Draft CTPS FFY 2014 UPWP Universe of Proposed New Projects, by Project Type

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Sort Key	Project Name	Project Cost	Proposed FFY 2014 UPWP Budget	Project Description	FFY 2014 UPWP Staff Evaluation	Focus Areas*															Comments
						Link Land Use and Transportation	Work with Limited Financial Resources	Use a Management and Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the Transportation System	Increase Transit and Healthy-Transportation Mode Share	Encourage Sustainable Communities and Livability	Advance Mobility, Access, and Congestion Reduction	Improve System Reliability	Increase Transportation Safety and Security	Support Economic Vitality	Consider Transportation Equity and Accessibility	Support MetroFuture Goals	Support Goals of PMT, youMove/weMove, GreenDOT, and MA Mode Shift	Enhance Technical Capacity, Knowledge, and Insights	Support Performance-Based Planning	
	ROADWAY NETWORK PERFORMANCE PROJECTS																				
1	**Traffic Signal Retiming Program**	$40,000	$40,000	Traffic signal retiming is one of the most cost-effective ways to improve traffic movement through an intersection. Comprehensive signal retiming programs have documented benefits of 7%-13% reduction in overall travel time, 15%-37% reduction in delay, and a 6%-9% fuel savings. The signal retiming program can minimize congestion, fuel consumption and emissions. Signal timing should be reviewed throughout the region to evaluate its effectiveness and to make necessary changes. Phases can be implemented in order to achieve the most efficiency over time. The current CMP Committee effort can be used as a pilot study.	High		✓	✓	✓	✓			✓						✓		✓	The listed cost of $40,000 would fund the retiming of 12 signals. The project scope is scalable.
2	**Congestion Costs for the Boston Region**	$38,500	$0	This proposed study would examine the extent of congestion in the Boston region and how it can be valued economically using commercial electronic traffic data and value-of-time measures.	High		✓						✓	✓						✓	✓	
3	**Congestion-Generating Location Analysis**	$75,000	$0	The proposed study would analyze whether there are specific locations in the Boston region that generate particularly congestion-inducing traffic using commercial electronic traffic data and regional travel model data. Outputs could support MPO efforts to prioritize investment dollars.	High	✓	✓		✓				✓	✓		✓		✓		✓	✓	Ongoing discussion is occurring regarding a university-based project with related focus.
4	**Roadway Network Reliability Evaluation**	$92,000	$0	The proposed study would evaluate the reliability of travel times and speeds on roadways in the Boston region using commercial electronic traffic data and other information. Outputs could be used to make more effective comparisons between roadway and transit travel times and speeds.	High			✓		✓				✓					✓	✓	✓	This project could be coordinated with the MPO's Congestion Management Process. The project scope is scalable.
5	**Priority Corridors for Long-Range Transportation Plan (LRTP) Needs Assessment**	$70,000	$70,000	This project would constitute an additional phase of the Priority Corridors for Long-Range Transportation Plan (LRTP) Needs Assessment project, which was included in the FFY 2013 UPWP. It would recommend conceptual improvements for a selected number of corridors or corridor segments that the Congestion Management Process (CMP) and the Long-Range Transportation Plan identified in the needs assessment process. Two MAPC subregions, Inner Core Committee (ICC) and Minuteman Advisory Group for Interlocal Coordination (MAGIC), suggested corridor study concepts that may be addressed through this proposed study.	High		✓		✓	✓	✓		✓	✓	✓	✓		✓	✓			The project scope is scalable.

Focus Areas Key: ✓ Major Consideration ✓ Minor Consideration

* Focus areas are based on MPO visions and policies, national transportation goals and planning factors, federal guidance and other regional priorities. The MPO vision topics are: mobility; safety and security, transportation equity; system preservation, modernization, and efficiency; livability; environment; and climate change.

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	ROADWAY NETWORK PERFORMANCE PROJECTS																				
6	**Addressing Safety, Mobility, and Access on Subregional Priority Arterial Roadways**	$60,000	$60,000	This project would constitute an additional phase of Addressing Safety, Mobility, and Access on Subregional Priority Arterial Roadways, which was included in the FFY 2013 UPWP. This project would identify priorty arterial bottleneck locations in the MPO region, with an emphasis on issues identified by subregional groups, and would develop recommendations for low-cost improvements. Staff will consider numerous strategies, including examining and evaluating traffic signals, bus stop locations, and access management, among others. Four MAPC subregions -- Inner Core Committee (ICC), North Shore Task Force (NSTF), South Shore Coalition (SCC), and Three Rivers Interlocal Council (TRIC) -- suggested corridor study concepts that may be addressed through this proposed study.	High	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			The project scope may be scalable. This project was funded under the FFY 2013 UPWP for $120,000, with $75,000 to be funded in FFY 2013 and the remaining $45,000 to be funded in FFY 2014. The proposed $60,000 shown here would fund additional corridor study work beyond that detailed in the FFY 2013 UPWP (and the approved work scope).
7	**TIP Project Impacts Before-After Evaluation**	$40,000	$40,000	This project would continue a pilot study begun in FFY 2012. Its purpose is to identify the effectiveness of TIP projects. Measuring project effectiveness is important in order to know whether the employed strategies work well and are therefore suitable for application in similar situations. To this end, staff will select TIP projects that are programmed for construction during a specified time period. It is likely that only traffic management and operations projects will be selected, as the construction period of projects in this category is shorter than for other projects, such as the construction of freeway interchanges. The "before" data will be collected in the early spring of the selected year, before specified projects begin. The "after" data will be collected upon project completion, which may be later than the identified year. The type of "before" and "after" data that staff will collect depends on the nature of the project. For traffic management and operations it is likely that traffic flow, speed, delay, and safety information will be collected. If budget allows, level-of-service and air quality information will also be calculated for the "before" and "after" conditions. Staff will compare the two sets of data and draw conclusions.	High		✓												✓	✓	✓	✓	

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	ROADWAY NETWORK PERFORMANCE PROJECTS																				
8	**Comprehensive Transportation Study for the Back Bay, the Fenway, and the Longwood Medical Area**	$200,000	$0	There are several transportation improvement efforts ongoing or proposed in an area that encompasses the Back Bay, the Fenway, and the Longwood Medical and Academic Area. Concerns have been expressed by elected officials and others about how all of these projects will interact and whether, as a whole, they will adequately serve the future transportation needs of this area. The proposed study, therefore, would comprehensively examine whether the major existing and proposed transportation facilities that support the Back Bay, the Fenway, and the Longwood Medical and Academic Area will be able to accommodate transportation demand from anticipated growth. Project concepts proposed for this area include the addition of Turnpike ramps in the Back Bay, Kenmore Square/Fenway, and Longwood Medical and Academic areas, expansion of Green Line capacity and of crosstown services that reduce congestion on the Green Line, extension of the Silver Line, commuter rail enhancements at Yawkey and Ruggles Stations, repair or elimination of the Bowker Overpass, and repair or downsizing of Storrow Drive in certain areas. Elements of the proposed study would include an assessment of expected development and projections of future traffic growth within the area, along with identification of relevant regionwide traffic growth trends that affect the area. The study would then compare future traffic growth to existing capacity and planned capacity enhancements to identify areas of significant congestion or other transportation deficiencies, and provide an inventory of possible solutions for these areas. It would also identify any major existing routes that are currently and likely to remain below capacity.	Low	✓			✓			✓	✓	✓		✓		✓	✓				This study may duplicate portions of several other ongoing MassDOT study efforts in this area and is probably premature at this point. In order to perform this study appropriately, those other efforts should be allowed to advance to the point where preferred solutions can be identified and then analyzed collectively in the manner suggested by this proposal. This project idea was submitted by State Senators Brownsberger and Chang-Díaz and State Representatives Fox, Rushing, and Walz, with express support from several area neighborhood associations (these include the Audubon Circle Association, Back Bay Association, Fenway Civic Association, Fenway Community Development Corporation, Medical Academic and Scientific Community Association, and Neighborhood Association of the Back Bay). Updates have been made to this project description to more closely parallel the State Sen. Brownsberger, et al., letter.
	SAFETY AND SECURITY PROJECTS																				
9	**Traffic Safety Countermeasures**	$30,000	$0	CTPS staff would help prepare a document that identifies safety topics and relevant countermeasures to address many important safety concerns. The FHWA has a recommendation for nine such countermeasures: 1) enhanced delineation and friction for horizontal curves, 2) pedestrian hybrid beacons, 3) backplates with reflective borders, 4) longitudinal rumble strips and stripes on two-lane roads, 5) corridor access management, 6) medians and pedestrian crossing islands in urban and suburban areas, 7) "Road Diet" roadway configuration, 8) roundabouts, and 9) safety edges. This empirical research study will point to these or other countermeasures to adopt and promote in Massachusetts. The study will review policies and other material that MassDOT already has for reference. The final product will be a memorandum documenting the analytical procedure that led to the selection of the MA safety countermeasures, a description of each countermeasure, safety facts, and MassDOT contact information for help.	Low			✓						✓	✓	✓					✓		This project may be a candidate for MassDOT SPR funding.

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	SAFETY AND SECURITY PROJECTS																					
10	**Crash Reduction Factors Analysis**	$30,000	$0	Safety countermeasures are design elements that address various types of roadway crashes at intersections and on roadway segments. Each crash type may have several countermeasures associated with it, and each countermeasure associates with a crash reduction factor. Staff will select TIP projects that applied various countermeasures and compare before-and-after data to calculate crash reduction factors from each countermeasure. An adequate sample size of TIP projects that employ the same countermeasure will be selected for a valid estimate. Interested parties may include Massachussetts area MPOs, MassDOT, municipalities, and consultants.	Low									✓	✓			✓	✓	✓	✓	This project may be a candidate for MassDOT SPR funding.
11	**Safety and Mobility near Schools (MAGIC Subregion Pilot)** **(Updated project name and description)**	$100,000	$0	This proposed study would have two phases. In the first, staff would map the locations of schools within the Minuteman Advisory Group for Interlocal Coordination (MAGIC) subregion and provide crash rates and/or Equivalent Property Damage Only (EPDO) values for intersections surrounding those schools. For the second phase, the results of this mapping effort would be used to select a series of study locations for more detailed evaluation. Staff would analyze access, egress, safety, mobility, and congestion issues for those traveling to or from school, including students that walk or bike. This may include evaluations of traveler adherence to existing school and traffic policies and regulations (such as in reduced-speed school zones). The results of these analyses would be used to recommend operations, policy, and other improvements. This proposed study could be used as a pilot project for similar studies that could be conducted in other MAPC subregions. Results from the mapping effort could also be used to support efforts to prioritize funding for intersection improvements.	Low		✓	✓			✓	✓			✓					✓	✓		This project incorporates a related idea submitted by the MAGIC subregion. The concept of this project, previously named "Reduced-Speed School Zones Study," has been revised since the February 7 UPWP Committee meeting. The listed cost of $100,000 would cover 25 schools.
12	**Impacts of Coastal Storms, Tidal Surges, and Climate Change on MassDOT Highway and Transit Tunnels**	$85,000	$0	This project is suggested in light of the tunnel flooding experienced in New York during Hurricane Sandy and continuing accumulation of evidence regarding climate change and its effects on sea-level rise and storm frequency and intensity. It would include: 1. Examining existing data on the vulnerability to flooding and other storm-related impacts of highway and transit tunnels in the MPO region. 2. Identifying and generating any additional data needed to assess current and future vulnerability, including vulnerability to the effects of sea-level rise and changes in storm and precipitation intensity projected for the next 50 years, at least. This study would assess specific tunnels and consider both direct effects (e.g., storm surge water entering tunnel systems) and indirect effects (e.g., loss of power).	Medium					✓				✓	✓				✓		✓		MassDOT's pilot proposal for Climate Change and Extreme Weather Vulnerability Assessments and Adaptation Options of the Central Artery was selected for funding by FHWA. Elements of this study concept not addressed in the MassDOT pilot proposal may be addressed through other avenues, including future UPWPs. Step 3 of the initial request for the proposed study, "Evaluating options to reduce flooding and other vulnerabilites of existing tunnels," has been removed. This study idea was submitted by the City of Boston.

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	NONMOTORIZED TRANSPORTATION PROJECTS																					
13	**Roadway Network Inventory for Emergency Needs: Phase II**	$25,000	$0	This proposed study would expand on the MPO's Roadway Network Inventory for Emergency Needs pilot study. The pilot, which is in the FFY 2013 UPWP, will gather data on traffic signal equipment in Boston and adjacent communities and create a GIS data layer of that information for use in the MPO's All-Hazards Planning application. It will also update an existing data layer in the application that depicts the location and condition of bridges. In addition to developing GIS layers, the pilot will inventory the locations and characteristics of signals on evacuation routes, documenting whether the existing signals have emergency management features such as the ability to be controlled from a traffic management or operations center or emergency-vehicle pre-emption. The condition of bridges on the evacuation routes will be documented as well. The study proposed for the FFY 2014 UPWP would expand upon the pilot to gather and map signal data from additional communities within the Route 128 area. Products of the study would also include, for both the pilot study communities and the additional ones, updated GIS data layers for signals and bridges, as well as updates to other data layers in the web application as new information becomes available.	Medium			✓		✓			✓	✓	✓					✓	✓	✓	
14	**Trip Purposes and Impacts of Bicycle and Pedestrian Paths**	$30,000	$0	The proposed study would examine the trip purposes for which travelers use different types of bicycle and pedestrian paths. In particular, this study would analyze which types of paths serve the highest number of commuting trips, and would evaluate the validity of the assumption that off-road, shared-use paths are primarily for noncommuting trips. Where appropriate, this study may evaluate impacts created by accessing paths, including emission impacts generated when motor vehicles are used to access trails. This study would require data collection. An element of this study would be the development and employment of a smartphone application for collecting study-supporting and other data on bicycle and pedestrian trips in the Boston region. This element may include a literature review, work on creating the prototype smartphone application, and then the collection, review, and analysis of data from the application. Upon completion of this project, this smartphone application may be available for long-term and regionwide use. The data collected from this application could be made publicly available on the MPO's website for use by external agencies and to support future bicycle and pedestrian facility research.	Low			✓	✓		✓		✓						✓	✓	✓	✓	This proposed project may potentially be coordinated with MassDOT statewide bicycle and pedestrian plan development.

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	NONMOTORIZED TRANSPORTATION PROJECTS																					
15	**Pedestrian Signal Phasing Study**	$30,000	$30,000	The selection of pedestrian signal phasing involves many complicated factors and is challenging to traffic engineers. Exclusive pedestrian phasing is favored for its safety considerations for pedestrians, though at heavy pedestrian crossing locations, concurrent phasing can sometimes be more effective for both traffic and pedestrian flow while providing a similar level of safety for pedestrians. Municipalities in the Boston Region MPO area have become increasingly interested in converting some of their intersection signals from an exclusive pedestrian phasing to a concurrent pedestrian phasing, but they have not been able to find useful references or guidelines. This study will review the existing practices and available guidelines for the two types of pedestrian signal operation, perform case studies in the MPO region (including analysis of crash data), compare both operations, and summarize the findings for the MPO's reference.	High		✓	✓			✓	✓	✓	✓	✓			✓	✓	✓		
16	**Bicycle/ Pedestrian Level of Service Analysis**	$30,000	$0	In this proposed study, CTPS staff would develop bicycle/pedestrian level-of-service criteria that are customizable to the Boston region, using already-available data or by acquiring additional data. This study would create an interactive tool available on the Boston Region MPO website that could analyze the bicycle/pedestrian facilities in the region based on the criteria. The interactive tool could also provide users, including Boston region municipalities, with the option of inputting additional data from municipal or other surveys. Data that would support these level-of-service criteria and the tool could include the number of travel lanes, the number of curb cuts per mile, the presence of lighting, of bicycle parking, or of pedestrian signals, or other items. Possible measures derived from data could include municipal mode split, motor vehicle volumes, adjacent vehicle speeds, speed limits, and bicycle and pedestrian volumes. The users of this interactive tool would benefit from having a standardized rating of the quality of a specific bicycle facility. For example, this information helps transportation planners and government officials make decisions for bicycle and pedestrian programs and projects, including prioritizing projects and allocating funding. Outputs from this tool may have the potential to be incorporated into the TIP selection process. They may also help to justify bicycle and pedestrian facilities as an integral component of the region's transportation network.	Medium				✓		✓	✓	✓					✓	✓	✓	✓	This proposed project may potentially be coordinated with the MPO Congestion Management Process or bicycle and pedestrian programs or MassDOT statewide bicycle and pedestrian plan development.
17	**Bicycle and Pedestrian Crash Analysis**	$42,500	$0	This proposed study would analyze the key causes of bicycle and pedestrian crashes in the Boston region using crash data to improve recommendations for reducing crash incidence.	Low			✓			✓	✓	✓		✓			✓	✓	✓	✓	This proposed project may potentially be coordinated with MPO bicycle and pedestrian programs or MassDOT statewide bicycle and pedestrian plan development.

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	TRANSPORTATION EQUITY AND ACCESSIBILITY PROJECTS																					
18	**Household Survey-Based Comparisons between Income and Racial Groups** **(Updated project description)**	$35,000	$0	The 2011 Massachusetts Household Travel Survey obtained travel information from households on a statewide basis. Every member in selected households prepared a diary for a specific day and reported all trips, methods of travel, and the type of activity at each location visited from the beginning to the end of that day. The survey method was designed to have representative results by income and race. In keeping with the MPO's Transportation Equity vision of conducting analyses of low-income and minority populations, this proposed study would analyze household survey data (including variables such as trip length, number of trips, types of trips, and modes used) for low-income and minority households and compare them with data from nonminority and higher-income households to determine what the differences are. This analysis would include an effort to identify the locations of households that meet environmental justice criteria (including those based on income and minority status) and may fall outside of known clusters. Data from sources other than the household survey may also be used, as necessary. The data used in this study will be analyzed in conjunction with the LRTP Needs Assessment issues to identify specific recommendations and needed improvements.	High							✓	✓				✓	✓	✓	✓	✓	This project could be incorporated into the ongoing MPO Transportation Equity Program. The components of the "Environmental Justice Households Locations Analysis" project proposal, which is no longer listed as an independent project, have been incorporated into this study.
19	**Environmental Justice-Analysis Methodology Review**	$60,000	$60,000	This study would analyze the way that CTPS conducts its environmental justice (EJ) analyses. Data to support this study could include Massachusetts Household Travel Survey data, MBTA Systemwide Passenger Survey data, regional travel model data, and other data. The study would consider four elements: methodology (including techniques to assign EJ designations to individual travel modes and submodes), service area, thresholds, and metrics for analysis. This project could include a Title VI-oriented component that addresses guidelines for conducting a benefits-and-burdens analysis. These guidelines could include 1) factors to consider in defining the project impact area, 2) methods for determining benefits and burdens, 3) methods for evaluating whether minority or low-income populations are burdened by the project, and 4) definition of a threshold for "disproportionally high."	High												✓	✓	✓	✓	✓	This project scope may be scalable. It could also be incorporated into ongoing MPO transportation equity programs.

NOTES:

The project named "The Effect of Hubway Bike Sharing on MBTA Trips" has been rescinded by its CTPS project proponent and has been removed from this project universe.

The project named "Environmental Justice Households Location Analysis" has been incorporated into the "Household Survey-Based Comparisons between Income and Racial Groups" project. Thus, it no longer appears as an independent project.

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	LAND USE, ENVIRONMENT AND ECONOMY PROJECTS																					
20	**Comparing Auto Usage and Land Use Characteristics**	$32,500	$0	This proposed study would use statistical and other analysis techniques to evaluate differences in auto trips between dense or mixed-use communities and other areas. In doing so, staff would examine the assumption that increasing density or the mix of land uses reduces vehicular travel. This study would use Massachusetts Household Transportation Survey data and other land use data.	Low	✓												✓	✓	✓	✓	
21	**Transportation Investments for Economic Development**	$50,000	$50,000	This proposed study would examine which transportation investments may yield the greatest economic development benefits using transportation economic impact analysis tools and other economic data. Analyses would focus on major infrastructure projects of regional significance.	High	✓	✓			✓						✓		✓	✓	✓	✓	This project could be incorporated into ongoing MPO development and analysis efforts related to the Long-Range Transportation Plan.
22	**GHG Reduction Strategy Cost-Effectiveness Analysis**	$55,000	$0	The proposed study would examine which are the most cost-effective greenhouse gas (GHG) reduction strategies for the transportation sector using EPA Motor Vehicle Emission Simulator (MOVES), regional travel model, and other data.	High		✓		✓			✓							✓	✓	✓	This project could be conducted in conjunction with the TEAMS Technical Assistance program. The project scope may be scalable.
23	**Boston Transportation Fact Book and Neighborhood Profiles: 21st Century** **(Updated project description)**	$75,000	$0	The proposed project, which would be a joint effort with the City of Boston, would develop a Boston Transportation Fact Book that reflects contemporary issues such as climate change and equity in access to transportation services. The data, tables, and charts would guide decision makers in a number of areas by identifying trends and establishing performance measures. The proposed areas to cover are reducing GHG emissions, providing equity in access to transportation services such as car and bike sharing, encouraging mode shift, decreasing obesity rates, supporting small businesses and the "new" economy, and managing parking. Neighborhood and regional connection profiles would also be created. A previous iteration of the Boston Transportation Fact Book and Neighborhood Profiles was completed in 2002.	Low	✓						✓								✓		The previous iteration of this project was funded with SPR funds. The project cost shown reflects the cost to the Boston Region MPO; the total funding for the project (currently estimated at $175,000) would include City of Boston funds. This study idea was submitted by the City of Boston.
	TRANSIT PROJECTS																					
24	**Determinants of Walking to Transit**	$32,500	$0	This proposed study would examine the determinants of walking to transit using Massachusetts Household Transportation Survey data and other collected field data. Outputs may provide guidance to the MPO on what infrastructure improvements to prioritize.	Low	✓			✓		✓	✓	✓					✓	✓	✓	✓	

NOTES:

The project named "Travel Options for Zero-Auto Households" has been incorporated into the "Identification of Areas with Mode Shift Opportunities" project on page 14. Thus, it no longer appears as an independent project.

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	TRANSIT PROJECTS																					
25	**Actions to Increase Transit Ridership: Cost-Effectiveness Analysis**	$70,000	$0	This proposed study would analyze the most cost-effective systemic actions for increasing transit ridership, using regional travel model data. Outputs from this study would support the MPO in focusing resources for achieving mode-share goals.	High		✓		✓		✓		✓					✓	✓	✓	✓	This project may relate to MBTA Service Standards.
26	**Development of a Methodology to Evaluate Potential Limited-Stop Service on Transit Routes (incl. Key Route Corridors)**	$52,000	$52,000	The MBTA regularly receives requests from elected officials and the public for limited-stop service in many of the Key Route bus corridors. However, dividing existing vehicles on a route between limited-stop and local service would fail to provide an adequate level of service on either. This project would evaluate criteria and costs for establishing additional limited-stop bus services based on existing and future ridership demand, operating strategies, and equipment needs. This methodology could ultimately be used in RTAs beyond the MBTA. This project then would analyze which Key Route corridors would be most likely to support both local and limited-stop service, as well as estimate the resources needed to provide both types of service. The results of the analysis could be used to justify additional operating funds at some point in the future. If additional MBTA operating resources become available, the results of this study would be used to prioritize the implementation of limited-stop service on Key Routes.	High		✓	✓	✓		✓		✓	✓			✓	✓	✓	✓	✓	The project scope may be scalable.
27	**Enhancing Transit to Better Serve Our Aging Population**	$25,000	$0	The proposed study would look at availability of transit options for accessing health care. Studies have shown that lack of transportation reduces health care utilization among children, seniors, low-income people, and people with disabilities. The study would use analytical mapping tools to assess transit access to health care facilities, particularly from minority and low-income neighborhoods. It would include local transit services such as those provided by councils on aging, the Massachusetts Department of Health and Human Services, and others, as well as services of the MBTA and RTAs. This study could be conducted in a subregion as a pilot, or it could include the entire MPO region.	Low				✓		✓		✓				✓	✓	✓	✓		This proposed project should be coordinated with MassDOT and MBTA plans and activities regarding THE RIDE and other transit options for elderly individuals.

NOTES:

The project named "Analysis of Subregional and Other Factors on MBTA Ridership" has been incorporated into the "Identification of Areas with Mode Shift Opportunities" project on page 14. Thus, it no longer appears as an independent project.

Draft CTPS FFY 2014 UPWP Universe of Proposed New Projects, by Project Type

(This document is a draft in development.)

Please note: columns have been added, and some projects have been renumbered.

Sort Key	Project Name	Project Cost	Proposed FFY 2014 UPWP Budget	Project Description	FFY 2014 UPWP Staff Evaluation	Focus Areas*																Comments
						Link Land Use and Transportation	Work with Limited Financial Resources	Use a Management and Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the Transportation System	Increase Transit and Healthy-Transportation Mode Share	Encourage Sustainable Communities and Livability	Advance Mobility, Access, and Congestion Reduction	Improve System Reliability	Increase Transportation Safety and Security	Support Economic Vitality	Consider Transportation Equity and Accessibility	Support MetroFuture Goals	Support Goals of PMT, youMove/weMove, GreenDOT, and MA Mode Shift	Enhance Technical Capacity, Knowledge, and Insights	Support Performance-Based Planning	
	TRANSIT PROJECTS																					
28	**Transit Connections to and within Cambridge and Somerville**	$75,000	$0	A study could evaluate how to improve transit connections within Cambridge and Somerville and between these cities and other parts of the Boston region. Connections of concern include those between Kendall Square and North Point, Kendall Square and Sullivan Square, and Kendall Square and the Longwood Medical Area, and also some existing connections, such as the EZRide Shuttle that serves Cambridgeport, MIT's Northwest Campus, Kendall Square, Lechmere, and North Station, that are at capacity.	Low	✓			✓		✓		✓	✓					✓	✓	✓		Work proposed in this project would need to be closely coordinated with MassDOT and MBTA plans and activities related to transit within, to, and from Cambridge and Somerville. This suggestion was provided at an Inner Core Committee subregion meeting. If work on this project did not include use of the MPO's regional travel demand model set, project costs could potentially be reduced to $30,000.
29	**MAGIC Area Study for Transit Service Integration**	$37,500	$0	The Minuteman Advisory Group on Interlocal Coordination's (MAGIC) priorities include analyses that look at innovative ways to integrate existing transit services (school buses, Council on Aging vans, locally funded shuttles, private business shuttles, etc.) into a more coherent and coordinated public transportation system.	Low		✓	✓			✓		✓				✓	✓	✓	✓		This proposed project should be coordinated or considered with respect to other past, current, or future MAGIC-area transit service projects. This study suggestion was based on an idea from the MAGIC subregion.
30	**MBTA Fare-Box Non-Interaction**	$30,000	$0	As the MBTA faces growing deficits and rising fares, it is important that as many fares as possible are collected, both to close the financial gap and to ensure equity among riders. The MBTA's Automated Fare Collection (AFC) system has been instrumental in reducing fare evasion, but non-interaction still exists. It occurs both through active means, such as forcing open fare-gates or "tailgating" fellow passengers through the gates, and passive means, such as when trains become too crowded for conductors to collect all fares. This study would start the process of developing a comprehensive review of how much fare-box non-interaction (both active and passive) occurs in the MBTA system and how much revenue is thereby lost to the MBTA. In this proposed project, staff would first conduct a peer and literature review to gain an understanding of how this issue is approached at other transit agencies around the country and world. The second task would be to design a procedure for data collection, based on the knowledge gained in task 1. Data collection would include representative samples from multiple mode and entrance types, such as rapid-transit manned entrances, rapid-transit unmanned entrances, surface trolley, bus, and commuter rail. Samples may also be taken during different weather events and times of day. The methodology would need to be repeatable to enable tracking over time, as well as cost-efficient. Implementation of the data collection effort developed in and recommended by this study would be included in a follow-up project the following year; the present effort would be only for design of the data collection methodology.	Low		✓			✓										✓		This project may be a candidate for MassDOT 5303 funding. This study idea was submitted by the MBTA.

Draft CTPS FFY 2014 UPWP Universe of Proposed New Projects, by Project Type

(This document is a draft in development.)

Please note: columns have been added, and some projects have been renumbered.

Sort Key	Project Name	Project Cost	Proposed FFY 2014 UPWP Budget	Project Description	FFY 2014 UPWP Staff Evaluation	Focus Areas*																Comments
						Link Land Use and Transportation	Work with Limited Financial Resources	Use a Management and Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the Transportation System	Increase Transit and Healthy-Transportation Mode Share	Encourage Sustainable Communities and Livability	Advance Mobility, Access, and Congestion Reduction	Improve System Reliability	Increase Transportation Safety and Security	Support Economic Vitality	Consider Transportation Equity and Accessibility	Support MetroFuture Goals	Support Goals of PMT, youMove/weMove, GreenDOT, and MA Mode Shift	Enhance Technical Capacity, Knowledge, and Insights	Support Performance-Based Planning	
	TRANSIT PROJECTS																					
31	**Transit Access to Health Care Facilities**	$30,000	$0	The proposed study would look at availability of transportation options for accessing health care. Studies have shown that lack of transportation reduces health care utilization among children, seniors, low-income people, and people with disabilities. The study would use analytical mapping tools to assess transit access to health care facilities, particularly from minority and low-income neighborhoods. It would include local transit services such as those provided by councils on aging, the Massachusetts Department of Health and Human Services, and others. This study could be conducted in a subregion as a pilot, or it could include the entire MPO region.	Medium							✓	✓				✓	✓	✓	✓	✓	The listed cost would be for completing work for one subregion.
32	**Identification of Areas with Mode Shift Opportunities (includes MAPC participation)** **(New project concept)**	$68,000	$68,000	This project would be undertaken in partnership with MAPC. It would identify the areas in the region where there is the most potential for shifting travelers away from single-occupant-vehicle trips to other modes, such as transit, walking, and bicycling. Staff would use existing and historical data on population and employment density, zero-vehicle households, and transit and roadway networks, and other spatial datasets, to accomplish this goal. In the MPO's part of the project, a statistical analysis would be conducted to determine what factors have been the most important determinants of successful transit service. Using this analysis coupled with land use forecasts from MetroFuture, staff could determine which areas would be most likely to support transit in the future. Using the same datasets, MAPC could conduct analysis for other modes, such as walking and biking.	High	✓	✓		✓		✓	✓	✓				✓	✓	✓	✓	✓	This project reflects the combination of projects, "Travel Options for Zero-Auto Households," and "Analysis of Subregional and Other Factors on MBTA Ridership," along with an MAPC project proposal to analyze mode shift opportunities. This project would be a joint effort between CTPS and MAPC. Costs shown reflect the CTPS portion of the project.

NOTES:

The projects under the functional group "MAPC Project Concepts" are no longer listed in this universe document.