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CAPE COD COMMISSION

Cape Cod Metropolitan Planning Organization (MPO)

Cape Cod
Transportation Improvement Program (TIP)
Federal Fiscal Years 2014 – 2017

Endorsed June 24, 2013

CAPE COD COMMISSION

Cape Cod Metropolitan Planning Organization

Cape Cod
Transportation Improvement Program (TIP)

Federal Fiscal Years 2014, 2015, 2016, and 2017
(October 1, 2013 – September 30, 2014)

June 24, 2013

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

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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 2014 - 2017 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) for Federal Fiscal Years 2013-2016 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.

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Cape Cod Metropolitan Planning Organization (MPO)

CAPE COD TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

SIGNATORY CERTIFICATION:

Date: 24 June 2013

for
Richard A. Davey, Secretary/ CEO
Massachusetts Department of Transportation (MassDOT)

for
Francis A. DePaola, P.E., Administrator
MassDOT Highway Division

John D. Harris, Chairman
Cape Cod Commission

William Doherty, MPO Representative
Barnstable County Commissioners

Ronald J. Bergstrom, Chairman
Cape Cod Regional Transit Authority

Jason Steiding, Representative
Mashpee Wampanoag Tribal Council

Asst. Town Manager
Debra Dagwan, Chairman
Barnstable Town Council

Michael Richardson, Mashpee
Sub-Region A: Bourne, Falmouth, Mashpee, and Sandwich

Curtis Sears, Yarmouth
Sub-Region B: Dennis and Yarmouth

Sims McGrath, Orleans
Sub-Region C: Brewster, Chatham, Harwich, and Orleans

Austin Knight, Provincetown
Sub-Region D: Eastham, Wellfleet, Truro, and Provincetown

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Introduction

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Federal legislation that contains requirements for transportation plans, programs and projects includes the current legislation: *Moving Ahead for Progress in the 21st Century* (MAP-21) and the outgoing legislation: *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) as well as the *Clean Air Act Amendments of 1990* (CAAA). Planning programs developed under the federal regulations for Cape Cod include the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP). The following figure, "Overview of the Transportation Planning Process" is a flow chart of the planning process.

A1. FEDERAL TRANSPORTATION LEGISLATION

Moving Ahead for Progress in the 21st Century – Transforming the Way We Build, Maintain, and Manage Our Nation's Highways (MAP-21):

MAP 21 The continues similar programs as were in the previous legislation, such as the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), the *Transportation Equity Act for the 21st Century* (TEA-21), and the landmark *Intermodal Surface Transportation Efficiency Act of 1991* (ISTEA).

On July 6, 2012, President Obama signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21). Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 represents a milestone for the U.S. economy – it provides needed funds and, more importantly, it transforms the policy and programmatic framework for investments to guide the growth and development of the country's vital transportation infrastructure.

MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

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A2. 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) 2014 -2017 TIP is not required. Further details and background information are provided below:

Introduction

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.

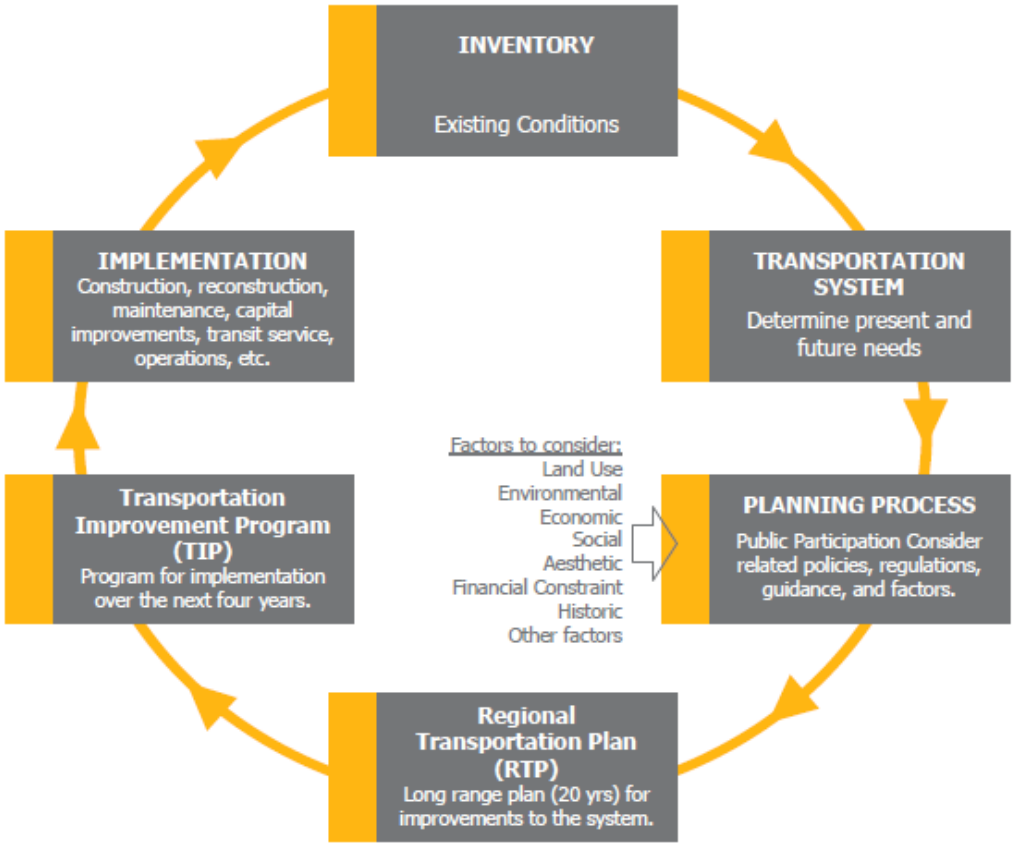
On May 21, 2012, (77 FR 30088), the final rule was published in the Federal Register, defining the 2008 NAAQS at 0.075 ppm, the standard that was promulgated in March 2008. A second rule published on May 21, 2012 (77 FR 30160), revoked the 1997 ozone NAAQS to occur one year after the July 20, 2012 effective 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. Since this 2014 - 2017 TIP will not complete its collective development, review, and approval by the Federal Highway Administration until after July 20, 2013 – when this standard will be revoked, and since the latest area designations to do not require conformity under the current 2008 standard, the MPO does not need to perform a conformity determination for ozone on the program.

OVERVIEW OF TRANSPORTATION PLANNING PROCESS



A3. CAPE COD TRANSPORTATION IMPROVEMENT PROGRAM AND MPO

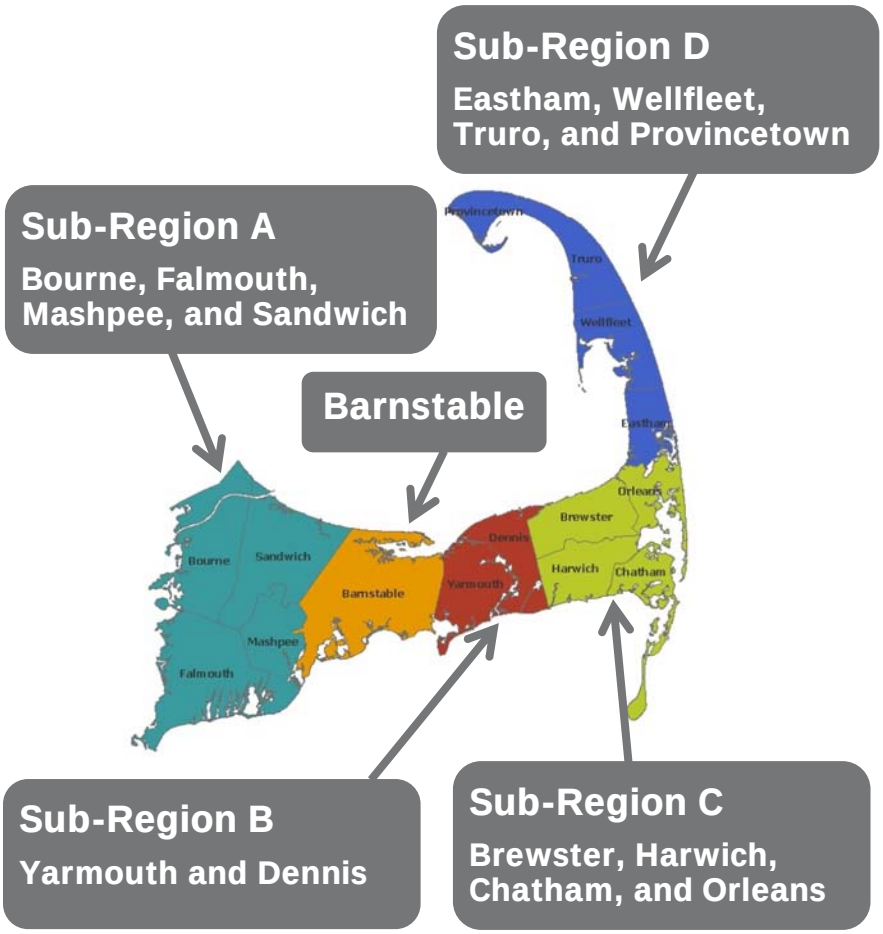
The Cape Cod Transportation Improvement Program (TIP) is devised from the Regional Transportation Plan (RTP) and includes the short-term transportation projects proposed for implementation in the next four years. The TIP is required to be updated every four years under federal law, and typically, in Massachusetts the TIP is updated each year. The development of the TIP occurs in coordination with the statewide schedule, and usually results in a statewide program of projects in place and submitted for federal approvals prior to the beginning of the Federal Fiscal Year on October 1. TIP development generally leads to action on

endorsement by the Cape Cod Metropolitan Planning Organization (MPO) in July or August each year.

The TIP is a listing of federal aid eligible transportation projects for Cape Cod that 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) along with public input, and in cooperation with state and federal agencies. The TIP must be financially constrained to estimated funds that are determined cooperatively with federal, state, and regional participants. The TIP must conform to the air quality plans and programs.

The MPO consists of the Massachusetts Department of Transportation (MassDOT) Secretary/CEO, the MassDOT Highway Administrator, the Cape Cod Commission (CCC) Chairman, Cape Cod Regional Transit Authority (CCRTA) Chairman, A Barnstable County Commissioner, Barnstable Town Council President, and Selectmen representing the Cape Cod sub-regions, and/or their designees (see following figure for sub-region map). Except for the Town of Barnstable designee (Town Council President), MPO members from the geographic sub-regions are elected by all select persons within the respective sub-region. Candidates are limited to currently serving selectpersons.

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 METROPOLITAN PLANNING ORGANIZATION SUB-REGIONS

The Cape Cod Joint Transportation Committee (CCJTC), with members from all fifteen Barnstable County towns and a bicycle representative, is also the MPO advisory group. The TIP must be endorsed by the Cape Cod Metropolitan Planning Organization (MPO) members, combined with other regional TIPs into the State Transportation Improvement Program (STIP), and approved by federal agencies in order for the federal aid transportation projects to proceed.

A4. PUBLIC PARTICIPATION PROCESS

A4a. Schedule and Public Participation

Pursuant to Federal Highway Administration 23 CFR Part 450 and Federal Transit Administration 49 CFR, the Cape Cod Transportation Improvement Program (TIP) was developed locally, and is based on the latest Regional Transportation Plan (RTP).

The RTP development discussions with various representatives, including those from Cape Air, Barnstable Municipal Airport, MassCoastal Railroad, Plymouth & Brockton Street Railway, Inc., Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority, and the HyLine Ferry. The publicly held discussions assisted in the RTP recommended strategies, studies, and items to implement.

In the fifteen towns on Cape Cod, the TIP project time frame has averaged approximately five to ten years from concept to construction, and the Cape Cod Joint Transportation Committee (CCJTC) strives to improve communication and processes related to the project development process. Project evaluation and status discussions occur primarily in the open public CCJTC meetings-with representatives of the Massachusetts Department of Transportation (MassDOT) typically present and participating. Project proponents and/or consultants on TIP projects are often present as well. The CCJTC includes representatives from each town (typically representatives of public works, engineering, and/or planning departments), a bicycle representative, as well as representatives of MassDOT, CCC, CCRTA, and other local groups.

Each year an annual discussion with regional, state, and federal partners on the federal and state financial resources for the collective TIPs is held jointly in the spring. The Cape Cod Commission has been a regular attendee to these statewide meetings and related discussions for information exchange. All of the CCJTC meetings are open to the public and are typically held on a monthly basis.

This TIP was produced in accordance with the latest Public Participation Program (PPP) established for the Cape Cod Region. TIP documents are available online at the Web site: www.capecodcommission.org. The Cape Cod Commission maintains an electronic mailing list of persons interested in transportation issues. 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 via email, telephone, fax, or regular mail. A public meeting to discuss the public draft was held in concert with the CCJTC meeting on June 14. 2013

Some of the meetings related to the development of the TIP for discussion and/or endorsement include:

Date	***Meeting***	***Location***
February 8, 2013	CCJTC Meeting	Barnstable
March 4, 2013	MPO Meeting	Barnstable
March 8, 2013	CCJTC Meeting	Barnstable
March 19, 2013	MARPA / MassDOT QTF	Sutton
April 10, 2013	TIP Day	Conference Call
April 12, 2013	CCJTC Meeting	Barnstable
April 22, 2013	MPO Meeting	Barnstable
May 1, 2013	Project Evaluation	Taunton
May 20, 2013	MPO Meeting	Barnstable
June 14, 2013.	CCJTC Meeting	Barnstable
June 24, 2013	MPO Meeting	Barnstable

Meetings are subject to change, and additional meetings may be scheduled. For the latest information on the meetings of the Cape Cod Joint Transportation Committee (CCJTC), the Cape Cod Metropolitan Planning Organization (MPO), and/or the Cape Cod Commission (CCC), please call the CCC at 508-362-3828.

The Cape Cod Joint Transportation Committee (CCJTC) is the transportation planning advisory group that reviews, discusses, and votes on recommendations to the Cape Cod Metropolitan Planning Organization. Barnstable County formed the CCJTC more than 40 years ago, and the first meeting was held in 1973. Membership consists of one appointee (chosen by town governance) from each town as well as a Bicycle Representative designated by the MPO. Public comment is welcome at all meetings.

A5. ADJUSTMENT/AMENDMENT PROCEDURES AND SUBSTITUTIONS

The Cape Cod MPO process follows an annual schedule for development of the Transportation Improvement Program (TIP) to be roughly compatible with the development schedule of the State Transportation Improvement Program (STIP), as is required under 23 CFR 450.324.

The inclusion of a project in the TIP is sufficient for the project proponent to proceed toward implementation. 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.

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.

A5A. 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:

- Consensus in the region for this project to move forward.
- 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.

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 a minor adjustment.

A5B. 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 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.

A6. TRANSPORTATION FUNDING PROGRAMS

This TIP is being 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 *Moving Ahead for Progress in the 21st Century* (MAP-21). The outgoing federal transportation legislation is the *Safe, Accountable, Flexible, and Efficient Transportation Equity Act-A Legacy for Users* (SAFETEA-LU). The following are brief descriptions of the various funding programs used for transportation projects on Cape Cod in the TIP:

FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND STATE MATCHING FUNDS

Congestion Management/Air Quality Improvement Program (CMAQ) - This funding category directs funds towards demonstration transportation projects in Clean Air Act non-attainment areas for ozone and carbon monoxide. Projects must contribute to attainment of national ambient air quality standards. FHWA share is 80%, state/local share is 20%.

Bridge Replacement and Rehabilitation Program (BR) - This federal bridge program provides for the replacement or repair of bridges on or off the federal aid system. FHWA share is 80%, state share 20%.

Surface Transportation Program (STP) - This program provides funds for state and local roadways that are classified higher than Rural Minor Collector or Local. These funds, however, are flexible and may be used for a variety of other activities, such as transit projects. FHWA share is 80%, state/local share 20%.

A portion of STP funds is for projects qualifying under one of the categories of **Transportation Enhancements (STP-E)**. These are projects above and beyond the usual transportation project but directly related to transportation such as preservation of historic transportation facilities and stormwater mitigation. FHWA share is 80%, state/local share 20%.

Highway Safety Improvement Program (HSIP) - This program provides funds for safety improvements that are directed to the top 5% of high safety problem locations within the region. A Road Safety Audit (RSA) with federal, state, regional, and local partners collaborates on the crash experience, geometric configuration, and other factors to identify potential improvements.

National Highway System (NHS) - This program provides funds for roadways classified as part of the National Highway System. These are usually the interstates, principal arterials and connections to ports and intermodal facilities. The NHS system was designated in 1995.

High Priority Project (HPP) - TEA-21 included a specific list of certain projects entitled "High Priority Projects", or earmarks. An amount of funding has been designated for implementation once these projects are scheduled in the TIP/STIP, designed and have all approvals. FHWA share is typically 90%, with the state/local share providing the remaining 10%.

Ferry Boat Discretionary (FBD) - This is a discretionary funding program for improvements related to ferryboat service. Since August 2000, FBD projects are listed in TIP year 3 unless funding is in place. In other words, a year 3 project is typically a request for funding; once approved for FBD funding, the project may move into year one of the TIP for implementation through an administrative adjustment.

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.

Scenic Byways (SB) - This is a discretionary federal funding program for improvements related to scenic byways; only Route 6A qualifies for this funding currently on Cape Cod. FHWA share is 80%, state/local share 20%.

American Recovery and Reinvestment Act of 2009 (ARRA) - This funding originates in the economic stimulus bill, and is commonly referred to as “stimulus” funding.

TRANSIT FUNDING CATEGORIES, FEDERAL TRANSIT ADMINISTRATION (FTA) AND STATE MATCHING FUNDS

FTA 5309 Formerly Section 3 - This category is discretionary funds for capital expenditures such as buses and terminal facilities; projects need federally earmarked 5309 funds to proceed.

FTA 5307 Formerly Section 9 - 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.

FTA 5310 Formerly Section 16 - This program funds public transit projects in rural areas.

FTA 5311 Formerly Section 18 - 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.

The current Federal transportation legislation, *Moving Ahead for Progress in the 21st Century* (MAP-21) continues many SAFETEA-LU programs and includes several new ones:

National Highway Performance Program (NHPP) [1106]
Under MAP-21, the enhanced National Highway System (NHS) is composed of approximately 220,000 miles of rural and urban roads serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. It includes the Interstate System, all principal arterials (including some not previously designated as part of the NHS) and border crossings on those routes, highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, and the network of highways important to U.S. strategic defense (STRAHNET) and its connectors to major military installations.

The NHPP is authorized at an average of $21.8 billion per year to support the condition and performance of the NHS, for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in an asset management plan of a State for the NHS.

MAP-21 establishes a performance basis for maintaining and improving the NHS.

- States are required to develop a risk- and performance-based asset management plan for the NHS to improve or preserve asset condition and system performance; plan development process must be reviewed and recertified at least every four years. The penalty for failure to implement this requirement is a reduced Federal share for NHPP projects in that year (65 percent instead of the usual 80 percent).

- The Secretary will establish performance measures for Interstate and NHS pavements, NHS bridge conditions, and Interstate and NHS system performance. States will establish targets for these measures, to be periodically updated.
- MAP-21 also requires minimum standards for conditions of Interstate pavements and NHS bridges by requiring a State to devote resources to improve the conditions until the established minimum is exceeded. The Secretary will establish the minimum standard for Interstate pavement conditions, which may vary by geographic region. If Interstate conditions in a State fall below the minimum set by the Secretary, the State must devote resources (a specified portion of NHPP and STP funds) to improve conditions. MAP-21 establishes the minimum standard for NHS bridge conditions – if more than 10 percent of the total deck area of NHS bridges in a State is on structurally deficient bridges, the State must devote a portion of NHPP funds to improve conditions.

Surface Transportation Program (STP) [1108]
This program provides funds for state and local roadways that are classified higher than Rural Minor Collector or Local. These funds, however, are flexible and may be used for a variety of other activities, such as transit projects. FHWA share is 80%, state/local share 20%.

Highway Safety Improvement Program (HSIP) [1112]
This program provides funds for safety improvements that are directed to the top 5% of high safety problem locations within the region. A Road Safety Audit (RSA) with federal, state, regional, and local partners collaborates on the crash experience, geometric configuration, and other factors to identify potential improvements.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) [1113]
This funding category directs funds towards demonstration transportation projects in Clean Air Act non-attainment areas for ozone and carbon monoxide. Projects must contribute to attainment of national ambient air quality standards. FHWA share is 80%, state/local share is 20%.

Transportation Alternatives (TA) [1122]
MAP-21 establishes a new program to provide for a variety of alternative transportation projects that were previously eligible activities under separately funded programs. This program is funded at a level equal to two percent of the total of all MAP-21 authorized Federal-aid highway and highway research funds, with the amount for each State set aside from the State's formula apportionments. Unless a State opts out, it must use a specified portion of its TA funds for recreational trails projects. Eligible activities include:

- Transportation alternatives (new definition incorporates many transportation enhancement activities and several new activities)
- Recreational trails program (program remains unchanged)

- Safe routes to schools program
- Planning, designing, or constructing roadways within the right-of way of former Interstate routes or other divided highways.

Fifty percent of TA funds are distributed to areas based on population (suballocated), similar to the STP. States and MPOs for urbanized areas with more than 200,000 people will conduct a competitive application process for use of the suballocated funds; eligible applicants include tribal governments, local governments, transit agencies, and school districts. Options are included to allow States flexibility in use of these funds.

Federal Lands and Tribal Transportation Programs [1119]
MAP-21 continues to acknowledge the importance of access to federal and tribal lands. Recognizing the need for all public Federal and tribal transportation facilities to be treated under uniform policies similar to the policies that apply to Federal-aid highways and other public transportation facilities, MAP-21 creates a unified program for Federal lands transportation facilities, Federal lands access transportation facilities, and tribal transportation facilities.

- The *Federal Lands Transportation Program* provides $300 million annually for projects that improve access within the Federal estate, such as national forests and national recreation areas, on infrastructure owned by the Federal government. This program combines the former Park Roads and Refuge Roads programs, and adds three new Federal land management agency (FLMA) partners. A portion of the funds will support traditional partner agencies at current funding levels, with new partners competing for a modest portion. All FLMA partners will administer the program using a new performance management model.
- The *Federal Lands Access Program* provides $250 million annually for projects that improve access to the Federal estate on infrastructure owned by States and local governments. Replacing and expanding the Forest Highways program, projects providing access to any Federal lands are eligible for this new comprehensive program. Funds are distributed by formula based on recreational visitation, Federal land area, Federal public road mileage, and the number of Federal public bridges. Eighty percent of funds go to States with large areas of public land. States are required to provide a non-Federal match for program funds (which has not been the case historically for Federal lands highway funding). Programming decisions will be made locally using a tri-party model in each State comprised of representatives from FHWA, State DOT, and local government, in consultation with applicable FLMAs.
- The *Tribal Transportation Program* provides $450 million annually for projects that improve access to and within Tribal lands. This program generally continues the existing Indian Reservation Roads program, while

adding new setasides for tribal bridge projects (in lieu of the existing Indian Reservation Road Bridge program) and tribal safety projects. It continues to provide setasides for program management and oversight and tribal transportation planning. A new statutory formula for distributing funds among tribes, based on tribal population, road mileage, and average funding under SAFETEA-LU, plus an equity provision, is to be phased in over a 4 year period.

MAP-21 also authorizes the *Tribal High Priority Projects Program*, a discretionary program modeled on an earlier program that was funded by setaside from the Indian Reservation Roads Program. MAP-21 provides $30 million per year from the General fund (subject to appropriation) for this new program. [1123]

Emergency Relief [1107]
The Emergency Relief (ER) program assists Federal, State, tribal and local governments with the expense of repairing serious damage to Federal-aid, tribal, and Federal Lands highways resulting from natural disasters or catastrophic failures. Unlike other highway programs, ER is funded by a permanent authorization of $100 million per year.

MAP-21 continues the ER program, with some changes in requirements:

- State must apply and provide a complete list of project sites and costs within two years of the event; cost may not exceed the cost to repair or reconstruct a comparable facility.
- For emergency repairs, a 100 percent Federal share is allowed during the first 180 days following a disaster. MAP-21 allows the Secretary to extend the time period if access to damaged areas is limited.
- Debris removal for major disasters declared under the Stafford Act will be funded by FEMA.
- Maintenance and operation of additional ferryboats or transit is eligible as a temporary substitute service.

Workforce Development and DBE [1109]
MAP-21 continues current law goals for use of small business concerns owned and controlled by socially and economically disadvantaged individuals. On-the-Job Training and DBE Supportive Services programs are continued without change. States may continue to use apportioned funds (except Metropolitan Planning or Ferry Program) for surface transportation workforce development, training, education, and small business capacity building.

Bridge and Tunnel Inspection [1111]
To provide for continued improvement to bridge and tunnel conditions essential to protect the safety of the traveling public and allow for the efficient movement of people and goods on which the U.S. economy relies, MAP-21 requires inspection and inventory of highway bridges and tunnels on public roads. No dedicated funds

are provided for inspections, but it is an eligible use of NHPP, STP, HSIP, FHWA administrative, Tribal Transportation, and Research funds.

Territorial and Puerto Rico Highway Program [1114]
MAP-21 continues funding for the Puerto Rico Highway program ($150 million annually) and the Territorial Highway program ($40 million annually).

Projects of National and Regional Significance [1120]
MAP-21 authorizes $500 million from the General Fund (subject to appropriation) in FY 2013 only, to fund critical high-cost surface transportation capital projects that will accomplish national goals, such as generating national/regional economic benefits and improving safety, and that are difficult to complete with existing Federal, State, local, and private funds. States, tribes, transit agencies, and multi-State or multi-jurisdictional groups of these entities are eligible to apply for competitive grant funding.

Construction of Ferry Boats and Ferry Terminal Facilities [1121]
It provides $67 million annually to construct ferry boats and ferry terminal facilities, to be distributed by formula. Unlike the former ferry boat discretionary program, there are no set-asides for specific States.

Appalachian Development Highway System (ADHS) [1528]
The ADHS program is continued, but without separate funding. Portions that are on the NHS are eligible for NHPP funding, and ADHS routes, including local access roads, are eligible for STP funding. To encourage the completion of the ADHS, States are required to submit plans for completion of the system and an increased Federal share is provided.

CAPE COD TIP PROJECTS

B1. CAPE COD PROJECTS, FEDERAL AID AND NON FEDERAL AID

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

Programming/Implementation Note:

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 PROJECTS

The Cape Cod federal aid target amounts, from Federal Highway Administration sources through the Commonwealth of Massachusetts, Massachusetts Highway Department, based on approximately 4.58% of the statewide amounts, are listed below, and the current amount programmed is the right column.

Projects programmed in years 2014-2017 reflect 2014 cost estimates. An inflation rate of 4% per year is added to project cost estimates in years 2015-2017, and therefore, the project cost estimates are by Year Of Expenditure (YOE) for the target projects.

YEAR	Total Federal Aid	Amount Programmed
2014	$ 8,426,248	$ 8,426,248
2015	$ 7,248,090	$ 6,847,610
2016	$ 7,998,143	$ 7,711,200
2017	$ 7,998,143	$ 7,168,000
TOTALS:	$ 31,670,624	$ 30,153,058

The list of specific Cape Cod projects is presented on the following pages.

2014 Cape Cod MPO Transportation Improvement Program

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2014 Cape Cod TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects											
►STP - Surface Transportation Program											
	No Projects Programmed										
			STP Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►HSIP - Highway Safety Improvement Program											
606178	BOURNE-RESURFACING & SAFETY UPGRADING ON ROUTE 28 (GENERAL MACARTHUR BOULEVARD)	5	HSIP	$ 630,457	$ 567,411	$ 63,046	CONSTRUCTION Total cost $8,417,977 ($7,787,520 NHPP + $630,457 HISP)	N/A	0	N/A	
				$ 630,457	$ 567,411	$ 63,046	◄ Funding Split Varies by Project	Quantified	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program											
604488	DENNIS- YARMOUTH- CAPE COD RAIL TRAIL EXTENSION	5	CMAQ	$ 7,234,135	$ 5,787,308	$ 1,446,827	TOTAL FUNDED $9,508,979 ($7,234,133 in 2014 CMAQ + $178,764 in 2014 TAP + $2,096,080 for Bass River Bridge portion in 2015 [TI 173 MA 209]), 25% Design estimate adjusted to 2014 = $9,694,773, project scope may need to be adjusted	Quantified	47094.6	N/A	
	CCRTA - NEW TRANSIT SERVICE DEMONSTRATION BOURNE TO SANDWICH ($187,360 TOTAL)	5	CMAQ>FTA	$ 149,888	$ 149,888	$ -	$149,888 TRANSFER TO FTA, CMAQ Year 3 out of 3 ($149,888 CMAQ with $37,472 CCRTA match for $187,360 Total cost) 100% design	Quantified	67711.382	N/A	
	CCRTA - NEW TRANSIT SERVICE DEMONSTRATION BOURNE TO FALMOUTH ($185,955 TOTAL)	5	CMAQ>FTA	$ 148,764	$ 148,764	$ -	$148,764 TRANSFER TO FTA, CMAQ Year 3 out of 3 ($148,764 CMAQ with $37,191 CCRTA match for $185,955 Total cost) 100% design	Quantified	59103.409	N/A	
	CCNS- NEW TRANSIT SERVICE DEMONSTRATION OUTER CAPE BIKE SHUTTLE	5	CMAQ>FTA	$ 84,240	$ 84,240	$ -	Transfer to FTA for CCNS, $84,240 CMAQ with $16,848 NPS match for a total project cost of $101,088. (100% federal funds) Year 2 of 3, 100% design	Quantified	628390.8	N/A	
			CMAQ Subtotal ►	$ 7,617,027	$ 6,170,200	$ 1,446,827	◄ 80% Federal + 20% Non-Federal	Quantified	802300.191		
►TAP Transportation Alternatives Program											
604488	DENNIS- YARMOUTH- CAPE COD RAIL TRAIL EXTENSION	5	TAP	$ 178,764	$ 143,011	$ 35,753	TOTAL FUNDED $9,508,979 ($7,234,135 in 2014 CMAQ + $178,764 in 2014 TAP + $2,096,080 for Bass River Bridge portion in 2015 [TI 173 MA 209]), 25% Design estimate adjusted to 2014 = $9,694,773, project scope may need to be adjusted	Quantified	47094.6	N/A	
			TAP Subtotal ►	$ 178,764	$ 143,011	$ 35,753	◄ 80% Federal + 20% Non-Federal	Quantified	47094.6		

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 8,426,248	**$ 8,426,248**	**◄Total**	**$ -**	**Target Funds Available**
Total STP Programmed ►	$ -	$ 5,439,085	◄ Max. **STP**	**$ 5,439,085**	STP Available
Total HSIP Programmed ►	$ 630,457	$ 630,457	◄ Min. **HSIP**	**$ -**	HSIP Minimum Met
Total CMAQ Programmed ►	$ 7,617,027	$ 2,177,942	◄ Min. **CMAQ**	**$ (5,439,085)**	CMAQ Minimum Met
Total TAP Programmed ►	$ 178,764	$ 178,764	◄ Min. **TAP**	**$ -**	TAP Minimum Met

►Section 1B / Federal Aid Bridge Projects											
	No Projects Programmed							N/A	0	N/A	
			BR Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Section 1C / Federal Aid Non-Target Projects											
►Earmarks											
	No Projects Programmed							N/A	0	N/A	
			Earmarks Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Earmark	Quantified	0		
►Other											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding	Quantified	0		
►Section 1D / Federal Aid Major & State Category Projects											
►IM - Interstate Maintenance											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			IM Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal	Quantified	0		
►NHPP - National Highway Performance Program											
606178	BOURNE-RESURFACING & SAFETY UPGRADING ON ROUTE 28 (GENERAL MACARTHUR BOULEVARD)	5	NHPP	$ 7,787,520	6,230,016	1,557,504	CONSTRUCTION Total cost $8,417,977 ($7,787,520 NHPP + $630,457 HISP)	N/A	0	N/A	

2014 Cape Cod MPO Transportation Improvement Program

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2014 Cape Cod TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description ▼
	NHPP Subtotal ►			$ 7,787,520	$ 6,230,016	$ 1,557,504	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Other											
	No Projects Programmed			$ -	-	-		N/A	0	N/A	
	Other Subtotal ►			$ -	$ -	$ -	◄ Funding Split Varies by Funding	Quantified	0		
►Section 2A / Non-Federal Projects											
	No Projects Programmed			$ -		$ -		N/A	0	N/A	
	Non-Federal Projects Subtotal►			$ -		$ -	◄100% Non-Federal	Quantified	0		
►Section 2B / Non-Federal Bridge Projects											
603690	CHATHAM- BRIDGE REPLACEMENT, C-07-01, BRIDGE STREET OVER THE MITCHELL RIVER	5	ABP-GANS	$ 14,400,000		$ 14,400,000	Total cost $14,400,000 Design status 25%	N/A	0	N/A	
	Non-Federal Bridge Projects Subtotal►			$ 14,400,000		$ 14,400,000	◄100% Non-Federal	Quantified	0		

2014 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼			Total Quantified Impact ▼	2014 Cape Cod TIP GHG Tracking Summary
Total ►	$ 16,213,768	$ 14,400,000	$ 30,613,768	◄ Total Spending in Region	Quantified	849394.791	
Federal Funds ►	$ 13,110,639		$ 13,110,639	◄ Total Federal Spending in Region			
Non-Federal Funds ►	$ 3,103,130	$ 14,400,000	$ 17,503,130	◄ Total Non-Federal Spending in			

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

2015 Cape Cod MPO Transportation Improvement Program

5/20/2013 Draft Released
06/24/2013 Endorsement

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description
►Section 1A / Federal Aid Target Projects											
►STP - Surface Transportation Program											
	No Projects Programmed										
			STP Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►HSIP - Highway Safety Improvement Program											
606394	BARNSTABLE- INTERSECTION IMPROVEMENTS @ ROUTE 28 (FALMOUTH ROAD) & BEARSE'S WAY	5	HSIP	$ 2,600,000	$ 2,340,000	$ 260,000	CONSTRUCTION Total $2,500,000, conceptual design and outreach, (4% inflation applied = $2,600,000)	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk Infrastructure	
			HSIP Subtotal ►	$ 2,600,000	$ 2,340,000	$ 260,000	◄ Funding Split Varies by Project Specifications	Quantified	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program											
606164	HARWICH- RECONSTRUCTION OF ROUTE 124 (PLEASANT LAKE AVENUE), FROM HEADWATERS DRIVE TO BREWSTER T.L.	5	CMAQ	$ 3,981,236	$ 3,184,989	$ 796,247	CONSTRUCTION Total cost $4,000,000 (4% inflation applied = $4,160,000 = $3,981,236 CMAQ + $178,764 TAP), conceptual design and outreach (CMAQ analysis to be performed upon completion of FDR)	Qualitative	0	Assumed Nominal Decrease in Emissions from Bicycle and Sidewalk Improvements	
	CCNS- NEW TRANSIT SERVICE DEMONSTRATION OUTER CAPE BIKE SHUTTLE	5	CMAQ>FTA	$ 87,610	$ 87,610	$ -	Transfer to FTA for CCNS, $87,610 CMAQ with $29,753 NPS match for a total project cost of $117,362. (100% federal funds) Year 3 of 3, 100% design	Quantified	628390.8	N/A	
			CMAQ Subtotal ►	$ 4,068,846	$ 3,272,599	$ 796,247	◄ 80% Federal + 20% Non-Federal	Quantified	628390.8		
►TAP Transportation Alternatives Program											
606164	HARWICH- RECONSTRUCTION OF ROUTE 124 (PLEASANT LAKE AVENUE), FROM HEADWATERS DRIVE TO BREWSTER T.L.	5	TAP	$ 178,764	$ 143,011	$ 35,753	CONSTRUCTION Total cost $4,000,000 (4% inflation applied = $4,160,000 = $3,981,236 CMAQ + $178,764 TAP), conceptual design and outreach (CMAQ analysis to be performed upon completion of FDR)	Qualitative	0	Assumed Nominal Decrease in Emissions from Bicycle and Sidewalk Improvements	
			TAP Subtotal ►	$ 178,764	$ 143,011	$ 35,753	◄ 80% Federal + 20% Non-Federal	Quantified	0		

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 6,847,610	**$ 7,248,090**	**◄Total**	**$ 400,480**	**Target Funds Available**
Total STP Programmed ►	$ -	$ 4,840,438	◄ Max. **STP**	**$ 4,840,438**	STP Available
Total HSIP Programmed ►	$ 2,600,000	$ 509,460	◄ Min. **HSIP**	**$ (2,090,540)**	HSIP Minimum Met
Total CMAQ Programmed ►	$ 4,068,846	$ 1,719,428	◄ Min.	**$ (2,349,418)**	CMAQ Minimum Met
Total TAP Programmed ►	$ 178,764	$ 178,764	◄ Min. **TAP**	**$ -**	TAP Minimum Met

►Section 1B / Federal Aid Bridge Projects											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			BR Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Section 1C / Federal Aid Non-Target Projects											
►Earmarks											
607571	DENNIS- YARMOUTH- RAIL TRAIL BASS RIVER BRIDGE CONSTRUCTION	5	TI (2005) TI173	$ 2,096,080	$ 1,676,864	$ 419,216	Earmark to cover Bass River Bridge portion of CCRT extention ($2,096,080 from TI 173 MA 209), Entire CCRT extenstion project TIP funding (2014+2015) = $9,508,979	N/A	0	N/A	
			Earmarks Subtotal ►	$ 2,096,080	$ 1,676,864	$ 419,216	◄ Funding Split Varies by Earmark	Quantified	0		
►Other											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source	Quantified	0		
►Section 1D / Federal Aid Major & State Category Projects											
►IM - Interstate Maintenance											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			IM Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal	Quantified	0		
►NHPP - National Highway Performance Program											
	No Projects Programmed			$ -	-	-		N/A	0	N/A	
			NHPP Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Other											
	No Projects Programmed			$ -	-	-		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding Source	Quantified	0		
►Section 2A / Non-Federal Projects											
	No Projects Programmed			$ -		$ -		N/A	0	N/A	
			Non-Federal Projects Subtotal►	$ -		$ -	◄100% Non-Federal	Quantified	0		

2015 Cape Cod MPO Transportation Improvement Program

5/20/2013 Draft Released
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MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description
►Section 2B / Non-Federal Bridge Projects											
	No Projects Programmed			$ -		$ -		N/A	0	N/A	
	Non-Federal Bridge Projects Subtotal ►			$ -		$ -	◄100% Non-Federal	Quantified	0		

2015 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼	
Total ►	$ 8,943,690	$ -	$ 8,943,690	◄ Total Spending in Region
Federal Funds ►	$ 7,432,474		$ 7,432,474	◄ Total Federal Spending in Region
Non-Federal Funds ►	$ 1,511,216	$ -	$ 1,511,216	◄ Total Non-Federal Spending in Region

Total Quantified Impact ▼	
Quantified	628390.8

2015 Cape Cod TIP GHG Tracking Summary

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

2016 Cape Cod MPO Transportation Improvement Program

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06/24/2013 Endorsement

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description ▼
►Section 1A / Federal Aid Target Projects											
►STP - Surface Transportation Program											
606596	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	5	STP	$ 3,169,236	$ 2,535,389	$ 633,847	CONSTRUCTION Total cost $3,100,000 (8% inflation applied = $3,348,000 = $3,169,236 STP + $178,764 TAP) (POSSIBLE CMAQ for future CMAQ consultation process), outreach and preliminary design	N/A	0	N/A	
			STP Subtotal ►	$ 3,169,236	$ 2,535,389	$ 633,847	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►HSIP - Highway Safety Improvement Program											
607444	FALMOUTH- INTERSECTION IMPROVEMENTS & RELATED WORK AT NORTH FALMOUTH HIGHWAY (ROUTE 28A) & NATHAN ELLIS HIGHWAY (ROUTE	5	HSIP	$ 2,160,000	$ 1,944,000	$ 216,000	CONSTRUCTION Total Cost $2,000,000 (8% inflation applied = $2,160,000) (possible HSIP - RSA to be conducted)	N/A	0	N/A	
									0	N/A	
			HSIP Subtotal ►	$ 2,160,000	$ 1,944,000	$ 216,000	◄ Funding Split Varies by Project	Quantified	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program											
606461	ORLEANS- INTERSECTION IMPROVEMENTS @ ROUTE 6A & MAIN STREET & ROUTE 28 & MAIN STREET	5	CMAQ	$ 2,203,200	$ 1,762,560	$ 440,640	CONSTRUCTION Total cost $2,040,000 (8% inflation applied = $2,203,000) preliminary design	Qualitative	0	Assumed Nominal Decrease in Emissions from Sidewalk Infrastructure	
			CMAQ Subtotal ►	$ 2,203,200	$ 1,762,560	$ 440,640	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►TAP Transportation Alternatives Program											
606596	CHATHAM- IMPROVEMENTS ON WEST MAIN STREET (ROUTE 28), FROM GEORGE RYDER ROAD TO BARN HILL ROAD	5	TAP	$ 178,764	$ 143,011	$ 35,753	CONSTRUCTION Total cost $3,100,000 (8% inflation applied = $3,348,000 = $3,263,320 STP + $178,764 TAP) (POSSIBLE CMAQ for future CMAQ consultation process), outreach and preliminary design	N/A	0	N/A	
			TAP Subtotal ►	$ 178,764	$ 143,011	$ 35,753	◄ 80% Federal + 20% Non-Federal	Quantified	0		

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 7,711,200	**$ 7,998,143**	**◄Total**	**$ 286,943**	**Target Funds**
Total STP Programmed ►	$ 3,169,236	$ 5,590,491	◄ Max. **STP**	**$ 2,421,255**	STP Available
Total HSIP Programmed ►	$ 2,160,000	$ 509,460	◄ Min. **HSIP**	**$ (1,650,540)**	HSIP Minimum Met
Total CMAQ Programmed ►	$ 2,203,200	$ 1,719,428	◄ Min. **CMAQ**	**$ (483,772)**	CMAQ Minimum Met
Total TAP Programmed ►	$ 178,764	$ 178,764	◄ Min. **TAP**	**$ -**	TAP Minimum Met

►Section 1B / Federal Aid Bridge Projects											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			BR Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Section 1C / Federal Aid Non-Target Projects											
►Earmarks											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			Earmarks Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Earmark	Quantified	0		
►Other											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding	Quantified	0		
►Section 1D / Federal Aid Major & State Category Projects											
►IM - Interstate Maintenance											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			IM Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal	Quantified	0		
►NHPP - National Highway Performance Program											
	No Projects Programmed							N/A	0	N/A	
			NHPP Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Other											
	No Projects Programmed			$ -	-	-		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding	Quantified	0		

►Section 2A / Non-Federal Projects

2016 Cape Cod MPO Transportation Improvement Program

5/20/2013 Draft Released
06/24/2013 Endorsement

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	GHG Analysis Type ▼	GHG Impact by the Numbers ▼	GHG Impact Description ▼	Additional Description ▼
	No Projects Programmed			$ -		$ -		N/A	0	N/A	
	Non-Federal Projects Subtotal ►			$ -		$ -	◄ 100% Non-Federal	Quantified	0		

►Section 2B / Non-Federal Bridge Projects

	No Projects Programmed			$ -		$ -		N/A	0	N/A	
	Non-Federal Bridge Projects Subtotal ►			$ -		$ -	◄ 100% Non-Federal	Quantified	0		

2016 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼		Total Quantified Impact ▼	2016 Cape Cod TIP GHG Tracking Summary
Total ►	$ 7,711,200	$ -	$ 7,711,200	◄ Total Spending in Region	Quantified 0	
Federal Funds ►	$ 6,384,960		$ 6,384,960	◄ Total Federal Spending in Region		
Non-Federal Funds ►	$ 1,326,240	$ -	$ 1,326,240	◄ Total Non-Federal Spending in		

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

2017 Cape Cod MPO Transportation Improvement Program

5/20/2013 Draft Released
06/24/2013 Endorsement

2017 Cape Cod TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	Analysis Type ▼	Impact by the	Impact Description ▼	ition al
►Section 1A / Federal Aid Target Projects											
►STP - Surface Transportation Program											
607405	CHATHAM- INTERSECTION IMPROVEMENTS & RELATED WORK AT MAIN STREET (ROUTE 28), DEPOT ROAD, QUEEN ANNE ROAD & CROWELL ROAD	5	STP	$ 2,061,236	$ 1,648,989	$ 412,247	CONSTRUCTION Total Cost $2,000,000 (12% inflation = $2,240,000 = $2,061,236 STP + $178,764 TAP), pre 25%	N/A	0	N/A	
			STP Subtotal ►	$ 2,061,236	$ 1,648,989	$ 412,247	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►HSIP - Highway Safety Improvement Program											
607435	BARNSTABLE- INTERSECTION IMPROVEMENTS @ FALMOUTH ROAD (ROUTE 28) & OSTERVILLE-WEST BARNSTABLE ROAD	5	HSIP	$ 2,240,000	$ 2,016,000	$ 224,000	CONSTRUCTION Total Cost $2,000,000 (12% inflation = $2,240,000), pre 25%	N/A	0	N/A	
			HSIP Subtotal ►	$ 2,240,000	$ 2,016,000	$ 224,000	◄ Funding Split Varies by Project	Quantified	0		
►CMAQ - Congestion Mitigation and Air Quality Improvement Program											
606272	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANNOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	CMAQ	$ 2,688,000	$ 2,150,400	$ 537,600	TOTAL $2,400,000 (12% inflation = $2,688,000) (HSIP, RSA performed; CMAQ Analysis to be performed upon completion of FDR), outreach	N/A	0	N/A	
			CMAQ Subtotal ►	$ 2,688,000	$ 2,150,400	$ 537,600	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►TAP Transportation Alternatives Program											
607405	CHATHAM- INTERSECTION IMPROVEMENTS & RELATED WORK AT MAIN STREET (ROUTE 28), DEPOT ROAD, QUEEN ANNE ROAD & CROWELL ROAD	5	TAP	$ 178,764	$ 143,011	$ 35,753	CONSTRUCTION Total Cost $2,000,000 (12% inflation = $2,240,000 = $2,061,236 STP + $178,764 TAP), pre 25%	N/A	0	N/A	
			TAP Subtotal ►	$ 178,764	$ 143,011	$ 35,753	◄ 80% Federal + 20% Non-Federal	Quantified	0		

►Section 1A / Fiscal Constraint Analysis

Total Federal Aid Target Funds Programmed ►	$ 7,168,000	**$ 7,998,143**	**◄Total**	**$ 830,143**	**Target Funds**
Total STP Programmed ►	$ 2,061,236	$ 5,590,491	◄ Max. **STP**	**$ 3,529,255**	STP Available
Total HSIP Programmed ►	$ 2,240,000	$ 509,460	◄ Min. **HSIP**	**$ (1,730,540)**	HSIP Minimum Met
Total CMAQ Programmed ►	$ 2,688,000	$ 1,719,428	◄ Min. **CMAQ**	**$ (968,572)**	CMAQ Minimum Met
Total TAP Programmed ►	$ 178,764	$ 178,764	◄ Min. **TAP**	**$ -**	TAP Minimum Met

►Section 1B / Federal Aid Bridge Projects											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			BR Subtotal ►	$ -	$ -	$ -	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Section 1C / Federal Aid Non-Target Projects											
►Earmarks											
	No Projects Programmed										
			Earmarks Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Earmark	Quantified	0		
►Other											
607398	YARMOUTH- BARNSTABLE- CAPE COD RAIL TRAIL EXTENSION, FROM STATION AVENUE (YARMOUTH) TO ROUTE 132 (BARNSTABLE)	5	CMAQ	$ 6,000,000	$ 4,800,000	$ 1,200,000	TOTAL COST $6,000,000 for 2017	Qualitative	0	Assumed Nominal Decrease in Emissions from Bicycle Infrastructure	
			Other Subtotal ►	$ 6,000,000	$ 4,800,000	$ 1,200,000	◄ Funding Split Varies by Funding	Quantified	0		
►Section 1D / Federal Aid Major & State Category Projects											
►IM - Interstate Maintenance											
	No Projects Programmed			$ -	$ -	$ -		N/A	0	N/A	
			IM Subtotal ►	$ -	$ -	$ -	◄ 90% Federal + 10% Non-Federal	Quantified	0		
►NHPP - National Highway Performance Program											
606179	DENNIS - HARWICH - BREWSTER - ORLEANS - RESURFACING AND RELATED WORK ON RTE. 6	5	NHPP	$ 8,357,798	6,686,238.4	1,671,559.6	TOTAL COST $8,357,798 for 2017 (31 total lane miles, 2.5 lanes/shoulder from milemarker 78.5 to 90.9), preliminary design	N/A	0	N/A	
			NHPP Subtotal ►	$ 8,357,798	$ 6,686,238	$ 1,671,560	◄ 80% Federal + 20% Non-Federal	Quantified	0		
►Other											

2017 Cape Cod MPO Transportation Improvement Program

5/20/2013 Draft Released
06/24/2013 Endorsement

2017 Cape Cod TIP GHG Tracking

MassDOT Project ID ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼	Analysis Type ▼	Impact by the	Impact Description ▼	ition al
	No Projects Programmed			$ -	-	-		N/A	0	N/A	
			Other Subtotal ►	$ -	$ -	$ -	◄ Funding Split Varies by Funding	Quantified	0		

►Section 2A / Non-Federal Projects

	No Projects Programmed			$ -		$ -		N/A	0	N/A	
			Non-Federal Projects Subtotal►	$ -		$ -	◄100% Non-Federal	Quantified	0		

►Section 2B / Non-Federal Bridge Projects

	No Projects Programmed										
				$ -		$ -		N/A	0	N/A	
			Non-Federal Bridge Projects Subtotal►	$ -		$ -	◄100% Non-Federal	Quantified	0		

2017 Cape Cod MPO TIP Summary

	TIP Section 1: ▼	TIP Section 2: ▼	Total of All Projects ▼		Total Quantified Impact ▼	2017 Cape Cod TIP GHG Tracking Summary
Total ►	$ 21,525,798	$ -	$ 21,525,798	◄ Total Spending in Region	Quantified 0	
Federal Funds ►	$ 17,444,638		$ 17,444,638	◄ Total Federal Spending in Region		
Non-Federal Funds ►	$ 4,081,160	$ -	$ 4,081,160	◄ Total Non-Federal Spending in		

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Transportation Improvement Program (TIP)

Project List (FY2014)

FTA Program	Transit Agency	FTA Activity Line Item	Project Description	Carryover or Earmark Detail	Federal Funds	RTACAP	MAP	ITCCAP	TDC	SCA	LocalFunds	Total Cost
5307												
5307	Cape Cod Regional Transit Authority (CCRTA)	111204	BUY REPLACEMENT		$272,000	$68,000	$0	$0	$0	$0	$0	$340,000
5307	Cape Cod Regional Transit Authority (CCRTA)	113401	REHAB/RENOVATE - BUS TERMINAL		$266,400	$66,600	$0	$0	$0	$0	$0	$333,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES		$958,400	$239,600	$0	$0	$0	$0	$0	$1,198,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114207	ACQUIRE - ADP HARDWARE		$28,000	$7,000	$0	$0	$0	$0	$0	$35,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119302	CONSTRUCTION - BUS SHELTERS		$44,000	$11,000	$0	$0	$0	$0	$0	$55,000
5307	Cape Cod Regional Transit Authority (CCRTA)	117C00	NON FIXED ROUTE ADA PARA SERV		$482,103	$0	$0	$0	$0	$120,526	$0	$602,629
5307	Cape Cod Regional Transit Authority (CCRTA)	117L00	MOBILITY MANAGEMENT		$1,095,574	$0	$0	$0	$0	$273,894	$0	$1,369,468
5307	Cape Cod Regional Transit Authority (CCRTA)	117A00	PREVENTIVE MAINTENANCE		$2,010,977	$0	$0	$0	$0	$502,745	$0	$2,513,722
5307	Cape Cod Regional Transit Authority (CCRTA)	300900	OPERATING ASSISTANCE		$1,404,190	$0	$0	$0	$0	$1,404,190	$0	$2,808,380
5307	Cape Cod Regional Transit Authority (CCRTA)	119309	CONSTRUCT ENHANCED ADA ACCESS		$17,450	$4,362	$0	$0	$0	$0	$0	$21,812
				Subtotal	$6,579,094	$396,562	$0	$0	$0	$2,301,355	$0	$9,277,011
5309												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5310												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5311												
5311	Cape Cod Regional Transit Authority (CCRTA)	300900	OPERATING ASSISTANCE		$46,018	$0	$0	$0	$0	$46,018	$0	$92,036
				Subtotal	$46,018	$0	$0	$0	$0	$46,018	$0	$92,036
5337												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5339												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Non-Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
				Total	$6,625,112	$396,562	$0	$0	$0	$2,347,373	$0	$9,369,047

Transportation Improvement Program (TIP)

Project List (FY2015)

FTA Program	Transit Agency	FTA Activity Line Item	Project Description	Carryover or Earmark Detail	Federal Funds	RTACAP	MAP	ITCCAP	TDC	SCA	LocalFunds	Total Cost
5307												
5307	Cape Cod Regional Transit Authority (CCRTA)	114402	REHAB/RENOVATE - MAINTENANCE FACILITY	2014	$1,200,000	$300,000	$0	$0	$0	$0	$0	$1,500,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114207	ACQUIRE - ADP HARDWARE	2013	$32,800	$8,200	$0	$0	$0	$0	$0	$41,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119302	CONSTRUCTION - BUS SHELTERS	2013	$44,520	$11,130	$0	$0	$0	$0	$0	$55,650
5307	Cape Cod Regional Transit Authority (CCRTA)	117C00	NON FIXED ROUTE ADA PARA SERV	2012	$496,566	$0	$0	$0	$0	$124,142	$0	$620,708
5307	Cape Cod Regional Transit Authority (CCRTA)	117L00	MOBILITY MANAGEMENT	2012, 2013	$958,974	$0	$0	$0	$0	$273,894	$0	$1,369,468
5307	Cape Cod Regional Transit Authority (CCRTA)	117A00	PREVENTIVE MAINTENANCE	2013	$2,071,307	$0	$0	$0	$0	$517,826	$0	$2,589,133
5307	Cape Cod Regional Transit Authority (CCRTA)	300900	OPERATING ASSISTANCE	2012	$600,000	$0	$0	$0	$0	$600,000	$0	$1,200,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119308	CONSTRUCT SIGNAGE	2013	$18,774	$4,693	$0	$0	$0	$0	$0	$23,467
5307	Cape Cod Regional Transit Authority (CCRTA)	113400	REHAB/RENOVATE BUS STATIONS	2013	$280,000	$70,000	$0	$0	$0	$0	$0	$350,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2013	$360,000	$90,000	$0	$0	$0	$0	$0	$450,000
				Subtotal	$6,062,941	$484,023	$0	$0	$0	$1,515,862	$0	$8,199,426
5309												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5310												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5311												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5337												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5339												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Non-Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
				Total	$6,062,941	$484,023	$0	$0	$0	$1,515,862	$0	$8,199,426

Transportation Improvement Program (TIP)

Project List (FY2016)

FTA Program	Transit Agency	FTA Activity Line Item	Project Description	Carryover or Earmark Detail	Federal Funds	RTACAP	MAP	ITCCAP	TDC	SCA	LocalFunds	Total Cost
5307												
5307	Cape Cod Regional Transit Authority (CCRTA)	113400	REHAB/RENOVATE BUS STATIONS	2013, 2014	$272,000	$109,180	$0	$0	$0	$0	$0	$545,900
5307	Cape Cod Regional Transit Authority (CCRTA)	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2014	$18,345	$173,045	$0	$0	$0	$0	$0	$865,225
5307	Cape Cod Regional Transit Authority (CCRTA)	114207	ACQUIRE - ADP HARDWARE		$44,000	$11,000	$0	$0	$0	$0	$0	$55,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119306	CONSTRUCT BICYCLE ACCESS, FACIL & EQUIP ON BUSES		$42,436	$10,609	$0	$0	$0	$0	$0	$53,045
5307	Cape Cod Regional Transit Authority (CCRTA)	117C00	NON FIXED ROUTE ADA PARA SERV	2013	$511,463	$0	$0	$0	$0	$127,866	$0	$639,329
5307	Cape Cod Regional Transit Authority (CCRTA)	117L00	MOBILITY MANAGEMENT	2013	$1,095,574	$0	$0	$0	$0	$273,894	$0	$1,369,468
5307	Cape Cod Regional Transit Authority (CCRTA)	117A00	PREVENTIVE MAINTENANCE	2014	$2,133,446	$0	$0	$0	$0	$533,361	$0	$2,666,807
5307	Cape Cod Regional Transit Authority (CCRTA)	300900	OPERATING ASSISTANCE	2013	$700,000	$0	$0	$0	$0	$700,000	$0	$1,400,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119303	CONSTRUCT LANDSCAPING / SCENIC BEAUTIFICATION	2014	$22,756	$5,689	$0	$0	$0	$0	$0	$28,445
				Subtotal	$4,840,020	$309,523	$0	$0	$0	$1,635,121	$0	$7,623,219
5309												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5310												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5311												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5337												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5339												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Non-Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
				Total	$4,840,020	$309,523	$0	$0	$0	$1,635,121	$0	$7,623,219

Transportation Improvement Program (TIP)

Project List (FY2017)

FTA Program	Transit Agency	FTA Activity Line Item	Project Description	Carryover or Earmark Detail	Federal Funds	RTACAP	MAP	ITCCAP	TDC	SCA	LocalFunds	Total Cost
5307												
5307	Cape Cod Regional Transit Authority (CCRTA)	113400	REHAB/RENOVATE BUS STATIONS	2015	$449,822	$112,455	$0	$0	$0	$0	$0	$562,277
5307	Cape Cod Regional Transit Authority (CCRTA)	119302	CONSTRUCTION - BUS SHELTERS		$46,400	$11,600	$0	$0	$0	$0	$0	$58,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114207	ACQUIRE - ADP HARDWARE		$52,000	$13,000	$0	$0	$0	$0	$0	$65,000
5307	Cape Cod Regional Transit Authority (CCRTA)	119305	CONSTRUCT PED ACCESS / WALKWAYS		$20,748	$5,187	$0	$0	$0	$0	$0	$25,935
5307	Cape Cod Regional Transit Authority (CCRTA)	117C00	NON FIXED ROUTE ADA PARA SERV	2015	$526,807	$0	$0	$0	$0	$131,702	$0	$658,509
5307	Cape Cod Regional Transit Authority (CCRTA)	117A00	PREVENTIVE MAINTENANCE	2015	$2,197,449	$0	$0	$0	$0	$549,362	$0	$2,746,811
5307	Cape Cod Regional Transit Authority (CCRTA)	117L00	MOBILITY MANAGEMENT	2015	$1,095,574	$0	$0	$0	$0	$273,894	$0	$1,369,468
5307	Cape Cod Regional Transit Authority (CCRTA)	300900	OPERATING ASSISTANCE	2015	$800,000	$0	$0	$0	$0	$800,000	$0	$1,600,000
5307	Cape Cod Regional Transit Authority (CCRTA)	114200	ACQUISITION OF BUS SUPPORT EQUIP/FACILITIES	2015	$712,946	$178,236	$0	$0	$0	$0	$0	$891,182
				Subtotal	$5,901,746	$320,478	$0	$0	$0	$1,754,958	$0	$7,977,182
5309												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5310												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5311												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5337												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
5339												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
Other Non-Federal												
				Subtotal	$0	$0	$0	$0	$0	$0	$0	$0
				Total	$5,901,746	$320,478	$0	$0	$0	$1,754,958	$0	$7,977,182

Cape Projects Advertised and Status

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Advertising DATE	AWARD or BID OPENING DATE	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost or award amount	FUND advertised	YEAR adver-tised (FFY)
56206	BOURNE	Bridge, Perry St, replacement/related BR# B-17-010	5/22/93	8/4/93	$857,648	BR	11/30/94	?town	$857,648	**BR**	1993
600326	DEN to ORL	Route 6, Install surface mount delineators	11/13/93	3/24/94	$37,717	NFA	YES	state	$37,717	**NFA**	1993
	Eastham, Wellfleet	Cape Cod Rail Trail (extension)	3/6/93	6/9/93	$1,239,333	CMQ	9/30/94	DEM	$1,239,333	**CMAQ**	1993
53355	FALMOUTH	Bridge, Menauhant Rd over Green Pond, BR#F-03-002	12/31/93	11/9/94	$2,274,690	BR	12/1/96	?town	$2,274,690	**BR**	1993
600485	HARWICH	Bridge #H-10-014, Rte 137 Br betterment over Rte 6	12/18/93	5/25/94	$564,384	NFA BR	7/15/95	state	$564,384	**NFA**	1993
600111	ORLEANS	Roof Replacment Orleans Depot, Bay Ridge La & 6, 6A	6/26/93	11/24/93	$68,500	NFA	done?	state	$68,500	**NFA**	1993
17400	SANDWICH	Bridge#S-04-02/Conrail, Old County Rd & Related	12/4/93	7/6/94	$282,240	BR	7/29/96	town	$282,240	**BR**	1993
	1993	ADVERTISING PROGRAM						***TOTAL***	**$5,324,512**		
600897	BARNSTABLE	Route 132 @ Bearses Way Intersection	12/10/94	3/1/95	$357,790	NFA	6/14/96	town	$357,790	**NFA**	1994
600694	Barns, Bour, Sand	Route 6 Sign Update & Replacement	12/17/94	4/26/95	$590,021	NFA	11/30/95	state	$590,021	**NFA**	1994
600492	BOURNE	Rte 6@Bournedale & Nightingale Rds, sig & safety	2/12/94	7/27/94	$662,568	NFA	7/31/98	state	$662,568	**NFA**	1994
600728	Dennis, Yarmouth	Bridge Maint. Rte 6, Y-1-7,15,16, D-7-11	10/8/94	1/11/95	$1,392,855	NFA	9/16/96	state	$1,392,855	**NFA**	1994
600407	MASHPEE	Rte 151 Resurface & related	9/3/94	11/16/94	$145,680	NFA	10/1/95	?town	$145,680	**NFA**	1994
	1994	ADVERTISING PROGRAM						***TOTAL***	**$3,148,914**		
	BARNSTABLE	Route 6 rest area renovations	9/16/95	1/17/96	$168,736	NFA	8/8/96	state	$168,736	**NFA**	1995
601219	BARNSTABLE	SSA ferry terminal & marine facilities	4/22/95	8/16/95	$4,568,000	FBD	7/9/97	SSA	$4,568,000	**FBD**	1995
600564	HARWICH	Rte 124 @ Rte 6, Park & Ride Lot Construction	4/1/95	8/30/95	$182,900	NFA	8/19/96	state	$182,900	**NFA**	1995
601039	MASHPEE	Route 130 section, resurfacing & related	2/4/95	5/2/95	$160,369	NFA	7/20/95	town	$160,369	**NFA**	1995
	1995	ADVERTISING PROGRAM						***TOTAL***	**$5,080,005**		
601396	BARNSTABLE	Route 28 Recons & Signals on a section	9/21/96	5/12/98	$1,249,101	STP	11/30/99	town	$1,278,140	**STP**	1996
601194	Bourne / Plymouth	Route 25 EB to rest area, water service tie in	11/25/95	complete	$361,495	NFA	7/13/96	state	$545,719	**NFA**	1996
601423	BOURNE	Buzzards Bay Train Station Improvements	9/21/96	1/7/98	$149,747	STP-E	12/31/99	town	$155,677	**STP-E**	1996
601418	BOURNE	Monument Beach Train Station Improvements	9/21/96	2/11/98	$28,698	STP-E	completed 1999	town	$32,163	**STP-E**	1996
601634	EASTHAM	Route 6 / Rogers Lane, drainage	12/2/95	complete readv 6/15/96		NFA	11/6/96	state	$30,950	**NFA**	1996
601257	FALMOUTH	Route 151 @ Sandwich Rd	10/14/95	complete	$408,260	STP	7/5/97	town	$499,676	**STP**	1996
601690	FALMOUTH	Construct Shining Sea Bikeway, Phase II	6/15/96	complete	$299,974	NFA	7/12/97	town	$273,399	**NFA**	1996
600402	FALMOUTH	Route 151 Section	9/28/96	10/7/97	$1,524,864	STP	5/28/99	town	$1,622,950	**STP**	1996
601563	TRURO	Cons. Two Chemical Storage Sheds	6/1/96	10/8/96	$200,000	NFA	?	state	$199,850	**NFA**	1996
601084	YARMOUTH	Route 6 Bridges #'s: Y-1-5, 5a, 6, 12, 13, 14	10/21/95	2/21/96	$986,000	NFA	1/14/98	state	$986,332	**NFA**	1996
601859	YARMOUTH	Recons railroad grade crossing Willow St	9/21/96	11/5/96	$375,222	NFA	7/30/97	state	$269,298	**NFA**	1996
	1996	ADVERTISING PROGRAM						***TOTAL***	**$5,894,154**		
601541	BARNS-ORLEANS	Route 6 safety improvements, signs	11/23/96	3/11/97		NFA	complete 1997	state	$659,265	**NFA**	1997
105701	BARNSTABLE	Route 28 section	12/28/96	4/1/97		NFA	11/30/98	state	$4,168,495	**NFA**	1997
600969	EASTHAM	Bridge, Bridge Rd over Boat Meadow River #E-04-001	2/22/97	6/24/97		NFA	completed 1999	town	$565,363	**NFA**	1997
601095	FALMOUTH	Bridge, Quaker Rd over Herring Brook #F-03-011	1/11/97	5/28/97	$1,198,203	BR	complete may00	town	$1,256,079	**BR**	1997
600517	FALMOUTH	Pedestrian signal Rte 28 @ Falmouth Mall	2/22/97	5/6/97	$54,738	NFA	11/1/97	town	$51,920	**NFA**	1997
601465	HARWICH	Cons of Bike Path CCRT extension	1/18/97	8/26/97	$698,302	NFA	8/22/98	town	$674,451	**NFA**	1997
601883	MASHPEE	Great Neck Rd South section	2/1/97	4/29/97	$667,492	NFA	complete	town	$750,910	**NFA**	1997
601882	MASHPEE	Route 151 section	2/15/97	11/4/97?		NFA	complete	town	$344,993	**NFA**	1997
601706	MASHPEE	Route151 @ Old Barns Rd (signal)	9/6/97	11/18/97	$279,706	NFA	complete 1999	town	$315,539	**NFA**	1997
601849	~~SANDWICH~~	~~Route 6 Rest Area Site Improvements WB~~	~~2/22/97~~	5/6/97 bids opened, rejected			readvertised	state		**NFA**	1997
601849	~~SANDWICH~~	~~Route 6 Rest Area Site Improvements WB~~	~~6/14/97~~	9/97 contractor withdrew			readvertised 98	state		**NFA**	1997
117808	SANDWICH	Route 6A, Tupper Rd to Chipman Rd	2/22/97	5/6/98	$1,812,077	NFA	11/30/00	state	$2,212,787	**NFA**	1997
601582	BARNSTABLE	Park & Ride lot expansion, Rte 6 at Rte 132	6/21/97	8/26/97	$799,528	CMQ	8/29/98	state	$931,620	**CMAQ**	1997
600795	YARMOUTH	Route 28@ Forest Rd	6/14/97	5/6/98	$539,380	NFA	??? deobligated	state		**NFA**	1997
	1997	ADVERTISING PROGRAM						***TOTAL***	**$11,931,422**		
601801	BARNSTABLE	Barns, Route 132 Signal Coordination	10/11/97	5/6/98	$249,305	NFA	9/26/98	town	$290,000	**NFA**	1998
600966	BARNSTABLE	Bridge, Craigville Beach Rd over Centerville River #B-01-002	12/27/97	4/14/98	$834,399	BR	6/1/02	town	$906,759	**BR**	1998
600967	~~Barns, Mashpee~~	~~Bridge, School St over Santuit River~~	~~11/29/97~~	~~4/28/98~~	**See 2000 Adv**	BR	**re-advertised**	town	see below	**BR**	1998
601522	DENNIS	Setucket Rd (Old Bass River Rd to Rte 134)	11/29/97	1/28/98	$657,694	STP	complete	town	$706,960	**STP**	1998
601849	SANDWICH	Route 6 Rest Area Site Improvements WB	8/1/98 (3rd time for advertising)			NFA	?	state	$150,914	**NFA 3rd**	1998
600970	FALMOUTH	CHURCH ST BR#F-03-014 (timber bridge replacement)	9/19/98	1/12/99	E. T. & L. Corp.	BR	5/27/00	town	$1,170,899	**BR**	1998
601966	BOURNE	Intersect Rte 6 and Nightingale Pond Dr & Scenic Dr	9/12/98	11/17/98	P.A. Landers	NFA	11/22/99	town	$251,678	**NFA**	1998
	1998	ADVERTISING PROGRAM						***TOTAL***	**$3,477,210**		

Cape Projects Advertised and Status

Cape Cod Transportation Improvement Program (TIP)

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Advertising DATE	AWARD or BID OPENING DATE	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost or award amount	FUND advertised	YEAR adver-tised (FFY)
601422	BOURNE +	Head of the Bay Road, (also Plymouth and Wareham)	? See below -- TIP 1999 funds			STP	advertised in 2000	town	see below	**STP**	1999
	1999	ADVERTISING PROGRAM						***TOTAL***	**$0**		
600967	Barns, Mashpee	Bridge, School St, Re-advertised May 2000 (orig 11/97)	5/6/00	6/13/00	$698,584	BR	11/1/01	town	$698,584	**NFA**	2000
601422	BOURNE +	Head of the Bay Road, (also Plymouth and Wareham)	7/8/00	9/12/00	$1,285,815	STP	Dec 2001	state	$1,248,879	**STP**	2000
601955	DENNIS	Route 6 @ Interchang 9 -- Route 134	6/17/00	9/19/00	$2,165,316	NFA	5/24/03**	state	$3,038,500	**NFA**	2000
601751	YARMOUTH	Buck Island and Town Brook Roads	6/24/00	8/22/00	$1,389,680	STP	Nov 2002**	town	$1,665,000	**STP**	2000
no projis	PROVINCETOWN	Shank Painter Property Acquisition - statewide Enhancements			$247,000	STP-E	complete	town	$247,000	**STP-E**	2000
	2000	ADVERTISING PROGRAM						***TOTAL***	**$6,897,963**		
	BOURNE	Academy Road Railroad crossing	5/12/01	open rejected 11/14/01		NFA ?		state	$247,507	**NFA**	2001
602309	HARWICH, CCRT	BRIDGE, Route 6/ Cape Cod Rail Trail, H-10-020	10/20/00	1/23/01	$703,342	CMAQ	11/24/01	regional	$703,342	**CMAQ**	2001
~~602293~~	~~HARWICH~~	~~BRIDGE, Lower County Road over the Herring River~~	~~3/12/01~~	bids opened 5/22/01, re-adv 7/21/01			----------	state	see below		2001
602293	HARWICH	BRIDGE, Lower County Road over the Herring River H-10-01	7/21/01	9/25/01	$1,386,288	NFA	11/30/02**	state	$1,386,288	**NFA**	2001
600756	HARWICH	BRIDGE, Route 6 over Depot Street H-10-016	6/2/01	7/31/01	$1,895,284	NFA	11/29/03**	state	$1,895,284	**NFA**	2001
601930	MASHPEE	Route 28 FalTL to Rotary, Shoulders & Sidewalk	7/21/01	9/25/01	$959,370	STP	11/30/02**	state	$959,370	**STP**	2001
603304	ORLEANS, CCRT	BRIDGE, Route 6/ Cape Cod Rail Trail	7/14/01	9/18/01	$2,754,491	CMAQ	11/30/02**	regional	$2,350,000	**CMAQ**	2001
600392	SANDWICH	Route 130 Reconstruction & related	9/29/01	7/9/02	$1,904,711	NFA		town	$1,900,000	**NFA**	2001
	2001	ADVERTISING PROGRAM						***TOTAL***	**$9,441,791**		
601466	CHATHAM	Bike Spur, from HarTL by airport then to downtown Chatham	8/10/02	11/19/02	$1,438,041	CMAQ		town	$1,800,000	**CMAQ**	2002
602842	Dennis Harwich	Route 28 overlay	3/19/02	4/23/02	$1,509,535	NFA	Jun 02-03	state	$1,491,063	**NFA**	2002
602520	Eastham Wellfleet	Route 6, Traffic safety improvements	12/3/01	4/2/02	$1,038,839	NFA	complete 2004	state	$996,181	**NFA**	2002
602531	FALMOUTH	BRIDGE, Meadow Neck Rd over the Moonakis River #F-03-01	9/7/02	12/17/02	$861,489	BR		town/state	$861,489	**BR**	2002
602562	ORLEANS	Main St, Rock Harbor Rd & Old Colony Rd	9/28/02	1/7/03	$362,181	NFA		town	$362,181	**NFA**	2002
	2002	ADVERTISING PROGRAM						***TOTAL***	**$5,510,914**		
603427	BARNSTABLE	Route 6 Resurfacing and drainage improvements	9/16/03	1/6/04	$4,000,000	STP	complete 2005	state	$4,000,000	**STP**	2003
602559	ORLEANS	Skaket Corners, Rte. 6A @ West Rd / Eldredge Park Way	11/21/03	2/18/04	$730,000	NFA	complete 2006	town	$962,000	**NFA**	2003
	2003	ADVERTISING PROGRAM						***TOTAL***	**$4,962,000**		
603521	FALMOUTH	Shining Sea Bikeway Phase IIB, Skating Lane to Carlson Lane	7/17/04	9/8/04	$672,000	CMAQ	7/2/05	town	$423,450	**CMAQ**	2004
601916	BARNSTABLE	Bearse's Way, Route 28 norhterly to Pitcher's Way	8/7/04	12/14/04	$1,651,000	STP	complete	town	$1,757,596	**STP**	2004
603847	BOURNE	Sagamore Rotary Area Improvements Depot & temp P&R lot	7/24/04	9/8/04	$5,000,000	STP	complete	state	$3,475,470	**STP**	2004
603847	BOURNE	Sagamore Rotary Chapter 149 fire station construction	8/14/04			STP	complete	state	$4,065,000	**STP**	2004
603847	BOURNE	Sagamore Rotary -- grade separation	8/14/04			STP	complete	state	$36,336,000	**STP**	2004
602326	YARMOUTH	Willow Street Recons (Rte 6 to relocated Higgins Crowell Rd)	9/27/04	2/1/05	$2,652,000	STP	complete	town	$2,652,000	**STP**	2004
	2004	ADVERTISING PROGRAM						***TOTAL***	**$48,709,516**		
601441	BARNSTABLE	Route 132 Boulevard	9/17/05	12/20/06	$10,000,000	STP	landscaping to be done	town	$9,600,000	**STP**	2005
603813	EASTHAM-ORLEANS	Route 6 Resurfacing and related	7/23/05	fall '05	$ 2,200,000	NFA	complete	state	$2,200,000	**NFA**	2005
603349	FALMOUTH	WOODS HOLE BRIDGE	8/20/05	5/16/06	$ 7,800,000	BR	complete	town	$8,000,000	**BR**	2005
	2005	ADVERTISING PROGRAM						***TOTAL***	**$19,800,000**		
S117 earmark	BARNSTABLE	Hyannis Gateway / Main St. Lighting etc.	7/8/06			S117	complete	town	$378,944	**S117**	2006
604091	DENNIS	Swan River Road reconstruction	8/12/06	9/25/07	$2,395,528	CMAQ	complete	town	$2,300,000	**STP**	2006
55400	FALMOUTH	Palmer Avenue BR	9/16/06	10/16/07		BR	warded-terminate	state	$1,500,000	**STP**	2006
603666	ORLEANS	Route 28 and Finlay Road intersection	9/9/06	7/24/07	$645,524	STP	complete	town	$590,000	**STP**	2006
604335	SANDWICH	Route 130/Water St and Main St Intersection TOWN HALL SQ	8/26/06	10/16/07	$546,657	STP	complete	town	$600,000	**STP**	2006
	2006	ADVERTISING PROGRAM						***TOTAL***	**$5,368,944**		
603520	FALMOUTH	Shining Sea Bikeway Ph III	9/1/07	3/25/08	$3,631,123	CMAQ	7/09 complete	town	$4,000,000	**STP**	2007
	2007	ADVERTISING PROGRAM						***TOTAL***	**$4,000,000**		

Cape Projects Advertised and Status

Cape Cod Transportation Improvement Program (TIP)

PROJIS or State Identification (SID) number	MUNICIPALITY of project location	DESCRIPTION	Advertising DATE	AWARD or BID OPENING DATE	Low bid, award amount, or TIP Programmed Amount	FUND in TIP	Completed?	Project Proponent	Estimated cost or award amount	FUND advertised	YEAR adver-tised (FFY)
603894	BOURNE	Rte. 6 Scenic Highway at Edgehill Road	4/26/08		$4,935,910	STP	complete	town	$3,948,728	**STP**	2008
605037	DENNIS	Rte. 28 at Rte. 134 intersection improvements	9/20/08		$843,000	CMAQ	complete	town	$596,000	**CMAQ**	2008
604919	HARWICH	Rte. 124 at Queen Anne Road intersection improvements	8/2/08	11/13/08	$1,200,000	CMAQ	complete	town	$859,800	**CMAQ**	2008
CCNS	PROVINCETOWN	Rte. 6 at Province Lands Rd.	2/00/2008		$2,500,000	Parks	complete	NPS	$2,500,000	**Parks**	2008
602923	YARMOUTH	Packet Landing site improvements	7/15/08	9/9/08	$633,436	HPP	complete	town	$633,436	**HPP**	2008
		2008 ADVERTISING PROGRAM						***TOTAL***	**$8,537,964**		
604521	BARNSTABLE	Route 6A resurfacing	3/9/09	6/23/09	$3,045,000	ARRA	complete	state	$3,045,000	**ARRA**	2009
604914	BARNSTABLE	Rte. 132 Boulevard Landscaping	5/9/09	7/14/09	$1,500,000	STP-E	REJECTED - ReADV	town	$0	**STP-E**	2009
604914	BARNSTABLE	Rte. 132 Boulevard Landscaping	2/27/10	4/6/10	$1,100,000	STP-E	complete	town	$783,933	**STP-E**	2009
604096	BARNSTABLE	Rte. 28 at 3 locations Rte. 149, So, County Rd., Lumbert Mill F	6/27/09	9/1/09	$3,200,000	CMAQ	complete	town	$3,200,000	**CMAQ**	2009
604224	BOURNE	Rte. 6 Scenic Highway resurfacing	4/4/09	4/21/09	$1,651,519	ARRA	complete	state	$1,651,519	**ARRA**	2009
	CAPE Safety	Hwy Safety Improvement Program DESIGN (Sand. Cotuit Harl	9/1/09		$458,514	HSIP	complete	state	$458,514	**HSIP**	2009
605214	DENNIS	Route 6A resurfacing	5/16/09	6/16/09	$1,680,620	ARRA	complete	state	$1,680,620	**ARRA**	2009
603494	FALMOUTH	BRIDGE Chapoquoit Road BR#F-03-009 over W. Falm Harbor	8/8/09	11/10/09	$3,000,000	BR	Spring 2012	town / state	$2,667,948	**BR**	2009
603609	FALMOUTH	Route 28 Section known as "Reine's Corner"	9/26/09	12/17/09	$2,000,000	STP	Spring 2011	state	$1,237,500	**STP**	2009
		2009 ADVERTISING PROGRAM						***TOTAL***	**$14,725,034**		
604093	BARNSTABLE	Rte 149 at Rte 6 EB off-ramps, Roundabout construction	9/11/10	3/22/11	$1,868,000	HSIP	underway	state	$1,868,000	**HSIP**	2010
604744	SANDWICH	Rte 130 at Rte 6 off-ramps, construct traffic signals & improv	9/11/10	2/8/11	$2,434,000	STP	underway	state	$1,521,000	**STP**	2010
605943	BOURNE-SANDWICH	ITS - Camera & equipment installation at Sagamore & Bourne	9/11/10	1/19/11	$1,000,000	STP	completed	state	$1,076,269	**STP**	2010
	CCRTA	Vehicles, equipment & terminal improvements	9/11/10	10/1/10	$635,322	ARRA FTA	transferred	state	$635,322	**ARRA FTA**	2010
		2010 ADVERTISING PROGRAM						***TOTAL***	**$5,100,591**		
604918	HARWICH	Route 137 Reconstruct & Improve QueenAnneRd to BrewTL	8/30/11	11/22/11	$5,916,934	STP-U, CMAQ	underway	state	$5,333,643	**STP-U**	2011
606131	SANDWICH	Intersection Cotuit Rd at Harlow / So. Sand. Rd. roundabout	9/7/11	11/22/11	$1,043,641	HSIP	underway	state	$1,098,743	**HSIP**	2011
606295	SANDWICH	Route 6 cable barrier installation	7/29/11	8/16/11	$300,000	HSIP	completed	state	$289,867	**HSIP**	2011
605619	FALMOUTH	Route 28 Resurfacing & Related Work	9/7/11	11/29/11	$5,686,424	NHS		state	$5,369,217	**NHS**	2011
		2011 ADVERTISING PROGRAM						***TOTAL***	**$12,091,470**		
605243	YARMOUTH	Old Town House Rd at Forest Rd Intersection & Signal improv	2/22/12	5/30/12	$1,221,000	HSIP	underway	town	$1,221,000	**HSIP**	2012
605375	DENNIS	Rte. 134 from Upper County Rd. to Rte. 28	5/19/12	7/17/2012*	$4,390,504	CMAQ TE HSIF	underway	town	$4,390,504	CMAQ- HSIP	2012
605291	DENNIS	BR# D-007-001 UpperCountyRd, BR# D-07-006	6/9/12	7/17/2012*	$10,964,561	BR	underway	state	$10,964,561	**BR**	2012
	CCRTA	New transit service Bourne-Sandwich	12/5/11	1/30/12	$138,580	CMAQ	transferred	state	$138,580	**CMAQ**	2012
	CCRTA	New transit service Bourne-Falmouth	12/5/11	1/30/12	$137,540	CMAQ	transferred	state	$137,540	**CMAQ**	2012
		2012 ADVERTISING PROGRAM						***TOTAL***	**$16,852,185**		
602213	ORLEANS	Roundabout at Route 28 & Route 6a			$1,331,245	CMAQ		state	$1,331,245	**CMAQ**	2013
605671	FALMOUTH	Rte 28 Improvements: Davisville/Old Mtghouse & Jones/Worcester			$3,308,075	CMAQ		state	$3,308,075	**CMAQ**	2013
607263	BARN-BOU-SAN	Changeable Message Boards/Cameras on Rtes 6, 25 and 28			$1,500,000	STP	underway	state	$1,500,000	**STP**	2013
606286	BOURNE-SANDWICH	Rte 6 Resurfacing:Sagamore Bridge - Sandwich/Barnstable T.L.		4/18/13	$8,200,948	NHS		state	$8,200,948	**NHS**	2013
605792	CCNS	Various Pavement Management Projects			$587,000	NHS	transferred	CCNS	$587,000	**FLHP**	2013
604488	DENNIS-YARMOUTH	Cape Cod Rail Trail Extension Design: Rte 134 - Station Ave			$1,300,000	TI (2005)	underway	town	$1,300,000	TI (2005)	2013
	CCRTA	New transit service Bourne-Sandwich			$180,154	CMAQ	transferred	state	$180,154	**CMAQ**	2013
	CCRTA	New transit service Bourne-Falmouth			$178,803	CMAQ	transferred	state	$178,803	**CMAQ**	2013
		2013 ADVERTISING PROGRAM						***TOTAL***	**$16,586,225**		

* proposed bid opening date

** proposed completion date for project

FEDERAL AID amount advertised or obligated (from FHWA sources) $181,189,843

NON FEDERAL AID amount advertised or obligated (from state sources) $32,250,971

TOTAL FHWA & NFA amount advertised or obligated only **$213,440,814**

PROJECTS IN NEED OF FUNDING (For Information Only)

			Estimated Cost
BARNSTABLE	URBAN AREA	Airport Rotary improvements, including potential grade separation of Route 28 with tunnel / overpass direct connection and improvements to remaining circle operations	$ 30,000,000
BARNSTABLE	URBAN AREA	Improved access for Hyannis Transportation Center	$ 5,000,000
BARNSTABLE BOURNE	URBAN AREA	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	URBAN AREA	Yarmouth Road/Willow Street widening (Includes additional 2 lanes of travel with median divider, sidewalk and multiuse path, for approximately 3 miles from State Route 28 to the recently-improved section in the Town of Yarmouth; R-O-W acquisition, demolition, roadway construction)	$ 20,000,000
BARNSTABLE YARMOUTH	URBAN AREA	Regional bicycle/pedestrian access in the Route 28/Yarmouth Road and Willow Street area between Hyannis Transportation Center and planned extension of the existing Cape Cod Rail Trail in Dennis-Yarmouth; Design build grade crossings of Willow Street and Railroad	$ 13,000,000
BARNSTABLE	URBAN AREA	Barnstable Route 6A at Route 132 roundabout	$ 1,200,000
BOURNE	URBAN AREA	Main Street improvements in Buzzards Bay -- business and government center; regional marine research education	$ 1,200,000
BOURNE	URBAN AREA	Belmont Circle Intersection Improvement Project	$ 5,110,000
BOURNE	URBAN AREA	Bourne Rotary Improvement Project	$ 50,000,000
BOURNE	URBAN AREA	Route 6 / Route 28 Bypass --Memorial Circle to Belmont Circle (1.1 miles)	$ 2,000,000
BOURNE	URBAN AREA	Memorial Circle Intersection Improvement Project	$ 1,125,000
BOURNE	URBAN AREA	Route 6 Scenic Highway Median Barrier	$ 12,000,000
MASHPEE	URBAN AREA	Route 151 Corridor Improvements	$ 8,250,000
BREWSTER	URBAN AREA	Route 6A Resurfacing	$ 6,000,000
BREWSTER	URBAN AREA	Full depth reclamation Harwich Road / Rte. 124	$ 1,500,000
BREWSTER	URBAN AREA	Full depth reclamation Long Pond Road / Rte. 137	$ 1,900,000
BREWSTER	URBAN AREA	Full depth reclamation Stony Brook Road, Rte. 6A - Satucket Rd	$ 600,000
CAPE RAIL	URBAN AREA	Buzzards Bay to Middleborough capital improvements for rail upgrade	$ 6,000,000
Cape Cod Regional Transit Authority	URBAN AREA	Intercity Seasonal Connector-demonstration	$ 4,000,000
DENNIS	URBAN AREA	Route 28 sidewalks	$ 2,000,000
EASTHAM	URBAN AREA	Route 6 and Governor Prence Road Improvements - Bicycle / Pedestrian	$ 1,000,000
HARWICH	URBAN AREA	Route 39 section, 1.6 miles from Bay Road to Brewster TL	$ 2,000,000
HARWICH	URBAN AREA	Route 39 section, 2.0 miles from Oak Street to Queen Anne Road	$ 2,500,000

PROJECTS IN NEED OF FUNDING (For Information Only)			Estimated Cost
ORLEANS	URBAN AREA	Rock Harbor Road drainage improvements and roadway reconstruction	$ 600,000
ORLEANS	URBAN AREA	Main Street Sidewalk extension and reconstruction of Meeting House Road intersection	$ 300,000
SANDWICH	URBAN AREA	Route 130 Exit 2 Phase 2, WB exit ramp and Service Road intersection improvements	$ 3,000,000
SANDWICH	URBAN AREA	Quaker Meetinghouse Road Pedestrian Accessibility 4 miles of sidewalk	$ 1,055,000
WELLFLEET		Chequessett BR Rehabilitation	$ 12,000,000
YARMOUTH	URBAN AREA	Yarmouth, Porous Pavement Projects for approximately 3,000 linear feet of roadway	$ 750,000
YARMOUTH	URBAN AREA	Yarmouth, Sidewalk improvements: North Main Street sidewalk of approximately 1 mile connecting existing sidewalk with major recreation area	$ 650,000
		TOTAL	**$ 197,740,000**

CAPE COD
COMMISSION

ATTACHMENTS

CAPE COD COMMISSION

C1. GLOSSARY

C1a. DEFINITIONS

The terms below define primarily the column headings in the TIP Projects Listing tables:

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).

C1b. ACRONYMS

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
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
STEA	Surface Transportation Extension Act of 1997
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
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

CAPE COD COMMISSION

C2. COMMENTS

This TIP comment period officially began after the Cape Cod Metropolitan Planning Organization (MPO) voted to release the Draft TIP for the public review/ comment period. The MPO is expected to consider TIP FFY 2014-2017 endorsement at their meeting on June 24, 2013, in Barnstable.

Comments on this TIP may be sent via mail, hand delivered, by facsimile, or via e-mail, by noon on Thursday, June 20, 2013, 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**

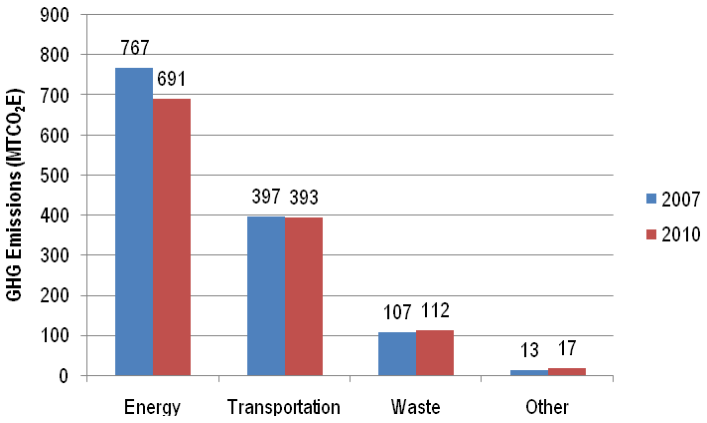
Comments / Questions received on this TIP:

C3. GREENHOUSE GAS (GHG) EMISSIONS

The transportation sector contributes approximately one-third of carbon dioxide (CO_2) emissions nationally. Therefore, to reduce climate change impacts to the environment, a reduction of transportation emissions is beneficial.

The Cape Cod National Seashore estimated that 82% of mobile emissions were from visitors in 2007. The Cape Cod National Seashore has taken action to promote alternative modes, such as the FLEX shuttle in partnership with the Cape Cod Regional Transit Authority (CCRTA) run on bio-diesel fuel, and is planning for bicycle facility improvements. The Climate Friendly Parks Cape Cod National

Seashore Action Plan includes the following table of CCNS operations emissions for 2007 and 2010:



Cape Cod National Seashore 2007 vs. 2010 Park Operations Emissions by Sector

To assist in monitoring GHG emissions, the Cape Cod Transportation Improvement Program (TIP) proposed projects now have a GHG impact number. For example, in TIP Year 2013, the proposed projects provide an estimated reduction in summer CO_2 emissions of 809,490.

2014-2017 TIP GREENHOUSE GAS (GHG) MONITORING AND EVALUATION

INTRODUCTION

This section summarizes the greenhouse gas (GHG) impacts that are anticipated to result from the projects that are included in this FFY 2014 - 2017 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.

FFY 2014 THROUGH 2017 ADA RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2014		none		$0	
				$0	
				$0	
				$0	
		TOTAL	$0	$0	

FFY = PROPOSED FEDERAL FISCAL YEAR FOR THE OBLIGATION OF FEDERAL FUNDS (PROJECT ADVERTISING)

PROJ. NO. = PROJECTINFO NUMBER. IT IS REQUIRED THAT ALL PROJECTS IN FFY 2014 HAVE A PROJ. NO.

DESCRIPTION = THE DESCRIPTION NOTED IN PROJECTINFO

TFPCC = TOTAL FEDERAL PARTICIPATING CONSTRUCTION COST (INCLUDES CONTINGENCIES, CONSTRUCTION ENGINEERING, TRAFFIC POLICE, PARTICIPATING UTILITY COSTS, ETC.)

YOE = YEAR OF EXPENDITURE (FFY 2014 = TFPCC, FFY 2015 = TFPCC X 1.04, FFY 2016 = TFPCC X 1.08, FFY 2017 = TFPCC X 1.12)

FFY 2014 THROUGH 2017 ADA RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2014	607032	DISTRICT 4- ADA RETROFITS AT VARIOUS LOCATIONS	$1,942,308	$2,020,000	STP-TE
2015	607033	DISTRICT 5- ADA RETROFITS AT VARIOUS LOCATIONS	$1,903,846	$1,980,000	STP-TE
		TOTAL	$3,846,154	$4,000,000	

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FFY 2014 THROUGH 2017 ADA RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2016	607035	DISTRICT 1- ADA RETROFITS AT VARIOUS LOCATIONS	$314,815	$340,000	STP-Flex
2016	607036	DISTRICT 2- ADA RETROFITS AT VARIOUS LOCATIONS	$685,185	$740,000	STP-Flex
2016	607038	DISTRICT 3- ADA RETROFITS AT VARIOUS LOCATIONS	$1,185,185	$1,280,000	STP-Flex
2016	607042	DISTRICT 6- ADA RETROFITS AT VARIOUS LOCATIONS	$1,518,519	$1,640,000	STP-Flex
		TOTAL	$3,703,704	$4,000,000	

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FFY 2014 THROUGH 2017 ADA RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2017	607039	DISTRICT 4- ADA RETROFITS AT VARIOUS LOCATIONS	$1,803,571	$2,020,000	STP-Flex
2017	607041	DISTRICT 5- ADA RETROFITS AT VARIOUS LOCATIONS	$1,775,893	$1,989,000	STP-Flex
		TOTAL	$3,579,464	$4,009,000	

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FFY 2014 THROUGH 2017 STATEWIDE INTELLIGENT TRANSPORTATION SYSTEMS PROJECT LISTING

TARGET PROJECTS

ITS and HOV Capital

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
14	607422	Statewide- Real Time Traffic Monitoring (RTTM) System (AC Year 1 of 2)	$7,000,000	$7,000,000	CMAQ
14	606432	Statewide- I-95 ITS and Fiber-Optic expansion - Burlington to Woburn	$5,000,000	$5,000,000	CMAQ
		Total CMAQ	$12,000,000	$12,000,000	
		ITS and HOC / HOV Operations			
14	606916	HOC Operating and Maintenance Expenses	$520,000	$520,000	STP-Flex
14	606427	Highway Assistance Patrols - area 2 - year 3	$1,328,535	$1,328,535	STP-Flex
14	606428	Highway Assistance Patrols - area 3 - year 3	$1,328,535	$1,328,535	STP-Flex
		Total STP-Flex	$3,177,070	$3,177,070	
		Total CMAQ+STP	**$15,177,070**	**$15,177,070**	

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FFY 2014 THROUGH 2017 STATEWIDE INTELLIGENT TRANSPORTATION SYSTEMS PROJECT LISTING

TARGET PROJECTS

ITS and HOV Capital

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
15	607422	Statewide- Real Time Traffic Monitoring (RTTM) System (AC Year 2 of 2)	$1,000,000	$1,000,000	CMAQ
15	607424	Statewide- ITS Advanced Transportaion Management System (ATMS) software (AC Year 1 of 2)	$5,769,000	$5,999,760	CMAQ
15	606923	Statewide- Consultant Services Contract for ITS Design and Support Services	$480,769	$500,000	CMAQ
15	606924	Statewide- Consultant Services Contract for ITS Design and Support Services	$480,769	$500,000	CMAQ
15	606927	Statewide- Expansion of CCTV, VMS & Traffic Sensor Network	$480,769	$500,000	CMAQ
		CMAQ Total	$8,211,308	**$8,499,760**	
		ITS and HOC / HOV Operations			
15	606930	HOV Lane Tow Truck Services for 2 years (Year 1)	$220,000	$228,800	STP-Flex
15	606931	HOV lane BTV Operator Contract, 2 year contract (year 1)	$220,000	$228,800	STP-Flex
15	606932	HOV Operating Expenses for two years (year 1)	$220,000	$228,800	STP-Flex
15	606916	HOC Operating and Maintenance Expenses	$850,000	$884,000	STP-Flex
15	606939	Highway Assistance Patrols - area 1 - year 1	$480,769	$500,000	STP-Flex
15	606940	Highway Assistance Patrols - area 2 - year 1	$480,769	$500,000	STP-Flex
15	606941	Highway Assistance Patrols - area 3 - year 1	$480,769	$500,000	STP-Flex
15	606942	Highway Assistance Patrols - area 4 - year 1	$480,769	$500,000	STP-Flex
15	606943	Highway Assistance Patrols - area 5 - year 1	$480,769	$500,000	STP-Flex
15	606944	Highway Assistance Patrols - area 6 - year 1	$96,154	$100,000	STP-Flex
		STP-Flex Total	$4,010,000	$4,170,400	
		Total CMAQ +STP		**$12,670,160**	

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FFY 2014 THROUGH 2017 STATEWIDE INTELLIGENT TRANSPORTATION SYSTEMS PROJECT LISTING

TARGET PROJECTS

ITS and HOV Capital

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
16	607485	Statewide- ITS Real Time Traffic Monitoring (RTTM) System Expansion	$1,000,000	$1,080,000	CMAQ
16	607424	Statewide- ITS Advanced Transportation Management System (ATMS) software (AC Year 2 of 2)	$1,566,000	$1,566,000	CMAQ
16	606933	Statewide- Consultant Services Contract for ITS Design and Support services	$462,963	$500,000	CMAQ
16	606934	Statewide- Consultant Services Conract for ITS Design and Support services	$462,963	$500,000	CMAQ
16	606936	Statewide- ITS Expansion of CCTV, VMS, & Traffic Sensor Network	$3,800,000	$4,104,000	CMAQ
16	606938	Statewide- ITS Deploy Critical Infrastructure Surveillance	$1,620,370	$1,750,000	CMAQ
		CMAQ Total	**$8,912,296**	**$9,500,000**	

ITS and HOC / HOV Operations

16	606930	HOV Lane Tow Truck Services for 2 years (Year 2)	$324,074	$350,000	STP-Flex
16	606931	HOV lane BTV Operator Contract, 2 year contract (year 2)	$740,741	$800,000	STP-Flex
16	606932	HOV Operating Expenses for two years (year 2)	$185,185	$200,000	STP-Flex
16	606939	Highway Assistance Patrols - area 1 - year 2	$416,667	$450,000	STP-Flex
16	606940	Highway Assistance Patrols - area 2 - year 2	$416,667	$450,000	STP-Flex
16	606941	Highway Assistance Patrols - area 3 - year 2	$416,667	$450,000	STP-Flex
16	606942	Highway Assistance Patrols - area 4 - year 2	$370,370	$400,000	STP-Flex
16	606943	Highway Assistance Patrols - area 5 - year 2	$370,370	$400,000	STP-Flex
16	606944	Highway Assistance Patrols - area 6 - year 2	$92,593	$100,000	STP-Flex
		STP-Flex Total	**$3,333,333**	**$3,600,000**	
		Total CMAQ+STP		**$13,100,000**	

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FFY 2014 THROUGH 2017 STATEWIDE INTELLIGENT TRANSPORTATION SYSTEMS PROJECT LISTING

TARGET PROJECTS

ITS and HOV Capital

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
17	607486	Statewide- ITS Highway Operations Center (HOC) Infrastructure Improvements	$1,500,000	$1,680,000	CMAQ
17	607487	Statewide- ITS ATMS Software & Hardware Systems Integration	$2,000,000	$2,240,000	CMAQ
17		Statewide- Consultant Service Contract for ITS design and Support Services	$446,429	$500,000	CMAQ
17		Statewide- Consultant Service Contract for ITS design and Support Services	$446,429	$500,000	CMAQ
17		Statewide- Expansion of CCTV, VMS & Traffic Sensor Network	$4,089,000	$4,579,680	CMAQ
		CMAQ Total	$8,481,857	**$9,499,680**	
		ITS and HOC / HOV Operations			
17		HOV Lane Tow Truck Services for 2 years (Year 1)	$312,500	$350,000	STP-Flex
17		HOV lane BTV Operator Contract, 2 year contract (year 1)	$714,286	$800,000	STP-Flex
17		HOV Operating Expenses for two years (year 1)	$178,571	$200,000	STP-Flex
17	606939	Highway Assistance Patrols - area 1 - year 1	$1,562,500	$1,750,000	STP-Flex
17	606940	Highway Assistance Patrols - area 2 - year 1	$1,294,643	$1,450,000	STP-Flex
17	606941	Highway Assistance Patrols - area 3 - year 1	$1,294,643	$1,450,000	STP-Flex
17	606942	Highway Assistance Patrols - area 4 - year 1	$1,071,429	$1,200,000	STP-Flex
17	606943	Highway Assistance Patrols - area 5 - year 1	$892,857	$1,000,000	STP-Flex
17	606944	Highway Assistance Patrols - area 6 - year 1	$267,857	$300,000	STP-Flex
		STP-Flex Total	$7,589,286	**$8,500,000**	
		Total CMAQ+STP		**$17,999,680**	

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FFY 2014 THROUGH 2017 STORMWATER RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2014	606990	STATEWIDE- STORMWATER RETROFITS AT VARIOUS LOCATIONS (IM/NHS)	$1,500,000	$1,500,000	STP-TE
		TOTAL	$1,500,000	$1,500,000	

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FFY 2014 THROUGH 2017 STORMWATER RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2015	606999	STATEWIDE- STORMWATER RETROFITS AT VARIOUS LOCATIONS (IM/NHS)	$2,884,615	$3,000,000	STP-FLEX
2015	607002	DISTRICT 3- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,442,308	$1,500,000	STP-FLEX
2015	607003	DISTRICT 4- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,442,308	$1,500,000	STP-FLEX
		TOTAL	$5,769,231	$6,000,000	

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FFY 2014 THROUGH 2017 STORMWATER RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2016	607004	STATEWIDE- STORMWATER RETROFITS AT VARIOUS LOCATIONS (IM/NHS)	$1,851,852	$2,000,000	STP-FLEX
2016	607000	DISTRICT 1- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,046,296	$1,130,000	STP-FLEX
2016	607001	DISTRICT 2- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,046,296	$1,130,000	STP-FLEX
2016	606996	DISTRICT 5- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$351,852	$380,000	STP-FLEX
2016	606997	DISTRICT 6- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$351,852	$380,000	STP-FLEX
		TOTAL	$4,648,148	$5,020,000	

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FFY 2014 THROUGH 2017 STORMWATER RETROFITS PROJECT LISTING

TARGET PROJECTS

FFY	PROJ. NO.	DESCRIPTION	TFPCC	YOE	FUNDING SOURCE
2017	TBD	STATEWIDE- STORMWATER RETROFITS AT VARIOUS LOCATIONS (IM/NHS)	$1,785,714	$2,000,000	STP-FLEX
2017	606994	DISTRICT 3- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,339,286	$1,500,000	STP-FLEX
2017	606995	DISTRICT 4- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,339,286	$1,500,000	STP-FLEX
		TOTAL	$4,464,286	$5,000,000	

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		TOTAL	$4,648,148	$5,020,000	

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2017	606995	DISTRICT 4- STORMWATER RETROFITS AT VARIOUS LOCATIONS	$1,339,286	$1,500,000	STP-FLEX
		TOTAL	$4,464,286	$5,000,000	

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FFY 2014 State Transportation Improvement Program - Commonwealth of Massachusetts

Federal Aid Target Projects

Transportation Alternatives Program

MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
604532	Boston	Acton etc	Acton- Carlisle- Westford- Bruce Freeman Rail Trail (Phase II-A)	3	STP-TE	$11,090,000	$8,872,000	$2,218,000	Total Project Cost now $11,090,008.75 Additional funds to cover cost overun will be CMAQ
605720	Merrimack Valley	Haverhill	Haverhill- Riverwalk Construction (Bradford Section) From Route 125 To County Road	4	STP-TE	$2,410,718	$1,928,574	$482,144	(Construction) TEC = 5.32 out of 18. (C)
605181	Merrimack Valley	Methuen	Methuen- Interchange Reconstruction On I-93 At Route 110/113 Rotary, Including Removal Of M-17-017 & M-17-018, Rehab Of M-17-007 & New Bridge Construction Of M-17-040	4	STP-TE -AC	$458,334	$366,667	$91,667	Total Project Cost = $59,892,000 FY 2013, 2014 & 2015 Statewide CMAQ & TE + 2013 HPP #2434 (2005) + 2013 IM (2010 Discretionary) + FY 2013 and FY 2015 STP, CMAQ & HSIP + FY 2014 STP + HSIP (Construction). TEC = 9.63 out of 18. (C)
605144	Pioneer Valley	Amherst etc	Amherst-Northampton-Southampton-West Brookfield, Sidewalk & Wheelchair Ramp Construction on Routes 5, 9 and 10	2	STP-TE	$1,600,000	$1,280,000	$320,000	
			Statewide Transportation Enhancements Sub-Total			$15,559,052	$12,447,242	$3,111,810	
606669	Merrimack Valley	Amesbury	Amesbury- Powwow Riverwalk Construction, From Main Street To Water Street, Includes Ped Bridge A-07-034 (Phase I)	4	STP-TE	$1,058,089	$846,471	$211,618	Total Project Cost = $1,800,000 in 2012 dollars, = 1,944,000 in 2014 dollars. FY 2014 CMAQ + FY 2014 TE (STP) (Construction) TEC = 5.42 out of 18. (C)
606636	Montachusett	Athol	Athol- Scenic Byway Access & Overlook Construction.	2	STP-TE	$72,800	$58,240	$14,560	Total Cost = $72,800 Adjusted for YOE by 4%; Non Adjusted Total Cost = $70,000; TEC 4.48 of 18; Landscape & Roadside Development; Prelim Design;
			Regional Transportation Enhancements Sub-Total			$1,130,889	$904,711	$226,178	
607447	Boston	Malden	Malden- Safe Routes To School (Beebe)	4	TAP	$ 577,500	$ 462,000	$ 115,500	
607441	Boston	Manchester	Manchester- Safe Routes To School (Memorial Elementary)	5	TAP	$ 625,000	$ 500,000	$ 125,000	
607449	Boston	Westwood	Westwood- Safe Routes To School (Downey Elementary)	6	TAP	$ 686,250	$ 549,000	$ 137,250	
607452	Pioneer Valley	Springfield	Springfield - Safe Routes To School (Alice Beal)	2	TAP	$ 388,750	$ 311,000	$ 77,750	
N/A	Statewide	Statewide	SRTS - Education		SRTS	$ 824,607	$ 824,607	$ -	
N/A	Statewide	Statewide	SRTS - Planning & Design		TAP	$ 600,893	$ 480,714	$ 120,179	
			Statewide Safe Routes To Schools			**$3,703,000**	**$3,127,321**	**$575,679**	
			Recreational Trails Total			**$1,000,000**	**$800,000**	**$200,000**	
			Transportation Alternatives Total			**$21,392,941**	**$17,279,274**	**$4,113,667**	

Project estimated total costs are BY YEAR OF EXPENDITURE (YOE), for years 2015-2017 an annual inflation rate of 4% is assumed.

FFY 2015 State Transportation Improvement Program - Commonwealth of Massachusetts

MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
Federal Aid Target Projects									
STP - Surface Transportation Program									
Transportation Alternatives Program									
606891	Berkshire	Pittsfield	Pittsfield- Ashuwillticook Rail Trail Extension To Crave Avenue	1	TAP	$ 2,021,760	$ 1,617,408	$ 404,352	
607254	Berkshire	North Adams	North Adams/ Williamstown - Mohawk Bike Trail Project	1	TAP	$ 4,717,440	$ 3,773,952	$ 943,488	Construction; YOE 8%
605215	Central Mass	Uxbridge	Uxbridge- Southern New England Trunk Trail Construction	3	TAP	$ 1,205,645	$ 964,516	$ 241,129	
605181	Merrimack Valley	Methuen	Methuen- Interchange Reconstruction On I-93 At Route 110/113 Rotary, Including Removal Of M-17-017 & M-17-018, Rehab Of M-17-007 & New Bridge Construction Of M-17-040	4	TAP-AC	$ 458,334	$ 366,667	$ 91,667	Total Project Cost = $59,892,000 FY 2013, 2014 & 2015 Statewide CMAQ & TE + 2013 HPP #2434 (2005) + 2013 IM (2010 Discretionary) + FY 2013 and FY 2015 STP, CMAQ & HSIP + FY 2014 STP + HSIP (Construction). TEC = 9.63 out of 18. (C)
606503	Merrimack Valley	Newburyport	Newburyport- Clipper City Rail Trail Along The City Branch (Phase II)	4	TAP	$ 3,120,000	$ 2,496,000	$ 624,000	
			TAP Flex Statewide Sub-Total			$11,523,179	$9,218,543	$2,304,636	
TBD	Boston	Saugus	Saugus- Safe Routes To School (Veterans Memorial)	4	TAP	$ 432,000	$ 345,600	$ 86,400	
TBD	Boston	Somerville	Somerville- Safe Routes To School (Healey)	4	TAP	$ 768,960	$ 615,168	$ 153,792	
TBD	Merrimack Valley	North Andover	North Andover - Safe Routes To School (North Andover Middle)	4	TAP	$ 655,200	$ 524,160	$ 131,040	Total Project Cost = $655,200. SRTS funding is TAP Flex and requires a 20% state match (Construction) (C)
TBD	Montachusett	Fitchburg	Fitchburg - Safe Routes To School (South Street Elementary)	3	TAP	$ 540,000	$ 432,000	$ 108,000	Safe Routes to School SRTS funding is TAP Flex and requires a 20% state match. PRC approval TBD
TBD	Southeast Mass	Mansfield	Mansfield - Safe Routes to School (Jordon/Jackson Elementary)	5	TAP	$ 609,440	$ 487,552	$ 121,888	
607453	Pioneer Valley	Southampton	Southampton - Safe Routes To School (Norris Elementary)	2	TAP	$ 531,250	$ 425,000	$ 106,250	
TBD	Boston	Milton	Milton- Safe Routes To School (Grover Elementary)	4	TAP	$ 624,520	$ 499,616	$ 124,904	
N/A	Statewide	Statewide	SRTS - Education		SRTS	$ 863,268	$ 863,268	$ -	
N/A	Statewide	Statewide	SRTS - Planning & Design		TAP	$ 800,000	$ 640,000	$ 160,000	
			Statewide Safe Routes To Schools			**$5,824,638**	**$4,832,364**	**$992,274**	
			Recreational Trails Total			**$1,000,000**	**$800,000**	**$200,000**	
			Transportation Alternatives Total			**$18,347,817**	**$14,850,907**	**$3,496,910**	

Project estimated total costs are BY YEAR OF EXPENDITURE (YOE), for years 2013-2015 an annual inflation rate of 4% is assumed.

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

FFY 2016 State Transportation Improvement Program - Commonwealth of Massachusetts

Federal Aid Target Projects

Transportation Alternatives Program

MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
605020	Merrimack Valley	Boxford	Boxford - Salsibury Multi-Use Trail	4	TAP	3,850,000	3,080,000	770,000	TFPC = $26,270,248. This item is for the Salisbury Section Only
602912	Pioneer Valley	Chicopee	Chicopee- Chicopee River Riverwalk Multi-Use Path Construction, From Grape Street To Front Street (Near Ellerton Street)	2	TAP	1,785,780	1,428,624	357,156	
603783	Pioneer	Westfield	Westfield- Columbia Greenway Rail Trail Construction (Center	2	TAP	6,784,162	5,427,330	1,356,832	
603730	Pioneer	West Springfield	West Springfield- Connecticut Riverwalk & Bikeway Extension,	2	TAP	1,640,736	1,312,589	328,147	
			Statewide TAP Sub-Total			$14,060,678	$11,248,542	$2,812,136	
TBD	Boston	Waterown	Watertown - Safe Routes To School (Hosmer Elementary)	6	TAP	$ 650,000	$ 520,000	$ 130,000	
TBD	Boston	Everett	Everett - Safe Routes To School (Madelaine English)	4	TAP	$ 650,000	$ 520,000	$ 130,000	
TBD	Boston	Revere	Revere - Safe Routes To School (Garfield Elem. & Middle)	4	TAP	$ 650,000	$ 520,000	$ 130,000	
N/A	Statewide	Statewide	SRTS - Education		SRTS	$ 904,283	$ 904,283	$ -	
N/A	Statewide	Statewide	SRTS - Planning & Design and selected schools		TAP	$ 800,000	$ 640,000	$ 160,000	
			Statewide Safe Routes To Schools			**$3,654,283**	**$3,104,283**	**$550,000**	
			Recreational Trails Total			**$1,000,000**	**$800,000**	**$200,000**	
			Transportation Alternatives Total			**$18,714,961**	**$14,552,825**	**$3,562,136**	

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FFY 2017 State Transportation Improvement Program - Commonwealth of Massachusetts

MassDOT Project ID ▼	MPO ▼	Municipality Name ▼	MassDOT Project Description ▼	District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼
Federal Aid Target Projects									
Transportation Alternatives Program									
			Statewide TAP Sub-Total			$0	$0	$0	
	Statewide	Statewide	SRTS - Education and Planning & Design and selected schools		SRTS	$ 947,835	$ 947,835	$ -	
N/A	Statewide	Statewide	SRTS - Planning & Design and selected schools		TAP	$ 800,000	$ 640,000	$ 160,000	
			Statewide Safe Routes To Schools			**$1,747,835**	**$1,587,835**	**$160,000**	
			Recreational Trails Total			**$1,000,000**	**$800,000**	**$200,000**	
			Transportation Alternatives Total			**$2,747,835**	**$2,387,835**	**$360,000**	

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POTENTIAL FFY 2014 THROUGH 2017 MASSDOT HIGHWAY DIVISION CMAQ PROJECTS

NO.	DESCRIPTION	D	REGION	TFPCC	CMAQ COST	YEAR	2014	2015	2016	2017
PROGRAM/NON-PROJECT ITEMS										
	MassRides -- Travel Options Program		Statewide			2013 - 2017	$2,618,805	$2,689,512	$2,762,128	$2,836,705
	Vanpools		Statewide			2012 2013 2014	$562,000			
	Truck Stop Electrification		Statewide			2014 2015	$500,000	$500,000		
	Alternative Fuel Vehicles		Statewide			2013 2014	$3,141,195			
2014 - CURRENT STATEWIDE PROJECTS										
603462	DUXBURY- INTERSECTION IMPROVEMENTS @ KINGSTOWN WAY (ROUTE 53) & WINTER STREET	5	Boston	$1,097,698	$1,097,698	2014	$1,141,606			
604432	WINCHENDON- MULTI-USE TRAIL CONSTRUCTION (NORTH CENTRAL PATHWAY - PHASE V) INCLUDES W-39-023, W-39-024 & W-39-028	2	Montachusett	$2,151,296	$340,000	2014	$353,600			
601019	WINCHESTER- SIGNAL & IMPROVEMENTS AT 4 LOCATIONS ON CHURCH STREET & ROUTE 3 (CAMBRIDGE STREET)	4	Boston	$3,985,903	$3,985,903	2014	$4,145,339			
604532	ACTON- CARLISLE- WESTFORD- BRUCE FREEMAN RAIL TRAIL EXTENSION, INCLUDING 6 RAILROAD BRIDGES (PHASE II-A)	4	Boston	$11,102,609	$2,300,000	2014	$2,300,000			
2015 - CURRENT STATEWIDE PROJECTS										
606055	DISTRICT 5- TRAFFIC SIGNAL CONTROLLER CABINET & MISCELLANEOUS MATERIALS PURCHASE & INSTALLATION	5	Statewide	$1,430,000	$1,430,000	2015		$1,487,200		

POTENTIAL FFY 2014 THROUGH 2017 MASSDOT HIGHWAY DIVISION CMAQ PROJECTS

NO.	DESCRIPTION	D	REGION	TFPCC	CMAQ COST	YEAR	2014	2015	2016	2017
606054	DISTRICT 4- TRAFFIC SIGNAL CONTROLLER CABINET & MISCELLANEOUS MATERIALS PURCHASE & INSTALLATION	4	Statewide	$1,238,085	$1,238,085	2015		$1,287,608		
606555	NORTHAMPTON- ROUNDABOUT CONSTRUCTION AT INTERSECTION ROUTES 5/10 (NORTH KING STREET) & HATFIELD STREET	2	Pioneer Valley	$2,917,000	$2,917,000	2015		$2,917,000		
604531	ACTON- MAYNARD- ASSABET RIVER RAIL TRAIL CONSTRUCTION, INCLUDES 2 BRIDGES	4	Boston	$4,501,362	$4,501,362	2015		$4,501,362		
2016 - CURRENT STATEWIDE PROJECTS										
606107	DISTRICT 6- SCHEDULED & EMERGENCY TRAFFIC SIGNAL REPAIRS AT VARIOUS LOCATIONS	6	Statewide	$560,280	$560,280	2016			$627,514	
606026	DISTRICT 4- TRAFFIC SIGNAL REPLACEMENT & FIBER-OPTIC LED CONVERSION AT VARIOUS LOCATIONS	4	Statewide	$1,680,000	$1,680,000	2016			$1,881,600	
606450	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	2	Pioneer Valley	$1,504,680	$1,504,680	2016			$1,685,242	
601579	WAYLAND- SIGNAL & INTERSECTION IMPROVEMENTS AT ROUTE 27 (MAIN STREET) AND ROUTE 30 (COMMONWEALTH ROAD)	3	Boston	$1,833,904	$1,833,904	2016			$2,053,972	
602165	STONEHAM- SIGNAL & INTERSECTION IMPROVEMENTS AT ROUTE 28/NORTH STREET	4	Boston	$3,142,660	$3,142,660	2016			$3,519,779	
605679	TAUNTON- INTERSECTION IMPROVEMENTS @ ROUTE 140 (COUNTY STREET) & HART STREET	5	SE Mass	$1,680,680	$1,680,680	2016			$1,882,362	
603477	SOUTHWICK- INTERSECTION IMPROVEMENTS AT FOUR LOCATIONS ON ROUTE 57 (FEEDING HILLS ROAD)	2	Pioneer Valley	$2,160,000	$2,160,000	2016			$2,419,200	
605066	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT PLEASANT STREET (STATE ROUTE 5) AND CONZ STREET	2	Pioneer Valley	$1,357,643	$1,357,643	2016			$1,520,560	

POTENTIAL FFY 2014 THROUGH 2017 MASSDOT HIGHWAY DIVISION CMAQ PROJECTS

NO.	DESCRIPTION	D	REGION	TFPCC	CMAQ COST	YEAR	2014	2015	2016	2017
602462	HOLLISTON- SIGNAL INSTALLATION AT ROUTE 16/126 AND OAK STREET	3	Boston	$1,000,000	$1,000,000	2016			$1,120,000	
603251	WORCESTER- SIGNAL & INTERSECTION IMPROVEMENTS @ HOLDEN STREET, DRUMMOND AVENUE & SHORE DRIVE	3	Central MA	$1,050,002	$1,050,002	2016			$1,176,002	
605367	TAUNTON- INTERSECTION IMPROVEMENTS AT THE HON. GORDON M. OWEN RIVERWAY & WILLIAMS STREET	5	SE Mass	$1,500,000	$1,500,000	2016			$1,680,000	
605189	CONCORD- BRUCE FREEMAN RAIL TRAIL CONSTRUCTION, FROM COMMONWEALTH AVENUE TO POWDER MILL ROAD, INCLUDES 2 RAILROAD BRIDGES & 1 CULVERT (PHASE II-C)	4	Boston	$5,532,584	$5,532,584	2016			$6,196,494	
602911	CHICOPEE- CONNECTICUT RIVERWALK & BIKEWAY CONSTRUCTION, FROM BOAT RAMP NEAR I-90 TO NASH FIELD (2.5 MILES)	2	Pioneer Valley	$2,400,000	$2,400,000	2016			$2,688,000	
2017 - STATEWIDE PROJECTS										
605213	SPRINGFIELD- WILBRAHAM- RECONSTRUCTION OF BOSTON ROAD (ROUTE 20)	2	Pioneer Valley	$8,683,580	$8,683,580	2016			$9,725,610	
606223	ACTON- CONCORD- BRUCE FREEMAN RAIL TRAIL CONSTRUCTION (PHASE II-B)	4	Boston	$5,760,000	$5,760,000	2017				$6,681,600
607398	YARMOUTH- BARNSTABLE- CAPE COD RAIL TRAIL EXTENSION, FROM STATION AVENUE (YARMOUTH) TO ROUTE 132 (BARNSTABLE)	5	Cape Cod	$6,000,000	$6,000,000	2017				$6,000,000
	LEE - BIKEWAY	1	Berkshire	$3,000,000	$3,000,000	2017				$3,480,000
607411	TISBURY- BIKE & PEDESTRIAN IMPROVEMENTS ALONG BEACH ROAD, FROM THE TERMINATION OF THE EXISTING SHARED USE PATH WESTERLY TO THE FIVE CORNERS INTERSECTION	5	Martha's Vineyard	$1,000,000	$1,000,000	2017				$1,160,000

POTENTIAL FFY 2014 THROUGH 2017 MASSDOT HIGHWAY DIVISION CMAQ PROJECTS

NO.	DESCRIPTION	D	REGION	TFPCC	CMAQ COST	YEAR	2014	2015	2016	2017
602929	HOLLISTON- MULTI-USE TRAIL CONSTRUCTION ON A SECTION OF THE UPPER CHARLES RAIL (2 MILES OF PROPOSED 27 MILES - PHASE I)	3	Boston	$2,168,360	$2,168,360	2017				$2,515,298
MAJOR INFRASTRUCTURE PROJECTS										
605181	METHUEN- INTERCHANGE RECONSTRUCTION ON I-93 AT ROUTE 110/113 ROTARY, INCLUDING REMOVAL OF M-17-017 & M-17-018, REHAB OF M-17-007 & NEW BRIDGE CONSTRUCTION OF M-17-040	4	Merrimack Valley	$59,892,000	$53,100,000	2013-15	$17,700,000	$17,700,000		

Glenn Cannon

From: Codd, Ned (DOT) <ned.codd@state.ma.us>
Sent: Friday, May 24, 2013 5:52 PM
To: Adams, Larry; Berger, Noah; Blei, David (DOT); Blunt, Mary Ellen; Bourassa, Eric; Bradbury, Sarah (DOT); Brennan, Tim (PVPC); Burns, Michael (DTA); Glenn Cannon; Cavicchi, Peter (DOT); Chong, Michael; Ciaramella, Pat (OCPC); DiZoglio, Dennis; Draisen, Mark (MAPC); Dunleavy, Linda (FRCOG); Eaton, Glenn; Frieri, Peter (DOT); Frost, Arthur (DOT); Hadfield, Jim; Harris, Brad (MRPC); Haznar, Pamela (DOT); Howard, Justin; Karns, Nat (BRPC); Kilmer, Charlie (OCPC); Kinahan, Erin (DOT); Kochan, Timothy (DOT); Komornick, Tony (MVPC); Kus, Clete; Priscilla Leclerc; London, Mark (MVC); Maloney, Paul; Marquis, Pamela (DOT); Masse, Richard (DOT); Mauro, Mike; McGahan, Anne; Moore, Mark (DOT); Mullaney, Maureen (FRCOG); Paul Niedzwiecki; Raphael, Connie (DOT); Roscoe, Dana (PVPC); Roux, Gary; Rydant, Rich; Scarbrough, Laurie (DOT); Simmons, Paula (DOT); Smith, Steve (SRPEDD); spfalzer@ctps.org; Sullivan, Ann (DOT); Suszynski, Frank (DOT); Vorce, Andrew (NPEDC); Wolfe, Pam (CTPS); Woods, Beverly (NMCOG)
Cc: Mohler, David (DOT); Bench, Clinton (DOT); Warrington, Sheri (DOT); Britland, Ethan (DOT); Cenizal, Callida (DOT); Hannon, Heather (DOT); Palmer, William (DOT); Anderson, David (DOT)
Subject: TAP Program Guidance

Greetings-

After consultation with the Federal Highway Administration Massachusetts Division, we have received the following guidance on implementing the regional and statewide Transportation Alternatives Program (TAP).

It turns out that the Congressional intent of the requirement for a COMPETITIVE TAP programming process is really for states/MPOs that do not have any competitiveness/merit-based selection in their existing processes.

- Regional TAP. Because all of the MPOs in Massachusetts have objective evaluation criteria against which projects are scored, Massachusetts' MPOs current project scoring and prioritization counts as a competitive process for the purpose of TAP selection. Therefore, if the selection of regional TAP projects is based on the competitive scoring process, then this approach is acceptable for the awarding of TAP funds, and no separate TAP application process is required. I would note that the hard work that the MPOs and EOTC did 10 years ago to establish these evaluation criteria continues to pay off, and will also pay off in the coming year as we work to implement performance management-based project selection. As we work on updating the project prioritization and selection process, it would probably be helpful to incorporate TAP-related factors to better facilitate the programming of TAP funds in future years
- Statewide TAP. Given the fact that the TAP program is smaller than the TE + SRTS programs, and half of the TAP funding is suballocated to the MPOs, there is a fairly small amount of statewide TAP funding. In addition, we are very proud of our Massachusetts SRTS program, and we want to ensure that it remains robust. Therefore, we plan to allocate all of our statewide TAP funding to SRTS infrastructure projects. MassDOT already runs what is essentially a competitive application process for our SRTS infrastructure projects, in which municipal proponents must submit an assessment request form, undergo a site visit, cooperate with us and our consultants on a planning study, have a project identified, and then have that project selected from among many potential school projects. For any TE-type projects in the future, after our TE balances are exhausted, we plan to build these with CMAQ funds.

Therefore, the TAP funds that are allocated in the regional TIPs can remain programmed as they are, as long as the projects were prioritized and selected using a competitive process, and as long as they meet TAP eligibility requirements.

Please contact me with questions. Thanks.

Ned

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Glenn Cannon

From: Codd, Ned (DOT) <ned.codd@state.ma.us>
Sent: Tuesday, May 28, 2013 8:35 PM
To: Adams, Larry; Berger, Noah; Blei, David (DOT); Blunt, Mary Ellen; Bourassa, Eric; Bradbury, Sarah (DOT); Brennan, Tim (PVPC); Burns, Michael (DTA); Glenn Cannon; Cavicchi, Peter (DOT); Chong, Michael; Ciaramella, Pat (OCPC); DiZoglio, Dennis; Draisen, Mark (MAPC); Dunleavy, Linda (FRCOG); Eaton, Glenn; Frieri, Peter (DOT); Frost, Arthur (DOT); Hadfield, Jim; Harris, Brad (MRPC); Haznar, Pamela (DOT); Howard, Justin; Karns, Nat (BRPC); Kilmer, Charlie (OCPC); Kinahan, Erin (DOT); Kochan, Timothy (DOT); Komornick, Tony (MVPC); Kus, Clete; Priscilla Leclerc; London, Mark (MVC); Maloney, Paul; Marquis, Pamela (DOT); Masse, Richard (DOT); Mauro, Mike; McGahan, Anne; Moore, Mark (DOT); Mullaney, Maureen (FRCOG); Paul Niedzwiecki; Raphael, Connie (DOT); Roscoe, Dana (PVPC); Roux, Gary; Rydant, Rich; Scarbrough, Laurie (DOT); Simmons, Paula (DOT); Smith, Steve (SRPEDD); spfalzer@ctps.org; Sullivan, Ann (DOT); Suszynski, Frank (DOT); Vorce, Andrew (NPEDC); Wolfe, Pam (CTPS); Woods, Beverly (NMCOG)
Cc: Mohler, David (DOT); Bench, Clinton (DOT); Warrington, Sheri (DOT); Britland, Ethan (DOT); Cenizal, Callida (DOT); Hannon, Heather (DOT); Palmer, William (DOT); Anderson, David (DOT); Yeung, Rebecca (DOT); Betts, William T (DOT); Guenard, Mark (DOT)
Subject: TIP Tips

Greetings-

As we reach the height of TIP season, I am sending out a few handy reminders to address TIP list issues that have been sighted in draft TIP lists.

- CMAQ and HSIP Overprogramming. The CMAQ and HSIP components of the regional target are a MINIMUM. Due to the high degree of flexibility of STP, and the relatively low amount of STP supply, STP balances are very scarce and very precious. As we have asked in the past, MPO staffs should work with the proponents of regional target projects and with the Highway Division district to identify the maximum amount of CMAQ and HSIP eligible expenditures, and program these in the regional target. The overall regional target is still the programming limit, but the greater the amount of CMAQ and HSIP (and the less STP), the better. This will allow us to better preserve STP balances for the projects that require them, and makes it less likely that we will have to reduce the STP available in future regional targets.
- Project Description. The project description should EXACTLY match the MassDOT ProjectInfo description. Any other information should be included in the "Additional Information" field.
- Addition Information. This field should include the following information:
    - Total project cost.
    - A list of all project funding sources (so that users can easily check other line items).
    - Source of match funding (other than state bond funding), especially for earmarks.
    - For all AC projects, an identification of the AC year/total AC years (e.g. "AC Year 1 of 3"), so that users can check the other STIP years for information. Just a reminder on AC'ing projects: per the terms agreed upon among the MPOs, MassDOT, and FHWA, the project must exceed the annual target funding (i.e. the project cannot fit in one year taking into account eligibility for various funding sources), and must require multiple years of construction that correspond to the years in which its funding is AC'd. Any projects that do not meet both of these requirements can be considered on a case by case basis, but AC'ing of such projects requires agreement of MassDOT and FHWA.
- Project Costs. Costs for projects in years 2-4 of the TIP must reflect Year of Expenditure costs, with a 4% increase per year. 2014 should be using current costs, so 2015 is 4%, 2016 is 8%, 2017 is 12%.

- Greenhouse Gas Tracking. Don't forget to include the greenhouse gas quantification/qualification information.
- Design Funding. Any projects, especially earmarks, programmed for design need to have construction programmed or have some funding for construction committed, such as being programmed in the RTP.
- Regional Targets. MPO staffs are reminded to attempt to program the full amount of their regional target for all TIP years. The closer the year, the more important full programming is. However, given all of our system's needs, and all of the deserving projects, we expect that the MPO staffs to be able to identify projects that will full all of the TIP years. If there are holes in the regional targets, the MPO staffs should work with the MassDOT Highway Division districts and with the regional municipalities to identify projects that can fit in those holes. The best time to do this is back in the fall/early winter, so that the projects can be scored relative to the evaluation criteria, but if that hasn't happened, the MPO staffs should do this consultation prior to releasing a draft TIP list.
- Transit TIP Lists. The Transit TIP lists must have all the projects clearly identified in a way that a lay person can understand -- special attention should be given to clarifying quantities of vehicles to be purchased and the uses of capital funds for operations.

Please contact your MPO liaison with questions. Thanks.

Ned

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Glenn Cannon

From: Cenizal, Callida (DOT) <callida.cenizal@state.ma.us>
Sent: Wednesday, May 29, 2013 2:09 PM
To: Glenn Cannon
Cc: Steven Tupper
Subject: RE: Eligible TAP Projects

Hi Glenn,

Pam is correct in that state DOTs are not eligible entities to access TAP funds. However, DOTs can partner with an eligible entity project sponsor (such as municipalities or RTAs) to carry out a project. It is unclear what exactly what that partnership would require, but I can look into it. I recommend that you either leave those funds unprogrammed or you work with municipalities to identify eligible projects.

Best,
Calli

Calli Cenizal ~ 857-368-8843 ~ callida.cenizal@state.ma.us

Please note that my new phone number

From: Glenn Cannon [mailto:gcannon@capecodcommission.org]
Sent: Wednesday, May 29, 2013 12:46 PM
To: Cenizal, Callida (DOT)
Cc: Steven Tupper
Subject: Eligible TAP Projects

Hi Calli,

At our May 20 MPO meeting, Pam Haznar was under the impression that projects designed by MassDOT were not eligible for TAP funding. We had programmed TAP funding for Route 28 and Bearses Way in Barnstable in 2015, Route 28/Main Street and Route 6A/Main Street in Orleans in 2016 and Route 28/Yarmouth Road in Barnstable in 2017.

I don't see where projects designed by MassDOT are ineligible for TAP funding in the guidelines (see attached).

My interpretation is that the local government agency, in cooperation with MassDOT, would need to request that TAP eligible component's be included in the project, and then the TAP eligible components could be funded through TAP.

Please let me know MassDOT's interpretation for programming TAP funds.

Thanks

Glenn

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

Glenn Cannon

From: Haznar, Pamela (DOT) <pamela.haznar@state.ma.us>
Sent: Thursday, June 06, 2013 7:49 AM
To: Glenn Cannon; 'JMAGNI@VHB.com'; 'GAllaire@yarmouth.ma.us'; 'jrodricks@town.dennis.ma.us'
Cc: Cenizal, Callida (DOT); Steven Tupper; Travers, Bill (DOT); Miller, Albert (DOT)
Subject: Re: Cape Cod Rail Trail and the Bass River Bridge

There is a cape cod JTC meeting next friday morning. It is critical that we receive information prior to the meeting.

From: Haznar, Pamela (DOT)
Sent: Tuesday, June 04, 2013 12:00 PM
To: 'gcannon@capecodcommission.org' <gcannon@capecodcommission.org>; 'JMAGNI@VHB.com' <JMAGNI@VHB.com>; 'GAllaire@yarmouth.ma.us' <GAllaire@yarmouth.ma.us>; 'jrodricks@town.dennis.ma.us' <jrodricks@town.dennis.ma.us>
Cc: Cenizal, Callida (DOT); 'stupper@capecodcommission.org' <stupper@capecodcommission.org>; Travers, Bill (DOT)
Subject: Re: Cape Cod Rail Trail and the Bass River Bridge

No, waiting

From: Glenn Cannon [mailto:gcannon@capecodcommission.org]
Sent: Tuesday, June 04, 2013 11:52 AM
To: Haznar, Pamela (DOT); 'Joseph Magni' <JMAGNI@VHB.com>; George Allaire (GAllaire@yarmouth.ma.us) <GAllaire@yarmouth.ma.us>; 'Joe Rodricks' <jrodricks@town.dennis.ma.us>
Cc: Cenizal, Callida (DOT); Steven Tupper <stupper@capecodcommission.org>
Subject: Cape Cod Rail Trail and the Bass River Bridge

Hi Pam,

Did you have the meeting to discuss segmenting the Cape Cod Rail Trail project into Phase I and Phase II?

And do you have a cost for Phase II (the bridge over Bass River) of the project?

Thanks

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

Glenn Cannon

From: Paul.Maloney@dot.gov
Sent: Tuesday, June 18, 2013 12:58 PM
To: Glenn Cannon
Cc: sheri.warrington@state.ma.us
Subject: RE: FHWA comments on DRAFT UPWP

6-18-2013

Hi Glenn. The publication of all obligated projects applies to all AC'd projects as well. Thanks.

Paul

Paul F. Maloney, P.E. (Maryland)
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From: Maloney, Paul (FHWA)
Sent: Tuesday, June 18, 2013 12:54 PM
To: Glenn Cannon (gcannon@capecodcommission.org)
Cc: Warrington, Sheri (DOT) (sheri.warrington@state.ma.us)
Subject: FHWA comments on DRAFT UPWP

Good afternoon Glenn. While the Draft UPWP is out for public review and comment, FHWA is providing comments that we feel are important to address in the final document. They are:

- The list of MO members does not seem to include Ex-Officio Non-Voting members. Two of those members would be Paul F. Maloney, P.E. Federal Highway Administration, and Noah Berger, Federal Transit Administration. Bill Gordon has retired and Noah is his supervisor. FTA does intend to fill the vacancy that Bill has left, however, until that happens, it may be best to include Noah.
- The list of Cape Cod JTC members does include Bill and myself. Would you please replace Bill's name with Noah's, as mentioned above?
- Introduction (Pg 1) SAFETEA-LU is mentioned when describing that the UPWP was developed in recognition of the federal legislation and regulations. MAP-21 should be mentioned. Please make this change. It would be helpful to the reader to provide a few examples of some of the major changes MAP-21 brought forward from the SAFETEA-LU era. For instance eliminating discretionary programs, emphasis on performance measures and Performance Management in general, and the introduction of the TAP program.
- Looking through the individual tasks, references are made to consistency with SAFETEA-LU. Please update these statements to reference MAP-21.
- Task 1.2 (TIP) – The Procedures section ends with **III – Modifications / Amendments**. Perhaps it would be a good practice to include another section; Section IV – Publication of Obligated Projects. This section should indicate that the TIP activity should include going back after all projects were obligated in the Program year and publishing them by their description and cost for interested individuals to review. This is to occur by regulation,

up to a period of 90-days following the closing of the fiscal year in which the projects were obligated. The listing should be made directly into the TIP.

- Task 2.2 – Performance Standards - this is a great task to begin to focus on MAP-21's performance measures approach. Please see the attachment (7 MAP-21 Goal Areas). Please expand the Objective discussion to relate this to MAP-21 and to discuss the 7 National goal areas (a general reference is fine) and the fact that the MPO will be working with the State DOT to support the Goals developed at the state level.
- While Task 3.0 includes Climate Change Mitigation and Adaptation work, there is no apparent Livability task. Please see the attached UPWP Priorities message. In it, MassDOT transmits UPWP Priority Guidance sent from FHWA. It includes "Assessment of Sustainability" and "Movement of Goods". These areas should be represented in the 2014 UPWP.

Thank you for the opportunity to provide comments on the draft UPWP. If there are any questions about these comments, please feel free to contact me and I will be happy to discuss them with you. Have a nice day.

Paul

Paul F. Maloney, P.E. (Maryland)
Statewide and Metropolitan Planner
FHWA - Massachusetts Division
55 Broadway, 10th floor
Cambridge, MA 02142
Phone: 617-494-3610
Email: paul.maloney@dot.gov

Glenn Cannon

From: Cenizal, Callida (DOT) <callida.cenizal@state.ma.us>
Sent: Wednesday, June 19, 2013 3:32 PM
To: Paul.Maloney@dot.gov
Cc: Warrington, Sheri (DOT); Glenn Cannon
Subject: RE: initial TIP comments - over-programming?

Hi Paul,

Thank you for keeping us in the loop concerning your comments. I am double checking with all of the projects that you have referenced, but for many of the projects you cited as being underfunded actually reflect the most up-to-date project costs, which are slightly lower than previously programmed amounts. I do agree that staff should check that 4% YOE is incorporated into all project costs, and then we can assess whether or not projects are appropriately funded.

Thank you,
Calli

Calli Cenizal ~ 857-368-8843 ~ callida.cenizal@state.ma.us

Please note that my new phone number

From: Paul.Maloney@dot.gov [mailto:Paul.Maloney@dot.gov]
Sent: Wednesday, June 19, 2013 3:11 PM
To: Cenizal, Callida (DOT); Warrington, Sheri (DOT)
Subject: FW: initial TIP comments - over-programming?

6-19-2013

Good afternoon Calli and Sheri. I meant to cc you on the email message below, and not Bill Palmer. Sorry for the confusion. Please feel free to contact me if you have any questions. I intend to talk with Glenn in the morning to straighten things out. Thanks very much.

Paul

Paul F. Maloney, P.E. (Maryland)
Statewide and Metropolitan Planner
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Cambridge, MA 02142
Phone: 617-494-3610
Email: paul.maloney@dot.gov

From: Maloney, Paul (FHWA)
Sent: Wednesday, June 19, 2013 3:01 PM
To: Glenn Cannon (gcannon@capecodcommission.org)
Cc: Palmer, William (DOT) (william.palmer@state.ma.us)
Subject: initial TIP comments - over-programming?

6-19-2013

Hi Glenn. I can't seem to understand the funding of certain projects, relative to their stated total costs. Please see the examples below.

General

- The 4% inflation rate, per year – after the first year, is not captured in any of the other elements except the first. It should not be applied to the first year at all.

On the 2014 Element

- Project 604488, the Dennis-Yarmouth Cape Cod Rail Trail Extension, **is under-funded by $185,783**. This is not financially constrained and must be corrected before the release of the final TIP. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation. This amount was arrived at by subtracting the CMAQ portion ($7,234,136), plus the TAP portion ($178,764), plus the TI – 173 earmark – MA 209- ($ 2,096,080), a total of $9,508,980, from the 2014 cost of $9,694,773. The project appears on the first year of the TIP, and was shown on the 2nd year of the 2013-2016 TIP, therefore it was subject to the 4% increase due to inflation. The cost that should be shown appears to be the figure of $9,694773. Please remove reference to the 2013 un-inflated cost. The present day cost estimate is now the 2013 future cost (factoring 4% inflation). That is $9,694,773.

- Project 606178 Bourne Resurfacing and Safety Upgrading (NHS) shows a cost of $7,795,507 and the amount programmed is only $7,787,520. **This project is under-funded by the difference, which is $7,987**. This is not financially constrained. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation. Please correct this before preparing the final TIP for MPO endorsement.

On the 2015 Element

- Project 606394 Barnstable is funded with HSIP funds only. The total cost is shown as $2,834,657 and the total amount programmed is $2,725,632**. This project is under-funded by $109,025**, and does not account for the 4% inflation that the second year of the TIP must account for in the project's total cost. This project is not financially constrained. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation.Please ensure that the cost is properly inflated to represent an appropriately estimated cost for 2015, and correct the underfunding issue prior to preparing the final TIP for endorsement.

- Please look at all projects in the 2015 element and beyond to ensure that total cost estimates do include the 4% per year estimate for inflation. This notation should be included in the "Additional Information" field for each project to notify the reader that inflation has been accounted for, when estimating costs.

- Project 606164-Harwich shows a total cost of $4,160,000 and only $4,000,000 is programmed. **This project is under-funded by $160,000** and creates a fiscally unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation.

On the 2016 Element

- Project 660461- Orleans shows a total cost of $2,294,723 however only $2,214,095 has been programmed. **This project is under-funded by $80,628** and creates a financially unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field.

- Project 606179 – Dennis shows a total cost of $6,145,440 , however $8,357,798 appears to be programmed, as shown in the "Additional Information" field. As shown, **this project appears to be over-funded by $2,212,358.** This overfunding condition must be corrected prior to the preparation of the final TIP for MPO endorsement.

On the 2017 Element

- Project 606272 – Barnstable shows a total cost of $3,442,084, however only $2,679,674 is programmed. As shown, **this project is under-funded by $742,410** and creates a financially unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field.

- Section 1C / Federal Aid Non-Target Projects – Yarmouth-Barnstable Cape Cod Rail Trail Extension This project has no Project ID number entered. Also, there is no total cost of the project included in the "Additional Information" field. Is the CMAQ funding shown meant to be Statewide CMAQ funding?

I should be available most times tomorrow morning. Please call to discuss. I will send my official comments along after our phone call, in case I may not be understanding things correctly. Thanks very much.

Paul

Paul F. Maloney, P.E. **(Maryland)**
Statewide and Metropolitan Planner
FHWA - Massachusetts Division
55 Broadway, 10th floor
Cambridge, MA 02142
Phone: 617-494-3610
Email: paul.maloney@dot.gov

Glenn Cannon

From: Paul.Maloney@dot.gov
Sent: Wednesday, June 19, 2013 3:35 PM
To: callida.cenizal@state.ma.us
Cc: sheri.warrington@state.ma.us; Glenn Cannon
Subject: RE: initial TIP comments - over-programming?

6-19-2013

Hi Calli. My bigger point is that the projects are not affordable, as shown. They need more funding, unless I'm missing something. Which is why I thought a phone conversation might be a good way to handle it. I wanted to give the CCC an opportunity to explain the funding levels, vs the costs.

Paul

Paul F. Maloney, P.E. (Maryland)
Statewide and Metropolitan Planner
FHWA - Massachusetts Division
55 Broadway, 10th floor
Cambridge, MA 02142
Phone: 617-494-3610
Email: paul.maloney@dot.gov

From: Cenizal, Callida (DOT) [mailto:callida.cenizal@state.ma.us]
Sent: Wednesday, June 19, 2013 3:32 PM
To: Maloney, Paul (FHWA)
Cc: Warrington, Sheri (DOT); Glenn Cannon
Subject: RE: initial TIP comments - over-programming?

Hi Paul,

Thank you for keeping us in the loop concerning your comments. I am double checking with all of the projects that you have referenced, but for many of the projects you cited as being underfunded actually reflect the most up-to-date project costs, which are slightly lower than previously programmed amounts. I do agree that staff should check that 4% YOE is incorporated into all project costs, and then we can assess whether or not projects are appropriately funded.

Thank you,
Calli

Calli Cenizal ~ 857-368-8843 ~ callida.cenizal@state.ma.us

Please note that my new phone number

From: Paul.Maloney@dot.gov [mailto:Paul.Maloney@dot.gov]
Sent: Wednesday, June 19, 2013 3:11 PM
To: Cenizal, Callida (DOT); Warrington, Sheri (DOT)
Subject: FW: initial TIP comments - over-programming?

6-19-2013

Good afternoon Calli and Sheri. I meant to cc you on the email message below, and not Bill Palmer. Sorry for the confusion. Please feel free to contact me if you have any questions. I intend to talk with Glenn in the morning to straighten things out. Thanks very much.

Paul

Paul F. Maloney, P.E. **(Maryland)**
Statewide and Metropolitan Planner
FHWA - Massachusetts Division
55 Broadway, 10th floor
Cambridge, MA 02142
Phone: 617-494-3610
Email: paul.maloney@dot.gov

From: Maloney, Paul (FHWA)
Sent: Wednesday, June 19, 2013 3:01 PM
To: Glenn Cannon (gcannon@capecodcommission.org)
Cc: Palmer, William (DOT) (william.palmer@state.ma.us)
Subject: initial TIP comments - over-programming?

6-19-2013

Hi Glenn. I can't seem to understand the funding of certain projects, relative to their stated total costs. Please see the examples below.

General

- The 4% inflation rate, per year – after the first year, is not captured in any of the other elements except the first. It should not be applied to the first year at all.

On the 2014 Element

- Project 604488, the Dennis-Yarmouth Cape Cod Rail Trail Extension, **is under-funded by $185,783**. This is not financially constrained and must be corrected before the release of the final TIP. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation. This amount was arrived at by subtracting the CMAQ portion ($7,234,136), plus the TAP portion ($178,764), plus the TI – 173 earmark – MA 209- ($ 2,096,080), a total of $9,508,980, from the 2014 cost of $9,694,773. The project appears on the first year of the TIP, and was shown on the 2nd year of the 2013-2016 TIP, therefore it was subject to the 4% increase due to inflation. The cost that should be shown appears to be the figure of $9,694773. Please remove reference to the 2013 un-inflated cost. The present day cost estimate is now the 2013 future cost (factoring 4% inflation). That is $9,694,773.

- Project 606178 Bourne Resurfacing and Safety Upgrading (NHS) shows a cost of $7,795,507 and the amount programmed is only $7,787,520. **This project is under-funded by the difference, which is $7,987**. This is not financially constrained. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation. Please correct this before preparing the final TIP for MPO endorsement.

On the 2015 Element

- Project 606394 Barnstable is funded with HSIP funds only. The total cost is shown as $2,834,657 and the total amount programmed is $2,725,632. **This project is under-funded by $109,025**, and does not account for the 4% inflation that the second year of the TIP must account for in the project's total cost. This project is not financially constrained. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation.Please ensure that the cost is properly inflated to represent an appropriately estimated cost for 2015, and correct the underfunding issue prior to preparing the final TIP for endorsement.

- Please look at all projects in the 2015 element and beyond to ensure that total cost estimates do include the 4% per year estimate for inflation. This notation should be included in the "Additional Information" field for each project to notify the reader that inflation has been accounted for, when estimating costs.

- Project 606164-Harwich shows a total cost of $4,160,000 and only $4,000,000 is programmed. **This project is under-funded by $160,000** and creates a fiscally unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field. This is also a project that does not show the additional 4% increase for inflation.

On the 2016 Element

- Project 660461- Orleans shows a total cost of $2,294,723 however only $2,214,095 has been programmed. **This project is under-funded by $80,628** and creates a financially unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field.

- Project 606179 – Dennis shows a total cost of $6,145,440 , however $8,357,798 appears to be programmed, as shown in the "Additional Information" field. As shown**, this project appears to be over-funded by $2,212,358.** This overfunding condition must be corrected prior to the preparation of the final TIP for MPO endorsement.

On the 2017 Element

- Project 606272 – Barnstable shows a total cost of $3,442,084, however only $2,679,674 is programmed. As shown, **this project is under-funded by $742,410** and creates a financially unconstrained condition. This programming error must be corrected prior to preparing the final TIP for MPO endorsement. If additional funds are being used to meet the costs of this project, please explain that in the "Additional Information" field.

- Section 1C / Federal Aid Non-Target Projects – Yarmouth-Barnstable Cape Cod Rail Trail Extension This project has no Project ID number entered. Also, there is no total cost of the project included in the "Additional Information" field. Is the CMAQ funding shown meant to be Statewide CMAQ funding?

I should be available most times tomorrow morning. Please call to discuss. I will send my official comments along after our phone call, in case I may not be understanding things correctly. Thanks very much.

Paul

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Phone: 617-494-3610
Email: paul.maloney@dot.gov

Glenn Cannon

From: Steven Tupper
Sent: Wednesday, June 19, 2013 3:55 PM
To: 'Cenizal, Callida (DOT)'; Glenn Cannon
Cc: Lev Malakhoff; Warrington, Sheri (DOT)
Subject: RE: recommendations on 2014 UPWP and 2014-17 TIP
Attachments: Allocation memo Cape Cod4L3E.pdf

Calli,

I have discussed these comments with Glenn and Lev and was asked to forward the following responses.

2013 UPWP Amendment:
We will split of the project funding over the two years with 25% in 2013 and 75% in 2014. Obligation of the funds is detailed in the attached FHWA memo.
As detailed in the project scope included in both UPWP's, feedback from the tool will ensure that sustainable elements are integrated into the continued development and design of the preferred alternative selected as part of the Hyannis Access Study Implementation. As also detailed in both UPWP's, the tool "will be used to evaluate the sustainability aspects of the Regional Transportation Plan (RTP) and to identify the strengths and weaknesses of the document in advance of the next planned update." This tool will be used to inform the update of the RTP. This tool with have real and tangible planning benefits, it is not merely an exercise.

2014 UPWP
The Commission does not anticipate carrying our performance measures for the CCRTA.

2014-2017 UPWP
As suggested we will recommend to the MPO that the CCRT extension project be split between 2014 and 2015 with the trail work programmed in 2014 and the bridge and related work programmed in 2015. With this spilt we will have funding available to cover the entire estimated cost (same amount as in year 2014 of 2013-2016 TIP) of the project with the breakdown as follows:

2014	
CMAQ	$7,234,136
TAP	$178,764
2014 Subtotal (Trail)	**$7,412,900**
2015	
CMAQ	$185,793
Earmark (outside of TIP targets)	$2,096,080
2015 Subtotal (Bridge)	**$2,281,873**
Project Total	**$9,694,773**

Any feedback on this proposed breakdown?

Please let me or Glenn know if you have any questions. We will be in touch gain after we review the comments from Paul Maloney.

Thanks,
Steve

From: Cenizal, Callida (DOT) [mailto:callida.cenizal@state.ma.us]
Sent: Monday, June 17, 2013 3:12 PM
To: Glenn Cannon
Cc: Lev Malakhoff; Steven Tupper; Warrington, Sheri (DOT)
Subject: recommendations on 2014 UPWP and 2014-17 TIP

Hi Glenn,

We discussed the upcoming endorsements and have the following comments.

For the FFY2013 UPWP Amendment, MassDOT Planning would very much like to see a financial separation of the FHWA INVEST project between the two UPWPs rather than carry the same amount for the project in both. It is expected that since CCC staff have the funding and staff breakdown of 13 person-weeks for the task as well as a general schedule, staff should be able to estimate when work will begin and thus how much will be expended in each FFY. Also, please determine if there is a deadline by which the funding needs to be obligated, and if it needs to be only some or all of the funding. If this is not changed, it is possible that MassDOT may vote no on this amendment. Furthermore, we would like more information on what is the end goal of this task, as one of the deliverables includes recommended improvements to the preferred alternative of the Hyannis Access Study. Will this actually result in changes to the preferred alternative? To the projects in the RTP? Or is this just a staff exercise to test this tool?

For the 2014 UPWP, in Task 2.2 Performance Measures, it seems that FTA may also be issuing guidance regarding performance measures as well. Will the Commission carry out work for the CCRTA regarding development of these performance measures? If so, please adjust the budget to include 5303 funds and CCC match.

For the 2014-2017 TIP, we have discussed with District 5 regarding the Cape Cod Rail Trail. In light of recent discussions with the Town and the MPO, it seems that the bridge should be funded in 2015 with the remaining earmark funds that are currently programmed in 2014. Therefore the earmark funds should be shifted from 2014 to 2015 with a note that they will be used for the bridge work for the Cape Cod Rail Trail; District 5 will work to determine a separate project number for that phase. The Town and the designer will then have the amount of programmed target funds in 2014 for the trail section and the earmark in 2015 for the bridge.

Please let me know if you have any questions.

Thank you,
Calli

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Callida Cenizal | Office of Transportation Planning
Massachusetts Department of Transportation
857-368-8843 - callida.cenizal@state.ma.us

Please note my new phone number

For news and updates, check out our blog at www.mass.gov/blog/transportation, or follow us on Twitter at www.twitter.com/massdot.
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Glenn Cannon

From: Cenizal, Callida (DOT) <callida.cenizal@state.ma.us>
Sent: Wednesday, June 19, 2013 4:04 PM
To: Steven Tupper; Glenn Cannon
Cc: Lev Malakhoff; Warrington, Sheri (DOT)
Subject: RE: recommendations on 2014 UPWP and 2014-17 TIP

Hi Steve,

Thank you for the additional information. My only hesitation would be the use of CMAQ in 2015 for the Cape Cod Rail Trail; the trail section can't be advance constructed over the two years, and I wouldn't program that amount as the amount of the bridge should be able to be covered by the earmark amount.

Below are some additional comments on the TIP that can be expected in MassDOT's comment letter (there may be additional ones forthcoming):

- The introduction prior to section A1 should cite MAP-21 in addition to SAFETEA-LU.
- In section A3 of the introduction, please include a map showing the region and the boundaries of the sub-regions.
- In section A3 of the introduction, please include additional information on the membership of the MPO. For instance, please specify which entities are permanent members and which are elected members. The process for electing the latter members can also be elaborated on here.
- In section A4 of the introduction, please elaborate more on the actual public participation process by explaining how outreach is performed, how and when documents are available, when public comment periods are required and used, and other opportunities for the public to be involved. This section could also explain what the Cape Cod Joint Transportation Committee is, its membership, and its role as an additional opportunity for community input.
- In section A6 of the introduction, the federal transportation legislation cited should be MAP-21 as incoming and SAFETEA-LU as outgoing. The section that follows should be streamlined to reflect the respective funding categories for each piece of legislation.
- In all four years of the highway project listing, please ensure that all bridge projects reflect their on-system (BR-ON) or off-system (BR-OFF) categorization.
- In all four years of the highway project listing, please change the heading and funding category of Section 1D – NHS to NHPP, as NHS program has been replaced by the NHPP program under MAP-21.
- In the 2014 highway project listing, please remove project #606390. This project is not on the statewide bridge project list.
- In the 2015, 2016, and 2017 highway project listings, please remove the placeholder project line item of "TAP project to be identified." Please leave it blank and the funds unprogrammed if there are no qualified projects.
- In the 2016 highway project listing, please change the funding source cell to HSIP for project #607444, as it is listed under HSIP. Also, this project should have a funding breakdown of 90% federal and 10% non-federal; please adjust as appropriate.
- In the 2016 highway project listing under section 1D, please remove project #606179 and place it in the same section in the 2017 highway project listing. The total programmed cost should be $8,357,798.
- In the 2017 highway project listing, please change the funding source cell to HSIP for project #607435, as it is listed under HSIP. Also, this project should have a funding breakdown of 90% federal and 10% non-federal; please adjust as appropriate.
- In the 2017 highway project listing, please change the funding source cell to CMAQ for project #606272, as it is listed under CMAQ.
- In the 2017 highway project listing under section 1C-Other, please include the project number for the Yarmouth-Barnstable rail trail extension. The project number is #607389.

Please let me know if you have questions.

Calli Cenizal ~ 857-368-8843 ~ callida.cenizal@state.ma.us

Please note that my new phone number

From: Steven Tupper [mailto:stupper@capecodcommission.org]
Sent: Wednesday, June 19, 2013 3:55 PM
To: Cenizal, Callida (DOT); Glenn Cannon
Cc: Lev Malakhoff; Warrington, Sheri (DOT)
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Project Total	**$9,694,773**

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Thanks,
Steve

CAPE COD COMMISSION

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