmen. The road was repaved recently and satisfactory until commonsense prevails and this drastic overkill project is set aside.

Sincerely,

David E. Burns, M.D.
President

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:23 PM
To: judylpat@rcn.com
Subject: RE: Draft FFY 2016-2019 TIP - PROPOSED DELAY

Hi Judy,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: judylpat@rcn.com [mailto:judylpat@rcn.com]
Sent: Tuesday, July 19, 2016 12:16 PM
To: Glenn Cannon
Subject: Draft FFY 2016-2019 TIP - PROPOSED DELAY

Attention: Members, Metropolitan Planning Organization,

Just a note to let you know I strongly support the above Transportation Improvement Plan #606596 which includes the delay or **hopefully the removal of this project**. The overwhelming majority of Chatham citizens oppose this plan. My family owns land that is affected by this horrific reduction in lanes. We also own land that a business is located on in this area. The removal of the third lane will cause serious traffic issues. This project is a waste of federal, state, and local taxes.

Thank you for consideration in getting this project removed.

Sincerely,

Judy Patterson
Post Office Box 242
West Chatham, MA 02669

Representing the Jean Harding Trust (1620 Main Street and 1652 Main Street)
The Patterson Family Trust

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:26 PM
To: At Home Again
Subject: RE: WEST CHATHAM ROADWAY PROJECT

Hi Janice,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: At Home Again [mailto:athomeagain@gmail.com]
Sent: Tuesday, July 19, 2016 10:25 AM
To: Glenn Cannon
Subject: WEST CHATHAM ROADWAY PROJECT

Glenn Cannon,
This is to state our support of the draft FFY 2016-2019 TIP. Project #606596 (West Chatham Roadway Project) has been and continues to be strongly opposed by Chatham citizens and business owners. It is a waste of federal, state and local taxes. Please consider our request.
Donna Ritvo
Janice Kurlychek
Lisa Young
Michaele Beauchemin
Owners of:
AT HOME AGAIN
1705 Main Street
Chatham

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:27 PM
To: mary mccauley
Subject: RE: West Chatham Road Project we don't need it or want it

Hi Mary,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

-----Original Message-----
From: mary mccauley [mailto:msmary@optonline.net]
Sent: Monday, July 18, 2016 10:54 AM
To: Glenn Cannon
Subject: West Chatham Road Project we don't need it or want it

HI Mr Cannon,
I have been a summer resident for 20 years and have spent all of them in West Chatham. I am opposed to this project as it is not necessary and a waste of tax payer dollars. I am utterly shocked that the "non binding vote" taken to get a read on how well this project was received by the "real residents " was voted down NO PROJECT ... yet the selectman chose to proceed to spend more money and do yet another study. I was at the Meeting where Mr. Roper actually addressed the fact that that this happened and I quote "the misinformed majority voted to stop the project but we are going to move forward any way"
I am not sure who is winning on this deal but as a non voting summer resident (taxation with out representation) I don't want it and the MAJORITY of the towns people don't want it....
There have been many close elections and at the end of the day the majority rules only in Chatham does a majority vote not count....
I use the Cape Cod rail trail everyday on my Bike it is a safe place to cycle . Route 28 in the summer is hectic, crowded and impossible to make a left hand turn . Taking out the turn lane will be a traffic disaster for all .
The businesses don's want it nor do the people who actually live in West Chatham .
The fact the there is the possibility to encourage cyclist to ride on route 28 is insane.... my husband has been hit on his bike 2 times... we ride the bike trail because it is safe.
Please do us all a favor stop the project we don't want .....NOR do the "misinformed majority"
You can actually see this on one of the broadcasts it was filmed when Mr. Roper was speaking.....
Sincerely,
Mary McCauley
101 Geranium Drive
West Chatham , Ma 02669
203-984-0184

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:27 PM
To: Judith Kelley
Subject: RE: West Chatham Roadway Project

Hi Judith,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: Judith Kelley [mailto:jbkelley@outlook.com]
Sent: Monday, July 18, 2016 11:54 AM
To: Glenn Cannon
Subject: West Chatham Roadway Project

To: Members, Metropolitan Planning Organization, c/o Glenn Cannon

This is to state my support of the draft FFY 2016-2019 TIP. Project #606596 (West Chatham Roadway Project} has been and continues to be strongly opposed by Chatham citizens. It is a waste of federal, state, and local taxes.

Sincerely,
Judith B. Kelley
West Chatham

Sent from Mail for Windows 10

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:29 PM
To: minitruck2@comcast.net
Subject: RE: Draft FFY 2016-2019 TIP

Hello,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: minitruck2@comcast.net [mailto:minitruck2@comcast.net]
Sent: Sunday, July 17, 2016 12:37 AM
To: Glenn Cannon
Cc: minitruck2@comcast.net
Subject: Draft FFY 2016-2019 TIP

To Members, Metropolitan Planning Organization, care of Glen Cannon:

I strongly support the draft FFY 2016-2019 Transportation Improvement Plan, INCLUDING the delay or removal of TIP Project #606596 (West Chatham Roadway Project) from the TIP. The overwhelming majority of all Chatham citizens oppose this plan. It is a waste of federal, state, and local taxes.

Steven Tupper

From: Glenn Cannon
Sent: Tuesday, July 19, 2016 12:30 PM
To: David Burns
Subject: RE: To MPO Committee: Support for the Delay of Project # 606596

Hello Dr. Burns,

I will include your comment in the Cape Cod Metropolitan Planning Organization (CCMPO) meeting packet for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: David Burns [mailto:mdburns14@comcast.net]
Sent: Saturday, July 16, 2016 11:44 PM
To: Glenn Cannon
Subject: To MPO Committee: Support for the Delay of Project # 606596

Hi Glenn:
Please make sure the MPO Board views this statement

I strongly support the draft FFY 2016-2019 Transportation Improvement Plan, that includes the **delay** or **removal** of TIP Project #606596 (West Chatham Roadway Project) from the TIP. The overwhelming majority of Chatham citizens **oppose** this plan as well as 40 plus West Chatham Business. This segment of Rte 28 roadway is safe, recently paved, and functions well for forty (40) years. The Project is nothing more than an expensive beautification project which too many oppose.

David E Burns MD, President of West Chatham Association, Inc.
PO Box 291
West Chatham, 02669-0291

Steven Tupper

From: Glenn Cannon
Sent: Monday, July 25, 2016 10:21 AM
To: Rosalie Ray
Subject: RE: Comment on the Cape Cod TIP

Hi Rosalie,

Thank You for your comment. I will pass your comment onto the Cape Cod Metropolitan Planning Organization (CCMPO for their consideration.

Glenn

Glenn Cannon
Director of Technical Services
3225 Main Street, P.O. Box 226
Barnstable, MA 02630
(508) 362 - 3828

From: Rosalie Ray [mailto:rsquared906@googlemail.com]
Sent: Friday, July 22, 2016 3:50 PM
To: Glenn Cannon
Subject: Comment on the Cape Cod TIP

Hello,

I am a seasonal user of the Provincetown shuttle. First of all, I just want to say that it is a great service and works well with the Fast Ferry, so that I can have a car free trip to the beach. That said, folks I recommend it to (and my girlfriend) are put off by the lack of schedule. I get it, because a flag service that serves mostly occasional users and is very accommodating can't promise a schedule, but I also see where they are coming from. I noticed that the TIP contains funding for new ADP software and bus shelter renovations. I wanted to suggest that it also incorporate tracking software and display screens or some sort of countdown (or even an app and better wifi) at the beaches and McMillan Pier. Knowing where the bus is is better than a schedule. I know that this would require working with the NPS, but you might also be able to get funding through the transit in parks program.

Just a thought, and thanks again for the great service! See you next year!

Rosalie Ray

Urban Planning PhD Student
Columbia University Graduate School of Architecture, Planning, and Preservation

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO

massDOT
Massachusetts Department of Transportation

July 22, 2016

Paul Niedzwiecki, Executive Director
Cape Cod Commission
3225 Main Street
Barnstable, MA 02630

Dear Mr. Niedzwiecki:

The Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning (OTP) has reviewed the draft 2017-2021 Transportation Improvement Program (TIP) released by the Cape Cod Metropolitan Planning Organization (MPO) on June 27, 2016. The following MassDOT comments include both general guidance and specific comments on the MPO's 3C planning process with regard to the content of this document as released for public review.

Please note the following comments specific to the information contained in the MPO's draft 2017-2021 TIP.

- Please ensure that the required greenhouse gas self-certification sheet is signed and included in the final document.

Narrative

- Page i – Please change the FHWA Administrator from Pamela Stephenson to Jeffrey McEwan.
- Page 3 – Please change the time horizon of the TIP from four years to five years.
- Page 8 – Please include procedures for removing a project from the TIP, in addition to adding a project to the TIP, in the "Amendment Process" section.
- Page 12 – Please update Table 6 to reflect final regional target amounts, specifically STP and TAP allocations.
- Page 13 – MassDOT appreciates the use of maps such as the "Map of Funded Highway Projects." Increased use of maps and graphics lends to the overall readability and user-friendliness of the document.

Federal Highway Project Listing

- Please do not over-program CMAQ and HSIP targets. Program up to the target amount and use other funding sources to cover the remainder of the project costs.
- Please reorient TIP template sheets into landscape format to increase font size and improve readability.

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

FFY 2017

- CC1000 – Please update the total amount programmed for this project in the Additional Information field to reflect the actual cost.
- Please do not over-program CMAQ. Please adjust the funding sources for 606707 to use other funding sources for costs exceeding the CMAQ target.
- Please remove BRI17 from the Cape Cod HSIP program. This program is already included in the statewide program.

FFY 2018

- 606596 – Please change the total project cost to reflect the current Estimated Total Federal Participating Construction Cost (TFPCC) plus year of expenditure (YOE) factor in the MassDOT Project Information (PINFO) database. Please ensure that fiscal constraint is maintained in FFY 2018.
- Please adjust funding sources as necessary for projects using CMAQ and HSIP to avoid over-programming these sources. Please use STP to cover project costs exceeding the CMAQ and HSIP targets.
- 607435 – Please ensure that the total project cost matches the TFPCC in PINFO plus YOE factor.
- CC1000 – Please update the Additional Information field to reflect the total project cost.

FFY 2019

- Please see FFY 2018 comment regarding over-programming CMAQ and HSIP and adjust project funding sources accordingly.
- 607397 – Please ensure that the total project cost reflects the TFPCC plus YOE factor.

FFY 2020

- 606900
    - Please change the MassDOT Project Description field to exactly match the description in PINFO.
    - Please ensure that the total project cost reflects the TFPCC plus YOE factor.
- Please see FFY 2018 comment regarding over-programming CMAQ and HSIP and adjust project funding sources accordingly.
- Please adjust TAP allocation to reflect final federal regional targets and adjust project funding sources accordingly.

FFY 2021

- Please see FFY 2018 comment regarding over-programming CMAQ and HSIP and adjust project funding sources accordingly.
    - 607405 - Please ensure that the total project cost reflects the TFPCC plus YOE factor.
- Please adjust TAP allocation to reflect final federal regional targets and adjust project funding sources accordingly.

Federal Transit Project Listing

- Please reorient TIP template sheets into landscape format to increase font size and improve readability.

Appendix A

- Please include scores, where appropriate, for projects that are unprogrammed, in addition to programmed projects.

Appendix B

For the purpose of ensuring compliance with *310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation*, we have provided the following comments to be addressed in the GHG sections of your TIP (for more information on reporting, please see the guidance document issued by MassDOT in December 2015: https://www.massdot.state.ma.us/GreenDOT/GreenhouseGasReduction.aspx):

- It appears that an older template may have been used. This appears to be the case for the GHG section dropdown options, which are not correct and do not reflect this year's TIP template options. Please use the new TIP template as the dropdown options have changed. Please refer to the guidance document issued by MassDOT in December 2015 for reporting guidelines.
- Please update the greenhouse gas emission results on statewide funded projects with the information that will be provided by OTP before endorsement.

2017 Highway

- 606707- GHG impacts are reported under each funding source instance, triple counting the GHG impact. Please only list the impact number once in the TIP.
- CC2000 - Please only list the GHG impact number of this project in the last year that the project appears in the TIP.
- CC1000 - Please only list the GHG impact number of this project in the last year that the project appears in the TIP.
- All project GHG impact descriptions are from an outdated template. Please correct to reflect the dropdown options included in this year's TIP template.

2018 Highway

- CC2000 - See FFY 2017 comment above.
- CC1000 - See FFY 2017 comment above.
- For all qualitative projects, please leave the GHG impact number field blank and remove all zeros.
- All project GHG impact descriptions are from an outdated template. Please correct to reflect the dropdown options included in this year's TIP template.

- 607444 and 607435 - Please apply the complete streets tool if possible.
- 606596 - This appears to be a very small reduction for the scale of the project.

2019 Highway

- CC2000 - See FFY 2018 comment above.
- For all qualitative projects, please leave the GHG impact number field blank and remove all zeros.
- All project GHG impact descriptions are from an outdated template. Please correct to reflect the dropdown options included in this year's TIP template.
- 607397 and 606272 - Please apply the complete streets tool if possible.

2020 Highway

- CC2000- See FFY 2019 comment above.
- Please apply the complete streets tool to the remainder of the projects in Section 1A if possible.
- For all qualitative projects, please leave the GHG impact number field blank and remove all zeros.
- All project GHG impact descriptions are from an outdated template. Please correct to reflect the dropdown options included in this year's TIP template.

2021 Highway

- CC2000- See FFY 2020 comment above.
- Please apply the complete streets tool to the remainder of the projects in Section 1A if possible.
- For all qualitative projects, please leave the GHG impact number field blank and remove all zeros.
- All project GHG impact descriptions are from an outdated template. Please correct to reflect the dropdown options included in this year's TIP template.

Completed highway projects

- Please note that there is no need to track qualitative projects.
- Please clarify if the reductions in CC2000 listed here are additional to those listed against CC2000 in the Highway 2017-2021 tabs.

Completed transit projects

- Please note that there is no need to track qualitative projects.

Please contact me at (857) 368-8865 or Gabriel Sherman at (857) 368-8866 if you have any questions.

Sincerely,

David Mohler
Executive Director
Office of Transportation Planning

Cc: Jeffrey McEwen, Division Administrator, Federal Highway Administration
Mary Beth Mello, Regional Administrator, Federal Transit Administration
Mary-Joe Perry, District 5 Highway Director
Astrid Glynn, Rail and Transit Division Administrator

CAPE COD COMMISSION

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