

CAPE COD COMMISSION

3225 MAIN STREET P.O. BOX 226 BARNSTABLE, MA 02630 (508) 362-3828 Fax (508) 362-3136 www.capecodcommission.org

CAPE COD COMMISSION CAPE COD METROPOLITAN PLANNING ORGANIZATION

Unified Planning Work Program for Transportation Planning Activities

October 1, 2008 - September 30, 2009

Metropolitan Planning Organization Members:

Bernard Cohen, Secretary, Executive Office of Transportation
Luisa Paiewonsky, Commissioner, Massachusetts Highway Department
Ronald Bergstrom, Chair, Cape Cod Regional Transit Authority
John D. Harris, Chair, Cape Cod Commission
Janet Joakim, President, Barnstable Town Council
William Doherty, Barnstable County Commissioners
Wayne Taylor, Mashpee Selectmen, for Bourne, Falmouth, Mashpee, Sandwich
Lawrence Cole, Harwich Selectman, for Brewster, Chatham, Dennis, Harwich, Yarmouth
John Hinckley, Jr., Orleans Selectman, for Eastham, Orleans, Provincetown, Truro,
Wellfleet

Transportation Advisory Group: Cape Cod Joint Transportation Committee Robert A. Burgmann, Chair

Cape Cod Metropolitan Planning Organization Endorsement:

August 18, 2008

This program is funded in part by the Cape Cod Commission, a department of Barnstable County. Prepared in Cooperation with the Executive Office of Transportation, the Massachusetts Highway Department and the U.S. Department of Transportation, Federal Highway Administration.

Cape Cod Metropolitan Planning Organization (MPO)

UNIFIED PLANNING WORK PROGRAM (UPWP)

October 1, 2008 through September 30, 2009

The signatures to follow certify that the Cape Cod Metropolitan Planning Organization (MPO), at their meeting on August 18, 2008, hereby approves the following action in accordance with the Comprehensive, Cooperative and Continuing transportation planning process:

In accordance with the requirements of 23 CFR Part 450 Section 310 of Federal Regulations, the MPO for Cape Cod has completed its review and hereby endorses the Cape Cod Unified Planning Work Program for Transportation Planning Activities for October 1, 2008 through September 30, 2009.

SIGNATORY CERTIFICATION:

Bernard Cohen, Secretary

Executive Office of Transportation

Luisa Paiewonsky, Commissioner
Massachusetts Highway Department

John D. Harris, Chair

Cape Cod Commission

Ronald Bergstrom, Chair

Cape Cod Regional Transit Authority

William Doherty

Barnstable County Commissioners

Janet Joakim, President Barnstable Town Council

Wayne Taylor

Bourne, Falmouth, Mashpee, Sandwich

Lawrence Cole, Ph.D.

Brewster, Chatham, Dennis, Harwich,

Yarmouth

John-Hinckley, Jr.

Eastham, Orleans, Provincetown, Truro, Wellfleet

Cape Cod Joint Transportation Committee Members

Robert A. Burgmann, PE Barnstable Rick Tellier Bourne Robert Bersin, PE Brewster Paul Lagg Chatham Joseph Rodricks, PE Dennis Sheila Vanderhoef Eastham George Calise, PE Falmouth Lincoln Hooper Harwich Catherine Laurent Mashpee Mark Budnick Orleans

Sharon Lynn Provincetown
Paul S. Tilton, PE Sandwich
Charleen Greenhalgh Truro
Mark Vincent Wellfleet
George R. Allaire, PE Yarmouth

Dr. Edward Gross Bicycle Representative

Joseph Potzka Cape Cod Regional Transit Authority

Paul Maloney, P.E. Federal Highway Administration
William Gordon, P.E. Federal Transit Administration
Rachel Bain Executive Office of Transportation

Tim Kochan MassHighway District 5

Maggie Geist Assoc for the Preservation of Cape Cod

TABLE OF CONTENTS

INTRODUCTION	4
Coordination with Federal Transportation Planning Factors	5
TASK #1 - MANAGEMENT AND SUPPORT OF THE PLANNING PROCESS AN	1D
CERTIFICATION ACTIVITIES	8
Task 1.1 - Unified Planning Work Program (Certification Activity)	8
Task 1.2 - Transportation Improvement Program (Certification activity)	
Task 1.3 - CCJTC and MPO activities/Public Participation Process	
Task 1.4 - Environmental Justice	11
Task 1.5 - Jobs Access Reverse Commute & New Freedom Programs	12
Task 1.6 - Other meetings and support of the planning process	12
TASK #2 - DATA COLLECTION AND ANALYSIS ACTIVITIES	
Task 2.1 - Cape Cod Traffic Counting Program	14
Task 2.2 - Transportation Database Management/Data & Information Requests	15
Task 2.3 - Travel Demand Forecasting & computer modeling	16
TASK #3 - SHORT AND LONG RANGE TRANSPORTATION PLANNING	18
Task 3.1 - Short Range Planning & Regional Transportation Plan updates	18
Task 3.2 - Congestion Management Program Development	19
Task 3.3 - Upper Cape Long Range Transportation Study	19
Task 3.4 - Transportation Safety (Reporting/Coordination & Evaluation at 3 locatio	ns)
	21
Task 3.5 - Growth Center Transportation and Land Use Study	22
Task 3.6 - Follow-up on previous transportation planning studies	23
TASK #4 - OTHER TECHNICAL ACTIVITIES	24
Task 4.1 - Intermodal Coordination, Intelligent Transportation Systems (ITS) & Tra	avel
Smart Initiatives	24
Task 4.2 - Other technical assistance requests	25
TASK #5 - CAPE COD COMMISSION TRANSPORTATION PLANNING &	
REGULATORY ACTIVITIES	
Task 5.1 - Review and Comment on Environmental Notification Forms, Environme	ntal
Impact Reports and Developments of Regional Impact	26
Task 5.2 - Assist Communities and the Region in the Development and	
Implementation of Local Comprehensive Plans (LCPs) and Districts of Critical	
Planning Concern (DCPCs)	27
Task 5.3 - Other transportation activities	27
TASK #6 - Addidtional Planning Efforts	28
Task 6.1 - Route 6A/Scenic Byways	
Task 6.2 - Minimodal Transportation Study (Cape Cod Regional Transit Authority)	
Task 6.3 - Flex Expansion Study (Monomoy National Wildlife Refuge)	
Task 6.4 - ITS/Preliminary Pilot Plan for CCNS Access	30
Task 6.5 - Satellite Maintenance/Storage Facility Study – Outer Cape	
Task 6.6 - Integrated Bicycle Plan for Cape Cod	30

Task 6.7 - Outer Cape Parking Study	31
Task 6.8 - Update 5-Year and Long Range Cape Cod Public Transportation Plan	
Phase I	31
Task 6.9 - Transportation Partner Program	31
Task 6.10 - Long Range Planning for Expansion of the Cape Cod Rail Trail thro	ugh
the National Seashore	32
Metropolitan Planning (PL) Fund Distribution	33
LIST OF SIGNIFICANT PLANNING STUDIES and OTHER GRANTS	34
FY 2009 FUNDING SUMMARY	38

INTRODUCTION

This Unified Planning Work Program (UPWP) is developed annually by the Cape Cod Commission transportation staff on behalf of the Cape Cod Metropolitan Planning Organization, in accordance with the requirements in SAFETEA-LU and federal planning regulations. The UPWP describes all significant transportation planning activities planned on Cape Cod over the twelve (12) month period, regardless of lead organization and funding source. The following are the major transportation planning areas:

- 1) Management and Support of the Planning Process and Certification Activities the efforts required for coordinating transportation planning activities between CCC and Metropolitan Planning Organization (MPO) member communities, local, regional, state and federal agencies; efforts required to maintain the public participation process; Environmental Justice strategies; efforts required for the administration of the CCC contract with the Massachusetts Highway Department (MHD) and the Executive Office of Transportation & Public Works (EOTPW); development and approval of the UPWP and the Transportation Improvement Program (TIP); and enhancement of the technical capacity of the planning process.
- 2) Data Collection & Analysis Activities to continually gather and update traffic, crash and road data necessary for transportation planning and analysis; to maintain databases, to develop and update Cape Cod's travel demand forecasting model; review safety data, goals, objectives and strategies to promote safety.
- 3) Short and Long Range Transportation Planning efforts to update and maintain the Regional Transportation Plan for Cape Cod, a certification activity that requires a new plan every four years and development of the Congestion Management Program for the region. Also efforts to perform special planning studies of corridor safety/traffic flow and transit and integration of special studies into the regional transportation plan. Emphasis areas include identification of strategies to support the economic vitality of the metropolitan area, transportation security, emergency planning, strategies to promote smart growth and economic development patterns, environmental protection and energy conservation and preservation of the existing transportation system.
- 4) Other technical activities to provide other technical assistance to the region, including assistance in the design and implementation of projects, participating in special studies, coordination with transit agencies and assistance in the planning, design and development of the Intelligent Transportation System for Cape Cod. Special emphasis areas include enhancing the integration and connectivity of the transportation system, across and between modes, for people and freight and promotion of Operation & Management Strategies.

- 5) Regulatory review and planning assistance to the Towns- Review of Developments of Regional Impact and assistance in the development and implementation of Local Comprehensive Plans and Districts of Critical Planning Concern.
- 6) Other/tentative planning efforts Efforts that have received preliminary approval that may be initiated during the UPWP period, including the Route 6A/Scenic Byways Program, several efforts proposed by the National Park Service and efforts planned by the Cape Cod Regional Transit Authority.

Coordination with Federal Transportation Planning Factors

All tasks of the UPWP will be implemented with consideration of federal transportation planning factors. This discussion relates to the general topic of Cape Cod MPO transportation planning and is intended to provide an overview to the public. Each planning factor may apply to a varying degree to each specific UPWP task. Cape Cod MPO transportation planning goals are manifested in the Cape Cod Regional Transportation Plan (RTP) referenced in the discussion below. The UPWP is developed in coordination with the eight SAFETEA-LU planning factors as follows:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

The Cape Cod MPO staff apply specific criteria in the review of transportation strategies. These criteria are applied to changes of delay and emissions. Reduction in traffic delay has a direct consequence on economic vitality both through the timely arrival of commuters and goods and reduction in fuel expenses and losses due to air pollution. The RTP directly supports these efforts through the goal: "Create a transportation system that reinforces local development, land use, economic, cultural, and historic preservation goals." The CCC directly supports regional productivity through its economic development mission (including full-time staff) manifested in the Regional Policy Plan and support of the Cape Cod Economic Development Council's initiatives.

2. Increase the safety of the transportation system for motorized and nonmotorized users;

The Cape Cod MPO staff apply specific criteria in the review of transportation strategies. These criteria are applied to estimated changes in safety. The primary goal of the RTP is focused on safety and security: "Create a transportation system that provides safe travel options for people and freight, and protects users from natural and external threats." Safety is of such importance that it is recognized in its own chapter of the RTP.

3. Increase the security of the transportation system for motorized and nonmotorized

users:

The primary goal of the RTP is focused on safety and security: "Create a transportation system that provides safe travel options for people and freight, and protects users from natural and external threats." Security is of such importance that it is recognized in its

own chapter of the RTP. One area of additional security planning that applies to Cape Cod is that of traffic impacts due to weather events such as impending hurricanes. CCC staff is continuing to participate in the Massachusetts Emergency Management Agency (MEMA) Massachusetts State Police efforts regarding the "Cape Cod Emergency Traffic Plan."

4. Increase the accessibility and mobility of people and for freight;

The Cape Cod MPO staff apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through its goal: "Connect village centers, economic and employment centers, and points of interest using multiple coordinated modes of transportation in a direct and efficient manner so that people and goods can get from where they are to where they are meant to go."

5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

The RTP supports this planning factor through three goals: "Create a transportation system that maintains, protects, and enhances the natural environment of Cape Cod;" "Create a transportation system that reinforces local development, land use, economic, cultural, and historic preservation goals;" and "Base projects and programs on an objective, transparent and inclusive decision-making process in cooperation with federal, state, regional, and local transportation agencies, government officials, businesses and citizens."

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

The Cape Cod MPO staff apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through its goal: "Connect village centers, economic and employment centers, and points of interest using multiple coordinated modes of transportation in a direct and efficient manner so that people and goods can get from where they are to where they are meant to go."

7. Promote efficient system management and operation, and;

The RTP supports this planning factor through three goals: "Optimize travel time throughout the transportation system for people and freight by pursuing strategies to reduce congestion in areas where it exist and taking proactive measures to prevent congestion in currently free flowing areas;" "Preserve, maintain, and modernize the existing transportation system;" and "Base projects and programs on an objective, transparent and inclusive decision-making process in cooperation with federal, state, regional, and local transportation agencies, government officials, businesses and citizens."

8. Emphasize the preservation of the existing transportation system

The RTP supports this planning factor through two goals: "Optimize travel time throughout the transportation system for people and freight by pursuing strategies to

reduce congestion in areas where it exist and taking proactive measures to prevent congestion in currently free flowing areas" and "Preserve, maintain, and modernize the existing transportation system." Through the CCC regulatory process, development projects are required to provide traffic mitigation. Additionally, a significant number of acres of developable land has been conserved through the CCC regulatory process – thereby reducing future transportation impacts.

TASK #1 - MANAGEMENT AND SUPPORT OF THE PLANNING PROCESS AND CERTIFICATION ACTIVITIES

<u>Task 1.1 - Unified Planning Work Program (Certification Activity)</u>

Objectives: To develop a Unified Planning Work Program (UPWP) in accordance with the requirements in SAFETEA-LU and federal planning regulations. To obtain MPO endorsement of the UPWP. To prepare progress reports, as needed.

Previous Work: Previous UPWPs (most recent MPO endorsed UPWP: July 26, 2007)

Procedures: In conformance with applicable Federal and State guidelines, prepare a UPWP which describes all significant transportation and transportation-related planning activities anticipated to be carried out in the region during the period, regardless of funding sources or lead organization. Maintain the UPWP and make amendments as necessary.

Products: Unified Planning Work Program for Transportation Planning Activities for the period October 1, 2009 to September 30, 2010. Amendments to the current UPWP will be submitted as necessary. Monthly progress reports on PL activities performed under the UPWP. Annual report of transportation planning activities.

Schedule: Draft UPWP submitted to MPO & CCJTC June, 2009.

Final UPWP submitted to MPO August, 2009.

Monthly progress reports.

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

FHWA/MassHighway \$17,463 6 person-weeks

<u>Task 1.2 - Transportation Improvement Program (Certification activity)</u>

Objectives: To prepare a program of transportation improvement projects that is consistent with SAFETEA-LU, the region's transportation plan, the State Implementation Plan, EPA's Air Quality Conformity Regulations and FHWA/FTA's Planning Regulations. The Transportation Improvement Program (TIP) will include a four year program of projects for FY 2009 through 2012. The TIP will be presented for endorsement by the Metropolitan Planning Organization (MPO) in accordance with federal regulations and the region's Public Participation Plan.

Previous Work: "Cape Cod Transportation Improvement Programs (TIPs)", 1988 to present; latest endorsed (December 2007) document covers the period of federal fiscal years 2008-2011.

Procedures:

To continue to participate in a committee of Regional Planning Agency (RPA) Directors, Federal & State officials to cooperatively develop financial estimates, evaluate projects, and schedule of TIP development.

I - Preparation of the draft TIP

A) General

- 1. The TIP is a staged, multi-year, intermodal program of transportation projects which are consistent with the Regional Transportation Plan (RTP). It is the programming document to implement primarily FHWA & Federal Transit Administration (FTA) Regional Transportation Plan projects.
- 2. Insure involvement of local officials and citizens through the Cape Cod Joint Transportation Committee and the Public Participation Plan.
- 3. Provide assistance to municipalities in advancing TIP projects.
- 4. Coordinate with MassHighway District 5, and the Executive Office of Transportation and Public Works (EOTPW) Planning Department in developing project advancement.
- 5. Include projects within financial estimates and other items as required by federal and state law.

B) Development of the four year program of projects according to a uniform statewide format.

- 1. Update the list of transit, highway, or air quality projects that are expected to require federal transportation funds during the active fiscal years of the TIP.
- 2. The list of projects may include information such as the following:
 - a. The official MassHighway/EOTPW identifying project title
 - b. Project description
 - c. Estimated total cost
 - d. Proposed sources of federal and non-federal funds.
- 3. The total costs of projects seeking federal funds in each program year shall be in line with anticipated federal and state funds.

C) Public Participation

• Per the MPO approved Public Participation Plan.

II - TIP Approval

The TIP documents will be reviewed and endorsed by the MPO. The endorsed products to serve as a portion of the required air quality consistency documentation necessary for USDOT (FHWA/FTA) and EPA conformity determinations.

III - Modification/Amendment

- A) Amendments to the TIP require MPO approval.
- B) Administrative adjustments to the TIP may be approved by the CCC Executive Director, with appropriate notification to the MPO.

Products:

- TIP consistent with the State Implementation Plan and the Regional Transportation Plan.
- Modifications/amendments to the TIP as required.

Schedule: As determined by the MPO, FHWA, FTA, EOTPW and MHD.

Funding/Staffing breakdown:

Funding source Amount CCC Staffing

FHWA/MassHighway \$70,798 25 person-weeks

Task 1.3 - CCJTC and MPO activities/Public Participation Process

Objectives: To maintain an open comprehensive, cooperative and continuing (3C) transportation planning and programming process involving the local, regional, state and federal levels of government in conformance with applicable federal and state requirements and guidelines.

Previous Work: Past maintenance of 3C process, including support to the CCJTC, the MPO and member agencies. Update of the Public Participation Plan (June 2007).

Procedures:

- 1. Provide administrative and technical support to the 3C regional planning process, such as:
 - a) Community liaison and assistance on transportation planning matters.
- b) Review of federal and state transportation programs and related documents as required.
- 2. Provide for and support the public participation process (PPP) in transportation planning for Cape Cod.
 - a) Support Cape Cod Joint Transportation Committee (CCJTC).
- b) Develop, support and participate in local parking, traffic, bikeway and environmental committee meetings.
 - c) Preliminary and follow-up work for meetings as required.
- 3. Present transportation plans and programs (e.g., UPWP, Regional Transportation Plan, TIP) developed through the public participation process to the Cape Cod Joint Transportation Committee and the Metropolitan Planning Organization (MPO) for appropriate action.

4. Conduct efforts in conformance with federal, state and local requirements.

Products: Viable 3C process, including CCJTC and public participation program.

Revision of PPP, as necessary.

Website updates, notices to news media, meeting notices.

Transportation program annual report. Minutes and reports on CCJTC meetings. Letters, memoranda and notes as required.

Other products as required.

Schedule: Meetings typically held monthly.

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

FHWA/MassHighway \$64,898 23 person-weeks

Task 1.4 - Environmental Justice

Objectives: To ensure that all segments of the population are able to fully participate in transportation planning processes and has access to transportation facilities. To integrate the basic principles of Environmental Justice into the 3C Transportation Planning Process, including Limited English Proficiency, as necessary. To develop and maintain a Title VI Civil Rights program for the Cape Cod MPO. To cooperate with stakeholders in the development of the Public Transit Human Services Transportation Plan.

Previous Work: Attendance at preliminary meetings with MassHighway and FHWA to discuss environmental justice requirements and receive guidance on ensuring compliance. Preparation of updates to the Cape Cod Regional Transportation Plan including information and strategies to ensure Environmental Justice.

Procedures: Coordination with the Cape Cod Regional Transit Authority and MassHighway, as required.

Products: Viable Title VI Civil Rights program for the Cape Cod MPO

Incorporation of environmental justice principles into MPO activities

Schedule: Ongoing procedures

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

FHWA/MassHighway \$4,814 1.5 person-weeks

<u>Task 1.5 - Jobs Access Reverse Commute & New Freedom Programs</u>

Objective:

To coordinate the Jobs Access Reverse Commute (JARC) and New Freedom (NF) Programs for the Cape Cod urbanized area. The JARC program instituted as part of the Welfare to Work program. The New Freedom program funds innovative measures to serve people with disabilities seeking reliable and safe transportation beyond Americans with Disabilities Act requirements.

Previous work:

Coordination with CCRTA, the Cape Organization for the Rights of the Disabled and other agencies with Access To Jobs and Welfare to Work programs.

Activities:

As the designated recipient for JARC and NF funds, the Cape Cod Commission shall see that the following are developed:

Identification of service gaps such as geographic restrictions and limited hours (JARC). Identification of needs for enhanced assistance, extended hours and improved scheduling (NF).

Development of criteria for evaluating proposals to use JARC and NF funding,

Products:

Coordinated Plan.

Schedule:

PER EOT guidance and federal requirements.

Funding/Staffing breakdown:

Funding Source	Amount	CCC Staffing
FHWA/MassHighway	\$ 2,407	1 person-week
EOT/FTA	\$16,900	5 person-weeks

Task 1.6 - Other meetings and support of the planning process

Objectives: To participate in and provide support to meetings and other activities relevant to the transportation planning process. To coordinate transportation planning activities and communication between the Cape Cod MPO/Cape Cod Commission and other Regional Planning Agencies, EOT, MassHighway FHWA, FTA and MARPA, particularly regarding the statewide road and bridge program and policy/funding discussions. To enhance the technical capability of the planning process through participation in relevant training, as resources permit.

Previous Work: Past coordination and support to the Southeast Region Planning & Economic Development District, the Old Colony Planning Council, the Cape Cod Regional Transit Authority, The Massachusetts Association of Regional Planning Agencies (MARPA) and other groups.

Procedures: Flexible, MARPA Directors and Transportation Program Managers typically meet monthly.

Products: Attendance at meetings; follow-up efforts as required..

Schedule: Progress reports prepared monthly. Other activities scheduled as required.

Funding/Staffing breakdown:

Funding Amount Staffing

MassHighway/FHWA \$35,399 12.5 person-weeks

TASK #2 - DATA COLLECTION AND ANALYSIS ACTIVITIES

Task 2.1 - Cape Cod Traffic Counting Program

Objectives: To create and maintain a database of traffic counting data for Cape Cod to be used for transportation planning. To monitor growth in traffic volumes and to determine existing traffic volumes on Cape Cod roads. To perform the coverage counts for MHD. To perform bicycle and pedestrian activity counts in selected locations. To obtain data on road geometry, when necessary, as part of the traffic counting efforts.

Note: It is a goal of the region to install permanent traffic counters to provide continuous reliable data on traffic volumes, vehicle types and speed on all major roads. Permanent stations with remote access capabilities are the appropriate safe and cost-effective manner to collect the data.

Previous Work: Annual traffic counting programs, 1984-2008.

Procedures: For the summer of 2009, an average of 10 coverage counts will be scheduled in each of Cape Cod's 15 towns, for a total of about 150 counts. Approximately 50% of the count locations for the summer of 2009 will be selected to support planning studies proposed in the Fiscal Year 2008 and proposed Fiscal Year 2009 Unified Planning Work Program. Additional counts, in coordination with or at the request of the towns and MassHighway, will be taken as schedule and weather permits. Where possible, FHWA traffic monitoring guide procedures will be followed. Police details, if required for the additional count locations, shall be the responsibility of the towns for local roads and MassHighway for state roads and locations requested by MassHighway. Turning movement counts will also be taken at selected intersections. Bicycle and pedestrian counts will also be performed on selected paths throughout Cape Cod.

Where possible, FHWA traffic monitoring guide procedures will be followed. Work activities under this task include:

- Placement of counters
- Retrieval of counters
- Routine checks of counters
- Equipment inventory and maintenance
- Data tabulation
- Data factoring
- Data analysis/recording
- Coordination of counters
- Coordination of safety measures with towns
- Coordination of external program counts
- Periodic calibration/verification of equipment per MassHighway guidelines
- Obtain necessary permits from towns and MassHighway
- Development of traffic count file and data base
- Data mapping

- Program evaluation
- Computer data entry and maintenance
- Updated geometric information, as needed. Gathered information to include sidewalks, shoulders and bicycle lanes.

Products:

- Cape Cod Traffic Counting Report for 2008. Report will contain information on study design, count location, date/time of peak hour volume, average daily traffic, factored average daily traffic. The most recent 10 years of counts conducted by CCC will be included in this report.
- On-line Database that includes date of counts, general weather and traffic conditions average daily traffic, factored average daily traffic, peak hour traffic volume. Breakdown of traffic by hour over period studied kept on file.
- Factored counts for MassHighway.
- Expanded seasonal traffic counting data
- Turning movement counts at intersections, including bicycle and pedestrian counts.
- An analysis of traffic growth trends over the past 10 year period for Cape Cod, subregions and major routes.
- Counts accessible at website (www.gocapecod.org/counts).

Schedule:

Report on counts taken in 2008 submitted January 2009. Office file updated continuously.

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

FHWA/MassHighway \$65,191 23 person-weeks

<u>Task 2.2 - Transportation Database Management/Data & Information Requests</u>

Objectives: To maintain and improve databases of Cape Cod transportation information including: roadway geometry, motor vehicle crashes, traffic volumes (motor vehicles, bicycles, pedestrian) and other. To provide the transportation information for Cape Cod to local and state officials, transportation professionals and the public. To review safety data, goals, objectives and strategies to promote safety.

Previous Work: Accident databases prepared with data supplied by MassHighway. Original database included detailed data for the years 1989-1991 and 1993 and less detailed information for the years 1991-2001. 2002-2006 Database includes new location reporting methods. Analyses included in the 1997, 2000 and 2003, and 2007 Cape Cod Regional Transportation Plans and other studies.

Procedures: Integrate new records when available; maintain database, develop subroutines for analysis. When details are needed for specific locations, town crash records may be obtained and reviewed. CCC staff will contact MassHighway to request latest crash records. Conduct public outreach to member communities. Respond to data and information requests from the public, transportation professionals and local, regional and state officials. Participate in analyses of and obtain latest Pictometry data and software.

Products: Crash, roadway geometry, roadway traffic volumes, intersection turning movements data. Pictometry information database. Generate a prioritized list of crash locations in the region. Reports, letters and memoranda as required.

Schedule: Ongoing. Updated annually with receipt of MassHighway accident records. Responsive to need for local data.

Funding/Staffing breakdown:

Funding Source Amount CCC staffing

MassHighway/FHWA \$17,699 6.5 person-weeks

Task 2.3 - Travel Demand Forecasting & computer modeling

Objectives: To continue to develop and calibrate computerized travel demand forecasting databases and models for Cape Cod, including year 2030 forecasts. Continue integration with Geographical Information Systems (GIS) data to provide a platform for GIS based traffic counts, congested link summaries, and accident summaries.

Previous Work:

- Transportation model, developed in 1999/2000 for base year of 1997.
- Transportation model, updated in 2006 for 2006.

Procedures: Review and utilize available socio-economic, employment, population and housing data for base year and forecast year data. Utilize existing traffic volume and transit data to determine existing travel demands. Utilize existing transportation models for sub-regions of Cape Cod. Improve transfer methods of data between CCC Geographic Information Systems (GIS) services and transportation modeling effort. Expand transportation demand model to include Saturday morning element and to explicitly include alternate modes. Additional modeling efforts include the use of Synchro/Sim-Traffic software. Construction of Synchro models includes development of a computerized roadway/intersection network. Inputs include turning movements and

roadway link traffic volumes, roadway and intersection geometry, and signal timing and phasing.

Products: Updated regional transportation model based on latest available demographic information, reports of results, and summaries. Models will be used to support Task 3 and other regional planning and TIP activities.

Schedule: Ongoing through September 30, 2009. To be developed in coordination with MassHighway.

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

MassHighway/FHWA \$17,699 6.5 person-weeks and/or contractual

TASK #3 - SHORT AND LONG RANGE TRANSPORTATION PLANNING FTA ITEM CODE 44.23.01

<u>Task 3.1 - Short Range Planning & Regional Transportation Plan updates</u> (Certification activity)

Objectives: To maintain and update the Regional Transportation Plan for Cape Cod, in conformance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and successor acts, consistent with the goals and requirements of the Cape Cod Commission, towns, the MassHighway, EOT, FTA and the FHWA, considering all modes of transportation and both short and long-range elements.

Previous work: Ten (10) year needs assessment prepared in October 1989.

Regional Policy Plan for Cape Cod, August, 1991. Long Range Transportation Plan, September, 1993.

Long Range Transportation Plan Amendments, September 1994.

Regional Policy Plan for Cape Cod, November, 1996.

Regional Transportation Plan, approved by MPO March 1997. Regional Transportation Plan, approved by MPO January 2001.

Regional Policy Plan for Cape Cod, April 2002.

Regional Transportation Plan, approved by MPO August 2003. Regional Transportation Plan, approved by MPO March 2007.

Procedures: Advancement of Short Range planning elements and, as necessary, updates to Regional Transportation Plan. Expected amendment to RTP in 2009 to include recommendations from Hyannis Access Study. Includes RTP conformity analysis and reassessment of fiscal constraint. Ongoing public outreach will include a "Transportation/Environmental Workshop" to further involve Cape Cod environmental organizations and strengthen the link between transportation impacts and environmental analysis.

Products: Updates and amendments as necessary (e.g., amendment to include Hyannis Access Study recommendations). Presentation materials, maps, website downloads for Transportation/Environmental Workshop.

Schedule: To be determined. Workshop – fall 2008.

Funding/Staffing breakdown:

Funding Source	Amount	CCC Staffing
MassHighway/FHWA	\$26,076	9.5 person-weeks
FTA	\$20,000	7 person-weeks
CCC	\$ 5,000	1.5 person-weeks

<u>Task 3.2 - Congestion Management Program Development</u>

Objective: To improve the on-line system database for providing Congestion Management information, including intersection and roadway Level-of-Service, travel times and Park & Ride Usage. Also to perform location studies, as time and need allows. To develop criteria for identifying congestion and methods to address congestion, consistent with applicable regional, state, and federal transportation policies.

Previous Work: Cape Cod Congestion Management System 1997 Report, January 21, 1998. Development of Congestion Management Program at www.gocapecod.org/congestion

Procedures: Data collection including specialized traffic counts, usage surveys, identification of locations for installation of monitoring stations, develop and refine procedures for defining congestion levels and locations. Identify 1 to 3 locations that are experiencing congestion and develop recommendations for potential improvement.

Products: Congestion Management Plan website for Cape Cod and associated data products; recommendations for improvements to specific congestion locations.

Schedule: Ongoing – to document congested facilities & levels of congestion

Budget:

FHWA/MHD \$36,778 16.5 person-weeks

<u>Task 3.3 - Upper Cape Long Range Transportation Study</u>

Objectives: To evaluate recent transportation studies in the Canal Area and refine and implement a scope of work for a future major transportation study. Long term goals include the identification of alternatives to improve transportation flow and safety in the Upper Cape considering all modes of transportation. Efforts to be conducted will be consistent with regional, state, and federal transportation policies.

Previous Work:

- The draft Canal Area Transportation Study prepared by Rizzo Associates, Inc. for MHD dated December 21, 1998, and the subsequent draft studies done by staff at the Cape Cod Commission, the most recent dated August 22, 2001.
- Route 3/Route 6 Sagamore Grade Separation Revised Environmental Assessment/Final Environmental Impact Report (EOEA #11731) dated October 31, 2003
- Bourne Scenic Highway Study and Canal Area Study TransCAD Technical Assistance: Cape Cod Travel Demand Forecasting Model dated February 2000 Louis Berger Group, Inc.
- EOEA Build-out Analysis for Cape Cod,
- Canal Area Traffic Study dated December 22, 2004 by the Massachusetts Highway Department.

Procedures:

A study design has been developed and submitted for approval prior to the initiation of work and will be updated and revised. Elements of the study design will include the need for agency coordination regarding environmental mitigation and the need to utilize appropriate visualization techniques. Consultation will include officials and public from affected communities including Upper Cape towns.

This effort was postponed partly due to fluctuating CCC staffing levels. With the completion of the Rt 3/Rt 6 interchange at Sagamore, new travel patterns are being established and can be evaluated (eliminating the need to estimate the short-term effects of the interchange).

The draft scope of work includes several subject areas not specifically addressed by the previous studies including:

- Freight
- Rail Service
- Emergency Services
- Intelligent Transportation Systems
- Alternative Transportation
- Bicycle Facilities
- Public Transportation
- Passenger Rail
- Canal Crossings
- Capacity
- Useful Life

Identify procedures for analyzing the impacts of the Sagamore Rotary Flyover project on traffic flow and patterns on the Canal area road system including Scenic Highway, Bourne Bridge, Sandwich Road in an effort to determine future improvement needs.

Products:

- Summary report of existing studies.
- Development of data collection and additional study needs.
- Development of Scope of Work and budget for subsequent phases.
- Update travel demand model in Canal area.

Schedule: To be determined in finalized study design.

Funding/Staffing breakdown:

Funding source Amount CCC staffing MassHighway/FHWA \$62,370 10 person-weeks & contractual

<u>Task 3.4 - Transportation Safety (Reporting/Coordination & Evaluation at 3 locations)</u>

Objectives:. To evaluate safety improvements at three high crash locations identified in the 2007 Cape Cod Regional Transportation Plan. Coordination with MHD's safety division and participation in MHD Road Safety Audits.

Previous Work: Safety evaluation study at the Otis Rotary in Bourne, Route 137/39 intersection in Harwich and Route 6A/28 in Orleans, three high crash locations identified in 2003 Cape Cod Regional Transportation Plan. Three candidate locations have been identified as part of the FFY 2008 UPWP effort. These include: Route 6/Brackett Road in Eastham and the two intersections on Route 130 in Sandwich formed by the Route 6 ramps at interchange 2. Due to an ongoing design project currently underway by MHD for the Route 130/Route 6 ramp locations, two additional locations have been proposed: Route 28/Yarmouth Road in Barnstable and Route 6A/Union Street in Yarmouth.

Procedures:

- Coordination with MHD designers for safety review of Route 6 ramps/Route130
- Review of causal factors of crashes at each location.
- Review of roadway/intersection geometry.
- Identification of deficiencies and alternatives to improve safety.
- Review of local and state police reporting practices.
- Identification of ways to improve accuracy, consistency and timeliness of information
- Assistance in the implementation of improved practices.
- Consultation & coordination with appropriate agencies regarding environmental mitigation.
- Use of visualization techniques including GIS data layers showing land use and sensitive environmental areas.

Products:

Recommendations to improve safety at studied locations.

Schedule:

October-November 2008 Data Collection

December 2008-February 2009 Problem identification, development

of improvements and analysis

March 2009 Recommendations and draft report

May 2009 Final report

Funding/Staffing breakdown:

Funding source Amount CCC staffing
MassHighway/FHWA \$54,574 19.5 person-weeks
less contractual

<u>Task 3.5 - Growth Center Transportation and Land Use Study</u>

Objectives: To identify and evaluate transportation improvements and their impact on land use in one or more growth centers on Cape Cod. Efforts to be conducted will be consistent with regional, state, and federal transportation policies. To promote consistency between transportation improvements and state and local planned growth in economic development patterns with consideration of strategies that promote energy conservation and improve quality of life.

Previous Work:

- Routes 28 & 132 Traffic Circulation Study Barnstable Area, August 31, 1992 by the CCC.
- Conceptual Design and Feasibility Study for a New Route 6 Interchange in the Town of Barnstable, January 1998, Massachusetts Highway Department.
- Assistance to EOT in the advancement of the Hyannis Access Study, 2006-2008.

Procedures:

A detailed study design will be developed. Activities will include consultation and coordination with appropriate agencies regarding environmental mitigation. Visualization techniques using GIS data layers for land use, sensitive environmental areas will be used.

Candidate locations include:

- Downtown Buzzards Bay
- East Harwich Center (Route 39 and Route 137)

Results will be used to develop recommendations consistent with the Regional Transportation Plan, including recommendations for land use and access management, consistent with regional, state, and federal transportation policies.

Public participation: Public meetings, as necessary

Products:

Interim and final reports on Buzzards Bay and East Harwich areas, Follow-up for the Hyannis Access Study (with EOTPW).

Schedule:

Expected schedule for Buzzards Bay and East Harwich study:

Detailed study design for Buzzards Bay and Harwich expected to be developed in October 2008.

Data collection expected to be complete by December 2008.

Analysis of alternatives expected to be complete by March 2009.

Draft report expected to be complete by July 2009.

Final report expected to be complete by September 2009.

Funding/Staffing breakdown:

Funding source Amount CCC staffing MassHighway/FHWA \$31,185 11 person-weeks

Task 3.6 - Follow-up on previous transportation planning studies

Objectives:

To allow for completion of and/or follow-up work on special transportation studies of prior UPWPs.

Previous work:

- Coordination with Hyannis Access Study and CCC safety & traffic flow studies efforts (e.g., further examination of Route 28 corridor from East Main Street in Yarmouth to Airport Rotary in Barnstable)
- "Three Location" safety studies

Methodology:

To be determined in consultation with MHD, consistent with prior study designs, updated as necessary.

Products:

To be determined.

Schedule:

Flexible.

Funding/Staffing breakdown:

Funding Source Amount CCC Staffing

FHWA/MassHighway \$11,800 4 person-weeks

TASK #4 - OTHER TECHNICAL ACTIVITIES

ITEM CODE 41.17.00

<u>Task 4.1 - Intermodal Coordination, Intelligent Transportation Systems (ITS) & Travel</u> Smart Initiatives

Objectives: To promote the most efficient, cost effective and environmentally sound use of our transportation system, covering all modes of transportation. To advance the development of a Transportation Management Center on Cape Cod. To work with state agencies in the advancement of intelligent transportation system initiatives for Cape Cod, including further development of ITS for the region. To assist in the advancement of improved rail, bus and water transportation, including passengers and freight. to/from and within the Cape Cod region. To enhance the integration and connectivity of the transportation system, across and between modes, for people and freight. To promote efficient system operation and management.

Previous Work: Assistance to the Cape Cod Transit Task Force and the Cape Cod Regional Transit Authority. Development of the Flex Route bus service for the Outer Cape. Marine Transportation Feasibility Study (1998). Intermodal and congestion management systems efforts. Assistance in ITS efforts on Cape Cod. Participation in Farradyne Systems study (1995). Transportation website "www.gocapecod.org." Assistance to the Cape Cod Chamber of Commerce with the development of the "Smart Guide."

Procedures:

- Assistance to the Cape Cod Transit Task Force and the Cape Cod Regional Transit Authority.
- Assistance to the Massachusetts Highway Department with the development of ITS for Cape Cod. Efforts to include outreach to stakeholders, attendance at meetings, review of documents and other assistance.
- Development of specific ITS criteria, goals and priorities consistent with the Cape Cod Regional Transportation Plan.
- Evaluation and integration of under-utilized sources of transportation information, including the Cape Cod Regional Transit Authority automated vehicle locator and the Route 132 closed loop signal system.
- Advancement of 511 Traveler Information System and other real-time transportation information systems.
- Support for MassRides' Initiatives

Products:

Evaluation of CCRTA transit routes; letters and memoranda as required; continued identification and development of congestion and intermodal management strategies; updated and expanded website of transportation information, reports and memoranda as required. Several possible products include:

- Traveler information via internet
- Promotion of transportation alternatives
- ITS plans for Cape Cod Canal Area, including real-time traveler information

- ITS plans for Hyannis area
- Summary reports of updates to CMS database
- Technical memoranda reporting analyses of travel patterns and traffic condition prediction methodology
- ITS coordination with other regions

Schedule: Continuous throughout the year.

Funding/Staffing:

Funding source	Amount	CCC staffing
EOT	\$42,813	15 person-weeks
CCC	\$10,703	3.5 person weeks
MassHighway/FHWA	\$23,599	8.5 person-weeks

Task 4.2 - Other technical assistance requests

Objectives: To provide the state, the towns and the region with technical transportation assistance, as needed.

Previous Work: Preparation of signal warrant analyses, review of local transportation improvement alternatives, preparation of local safety studies (Provincetown Bicycle Safety, Conwell Street Study, Bradford & Allen Street Study). Wellfleet Fire station access/egress recommendations (2007).

Procedures: As required.

Products: Letters, reports, memoranda and analyses.

Schedule: Continuous throughout the year.

Funding/Staffing:

Funding Source Amount CCC staffing MassHighway/FHWA \$47,592 13.5 person-weeks

TASK #5 - CAPE COD COMMISSION TRANSPORTATION PLANNING & REGULATORY ACTIVITIES

<u>Task 5.1 - Review and Comment on Environmental Notification Forms, Environmental Impact Reports and Developments of Regional Impact</u>

Objectives:

The primary purpose of the CCC regulatory program is mitigation of transportation impacts in a manner that is consistent with Barnstable County's Regional Policy Plan. To ensure proper review and analysis of traffic impacts of major residential and commercial developments throughout the region. To provide such information to the CCC, EOT, MassHighway, EOEA-MEPA Unit, town officials and other interested parties, as required. To recommend mitigation measures and work with interested parties in applying conditions to projects. To assist the Cape Cod Commission regulatory staff in the review of developments of regional impact. To assist the Massachusetts Highway Department/Public Private Development Unit (MassHighway - PPDU) in the implementation of mitigation strategies.

Previous Work:

Previous work includes analysis, review and comment on Environmental Notification Forms (ENFs), Environmental Impact Reports (EIRs) and Cape Cod Commission regulatory review.

Procedures:

- Review ENF, EIR, EIS, MIS and/or traffic analyses.
- Compute trip generation estimates.
- Review traffic counts on adjacent street network; conduct special traffic counts.
- Perform preliminary site visit.
- Compute LOS at site drive and area intersections, as necessary.
- Attend MEPA site visit, if applicable.
- Discuss project with interested parties.
- Identification of appropriate mitigation measures.
- Review mitigation measures for compliance and consistency with the Regional Policy Plan.
- Written and oral comments and testimony to the Cape Cod Commission, MassHighway District 5, MEPA, the towns and other interested organizations as required.
- Coordinate mitigation with MassHighway-PPDU.
- Products: Discussions with MEPA, MassHighway, project proponents and town officials. Provide written comments. Testimony at DRI and other meetings as required. Advancement of measures to mitigate traffic impacts. Analysis and recommendation on transportation improvements necessary to mitigate impacts.

Schedule:

As required to meet CCC, MEPA, EOT, MassHighway and local deadlines.

Funding/Staffing: Support of this effort will be provided by the CCC. Below is the funding/staffing breakdown:

Funding Source Amount CCC Staffing CCC \$101,056 36 person-weeks

<u>Task 5.2 - Assist Communities and the Region in the Development and Implementation of Local Comprehensive Plans (LCPs) and Districts of Critical Planning Concern (DCPCs)</u>

Objectives: To provide technical assistance in the development and implementation of LCPs and DCPCs and other CCC funded transportation efforts.

Previous work: Past assistance in the development of LCPs in various Cape Cod towns.

Procedures: Advisory and analytical assistance.

Products: Regional Policy Plan update expected 2008.

Letters, memoranda, testimony as required.

Schedule: As established by the Cape Cod Commission and the Towns and legislated requirements.

Funding/staffing:

Funding Source Amount CCC Staffing CCC \$101,056 36 person-weeks

Task 5.3 - Other transportation activities

Objectives: To perform other transportation activities and transportation program management.

Previous work: Past transportation program management.

Procedures: Flexible.

Products: Viable transportation planning program.

Schedule: Continuous throughout the year.

Funding/Staffing:

Funding Source Amount CCC staffing CCC \$50,527 18 person-weeks

TASK #6 - Addidtional Planning Efforts

Three of the tasks listed below are (6.8-6.10) are pending funding & approval from Cape Cod National Park Service.

Task 6.1 - Route 6A/Scenic Byways

Objectives:

To update the 1995 Route 6A Corridor Management Plans; to develop and design byway related projects and to implement those projects. Efforts to be consistent with the National Scenic Byways Program and the Cape Cod and Islands Rural Roads Initiative.

Previous Work:

Develop of a Corridor Management Plan for Route 6A (April 1995) and related follow-up/implementation projects:

- Route 6A Corridor Management Plan
- Access Management Study
- Tree Canopy
- Bicycle Activities/Bicycle Safety/Bicycle Map
- Pedestrian Activities/Tour Network
- Pedestrian Safety Improvements

Procedures:

Per MHD approved scope consistent with the FHWA review and award of funding. Also, coordination with the Old King's Highway Regional Historic District Committee.

Products:

Updated Corridor Management Plan. Development and design of projects. Project Implementation.

Schedule:

• Updated Corridor Management Plan 12 months after notice to proceed.

Funding Staffing:

Update of CMP

Scenic Byways funds.

MHD/FHWA CCC staffing \$65,000 23 person-weeks

<u>Task 6.2 - Minimodal Transportation Study (Cape Cod Regional Transit Authority)</u> Objective:

To evaluate and identify "minimodal" locations in Orleans and to develop construction drawings and required permitting for a facility at MacMillan Wharf. Development of these transportation centers on Cape Cod is expected to promote transit as an alternative to automobile travel and to improve service coordination between public and private transportation providers.

Previous Work:

Cape Cod Transit Task efforts, including 5-Year Plan for Public Transportation on Cape Cod. Coordination with CCRTA in development of Hyannis Transportation Center.

Procedures:

- Development of potential Orleans site alternatives
- Develop access plans, initial environmental screening and preliminary plans, specifications and estimates
- Evaluate surrounding land use and consistency with local and regional planning for the proposed sites
- Develop site needs and potential based on short and long range planning
- Evaluate potential of the proposed Orleans sites to meet potential service needs
- Present alternatives for public comment and recommend final alternatives for further design and development
- Development of permitting and construction plans for MacMillan Wharf site, Provincetown

Products:

- 1) Report on candidate Orleans locations and feasibility of minimodal transportation centers.
- 2) Permitting and construction drawings and documents for the MacMillan Wharf site in Provincetown.

Schedule:

To be determined.

Budget:

EOT/FTA \$184,440

Note: Contractual work under CCRTA.

<u>Task 6.3 - Flex Expansion Study (Monomoy National Wildlife Refuge)</u>

Objectives:

Identify service needs and options for expanded Flex service.

Previous Work:

Development and implementation of Flex service between Harwich and Provincetown.

Procedures:

Per grant application submitted by Monomoy National Wildlife Refuge,

Budget:

\$100,000 (work performed by Volpe Center.

Schedule:

Per Grant application. NOTE: Planning study application by MNWR, ATPPL funding.

Task 6.4 - ITS/Preliminary Pilot Plan for CCNS Access

Objectives:

To develop, promote and implement alternative transportation programs serving the Cape Cod National Seashore and surrounding communities.

Previous Work:

Develop of Flex service and ITS partnership program.

Procedures:

Per grant application/

Budget: \$250,000

Schedule:

To be determined contingent upon acceptance of proposals and award of grant funds.

CCNS application – PLHD funds.

<u>Task 6.5 - Satellite Maintenance/Storage Facility Study – Outer Cape</u>

Objectives:

Define needs and evaluate alternative satellite maintenance/storage sites on the Outer Cape.

Previous Work:

New initiative related to Flex bus service needs.

Procedures:

PER CCNS grant application.

Budget:

\$200,000

Schedule: Per CCNS grant application.

Task 6.6 - Integrated Bicycle Plan for Cape Cod

Objectives:

This study will develop a comprehensive vision for an integrated regional system of bicycle trails and facilities including connections to transit.

Previous Work:

development of the Massachusetts Bicycle Plan

Procedures:

PER CCNS grant application. Also, identify roadways with adequate shoulders for bicycle use.

Budget: \$250,000

Schedule: Per CCNS grant application.

Task 6.7 - Outer Cape Parking Study

Objectives:

This study will explore the need for park and ride and additional park and town beach parking and develop a recommended parking development and maintenance program.

Procedures:

PER CCNS grant application.

Budget: \$250,000

Schedule: Per CCNS grant application

<u>Task 6.8 - Update 5-Year and Long Range Cape Cod Public Transportation Plans,</u> <u>Phase I</u>

Objectives:

Revise the existing 2002 and 2003 documents.

Previous Work – Development of the original plans

Procedures:

PER CCNS grant application.

Budget:

\$250,000

Task 6.9 - Transportation Partner Program

Objectives:

Develop a common communications network to promote "smart" transfers between public and private transportation providers.

Previous Work:

Initial Partner	Program tha	t developed	the GPS	tracking	system	using	cell j	phone
technology.								

Procedures:

PER CCNS grant application.

Budget:

\$175,000

<u>Task 6.10 - Long Range Planning for Expansion of the Cape Cod Rail Trail through the National Seashore</u>

Objectives:

This study will develop an alignment and define phases for expansion of the Rail Trail into Provincetown.

Procedures:

PER CCNS grant application.

Budget:

\$250,000

Metropolitan Planning (PL) Fund Distribution

Federal funds only

	Berkshire	Boston	Cape Cod	Central	Merrimac	Montachusett	NMiddlesex	Old Colony	Pioneer	Southeast	Subtotal	TOTAL
Distribution Factor	0.01164	0.57587	0.01410	0.06661	0.04482	0.01739	0.04904	0.03402	0.09824	0.08827		1.00
Distribution Factor, updated 2003	0.00936483	0.527864225 0.03542297	0.03542297	0.07439209	0.05285859	0.05285859 0.02654686	0.04695953	0.050057062	0.08474535	0.091788493		1.00
Distribution Factor, updated 2007	0.04928403	0.34335966 0.061	28872	0.08719251	0.07114080	$0.07114080 \ \ 0.05890295 \ \ 0.06758006$	0.06758006	0.07044230	0.09461633	0.09619265		1.00
8,224,988												
2006 FISCAL year allocation	412,489	2,758,047	530,369	706,655	609,243	490,216	582,557	596,570	753,491	785,352	8,224,988	8,224,988
Auth. RPA Distribution	341,920	2,274,240	447,853	665,600	510,392	524,000	483,415	509,440	649,257	624,000	7,030,117	7,030,117
De-Oblig				(17,665)		(166,703)					(184,368)	(184,368)
Oblig.	10,400			147,206	110,640	20,000			28,000		316,246	316,246
Balance	170,441	1,241,988	647,761	240,070	921,158	536,678	1,747,069	1,148,572	516,549	1,200,081	8,370,366	8,370,366
8,029,652												
2007 FISCAL year allocation	402,692	2,692,546	517,773	689,873	594,774	478,573	568,722	582,402	735,596	766,701	8,029,652	8,029,652
Auth. RPA Distribution	341,920	2,274,240	447,854	665,600	510,392	524,000	483,415	509,440	649,257	624,000	7,030,118	7,030,118
De-Oblig								(98,415)			(98,415)	(98,415)
Balance	231,213	1,660,294	717,680	264,343	1,005,540	491,251	1,832,376	1,319,949	602,888	1,342,782	9,468,315	9,468,315
8,243,226												
2008 FISCAL year allocation	406,259	2,830,391	505,217	718,748	586,430	485,550	557,078	580,672	779,944	792,938	8,243,226	8,243,226
Auth. RPA Distribution	365,752	2,547,651	454,779	646,928	527,484	436,973	501,518	522,291	701,828	713,699	7,418,903	7,418,903
De-Oblig											0	0
Oblig.				53,890							53,890	53,890
Balance	271,720	1,943,034	768,117	390,052	1,064,486	539,829	1,887,936	1,378,329	681,004	1,422,021	10,346,528	10,346,528
8,374,270												
2009 FISCAL year allocation	412,718	2,875,386	513,248	730,174	595,752	493,269	565,934	589,903	792,343	805,543	8,374,270	8,374,270
Auth. RPA Distribution (92% OA)	379,700	2,645,356	472,188	671,760	548,092	453,808	520,659	542,711	728,955	741,100	7,704,328	7,704,328
De-Oblig											0	0
Oblig.											0	0
Balance	304,738	2,173,065	809,177	448,466	1,112,146	579,290	1,933,210	1,425,522	744,391	1,486,464	11,016,469	11,016,469

Explanation of each line in the segment for each year

2007 FISCAL year allocation = Distribution of the annual apportionment

Auth. RPA Distribution = Authorized funding for the year

= Any deobligation. Entered as a negative number

= the unobligated balance for each MPO

Special Notes:

Balance

De-Oblig

If any additional authorization of funds were made in any particular year, an additional row was inserted to record them

In FFY 2005 there were two authorizations, one at the beginning of the year and one in September before the end of the year.

In 1998 the amounts received under the congressional legislations, STEA -97 and Tea -21 are listed separately and added together.

In 2001 the de-obligations were made at the request of FHWA to make the authorized amounts equal to the amounts in the UPWP.

In 2007, MARPA revised the formula to include 40% takedown, 30% as a % of urban pop, and 30% as a % of total pop. The percentage shown is the result of the new formula.

This new formula was derived differently than the 2003 version.

LIST OF SIGNIFICANT PLANNING STUDIES and OTHER GRANTS

Significant regional transportation studies:

By the Cape Cod Commission:	
Cape Cod Transportation Improvement Program FY2009-2012	August 2008 (expected)
Cape Cod TIP Amendment FY2007-2010	June 2008 (expected)
Cape Cod TIP Adjustment FY2007-2010	August 2007
Cape Cod Unified Planning Work Program for FY2008	July 2007
Cape Cod TIP Amendment FY2007-2010	June 2007
Safety Study at three locations	December 2006
Cape Cod Unified Planning Work Program for FY2007	August 2006
Cape Cod Transportation Improvement Program FY2007-2010	August 2006
Cape Cod TIP Amendment (FY2006-2010)	March 2006
Route 28 Safety & Traffic Flow Study (Draft)	January 2006
Provincetown – Howland and Bradford Street Intersection Study	November 2005
Cape Cod Unified Planning Work Program for FY2006	August 2005
Cape Cod Transportation Improvement Program FY2006-2010	July 2005
Cape Cod Transportation Improvement Program Amendment FY2005-2009	May 2005
Cape Cod Transportation Improvement Program Amendment FY2005-2009	April 2005
Cape Cod Unified Planning Work Program for FY05 Amendment	February 2005
Cape Cod Unified Planning Work Program for FY05	August 2004
Cape Cod Transportation Improvement Program FY2005-2009	July 2004
Cape Cod Transportation Improvement Program Amendment FY2004-2008	June 2004
Cape Cod Transportation Improvement Program Amendment FY2004-2008	March 2004
Route 6 Safety & Traffic Study (Eastham, Wellfleet, Truro, Provincetown)	March 2004
Cape Cod Transit Support Facilities Design Prototypes	
(Cape Cod Commission and National Park Service)	February 2004
2003 Cape Cod MPO Regional Transportation Plan	August 2003
Cape Cod Unified Planning Work Program for FY04	August 2003
Cape Cod Transportation Improvement Program FY2004-2008	August 2003
Cape Cod Transportation Improvement Program Amendment	June 2003
Falmouth Steamship Authority Traffic Study (final draft)	February 2003
Cape Cod Traffic Counting Program Annual Report	January 2003
Cape Cod Unified Planning Work Program for FY03	August 2002
Cape Cod Transportation Improvement Program FY2003-2007	August 2002
Cape Cod Park & Ride Study	June 2002
Five-Year Public Transportation Plan (by CCC and the CC Transit Task Force)	June 2002
2002 Regional Policy Plan	April 2002
Marston Mills Recreational Fields Traffic Study	November 2001
Provincetown Bike Route Study	December 2000
Bicycle Safety Study - Provincetown	April 2000
A Strategic Plan for Expanded Cape Cod Ferry Service	Jan. 2000
Harwich Route 39/137 Planning Study	May 1999
Conwell Street Corridor Safety Study	May 1999
BL-2 Internal Road Transportation Benefits & Detriments (Sandwich)	November 1998
Massachusetts Military Reservation Master Plan	September 1998
Cape Cod Marine Transportation Feasibility Study	June 1998
Veterans Memorial Elementary School (Provincetown) Pedestrian Safety Study	May 1998
Route 28 &132 Traffic Circulation Study - Barnstable	August 1992
Route 28 Traffic Circulation Study - Yarmouth to Orleans	March 1992
Route 28 Traffic Circulation Study - Mashpee	December 1989
Route 28/MacArthur Blvd Traffic Study - Bourne	April 1989
10 Year Needs Assessment - Summary List	October 1989
Route 6 - Alternatives - Dennis to Orleans	October 1986

Environmental Impact Reports and Traffic Impact Studies (by others)	
Independent Living Facility, Falmouth, Traffic Impact Technical Memorandum	April 2006
Orleans Toyota – O'Connor Road Traffic Impact Letter	April 2006
CCRTA Fare Study – Final Report (Draft)	March 2006
Strategic Plan for the Development of Flex Service	March 2006
Dunkin Donuts, Dennis, Traffic Impact Letter	March 2006
International Fund for Animal Welfare Transportation Report, Yarmouth	March 2006
Electronics Superstore, Hyannis, Traffic Impact Technical Memorandum	March 2006
Walgreen Pharmacy, Traffic Impact & Assessment Study, Yarmouth	February 2006
Cape Cod Cooperative Bank, Barnstable, Traffic Impact Technical Memo	December 2005
Mashpee Industrial Park, Traffic Impact Letter	November 2005
Mashpee Commons, Traffic Impact & Access Study	November 2005
Macmillan Pier Transportation Center Feasibility Study – Final Draft Report	January 2006
CVS, Bourne – Traffic Impact Technical Memorandum	October 2005
Cape End Manor, Traffic Impact Letter, Provincetown	September 2005
Canal Bluffs 40B, Bourne, Traffic Impact Letter	September 2005
Bayside Seafood and Market, Brewster, Traffic Impact Assessment	August 2005
Dowcett Subdivision, Yarmouth, Traffic Impact Assessment	August 2005
Spring Bars Road 40B, Falmouth, Traffic Impact Assessment	July 2005
Bourne Elementary School, ENF	June 2005
Office Building, Hyannis, Traffic Impact Assessment	May 2005
Summerwoods 40B, Traffic Impact Letter, Harwich	April 2005
Integrated Solid Waste Mgt Facility, Bourne, Traffic Impact Assessment	January 2005
Riverview School, Sandwich, Traffic Impact Assessment	January 2005
Canal Place 40B, Bourne, Traffic Impact Report	January 2005
Orleans Shaw's (Traffic Impact & Access Study)	November 2004
Annie's Pasture 40B, Traffic Impact Assessment, Sandwich	November 2004
Eastham Town Beach Traffic Impact Assessment	September 2004
Lookout Ridge Subdivision, Traffic Impact Assessment, Sandwich	September 2004
Sandwich Shaw's (Traffic Impact & Access Study)	August 2004
Barnstable Airport Improvement Project, Hyannis, MA (Final EIR/Final EA)	May 2004
Proposed Cape Cod Hospital Expansion	March 2004
CanalSide Commons Development Traffic Impact and Access Study	March 2004
North Bay Partners Traffic Study – Barnstable	March 2004
Schooner Village 40B, Traffic Impact Assessment, Barnstable	January 2004
Sagamore Rotary Grade Separation (Revised EA/Final EIR)	October 2003
South Cape Village Supplemental EIR	October 2003
Alternative Transportation Facility Design Prototypes Workbook	September 2003
Sagamore Rotary Transportation Improvements Project	September 2003
(Environmental Assessment and draft EIR)	June 2003
Mashpee Place (final EIR)	May 2003
Wendy's Restaurant, Yarmouth, Traffic Impact & Access Study	June 2003
Cape Cod National Seashore Alternative Transportation Systems	June 2003
Long Range Planning Study	May 2003
Augat Self Storage Transportation Impact Assessment, Mashpee	March 2003
Harwich Commons Expansion, Traffic Impact & Access Study	March 2003
Dunkin Donuts, Traffic Study, Brewster	February 2003
Wellfleet Harbor Actors Theater (Traffic Impact & Access Study)	December 2002
Pleasant Bay Assisted Living, Traffic Study – Brewster	November 2002
Wise Living 40B, Traffic Impact & Access Study, Orleans	November 2002
Cape Cod Hospital Proposed Hadaway Road Ambulatory Campus	October 2002
Falmouth Hospital Expansion Traffic Impact Study	October 2002
Independence Medical Arts Traffic Impact Letter – Barnstable	October 2002
Sandwich Shaw's (Traffic Impact & Access Study)	August 2002
Mashpee Shaw's (Traffic Impact & Access Study)	August 2002 August 2002
manipor onan o (Traine impact or recess oracy)	1145451 2002

July 2002 Rt 28 Mobil Gas Traffic Impact Letter – Yarmouth May 2002 Truro Stop & Shop (draft EIR) Orleans Shaw's (Traffic Impact & Access Study) January 2002 Long Pond Medical Traffic Impact Letter – Harwich September 2001 Atlantis Supermarket (ENF) September 2001 Harwich Shaw's (Traffic Impact and Access Study) April and July 2001 Anchor Self Storage, Sight Distance & Trip Generation Analysis, Mashpee May-June 2001 Flagship Self Storage, Traffic Assessment, Mashpee May 2001 BJ's Wholesale Club April 2001 November 2000 Cotuit Landing - Barnstable (final) CanalSide Commons - Bourne (final) October 2000 Brewster Farms Country Market, Traffic Report, Brewster August 200 CanalSide Commons - Bourne (supplemental draft) May 2000 Mashpee Commons - Mashpee (draft) March 2000 South Cape Factory Outlet - Mashpee (final) February 2000 Route 3 - South Weymouth to Bourne - Corridor Needs Analysis May 1999 Silver Square Traffic Impact Assessment – Bourne April 1999 South Cape Factory Outlet - Mashpee (draft) April 1999 CanalSide Commons - Bourne (draft) Feb. 1999

Feasibility/Conceptual Planning Studies (by others)

Sagamore Rotary Grade Separation Study Conceptual Design & Feasibility Study

for a New Route 6 Interchange in the Town of Barnstable Jan. 1998

Route 6 - Transportation Improvements Project Dennis to Orleans (draft)

Other active CCC Planning Grants:

US Dept of Housing & Urban Development - HOME program

Coastal Zone Management - Mass Bays Program

EPA – Wastewater Planning

EOEA - Smart Growth Technical Assistance

DEP - U. Mass. School of Marine Science & Technology

October 1994

March 1998

List of staff and estimated percentage of time allocated to MassHighway funded (PL) tasks in the 2008-2009 UPWP:

TBA, Technical Services Manager	37%
Lev A. Malakhoff, Senior Transportation Engineer	84%
Priscilla N. Leclerc, Senior Transportation Planner	80%
Glenn Cannon, PE, Transportation Engineer	13%
Clay Schofield, PE, Transportation Engineer	60%
Andrew Koziol, Transportation Analyst	80%
Sharon Rooney, Chief Planner	5%
TBA, Planner II	10%
TBA, Planner II	10%
TBA, GIS System Manager	5%
TBA, GIS Analyst	15%
Seasonal Traffic Technicians Seasonal Traffic Technicians	asonal

Seasonal Traffic Counting Technician(s) - approximately 20 person weeks 100%

Cape Cod Unified Planning Work Program

FY2009 Funding Summary

		FHWA	MHD	MHD/FHWA	FTA	EOT/FTA	CCC	Other	Notes
									Notes
		PL funds	PL (match)	Scenic Byways	Sec 5303	Sec 5316		Federal	
	Mgt & Support of the Planning Process					Sec 5317			
	& Certification Activities								
1.1	Unified Planning Work Program	\$13,971	\$3,493						
1.2	Transportation Improvement Program	\$56,638							
1.3	CCJTC and MPO activities/Public Participation Program	\$51,918							
	Environmental Justice	\$3,851	\$963						
	Access to Jobs/Job Access Reverse Commute/New Freedom	\$1,926	\$481			\$16,900			
	Other Meetings & Support of the planning process	\$28,319							
	Total for Task		\$39,156						
	10141.01 1401	· • • • • • • • • • • • • • • • • • • •	\$55,155						
		+							
Took 2	Data Collection & analysis activities	+				+	$\overline{}$		
		650.450	£40.000			\longrightarrow			
2.1	Traffic Counting Program	\$52,153	\$13,038						
2.2	Transportation database management & pictometry	\$14,160							
2.3	Computer modelling & travel demand forecasting	\$14,160							
	Total for Task 2	2 \$80,472	\$20,118						
Task 3	Short and long range planning								
3.1	Short Range Planning & Regional Transportation Plan updates	\$20,861	\$5,215		\$20,000		\$5,000		
3 2	Congestion Management Plan	\$37,422			,		,		—
3.2	Canal Area Long Range Transportation Study	\$49,896							
3.3	Carlar Area Long Range Transportation Study	\$43,659				+			
	Transportation Safety (Locations Study)	\$24,948	\$6,237						+
	Growth Center Transportation & Land Use Study	\$24,948	\$6,237						
3.6	Follow-up on previous planning studies	\$9,440							ــــــ
	Total for Task	3 \$186,227	\$46,557		\$20,000		\$5,000		
Task 4	Other technical activities								
4.1	Intermodal Coordination & ITS	\$18,879	\$4,720		\$42,813		\$10,703	·	
	Other Technical Assistance Requests	\$30,074	\$7,518		¥ 12,0 10		7.0,.00		
7.2	Total for Task				\$42,813		\$10,703		
	Total for lask	F \$40,000	Ψ12,230		ψ 4 2,013		ψ10,703		
	CCC Planning and regulatory activities								
	Regulatory						\$101,056		
	Planning						\$101,056		
5.3	Other transportation activities						\$50,527		
	Total for Task	5					\$252,639		
Tack 6	Additional Planning Efforts (*pending approval)	+							
		+		\$65,000					
	Route 6A/Scenic Byways			\$65,000		2121112			
6.2	Minimodal Study (CCRTA)					\$184,440			ļ
6.3	Flex Expansion Study (Monomoy National Wildlife Refuge)							\$100,000	
	ITS Implementation Plan								NPS Funds
6.5	Satellite Maintenance/Storage Facility Study - Outer Cape							\$200,000	ATPPL
	Integrated Bicycle Plan								NPS Funds
6.7	Outer Cape Parking Study							\$250,000	
	Update 5-Year and Long Range Cape Cod Public Transportation Plans Phase I							\$200,000	
	Transportation Partner Coordination Program	+						\$175,000	
	Long Range Planning for Expansion of Cape Cod Rail Trail through CACO	+				\longrightarrow		\$250,000	
0.10		_		***		2121112			
	Total for Task	١		\$65,000		\$184,440	$\overline{}$	\$1,675,000	
		+						010====	
	Total			\$65,000	\$62,813	\$184,440	\$268,342	\$1,675,000	
	Funding Check		\$118,069						
	Total P.	4	\$590,344						
	MHD = Massachusetts Highway Department								
	EOT = Executive Office of Transportation	1					$\overline{}$		1
	FHWA = Federal Highway Administration	+							t
	FTA = Federal Transit Administration	+				+	$\overline{}$		
		+							
	CCC= Cape Cod Commission	 '							
	CCRTA = Cape Cod Regional Transit Authority								
	PL = Planning funds								
			1 ,						
	Sec 5303 = Federal Transit Planning Funds	+				+			
	Sec 5303 = Federal Transit Planning Funds Sec 5316								
	Sec 5303 = Federal Transit Planning Funds Sec 5316 Sec 5317								
	Sec 5303 = Federal Transit Planning Funds Sec 5316								