



CAPE COD  
COMMISSION

2012 REGIONAL TRANSPORTATION PLAN  
Chapter 8: Recommendations and  
Financial Plan

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## Chapter 8: Table of Contents

8.	Recommendations and Financial Plan.....	533
8.1	Introduction .....	533
8.2	Background / Source of the Financial Resources .....	533
8.3	Federal Transportation Funds: Categories and Eligible Activities.....	535
8.4	Summary of Previous Expenditures .....	538
8.4.1	Federal Highway Administration Previous Expenditures.....	539
8.4.2	Federal Lands Highway Program Administration.....	539
8.4.3	Federal Transit Administration Previous Expenditures.....	539
8.5	Estimated Available Funds .....	540
8.5.1	Federal Highway Administration Source Funds.....	540
8.5.2	Federal Transit Administration Source Funds .....	541
8.6	Recommendations within available resources.....	543
8.7	Conclusion .....	547

## Chapter 8: List of Tables

Table 1 – FFY 2012-2035 Estimated Regional Transportation Plan Highway funding.....	541
Table 2 – Estimated Regional Transportation Plan Transit Funding .....	542
Table 3 – Allocation of Available Highway Funding.....	544
Table 4 – Estimated Regional Discretionary Expenditures.....	545
Table 5 – Projects Funded by the Accelerated Bridge Program/GANS .....	546



## 8. Recommendations and Financial Plan

### 8.1 INTRODUCTION

The Regional Transportation Plan (RTP) contains data collection and analysis, discussion about and outreach for the existing Cape Cod transportation system, related issues, and potential solutions. The overarching objective of the RTP is for improved mobility of both residents and visitors to, from, and within the Cape Cod region, and connections beyond the region. While smaller improvements are not specifically identified, the RTP goals assist in directing design and implementation.

Many sources and outreach efforts over the last several years, along with ongoing data collection, analysis, and communications have resulted in a list of recommendations for improvement to Cape Cod's regional transportation system.

However, planning for improvements is meaningless without considering how potential solutions can be financed. The implementation of the proposed projects and programs recommended from this RTP effort—whether large or small, transit, or roadway related—will need financing to proceed.

Under Title 23, federal transportation law, currently an extension of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), a regional transportation plan may only recommend implementation of programs and projects where funding "can reasonably be expected to be available" per 23 CFR 450.322(b)(11). In other words, just as in a local budget, the plan is not approved unless the fiscal analysis shows that there is expected to be enough funding to implement the recommendations. Other proposed projects, programs, and/or studies may be included for informational purposes only.

Therefore, this chapter presents the RTP recommendations within the financial resources expected to be available for the region.

### 8.2 BACKGROUND / SOURCE OF THE FINANCIAL RESOURCES

The primary source of funding for implementation of the RTP projects and programs is from the federal Highway Trust Fund (HTF). Distribution of Highway Trust Fund revenues are appropriated by Congress for surface transportation purposes through the United States Department of Transportation (USDOT) Federal Highway Administration (FHWA) and the USDOT Federal Transit Administration (FTA) from federal legislation, with the most recent six-year act entitled the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). SAFETEA-LU was

signed into law on August 10, 2005, by President George Bush, and has now expired. Continuing resolutions and extensions of SAFETEA-LU have provided funds that will continue through the end September 2011. Efforts are underway in Congress on a draft new bill.

The federal legislation provides authorization; it sets policy, programs, and amounts. It typically authorizes specific dollar amounts for each program. Each year Congress provides an annual appropriation which funds the programs authorized, however, the Congressional amount that is appropriated, or budgeted, is generally less than the amount authorized.

Obligation of the federal dollars occurs for Federal Highway and state funded projects as each project is advertised for construction. For a transit project, the obligation of the federal dollars is as the funds are approved through the online Transportation Electronic Award and Management (TEAM) system.

The federal Highway Trust Fund (HTF) receipts are collected primarily based on user taxes on fuel. Examples of the current tax per gallon by fuel type are as follows:

<b>FEDERAL HIGHWAY TRUST FUND TAX AMOUNTS</b>		
<b><u>FUEL TYPE</u></b>	<b><u>CENTS PER UNIT</u></b>	<b><u>UNIT</u></b>
Gasoline	18.4	gallon
Gasahol	18.4	gallon
Diesel fuel	24.4	gallon
Liquefied petroleum gas	18.3	gallon
Liquefied natural gas	24.3	gallon
Compressed natural gas	48.54	1,000 cubic ft

<b><u>STATE GAS TAX AMOUNT</u></b>	
Gasoline .....	21.0 cents/gallon

For this RTP financial plan, the federal funding provided by SAFETEA-LU extensions through, and in cooperation with, the Commonwealth of Massachusetts is what forms the basis for the estimated available funds for the federal aid eligible components of the transportation system. State funds provide a matching project implementation amount. For a highway construction project the state amount is typically 20% of the construction cost, and the federal highway amount is 80%. Exceptions include the Highway Safety Improvement Program (HSIP) funds, which are 90% federal and 10% state funds. For a transit project the state amount may average at a higher percentage due to the state funding a large percent of operating cost.

Local funds play a large part in the process through project design. Most of the project designs on Cape Cod are funded by the local town where the project is located. This may be the practice even for certain state facilities, because local towns are interested in moving a project forward. Transit services also have a local share in funding, with a

portion of service operating costs assessed to the towns through the Cape Cod Regional Transit Authority.

### 8.3 FEDERAL TRANSPORTATION FUNDS: CATEGORIES AND ELIGIBLE ACTIVITIES

The Regional Transportation Plan process considers all transportation modes. However, the financial estimates are only for the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) eligible facilities. At this time, there is a separate federal source for airport related projects, through the Federal Aviation Administration (FAA). The following table provides examples of the FHWA and FTA federal funding categories and general uses.

Federal Highway Administration Programs	
Fund and Primary Purpose	Eligible Activities
<b>Metropolitan Planning (PL)</b> To carry out the metropolitan transportation planning process	Multimodal transportation planning. Primary documents required are the UPWP, RTP, and the TIP.
<b>Statewide Planning and Research (SPR)</b> Highway and transit planning Statewide transportation planning	Metropolitan transportation planning and Statewide transportation planning process and public transportation management systems; 25% of SPR to be used for Research, Development, and Training
<b>National Highway System (NHS)</b> NHS is the system of significant rural and urban roads serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. NHS funds are for Improvements to rural and urban roads that are part of the NHS or that are NHS Intermodal connectors	NHS corridor improvements that are highway, transit, or system demand management (such as carpool programs). Includes funding for environmental restoration and pollution abatement to minimize the impact of transportation projects. NHS related transportation planning.
<b>Surface Transportation Program (STP)</b> Construction, reconstruction, rehabilitation, and operational improvements for highways, bridges, and other modes 10% set aside for Transportation Enhancements	Capital costs of construction for highway, bicycle/pedestrian accommodation, and/or transit projects (with transfer to FTA for transit) Surface transportation planning programs
<b>Transportation Enhancements</b> To provide for linked but non-typical highway related items—12 specific activities are included in the federal definition	Examples of the 12 specific activities include landscaping, bicycle/pedestrian components, stormwater mitigation projects.
<b>Highway Bridge Replacement / Rehabilitation</b> Replace and rehabilitate deficient highway bridges and to seismically retrofit bridges located on any public road.	Funds provided for Off-System bridges may not be transferred to other 23 U.S.C. programs without a needs determination.
<b>Construction of Ferry Boats &amp; Ferry Terminal Facilities—Ferry Boat Discretionary</b>  Ferry projects	Construction of ferry boats and ferry terminal facilities. Priority ferry systems that provide critical access to areas that are not well-served by other modes of surface transportation; carry the greatest number of passengers and vehicles; or carry the most passengers in passenger only service.

<b>Federal Highway Administration Programs (continued)</b>	
<b>Fund and Primary Purpose</b>	<b>Eligible Activities</b>
<p><b>Highway Safety Improvement Program (HSIP)</b> Safety projects</p>	<p>Funds projects that are designed to produce a reduction in traffic fatalities and serious injuries on public roads. Rail-highway crossing improvements</p>
<p><b>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</b> Air quality benefits</p>	<p>Projects in nonattainment and maintenance areas that reduce transportation related emissions. Any transit capital projects and operating expenses for new services. Operating assistance is limited to new or expanded transportation services, and limited to three (3) years.</p>
<p><b>Recreational Trails Program (RTP)</b> Trails</p>	<p>Develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses.</p>
<p><b>Federal Lands Highways Program (FLHP)</b> Coordinated program of public roads and transit facilities serving Federal and Indian lands. Funding is broken into 4 discrete sources: Indian Reservation Roads (IRR); Public Lands Highway - Discretionary &amp; Forest Highways; Parkways &amp; Park Roads; Refuge Roads</p>	<p>May be used for facilities within, adjacent, or providing access to public lands, national parks, national forests, refuge roads, and Indian reservations. SAFETEA-LU added Alternative Transportation in Parks and Public Lands (ATPPL). May be administered by FHWA or may be transferred to FTA for transit projects eligible for FLH funds under 23 U.S.C. 204(h).</p>
<p><b>Transportation, Community, and System Preservation Program (TCSP)</b> Provides funding for a comprehensive program to facilitate the planning, development, and implementation of strategies to integrate transportation, community, and system preservation plans or practices.</p>	<p>Improve the efficiency of the transportation system Reduce the impacts of transportation on the environment. Reduce the need for costly future investments in public infrastructure Provide efficient access to jobs and services Examine community development patterns and identify strategies to encourage private sector development</p>
<p><b>Safe Routes To Schools</b> Provides funding to encourage and make safer walking and bicycling routes to schools.</p>	<p>Funds are for planning, design, and construction of projects that will substantially improve the ability of students to walk and bicycle to school.</p>

<b>Federal Transit Administration Programs</b>	
<b>Fund and Primary Purpose</b>	<b>Eligible Activities</b>
<p><b>Metropolitan Planning Program Section 5303</b> To carry out the metropolitan transportation planning process under 49 U.S.C. 5303</p>	Metropolitan transportation planning process (23 U.S.C. 134)
<p><b>Urbanized Area Formula Grants Section 5307</b> Transit capital and planning assistance to urbanized areas</p>	In a Transportation Management Area, the MPO may elect to transfer portions of its FTA Section 5307 funds that cannot be used for operating assistance to FHWA for highway projects subject to the requirements of 49 U.S.C. 5307(b)(2).
<p><b>Section 5309</b> Earmark or discretionary funds for bus/rail</p>	Priority for capital bus needs unmet by formula funds, fleet expansion, clean fuels. Eligible New Starts construction program funds for new or extensions to light rail, rapid rail (heavy rail), commuter rail, monorail, busway, and automated fixed guideway system (such as a "people mover").
<p><b>Special Needs of Elderly Individuals and Individuals With Disabilities Program (49 U.S.C. 5310) Section 5310</b> Intended primarily for private non-profit organizations, public bodies approved by the State to coordinate services for the elderly and individuals with disabilities</p>	Capital funding to assist in providing transit services for the elderly and/or disabled population  The Mobility Assistance Program (MAP) administered by the state provides assistance with capital needs for services related to elderly and/or disabled individuals.
<p><b>Non Urbanized Area Formula Program Section 5311</b> Eligible subrecipients include State and local public agencies, Indian Tribes, private non-profit organizations, and private operators of public transportation services.</p>	For the purpose of supporting public transportation in areas with a population of less than 50,000. May be used for capital, operating, state and/or project administration.
<p><b>Transit in the Parks Program Section 5320?</b> A new program in SAFETEA-LU for alternative transportation serving Federal and Indian lands. Capital and planning projects are selected from applications based on criteria as in the solicitation notice. Eligible subrecipients include the National Park Service and Tribal Governments. Local governments acting with the consent of a Federal land management agency are also eligible to apply.</p>	Projects must conserve natural, historical, and cultural resources, reduce congestion and pollution, and improve visitor mobility and accessibility. No more than 25 percent may be allocated for any one project. May be used for transit facilities within, adjacent, or providing access to public lands, national parks, national forests, refuge roads, and Indian reservations.
<p><b>Job Access and Reverse Commute Program (49 U.S.C. 5316)</b> The Job Access and Reverse Commute (JARC) program The federal requirement is that projects selected for funding be included in a locally developed coordinated public transit/human service transportation plan for Sections 5310, 5316 (JARC) and 5317 (New Freedom).</p>	The Job Access and Reverse Commute (JARC) program provides formula funding to States and Designated Recipients to support the development and maintenance of job access projects designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment, and for reverse commute projects designed to transport residents of UZAs and other than urbanized to suburban employment opportunities.

Federal Transit Administration Programs (continued)	
Fund and Primary Purpose	Eligible Activities
<p><b>New Freedom Program (49 U.S.C. 5317)</b>            To provide new transportation services beyond requirements of the Americans with Disabilities Act of 1990 (ADA).            The federal requirement is that projects selected for funding be included in a locally developed coordinated public transit/human service transportation plan for Sections 5310, 5316 (JARC) and 5317 (New Freedom).</p>	<p>Funding is available for transportation services provided by public, non-profit, or private-for-profit operators that are both new and go beyond ADA. The Federal share is 80 percent of capital expenses and 50 percent of operating expenses. Funds provided under other Federal programs (other than those of the DOT) may be used for local/state match for funds provided under Section 5317, and revenue from service contracts may be used as local match.</p>

These tables are provided as an overview to inform the reader of the potential for the use of the FHWA and FTA funds for transportation improvements. However, it is not a comprehensive list of all the funding categories or descriptions. For more information, please see the United States Department of Transportation (U.S. DOT), and the FHWA and FTA websites:

U.S. DOT: <http://www.dot.gov/>

FHWA: <http://www.fhwa.dot.gov/>

FTA: <http://www.fta.dot.gov/>

## 8.4 SUMMARY OF PREVIOUS EXPENDITURES

The summary of previous expenditures is based on projects that were implemented through the local short-range planning document, the Transportation Improvement Program (TIP). From the RTP effort, further project specific analysis and feasibility review leads to project design development, and subsequently to inclusion on the TIP for implementation. Typically, the four-year TIP is updated annually in Massachusetts.

The TIP includes projects that are proposed to be ready for implementation within the TIP four-year time frame. For a "highway" funded project, this generally means that a project on the TIP is under design, or has a design completed and approved by MassDOT. For a transit project in the TIP, the Cape Cod Regional Transit Authority (CCRTA) is a direct grant recipient from FTA, and is generally the project proponent. The CCRTA Board approves an annual budget based on available resources from FTA, state, and local sources, and the transit projects move forward with TIP and FTA approval.

This section is to provide an overview of the previous federal aid resources invested in the Cape Cod transportation system through the MPO processes. This does not include additional local resources that may be used in the area, such as the local state aid for roadways or “Chapter 90” funds.

8.4.1 FEDERAL HIGHWAY ADMINISTRATION PREVIOUS EXPENDITURES  
(Includes state matching amount)

The summary of previous expenditures on the highway side includes a variety of projects and funding categories, and is provided for basic information here. Recently funded specific transportation projects within these amounts include: Route 132 section to four lanes in Barnstable, Sagamore area improvements in Bourne, the Shining Sea Bikeway extension in Falmouth, and the Harwich intersection of Route 124 at Queen Anne Road

<u>Time Frame</u>	<u>Amount</u>
1993-1998 .....	\$ 34,856,217
1999-2004 .....	\$ 75,522,184
2005-2010 .....	\$ 55,464,533
<b>Total Amount</b> .....	<b>\$ 165,842,934</b>
Average Annual Amount .....	\$ 9,213,416

8.4.2 FEDERAL LANDS HIGHWAY PROGRAM ADMINISTRATION

Cape Cod has benefited historically from funding programs under the Federal Lands Highway Program (FLHP). The FLHP funds have been used for roadway and transit facilities related by the National Park Service for access to the Cape Cod National Seashore, and for planning and studies in the area. The average amount of FLHP funds to the CCNS since the previous RTP is about \$2.3 million annually. With the official federal recognition of the Mashpee Wampanoag Tribe, FLHP funds are also available for improvements related to the designated Indian Reservation Roads in the vicinity.

However, these funds have not been included as revenues that are known for fiscal constraint in this RTP due to the fact that there is not an estimate for future funding amounts.

8.4.3 FEDERAL TRANSIT ADMINISTRATION PREVIOUS EXPENDITURES  
(Includes state amount)

The summary of previous expenditures on the transit side includes a variety of projects and funding categories, and is also provided for basic information here. Recently funded specific transportation projects within these amounts include: replacement vehicles for

the CCRTA services, new fare boxes, bus stops, and a portion of the maintenance and operating expenses.

<b>Time Frame</b>	<b>Amount</b>
1993-1998 .....	\$ 36,303,710
1999-2004 .....	\$ 45,089,333
2005-2010 .....	\$ 68,270,818
<b>Total Amount .....</b>	<b>\$149,672,861</b>
Average Annual Amount .....	\$ 8,804,286

## 8.5 ESTIMATED AVAILABLE FUNDS

Previous sections have outlined that the primary source for transportation planning and implementation funds are from federal sources, along with the sub-categories of funding purpose and general use. In section 8.3, specific Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding categories that may be used on Cape Cod and the general uses are described.

This section provides the estimated funding expected to be available for the next 24 years—2012 to 2035—for the Cape Cod Region.

### 8.5.1 FEDERAL HIGHWAY ADMINISTRATION SOURCE FUNDS

In April 2011, the Cape Cod Region received estimated available funding on the highway side from the Massachusetts Department of Transportation (MassDOT). A summary is included in the table below of the estimated available funds for the Cape Cod region from Federal Highway Administration (FHWA) including the state matching funds.

TABLE 1 – FFY 2012-2035 ESTIMATED REGIONAL TRANSPORTATION PLAN HIGHWAY FUNDING

	2012-2015	2016-2020	2021-2025	2026-2030	2031-2035	TOTAL
<b>Total Highway Revenue Available for Cape Cod RTP Programming</b>	<b>\$117,572,000</b>	<b>\$141,653,000</b>	<b>\$194,018,000</b>	<b>\$236,559,000</b>	<b>\$274,237,000</b>	<b>\$964,039,000</b>
Major Infrastructure Projects	\$ 7,462,000	\$10,029,000	\$15,152,000	\$18,514,000	\$21,462,000	\$72,619,000
Federal Aid Bridge Projects	\$12,642,000	\$13,928,000	\$20,841,000	\$25,423,000	\$29,472,000	\$102,305,000
National Highway System (NHS) Projects	\$15,361,000	\$16,462,000	\$24,710,000	\$30,159,000	\$34,962,000	\$121,654,000
Statewide Maintenance	\$49,488,000	\$50,482,000	\$61,433,000	\$72,298,000	\$83,813,000	\$317,512,000
Regional Discretionary Funding	\$32,619,000	\$50,752,000	\$71,883,000	\$90,167,000	\$104,528,000	\$349,949,000

The Cape Cod Regional Transportation Plan (RTP) estimates for federal and state highway funding are based on the existing short-term TIP estimates for 2012-2014. Year 2015 is level-funded with 2014, and from 2016 through 2035 an annual inflation rate of 3% is calculated. The statewide items and other programs, such as the bridge program, are estimated using the current TIP/STIP shares and the same 3% annual inflation rate. Additional state financial plan factors have been considered, such as in 2022, where the numbers increase to higher levels reflecting the repayment of the Grant Anticipation Notes (GANS) for the Accelerated Bridge Program.

#### 8.5.2 FEDERAL TRANSIT ADMINISTRATION SOURCE FUNDS

In August 2011, the Cape Cod Region received estimated available funding for transit in tables from the Massachusetts Department of Transportation (MassDOT).

This Federal Transit Administration (FTA) and state matching funding are allocated through the Cape Cod Regional Transportation Plan (RTP) recommendations according to regional priorities and the funding time frame. The Cape Cod Regional Transit Authority (CCRTA), whose Chairman also serves as MPO Member, is a direct recipient of Federal Transit Administration funds. The CCRTA Administrator and its Board work to maintain and operate services through use of these funds in their annual budgeting and the TIP.

In section 8.3, the various transit funding categories through the Federal Transit Administration (FTA) are described. A summary of the estimated available funds for the Cape Cod region from Federal Transit Administration (FTA) are in Table 2; these amounts include estimated state contract funds.

TABLE 2 – ESTIMATED REGIONAL TRANSPORTATION PLAN TRANSIT FUNDING

**Massachusetts Transit Program Funding Forecasts  
2012-2036**

As of August 18, 2011



v 2.3

RTA: CCRTA  
 Recipient Name: Cape Cod RTA  
 MPO: Cape Cod MPO

Federal Formula Program		Note	FFY 2012-2016	FFY 2017-2021	FFY 2022-2026	FFY 2027-2031	FFY 2032-2036	Total
§ 5307	Urbanized Area Formula		\$ 26,551,897	\$ 30,780,926	\$ 35,683,529	\$ 41,366,990	\$ 47,955,679	\$ 182,339,020
§ 5309	Capital Fixed Guideway Program	A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Commonwealth Programs for RTA		Note	FFY 2012-2016	FFY 2017-2021	FFY 2022-2026	FFY 2027-2031	FFY 2032-2036	Total
SCA	State Contract Operating Assistance		\$ 17,289,736	\$ 20,038,000	\$ 23,220,000	\$ 26,909,000	\$ 31,186,000	\$ 118,642,736
RTACAP	RTA Capital Assistance Program		\$ 1,698,573	\$ 2,212,350	\$ 2,433,585	\$ 2,676,943	\$ 2,944,637	\$ 11,966,088
ITCCAP	RTA Intermodal Assistance Program	D	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Statewide Programs for all eligible participants		Note	FFY 2012-2016	FFY 2017-2021	FFY 2022-2026	FFY 2027-2031	FFY 2032-2036	Total
§ 5310	Elderly/Persons with Disabilities	B	\$ 14,542,206	\$ 16,837,000	\$ 19,481,000	\$ 22,543,000	\$ 26,097,000	\$ 99,500,206
§ 5311	Rural Area/Non Urbanized	B	\$ 13,917,629	\$ 16,124,000	\$ 18,676,000	\$ 21,634,000	\$ 25,063,000	\$ 95,414,629
§ 5311(f)	Intercity bus		\$ 2,783,522	\$ 3,218,000	\$ 3,718,000	\$ 4,297,000	\$ 4,969,000	\$ 18,985,522
MAP	Mobility Assistance Program	C	\$ 18,721,340	\$ 21,703,164	\$ 25,159,916	\$ 29,167,238	\$ 33,812,823	\$ 128,564,481
RBFAP	Regional Bus Fleet Acquisition Program	E	\$ 6,500,000	\$ 8,250,000	\$ 9,075,000	\$ 9,982,500	\$ 10,980,750	\$ 44,788,250
RTAP	Rural Transportation Assistance		\$ 542,519	\$ 620,000	\$ 701,000	\$ 800,000	\$ 915,000	\$ 3,578,519
MassDOT	MassDOT Admin		\$ 5,558,272	\$ 6,417,000	\$ 7,389,000	\$ 8,512,000	\$ 9,821,000	\$ 37,697,272

JARC & New Freedom Programs		Note	FFY 2012-2016	FFY 2017-2021	FFY 2022-2026	FFY 2027-2031	FFY 2032-2036	Total
§ 5316	Jobs Access Reverse Commute	C	\$ 15,402,464	\$ 17,805,000	\$ 20,537,000	\$ 23,711,000	\$ 27,391,000	\$ 104,846,464
	MassDOT Admin		\$ 1,179,833	\$ 1,358,000	\$ 1,561,000	\$ 1,796,000	\$ 2,071,000	\$ 7,965,833
	Boston		\$ 8,400,344	\$ 9,734,000	\$ 11,270,000	\$ 13,048,000	\$ 15,109,000	\$ 57,561,344
	Small Urban		\$ 1,568,566	\$ 1,811,000	\$ 2,086,000	\$ 2,406,000	\$ 2,777,000	\$ 10,648,566
	Rural		\$ 649,566	\$ 745,000	\$ 848,000	\$ 970,000	\$ 1,110,000	\$ 4,322,566
	Central Mass		\$ 1,218,213	\$ 1,406,000	\$ 1,615,000	\$ 1,858,000	\$ 2,141,000	\$ 8,238,213
	Cape Cod		\$ 510,298	\$ 585,000	\$ 661,000	\$ 755,000	\$ 861,000	\$ 3,372,298
	Pioneer Valley		\$ 1,875,643	\$ 2,166,000	\$ 2,496,000	\$ 2,878,000	\$ 3,322,000	\$ 12,737,643
§ 5317	New Freedom	C	\$ 11,851,934	\$ 13,690,000	\$ 15,780,000	\$ 18,202,000	\$ 21,013,000	\$ 80,536,934
	MassDOT Admin		\$ 921,992	\$ 1,065,000	\$ 1,221,000	\$ 1,401,000	\$ 1,610,000	\$ 6,218,992
	Boston		\$ 6,595,232	\$ 7,641,000	\$ 8,848,000	\$ 10,245,000	\$ 11,870,000	\$ 45,199,232
	Small Urban		\$ 1,132,658	\$ 1,306,000	\$ 1,503,000	\$ 1,731,000	\$ 1,991,000	\$ 7,663,658
	Rural		\$ 570,042	\$ 650,000	\$ 740,000	\$ 843,000	\$ 965,000	\$ 3,768,042
	Central Mass		\$ 874,160	\$ 1,003,000	\$ 1,151,000	\$ 1,321,000	\$ 1,518,000	\$ 5,867,160
	Cape Cod		\$ 514,742	\$ 590,000	\$ 666,000	\$ 760,000	\$ 866,000	\$ 3,396,742
	Pioneer Valley		\$ 1,243,108	\$ 1,435,000	\$ 1,651,000	\$ 1,901,000	\$ 2,193,000	\$ 8,423,108

All programs subject to the appropriation of the sponsoring entity.  
 Federal Program and State Contract Assistance escalations based on 2.00% annual inflation (per Federal Reserve guidance)  
 State Capital programs are actual programmed through 2016; 10% increase every fifth year thereafter.

- A WRTA is only RTA with 5309 funds included
- B Competitive program with funding allocated based on actual application and award.
- C Competitive program with funding allocated based on actual application and award. Amount displayed reflects upper annual potential award.
- D ITCCAP program sunsets by 2014 and merges into RTACAP program

## 8.6 RECOMMENDATIONS WITHIN AVAILABLE RESOURCES

The Regional Transportation Plan (RTP) programs and projects were derived from the analysis, outreach, and evaluation process, and resulted in the RTP alternatives list. With receipt of the estimated financial resources for the RTP, staff began the process of aligning the expected available revenues, as shown in Table 1, to the RTP highest priorities. The result of this process, proposed Major Infrastructure and Regional Discretionary category funds allocations, are shown in Table 3 on the following page. Each RTP project has an cost estimate for implementation in the current (FY 2012) year . Of course, resources are only expected to be available over the life of the RTP on an annual basis. Therefore, costs for each project in the Year of Expenditure have been increased by four percent per year. The Year of Expenditure is assumed to be the middle-year in each 5-year time band in the following table.

TABLE 3 – ALLOCATION OF AVAILABLE HIGHWAY FUNDING

Project / Program	2012 Total Estimated Cost	Year of Expenditure (YOE) Estimated Cost	Regional Discretionary Source Amount	Major Infrastructure Source Amount	Total YOE Estimated Cost	Years of Funding Source
Barnstable: Hyannis Access Improvements Phase I #3802	\$ 6,378,549	\$7,462,000	\$ 0	\$7,462,000	\$7,462,000	2012-2015
TIP Projects		\$32,619,000	\$32,619,000		\$32,619,000	2012-2015
<b>Subtotal Funding</b>	<b>\$6,378,549</b>	<b>\$40,081,000</b>	<b>\$32,619,000</b>	<b>\$7,462,000</b>	<b>\$40,081,000</b>	<b>2012-2015</b>
Barnstable: Hyannis Access Improvements Phase II #3802	\$43,621,451	\$55,195,052	\$45,166,052	\$10,029,000	\$55,195,052	2016-2020
TIP Projects		\$5,585,948	\$5,585,948		\$5,585,948	2016-2020
<b>Subtotal Funding</b>	<b>\$43,621,451</b>	<b>\$60,781,000</b>	<b>\$50,752,000</b>	<b>\$10,029,000</b>	<b>\$60,781,000</b>	<b>2016-2020</b>
Bourne: Route 6 Reconfigure Interchange One #3305	\$11,500,000	\$18,411,871	\$8,259,871	\$10,152,000	\$18,411,871	2021-2025
Capewide: Cape Cod Rail Trail Extensions #3302 Phase I	\$22,422,816	\$35,899,651	\$30,899,651	\$5,000,000	\$35,899,651	2021-2025
TIP Projects		\$32,723,478	\$32,723,478		\$32,723,478	2021-2025
<b>Subtotal Funding</b>	<b>\$33,922,816</b>	<b>\$87,035,000</b>	<b>\$71,833,000</b>	<b>\$15,152,000</b>	<b>\$87,035,000</b>	<b>2021-2025</b>
Capewide: Cape Cod Rail Trail Extensions Phase II #3302	\$6,265,854	\$12,205,261	\$12,205,261	\$0	\$12,205,261	2026-2030
Bourne: Route 25 Access Ramp Widening/Belmont Circle Modification #4085	\$5,110,000	\$9,953,772	\$0	\$9,953,772	\$9,953,772	2026-2030
Sandwich Barnstable Yarmouth : Route 6 Hydroplaning #4011	\$10,000,000	\$19,479,005	\$10,918,777	\$8,560,228	\$19,479,005	2026-2030
Capewide: Transportation Management Center #3319	\$6,450,000	\$12,563,958	\$12,563,958	\$0	\$12,563,958	2026-2030
Orleans, Eastham, Wellfleet, Truro, Provincetown: Route 6 Improvements #3332	\$5,000,000	\$9,739,502	\$9,739,502	\$0	\$9,739,502	2026-2030
Bourne: Otis Rotary Area Improvements #3315	\$5,000,000	\$9,739,502	\$9,739,502	\$0	\$9,739,502	2026-2030
TIP Projects		\$35,000,000	\$35,000,000		\$35,000,000	2026-2030
<b>Subtotal Funding</b>	<b>\$37,825,854</b>	<b>\$108,681,000</b>	<b>\$90,167,000</b>	<b>\$18,514,000</b>	<b>\$108,681,000</b>	<b>2026-2030</b>
Capewide: Year-Round Daily Rail Service #3306	\$16,000,000	\$37,918,701	\$30,456,701	\$7,462,000	\$37,918,701	2031-2035
Mashpee: Mashpee Rotary Ring Roads #3362	\$20,000,000	\$47,398,376	\$33,398,376	\$14,000,000	\$47,398,376	2031-2035
TIP Projects		\$40,672,923	\$40,672,923		\$40,672,923	2031-2035
<b>Subtotal Funding</b>	<b>\$36,000,000</b>	<b>\$125,990,000</b>	<b>\$104,528,000</b>	<b>\$21,462,000</b>	<b>\$125,990,000</b>	<b>2031-2035</b>

The Cape Cod Region has worked cooperatively with partners and stakeholders in an ongoing effort to assess, maintain, and improve the region’s transportation system. Within the previous expenditures, there are many different types of projects that have been supported through the process. These include contributions to: property acquisition adjacent to Route 6 in Provincetown, movement and landscaping of Nauset Light in Eastham, Route 132 Boulevard in Barnstable, Sagamore area improvements in Bourne, along with CCRTA transit services.

Balancing the expenditures to the region’s needs is increasingly difficult within the available federal, state, and local resources. The condition of the roadway system is always a top concern for the region, and that includes an ongoing look at safety issues. It is also an ongoing process with the stakeholders and partners as individual projects and/or programs move forward. Annual expenditures for a particular category can vary from 10% - 100% in a given year. One example is the extensions of the bikeways on Cape Cod that are increasingly used for all trip types, and also provide a healthful benefit for the rider and the climate while reducing roadway congestion. This type of project is considered “Mobility” and can, in an individual year, use much of that year’s funding. The Shining Sea Bikeway extension was programmed at \$4.8 million in the TIP, and was recently completed in Falmouth. Other projects combine multiple modes to improve vehicular, bicycle, and pedestrian operations, and therefore are difficult to categorize as purely “roadway” improvements. Therefore, the task of projecting future funds by type within the limited resources is difficult, and is included for planning purposes here.

TABLE 4 – ESTIMATED REGIONAL DISCRETIONARY EXPENDITURES  
(In Million Dollars)

	Anticipated 2012-2015 Costs (Based on the TIP)	2016 - 2020	2021 - 2025	2026 - 2030	2031 - 2035	Total 2016- 2035	Percentages 2016- 2035
Roadway Reconstruction/ Resurfacing	\$ 10.3	\$ 1.8	\$ 10.8	\$ 11.6	\$ 13.4	\$ 37.6	33%
Safety	\$ 7.1	\$ 1.4	\$ 8.2	\$ 8.8	\$ 10.1	\$ 28.5	25%
Mobility	\$ 15.2	\$ 2.4	\$ 13.7	\$ 14.7	\$ 17.1	\$ 47.9	42%
Total	\$ 32.6	\$ 5.6	\$ 32.7	\$ 35	\$ 40.6	\$ 114	100%

The following table provides a list of bridge projects within the Cape Cod region with estimated costs of over \$10 million that are currently scheduled for advertisement.

TABLE 5 – PROJECTS FUNDED BY THE ACCELERATED BRIDGE PROGRAM/GANS

City/Town	Project	Estimated Cost	2012 – 2015	2016 – 2020	2021 – 2025	2026 – 2030
Chatham	Bridge Street bridge over the Mitchell River	\$14,400,000	\$14,400,000			
TOTAL ACCELERATED BRIDGE PROGRAM/GANS		\$14,400,000	\$14,400,000			

Design financing and oversight is typically performed by the project proponent, who may also be the facility owner. Many of the Cape Cod Towns have contributed design funds for projects to be implemented or constructed through the MPO process funds. All projects seeking Federal Highway Administration (FHWA)/state funds are required to have the project designs reviewed by the MassDOT Highway Division. A public hearing is held at the 25% design stage. Many project proponents have early local public input meetings during the project development process in addition to the official 25% design stage public hearing.

Projects that are recommended in this Regional Transportation Plan for Cape Cod will move forward in the short range budget for implementation—the Cape Cod Transportation Improvement Program (TIP), as the project designs are developed. The TIP aligns the projects within the next four specific years for advertising and/or implementation. The TIP is required under federal legislation to be updated at least every four years. In the Commonwealth of Massachusetts the TIP is typically updated each year by the Cape Cod Metropolitan Planning Organization (MPO), in cooperation with state and federal partners. The MPO meetings are all public and input is welcome.

## 8.7 CONCLUSION

The recommended priorities to move forward in this Regional Transportation Plan (RTP) are contained within the financial resources estimated to be available for the region over the RTP time frame. Therefore, the RTP is financially constrained.

The Cape Cod region continues to collect transportation system condition, usage, and safety data and analyze it as part of the ongoing planning process. Development and implementation of the RTP guides future transportation improvements. However, it should be noted that although this plan extends to 2035, the RTP is currently updated every four years. Therefore, the shorter-range recommended projects are beginning the design process now in order to move forward toward implementation.

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