

Cape Cod



2007 Regional Transportation Plan  
**Chapter 7**  
Financial Plan

April 2007

*Prepared by CAPE COD COMMISSION Transportation Staff, on behalf of the*

**CAPE COD METROPOLITAN PLANNING  
ORGANIZATION:**

**Massachusetts Executive Office of Transportation  
Massachusetts Highway Department  
Cape Cod Regional Transit Authority  
Cape Cod Commission  
Barnstable County  
Town of Barnstable  
Towns of Bourne, Sandwich, Falmouth, and Mashpee  
Towns of Yarmouth, Dennis, Harwich, Brewster, and Chatham  
Towns of Orleans, Eastham, Wellfleet, Truro, and Provincetown**

*In cooperation with:*

Massachusetts Department of Environmental Protection  
United States Department of Transportation Federal Highway Administration  
United States Department of Transportation Federal Transit Administration



## Table of Contents

|       |   |    |
|-------|---|----|
| 7     | Financial Information / Introduction.....                             | 4  |
| 7.1   | Background / Source of the Financial Resources .....                  | 4  |
| 7.2   | Federal Transportation Funds: Categories and Eligible Activities..... | 5  |
| 7.3   | Summary of Previous Expenditures.....                                 | 9  |
| 7.4   | Estimated Available Funds .....                                       | 9  |
| 7.5   | Projects Recommended 2007-2030 .....                                  | 10 |
| 7.5.1 | Projects Programmed 2007-2010.....                                    | 12 |
| 7.5.2 | Recommended Projects for 2011-2030.....                               | 17 |
| 7.6   | Conclusion .....  | 18 |

## **7 Financial Information / Introduction**

The Regional Transportation Plan (RTP) is data collection and analysis, discussion and outreach, on the existing system issues and problem areas in the Cape Cod Transportation System. This lends insight into possible solutions for improved mobility of both residents and visitors to, from, and within the Cape Cod region. However, planning for improvements is meaningless without funding for the solutions.

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. Therefore this transportation planning effort includes a look at the financial outlook, and at what solutions will be recommended for implementation within the available funds. To be financially constrained the RTP recommendations for implementation may include only the projects within the funds that are reasonably expected to be available. Other proposed projects, programs, and/or studies may be included for information purposes only.

### **7.1 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 the current legislation entitled the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), signed into law on August 10, 2005, by President George Bush. SAFETEA-LU authorizes specific dollar amounts for each program. Each year Congress provides an annual appropriation which funds the programs specified in SAFETEA-LU.

The 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                        | cubic foot         |

\*To be determined; 1997 amount is 48.54 cents per thousand cubic feet for Compressed natural gas.

| <b><u>STATE TAX AMOUNTS</u></b> |                   |
|---------------------------------|-------------------|
| gasoline .....                  | 21.0 cents/gallon |
| gasahol .....                   |                   |
| diesel fuel .....               |                   |
| liquefied petroleum gas         | 19.1%             |

For this RTP financial plan, the federal funding provided by SAFETEA-LU 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 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 designed 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.

## **7.2 Federal Transportation Funds: Categories and Eligible Activities**

Basically, all transportation modes are eligible for this federal funding with the exception of airport related projects that have a separate federal bill for funding. The following table provides examples of the federal funding categories and general uses.

| <b>Federal Highway Administration Programs</b>  |  |
|---|--|
| <b>Fund and Primary Purpose</b>   | <b>Eligible Activities</b>   |
| <p><b>Metropolitan Planning (PL)</b><br/>To carry out the metropolitan transportation planning process</p>  | <p>Multimodal transportation planning Primary documents required are the Unified Planning Work Program (UPWP), the Regional Transportation Plan (RTP), and the Transportation Improvement Program (TIP)</p>  |
| <p><b>Statewide Planning and Research (SPR)</b><br/>Highway and transit planning<br/>Statewide transportation planning</p>  | <p>Metropolitan transportation planning and Statewide transportation planning process and public transportation management systems; 25% of SPR to be used for Research, Development, and Training</p>  |
| <p><b>National Highway System (NHS)</b><br/>Improvements to rural and urban roads that are part of the NHS or that are NHS Intermodal connectors</p>  | <p>NHS corridor improvements that are highway, transit, or system demand management (such as carpool programs) NHS related transportation planning</p>   |
| <p><b>Surface Transportation Program (STP)</b><br/>Construction, reconstruction, rehabilitation, and operational improvements for highways, bridges, and other modes<br/>10% set aside for Transportation Enhancements</p>  | <p>Capital costs of construction for highway, bicycle/pedestrian accommodation, and/or transit projects (with transfer to FTA for transit)<br/>Surface transportation planning programs</p>  |
| <p><b>Transportation Enhancements</b><br/>To provide for linked but non-typical highway related items—12 specific activities are included in the federal definition</p>   | <p>Examples of the 12 specific activities include landscaping, bicycle/pedestrian components, stormwater mitigation projects.</p>  |
| <p><b>Highway Bridge Replacement / Rehabilitation</b><br/>Replace and rehabilitate deficient highway bridges and to seismically retrofit bridges located on any public road.</p>  | <p>Funds provided for Off-System bridges may not be transferred to other 23 U.S.C. programs without a needs determination.</p>   |
| <p><b>Construction of Ferry Boats &amp; Ferry Terminal Facilities—Ferry Boat Discretionary</b><br/><br/>Ferry projects</p>  | <p>Construction of ferry boats and ferry terminal facilities in accordance with section. 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.</p>   |
| <p><b>Highway Safety Improvement Program (HSIP)</b><br/><br/>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><br/><br/>Air quality benefits</p>  | <p>Projects in nonattainment and maintenance areas that reduce transportation related emissions.<br/>Any transit capital projects and operating expenses for new services. Operating assistance is limited to new or expanded transportation services. Operating assistance is limited to three (3) years.</p>   |
| <p><b>Federal Lands Highways Program (FLHP)</b><br/>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 transit facilities within, adjacent, or providing access to public lands, national parks, national forests, refuge roads, and Indian reservations.<br/>Includes Alternative Transportation in Parks and Public Lands (ATPPL)—a new program in SAFETEA-LU for alternative transportation. 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>Recreational Trails Program (RTP)</b><br/>Trails</p>  | <p>Develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses.</p>   |

| <b>Federal Highway Administration Programs (continued)</b>   |   |
|--|---|
| <b>Fund and Primary Purpose</b>  | <b>Eligible Activities</b>  |
| <p><b>Transportation, Community, and System Preservation Program (TCSP)</b><br/>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<br/>Reduce the impacts of transportation on the environment.<br/>Reduce the need for costly future investments in public infrastructure<br/>Provide efficient access to jobs and services<br/>Examine community development patterns and identify strategies to encourage private sector development</p> |
| <p><b>Safe Routes To Schools</b><br/>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 (PL) Section 5303</b><br/>To carry out the metropolitan transportation planning process under 49 U.S.C. 5303</p>   | <p>23 U.S.C. 134 metropolitan transportation planning process</p>   |
| <p><b>Statewide Planning &amp; Research (SPR)</b><br/>To carry out the provisions of 49 U.S.C. sections 5304, 5306, 5315, and 5322.</p>  | <p>23 U.S.C. 135 statewide transportation planning process.</p>   |
| <p><b>Urbanized Area Formula Grants Section 5307</b><br/>Transit capital and planning assistance to urbanized areas</p>  | <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>   |
| <p><b>Section 5309</b><br/>Earmark or discretionary funds for bus/rail</p>   | <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> |
| <p><b>Special Needs of Elderly Individuals and Individuals With Disabilities Program (49 U.S.C. 5310) Section 5310</b><br/>Intended primarily for private non-profit organizations, public bodies approved by the State to coordinate services for the elderly and individuals with disabilities</p> | <p>Capital funding to assist in providing transit services for the elderly and/or disabled population</p> <p>The Mobility Assistance Program (MAP) administered by the state provides assistance with capital needs for services related to elderly and/or disabled individuals.</p>                      |
| <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>  | <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>   |

| <p style="text-align: center;"><b>Federal Transit Administration Programs (continued)</b></p> <p><b>Fund and Primary Purpose</b></p>   | <p style="text-align: center;"><b>Eligible Activities</b></p>  |
|--|--|
| <p><b>Alternative Transportation in Parks and Public Lands (ATPPL) 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.</p>   | <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. Federal land management agencies and State, tribal and local governments acting with the consent of a Federal land management agency are eligible to apply.</p> |
| <p><b>Job Access and Reverse Commute Program (49 U.S.C. 5316)</b><br/>The Job Access and Reverse Commute (JARC) program<br/>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>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.</p>  |
| <p><b>New Freedom Program (49 U.S.C. 5317)</b><br/>To provide new transportation services beyond requirements of the Americans with Disabilities Act of 1990 (ADA).<br/>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>   |

### 7.3 Summary of Previous Expenditures

| <b>Time Frame</b>           | <b>Federal Highway Administration</b><br>(includes state matching amount) | <b>Federal Transit Administration</b><br>(includes state amount) |
|-----------------------------|---|--|
| 1993-1996 .....             | \$ 19,800,585   | \$ 28,598,220  |
| 1997-2000 .....             | \$ 28,218,353   | \$ 16,818,216  |
| 2001-2004 .....             | \$ 24,516,794   | \$ 28,280,117  |
| <b>Total Amount</b> .....   | <b>\$ 72,535,732</b>  | <b>\$ 73,696,553</b>   |
| <b>Average Annual</b> ..... | <b>\$ 6,044,644</b>   | <b>\$ 6,141,379</b>  |

### 7.4 Estimated Available Funds

A summary of the estimated available federal funding including state matching and operating funds for the next 24 years—2007 to 2030—for recommendations in this Cape Cod Regional Transportation Plan (RTP) is below by associated source and time frame.

| <b>Time Frame</b>             | <b>Federal Highway Administration</b><br>(includes state matching amount) | <b>Federal Transit Administration</b><br>(includes state amount) |
|-------------------------------|---|--|
| 2007-2010 .....               | \$ 92,204,289 <sup>1</sup>  | \$ 41,237,603 <sup>2</sup>                                       |
| 2011-2015 .....               | \$ 114,761,000  | \$ 61,738,840  |
| 2016-2020 .....               | \$ 167,660,000  | \$ 70,978,920  |
| 2021-2025 .....               | \$ 193,222,000  | \$ 81,612,738  |
| 2026-2030 .....               | \$ 222,856,000  | \$ 93,852,036  |
| <b>2007-2030 Totals</b> ..... | <b>\$ 722,999,000</b>   | <b>\$ 349,420,137</b>  |

#### <sup>1</sup> 2007-2010 FHWA "Highway" Funding by basic type (from the August 2006 TIP)

|   |                      |
|---|----------------------|
| Federal Highway Administration (FHWA) & state targeted amount ..... | \$ 25,622,305        |
| Federal Aid Bridge amount .....                                     | \$ 4,500,000         |
| Other Federal Aid projects (earmarks and discretionary) .....       | \$ 37,581,984        |
| Major Infrastructure Amount (Bourne / Sagamore project) .....       | \$ 24,500,000        |
| <b>Total FHWA/state amount programmed in TIP</b> .....              | <b>\$ 92,204,289</b> |

#### <sup>2</sup> 2007-2010 FTA "Transit" Funding by basic type (from the August 2006 TIP)

|   |                     |
|---|---------------------|
| Federal Transit Administration (FTA) 5307 capital funds .....               | \$19,044,215        |
| 5311-5312 Operating Assistance/CCRTA services (local \$ not included) ..... | \$ 7,038,834        |
| Mobility Assistance Program .....   | \$ 2,758,725        |
| Alternative Transportation in Parks & Public Lands (ATPPL) .....            | \$ 1,305,000        |
| <b>Total FTA/state amount programmed in TIP</b> .....                       | <b>\$30,146,774</b> |

Specific programmed items in years 2007-2010 of the Regional Transportation Plan and the current Transportation Improvement Program (TIP) follow under "HIGHWAY", for the Federal Highway Administration (FHWA) source funds, and under "TRANSIT", for the Federal Transit Administration (FTA) source funds.

### 7.5 Projects Recommended 2007-2030

| Recommended Projects         | ESTIMATED COST  | AIR QUALITY STATUS   | Air Quality Analysis Completion Year |    |
|------------------------------|---|----------------------|--------------------------------------|----|
| <b>A. Programs</b> (ongoing) |   |                      |                                      |    |
| 1                            | Roadways: Rehabilitation, Reconstruction  | \$130,000,000        | EXEMPT                               | NO |
| 2                            | Geometrics: Intersection, Land Conservation, Roundabouts, Traffic Calming, Signals, Access Management, Enhancements, Reconfigurations | \$70,000,000         | EXEMPT                               | NO |
| 3                            | Safety: Roundabouts, Traffic Calming, Relocation of telephone poles, Red Light running cameras  | \$40,000,000         | EXEMPT                               | NO |
| 4                            | Bicycle / Pedestrian  | \$30,000,000         | EXEMPT                               | NO |
| 5                            | Intelligent Transportation Systems (ITS): Real Time Traffic Information, Canal Area Real Time Traffic Information                     | \$30,000,000         | EXEMPT                               | NO |
| 6                            | Rail Infrastructure Preservation  | \$10,000,000         | EXEMPT                               | NO |
| 7                            | Bridges - ongoing   | \$30,999,000         | EXEMPT                               | NO |
| 8                            | Capewide Transit Marketing and Education  | \$1,000,000          | EXEMPT                               | NO |
| 9                            | Transit Capital - ongoing, Bus Purchases, Rail, Park & Ride Lots, Bus Shelters, ITS   | \$223,260,000        | EXEMPT                               | NO |
| 10                           | Transit Operating - bus ongoing, year-round rail service  | \$125,000,000        | EXEMPT                               | NO |
| <b>A. TOTAL</b>              |   | <b>\$690,259,000</b> |                                      |    |
| Average Annual Amount        |   | \$28,760,792         |                                      |    |

## Recommended Projects

### B. Projects

|    |  | ESTIMATED<br>COST | AIR<br>QUALITY<br>(AQ)<br>STATUS | AQ<br>Analysis<br>Completion<br>Year |
|----|--|-------------------|----------------------------------|--------------------------------------|
| 1  | Bourne, Scenic Highway Median Barrier  | \$15,000,000      | EXEMPT                           | 2010                                 |
| 2  | Sandwich to Orleans, Rte 6 Interchange Improvements (Exits 2-12)   | \$68,241,000      | EXEMPT                           | 2010                                 |
| 3  | Cape Cod Rail Trail Extensions (Den-Yarm-Barns. To Hyannis Transportation Center)  | \$4,000,000       | EXEMPT                           | 2010                                 |
| 5  | Bourne, Bourne Rotary Improvements (short-term)  | \$1,000,000       | EXEMPT                           | 2010                                 |
| 7  | Year-Round Daily Passenger Rail Service (Hyannis, Buzzards Bay, Middleborough (to Boston), Providence, RI (to TF Green, to NY) | \$26,000,000      | EXEMPT                           | 2010                                 |
| 11 | Bourne, Canal Area ITS for Real Time Information   | \$3,000,000       | EXEMPT                           | 2010                                 |
| 14 | Barnstable, Route 132 Boulevard Landscaping  | \$1,500,000       | EXEMPT                           | 2010                                 |
| 22 | Orleans Transportation Center  | \$1,000,000       | EXEMPT                           | 2010                                 |
| 4  | Barnstable , Route 132 Access management, Phinneys Lane to Airport Rotary  | \$5,000,000       | EXEMPT                           | 2020                                 |
| 5L | Bourne, Bourne Rotary Improvements (long-term)   | \$60,000,000      | NON-EXEMPT                       | 2020                                 |
| 6  | Bourne Route 6 WB Reconfigure Exit 1 on-ramp   | \$7,000,000       | EXEMPT                           | 2020                                 |
| 8  | TF Green Bus   | \$33,600,000      | EXEMPT                           | 2020                                 |
| 9  | Barnstable Airport Rotary Modification   | \$900,000         | EXEMPT                           | 2020                                 |
| 10 | Barnstable Airport Access Roads-- extend Attucks Lane  | \$15,000,000      | NON-EXEMPT                       | 2020                                 |
| 12 | Barnstable Yarmouth Road add lanes   | \$10,000,000      | NON-EXEMPT                       | 2030                                 |
| 13 | Bourne Sandwich Road Parkway-- 4 lanes and median  | \$35,000,000      | NON-EXEMPT                       | 2030                                 |
| 15 | Capewide Traffic Counting Equipment Installation for Continuous Monitoring   | \$1,000,000       | EXEMPT                           | 2030                                 |
| 16 | Bourne, Otis Rotary Area Improvements  | \$5,000,000       | EXEMPT                           | 2030                                 |
| 17 | Orleans, Route 6A and Route 28 Intersection Improvements   | \$1,000,000       | EXEMPT                           | 2030                                 |
| 18 | Barnstable, Independence Park Bikepath   | \$7,000,000       | EXEMPT                           | 2030                                 |
| 19 | Barnstable, Route 6A and 132 roundabout  | \$1,000,000       | EXEMPT                           | 2030                                 |
| 20 | Capewide, Transportation Management Center   | \$6,500,000       | EXEMPT                           | 2030                                 |
| 21 | Buzzards Bay Transportation Center   | \$2,000,000       | EXEMPT                           | 2030                                 |

**B. TOTAL**

**\$309,741,000**

Average Annual Amount

\$12,905,875

**A + B TOTAL**

**\$1,000,000,000**

Average Annual Amount

\$41,666,667

**7.5.1 Projects Programmed 2007-2010**

**2007-2010 FHWA "HIGHWAY" Funding Projects (based on the August 2006 TIP)**

| State ID    | MUNICIPALITY           | DESCRIPTION   | FUND   | RTP                           | TOTAL COST   | Year expected to be advertised |
|-------------|------------------------|---|--|-------------------------------|--------------|--------------------------------|
| 604914      | BARNSTABLE             | Route 132 Boulevard--Landscaping phase (Enhancements?)<br>Route 132, widen with median boulevard from just east of Route 6 to Bearse's Way; Advance Construct 2005+, 2008 third AC year | STP-U  | Target project                | \$1,500,000  | 2009                           |
| 601441      | BARNSTABLE             | Route 28 Intersection Improvements at 3 locations--Rte 149, So. County Rd, Lumbert Mill Rd.   | possible CMAQ  | Target project                | \$3,600,000  | 2008                           |
| 604096      | BARNSTABLE             | Cape Cod Hyannis Memorial Statue Gateway/ Walkway, Massachusetts  | 112 STP (100% Federal Funds)<br>117 STP (100% Federal Funds) | Other Federal Aid Projects    | \$100,000    | 2007                           |
| 112 Earmark | BARNSTABLE             | Cape Cod Hyannis Gateway, Massachusetts   | 117 STP (100% Federal Funds)                                 | Other Federal Aid Projects    | \$378,944    | 2007                           |
| 117 Earmark | BARNSTABLE             | Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA) M/V Eagle Mid-Life Refurbishment  | FBD  | Other Federal Aid Projects    | \$5,900,000  | 2008                           |
| SSA         | Barnstable / Nantucket | Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA) HYANNIS Terminal Slip Modifications   | FBD  | Other Federal Aid Projects    | \$4,500,000  | 2008                           |
| SSA         | Barnstable / Nantucket | Route 6 Scenic Highway Median installation and safety improvements at Edge Hill Road AC Project 07-08 Total \$5.5 mil   | STP  | Target project                | \$5,500,000  | 2007                           |
| 603894      | BOURNE                 | Real Time Traffic Information System -- Design Build of year-round 24/7 Web based traffic information system based on cameras, sensors, 511   | CMAQ   | Target project                | \$1,375,542  | 2010                           |
| 603847      | BOURNE                 | Sagamore Rotary Area Improvements   | STP - FLEX   | Major Infrastructure Projects | \$22,500,000 | 2007                           |
| 603847      | BOURNE                 | Sagamore Rotary Area Improvements   | STP - FLEX   | Major Infrastructure Projects | \$2,000,000  | 2008                           |
| 247         | CAPEWIDE               | Rural Roads Initiative, Cape & Islands  | HPP#247  | Other Federal Aid Projects    | \$218,000    | 2007                           |
| 601467      | CHATHAM                | Streetscape Improvements Main St  | STP  | Target project                | \$1,306,920  | 2009                           |

**HIGHWAY: 2007-2010 Federal Highway Administration and state (continued)**

| State ID    | MUNICIPALITY                              | DESCRIPTION  | FUND                        | RTP                        | TOTAL COST   | Year expected to be advertised |
|-------------|---|--|-----------------------------|----------------------------|--------------|--------------------------------|
| 604742      | DENNIS                                    | Great Western Rd & South Gage's Way Intersection Improvements  | STP                         | Target project             | \$650,000    | 2010                           |
| 600395      | DENNIS                                    | Route 134, from Route 28 to Upper County Rd  | STP                         | Target project             | \$2,000,000  | 2010                           |
| 113 Earmark | DENNIS                                    | Bass River Gateway Project (Howland Property)  | 113 STP                     | Other Federal Aid Projects | \$1,400,000  | 2007                           |
| 603892      | DENNIS                                    | BRIDGE Upper County Rd Footprint replacement, BR#D-07-001  | BRIDGE - ON SAFETEA-LU      | BRIDGE                     | \$2,000,000  | 2010                           |
| 604488      | DENNIS, YARMOUTH, BARNSTABLE              | Cape Cod Rail Trail Extension [Design Amount in 2007]  | EARMARK TI#173              | Other Federal Aid Projects | \$595,975    | 2007                           |
| 604488      | DENNIS, YARMOUTH & BARNSTABLE             | Cape Cod Rail Trail Extension [CMAQ and Earmark construction]  | CMAQ SAFETEA-LU             | Target project             | \$1,375,542  | 2009                           |
| 604488      | DENNIS, YARMOUTH, BARNSTABLE              | Cape Cod Rail Trail Extension [Design Amount in 2008; Total earmark \$2,598,780 in federal earmark amount]   | EARMARK TI#173              | Other Federal Aid Projects | \$2,652,500  | 2010                           |
| PLH         | Department of Conservation and Recreation | Cape Cod Seashore Eastham Dennis Bike Trail Repair   | Public Lands Highway        | Other Federal Aid Projects | \$1,190,400  | 2007                           |
| 603609      | FALMOUTH                                  | Route 28 Reconstruction at Reine's Corner  | STP                         | Target project             | \$500,000    | 2007                           |
| 603520      | FALMOUTH                                  | Shining Sea Bikeway Extension [CMAQ and Earmark]   | CMAQ SAFETEA-LU             | Target project             | \$1,375,542  | 2007                           |
| 603520      | FALMOUTH                                  | Shining Sea Bikeway Extension [Total earmark \$2,765,632 in federal earmark amount]  | EARMARK HPP#1326 SAFETEA-LU | Other Federal Aid Projects | \$2,065,040  | 2007                           |
| 603520      | FALMOUTH                                  | Shining Sea Bikeway Extension [Total earmark \$2,765,632 in federal earmark amount]  | EARMARK HPP#1326 SAFETEA-LU | Other Federal Aid Projects | \$696,000    | 2008                           |
| 603520      | FALMOUTH                                  | Shining Sea Bikeway Extension [Total earmark \$2,765,632 in federal earmark amount]  | EARMARK HPP#1326 SAFETEA-LU | Other Federal Aid Projects | \$696,000    | 2009                           |
| SSA         | FALMOUTH                                  | Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA) Woods Hole Terminal reconstruction / improvements to the terminal, 2 ferry slips, new longer transfer bridges, ticket office building. | FBD                         | Other Federal Aid Projects | \$10,000,000 | 2010                           |

**HIGHWAY: 2007-2010 Federal Highway Administration and state  
(continued)**

| State ID | MUNICIPALITY         | DESCRIPTION  | FUND         | RTP                        | TOTAL COST  | Year expected to be advertised |
|----------|----------------------|--|--------------|----------------------------|-------------|--------------------------------|
| 603494   | FALMOUTH             | BRIDGE, Chappaquoit BR#F-3-9   | BRIDGE - OFF | BRIDGE                     | \$2,500,000 | 2008                           |
| 604882   | HARWICH              | Route 124 at Queen Anne Road Intersection Improvements   | STP          | Target project             | \$600,000   | 2010                           |
| 604744   | SANDWICH             | Route 6 Ramps at Route 130, Intersection improvements  | STP          | Target project             | \$650,000   | 2010                           |
| PIF PNF  | TRURO                | Route 6 safety improvements for bike ped<br>Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA) M/V Nantucket Mid-Life Refurbishment | CMAQ         | possible CMAQ              | \$2,000,000 | 2010                           |
| SSA      | Vineyard / Nantucket |  | FBD          | Other Federal Aid Projects | \$6,600,000 | 2007                           |
| 602327   | YARMOUTH             | Higgins Crowell Road from Rte. 28 to Mid-Tech Drive  | STP          | Target project             | \$2,580,000 | 2009                           |
| 602923   | YARMOUTH             | Packets Landing Improvements   | HPP#404      | Other Federal Aid Projects | \$589,125   | 2007                           |

**TRANSIT: 2007-2010 Federal Transit Administration and state funds / Cape  
Cod Regional Transit Authority Projects**

| Year | Fund  | Project Description   | Total Cost  | Federal     | State     |
|------|-------|---|-------------|-------------|-----------|
| 2007 | 5311  | Operating Assistance  | \$956,922   | \$46,018    | \$910,904 |
| 2007 | 5307  | Operating Assistance  | \$971,786   | \$134,530   | \$837,256 |
| 2007 | 5307  | Preventative Maintenance  | \$2,544,262 | \$1,578,775 | \$965,487 |
| 2007 | 5307  | ADA Paratransit   | \$1,379,268 | \$467,695   | \$911,573 |
| 2007 | 5307  | Transit Enhancements  | \$53,916    | \$44,930    | \$8,986   |
| 2007 | 5307  | Hyannis Transportation Center<br>(\$474,750 in local funds)   | \$750,000   | \$275,250   | \$474,750 |
| 2007 | 5307  | Transit buses, supervisor vehicle, transit<br>shop equipment, benches, signs, bike<br>racks, ITS equipment/installation | \$1,151,691 | \$921,353   | \$230,338 |
| 2007 | MAP31 | Minibuses (10)  | \$570,000   | \$0         | \$570,000 |
| 2007 | MAP31 | Lift Van (3)  | \$110,000   | \$0         | \$110,000 |
| 2007 | MAP31 | Mobile radios/base sta. MDTs  | \$10,000    | \$0         | \$10,000  |
| 2007 | ATPPL | National Seashore CG Beach shuttle<br>replacement - phase 1   | \$400,000   | \$400,000   | \$0       |
| 2007 | ATPPL | National Seashore Evaluate & Procure<br>transit software system   | \$250,000   | \$250,000   | \$0       |
| 2007 | ATPPL | National Seashore Flex satellite maint<br>needs / alternative study   | \$200,000   | \$200,000   | \$0       |
| 2007 | ATPPL | National Seashore Flex evaluation study   | \$30,000    | \$30,000    | \$0       |
| 2007 | ATPPL | transportation partner coordination<br>program  | \$175,000   | \$175,000   | \$0       |
| 2007 | ATPPL | National Seashore ITS implementation<br>study   | \$250,000   | \$250,000   | \$0       |
| 2008 | 5312  | CCRTA Wi-MAX Project Field<br>Operational Test  | \$625,000   | \$500,000   | \$125,000 |
| 2008 | 5311  | Operating Non-Urb Area  | \$956,922   | \$46,018    | \$910,904 |
| 2008 | 5307  | Operating Subsidy   | \$538,120   | \$0         | \$538,120 |
| 2008 | 5307  | Preventative Maintenance  | \$2,260,155 | \$1,578,775 | \$681,380 |
| 2008 | 5307  | ADA Paratransit   | \$799,115   | \$467,695   | \$331,420 |
| 2008 | 5307  | Transit Enhancements  | \$85,530    | \$44,930    | \$40,600  |
| 2008 | 5307  | Transit buses, minibuses, vans; ITS<br>Equipment; bus stops/signs   | \$1,423,770 | \$1,250,000 | \$173,770 |
| 2008 | MAP32 | Minibuses (10)  | \$588,610   | \$0         | \$588,610 |
| 2008 | MAP32 | Lift Van (2)  | \$81,280    | \$0         | \$81,280  |
| 2008 | MAP32 | Mobile radios/base sta. MDTs  | \$10,612    | \$0         | \$10,612  |

**TRANSIT: 2007-2010 Federal Transit Administration and state funds / Cape  
Cod Regional Transit Authority Projects (continued)**

| <b>Year</b> | <b>Fund</b> | <b>Project Description</b>   | <b>Total Cost</b> | <b>Federal</b> | <b>State</b> |
|-------------|-------------|------------------------------|-------------------|----------------|--------------|
| 2009        | 5311        | Operating Assistance         | \$956,922         | \$46,018       | \$910,904    |
| 2009        | 5307        | Operating Assistance         | \$538,120         | \$0            | \$538,120    |
| 2009        | 5307        | Preventative Maintenance     | \$2,322,710       | \$1,578,775    | \$743,935    |
| 2009        | 5307        | ADA Paratransit              | \$809,058         | \$467,695      | \$341,362    |
| 2009        | 5307        | Transit Enhancements         | \$85,530          | \$44,930       | \$40,600     |
| 2009        | 5307        | Bundled Transit Projects     | \$1,148,520       | \$974,750      | \$173,770    |
| 2009        | MAP32       | Minibuses (10)               | \$600,382         | \$0            | \$600,382    |
| 2009        | MAP32       | Lift Van (2)                 | \$82,906          | \$0            | \$82,906     |
| 2009        | MAP32       | Mobile radios/base sta. MDTs | \$10,824          | \$0            | \$10,824     |
| 2010        | 5311        | Operating Assistance         | \$956,922         | \$46,018       | \$910,904    |
| 2010        | 5307        | Operating Assistance         | \$538,120         | \$0            | \$538,120    |
| 2010        | 5307        | Preventative Maintenance     | \$2,387,083       | \$1,578,775    | \$808,308    |
| 2010        | 5307        | ADA Paratransit              | \$809,058         | \$467,695      | \$341,362    |
| 2010        | 5307        | Transit Enhancements         | \$85,530          | \$44,930       | \$40,600     |
| 2010        | 5307        | Bundled Transit Projects     | \$1,148,520       | \$974,750      | \$173,770    |
| 2010        | MAP32       | Minibuses (10)               | \$600,382         | \$0            | \$600,382    |
| 2010        | MAP32       | Lift Van (2)                 | \$82,906          | \$0            | \$82,906     |
| 2010        | MAP32       | Mobile radios/base sta. MDTs | \$10,824          | \$0            | \$10,824     |

### **7.5.2 Recommended Projects for 2011-2030**

The list of recommended projects for 2011-2030 includes the same projects that are listed on pages 8 and 9 that are to be implemented after 2010. Programs are "ongoing" and are accomplished throughout the entire plan life. The two lists below include both the programs and the specific projects for 2011-2030.

#### **Programs 2011-2030**

- Roadways: Rehabilitation, Reconstruction
- Geometrics: Intersection, Land Conservation, Roundabouts, Traffic Calming, Signals, Access Management, Enhancements, Reconfigurations
- Safety: Roundabouts, Traffic Calming, Relocation of telephone poles, Red Light running cameras
- Bicycle / Pedestrian
- Intelligent Transportation Systems (ITS): Real Time Traffic Information, Canal Area Real Time Traffic Information
- Rail Infrastructure Preservation
- Bridges - ongoing
- Capewide Transit Marketing and Education
- Transit Capital - ongoing, Bus Purchases, Rail, Park and Ride Lots, Bus Shelters, ITS
- Transit Operating - bus ongoing, year-round rail service

#### **Projects 2011-2030:**

- Barnstable, Route 132 Access management, Phinneys Lane to Airport Rotary
- Bourne, Bourne Rotary Improvements (long-term)
- Bourne, Route 6 WB Reconfigure Exit 1 on-ramp
- Barnstable, Hyannis to T.F. Green Airport in Warwick, Rhode Island Bus
- Barnstable, Airport Rotary Modification
- Barnstable, Airport Access Roads-- extend Attucks Lane
- Barnstable, Yarmouth Road add lanes
- Bourne, Sandwich Road Parkway-- 4 lanes and median
- Capewide, Traffic Counting Equipment Installation for Continuous Monitoring
- Bourne, Otis Rotary Area Improvements
- Orleans, Route 6A and Route 28 Intersection Improvements
- Barnstable, Independence Park Bikepath
- Barnstable, Route 6 and 132 roundabout
- Capewide, Transportation Management Center
- Bourne, Buzzards Bay Transportation Center

## 7.6 Conclusion

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

The RTP recommended programs and projects now have implementation funds allocated. The programs are ongoing items that are primarily geared to maintenance and operations of the existing system. These items, for example, include the existing capital purchases, operations, and maintenance of the Cape Cod Regional Transit Authority services. There are also included "bundled" amounts for smaller intersection projects that are not specifically listed, but are important safety and/or congestion improvements for the current transportation system.

The RTP is currently updated every four years, therefore, the shorter range recommended projects, listed below, are the projects that are in the design process or are about to begin to move forward with design/implementation now.

### **Recommended Projects for 2007-2010**

- Bourne, Scenic Highway Median Barrier
- Sandwich to Orleans, Rte 6 Interchange Improvements (Exits 2-12)
- Cape Cod Rail Trail Extensions (Dennis-Yarmouth-Barnstable To Hyannis Transportation Center)
- Bourne, Bourne Rotary Improvements (short-term)
- Year-Round Daily Passenger Rail Service (Hyannis, Buzzards Bay, Middleborough (connect to Boston), Providence, Rhode Island (connect to TF Green Airport; to New York)
- Bourne, Canal Area Intelligent Transportation Systems (ITS) for Real Time Traffic Information
- Barnstable, Route 132 Boulevard Landscaping
- Orleans Transportation Center

These recommended projects will also be listed in the short range budget for implementation—the Cape Cod Transportation Improvement Program (TIP). The TIP aligns the projects within the next four specific years for advertising and/or implementation. The TIP is now required under federal legislation to be updated every four years, but 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.