Memorandum for the Record
Transportation Planning and Programming Committee of the
Boston Region Metropolitan Planning Organization (MPO)

August 18, 2011 Meeting
10:00 AM – 11:15 AM, State Transportation Building, Conference Rooms 2 & 3, 10 Park Plaza, Boston
David Mohler, Chair, representing Jeffrey Mullan, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)

Decisions

The Transportation Planning and Programming Committee agreed to the following:

- approve the federal fiscal year (FFY) 2012 Unified Planning Work Program (UPWP)
- approve the work program for the *Regional HOV Lane System Planning Study*

Meeting Agenda

1. Public Comments

Jim Gallagher registered his objection to the way in which MassDOT announced its proposal to seek an amendment to the State Implementation Plan (SIP). He believes that MassDOT should have brought its proposal to the community before requesting the amendment from the Department of Environmental Protection (DEP). The proposed amendment to the SIP would eliminate the requirement to complete the final design of the *Red Line – Blue Line Connector* project.

Wig Zamore, Somerville Transportation Equity Partnership and Mystic View Task Force, noted that there is no funding source for the *Green Line Extension* project listed in the draft FFYs 2012 – 2015 Transportation Improvement Program (TIP), and he suggested that the information be added. D. Mohler stated that the funding source would be included in the document soon.

In response to a question from Bob McGaw, Belmont resident, D. Mohler provided information on the status of the SIP projects and MassDOT's proposed amendment to the SIP. He explained that MassDOT will complete all of the SIP projects, except the design of *Red Line – Blue Line Connector* project. The projects will be completed behind their original schedules, as outlined in the proposed amendment.

J. Gallagher stated that the TIP should not have been released for public comment without the financial information for the *Green Line Extension* project included in it. D. Mohler responded by noting that the current cash flow information for that project is included in the TIP. He directed staff to add a note to the TIP document to specify that the project will be funded by state bonds and possibly with federal New Starts funding (up to 50%), if approved.

Tom Bent, City of Somerville, noted that he submitted questions to MPO staff regarding the *Green Line Extension* project. He asked when MassDOT would be filing a petition to delay the project. D. Mohler replied that MassDOT must prepare a mitigation proposal first. It is possible that the petition may be filed in the first quarter of 2012. A public process will follow.

T. Bent then inquired about the availability of the risk analysis that MassDOT conducted for the *Green Line Extension* project. D. Mohler stated that MassDOT will post the documents on its website after it redacts certain information that should not be made available to potential bidders at this time. It is possible the documents may be available by the end of next week.

W. Zamore commented that it appears that MassDOT does not have enough staff working on the *Green Line Extension* project to execute the project in a timely manner. He then suggested a possible study idea for the MPO's next UPWP, which would have the MPO staff research how other light rail construction projects in the country are managed.

2. Chair's Report – *David Mohler, MassDOT*
The DEP has released a schedule for an upcoming public hearing on the SIP. The hearing will be held in September.

The chair will be scheduling a meeting of the Executive Director Search Committee, which is overseeing the process for hiring a new Director of the Central Transportation Planning Staff (CTPS).

The Secretary of Transportation, Jeffrey Mullan, will step down from his position on September 2. Richard Davey will become Secretary of Transportation on September 3.

3. Subcommittee Chairs' Reports
There were none.

4. Regional Transportation Advisory Council Report – *Steve Olanoff, Regional Transportation Advisory Council*
The Advisory Council heard a presentation from the Massachusetts Port Authority at its August meeting. Two subcommittees will meet next week to develop the Council's comments on the TIP and Long-Range Transportation Plan.

The Council will also hold its election for chair and vice chair in September. S. Olanoff is a candidate for chair, and Monica Tibbits, 128 Business Council, is a candidate for vice chair.

5. Director's Report – *Karl Quackenbush, Acting Director, CTPS*
Staff distributed copies of the MPO's new Memorandum of Understanding. Copies of a red-lined version showing edits made to the document were also made available on request.

Ariel Godwin, Congestion Management Process (CMP) Manager, has resigned from CTPS to relocate to Florida. CTPS will be running an advertisement for two positions: Congestion Management Process (CMP) Manager and TIP Manager.

In response to members' questions, K. Quackenbush stated that CTPS hopes to fill the TIP Manager position soon. Sean Pfalzer, Assistant TIP Manager and MPO staff, and Pam Wolfe, Manager of Certification Activities, are currently handling the functions of the TIP Manager.

6. FFY 2012 Unified Planning Work Program – *Mary Ellen Sullivan, UPWP Manager, MPO Staff*

Members were provided with documentation for the *FFY 2012 Unified Planning Work Program* (UPWP), including a chapter on the budget (Chapter 8), public comment letters and draft responses (Appendix B), and a description of the South Station Expansion study (which was requested by MassDOT since the release of the draft UPWP). (See attached.)

M.E. Sullivan noted that most of the public comment letters expressed support for the Needs Assessment of the Long-Range Transportation Plan and requested specific corridor studies. The Regional Transportation Advisory Council submitted a comment requesting the completion of the *Freight Survey* project and the *Regional HOV-Lane System* study.

A motion to approve the FFY 2012 UPWP was made by John Romano, MassDOT Highway Department, and seconded by Eric Bourassa, Metropolitan Area Planning Council. The motion carried.

7. Work Programs – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS) and Mark Berger, MassDOT*

Members heard presentations on two draft work programs at the meeting of August 4: the *Regional HOV Lane System Planning Study* and the *Boston Ramp Study*. (See attached.)

A motion to approve the work program for the *Regional HOV Lane System Planning Study* was made by T. Bent, and seconded by John Westerling, Town of Hopkinton. The motion carried.

Members further discussed the *Boston Ramp Study* and Mark Berger, Project Supervisor, MassDOT, answered questions. This study would support a study being conducted by MassDOT's Office of Transportation Planning. MassDOT is studying the potential for building new ramps on the Massachusetts Turnpike between Brookline Avenue and Berkeley Street in Boston. CTPS would conduct travel forecasting for four potential ramp configurations and provide data on traffic volumes on the Turnpike, on the potential new ramps, and on surface streets.

Jim Gillooly, City of Boston, asked if MassDOT has made a decision about electronic tolling on the potential new exit ramps. M. Berger replied that MassDOT is considering

equity-based tolling (a driver would pay a toll amount based on the distance of his or her trip).

J. Gillooly expressed concern that it would be premature to assume tolling at this stage of the study. And he noted that adding tolls in the downtown area might be a disincentive for drivers to use the Turnpike when traveling from the waterfront area. He suggested adding language to the work program stating that "should there be tolls, electronic tolling would be used."

While the study, as presented, would model traffic with the assumption that there are tolls, J. Gillooly suggested adding a step to model traffic assuming that there are no tolls. This information would help determine how much use the Turnpike would get under both conditions and, in the future, it could inform a public process regarding tolling.

Three of the proposed modeling scenarios would examine potential new westbound off-ramps. J. Gillooly recommended that the fourth scenario examine an eastbound on-ramp. He suggested adding language to the work program to that effect; the MassDOT representatives agreed. He also asked that consideration be given to the concept of a reverse lane loop that would allow westbound traffic to reverse direction. M. Berger noted that MassDOT is developing an alternative for an eastbound on-ramp.

David Koses, City of Newton, expressed agreement with J. Gillooly's comments. He also expressed concern about a perceived policy shift by MassDOT to toll all segments of the Turnpike. D. Mohler responded that MassDOT has not set a new tolling policy yet, but is studying alternatives.

D. Koses remarked that the alternatives posed in the work program (closing ramps to the Turnpike at Cortez Street, Arlington Street, Clarendon Street, and Massachusetts Avenue) seem difficult to envision. S. Olanoff suggested studying the traffic impacts of closing those on-ramps prior to testing the alternatives proposed in this study. He also suggested giving the work program a more descriptive name.

In response to these comments, M. Berger provided background information regarding how the proposed alternatives were selected. MassDOT first conducted an existing conditions analysis of the study area, in which the City of Boston, MAPC, neighborhood groups, a study advisory group, and others participated. The analysis identified "fatal flaws" or factors that would limit the design of new ramps. These factors include the Worcester rail line, which limits the ability to add eastbound on-ramps, and the area near the Bowker Overpass where there are restrictions due to environmental and historic issues. The three scenarios presented in the work program are those that passed the "fatal flaw" analysis and that seemed reasonable from the point of view of the members of the advisory group. While MassDOT is not recommending these alternatives at this time, it would like to examine the potential number of people that would use the ramps and the potential traffic impacts.

S. Olanoff advised studying the potential ramps both with and without closing the existing ramps. He questioned why the study assumed that those ramps would be closed and suggested that the act of closing those ramps be part of the study. M. Berger noted, however, that MassDOT is bound by the Federal Highway Administration's (FHWA) design guidelines, which would limits the ability to implement certain options.

Members returned to the discussion of whether to model the scenarios with the assumption that the ramps will be tolled or not tolled. E. Bourassa noted that building a new ramp would necessarily require MassDOT to apply tolls. D. Mohler agreed, and noted that it can be assumed that an untolled road would attract more users. J. Gillooly argued, however, that the cost of the tolls would have an impact on how many users are attracted to the Turnpike. He advocated for modeling both with and without tolls. D. Mohler noted that the additional modeling work would increase the cost of the work program.

No agreement was reached on these issues. This agenda item was tabled.

8. Members Items

J. Romano reminded members of the upcoming hearings on proposed routing of non-radioactive hazardous materials through Boston. The first hearing will be held on August 23 in Conference Rooms 2 & 3 of the State Transportation Building from 6:30 to 8:30 PM.

J. Gillooly provided background information about the routing proposal. The City of Boston is seeking state approval to restrict the trucking of hazardous materials through downtown Boston, unless authorized to make a delivery or pick-up in the city. The city funded a study that shows that the re-routing of such trucks would improve safety both in the daytime and evening hours.

Joe Cosgrove, MBTA, announced that the Federal Transit Administration awarded a $3 million Asset Management Grant to the MBTA.

D. Mohler announced that FHWA released its Discretionary Awards, which included $1 million for Commonwealth Avenue and additional funds for several other projects in the region.

9. Adjourn

A motion to adjourn and convene the MPO meeting was made by J. Westerling, and seconded by J. Romano. The motion carried.

Transportation Planning and Programming Committee Meeting Attendance
Thursday, August 18, 2011, 10:00 AM

Member Agencies	Representatives and Alternates
MassDOT	David Mohler
MassDOT Highway	Marie Rose
	John Romano
City of Boston	Jim Gillooly
City of Newton	David Koses
City of Somerville	Tom Bent
MAPC	Eric Bourassa
	Eric Halvorson
MBTA	Joe Cosgrove
Regional Transportation Advisory Council	Steve Olanoff
Town of Bedford	Richard Reed
Town of Braintree	Christine Stickney
Town of Hopkinton	John Westerling
	Mary Pratt

MPO Staff/CTPS
Michael Callahan
David Fargen
Maureen Kelly
Gregg Lantos
Robin Mannion
Anne McGahan
Sean Pfalzer
Karl Quackenbush
Mary Ellen Sullivan
Alicia Wilson
Pam Wolfe

Other Attendees

Jim Gallagher	
Bob McGaw	Belmont resident
Joe Onorato	MassDOT Highway
Karen Pearson	MassDOT Office of Transportation Planning
Wig Zamore	Somerville Transportation Equity Partnership / Mystic View Task Force

FFY 2012 UPWP BUDGET BY RECIPIENT AGENCY

		MAPC			CTPS								MassDOT	
UPWP Category	UPWP Total	Total MAPC	PL	MPO §5303	Total CTPS	PL	MPO §5303	SPR	Mass DOT	Mass DOT §5303	MBTA	Other	Mass DOT Total	Mass DOT
Administration and Resource Management Projects	$832,200				$832,200	547,700	262,300	14,000		6,000	2,200			
Certification Requirements	$2,475,000	$330,000	231,000	99,000	$2,145,000	1,460,600	684,400							
Planning Studies	$1,225,600	$340,000	222,800	117,200	$885,600	390,300	127,300	65,000	243,800			59,200		
Technical Support/Operations Analysis Projects	$2,090,800	$274,500	170,600	103,900	$1,816,300	263,300	172,400	421,000	200,000	301,300	458,300			
MassDOT Match to CTPS FFY 2012 §5303 Funds	$260,400												$260,400	260,400
Total	$6,884,000	$944,500	$624,400	$320,100	$5,679,100	$2,661,900	1,246,400	$500,000	$443,800	$307,300	$460,500	$59,200	$260,400	$260,400

FFY 2012 UPWP BUDGET BY FUNDING SOURCE

		FEDERAL HIGHWAY ADMINISTRATION (FHWA) FUNDING				FEDERAL TRANSIT ADMINISTRATION (FTA) FUNDING					NON FEDERAL FUNDING			
UPWP Category	UPWP Total	Total FHWA with Match	PL	SPR	MassDOT PL and SPR Match	Total FTA with Match	MPO FFY 2011 §5303	MAPC FFY 2012 §5303 Match	Mass DOT FFY 2011 §5303	Mass DOT FFY 2012 §5303 Match	Total Non-Federal	MBTA	MassDOT	Other
Administration and Resource Management Projects	$832,200	$561,700	438,160	11,200	112,340	$268,300	262,300	0	4,000	2,000	$2,200	2,200		
Certification Requirements	$2,475,000	$1,691,600	1,353,280	0	338,320	$783,400	763,600	19,800			$0			
Planning Studies	$1,225,600	$678,100	490,480	52,000	135,620	$244,500	221,060	23,440			$303,000		243,800	59,200
Technical Support/Operations Analysis Projects	$2,090,800	$854,900	347,120	336,800	170,980	$577,600	255,520	20,780	200,900	100,400	$658,300	458,300	200,000	
MassDOT Match to CTPS FFY 2012 §5303 Funds	$260,400										$260,400		$260,400	
Total	$6,884,000	$3,786,300	$2,629,040	$400,000	$757,260	$1,873,800	$1,502,480	$64,020	$204,900	$102,400	$1,223,900	$460,500	$704,200	

FFY 2012 FTA §5303 FUNDING BY ELEMENT AND TASK

Estimated Budget, FTA §5303 by Agency (in $1,000s)

Projects by Element and Task		FTA §5303 Total	MAPC		CTPS	MassDOT	
			Fed	Local	Fed	Fed	Local
44.21.00	**Program Support and Administration**	**417.800**	**79.200**	**19.800**	**318.800**		
21.01	Unified Planning Work Program	**25.300**	2.400	0.600	22.300		
21.02	3C Planning Process and Public Outreach Activities	**215.800**			215.800		
	MAPC/MPO Liaison Support	**48.000**	38.400	9.600			
	Subregional Activities	**48.000**	38.400	9.600			
21.03	Environmental/Climate Change Support						
	Air Quality Conformity Determinations	**7.300**			7.300		
	Air Quality Support Activities	**11.500**			11.500		
21.04	Support to Targeted Populations						
	Disability Access Support	**27.800**			27.800		
	Transportation Equity/Env. Justice Support	**34.100**			34.100		
44.22.00	**General Development and Comprehensive Planning**	**680.600**	**73.360**	**18.340**	**588.900**		
22.01	Data Resources Management	**135.600**			135.600		
22.02	Alternative-Mode Program Support						
	Alternative-Mode Coordination	**65.800**	52.640	13.160			
	Bicycle Network Evaluation	**19.900**	8.000	2.000	9.900		
	Bicycle Pedestrian Support Activities	**15.900**			15.900		
	Congestion Management Process	**68.600**			68.600		
22.03	Technical Capacity Enhancement						
	Computer Resources Management	**103.700**			103.700		
	Integrating Land Use in Reg.Trans. Models	**25.500**	12.720	3.180	9.600		
	Regional Model Enhancement	**245.600**			245.600		
44.23.00	**Long-Range Transportation Planning**	**207.700**	**85.760**	**21.440**	**100.500**		
23.01	Systems-Level Planning						
	Corridor/Subarea Studies: Land Use Reviews	**39.000**	31.200	7.800			
	Long-Range Transportation Plan	**68.600**			68.600		
	Regional Vision: MetroFuture	**41.000**	32.800	8.200			
23.02	Project-Level Planning						
	Land Use Development Project Reviews	**27.200**	21.760	5.440			
	Regional HOV-Lane System Planning Study	**9.600**			9.600		
	Safety and Operations at Selected Intersections	**22.300**			22.300		
44.24.00	**Short-Range Transportation Planning**	**490.500**	**17.760**	**4.440**	**167.000**	**200.900**	**100.400**
24.01	Special Activities						
	Analysis of JARC and New Freedom Projects	**20.000**			20.000		
	Boston Region MPO Title VI Reporting	**3.200**			3.200		
	Community Transportation Technical Assistance	**27.800**	12.000	3.000	12.800		
	Emer. Evac. & Hazard Mitigation Mapping, Phase II	**4.800**			4.800		
	Impacts of Walk. Radius on Frequency and Reliability	**20.000**			20.000		
	Livable Communities Workshop Program	**26.300**	5.760	1.440	19.100		
	MassDOT Transit Planning Assistance	**301.300**				200.9	100.4
	MBTA Bus Route 1 Transit-Signal Priority Study	**1.000**			1.000		
	MBTA Passenger Survey: Comparison of Results	**30.000**			30.000		
	RTA Service Planning Assistance	**20.000**			20.000		
	Safe Access to Transit for Pedestrians and Bicyclists	**28.200**			28.200		
	TIP Before-After Evaluations				1.500		
	Travel Data Forecasts				3.200		
	Travel Operations Analysis	**3.200**			3.200		
44.25.00	**Transportation Improvement Program**	**48.200**	**0.000**	**0.000**	**48.200**		
25.01	Transportation Improvement Program (TIP)	**48.200**			48.200		
44.27.00	**Other Activities**	**29.000**	**0.000**	**0.000**	**23.000**	**4.000**	**2.000**
27.01	Direct Support	**29.000**			23.000	4.000	2.000
MaaaDOT Local Match to CTPS Projects		**260.400**					**260.400**
	GRAND TOTAL	2134.200	256.080	64.020	1246.400	204.900	362.800

FFY 2012 UNIFIED PLANNING WORK PROGRAM
CTPS SCHEDULE AND STAFF ASSIGNMENTS

The charts below present estimated schedules and staff assignments for the projects in this UPWP. They are subject to revision as the projects move through implementation. All projects are supported by the Administrative Group, the Editing Group, and the Graphics Group and overseen by the CTPS Directors.

Project #	ONGOING PLANNING ACTIVITIES	Analytical Studies	Certification Activities	Information Technology and Services	Transit Service Planning	Traffic Analysis and Design	Travel Model Application	Travel Model Development	FFY 2011 UPWP Status
10112	Air Quality Conformity Determinations		✓				✓	✓	Ongoing
90061	Air Quality Support Activity		✓						Ongoing
11247 & MAPC4	Bicycle Network Evaluation		✓	✓					Ongoing
13209	Bicycle/Pedestrian Support Activities		✓	✓		✓			Ongoing
11355	Boston Region MPO Title VI Reporting		✓						Ongoing
13150 & MAPC9	Community Transportation Technical Assistance Program		✓		✓	✓			Ongoing
60415–60492	Computer Resource Management			✓					Ongoing
11138	Congestion Management Process			✓		✓			Ongoing
60110–60600	Data Resources Management			✓					Ongoing
90000	Direct Support								
90024 & 90028	Disability Access Support		✓						Ongoing
11702 & MAPC10	Integrating Land Use in Regional Transportation Models							✓	Ongoing
13801 & MAPC11	Livable Communities Workshop Program		✓	✓		✓			Ongoing
10101	Long-Range Transportation Plan		✓	✓	✓	✓	✓	✓	Ongoing
11124	MassDOT Statewide Planning & Research Program Support	✓	✓	✓		✓	✓	✓	Ongoing
11380	MassDOT Transit Planning Assistance			✓	✓		✓		Ongoing
22123	Massport Technical Assistance State FY 2011–12			✓			✓		Ongoing
14303	MBTA Rider Oversight Committee Support				✓				Ongoing
11244	Regional Model Enhancement							✓	Ongoing
13246	Safety and Operations Analyses at Selected Intersections			✓		✓			Ongoing
11132	Transportation Equity/Environmental Justice Support		✓	✓				✓	Ongoing
10103	Transportation Improvement Program (CTPS)		✓	✓					Ongoing
90080	Travel Data Forecasts					✓			Ongoing
90040	Travel Operations Analysis				✓				Ongoing
10104	Unified Planning Work Program (CTPS)	✓	✓	✓	✓	✓	✓	✓	Ongoing

FFY 2012 UNIFIED PLANNING WORK PROGRAM
CTPS SCHEDULE AND STAFF ASSIGNMENTS (cont.)

Project #	STUDIES CURRENTLY UNDERWAY TO BE DEVELOPED	Analytical Studies	Certification Activities	Information Technology and Services	Transit Service Planning	Traffic Analysis and Design	Travel Model Application	Travel Model Development	Anticipated Completion Date
23227	2011–12 I-93 North and Southeast Xway HOV Lane Monitoring			✓		✓			Oct. 2012
11141	Emergency Evacuation & Hazard Mapping, Phase II		✓	✓					Jun. 2012
22333	Green Line Extension FEIR						✓		TBD*
11377	Green Line SIP Mitigation Strategies		✓				✓		TBD*
11703	I-495 Land Use Study			✓			✓	✓	TBD*
11374	Impacts of Walking Radius/Transit Frequency & Reliability			✓	✓		✓		Mar. 2012
11375	Intercity Bus Study			✓	✓		✓		Jun. 2012
13151	MassDOT Title VI Program			✓	✓				Mar. 2012
14319	MBTA 2011 National Transit Database: Directly Operated				✓				Nov. 2011
14318	MBTA 2011 National Transit Database: Purchased Bus				✓				Nov. 2011
14326	MBTA 2012 National Transit Database: Directly Operated				✓				Nov. 2012
14325	MBTA 2012 National Transit Database: Purchased Bus				✓				Nov. 2012
TBD	MBTA 2013 National Transit Database: Directly Operated				✓				Nov. 2013
TBD	MBTA 2013 National Transit Database: Purchased Bus				✓				Nov. 2013
23313	MBTA Bus Route 1 Transit Signal-Priority Study					✓			Nov. 2011
11369	MBTA Bus Service Data Collection VII				✓				Mar. 2012
TBD	MBTA Bus Service Data Collection VIII				✓				Mar. 2013
11376	MBTA Operations Support			✓	✓				TBD*
11142	MPO Freight Study, Phase II	✓	✓	✓			✓	✓	TBD*
13250	Regional HOV-Lane System Planning Study					✓	✓		TBD*
13252	Roundabout Installation Screening Tool			✓		✓			Nov. 2011
43212	South Coast Commuter Rail Extension						✓		TBD*
53310	Wellesley Transit Study				✓				Nov. 2011

* To be determined

FFY 2012 UNIFIED PLANNING WORK PROGRAM
CTPS SCHEDULE AND STAFF ASSIGNMENTS (cont.)

Project #	STUDIES WITH WORK SCOPES TO BE DEVELOPED	Analytical Studies	Certification Activities	Information Technology and Services	Transit Service Planning	Traffic Analysis and Design	Travel Model Application	Travel Model Development	Anticipated Completion Date
13152	Analysis of JARC and New Freedom Projects		✓	✓					TBD*
11143	Freight Survey	✓	✓	✓			✓	✓	TBD*
11379	MBTA Systemwide Passenger Survey: Comparison of Results			✓	✓				TBD*
13254	Pavement Management System Development		✓	✓		✓			TBD*
12201	Priority Corridors for LRTP Needs Assessment		✓	✓		✓			TBD*
14327	Regional Transit Service Planning Technical Support				✓				TBD*
13153	Safe Access to Transit for Pedestrians and Bicyclists		✓	✓	✓	✓			TBD*
12202	TIP Project Impacts Before-After Evaluation		✓			✓			TBD
14328	MBTA Neighborhood Maps				✓				TBD*
11376	MBTA Operations Support				✓				TBD*
TBD	MBTA Title VI Program Monitoring		✓		✓				TBD*
12311	South Station Expansion: Support				✓		✓		TBD*

* To be determined

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
5/31/11	Town of Bedford	Walter J. St. Onge III, Chair Selectmen of Bedford	Selectmen of the Town of Bedford recommend that the MPO include a study of the Route 4/225 Corridor in Lexington and Bedford as part of the FFY 2012 UPWP. The corridor meets the criteria used by the LRTP Needs Assessment process in identifying bottleneck locations. The Town of Lexington has approved an area-wide transportation plan which calls for a number of traffic modernization improvements to occur on the Route 4/225 corridor. Two particular improvements called out are for two-lane roundabouts on Routes 4/225 intersections at Hartwell Avenue and also at the northern interchange with Route 195/128. Lexington officials expect to begin a 25% design effort in the near future. The Town of Bedford has specific concerns on how installation of the two-lane roundabouts in Lexington will affect traffic for those leaving Bedford during the AM peak travel periods and for those returning to Bedford in the PM peak travel periods.	The proposed Priority Corridors for Long Range Transportation Plan Needs Assessment project has advanced as a new project in the FFY 2012 UPWP. The Route 4/225 study area will be considered as a possible candidate for one of the locations to be studied. So noted.
6/9/11	Town of Lexington	Hank Manz, Chairman Selectmen of Lexington	Selectmen of the Town of Lexington recommend that the MPO include a study of the Route 4/225 Corridor in Lexington and Bedford as part of the FFY 2012 UPWP. The corridor meets the criteria used by the LRTP Needs Assessment process in identifying bottleneck locations. The Town of Lexington has approved an area-wide transportation plan which calls for a number of traffic modernization improvements to occur on the Route 4/225 corridor. Two particular improvements called out are for two-lane roundabouts on Routes 4/225 intersections at Hartwell Avenue and also at the northern interchange with Route 195/128. The town expects to begin a 25% design effort in the near future. The Town of Bedford has made some infrastructure improvement to the Routes 4/225 corridor, but a potential system corridor plan would help identify additional modernizations that would alleviate congestion all along Routes 4/225 to the point at which the two routes split past Bedford center. Lexington officials understand that Bedford also has specific concerns on how installation of the two-lane roundabouts in Lexington will affect traffic for those entering and leaving Bedford during peak travel periods.	The proposed “Priority Corridors for Long Range Transportation Plan Needs Assessment” project has advanced as a new project in the FFY 2012 UPWP. The Route 4/225 study area will be considered as a possible candidate for one of the locations to be studied. So noted.

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
6/14/11	Minuteman Advisory Group on Interlocal Coordination (MAGIC)	Michelle Ciccolo, Chair	The letter provides background on the organization and the transportation challenges it faces. MAGIC recognizes the severe fiscal constraints currently facing the commonwealth and the need to prioritize scarce resources. The MAGIC towns have invested significant financial resources and decades to design to projects listed in the letter. Strongly urge the MPO to give priority to MAGIC projects already in the pipeline. In addition to comments on the LRTP and TIP projects documented elsewhere, MAGIC supports the following UPWP-related projects : • Route 4/225 in UPWP: MAGIC supports a corridor planning study for this route in Bedford and Lexington, which provides direct highway access to Route 128 and is one of the most congested in the region. Lexington recently rezoned this area, and the job creation and economic growth that could result should factor into this corridor study. • Coordinated public transportation studies in UPWP: MAGIC supports studies 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.	The MPO recognizes that community support is essential to the success of any study, and staff for the study will continue to work closely with municipalities in the development of its plans and programs. The MPO notes the support for this project. The project will considered as a possible be a candidate for one of the locations to be studied under the “Priority Corridors for Long Range Transportation Plan Needs Assessment Study, which is included in the FFY 2012 UPWP. The MPO has conducted several Suburban Transit Opportunities Studies and has funded programs to promote services and programs such as described in your comment. The MPO will continue to explore ways to promote the suburban transit opportunities and to maximize efficiencies in this area wherever feasible.
7/13/11	Bike-to-the-Sea	Stephen Winslow	Supports the bicycle and pedestrian components of the "Wellington Circle Improvements: Medford" proposed project from the FFY 2012 UPWP Universe of Proposed New Projects and asks that the study of the Route 16/Wellington Corridor by the Department of Conservation and Recreation and the Mystic Valley Development Commission be reviewed and that bicycle accommodations be more fully addressed.	While the Wellington Circle Improvements: Medford Study was evaluated for inclusion in the FFY 2012 UPWP’s it was not included for funding this year, However, the Safe Access to Transit for Pedestrians and Bicyclists Study will explore pedestrian and bicycle access at 6 to 8 stations in the MBTA system. Wellington Circle will be considered as a possible candidate for one of the locations to be studied. If selected, the recommendations of the previous study by DCR will be considered by MPO staff.
8/2/11	495/MetroWest Partnership	Paul F. Matthews, Executive Director; Jessica Strunkin, Deputy Director of Public Policy and Public Affairs	The letter provides background on the organization and the transportation challenges it faces. The MetroWest region has experienced significant growth recently, causing transportation challenges that include increasing traffic congestion, an increase in vehicle miles traveled, highway capacity issues, gaps in public transit, and aging transportation infrastructure. The Partnership is eager to participate in the studies and any projects in the 495 MetroWest region where their assistance would be helpful.	

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
			Urges the MPO to include communities in the Partnership as candidate locations for the Priority Corridors for LRTP Needs Assessment study.	Corridors of with mobility problems identified in the CMP and the LRTP as part of the needs assessment process will be considered as a possible candidates for inclusion in this study. All the corridors in the MPO region, including the 495 MetroWest region will be included during the selection process.
			<u>Supports the following:</u> • Regional Model Enhancement: Has long advocated for mechanisms for coordination of land use and transportation planning which has led to the ongoing "495/MetroWest Development Compact" Considers the state-of-the-practice regional travel-demand model set and the Statewide Household Travel Survey important to transportation planning and investment.	The FFY 2012 UPWP includes funding for the Massachusetts Statewide Household Travel Survey, which will be used to update the data used to represent the MetroWest area in the MPO's regional model.
			• Congestion Management Process: Eager to see the outcome and potential benefits to refocusing the Congestion Management Process. Urge the inclusion of some Partnership congestion problems in the monitoring, needs assessment and strategy recommendations of the project.	So noted.
			• Corridors/Subarea Planning Studies–Land Use Reviews: Pleased that the Route 9 Phase II Study Implementation is included as a task. Supports the Framingham Technology Park Sustainable Transportation Plan as it relates to transportation demand management solutions; internal roadway, bicycle, and pedestrian improvements; and other ideas for improving economic growth and mobility in this area.	So noted.
			• Safety and Operations Analyses at Selected Intersections: Many intersections in the area with congestion and safety problems fail to proceed due to lack of design funding.	The MPO appreciates your support and notes that the "Safety and Analysis at Selected Intersections" study will identify a list of problem locations in the region. MPO staff will then seek municipal cooperation and commitment to further study three selected locations; and perform data collection, analysis and documentation only at locations that have commitment from the municipality to implement study recommendations..
			• MAPC Alternative-Mode Planning and Coordination: Pleased that transportation demand management activities will receive additional emphasis in FFY 2012. Supports work on pedestrian and bike planning. Urges MPO to consider gaps in transit to this area. Continue to offer insight into transit service gaps in Littleton and Boxborough.	So noted.

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
			• Community Transportation Technical Assistance Program: Suggests that the success of the program depends on how well and to whom it is publicized. Asks the MPO to consider utilizing the Partnership to publicize the program.	The MPO notes your support for this project. The program is publicized through MPO's extensive outreach process, which includes press releases, promotion through the MPO's listserve and newsletter, as well as letters to the chief elected officials of the MPO's 101 municipalities.
			<u>Additional Projects and Comments</u> • MBTA Systemwide Passenger Survey–Comparison of Results: Recent trends in fuel prices, the economy, and the business environment have contributed to increase demands on the MBTA including increasing reverse commute patterns. Urges more frequent data collection for this purpose.	So noted.
			• Pavement Management System Development: Strongly supports the need to identify the cost of maintaining our existing infrastructure to highlight the need for more transportation revenue in the Commonwealth.	So noted.
			• RTA Service Planning Technical Support: The work is essential for providing transit options to MetroWest residents and workers.	So noted.
			• Safety and Operations Analyses at Selected Intersections: Many intersections in the area with congestion and safety problems fail to proceed due to lack of design funding.	So noted.
			<u>Appendix A – Other Regional Transportation Projects</u> • Downtown Framingham Traffic Impact Analysis: Solutions to the grade-crossing problem would support MassDOT's new GreenDOT initiative by mitigating air quality impacts. • Fitchburg Small Starts Planning/Design/Engineering: Extremely supportive of improving the Fitchburg Line Improvement Project and the ARRA double-tracking and station improvements will lead to increase in ridership to the area, including reveres-commuters. • I-495/Route 9 Interchange Study: Pleased that the study includes the I-495/I-90 interchange. Emphasize the relationship between the study intersection and the I-495/Route 9 interchange. • Massachusetts Turnpike Corridor Plan (Boston Extension): Supports the state of good repair and approves the MassDOT corridor review with an emphasis on bottleneck alleviation, improved tolling technologies and improving air quality. • Massachusetts Turnpike - Boston Ramps Study: Supports the study as it would improve commuting for many Partnership	The MPO notes the Partnership's comments on projects included in Appendix A and will coordinate with the appropriate entity conducting each project where feasible.

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
			residents and workers. New connections on the Turnpike would help address the traffic congestion caused by the economic growth in the Back Bay, Longwood Medical Area (LMA), Fenway, and Seaport District neighborhoods in the city of Boston.	
8/9/11	City of Waltham	Honorable Jeannette A. McCarthy, Mayor	Supports the Corridors/Subarea Planning Studies: Land Use Reviews study. Recommends that the outlined planning task Route 128 Corridor Plan include a preliminary evaluation of interchange alternatives between Routes 20, 117, and 128 that they may be used to improve congestion, air quality, and circulation for existing traffic, accommodate multi-modal users seeking to access a potential transit station, and encourage economic development in the area. <u>Corridor Studies</u> Main St. (Route 117) between the Weston town line and Bank Square (Route 20) should be one of the priority corridors under CTPS "Priority Corridors for LRTP Needs Assessment" study. Route 128 Corridor Plan: Route 117 bridge widening over Route 128; potential roadway connection between Route 117 and Route 20 and along Green Street; and other critical intersection improvements. Asks that the MPO staff review traffic data and analysis available from other recent economic developments projects.	The MPO appreciates the support from the City of Waltham for the projects as noted in the FFY 2012 UPWP, including the MAPC's Route 128 Corridor Plan. The proposed "Priority Corridors for Long Range Transportation Plan Needs Assessment" project has advanced as a new project in the FFY 2012 UPWP. These corridors will be considered as a possible candidates for one of the locations to be studied. Previous studies, where applicable, are considered by MPO staff as part of the project analysis and study process.

Summary of Written Comments on the Draft FFY 2012 Unified Planning Work Program, with MPO Responses

8/11/11	Regional Transportation Advisory Council	Laura Wiener, Chair	Supports the draft FFY 2012 Unified Planning Work Scope. Appreciates that the draft FFY 2012 UPWP addresses many of the greatest concerns of the Council. In particular, the Council supports:	The MPO appreciates the Council's support for the FFY 2012 UPWP and values its participation as a member of the MPO's UPWP Subcommittee.
			• Freight Survey project	The MPO notes your support for freight planning in the region. The freight survey will expand knowledge about freight movement in the region.
			• Safe Access to Transit for Pedestrians and Bicyclists	The MPO continues to engage in planning projects that promote bicycle and pedestrian access and safety
			• Regional HOV-Lane System Planning Study	The MPO appreciates the Council's support of this project.
			Asks that the MPO prioritize its freight, HOV and bicycle planning work since it is very important to the region's future. Expressed interest in seeing the completion of the several studies in the FFY 2011 UPWP that cover these areas. Appreciates the importance of the public outreach process conducted by the MPO Staff. Suggests that public outreach is one of the critical MPO functions funded through the UPWP.	The MPO recognizes that community support is essential to the success of any project, and staff for the studies funded through the UPWP will work closely with municipalities throughout the course of the study.

SOUTH STATION EXPANSION: SUPPORT

STAFF: Central Transportation Planning Staff

CLIENT: MassDOT Office of Transportation Planning **ID #:** 12311

BUDGET: $325,000 **STATUS:** 0%

Boston's South Station is the premier passenger hub in New England, serving rail passengers from the Northeast Corridor and beyond, connecting them to local and intercity destinations. South Station offers commuters and travelers not only Amtrak and MBTA commuter rail service, but also intercity bus, MBTA rapid transit, and MBTA bus rapid transit services. At present, however, South Station operates above its design capacity for efficient train operations and convenient passenger queuing. In addition, South Station lacks sufficient ancillary vehicle storage capacity , constraining operations today and limiting future growth. Several recent transportation studies have highlighted the existing limitations at South Station and how they limit the expansion of local, regional, and Northeast Corridor–wide rail service. In order to realize the cumulative 50 percent increase in Amtrak high-speed and intercity passenger service outlined in the Northeast Corridor Plan, South Station and its support facilities need to be expanded and improved. In addition, the Commonwealth of Massachusetts is planning a number of major commuter rail expansion projects, and greater capacity at South Station is a prerequisite for the full realization of these plans. MassDOT's South Station Expansion project will make possible all of these rail improvements for the benefit of not only Boston and New England but also the entire Northeast Corridor. MassDOT was awarded $32.5 million in High Speed Rail from the Federal Railroad Administration (FRA) to study the expansion of South Station. This funding will be matched by $10.5 million dollars in state funds and will support MassDOT's work once funding is received from the FRA.

FFY 2012 Activities and Expected Work Products: CTPS will support MassDOT and its project team in the analysis work of this project. The work could include data collection, service plan development, modeling work, and coordination with stakeholders.

FHWA/FTA Grant Application Task and Element: 41.23.01

FFY 2012 Budget

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY12 Total Budget	PL	MPO §5303	SPR	MassDOT	MassDOT §5303	MBTA	Other
113,800			$113,800				113,800			

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Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Karl H. Quackenbush
Acting Director, MPO Staff

MEMORANDUM

DATE **August 18, 2011**

TO **Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization**

FROM **Karl H. Quackenbush, CTPS Acting Director**

RE **Work Program for: Regional HOV Lane System Planning Study**

ACTION REQUIRED

Review and approval

PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization vote to approve the work program for Regional HOV Lane System Planning Study in the form of the draft dated August 18, 2011.

PROJECT IDENTIFICATION

Unified Planning Work Program Classification
Planning Studies

CTPS Project Number
13250

Client
Boston Metropolitan Planning Organization

CTPS Project Supervisors
Principal: Karl H. Quackenbush
Manager: William S. Kuttner

Funding
MPO §5303 Contract #67436;
MPO 3C PL Contract #66104

IMPACT ON MPO WORK

This is MPO work and will be carried out in conformance with the priorities established by the MPO.

BACKGROUND

Traffic on the regional express highway system increased rapidly during the 1970s and 1980s as growth in population, jobs, and auto ownership filled the then recently completed express highway system. Traffic has continued to grow in recent years in response to these trends, but at a slower rate. The recent economic slowdown has resulted in a general leveling of traffic, with increases in some areas and decreases in others. This leveling is assumed to be temporary, and a trend of gradually increasing traffic is projected into the foreseeable future.

Congestion and delay are today commonplace throughout much of the regional express highway system. Congestion does not occur uniformly across the highway system, and the sections with the worst congestion understandably call for the earliest remedies. The completion of the Central Artery project relieved congestion in the core of the region, but substantial congestion remains, and a gradual increase in traffic should be anticipated.

Accommodating traffic growth without serious increases in congestion will require adding capacity in some manner. Widening of U.S. 3 to New Hampshire and the Central Artery Project are complete. Widening of the Route 128 beltway corridor between Routes 9 and 24 is underway, and the possible widening of I-93 to New Hampshire is under investigation. Increasing capacity without widening can in certain instances be achieved using management and operations strategies, such as ramp metering and real-time message boards.

Another approach to adding capacity without adding general-purpose lanes to an existing highway is to set up a special lane dedicated to high-occupancy vehicles, or HOVs. By offering a congestion-free lane for buses and autos with multiple occupants, the number of persons passing through a congested corridor can be significantly increased. Other potential benefits include reduced delay in general-purpose lanes, reduced congestion on surface roadways, and efficient additional capacity to accommodate future travel growth.

There are a number of variants to the design, implementation, and operation of these preferential lane facilities. Some jurisdictions have expanded eligibility criteria to include very low emissions or a willingness to pay, utilizing new open-road tolling technology. Also, pavement and right-of-way requirements can vary depending upon traffic and physical circumstances.

Some HOV facilities have already been implemented in the Boston region, mostly on I-93 within or near Boston. These facilities have increased roadway capacity and reduced travel times for buses and other HOVs. A detailed MPO study of extending and improving the preferential lane facilities in Dorchester is now underway.

The corridors that are analyzed will be organized generally by stretches between interchanges where major expressways, both radial and circumferential, cross one another. Promising sections for HOV implementation may be identified along a portion of one of these longer expressway system components. Where studies of HOV and related options have been undertaken or are currently in process, these past and current efforts will be utilized in this study.

OBJECTIVES

The principal objectives of this work program are:

1. To gather regional vehicle-type and occupancy data to support evaluation of potential HOV lanes, as well as to support development and calibration of the regional travel-demand model set as related to HOV considerations.

2. To evaluate components of the regional expressway system between key interchanges by direction for appropriateness and potential benefit of HOV lane implementation.

3. To describe on a conceptual basis HOV treatments for expressway system components where significant potential benefits are identified.

WORK DESCRIPTION

The work required to accomplish the study objectives has been grouped in four tasks:

Task 1 Develop Evaluation Criteria and Data-Gathering Needs

Currently available traffic, travel time, and other data will be studied and organized. A first-pass evaluation of selected expressway system components based upon available data will be developed. This step will suggest the evaluation criteria and identify specific data-gathering needs.

Products of Task 1

Compilation of currently available data. One or more preliminary evaluations of selected expressway system components for appropriateness of HOV treatments based on available data. Field data-gathering plan.

Task 2 Gather Vehicle-Type and Vehicle-Occupancy Data

CTPS personnel will count, classify, and characterize traffic flows at key locations to obtain data identified in Task 1 as necessary to the evaluation process. These data will be obtained in conformity with the specific vehicle classes used in the various trip tables assigned as part of the regional travel-demand model set.

In addition to collecting vehicle-type and occupancy data to specifically characterize expressway system components, it is also anticipated that a broader sample of count information will be obtained in order to support model development and calibration more fully. This count information could include off-peak directions and periods, as well as non-expressway traffic flows. The count information will be compared with current model assignments in anticipation of possible model calibration efforts that could be undertaken as a separate CTPS activity.

CTPS has undertaken peak-period occupancy counts in support of required HOV facility monitoring as well as some initial occupancy counts on selected regional expressways in anticipation of a broader set of ongoing occupancy and classification efforts. The data from these efforts have been reviewed and will inform further fieldwork in support both of analyzing specific expressway components and of serving broader needs of model development.

Travel times are measured by CTPS as part of the Congestion Management Process (CMP). The ongoing CMP efforts might be augmented in collaboration with this study—for example, by measuring travel times over longer travel distances.

Product of Task 2

Tabular information describing the vehicle-type and occupancy findings

Task 3 Evaluate Expressway System Components

As field data are obtained, it will be possible to perform a more complete evaluation and comparison of the regional expressway system components.

Product of Task 3

Technical memorandum presenting the evaluation of expressway system components for appropriateness of HOV treatments

Task 4 Describe Potential HOV Implementation

Potential HOV implementation will be described for one or more of the regional expressway system components found to be appropriate for an HOV treatment. Conceptual analysis of projected use, entry/exit sections, weaves and merges, right-of-way availability, and other sketch-planning considerations will be described and discussed.

Products of Task 4

Technical memorandum describing potential HOV or similar preferential lane treatments for a set of regional expressway components.

ESTIMATED SCHEDULE

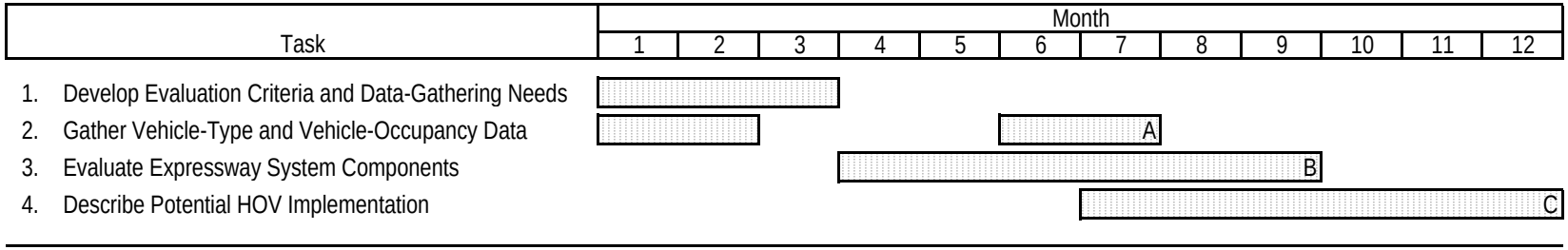
It is estimated that this project will be completed 12 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

ESTIMATED COST

The total cost of this project is estimated to be $59,929. This includes the cost of 30.5 person-weeks of staff time, overhead at the rate of 94.57 percent, and travel. A detailed breakdown of estimated costs is presented in Exhibit 2. About one-eighth of this work will take place in federal fiscal year 2011, with completion in FFY 2012.

KQ/WSK/wsk

Exhibit 1
ESTIMATED SCHEDULE
Regional HOV Lane System Planning Study



Products/Milestones

A: Vehicle-type and vehicle-occupancy data set
B: Memorandum applying evaluation criteria
C: Memorandum describing potential implementation

Task 2 occupancy data will be gathered over a two-month period in the fall of 2011 and a two-month period in the spring of 2012.

Exhibit 2
ESTIMATED COST
Regional HOV Lane System Planning Study

Direct Salary and Overhead	$59,529

Task	M-1	P-5	P-4	P-2	P-1	Temp	Total	Direct Salary	Overhead (@ 94.57%)	Total Cost
1. Develop Evaluation Criteria and Data-Gathering Needs	0.1	2.0	0.0	0.2	0.0	0.0	2.3	$3,614	$3,418	$7,033
2. Gather Vehicle-Type and Vehicle-Occupancy Data	0.0	4.2	0.0	0.0	0.0	15.0	19.2	$14,106	$13,340	$27,445
3. Evaluate Expressway System Components	0.2	2.0	0.0	0.2	0.0	0.0	2.4	$3,779	$3,574	$7,354
4. Describe Potential HOV Implementation	0.1	4.0	1.0	0.2	1.3	0.0	6.6	$9,096	$8,602	$17,697
Total	0.4	12.2	1.0	0.6	1.3	15.0	30.5	$30,595	$28,934	$59,529

Other Direct Costs	$400
Travel	$400

TOTAL COST	$59,929

Funding
MPO §5303 Contract #67436; MPO 3C Planning Contract #66104

BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Karl H. Quackenbush
Acting Director, MPO Staff

MEMORANDUM

DATE **August 18, 2011**

TO **Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization**

FROM **Karl H. Quackenbush, CTPS Acting Director**

RE **Work Program for: Boston Ramp Study**

ACTION REQUIRED

Review and approval

PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of MassDOT, vote to approve the work program for Boston Ramp Study in the form of the draft dated August 18, 2011.

PROJECT IDENTIFICATION

Unified Planning Work Program Classification
Planning Studies

CTPS Project Number
95047

Client
Massachusetts Department of Transportation
Project Supervisor(s): Mark Berger

CTPS Project Supervisors
Principal: Karl Quackenbush
Manager: Scott Peterson

Funding
MassDOT SPR Contract #68456

IMPACT ON MPO WORK

The MPO staff has sufficient resources to complete this work in a capable and timely manner. By undertaking this work, the MPO staff will neither delay the completion of nor reduce the quality of other work in the UPWP.

BACKGROUND

The purpose of this project is to support a study that MassDOT is conducting that will develop and evaluate alternatives for new ramps along the Massachusetts Turnpike between Brookline Avenue and Berkeley Street in the city of Boston. The Back Bay, Longwood Medical Area, Fenway, and Seaport District neighborhoods are important economic engines within the city of Boston. The Massachusetts Turnpike travels through or very near these neighborhoods, but only provides limited-access ramps in the Back Bay (eastbound-off and westbound-on) and full-access ramps in the Seaport District (all directions). New connections to the Massachusetts Turnpike would also allow for potential new transit bus routes between these neighborhoods.

In 1997, the Massachusetts Turnpike Authority, in conjunction with the Boston Transportation Department and the Boston Redevelopment Authority, conducted the "Boston Extension Ramps Feasibility Study." This previous study developed and analyzed eight new ramp alternatives along I-90 to provide improved access between Back Bay and Logan Airport and the South Boston Waterfront. The new study will provide input into a detailed level-of-service and safety analysis of each alternative's impact on the operations of the Massachusetts Turnpike and surrounding roadways. The study will also analyze the changes in travel patterns caused by each alternative, including detailed level-of-service analysis for key intersections directly affected by changes in Turnpike access. Other than the key intersections, the study will not provide a detailed level-of-service analysis of other roadways and intersections in the study area. A recommended plan of future transportation improvements (short-term and long-term) will be the end product of this project.

OBJECTIVE(S)

The objective of this work is to conduct six model runs: a 2009 base year, a 2035 no-build forecast year, and four build alternatives for 2035. The four build alternatives are:

1. Construct new off-ramp from I-90 WB to Berkeley Street. Close Cortez Street connection to Berkeley Street (if in model). Close Arlington Street I-90 WB on-ramp. New ramp must be tolled using all electronic tolling.

2. Construct new off- ramp from I-90 WB to Trinity Place following the Clarendon Street on-ramp right-of-way. Close Clarendon Street and Arlington Street I-90 WB on-ramps. New ramp must be tolled using all electronic tolling.

3. Construct new off-ramp from I-90 WB to Brookline Avenue. Close Newbury Street between Kenmore Street and Brookline Avenue to make room for the new ramp. Close Massachusetts Avenue I-90 WB on-ramp. New ramp must be tolled using all electronic tolling.

4. As this project progresses, CTPS will work with the project team to test a fourth alternative, based on feedback from the client and stakeholders. This alternative will be developed in more detail in the conceptual design task.

The end product would be a comparison of traffic volumes and other key transportation metrics by peak period between the no-build and build scenarios for multiple locations in the study area.

WORK DESCRIPTION

Work on this project will include six tasks. These tasks will consist of the following:

1. The model set will be calibrated to a base year (2009) using traffic counts, transit information, congested speeds, and toll revenue. CTPS will utilize electronic toll collection data to help calibrate the model.

2. CTPS will develop a no-build scenario for the 2035 forecast year, and apply and analyze the model results.

3. CTPS will work with MassDOT to convert the conceptual designs for the four alternatives into inputs that can be modeled.

4. Using the model set for 2035, CTPS will test up to a maximum of four alternatives and examine the results for multiple roadway locations, based on input from MassDOT.

5. The methodology and results of the analysis will be documented in a technical memorandum.

6. CTPS will provide support to MassDOT and its stakeholders for up to one year from the start of this project.

Each of these tasks is described below.

Task 1 Develop and Calibrate Base-Year (2009) Model

CTPS will develop a 2009 base-year model and calibrate it to highway and transit use in the study area. The study will focus on 23 intersections and 20 roadway locations. This

base-year model will be used to develop forecast years in the Boston Ramp Study and the Toll Equity Study.

Products of Task 1

- A calibrated and validated base-year model set by time period and daily
- Tabular and graphical summaries of highway assignment results for the study area
- Tabular and graphical summaries of turning movements for selected intersections
- Tabular summaries of transit ridership and boardings for selected transit lines and stations

Task 2 Model Future-Year No-Build Scenario for 2035

In this task, the 2035 no-build roadway network in the study area will be created, based on the Boston Region MPO's Long-Range Transportation Plan (LRTP) currently under development. The 2035 no-build scenario will use the most recent land use assumptions approved by the MPO for this LRTP. The outputs of the no-build model run will be used as the basis for analyzing the impacts of the build scenarios described in Task 4.

Products of Task 2

- A 2035 no-build model set using the MPO-approved land use
- Highway and transit trip tables to use as inputs to the build scenarios
- Tabular and graphic summaries corresponding to those produced in Task 1 for the base year

Task 3 Convert Conceptual Designs into Inputs to Use in the Travel Model

CTPS will work with MassDOT to define and clarify the operations for the proposed alternatives in order to incorporate the design characteristics into the travel modeling process.

Products of Task 3

Tabular and graphical design concepts and operational characteristics that can be used as input into the modeling process

Task 4 Develop and Model Multiple Build Alternatives and Analyze Results

CTPS will modify the no-build model roadway network to reflect up to a maximum of four build scenarios. The build scenarios will utilize the same land use assumptions as the no-build scenario. The results of this modeling will be analyzed, comparing traffic conditions under the no-build scenario to conditions with various configurations of the proposed Boston Ramp alternatives. The build alternatives' traffic operations at 23 intersections will be examined qualitatively to determine their likely impact due to the changes to the roadway network.

Products of Task 4

- Tabular summaries of the travel model results by Boston neighborhood, which includes Chinatown, Longwood, and the Back Bay.
- Tabular and graphic summaries corresponding to those produced in Task 1 for the base year.

Task 5 Coordinate with Project Team and Provide Ongoing Technical Assistance

CTPS will work with the Boston Ramp project team for up to one year from the start date of this project. The work will consist of attending up to a maximum of five internal meetings and three meetings with stakeholders. CTPS will fulfill any data requests from the project team, when data is readily available, and educate the stakeholders about any past or proposed work discussed in this scope.

Products of Task 5

Coordinate with the project team, attend meetings, provide data to the project team, and prepare memos and presentations as needed

Task 6 Produce Technical Memorandum

Prepare technical memorandum documenting the work done on this task and comparing the model results (changes in peak-hour vehicle volumes and speeds at the selected roadway locations) for the four scenarios with the no-build scenario results.

Product of Task 6

A technical memorandum with tabular and graphical summaries of results and documentation of the methodology used in the analysis.

ESTIMATED SCHEDULE

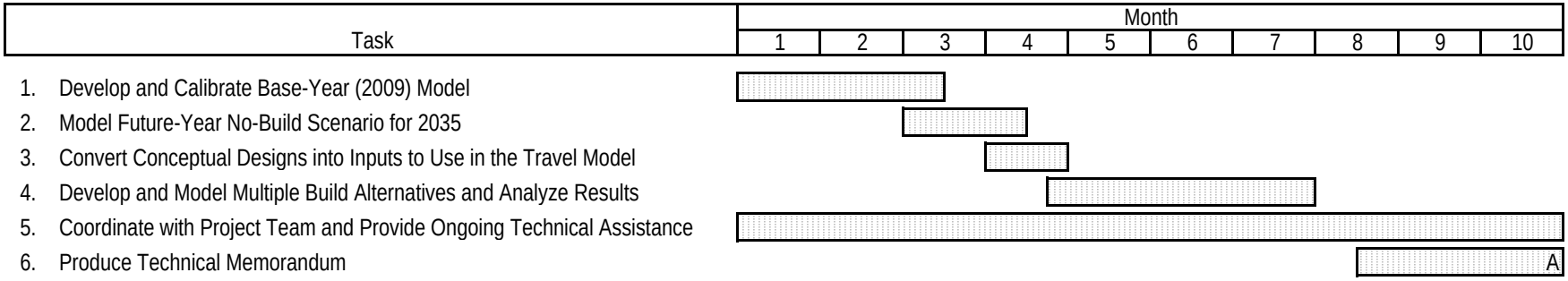
It is estimated that this project will be completed 10 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

ESTIMATED COST

The total cost of this project is estimated to be $63,000. This includes the cost of 24.5 person-weeks of staff time, overhead at the rate of 94.57 percent, and travel. A detailed breakdown of estimated costs is presented in Exhibit 2.

KQ/SAP/sap

Exhibit 1
ESTIMATED SCHEDULE
Boston Ramp Study



Products/Milestones

A: Technical memorandumm with tabular and graphical summaries of results and documentation of the methodology used in the analysis.

Exhibit 2
ESTIMATED COST
Boston Ramp Study

Direct Salary and Overhead	$62,960

Task	Person-Weeks						Direct Salary	Overhead (@ 94.57%)	Total Cost
	M-1	P-5	P-4	P-3	SP-3	Total			
1. Develop and Calibrate Base-Year (2009) Model	0.6	1.5	3.6	1.0	0.0	6.7	$8,901	$8,417	$17,318
2. Model Future-Year No-Build Scenario for 2035	0.6	0.8	1.6	0.0	0.0	3.0	$4,259	$4,027	$8,286
3. Convert Conceptual Designs into Inputs to Use in the Travel Model	0.2	0.7	0.0	0.0	0.0	0.9	$1,474	$1,394	$2,868
4. Develop and Model Multiple Build Alternatives and Analyze Results	1.0	1.5	3.9	0.0	0.0	6.4	$8,881	$8,399	$17,281
5. Coordinate with Project Team and Provide Ongoing Technical Assistance	0.8	0.5	0.0	1.2	0.0	2.5	$3,356	$3,174	$6,530
6. Produce Technical Memorandum	0.8	0.0	1.1	1.6	1.5	5.0	$5,487	$5,189	$10,677
Total	4.0	5.0	10.2	3.8	1.5	24.5	$32,358	$30,601	$62,960

Other Direct Costs	$40
Travel	$40

TOTAL COST	$63,000

Funding
MassDOT SPR Contract #68456