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

for Federal Fiscal Years (FFY) 2010, 2011, 2012, and 2013  
(October 1, 2009 - September 30, 2013)

prepared by the

***Cape Cod Metropolitan Planning Organization***

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*and the*

***Cape Cod Joint Transportation Committee***

George Allaire, Chairman, Yarmouth

Robert Burgmann, Vice-Chairman, Barnstable

**Cape Cod TIP Amendment**  
**FFY 2010-2013**  
**December 21, 2009**

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

# **CAPE COD METROPOLITAN PLANNING ORGANIZATION**

Cape Cod Transportation Improvement Program (TIP)  
Endorsement, Certification Statements, and Signatures

## **ENDORSEMENT, TIP**

The signatures to follow certify that the Cape Cod Metropolitan Planning Organization (MPO) hereby endorses the *Cape Cod Transportation Improvement Program (TIP) Amendment for Federal Fiscal Years 2010-2013* in fulfillment of the requirements of 23 CFR Part 450.324.

## **CERTIFICATION**

### **Air Quality Conformity**

Whereas, the 1990 Clean Air Act Amendments (CAAA) require Metropolitan Planning Organizations within non-attainment areas and/or attainment areas with maintenance plans to perform air quality conformity determinations prior to the approval of transportation plans and transportation improvement programs, and at such other times as required by regulation;

Whereas, the air quality conformity analysis prepared for the 2010 – 2013 Transportation Improvement Program also demonstrates air quality conformity of the Cape Cod 2007 Regional Transportation Plan, and that all regionally significant transportation projects in the 2010 – 2013 Transportation Improvement Program are contained in the 2007 Regional Transportation Plan, and that all regionally significant projects in the 2014 to 2030 timeframe of the Regional Transportation Plan are modeled in the 2010 – 2013 Transportation Improvement Program's air quality conformity analyses;

Whereas, the Cape Cod MPO has completed its review accordance with Section 176(c) (4) of the Clean Air Act as amended in 1990 [42 U.S.C. 7251 (a)], and hereby certifies the FFY 2010-2013 TIP is financially constrained and that implementation of the Cape Cod 2007 Regional Transportation Plan satisfies the conformity criteria specified in both 40 CFR Part 51 and 93 (8/15/1997) and 310 CMR 60.03 (12/30/1994). Based on the results of the conformity analyses, the Cape Cod 2007 Regional Transportation Plan, the FFY 2010-2013 TIP, and the TIP Amendment FFY 2010-2013 are consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan;

Therefore, in accordance with 23 CFR Part 450 Section 322 (Development and content of the Metropolitan Transportation Plan) of the March 16, 2007 Final Rules for Statewide and Metropolitan Planning, the MPO hereby endorses the *Cape Cod Transportation Improvement Program (TIP) Amendment for FFY 2010-2013*.

The Eastern Massachusetts Non Attainment area air quality conformity determination, with the emissions estimates and regionally significant projects, is included in full as part of Section A.

### **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;



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## A. INTRODUCTION

Federal legislation that contains requirements for transportation plans, programs and projects includes: *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) and 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). Figure 1 “Overview of the Transportation Planning Process” is a flow chart of the planning process.

### A1. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

The *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) continues similar programs as were in the previous legislation, both *The Transportation Equity Act for the 21st Century* (TEA-21), enacted on June 9, 1998, and "ISTEA"—*the Intermodal Surface Transportation Efficiency Act of 1991*.

"SAFETEA-LU addresses the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities." This excerpt quoted from: SAFETEA-LU, A Summary of Highway Provisions, Federal Highway Administration, Office of Legislation and Intergovernmental Affairs, Program Analysis Team, August 25, 2005. With SAFETEA-LU expiring on September 30, 2009, discussions are underway on the next federal legislation.

### A2. Air Quality Conformity Status

#### A2a. Air Quality, Introduction and Background

The Commonwealth of Massachusetts is classified as serious nonattainment for ozone, and is divided into two nonattainment areas. The Eastern Massachusetts ozone nonattainment area includes Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Suffolk, and Worcester counties. Berkshire, Franklin, Hampden, and Hampshire counties comprise 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.

In April 2002, the cities of Lowell, Waltham, Worcester and Springfield were re-designated to attainment for carbon monoxide with EPA-approved limited maintenance plans. In April 1996, the communities of Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere, and Somerville were classified as attainment for carbon monoxide (CO). Air quality conformity analysis must still be completed in these communities, as they have a carbon monoxide maintenance plan approved into the state implementation plan (SIP). The year 2010 carbon monoxide motor vehicle

emission budget established for the Boston CO attainment area with a maintenance plan is 228.33 tons of carbon monoxide per winter day.

The CAAA also required Metropolitan Planning Organizations (MPOs) within nonattainment areas to perform conformity determinations prior to the approval of their Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs). The most recent prior conformity determination occurred in the summer of 2007, when the Federal Highway Administration (FHWA) – in consultation with the Environmental Protection Agency (EPA New England) and the Massachusetts Department of Environmental Protection (DEP) – confirmed that all 13 of the RTPs for the year 2007 in Massachusetts were in conformity with the Massachusetts State Implementation Plan (SIP). A brief summary of major conformity milestones in recent years is as follows (more details are provided in the 2007 RTPs and related documents):

Between 2003 and 2006, several new conformity determinations were made that were triggered by various events, including: The 2003 regional transportation plans, a change in designation from the one-hour ozone standard to an eight-hour ozone standard, and various changes to regional TIPs that involved reprogramming transportation projects across analysis years.

In 2007, air quality analyses were conducted on behalf of all the 2007 Regional Transportation Plans (RTPs), the purposes of which were to evaluate the RTPs' air quality impacts on the SIP. Conformity determinations were performed to ensure that all regionally significant projects were included in the RTPs. The Massachusetts Executive Office of Transportation found the emission levels from the 2007 Regional Transportation Plans to be in conformance with the SIP. Each MPO had certified (and continues to certify) that all activities outlined in its Plan and its TIP:

- will not cause or contribute to any new violation of any standard in any area;
- will not increase the frequency or severity of any existing violation of any standard in any area; and,
- will not delay the timely attainment of any standard or any required interim emission reductions or other milestones in any area.

On April 2, 2008, EPA found that the 2008 and 2009 motor vehicle emissions budgets in the January 31, 2008 Massachusetts 8-hour ozone State Implementation Plan revision were adequate for transportation conformity purposes. The submittal included 2008 and 2009 motor vehicle emission budgets for the Boston-Lawrence-Worcester (Eastern Massachusetts) and Springfield (Western Massachusetts) 8-hour ozone nonattainment areas. Massachusetts submitted these budgets as part of the 8-hour ozone attainment demonstration and reasonable further progress plan for both nonattainment areas, and as a result of EPA's adequacy finding, these budgets are required to be used for this and future conformity determinations.

## **Conformity Test**

The conformity test is to show consistency with the emissions budgets set forth in the SIP, and to contribute to reductions in CO nonattainment areas. In addition, the format of the conformity test is determined by evolving regulations. These regulations set specific requirements for different time periods depending on the timeframe of the Commonwealth's SIP submittals to EPA. These periods are defined as follows:

*Control Strategy Period:* Once a control strategy SIP has been submitted to EPA, EPA has to make a positive adequacy determination of the mobile source emission budget before such budget can be used for conformity purposes. The conformity test in this period is consistent with the mobile source emission budget.

*Maintenance Period* is the period of time beginning when the Commonwealth submits and EPA approves a request for redesignation to an attainment area, and lasting for 20 years. The conformity test in this period is consistent with the mobile source emission budget.

Horizon years for regional and state model analyses have been established following 40 CFR 93.106(a) of the Federal Conformity Regulations. The years for which the regional and state transportation models were run for emission estimates are shown below:

- 2000: Milestone Year – This year is currently being used by the statewide travel demand model as the new base year for calculation of emission reductions of VOCs and NOx.
- 2010: Analysis Year – first year of TIP
- 2020: Analysis Year
- 2030: Horizon Year – last forecast year of regional transportation plans

### **Changes in Project Design since the Last Conformity Determination Analysis**

The milestone and analysis year transportation model networks are composed of projects proposed in this 2010-2013 TIP. Projects in these networks consist of all in-place “regionally significant” projects that can reasonably be expected to be completed by a given analysis/horizon year with consideration of available funding commitments. This project group would include, but not be limited to, regionally significant projects where at least one of the following steps has occurred within the past three years:

- Comes from the first year of a previously conforming TIP,
- Completed the NEPA process, or
- Currently under construction or are undergoing right-of-way acquisition

The Commonwealth requires that any changes in project design from the previous conformity determination for the region be identified. The last conformity determination was performed on the 2007 Regional Transportation Plan.

A complete listing of future regionally significant projects for the entire Eastern Massachusetts Ozone Non-Attainment Area is provided below:

### **Regionally Significant Projects Included in the Regional Transportation Models for the Eastern Massachusetts Ozone Non-Attainment Area**

<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Boston Region</b>
2020	Bedford	Middlesex Turnpike Improvements Phase 3 – widening Plank St. to Manning
2020	Boston	East Boston Haul Road/Chelsea Truck Route (new grade separated roadway)
2020*	Boston	Fairmount Line Improvements, including new stations
2020*	Boston	Russia Wharf Ferry Terminal
2020	Boston	Sullivan Square Improvements
2020	Boston Logan Airport	Consolidated Rental Car Facility (Boston Logan Airport)
2020	Braintree	Braintree Split - I-93/Route 3 Interchange
2020	Canton	I-95 (NB)/Dedham Street Ramp/Dedham Street Corridor (new ramp with widening on Dedham St. from I-95 to University Ave.)
2020	Concord, Lincoln	Route 2/Crosby's Corner (grade separation)
2020	Hanover	Route 53 Final Phase (widening to 4 lanes between Rte 3 and Rte 123)
2020	Hudson	Route 85 (capacity improvements from Marlborough TL to Rte 62)
2020	Marshfield	Route 139 Widening (to 4 lanes between School St. and Furnace St.)
2020	Newton, Needham	Needham Street/Highland Avenue (includes widening Charles River Bridge)
2020	Quincy	Quincy Center Concourse, Phase 2 (new roadway: Parking Way to Hancock)
2020	Revere	Wonderland Parking Garage
2020	Salem	Bridge Street (widening to 4 lanes between Flint and Washington St.)
2020*	Region wide	1000 Additional Park and Ride Spaces

2020	Somerville	Assembly Square Orange Line Station
2020	Somerville	Assembly Square Roadways (new and reconfigured)
2020*	Somerville, Cambridge	Green Line Extension from Lechmere Station to College Avenue
2020	Somerville, Medford	Green Line Extension from College Ave. to Mystic Valley Parkway (Route 16)
2020	Weymouth, Hingham, Rockland	South Weymouth Naval Air Station Access Improvements
2020	Weymouth	Route 18 Improvements (widening between Rte 3 and Rte 139)
2020	Wilmington	Tri-Town Interchange (new "Lowell Junction" interchange on I-93 between Route 125 and Dascomb Rd.)
2020	Woburn	Montvale Avenue (widening between Central St. to east of Washington St.)
2020	Woburn	New Boston Street Bridge (reestablish connection over MBTA Lowell line)
2030	Boston	Rutherford Avenue (new 4 lane bypass road)
2030	Canton	I-95/I-93 Interchange (new direct connect ramps)
2030	Framingham	Route 126/135 Grade Separation
2030	Malden, Revere, Saugus	Route 1 (widening from 4 to 6 lanes between Copeland Circle and Rt. 99)
2030	Reading, Woburn, Stoneham	I-93/I-95 Interchange (new direct connect ramps)
TBD*	Boston	Red Line/Blue Line Connector – Design Only
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description - Cape Cod Region</b>
2020	Barnstable	Barnstable Airport Access
2020	Barnstable	Yarmouth Rd. /Rte 28 (widening to 4 lanes) with Hyannis Rotary improvements
2030	Bourne	Bourne Rotary Long-Term Improvements
2030	Bourne, Sandwich	Bourne-Sandwich Parkway (widening to 4 lanes)
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description - Central Massachusetts Region</b>
2020	Charlton, Oxford	Route 20 Widening
2020	Auburn, Shrewsbury, Worcester	Route 20 Widening – selected locations
2020	Worcester	I-290 / Vernon St. / Kelley Square (new interchange and square realignment)
2030	Millbury, Sutton	Route 146 Improvements – add frontage roads to create limited access roadway between a new interchange (at Boston Rd.) and existing I-90 interchange
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Martha’s Vineyard Region</b>
n/a	n/a	none
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Merrimack Valley Region</b>
2020	Amesbury	Route 110 from I-495 to I-95 (widen from 2 lanes to 4)
2020	Andover	Burt Road extension – improve access to Route 125
2020	Andover	Tri-Town Interchange (new "Lowell Junction" interchange on I-93 between Route 125 and Dascomb Rd.) and I-93 widening to 4 lanes in each direction from new interchange/current "lane drop" area to I-495.
2020	Georgetown	Georgetown Industrial Park Access Road from Route 133
2020	Lawrence	Route 114 (widening from I-495 to Waverly Road)
2020	Lawrence	I-495 over Merrimack River (widening and add new ramps)
2020	Methuen	Route 110/113 (Methuen Rotary – new interchange ramps at I-93)
2020	Newburyport, Amesbury	I-95 over Merrimack River (Whittier Bridge widening from 6 to 8 lanes)
2030	Andover, Methuen	I-93 – widening to 4 travel lanes in each direction from I-495 to NH line
2030	Newburyport	Hale Street Industrial Park access from I-95
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Montachusett Region</b>
2020	Athol	New Interchange on Route 2 at South Athol Road
2020	Fitchburg, Leominster, Sterling	Routes 12 and 13 (various improvements to on and off ramps)
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Nantucket Region</b>
n/a	n/a	none
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Northern Middlesex Region</b>
2020	Billerica	Middlesex Turnpike Improvements Phase 3 – widening Plank St. to Manning
2020	Tewksbury	Tri-Town Interchange (new "Lowell Junction" interchange on I-93 between Route 125 and Dascomb Rd.)

Analysis Year	Community	Project Description – Old Colony Region
2020	Abington	Route 18 - Widening to 4 Lanes from Route 139 to Highland Place
2020	Kingston	Route 3 - Add SB On Ramp from Cranberry Dr (near Kingston Rail Station)
2020	Plymouth	Route 3 – Expand to fully directional interchange at Clark Rd. (Exit 3)
2030	Bridgewater	Route 24 - Add Northbound Slip Ramp from Route 104 WB to Route 24 NB
2030	Brockton	Main Street, Warren Avenue, Spring Street, West Elm Street, Belmont Street - Reestablish Two-Way Circulation
2030	Brockton	Route 123 - Widen from Route 24 to Linwood Street
2030	Kingston, Plymouth	Route 3 - Widening from 4 to 6 Lanes between Hingham and Rte 44
2030	Plymouth	Route 25 - Add New Interchange Before Exit 1 and connect to Bourne Road
2030	Plymouth	Route 3 - Add NB Off-ramp to Plimouth Plantation Hwy. and SB On/off Ramp to Camelot Dr.
2030	Plymouth	Route 3 - Add Northbound on-Ramp at Long Pond Road (Exit 5)
2030	West Bridgewater	Route 106 - Widening from 2 to 4 Lanes between Route 24 and Route 28
Analysis Year	Community	Project Description – Southeastern Massachusetts Region
2020	Dartmouth	Route 6 (Faunce Corner Rd) / I-195 Interchange - Bridge Widening to 4 Lanes
2020	Fall River, Somerset	New Brightman Street Bridge (widening from 2 to 4 lanes)
2020	Freetown	Route 24 - New Interchange (Exit 8 ½)
2020	Mansfield	Route 140 / I-495 New Southbound On-Ramp
2020	New Bedford	Kings Highway - Corridor Widening
2020	Middleborough	Route 44 - Widening from Rte 24 to Rte 58 and Remove Middleboro Rotary
2030	Fall River	Route 79/Davol Street (interchange improvements and new traffic circulation)
2030	Taunton	Route 24 / 140 - Interchange Reconstruction
2030	Taunton, Raynham	Route 24 - Widening from Route 140 to I-495

Note: \* = Listed as SIP Commitment (State Implementation Plan)

## Air Quality Conformity Analysis

Specific information regarding the analysis and modeling methods, latest planning assumptions, and consultation procedures are all detailed in the 2007 RTP and appendices. The emissions from the following MPOs have been combined to show conformity with the SIP for the Eastern Massachusetts Nonattainment Area:

- Cape Cod MPO
- Central Massachusetts MPO
- Merrimack Valley MPO
- Boston MPO
- Montachusett Region MPO
- Northern Middlesex MPO
- Old Colony MPO
- Southeastern Region MPO
- Martha's Vineyard Commission\*
- Nantucket Planning and Economic Development Commission\*

\* These regions do not contain any official urbanized areas, but are treated as MPOs for planning purposes.

Using the latest planning assumptions, the Executive Office of Transportation, Office of Transportation Planning, estimated the emissions for VOC and NOx for all areas and all MPOs through a combination of the statewide and selected regional travel demand models (and with assistance from MPO staff). The VOC mobile source emission budget for 2009 and beyond for the Eastern Massachusetts Nonattainment Area has been set at 63.50 tons per summer day and the 2009 (and beyond) mobile source budget for NOx is 174.96 tons per summer day. As shown in Tables 1 and 2, the results of the air quality analysis demonstrate that the VOC and NOx emissions from all Action

scenarios are less than the VOC and NOx emissions budgets for the Eastern Massachusetts Nonattainment Area:

**TABLE 1**  
**VOC Emissions Estimates for the Eastern Massachusetts Ozone Nonattainment Area**  
**(all emissions in tons per summer day)**

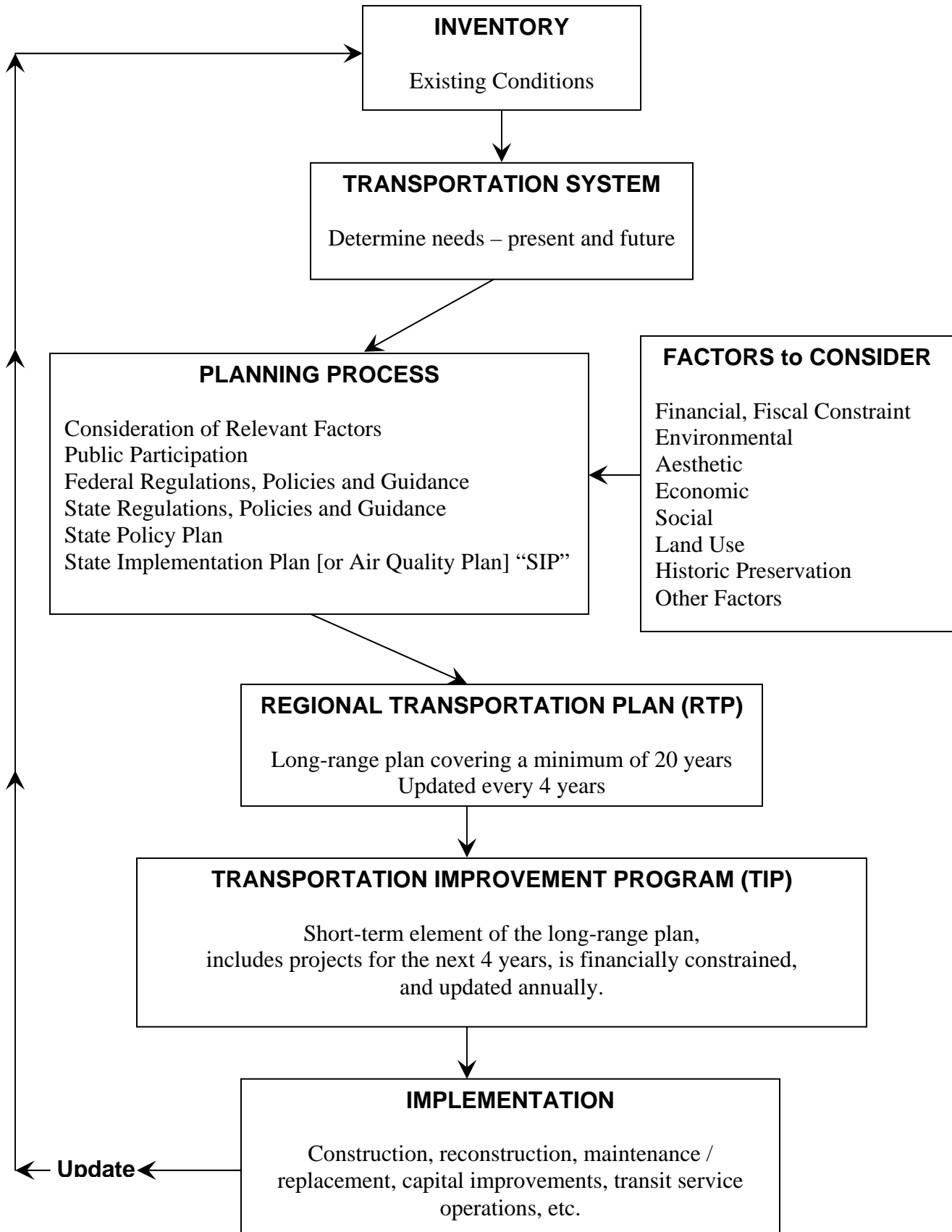
<b>Year</b>	<b>Cape Cod MPO</b>	<b>Eastern MA Action Emissions</b>	<b>Budget</b>	<b>Difference (Action – Budget)</b>
2000	n/a	166.545	n/a	n/a
2010	3.0210	59.155	63.50	-4.345
2020	1.6646	32.415	63.50	-31.085
2030	1.5792	30.412	63.50	-33.088

**TABLE 2**  
**NOx Emissions Estimates for the Eastern Massachusetts Ozone Nonattainment Area**  
**(all emissions in tons per summer day)**

<b>Year</b>	<b>Cape Cod MPO</b>	<b>Eastern MA Action Emissions</b>	<b>Budget</b>	<b>Difference (Action – Budget)</b>
2000	n/a	287.877	n/a	n/a
2010	7.6853	162.637	174.96	-12.323
2020	2.1137	48.148	174.96	-126.812
2030	1.4042	32.743	174.96	-142.217

This conformity determination analysis has been prepared in accordance with EPA's final conformity regulations. The air quality analyses outlined in this document demonstrate that the implementation of the TIP satisfies the conformity criteria where applicable and is consistent with the air quality goals in the Massachusetts SIP. Specifically, the Cape Cod Metropolitan Planning Organization (MPO) has found the emission levels from this FY 2010-2013 TIP – in combination with the emission levels from the other MPOs in its nonattainment area – demonstrate conformity with the SIP. Therefore, the FFY 2010 - 2013 Transportation Improvement Program (TIP) is in conformity with the SIP where required.

Figure 1 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, 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.

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, Executive Office of Transportation and Public Works staff, Massachusetts Highway Department 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 financial estimates developed cooperatively with federal, state, and regional participants. The TIP must conform with the air quality plans and programs.

The **MPO** consists of the Executive Office of Transportation and Public Works (EOT) Secretary, the Massachusetts Highway Department (MHD) Commissioner, the Cape Cod Commission (CCC) Chairman, Cape Cod Regional Transit Authority (CCRTA) Chairman, Barnstable County Commissioner Chairman, Barnstable Town Council Chairman, and three Selectmen representing three Cape Cod sub-regions. The Federal Highway Administration, Federal Transit Administration, Army Corps of Engineers, Cape Cod National Seashore, the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority, and the Chair of the Cape Cod Joint Transportation Committee serve as non-voting members of the MPO. 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 TIP s into the State Transportation Improvement Program (STIP), and approved by federal agencies in order for any 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, Cape Cod Central Railroad, Plymouth & Brockton bus, Steamship Authority, and the HyLine Ferry—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 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 Highway Department (MHD) and the Executive Office of Transportation (EOT) 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 planning departments), a bicycle representative, as well as representatives of EOT, MHD, 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—this year it was held on May 28, 2009. 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. The Draft TIP is available online at the Web site: [www.gocapecod.org/tip](http://www.gocapecod.org/tip). Some of the meetings related to the development of the TIP for discussion and/or endorsement include:

- Oct. 22, 2008 Public meeting (RTP-TIP-Env), Wed., October 22, 2008, 2:00 p.m., Hyannis Transportation Center, Barnstable
- Nov. 7, 2008 CCJTC meeting (TIP-Env; HSIP), Fri., Nov. 7, 2008, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Jan. 26, 2009 MPO meeting, Monday, January 26, 2009, 1:00 p.m., Cape Cod Commission Offices, Barnstable
- Feb. 6, 2009 CCJTC meeting, Friday, February 6, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Feb. 25, 2009 MPO meeting, Wednesday, February 25, 2009, 2:00 p.m., Cape Cod Commission Offices, Barnstable
- Mar. 6, 2009 CCJTC meeting, Friday, March 6, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Mar. 30, 2009 MPO meeting, Monday, March 30, 2009, 1:00 p.m., Cape Cod Commission Offices, Barnstable
- Apr. 3, 2009 CCJTC meeting, Friday, April 3, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- May 1, 2009 CCJTC meeting, Friday, May 1, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- May 28, 2009 Quarterly Issues Task Force meeting, Thursday, May 28, 2009, 9:30 a.m., Sutton, MA
- June 3, 2009 Projects meeting, Wednesday, June 3, 2009, 10:30 a.m., MHD District 5 Office, Taunton, MA
- June 5, 2009 CCJTC meeting, Friday, June 5, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- July 10, 2009 CCJTC meeting, Friday, July 10, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- July 20, 2009 MPO meeting, Monday, July 20, 2009, 1:00 p.m., Cape Cod Commission Offices, Barnstable
- Aug. 7, 2009 CCJTC meeting, Friday, August 7, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Aug. 24, 2009 MPO meeting, Monday, August 24, 2009, 12:00 p.m., Cape Cod Commission Offices, Barnstable
- Sept. 4, 2009 CCJTC meeting, Friday, September 4, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Sept. 17, 2009 Cape Cod Commission meeting, Thurs., Sept. 17, 2009, 3:00 p.m., Assembly of Delegates Chamber, Barns.
- Sept. 23, 2009 Projects meeting, Wednesday, Sept. 23, 2009, 1:00 p.m., Cape Cod Commission Offices, Barnstable
- Sept. 28, 2009 MPO meeting, Monday, September 28, 2009, 12:00 p.m., Cape Cod Commission Offices, Barnstable
- Nov. 6, 2009 CCJTC meeting, Friday, Nov. 6, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Nov. 16, 2009 MPO meeting, Monday, Nov. 16, 2009, 12:00 p.m., Cape Cod Commission Offices, Barnstable
- Dec. 4, 2009 CCJTC meeting, Friday, Dec. 4, 2009, 8:30 a.m., Cape Cod Commission Offices, Barnstable
- Dec. 21, 2009 MPO meeting, Monday, Dec. 21, 2009, 12:00 p.m., Cape Cod Commission Offices, Barnstable

Meetings are subject to change. 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.

## **A5. Adjustment/Amendment Procedures & 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 feasible, and, 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. Projects in the first years of the TIP, which have designs completed or well underway, should have public support in addition to the regional support. Inclusion on this list does not guarantee funding; the project proponent is responsible for completing the steps toward implementation. The Massachusetts Highway Department has committed to a \$400 million annual statewide road and bridge program. 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.

### **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 EOT/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 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**

Most funding categories in this TIP are through federal sources: Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) as provided by the current federal legislation. The current federal transportation legislation is the Safe, Accountable, Flexible, 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 and state Non Federal Aid**

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. Federal share is 80%, state/local share is 20%.

Bridge Replacement and Rehabilitation Program (BR) - This program provides for the replacement or repair of bridges on or off the federal aid system. Federal 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. A portion of STP funds is for projects qualifying under one of the ten 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. Federal share is 80%, state/local share 20%.

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". An amount of funding has been designated for implementation once these projects are scheduled in the TIP/STIP, designed and have all approvals.

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.

Non Federal Aid (NFA) - These projects are not funded with federal dollars. Typically projects in this category are funded through state bonding.

Scenic Byways (SB). - This is a discretionary federal funding program for improvements related to scenic byways.

American Recovery and Reinvestment Act of 2009 (ARRA) or "stimulus" Funding from the economic stimulus bill.

### **Transit Funding Categories, Federal Transit Administration and EOTC**

FTA 5309 Formerly Section 3 (5309) - 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 (5307) - These funds are for capital expenditures. In urbanized areas with a population over 200,000, the use for operating assistance is phased out in SAFETEA-LU.

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

FTA 5311 Formerly Section 18 (5311) - This program funds public transit projects in rural areas. Massachusetts EOT 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 EOT program funds capital improvements for transportation services for people who are elderly and/or have disabilities.

## **B. TIP/STIP 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.

In this TIP Amendment, the Federal Fiscal Year (FY) 2010 projects are the region's highest priority projects that should be ready to move to implementation.

## Summary of Funding 2010-2013

The Cape Cod federal aid target amounts, from Federal Highway Administration sources through the Commonwealth of Massachusetts, Massachusetts Highway Department, based on approximately 4.59% of the statewide amounts, are listed below, and the current amount programmed is the right column.

Projects programmed in years 2010-2013 reflect 2009 cost estimates. Financial targets have been reduced by an estimated inflation amount. An inflation rate of 4% per year was deducted from the regional funding estimated to be available.

<b>YEAR</b>	<b>Total Federal Aid</b>	<b>Amount Programmed</b>
2010:	\$ 6,040,748	\$ 6,040,748
2011:	\$ 5,585,909	\$ 5,585,909
2012:	\$ 5,428,336	\$ 5,428,400
2013:	\$ 5,361,312	\$ 5,323,514
<b>TOTALS:</b>	<b>\$ 22,416,315</b>	<b>\$ 22,378,571</b>

**The list of specific projects follows.**

**Federal Highway Administration / State Funded Projects 2010-2013**







**Federal Transit Administration / Cape Cod Regional Transit Authority Projects 2010-2013**

**PROJECTS IN NEED OF FUNDING, FOR INFORMATION ONLY**

## **B2. PREVIOUSLY ADVERTISED TIP PROJECTS and STATUS**

In excel file...





**B3a. MAP OF PREVIOUS TIP PROJECTS**

## **B4. TRANSIT PROJECT INFORMATION**

Both transit info pages are in excel...

### **B4a. FTA AUTHORIZATION**



**TRANSIT  
INFORMATION  
SUPPLIED BY THE  
CCRTA**

**B4b. Status of CCRTA Projects**

## C. ATTACHMENTS

### 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

## ACRONYMS (continued)

ESC	(Massachusetts) Enhancements Steering Committee
FA	Federal Aid
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year <i>or</i> 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
L RTP	Long Range Transportation Plan
MAP	Mobility Assistance Program
MEPA	Massachusetts Environmental Protection Act
MHD	Massachusetts Highway Department <i>or</i> MassHighway Department
MPO	Metropolitan Planning Organization <i>or</i> Cape Cod Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NFA	Non Federal Aid
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NO <sub>x</sub>	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
STEPA	Surface Transportation Extension Act of 1997
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation 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

## 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. A September meeting of the MPO is expected for endorsement consideration.

Comments on this TIP may be sent via mail, hand delivered, by facsimile, or via e-mail, as follows:

Mailed or dropped off:

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

Sent by facsimile to the attention of the Transportation Program

**FAX: 508-362-3136**

Electronic mail "e-mail"-- please put "TIP" in the subject line:

**ccjtc@capecodcommission.org**

Comments / Questions received on this TIP Amendment:

{response}

Bridge "Street" should be Bridge "Road" in Eastham

This will be corrected.

Paul Maloney, FHWA, comments:

FHWA Comments on the Cape Cod MPO's draft 2010-2013 TIP  
September 17, 2009

FHWA has reviewed the Cape Cod draft 2010-2013 TIP and has the following comments:

P. ii Please include the following Self Certification, which is found in 23 CFR 450.334 ( #6):

23 CFR 230, regarding the implementation of an Equal Employment Opportunity Program on Federal and Federal-aid Highway construction contracts.

P. 2/3 Please see the small font text that was entered under the Conformity Test section. It begins at the bottom of page 2 and goes over to page 3. This comment applies to both the Control Strategy Period and the Maintenance Period passages. Please change the word "consistency" to "consistent".

P. 3 Please see the listed regions in the Eastern Non-Attainment Area. The note at the bottom (see \*) says that the Martha's Vineyard and Nantucket regions are considered MPOs for planning purposes. It may be more accurate to say that they are treated as MPOs for planning purposes.

P. 8 In the first paragraph of Section A5, the CFR citation should be 23 CFR 450.324. The Title number (23) was not included in the passage written.

As an aside, Administrative Modifications are allowed for other changes as well. They include a change to a project's name, scope, and cost, if minor in nature.

It appears that the formatting was disrupted in the Amendment Process section.

P.12 FHWA notes the following issues with the first year element.

## Part 1A

The first three projects are only at 25% design. Please work with District 5 to ensure that these projects do not present a readiness issue. FHWA is not optimistic that projects that are so early in the design process could be ready for advertisement in 2010. It may be that these projects are book jobs and may proceed more quickly than non-book jobs. Please keep FHWA apprised of this situation.

## Part 1C

Please revisit each project entry and ensure that each clearly states what phase of work (design, construction, etc...) is being programmed. Please do this for the SSA projects as well. We presume that the work programmed for those projects are construction related, but please make this explicit in the project description. Also, the design status must be included for these projects.

P. 13

### **2010 element- cont.**

#### Part 2B

Please explicitly identify the phase of work being programmed for the Dennis bridge project (Projis 605272).

Please enter the % complete status for these projects.

### **2011 element**

#### Part 1A

More detail is necessary for the "Cape Cod Projects" entry. Even though a decision may not have been reached on what HSIP projects may be addressed, please reference possible projects coming out of the RSA. A particular project should be identified, but if that decision has not been made yet, and as long as it will likely be one of several that are the result of the RSA, several can be identified as potential projects, of which, one will be programmed. Also, please show the % complete status as 0%.

#### Part 2B

Please add the phase of work for the Dennis bridge project (projis 605291). Also address the % complete. It may be 0%, but please show the status.

Year 2 on the TIP should show Year Of Expenditure costs for all projects. This effectively means that a 4% rate of inflation must be adjusted into present day costs to account for the effects of inflation. This may have been done appropriately, but it would be most helpful to add a footnote to this effect for the reader's benefit. P. 14

### **2012 element**

#### Part 1A

Please clarify the Rt 134 Reconstruction project description to add the phase of the offset path from Rt 28 to Highbank / Upper County Road. The phase of work being programmed for this path is unclear.

Please add the % complete status for the Dennis, Yarmouth project (Projis 604488). If it is 0%, please show that.

## Part 1C

Please clarify what phase of work is being programmed for all SSA projects. It is presumed that construction is being programmed, but it should be explicit.

Also, please enter the % complete status. If 0%, please show 0%.

Year 3 on the TIP should show Year Of Expenditure costs for all projects. This effectively means that a 4% per year (from present – i.e. year 2010) rate of inflation must be adjusted into present day costs to account for the effects of inflation. This may have been done appropriately, but it would be most helpful to add a footnote to this effect for the reader's benefit.

P.15

## 2013 element

### Part 1A

Please add the phase of work being programmed for the Chatham and Falmouth projects.

For all projects, please show 0% complete, as long as appropriate.

The programmed amount is more than \$112,000 greater than the funding available. Since the Eastham project has not even been presented to the PRC, we suggest reducing it's cost by the over-programmed amount to observe financial constraint. This project is still very early in the process and estimates will be further refined as the project's readiness progresses.

Year 4 on the TIP should show Year Of Expenditure costs for all projects. This effectively means that a 4% per year (from present – i.e. year 2010) rate of inflation must be adjusted into present day costs to account for the effects of inflation. This may have been done appropriately, but it would be most helpful to add a footnote to this effect for the reader's benefit

P. 19 Please increase the size of this table for easier viewing by the reader.

Also, in accordance with 23 CFR 450.332, please include the following information in the list of previously obligated projects:

Sec. 450.332 Annual listing of obligated projects.

(a) In metropolitan planning areas, on an annual basis, no later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop a listing of projects (including investments in pedestrian walkways and bicycle transportation facilities) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year.

(b) The listing shall be prepared in accordance with Sec. 450.314(a) and shall include all federally funded projects authorized or revised to increase obligations in the preceding program year, and shall at a minimum include the TIP information under Sec. 450.324(e)(1) and (4) and identify, for each project, the amount of Federal funds requested in the TIP, the Federal funding that was obligated during the preceding year, and the Federal funding remaining and available for subsequent years.

(c) The listing shall be published or otherwise made available in

accordance with the MPO's public participation criteria for the TIP

P. 20 Same comments.

### **General**

This TIP does not appear to explain the project selection and prioritization process. Please add a passage that does so. Factors that should be discussed include: Transportation Evaluation Criteria, Project Readiness, and cost estimates versus funding availability.

*{All FHWA comments will be addressed—with the exception of the “Year of Expenditure” project cost increase of 4% annually—instead the estimated available funds, or “targets”, have been reduced by the 4% annual amount.}*

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Friends of the Mitchell River Wooden Drawbridge  
C/o 14 Sunset Lane  
Chatham, MA 02633

September 25, 2009

Ms. Priscilla N. Leclerc  
Senior Transportation Planner  
Cape Cod Commission  
3225 Main Street  
Barnstable, MA 02630

Re: Cape Cod MPO  
Project Inf. No. 603690  
Mitchell River Bridge  
Chatham, MA 02633

Dear Ms. Leclerc:

We are writing on behalf of the Friends of the Mitchell River Wooden Drawbridge, a committee of Chatham residents and property owners, to advise you of our deep concern about the proposed plans to replace the existing wooden drawbridge with a steel and concrete span which would be totally out of keeping with the existing historic structure as well as detrimental to the surrounding site.

It is our understanding that the proposal to do substantial work on the existing bridge is part of the Transportation Improvement Program (TIP) for this year, that the Cape Cod Commission has already approved the TIP, and that it is scheduled to be reviewed by the Metropolitan Planning Organization (MPO) on Monday, September 28th. Members of our Committee plan to be present at this meeting and to express our dissatisfaction with the design which has been proposed by URS Corporation, the contractor chosen by the Massachusetts Highway Department for this project.

As a matter of historical information, a wooden drawbridge was first put in operation over the Mitchell River on or about 1850, and has been in place there continuously since that time, subject only to regular updating and necessary repairs and replacements, the most recent of which took place in 1980. It is now the last remaining wooden drawbridge in the Commonwealth of Massachusetts, and one of only a very few wooden drawbridges in the United States. As such, it is a historical asset of great significance to the town and to the state and not worthy of being consigned to the scrap heap.

As you know, an informational meeting was held in Chatham on September 3rd at the request of URS Corporation to discuss their proposal to replace the existing wooden bridge with a steel and concrete structure topped by a massive tower and counterweight to control the drawspan. This meeting was attended by over sixty people, many of whom either have property abutting the bridge or who live in the surrounding historic Bridge Street and Old Village areas of Chatham surrounding Mill Pond and Little Mill Pond. What you need to be aware of is that, overwhelmingly, those present expressed their desire to retain a wooden drawbridge at the site; were critical of the modern design and its lack of appreciation for the history of the existing bridge and the surrounding site itself which is largely unchanged for over a hundred years; and stated their belief that the new design would result in the speeding up of traffic along the Bridge Street straightaway and over the bridge itself with the potential for serious accidents to adults and young children, who have regularly fished both sides of the bridge for many years.

At the conclusion of the meeting, we were informed by URS that they would take all of these comments into consideration and return to Chatham for a further informational meeting and a new design, and we understand that this is presently scheduled for November 19th. As confirmed by URS in their letter of August 26th to the Chatham Historical Commission, this project will require review under Section 106 of the National Historic Preservation Act of for assets of historical significance where federal funds and permits are involved. It is also our understanding that the local Historical Commission is in the process of reviewing the eligibility of the bridge for the National Register of Historic Places, and that they will be furnishing their comments to URS and to the Massachusetts Historical Commission in due course.

In closing, our Committee wishes it to be clear that while we totally support the ongoing program to improve, repair or rebuild our existing historic wooden drawbridge, we are not in favor of the proposed design which was provided to us on September 3rd and which would replace this bridge with a steel and concrete structure that would be inappropriate for the site and would effectively eliminate from our history the last remaining wooden drawbridge in Massachusetts.

We thank you for the opportunity to offer our comments and we look forward to discussing this with you at your meeting on Monday, September 28th.

For The Friends of the Mitchell River Wooden Drawbridge: \*  
Norman and Carol Pacun  
Spencer Grey  
Mary Ann Gray

\*List of Committee Members in signed letter to follow.  
cc: Dorr Fox, Preservation Massachusetts  
Stuart Smith, Town of Chatham Harbormaster  
Don Aikman, Ch. Chatham Historical Commission

### C3. MAINTENANCE AND OPERATIONS

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

Section I - Non Federal Aid Maintenance Projects - State Bondfunds				
08/22/09				
Program Group/Sub Group	SFY 2007 NFA Expenditures	SFY 2008 NFA Expenditures	SFY 2009 NFA Expenditures	Estimated SFY 2010 NFA Expenditures
<b>01 - Bridge Repair &amp; Replacement</b>				
New Bridge (Excluded)				
Bridge Replacement ( Excluded)				
Bridge Reconstruction/Rehab	\$0	\$11,186	\$0	\$3,729
Drawbridge Maintenance	\$98,384	\$111,840	\$89,411	\$99,878
Structure Maintenance	\$1,404,372	\$2,270,093	\$3,305,416	\$2,326,627
<b>02 - Bridge Painting</b>				
Painting - Structural	\$30,709	\$0	\$10,382	\$13,697
<b>03 - Roadway Reconstruction</b>				
Hwy Relocation (Excluded)				
Hwy Recon. - Added Capacity(Excluded)				
Hwy Recon - Added Capacity( Excluded)				
New Construction (Excluded)				
Hwy Reconstr - Restr and Rehab	\$107,873	\$127,328	\$96,303	\$110,501
Hwy Reconstr - No Added Capacity	\$0	\$1,130	\$0	\$377
Hwy Reconstr - Minor Widening	\$0	\$5,785	\$1,581	\$2,455
Hwy Reconstr - Major Widening (Excluded)				
<b>04 - Roadway Resurfacing</b>				
Resurfacing	\$1,324,486	\$2,856,088	\$2,007,093	\$2,062,556
<b>05 - Intersection &amp; Safety</b>				
Impact Attenuators	\$10,479	\$26,667	\$22,870	\$20,005
Safety Improvements	\$10,592	\$1,002,512	\$6,903	\$340,002
Traffic Signals	\$89,270	\$90,945	\$86,173	\$88,796
<b>06 - Signs &amp; Lighting</b>				
Lighting and Electrical	\$42,412	\$57,443	\$50,003	\$49,953
Sign Installation / Upgrading	\$30,883	\$26,427	\$35,822	\$31,044
Structural Signing	\$29,335	\$19,741	\$19,118	\$22,732
Vertical Construction	\$48,919	\$0	\$0	\$16,306
<b>07 - Guardrail</b>				
Guard Rail and Fencing	\$0	\$0	\$0	\$0
<b>08 - Maintenance</b>				
Catch Basin Cleaning	\$8,327	\$21,474	\$49,145	\$26,316
Crack Sealing	\$143,745	\$97,630	\$114,395	\$118,590
Landscape and Roadside Develop	\$3,285	\$0	\$1,121	\$1,469
Mowing and Spraying	\$145,577	\$132,075	\$126,924	\$134,859
Pavement Marking	\$32,265	\$39,516	\$40,453	\$37,411
Sewar and Water	\$12,776	\$3,102	\$5,348	\$7,075
Process/Recycle/Tmsprt Soils				\$0
Contract Hwy Maint.				\$0
<b>09 - Facilities</b>				
Chemical Storage Sheds	\$0	\$0	\$0	\$0
Vertical Construction				\$0
<b>10 - Bikeways (Excluded)</b>				
<b>11 - Other</b>				
Miscellaneous / No Prequal	\$0	\$0	\$0	\$0
Asbestos Removal				\$0
Demolition				\$0
Drilling and Boring				\$0
<b>Section I Total:</b>	<b>\$3,573,691</b>	<b>\$8,900,981</b>	<b>\$6,068,461</b>	<b>\$5,514,378</b>
Section II - Non Federal Aid Highway Operations - State Operating Budget Funding				
<b>12 - Snow and Ice Operations &amp; Materials</b>	\$1,914,281	\$4,888,011	\$5,935,424	\$4,245,905
<b>13 - District Maintenance</b> ( Mowing, Litter Management, Sight Distance Clearing, Etc. )	\$703,265	\$917,177	\$810,783	\$810,408
<b>Section II Total:</b>	<b>\$2,617,546</b>	<b>\$5,805,187</b>	<b>\$6,746,207</b>	<b>\$5,056,314</b>
<b>Grand Total NFA:</b>	<b>\$6,191,237</b>	<b>\$12,706,169</b>	<b>\$12,814,667</b>	<b>\$10,570,691</b>



#### **C4. Project and Financial Information**

The following pages include Cape Cod project information, and the financial information for the Transportation Improvement Programs around the state, this information was received in July 2009.

This latest available financial information, including any estimates on the Economic Recovery / Stimulus funds for transportation, was used for development of this TIP for FFY 2010-2013.

**CAPE COD "TARGETS", OR ESTIMATED AVAILABLE FUNDS, FOR THE TIP YEARS 2010-2013**

	Previous Estimates	MAY 2009 draft	Difference May from Previous Estimates	JULY 10, 2009 draft	Difference July from Previous Estimates	<b>NEW</b> JULY 14, 2009 draft targets	Difference July 14 from July 10 Cape Cod Estimates
<b>2010</b>							
GENERAL TARGET:	\$5,352,978	\$5,352,978	\$0	\$5,582,234	\$5,582,234	\$5,582,234	\$0
CMAQ TARGET:	\$917,028	\$917,028	\$0	\$0	\$0	\$0	\$0
HSIP TARGET:	\$458,514	\$458,514	\$0	\$458,514	\$458,514	\$458,514	\$0
<b>TOTAL TARGETED FHWA /STATE MATCHING FUNDS:</b>	<b>\$6,728,520</b>	<b>\$6,728,520</b>	<b>\$0</b>	<b>\$6,040,748</b>	<b>\$6,040,748</b>	<b>\$6,040,748</b>	<b>\$0</b>
<b>2011</b>							
TOTAL TARGET:	\$5,870,228	\$4,760,584	(\$1,109,644)	\$5,127,395	\$5,127,395	\$5,127,395	\$0
CMAQ TARGET:	\$917,028	\$917,028	\$0	\$0	\$0	\$0	\$0
HSIP TARGET:	\$458,514	\$458,514	\$0	\$458,514	\$458,514	\$458,514	\$0
<b>TOTAL TARGETED FHWA /STATE MATCHING FUNDS:</b>	<b>\$7,245,770</b>	<b>\$6,136,126</b>	<b>(\$1,109,644)</b>	<b>\$5,585,909</b>	<b>\$5,585,909</b>	<b>\$5,585,909</b>	<b>\$0</b>
<b>2012</b>							
TOTAL TARGET:	\$5,573,880	\$4,473,894	(\$1,099,986)	\$4,511,308	\$4,511,308	\$4,969,822	\$458,514
CMAQ TARGET:	\$917,028	\$917,028	\$0	\$458,514	\$458,514	\$0	(\$458,514)
HSIP TARGET:	\$458,514	\$458,514	\$0	\$458,514	\$458,514	\$458,514	\$0
<b>TOTAL TARGETED FHWA /STATE MATCHING FUNDS:</b>	<b>\$6,949,422</b>	<b>\$5,849,436</b>	<b>(\$1,099,986)</b>	<b>\$5,428,336</b>	<b>\$5,428,336</b>	<b>\$5,428,336</b>	<b>\$0</b>
<b>2013</b>							
TOTAL TARGET:	\$5,573,880	\$3,985,770	(\$1,588,110)	\$3,985,770	\$3,985,770	\$3,985,770	\$0
CMAQ TARGET:	\$917,028	\$917,028	\$0	\$917,028	\$917,028	\$917,028	\$0
HSIP TARGET:	\$458,514	\$458,514	\$0	\$458,514	\$458,514	\$458,514	\$0
<b>TOTAL TARGETED FHWA /STATE MATCHING FUNDS:</b>	<b>\$6,949,422</b>	<b>\$5,361,312</b>	<b>(\$1,588,110)</b>	<b>\$5,361,312</b>	<b>\$5,361,312</b>	<b>\$5,361,312</b>	<b>\$0</b>
	<b>\$27,873,134</b>	<b>\$24,075,394</b>		<b>\$22,416,305</b>		<b>\$22,416,305</b>	