

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

**May 15, 2008 Meeting**

10:00 AM –12:45 PM, State Transportation Building, Conference Room 4, 10 Park Plaza, Boston

David Mohler, Chair, representing Bernard Cohen, Executive Office of Transportation & Public Works (EOTPW)

**Decisions**

The Transportation Planning and Programming Committee voted to take the following actions:

- Approve the work program for the I-495 Study – I-90 to I-290
- Approve the minutes of the April 3<sup>rd</sup> meeting with recommended changes
- Approve the minutes of the April 17<sup>th</sup> and May 1<sup>st</sup> Municipal Transportation Improvement Program (TIP) Input Days with recommended changes and corrections to the attendance list

**Meeting Agenda**

**1. Public Comments**

There were none.

**2. Chair's Report** – *David Mohler, EOTPW*

There was none.

**3. Subcommittee Chairs' Reports** – *Barbara Lucas, MAPC, Steve Woelfel, MassHighway, and Paul Regan, MBTA Advisory Board*

B. Lucas reported that the Suburban Mobility and Transportation Demand Management (TDM) Subcommittee met on May 8<sup>th</sup> and discussed three proposals for Suburban Mobility funding and three for TDM funding. Letters will be sent to the proposers this week with follow-up questions. The Subcommittee will meet next in June.

S. Woelfel reported that the Unified Planning Work Program (UPWP) Subcommittee will meet on May 29<sup>th</sup> at 1:30 PM to discuss project selection for FFY 2009.

P. Regan reported that the Administration and Finance Subcommittee will meet on May 22<sup>nd</sup> at 9:30 AM to discuss approval of a new hire at the Central Transportation Planning Staff (CTPS) and the CTPS budget.

**4. Regional Transportation Advisory Council** – *Kristina Johnson, Regional Transportation Advisory Council*

The Advisory Council met on May 14<sup>th</sup> and heard presentations on the TIP amendment, the MPO's Walkable Communities Program, and the RPA Hybrid land use scenario.

## 5. Action Items

### **Work Program for I-495 Study – I-90 to I-290 – Barbara Lucas, MAPC**

The work program for the I-495 Study – I-90 to I-290 was presented to members at the May 8<sup>th</sup> meeting. The work program is a joint project of MAPC and the Central Massachusetts Regional Planning Commission (CMRPC). It will involve a study of the interchanges of I-495 at I-290, Route 9, and I-90, and intersections in proximity to the I-495 corridor. The two MPOs will consider future highway demand and identify potential solutions to reduce traffic congestion. Mary Ellen Blunt, CMRPC, is the project manager for CMRPC.

During a discussion of the work program, Mary Pratt, Town of Hopkinton, made note of a location on the Massachusetts Turnpike where there is a high incidence of truck accidents. She also noted that there are constraints to widening the roadway at this location as the roadway is surrounded by wetlands. B. Lucas stated that there could possibly be intelligent transportation system (ITS) solutions to improve traffic flow in that area.

David Koses, City of Newton, asked for details about the work program's deliverables, specifically concerning the community survey. B. Lucas responded that a memorandum would be produced. Conversations would be held with communities about ITS and future land use. The survey would be designed to get a feel for what communities are willing to take on. The study will look at future demand and what can be done to address it, including ITS, future land use actions, and possibly adding capacity.

In response to a question, B. Lucas stated that in conducting the work program, the MPO's recent study, the I-495 Transit Feasibility Study, will be referenced.

A motion to approve the work program for the I-495 Study – I-90 to I-290 was made by P. Regan, and seconded by Thomas Bent, City of Somerville. The motion passed unanimously.

### **Meeting Minutes – Pam Wolfe, MPO Staff**

A motion to approve the minutes of the April 3<sup>rd</sup> meeting – with changes recommended to page 10 by B. Lucas and to page 8 by K. Johnson – was made by S. Woelfel, and seconded by Thomas Kadzis, City of Boston. The motion passed unanimously.

A motion to approve the minutes of the April 17<sup>th</sup> and May 1<sup>st</sup> Municipal TIP Input Days meetings – with corrections made to the attendance list and the addition of text noting the Committee's decision to hold an Agency TIP Day and to have provided to them a list of bridges presented at the Municipal TIP Input Days – was made by S. Woelfel, and seconded by T. Bent. The motion passed unanimously.

B. Lucas inquired about staff's plan for updating the TIP project information forms. P. Wolfe stated that members will receive updated MPO Project Information Forms (PIFs) next week. Hayes Morrison, MPO staff, added that staff intends to update all project

forms but is focusing first on those projects that will be addressed in the FFY 2008 TIP amendment. B. Lucas stated that MAPC will update the land use information for the PIFs of those projects, based on updated Commonwealth Capital information MAPC received this week, and that this information would be delivered to staff by May 16<sup>th</sup>.

## **6. Mobility Management System Update**

Please see attached PowerPoint presentation slides for details.

### **Program Overview – Efi Pagitsas, MPO Staff**

E. Pagitsas provided an overview of the MPO's Mobility Management System (MMS) program. Under SAFETEA-LU, transportation management areas with populations greater than 200,000 are required to have a Congestion Management Process (CMP). The MPO's CMP, the MMS program, began in October 2005 and extends through 2008. Staff provides periodic updates to the Committee on the status of this program. The previous updates were in November 2006 and December 2007.

The goal of the CMP is to “promote the effective and efficient use of transportation facilities so that roadway capacity increases for single-occupant vehicles are minimized.” The CMP must be multi-modal, which the MPO's has been since the mid-1990s when the ISTEA legislation was passed. It must also have TDM elements (such as congestion pricing and HOV lanes) and Operational and Management Strategies (actions aimed at managing the system better so as to reduce vehicular congestion and improve safety, such as Incident Management and ITS add-ons to projects). The CMP must be integrated into the Regional Transportation Plan, TIP, and UPWP processes.

During a discussion period, T. Kadzis raised the issue of Incident Management and the Federal Highway Administration's (FHWA) emphasis on addressing non-recurring traffic incidents. E. Pagitsas confirmed that FHWA is emphasizing the need for states and MPOs to develop policy agreements that would result in quicker clearance time for accidents. She noted that there are some legal issues, which affect the clearance time of accidents. D. Mohler added that the State Police may require that vehicles involved in an accident are not immediately moved if an investigation is required.

### **MassHighway and MassPike Park & Ride Usage – Jared Fijalkowski, MPO Staff**

J. Fijalkowski reported on Subtask 5.2 of the MMS work program, under which MPO staff presents data collected by EOTPW Planning at 25 MassHighway-operated and 14 MassPike-operated Park & Ride lots twice a year. (See attached memorandum for details.)

The most recent inventory of the lots was in May 2007. In the MassHighway lots, 57 percent of parking spaces were utilized and there was a 10 percent increase in usage from May 2005. Four lots were over capacity, two were at capacity, and six were less than 10 percent utilized. At the MassPike lots, 35 percent of spaces were utilized and there was a 16 percent increase in utilization from May 2005. Four lots were at capacity and four had no parked vehicles.

The findings show the following:

- parking utilization is higher at lots where bus transit service is available;
- lots with the highest utilization are located within a half mile of a highway ramp and at least 25 miles from downtown Boston; and
- many lots with low utilization are located two or more miles from the nearest highway interchange.

MPO staff has conducted studies for MassHighway to identify new Park & Ride locations. EOTPW Planning has been working with municipalities and MassCommute to identify new locations.

During a discussion period, members raised the following questions and observations:

Ginger Esty, Town of Framingham, observed that a lot near Route 9 in Framingham has been used by limousine services and by trucks and she questioned whether these uses were authorized. D. Mohler stated that EOTPW has recently changed regulations to allow some overnight parking in its lots.

Richard Reed, Town of Bedford, asked why the presentation did not include more recent data, particularly given that transit usage is rising due to high gas prices. J. Fijalkowski stated that staff used the data provided by EOTPW. He has not seen the data from November or December 2007.

Jim Gallagher, MAPC, asked about what is being done to identify reasons for under-usage at some lots. D. Mohler stated that EOTPW is focused more on improving those lots that are over-capacity and adding lots at new locations.

Lynn Duncan, City of Salem, asked about how staff determines whether lots are over-capacity. J. Fijalkowski replied that staff compares the number of vehicles parked to the number of legal parking spaces.

Shirin Karanfiloglu, Massachusetts Turnpike Authority, stated that her agency is encouraging greater usage of its lots by addressing customer complaints about lighting and maintenance, and it is providing bus service at some locations where there is demand. The agency is also addressing truck parking.

D. Koses noted that the lots in Newton are over-capacity every day and commuters are parking on local streets.

M. Pratt suggested that Park & Ride lots that are located within other parking lots should be marked so that people know they are there.

B. Lucas asked if a map showing the locations of Park & Ride lots is available. J. Fijalkowski stated that a map is being developed and will be posted on the MPO's website.

**TDM – Jared Fijalkowski, MPO Staff**

J. Fijalkowski reported on Task 8 of the MMS work program and provided an update on the current TDM activities in the region, including activities implemented through the MPO, state agencies, municipalities, and public/private partnerships. (See the attached memorandum.)

Between 1996 and 2005 in Massachusetts, the number of registered vehicles and vehicle miles traveled increased faster than the increase in licensed drivers. TDM programs are used to reduce the percentage of people who drive alone to work and increase the use of other transportation modes (carpool, transit, bicycling, walking).

J. Fijalkowski provided a summary of TDM activities underway in the region including those funded through the MPO's Suburban Mobility and TDM Program, and those operated by MassRIDES and Transportation Management Associations (TMAs) in the region.

He also reported that soon staff will be presenting an interactive intersections database. Staff will deliver another presentation later this year to update members on two additional MMS program activities: an analysis of 34 intersections with high incidence of crashes involving bicyclists and pedestrians, and an analysis of limited-access highway travel speeds.

Members raised several questions:

B. Lucas asked for an explanation of the “value added” by the MMS to data collection efforts. J. Fijalkowski stated that the MMS shows that there is a trend towards increased utilization of Park & Ride lots and that trend is likely to continue due to high gas prices, and that lots with bus service tend to have higher utilization. The MPO could use this information to make recommendations for building new lots to meet growing demand.

B. Lucas asked staff to go beyond analyzing trends extended and to consider whether there is a tipping point at which solutions beyond adding new lots would be needed (such as more service), to consider the impact of gas prices, and to compare this region to others in the country. E. Pagitsas stated that the MMS work program is not finished and that the memorandum presented today would be updated to include more recent data. Changes attributed to high gas prices would likely be evident in the new data. She also explained that this work program has no element for comparing this region's TDM programs to programs in other parts of the country.

D. Mohler advised staff to correct inconsistencies on page 5 of the TDM memo. He also asked staff to check to see whether in some instances the TMA members were operating the shuttles, not the TMA and also to determine how TMAs account for reductions in VMT, for example, whether they count transit trips within their TMAs.

D. Koses suggested adding WalkBoston's Safe Routes to School program to the list of TMA programs in the region, and he noted that some other programs in the region should

be considered for inclusion as well, such as the Turnpike UTurn, SmartTraveler, Boston's CMS Program, LEXPRESS, and Logan Express.

Lourenço Dantas, Massport, suggested that the MPO consider a UPWP study that would conduct a full park-and-ride lot inventory with analysis (similar to the aforementioned 1999 study), or consider revising the MMS work program to include such an additional task. He noted that this is a good opportunity to study the impact on travel of rising gas prices.

**7. JOURNEY TO 2030 Amendment** – *Anne McGahan, MPO Staff*

A. McGahan discussed the schedule for the amendment of the long-range regional transportation plan. The plan must be amended for three reasons: 1) to incorporate the land use scenario that the MPO adopted at the April 3<sup>rd</sup> meeting; 2) to add text regarding the MPO's position on illustrative projects (also determined at the April 3<sup>rd</sup> meeting); and 3) to update the plan with the substitute State Implementation Plan (SIP) projects. The MPO will be required to amend the plan within 60 days after the U.S. Environmental Protection Agency (EPA) rules on the SIP projects. The MPO is awaiting guidance from FHWA and the Federal Transit Administration (FTA) to proceed.

When amending the plan, members will need to consider that there has been a \$56 million increase in highway project costs since the plan was approved. Projects that have increased in cost include Bedford, Burlington, and Billerica – Middlesex Turnpike, Concord and Lincoln – Route 2/Crosby's Corner, and Salem – Bridge Street. The Quincy – Quincy Center Concourse, Phase 2 project has decreased in cost.

During the Municipal TIP Input Days, municipalities presented some projects that are not listed in the plan, but that would need to be prior to being programmed on the TIP due to air quality conformity requirements. These projects include the Marshfield – Route 139, Chelsea – Spruce Street (possibly), Woburn – Montvale Avenue, and Milford – Veterans Memorial Drive projects. The Woburn – New Boston Street Bridge projects may have to be moved into an earlier year if the project was to be programmed prior to 2020.

As the plan amendment process goes forward, staff will provide members with a memorandum and the edited sections of the current plan text in "track changes." The new sections, once adopted, can be inserted into the plan rather than reprinting the whole plan.

B. Lucas noted that when there are changes, she would like to see, not just the updated excerpts, but the whole chapter.

Mary Pratt, Town of Hopkinton, raised the issue of the depletion of the federal Highway Trust Fund. She stated that highway funds are being used for natural hazard and terrorism preparedness and she expressed concern about the impact that might have on transportation funding. She expressed interest in raising this issue with congressmen. S. Woelfel stated that the federal agencies might be looking toward state and local governments for ideas on how to address these issues.

In response to a question on availability of funding from B. Lucas, D. Mohler explained that the state is awaiting federal guidance as to what the MPO can assume for funding in this plan.

In response to a question from T. Kadzis regarding timing of the Plan amendment activities, D. Mohler said that once the EPA's public notice of final rule on the substitute projects is published in the Federal Register, the MPO would have a total of 90 days to complete the amendment process. A. McGahan stated that model runs on a transportation network including the substitute SIP projects would take about two weeks.

**8. FFYs 2009 – 2011 TIP – Hayes Morrison, MPO Staff**

Staff distributed a memorandum regarding the proposed draft amendment of the FFY 2008 element of the FFYs 2007 – 2010 TIP. (See attached.) The memorandum addresses issues raised at the May 8<sup>th</sup> meeting and notes the following:

- In amending the TIP, the MPO may only move projects that are exempt from air quality conformity requirements.
- MassHighway has recommended removing the Belmont, Cambridge, and Somerville – Bicycle Facility and the Belmont, Billerica, and Burlington – Middlesex Turnpike, Phase 2 projects from the FFY 2008 element of the TIP. The removal of these projects would create a surplus of \$16.5 million in the FFY 2008 element.

The memorandum also provides information regarding:

- the reason for project delays;
- information on four potential replacement projects; and
- the impact on the FFY 2008 and FFY 2009 TIP elements.

Staff informed members that, per MassHighway, two other projects programmed in FFY 2009 will not be ready for advertising in that year: the Boston – Tremont Street and Milford – Upper Charles Trail projects. Regarding the Milford project, right-of-way has not been approved. This creates a \$3.3 million balance in the FFY 2009 targets.

In preparing alternatives for the amendment, staff first looked at the possibility of shifting projects already programmed in the TIP to the FFY 2008 element.

During a discussion period, B. Lucas asked staff to add information on the Franklin – King Street project as a possible candidate for programming in FFY 2008. G. Esty asked staff to look at the possibility of adding the Framingham – Central Street Bridge project back into the TIP.

B. Lucas expressed concern about whether there is a systemic problem with projects not moving through the MassHighway project development system.

T. Kadzis raised a question about the cost of the Boston – Massachusetts Avenue project. H. Morrison confirmed that the reduced cost estimate (from \$11.3 million to \$10.8 million) is the most accurate.

R. Reed asked for an explanation of the impact of a TIP project not being advertised by the end of the fiscal year in which it is programmed, the ability of the state to match federal funds, the state's process for releasing projects over the course of a year, and whether the state could guarantee that a project be advertised in the first quarter of the fiscal year.

D. Mohler explained that if a project programmed in the TIP is not advertised by September of that fiscal year, the MPO loses the money and the state may spend those federal funds elsewhere. The recently passed bond bill enables the state to match federal funds for projects programmed from FFY 2008 through FFY 2010. In terms of cash flow, the state is able to advertise projects on October 1<sup>st</sup> at the beginning of the fiscal year, however, this may not be possible in terms of available personnel. The state cannot guarantee that a project would be advertised in the first quarter. EOTPW is committed to reforming its advertising program, he added.

Speaking in support of the Middlesex Turnpike project, R. Reed reported that the municipal project proponents have spent \$4 million already to make the project ready, however, the environmental permitting is not finished. R. Reed stated that the municipalities provided the Department of Environmental Protection (DEP) with the necessary documents in December and January, but DEP has delayed the permitting process.

He voiced the opinion that there are structural issues within state agencies that slow progress on projects. Unlike some other states, Massachusetts' project development structure leaves municipalities with the responsibility of making projects ready, but there are factors (such as environmental permitting) that are out of their control, he said. Consideration should be given to reforming this structure, he added.

Since the Middlesex Turnpike project may not be removed from the TIP due to air quality conformity requirements, the proposed amendment would include \$1 million for that project in the FFY 2008 element and the bulk of the funding in the FFY 2009 element. Members discussed what the amount programmed in FFY 2008 could be used for. R. Reed suggested reimbursing the municipalities for money already spent and then having the municipalities pick up a comparable amount of construction costs. D. Mohler stated that staff would check with FHWA to see if this arrangement is possible.

Regarding the Bicycle Facility project, T. Bent reported that the municipal proponents are in discussion with MassHighway. S. Woelfel added that there are some issues that need to be resolved with the MBTA since the facility would pass through an MBTA-owned area. There also needs to be clarification concerning the location of the bridge structure in relation to an MWRA pipe. H. Morrison clarified that the project includes two structures – a cantilever walkway and a pedestrian bridge. The City of Cambridge's Conservation Commission must approve the walkway. The pedestrian bridge has not been reviewed for approval by MassHighway's Bridge Section.

Staff will email and call all municipalities that have an interest in the upcoming TIP amendment to alert them of the potential changes. The MPO will take up the amendment on May 22<sup>nd</sup>. Staff also noted that there will be amendments to the transit section of the TIP. Members will consider the addition of the Fitchburg Commuter Rail and Park Street projects and potentially others.

B. Lucas asked whether the MPO may pre-pay on projects to free up funding for FFY 2009. D. Mohler explained that the MPO must spend funds within the year that the funds were obligated.

#### **9. Members' Items**

B. Lucas announced that MAPC will hold its MetroFuture event and the MPO elections on May 28<sup>th</sup> at the Omni Parker House. Candidate statements will be heard between noon and 1 PM.

#### **10. Adjourn**

A motion to adjourn was made by S. Woelfel, and seconded by P. Regan. The motion passed unanimously.

**Transportation Planning and Programming Committee Meeting Attendance**  
**Thursday, May 15, 2008, 10:00 AM**

**Member Agencies**

EOTPW  
City of Boston  
City of Newton  
City of Salem  
City of Somerville  
MAPC  
  
MassHighway  
MassPike  
Massport  
MBTA  
MBTA Advisory Board  
Advisory Council  
  
Town of Bedford  
Town of Framingham  
Town of Hopkinton

**Representatives and Alternates**

David Mohler  
Thomas Kadzis  
David Koses  
Lynn Duncan  
Thomas Bent  
Barbara Lucas  
Jim Gallagher  
Steve Woelfel  
Shirin Karanfiloglu  
Lourenço Dantas  
Joe Cosgrove  
Paul Regan  
Kristina Johnson  
Steve Olanoff  
Richard Reed  
Ginger Esty  
Mary Pratt

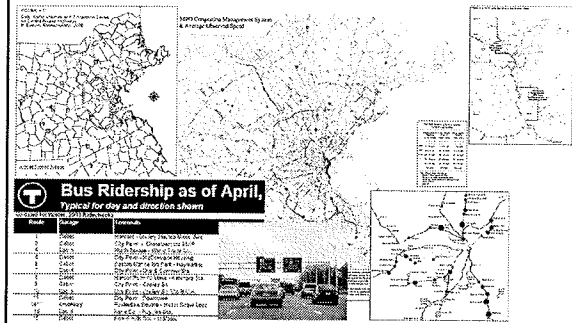
**MPO Staff/CTPS**

Jared Fijalkowski  
John Hersey  
Maureen Kelly  
Anne McGahan  
Hayes Morrison  
Efi Pagitsas  
Karl Quackenbush  
Arnie Soolman  
Mary Ellen Sullivan  
Pam Wolfe

## Mobility Management System (MMS) Today's Presentation

- SAFETEA-LU and Program Overview
- MassHighway and Mass Turnpike Authority Park-and-Ride Lots
- Transportation Demand Management in the Boston Region

## SAFETEA-LU and Program Overview



## Background

- Ongoing program for TMAs with populations greater than 200,000
- Started in the mid-90s with ISTEA
- Present work program began in October 2005
- Status presentations to the TPPC

## 2005 Work Program Status Updates

- November 2006
  - Project Status
  - MBTA Park-and-Ride Lot Monitoring
- December 2007
  - Project Status
  - MBTA Bicycle Parking Monitoring
  - HOV Monitoring Results

## SAFETEA-LU and the CMP

- Congestion Management Process (CMP)
  - Monitoring and evaluating system performance
  - Defining and analyzing strategies
  - Implementing strategies
- Promotes the effective and efficient use of transportation facilities so that roadway capacity increases for single-occupant vehicles are minimized

## SAFETEA-LU's Emphasis Areas for the CMP

- Multimodal
- Transportation Demand Management
- Operational and Management Strategies
- Integration with Plan, TIP, and UPWP

### **SAFETEA-LU's Emphasis Areas for the CMP**

- Multimodal
- Transportation Demand Management
  - Alternative Commute Programs
  - HOV Facilities and Congestion Pricing
  - Public Transportation Improvements
  - Pedestrian and Bicycle Improvements
  - Growth Management
- Operational and Management Strategies
- Integration with Plan, TIP, and UPWP

### **SAFETEA-LU's Emphasis Areas for the CMP**

- Multimodal
- Transportation Demand Management
- Operational and Management Strategies
  - Incident Management
  - Intelligent Transportation Systems (ITS)
  - Safety Improvements
  - Roadway Capacity Increases (where necessary)
- Integration with Plan, TIP, and UPWP


### **SAFETEA-LU's Emphasis Areas for the CMP**

- Multimodal
- Transportation Demand Management
- Operational and Management Strategies
- Integration with Plan, TIP, and UPWP
  - Provide recommendations for new studies for the UPWP
  - Identify congested locations or areas with mobility concerns for consideration in the TIP
  - Provide data for the evaluation of TIP and Plan projects
  - Projects that are included in the Plan that add single-occupant vehicle capacity must be approved in the MMS

### **Mobility Management System**

Monitoring of MassHighway and  
Massachusetts Turnpike Authority  
Park-and-Ride Lots

May 15, 2008



### **Monitoring of MassHighway and MassPike Lots**

Overview:

- Subtask 5.2 of Mobility Management System
- Inventory conducted by EOTPW Planning twice annually
- Data used is from the spring of 2005, 2006, and 2007

### **Data**

- 25 MassHighway-operated lots with a total of 4,930 parking spaces statewide
- 14 MassPike-operated lots with a total of 1,956 parking spaces statewide

**Results**  
MassHighway-operated Lots

- 57 percent of all parking spaces at MassHighway-operated lots were utilized in May 2007
- 10 percent increase in utilization since May 2005

**Results**  
MassHighway-operated Lots

- Four lots are over capacity: Andover, Newburyport, Somerset, and West Bridgewater
- Two lots are at capacity: Barnstable and Plymouth (Long Pond Road)
- Six lots have utilization of less than 10 percent: Charlemont, Pembroke, Plymouth (Route 44), Tyngsborough, Wareham, and Woburn (Anderson RTC)

**Results**  
MassPike-operated Lots

- 35 percent of all parking spaces at MassPike-operated lots were utilized in May 2007
- 16 percent increase in utilization since May 2005

**Results**  
MassPike-operated Lots

- Four lots are at capacity: Auburn, Newton/Auburndale, West Newton (Route 16), and West Newton (Webster Street)
- Four lots had zero vehicles parked: Weston, Worcester, and two in Westborough

**Findings**

- Parking utilization is higher where bus transit service is available
  - 80% at MassHighway lots with bus transit
  - 22% at MassHighway lots without bus transit
- The lots with the highest utilization are located within ½ mile of a highway ramp and at least 25 miles from downtown Boston
- Many lots with low utilization are located two or more miles from nearest highway interchange

**Identifying New Park-and-Ride Locations**

- MPO staff has conducted studies for MassHighway to recommend suitable locations for new park-and-ride facilities
- EOTPW Planning works with municipalities and MassCommute to identify locations for new park-and-ride lot facilities
- Tyngsborough lot opened in 2007

## Mobility Management System

Status of  
Transportation Demand Management (TDM)  
in the Boston Region

May 15, 2008

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## TDM Activities

Overview:

- Task 8 of Mobility Management System
- Report of current TDM activities in the Boston Region
- Includes activities implemented through the MPO, state agencies, municipalities, and public/private partnerships

## TDM Activities

In Massachusetts between 1996 and 2005:

- Number of registered vehicles increased by 13 percent
- Number of vehicle-miles traveled increased by 17 percent
- State lane-miles increased by 10 percent
- Number of licensed drivers increased by only 6 percent

## 2000 U.S. Journey-to-Work Data

|              | 2000 Census<br>(Boston Region<br>MPO Area) |
|--------------|--|
| Drive alone  | 66.5%                                      |
| Carpool      | 8.2%                                       |
| Transit      | 14.8%                                      |
| Bicycle      | 0.6%                                       |
| Walk         | 5.7%                                       |
| Other        | 0.8%                                       |
| Work at home | 3.4%                                       |
| Total        | 100.0%                                     |

## Boston Region MPO TDM Activities

Suburban Mobility Program:

- Goal is to improve mobility in suburban areas that are not served or are under-served by transit
- Examples of projects funded include The Local Connection and the Ipswich-Essex Explorer
- \$650,000 reserved in FFY 2008 for suburban mobility projects

## Boston Region MPO TDM Activities

TDM Program:

- Goal is to reduce transportation-related emissions by reducing single-occupant vehicle trips
- Projects recently funded include an alternative-transportation campaign in Cambridge and a City of Boston employee bicycle pool
- \$250,000 reserved in FFY 2008 for start-up TDM projects

### **MassRIDES**

- Free travel-options service of EOTPW
- 270 employers partner with MassRIDES to improve their employees' commutes
- 10,430 active individual members statewide
- 42 vanpools with 541 members travel within or to and from the Boston region

### **MassRIDES**

- Coordinates Emergency Ride Home Program
- Implements Safe Routes to School in MA
- Coordinates Logan TMA and South Shore TMA

### **TMA's**

TMA's:

- Provide a variety of transportation services in specific areas (groups of businesses, for example)
- Are generally public-private partnerships

### **TMA's**

- 12 TMA's statewide, 11 of which operate in the Boston region
- MassCommute, the statewide association of TMA's, represents 10 of the 12 TMA's
- In 2007, there were nearly 3.4 million boardings on MassCommute-member TMA shuttles
- In 2007, TMA activities resulted in a reduction of 55,416,724 vehicle-miles traveled

### **Future MMS Status Updates**

Soon:

- Interactive intersections database

In August:

- Analysis of 34 intersections with high incidence of bike/ped crashes
- Analysis of limited-access highway travel speeds

**MEMORANDUM**

**TO:** Transportation Planning and Programming Committee **May 15, 2008**

**FROM:** Alicia Wilson and Jared Fijalkowski

**RE:** Utilization of MassHighway and Massachusetts Turnpike Authority park-and-ride lots (a Mobility Management System report)

**INTRODUCTION**

The purpose of this memo is to present findings on the utilization of park-and-ride lots operated by the Massachusetts Highway Department (MassHighway) and the Massachusetts Turnpike Authority (MTA). Overall, the total number of parked vehicles at MassHighway lots increased by 10 percent between May 2005 and May 2007. During the same time period, the total number of parked vehicles at MTA lots increased by 26 percent.

Park-and-ride lots provide commuters with an opportunity to take a higher-occupancy mode of travel for at least a portion of their commute. MassHighway currently operates 25 park-and-ride lots in Massachusetts (6 of which are in the Boston Region MPO area), and the MTA operates 14 lots (5 of which are in the Boston Region MPO area). Carpoolers and vanpool users use these lots, and private bus companies serve many of the lots.

The Commonwealth's Executive Office of Transportation and Public Works (EOTPW) surveys the utilization of the MassHighway and MTA park-and-ride lots twice a year, in the fall and spring. MPO staff used data from these surveys to examine and analyze the utilization of the lots. May 2007 data, the most recent data available at the time of commencing this study, was used for looking at current utilization. April 2006 and May 2005 data was used for looking at trends.

**BACKGROUND**

This study was performed under the Mobility Management System (MMS), which is an ongoing MPO work program for collecting and gathering performance data about the region's transportation systems. As part of the MMS, data is analyzed and used to provide planners and decision-makers with tools to help prioritize transportation projects and program funds. In the present case, parking-expansion projects can be guided by identifying new or changing parking needs and analyzing trends; comparing new data with data from previous surveys can determine where the most desire for additional parking lies. Another component of the MMS is the posting

of information about lot capacity and usage on the Web so that members of the commuting public can use it to make decisions about their own commutes.

Utilization of parking spaces at MassHighway lots was last analyzed by the MPO in the 2004 Congestion Management System report. That analysis included only MassHighway lots in the Boston Region MPO area and did not include lots operated by the MTA.

### **PARKING UTILIZATION: RECENT LEVELS**

There are approximately 6,850 spaces in the 25 MassHighway lots and the 14 MTA lots located throughout Massachusetts. MassHighway lots account for 4,930 spaces, MTA lots for 1,964 spaces. All MassHighway lots and all but three MTA lots were surveyed on a typical weekday in May 2007. Overall, 57 percent of all spaces at MassHighway park-and-ride lots and 28 percent of all surveyed MTA park-and-ride spaces were utilized in May 2007. Data for each MassHighway and MTA lot is listed in Tables 1 and 2, respectively.

Utilization at MassHighway lots ranged from 0 to 131 percent, with six lots either at capacity or over capacity (in MMS studies, “at capacity” is defined as utilization at or above 85 percent, and “over capacity” is defined as utilization over 100 percent). The over-capacity lots were Andover, Newburyport, Somerset, and West Bridgewater. There were six lots where less than 10 percent of available spaces were utilized: Charlemont, Pembroke, Plymouth at Route 44, Tyngsborough, Wareham, and Woburn.

Utilization at the 11 MTA lots surveyed ranged between 0 and 98 percent in the May 2007 survey.<sup>1</sup> Auburn was the only lot at capacity, but the Ludlow lot was approaching capacity. No vehicles were observed at 4 lots: Westborough (2 lots), Weston, and Worcester.

Park-and-ride lot utilization is generally higher at lots where bus service is available. Thirteen MassHighway lots have bus service available (see Table 1), and the average parking utilization at those lots is 80 percent. The twelve MassHighway lots without bus service have an average parking utilization of 22 percent. Commercial bus service is available at the MTA’s Framingham and Millbury (Exit 10A) lots, but these lots do not have significantly higher utilization than other MTA-operated lots.

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<sup>1</sup> The Newton/Auburndale lot and both West Newton lots were not surveyed in May 2007.

**TABLE 1**  
**MassHighway Park-and-Ride Lot Utilization**

| Lot Location              | Parking Spaces | Parked Vehicles (% Full) |                    |                    | Bus Service? |
|---------------------------|----------------|--------------------------|--------------------|--------------------|--------------|
|                           |                | May 05                   | Apr 06             | May 07             |              |
| Andover                   | 71             | 72 (101%)                | 87 (123%)          | 93 (131%)          | No           |
| Barnstable                | 365            | 388 (106%)               | 359 (98%)          | 364 (100%)         | Yes          |
| Berlin                    | 45             | 30 (67%)                 | 30 (67%)           | 35 (78%)           | No           |
| Bourne                    | 377            | 300 (80%)                | 339 (90%)          | 310 (82%)          | Yes          |
| Bridgewater               | 60             | 40 (67%)                 | 63 (105%)          | 27 (45%)           | Yes          |
| Canton                    | 120            | 55 (46%)                 | 54 (45%)           | 62 (52%)           | Yes          |
| Charlemont                | 75             | 2 (3%)                   | 2 (3%)             | 1 (1%)             | No           |
| Framingham                | 114            | 33 (29%)                 | 35 (31%)           | 24 (21%)           | Yes          |
| Freetown                  | 33             | 26 (79%)                 | 22 (67%)           | 10 (30%)           | No           |
| Harwich                   | 75             | 25 (33%)                 | 27 (36%)           | 16 (21%)           | Yes          |
| Mattapoisett              | 80             | 11 (14%)                 | 13 (16%)           | 15 (19%)           | No           |
| Methuen                   | 189            | 121 (64%)                | 89 (47%)           | 94 (50%)           | Yes          |
| Milton                    | 200            | 82 (41%)                 | 96 (48%)           | 97 (49%)           | Yes          |
| New Bedford               | 201            | 112 (56%)                | 142 (71%)          | 147 (73%)          | Yes          |
| Newburyport               | 510            | 571 (112%)               | 577 (113%)         | 598 (117%)         | Yes          |
| Pembroke                  | 90             | 1 (1%)                   | 5 (6%)             | 6 (7%)             | No           |
| Plymouth (Long Pond Road) | 200            | 108 (54%)                | 152 (76%)          | 172 (86%)          | Yes          |
| Plymouth (Route 44)       | 520            | 0 (0%)                   | 11 (2%)            | 16 (3%)            | No           |
| Rockland                  | 440            | 255 (58%)                | 303 (69%)          | 329 (75%)          | Yes          |
| Somerset                  | 68             | 62 (91%)                 | 86 (126%)          | 73 (107%)          | No           |
| Taunton                   | 187            | 134 (72%)                | 143 (76%)          | 148 (79%)          | No           |
| Tyngsborough*             | 250            | —                        | —                  | 10 (4%)            | No           |
| Wareham                   | 120            | 7 (6%)                   | 9 (8%)             | 11 (9%)            | No           |
| West Bridgewater          | 140            | 128 (91%)                | 144 (103%)         | 163 (116%)         | Yes          |
| Woburn                    | 400            | 0 (0%)                   | 0 (0%)             | 0 (0%)             | No           |
| <b>Total</b>              | <b>4,930</b>   | <b>2,563 (52%)</b>       | <b>2,788 (57%)</b> | <b>2,821 (57%)</b> |              |

\* The Tyngsborough lot is new and was first inventoried in May 2007.

Source: EOTPW Planning

**UTILIZATION TRENDS**

Table 1 shows parking utilization at MassHighway park-and-ride lots in May 2005, April 2006, and May 2007. Overall, the total number of parked vehicles at MassHighway lots increased by 10 percent between the first and last of these observation points. Demand increased at 9 lots, 4 of which were over capacity in May 2007, was stable at 11 lots, and decreased at 4 lots. The Tyngsborough lot is fairly new and does not have historical data.

Parking utilization over the same period is similarly shown for MTA park-and-ride lots in Table 2. Overall, the total number of parked vehicles at MTA lots increased by 26 percent between May 2005 and May 2007. Four lots saw moderate increases in utilization over time: Framingham, Millbury (I-90 Exit 10A and Exit 11), and Sturbridge. Utilization at the remaining lots was relatively stable.

**TABLE 2**  
**Massachusetts Turnpike Authority Park-and-Ride Lot Utilization**

| Lot Location                  | Parking Spaces | Parked Vehicles (% Full) |                  |                  | Bus Service? |
|-------------------------------|----------------|--------------------------|------------------|------------------|--------------|
|                               |                | May 05                   | Apr 06           | May 07           |              |
| Auburn                        | 135            | 132 (98%)                | 138 (102%)       | 132 (98%)        | No           |
| Framingham                    | 120            | 35 (29%)                 | 44 (37%)         | 47 (39%)         | Yes          |
| Grafton                       | 500            | 5 (1%)                   | 11 (2%)          | 4 (1%)           | No           |
| Ludlow                        | 43             | 28 (65%)                 | 38 (88%)         | 34 (79%)         | No           |
| Millbury (I-90 Exit 10A)      | 446            | 97 (22%)                 | 112 (25%)        | 153 (34%)        | Yes          |
| Millbury (I-90 Exit 11)       | 140            | 71 (51%)                 | 72 (51%)         | 83 (59%)         | No           |
| Newton/Auburndale*            | 60             | 60 (100%)                | 60 (100%)        | 60 (100%)        | No           |
| Sturbridge                    | 50             | 10 (20%)                 | 15 (30%)         | 22 (44%)         | No           |
| West Newton (Route 16)*       | 42             | 42 (100%)                | 42 (100%)        | 42 (100%)        | No           |
| West Newton (Webster Street)* | 130            | 116 (89%)                | 116 (89%)        | 116 (89%)        | No           |
| Westborough (1)               | 42             | 0 (0%)                   | 0 (0%)           | 0 (0%)           | No           |
| Westborough (2)               | 58             | 0 (0%)                   | 0 (0%)           | 0 (0%)           | No           |
| Weston                        | 100            | 0 (0%)                   | 0 (0%)           | 0 (0%)           | No           |
| Worcester                     | 90             | 0 (0%)                   | 0 (0%)           | 0 (0%)           | No           |
| <b>Total</b>                  | <b>1,956</b>   | <b>596 (30%)</b>         | <b>648 (33%)</b> | <b>693 (35%)</b> |              |

\* Data for MTA lots in Newton/Auburndale and West Newton (Route 16 and Webster Street) is from the fall 2005 inventory of parking at MBTA stations. The number of vehicles and utilization percentage for each lot are from one observation in that inventory. These numbers from a different source are included in order to make it possible to compute the total percentage of parking utilization at all MTA park-and-ride lots.

Source: EOTPW Planning

**ANALYSIS OF FACTORS CONTRIBUTING TO UTILIZATION LEVELS**

Five of the surveyed MassHighway and MTA lots had no cars parked on any of the three survey days. Two of these lots are the MTA-operated lots in Westborough, which are located on Route 9 over two miles from I-495, the nearest limited-access highway. Similarly, the MTA’s Worcester and Weston park-and-ride lots, both of which had no cars parked during the survey times, are located several miles from the nearest entrance to the Massachusetts Turnpike.

MassHighway’s Woburn park-and-ride lot, the last of the five that had no cars parked, is part of the Anderson Regional Transportation Center, which is also served by the MBTA’s Lowell commuter rail line, Amtrak’s Downeaster service, and the Massachusetts Port Authority’s Logan

Express bus service. Four hundred of the center's 2,400 parking spaces are allocated to MassHighway for park-and-ride activities. Parking is free for commuters in carpools (the fee is \$2 for other users), but they must register with MassRIDES to be eligible for the discount. Although the parking lot at the center is well utilized, there were no registered carpools as of the spring of 2008. Therefore, it is assumed that no vehicles are parked in the MassHighway-designated spaces.

Six MassHighway-operated lots (Andover, Barnstable, Newburyport, Plymouth [Long Pond Road], Somerset, and West Bridgewater) and one MTA-operated lot (Auburn) were at capacity or over capacity in May 2007.<sup>2</sup> Each of these lots is strategically located within half a mile of access points to limited-access highways, which may contribute to their success. In addition, utilization may be boosted by the transit service that is available at the Barnstable, Newburyport, Plymouth (Long Pond Road), and West Bridgewater lots. Also, each of the seven over-capacity lots is located over 25 miles from Boston, where carpooling is more likely to be an attractive commuting option.

## **NEW PARK-AND-RIDE FACILITIES**

MassHighway is working to promote carpooling by strategically expanding park-and-ride capacity. It works with municipalities that show interest in a new park-and-ride facility to determine feasibility and estimate demand. MassHighway is also working with MassCommute, the association of transportation management associations (TMAs) in Massachusetts, to identify locations for new park-and-ride lots.

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<sup>2</sup> This does not count the three MTA lots not surveyed in May 2007.

**MEMORANDUM**

**TO:** Transportation Planning and Programming Committee **May 15, 2008**

**FROM:** Alicia Wilson and Jared Fijalkowski

**RE:** The status of transportation demand management (TDM) in the Boston Region Metropolitan Planning Organization area (a Mobility Management System report)

**INTRODUCTION**

The purpose of this memo is to report on transportation demand management (TDM) activities in the Boston Region MPO area. It outlines the TDM strategies currently conducted by the Boston Region MPO, state agencies, local governments, and private companies. This memo marks the first time that the Mobility Management System (MMS) has reported on TDM activities in the Boston region.

The MMS is an ongoing multimodal MPO program for collecting and gathering performance data about the region's transportation system. In addition, as part of the MMS, data is collected and analyzed so as to provide planners and decision-makers with tools to help prioritize transportation projects and program funds. MMS data on the capacity and usage of transportation facilities and services is also posted on the Web, so that the public can use it in making decisions about their own travel and for other purposes.

**BACKGROUND**

In 1996, the 4.79 million vehicles registered in Massachusetts traveled 47.546 billion miles within the state.<sup>1</sup> By 2005, the number of registered vehicles had increased by 13% to 5.414 million,<sup>2</sup> and they traveled 55.458 billion miles in that year, an increase of 17 percent.<sup>3</sup> The number of licensed drivers increased by 6 percent during this time period. There were more registered vehicles than licensed drivers in both years. State lane-miles increased by approximately 10 percent during this time period.<sup>4</sup> Most of the additional miles were more than likely on local roads or in residential areas and did little to relieve congestion.

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<sup>1</sup> *Massachusetts Transportation Facts*, 1998.

<sup>2</sup> Massachusetts Department of Revenue.

<sup>3</sup> U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2005*.

<sup>4</sup> *Ibid.*

While work trips generally account for only 15 percent of total trips nationally,<sup>5</sup> they are crucial to the design and operation of roadways and transit because they occur in concentrated time periods and therefore create more congestion. Table 1 presents the 2000 U.S. census journey-to-work data on choice of transportation mode for the state and for the MPO area. Note that the MPO area has proportionally more transit and walk trips and fewer single-occupancy-vehicle (SOV) trips than the state as a whole.

Table 1 also presents the changes in mode choice between 1990 and 2000. The trends in the MPO area and those in the state as a whole are as follows. The proportions of trips made on transit and by bicycle, as well as of people who work at home, increased; however so did the proportion of SOV trips. The proportions of carpool and walk trips decreased.

**TABLE 1**  
**2000 U.S. Census Journey-to-Work Data**

|              | Massachusetts |                           | Boston Region MPO Area |                           |
|--------------|---------------|---------------------------|------------------------|---------------------------|
|              | 2000          | Percent Change, 1990-2000 | 2000                   | Percent Change, 1990-2000 |
| Drove alone  | 73.8%         | 6.6%                      | 66.5%                  | 2.6%                      |
| Carpool      | 9.0%          | -12.3%                    | 8.2%                   | -14.8%                    |
| Transit      | 8.5%          | 9.5%                      | 14.8%                  | 8.6%                      |
| Bicycle      | 0.4%          | 9.5%                      | 0.6%                   | 14.3%                     |
| Walk         | 4.3%          | -16.8%                    | 5.7%                   | -12.4%                    |
| Other        | 0.8%          | 2.0%                      | 0.8%                   | -0.5%                     |
| Work at home | 3.1%          | 30.2%                     | 3.4%                   | 34.9%                     |
| <b>Total</b> | 99.9%         |                           | 100.0%                 |                           |

As transportation demand is growing faster than capacity, measures to manage demand must be taken. By focusing on travel alternatives rather than capital improvements or infrastructure changes, TDM measures can improve transportation system efficiency. A variety of TDM measures are in effect in the Boston Region MPO area and the rest of the state. Several of the most extensive programs are summarized below.

**MASSRIDES**

MassRIDES is a service of the Commonwealth’s Executive Office of Transportation and Public Works (EOTPW) that offers free statewide travel options assistance to employers and travelers. The programs and services of MassRIDES, which are described below, involve the active

<sup>5</sup> Transportation Research Board, *Commuting in America III: The Third National Report on Commuting Patterns and Trends*, NCHRP Report 550, October, 2006, p. 3.

participation of over 270 employers. Additional information on all of the *MassRIDES* programs can be found at [www.commute.com](http://www.commute.com).

*MassRIDES* promotes carpooling and vanpooling through a ridematching database consisting of commuters who register to take advantage of the many programs and services *MassRIDES* provides, including carpool-partner matching. As of April 2008, the database had 10,430 members registered for active matching to travel options statewide. It allows users to find others with similar commutes and to create or join a carpool.

*MassRIDES* helps interested commuters form vanpools of 7–15 people traveling to and from the same areas. Each vanpool has a unique route and schedule based on the needs of its members. In most cases, vanpoolers meet their rides at park-and-ride lots and are driven to their worksites. As of March 2008, there were 62 vanpools statewide, with 772 participants. Forty-two of these vanpools with a total of 541 members were traveling to or from locations in the Boston region.

Commuters who use alternative modes of transportation that are less flexible than single-occupant-vehicle travel sometimes worry about how they will get home in an emergency. At the end of 2007, 130 *MassRIDES* employer partners statewide were participating in the Emergency Ride Home Program. Over 2,100 employees of partner companies who use an alternative form of transportation to get to work at least two days a week were eligible to be reimbursed for a taxi ride home up to four times per year.

The Safe Routes to School Program, administered by *MassRIDES* for EOTPW, focuses on educating elementary and middle school students, parents, and community members on the value of walking and bicycling to and from school. It aims to increase physical activity and safety, and to decrease traffic congestion and air pollution at its partner schools. There is also an infrastructure component that will construct safety and access improvements in selected locations near schools. Safe Routes to School is a national program authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In April 2008, Massachusetts Safe Routes initiatives in over 120 schools and more than 50 communities reached over 50,000 students.

*MassRIDES* coordinates the Logan TMA Program, which serves employees of various businesses at Logan Airport. The program promotes the use of transportation alternatives for Logan employees' commutes. One service of the program is the Logan Sunrise Shuttle, which provides transportation from East Boston neighborhoods to the airport for employees whose shifts begin between 3:00 AM and 5:30 AM, before the MBTA begins operation for the day.

The South Shore TMA Program (a partnership between *MassRIDES* and the South Shore Chamber of Commerce) promotes commuting via alternative transportation modes on the South Shore. Current member agencies of this TMA are A. W. Perry, Blue Cross Blue Shield of Massachusetts, and the South Shore Chamber of Commerce.

In 2007, MassRIDES:

- Held 208 worksite commuter events providing employers the opportunity to register for ridematching services and the Emergency Ride Home Program.
- Implemented 43 new programs at partner worksites.
- Organized its first Bike to Work Week (May 2007).
- Launched online matching where travelers can receive instant matches (almost 75 percent of registrations in the fourth quarter came from online users).
- Enrolled over 2,500 travelers in its statewide ridematching database.<sup>6</sup>

## MASSACHUSETTS RIDESHARE PROGRAM

The Massachusetts Rideshare Regulation (310 CMR 7.16), established in 1979, is a statewide air quality initiative of the Department of Environmental Protection (MassDEP). Its goal is to reduce air pollution and to achieve and maintain conditions that meet health-based federal air quality standards. It requires many businesses and educational institutions to develop plans and set goals for reducing drive-alone commuting trips by 25 percent. The following businesses and institutions are currently required to file base reports and periodic updates with MassDEP:<sup>7</sup>

- Businesses with 1,000 or more applicable employees.<sup>8</sup>
- Educational institutions with 1,000 or more applicable employees and/or students.<sup>9</sup>
- Businesses that have 250 or more applicable commuters and are also subject to the Massachusetts Air Operating Permit Program.

The MassDEP website states that “over the past several years, Massachusetts businesses have reported that over 28,000 commuters have eliminated over 140,000 drive-alone commute trips each week.”

## TRANSPORTATION MANAGEMENT ASSOCIATIONS (TMAs)

Transportation management associations (TMAs) are generally controlled by their members and provide transportation services in specified areas, such as a medical center or industrial park. TMAs are nonprofit and are generally public-private partnerships consisting of area businesses with local government support. They provide an institutional framework for TDM programs and services. Programs conducted by TMAs are usually more cost-effective than those managed by individual businesses.

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<sup>6</sup>URS Corporation, *MassRides Travel Options, 2007 Annual Report*, pp. 3 and 4.

<sup>7</sup>[www.mass.gov/dep/air/approvals/ridesh02.htm](http://www.mass.gov/dep/air/approvals/ridesh02.htm).

<sup>8</sup> Applicable employees must work 17 or more hours per week for 20 or more weeks per year, begin and end their workday between 6:00 AM and 8:00 PM, and use their vehicles during work hours fewer than five times a month.

<sup>9</sup> Applicable students must be full-time students, live off campus, begin and complete classes between 6:00 AM and 8:00 PM, and need their vehicle for class assignments or for after-school work fewer than five times a month.

MassCommute, the Massachusetts Transportation Management Association Council, is a group of 10 TMAs that operate in Massachusetts; they are listed in Table 2 (the Logan TMA and the South Shore TMA, described earlier in the memo and also listed in the table, are not part of MassCommute). MassCommute represents 350 employers with a total of 267,474 employees.<sup>10</sup> All but one (the Merrimack Valley TMA) of the 10 TMAs operate within the Boston Region MPO area.

The TMAs offer a variety of services. All offer ridematching. Most offer a guaranteed ride home, transportation advocacy programs, transportation awareness days, shuttle bus services, and vanpool subsidies. Services least widely offered are advocacy for infrastructure improvements, bike/walk incentives, telecommuting, and affiliation with Zipcar. Table 2 shows the services offered by each TMA.<sup>11</sup>

**TABLE 2**  
**Transportation Management Association Services**

| Service Offered                          | Transportation Management Association |               |                     |              |                        |                  |               |                 |         |             |           |                      |
|--|---------------------------------------|---------------|---------------------|--------------|------------------------|------------------|---------------|-----------------|---------|-------------|-----------|----------------------|
|  | A Better City (ABC)                   | Charles River | CommuterWorks/MASCO | The Junction | Logan Airport Employee | Merrimack Valley | MetroWest/495 | Neponset Valley | Seaport | South Shore | TransComm | 128 Business Council |
| Advocacy for infrastructure improvements |                                       |               |                     | √            |                        |                  |               |                 |         |             |           |                      |
| Bike/walk incentive                      |                                       |               |                     | √            |                        |                  |               |                 |         |             |           |                      |
| Carpool subsidy                          | √                                     |               | √                   | √            |                        | √                |               |                 | √       |             | √         |                      |
| Guaranteed ride home                     | √                                     |               |                     | √            | √                      | √                |               |                 |         | √           |           |                      |
| Information kiosks                       | √                                     | √             | √                   | √            | √                      | √                | √             | √               | √       |             | √         | √                    |
| Ridematching                             |                                       | √             |                     |              | √                      |                  |               |                 | √       | √           |           |                      |
| Shuttle services                         | √                                     | √             | √                   | √            | √                      | √                | √             | √               | √       |             | √         | √                    |
| TAPA/DEP compliance assistance           |                                       | √             | √                   | √            | √                      |                  |               | √               | √       |             | √         | √                    |
| Telecommuting                            | √                                     |               | √                   | √            |                        | √                |               |                 |         | √           | √         | √                    |
| Transit subsidy                          | √                                     |               |                     |              | √                      | √                |               |                 |         | √           |           |                      |
| Transportation advocacy programs         | √                                     |               | √                   |              | √                      | √                |               |                 |         |             | √         |                      |
| Transportation awareness days            | √                                     | √             | √                   |              |                        | √                | √             | √               | √       | √           | √         | √                    |
| Vanpool subsidy                          | √                                     | √             |                     | √            | √                      | √                | √             | √               | √       | √           | √         | √                    |
| Zipcar affiliate                         | √                                     |               |                     |              | √                      | √                |               |                 |         |             |           |                      |

Source: [www.masscommute.com](http://www.masscommute.com) and MassRIDES.

<sup>10</sup> [www.masscommute.com](http://www.masscommute.com)

<sup>11</sup> Ibid.

MassCommute's statistics for 2007 are listed on the organization's website ([www.masscommute.org](http://www.masscommute.org)). During that year, member TMAs registered 1,331 new people in the database for guaranteed ride home programs; there were 3,380,424 annual boardings on TMA shuttles; and 55,416,724 vehicle miles of travel (VMT) were eliminated.<sup>12</sup>

## **BOSTON REGION MPO SUBURBAN MOBILITY AND TDM PROGRAMS**

The MPO's Suburban Mobility Program, now in its third year, annually makes funding available for projects that address transportation needs in suburban areas that currently are not served or are underserved by transit. The MPO is committed to reducing single-occupancy vehicle travel in such areas. For federal fiscal year (FFY) 2008 (October 2007 through September 2008), it allocated \$650,000 for this program.

The potential types of services that may receive funding under the Suburban Mobility Program include but are not limited to fixed-route services, demand-response services, joint dispatch services, and hybrid fixed-route/demand-response services. Other types of service that reduce the use of single-occupant vehicles are also eligible and encouraged. The MPO is particularly interested in services that act as feeders to commuter rail stations (or other transit transfer points), provide increased access to employment, or improve mobility for transit-dependent suburban residents.

The MPO also has made available \$250,000 this federal fiscal year with the intention of funding multiple TDM projects. This MPO program is in its first year. Several proposals were submitted and approved in January 2008; others might be approved during the remainder of this year. Proposed projects must contribute to air quality improvements. Types of projects that are eligible for this program include, but are not limited to, projects that employ:

- Alternative modes or strategies supporting use of them
  - Transit services
  - Nonmotorized-mode support
  - Park-and-ride lot amenities
- Work-site-based strategies:
  - Parking management
  - Transportation management associations
  - Facility amenities to benefit commuters
  - Telecommuting
- Land use strategies: Planning for alternative-mode transportation connected to sustainable land uses

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<sup>12</sup> Ibid.

- Ordinances, policies, and programs
  - Trip reduction ordinances, policies, and programs, including parking pricing and transit subsidy requirements

Eligible applicants for the Suburban Mobility and TDM programs include the MPO region's municipalities, regional transit authorities, TMAs, transportation management organizations, and regional Planning Agency. The programs include outreach efforts that encourage eligible entities to develop projects and apply for project funding. Both programs are financed with federal Congestion Mitigation/Air Quality (CMAQ) funds and matching state/local funding.<sup>13</sup>

### **CITY OF BOSTON PARKING FREEZES**

The U.S. Environmental Protection Agency's Clean Air Act requires states to bring their air into compliance with National Ambient Air Quality Standards. A State Implementation Plan (SIP) includes programs that a state commits to which are designed to help achieve that compliance. As part of the Commonwealth's SIP, the Massachusetts Department of Environmental Protection instituted freezes on the creation of off-street parking in downtown Boston, South Boston, and East Boston. The goals of these freezes are to:

- Reduce vehicle miles traveled in Boston.
- Promote the use of public transit.
- Encourage transit-related development.<sup>14</sup>

Boston's Air Pollution Control Commission (APCC) administers the parking freezes. The APCC cannot issue any new permits for new parking unless there are allocable spaces in the parking freeze bank, which represents the difference between the cap and the number of spaces currently allocated through permits.<sup>15</sup>

### **THE CITY OF CAMBRIDGE'S PARKING AND TRANSPORTATION DEMAND MANAGEMENT ORDINANCE (PTDM)**

The PTDM ordinance, adopted on November 16, 1998, is a section of the Cambridge Municipal Code whose purpose is to reduce vehicle trips, especially single-occupancy ones, and traffic congestion within Cambridge by requiring parking and TDM plans for commercial parking facilities and other types of nonresidential parking facilities with 20 or more spaces. The following is stated in the Cambridge Municipal Code, Section 18, Parking and Transportation Demand Management Planning; Parking Space Registration:

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<sup>13</sup> [www.ctps.org/bostonmpo/resources/TDM](http://www.ctps.org/bostonmpo/resources/TDM).

<sup>14</sup> [www.cityofboston.gov/environment](http://www.cityofboston.gov/environment).

<sup>15</sup> Ibid.

- No person shall build, expand, or operate a parking facility subject to the Parking and Transportation Demand Management (PTDM) Plan requirements of this Chapter absent a PTDM Plan approved by the Planning Officer.
- The PTDM requirements of this Chapter shall apply to each of the following:
  1. Any commercial parking facility for which a certificate of occupancy or operating license, variance or special permit was not obtained prior to the effective date of this chapter;
  2. Any existing commercial parking facility at which the number of parking spaces is increased after the effective date of this chapter;
  3. Any parking facility at which the use of existing or permitted parking spaces is changed to commercial use after the effective date of this chapter;
  4. Any new project to build or create by change of use twenty or more non-residential parking spaces; and
  5. Any new project to expand an existing parking facility resulting in a total number of non-residential parking spaces of twenty or more.
- The PTDM Plan shall be designed to minimize the amount of parking demand associated with the project and reduce single-occupant vehicle trips in and around Cambridge.

## MEMORANDUM

**TO:** Transportation Planning and Programming Committee

**DATE:** May 15, 2008

**FROM:** Hayes Morrison, TIP Manager

**RE:** Proposed Draft Amendment One of the FFY 2008 Element of the FFYs 2007 – 2010 TIP

In this amendment, the Boston Region MPO can only move in or out projects that are determined to be exempt from air quality conformity requirements (those that have a neutral impact on air quality).

Since the May 1 staff recommendation, MassHighway has indicated that two projects currently programmed in the FFY 2008 element:

- Belmont, Cambridge, Somerville – 600811 – Bicycle Facility, \$5,200,000,
- Belmont, Billerica, Burlington – 29491 – Middlesex Turnpike, Phase 2 of 3, \$13,841,840,

should be moved out of the current programming year. This memo provides information in three sections for your consideration of the amendment action:

- 1) Detailed information on the reasons for the delay of the above listed projects
- 2) Detailed information on the potential replacement projects
- 3) Information on the impact on the FFY 2008 element and the FFY 2009 element

### **1) Detailed information on the reason for the delay of the above listed projects**

#### **Belmont, Cambridge, Somerville – 600811 – Bicycle Facility, \$5,200,000**

Reasons for the project not being ready for advertisement in FFY 2008 are:

- There was a request that 706 feet of sidewalk along the path (in Cambridge) be widened. The agreed upon design for that widening was a cantilever walkway. This walkway cannot be designed without a determination from the Cambridge Conservation Commission. MassHighway's design engineer was at the Cambridge Conservation Commission on Monday, May 12, and was told that the following would have to be completed before a determination could be issued:
  1. wildlife habitat analysis
  2. analysis the hydric soils
  3. analysis of the affect of shade on the bank
  4. reuse of soil to create buffer and enhancement to the bordering vegetated wetlandMassHighway will not apply for a final determination until this summer; the cantilever walkway cannot be designed until the determination is issued.

- In addition to the walkway, there is a pedestrian bridge over the Alewife Brooke in Belmont included in the project design. This bridge has not been reviewed at all. There is no anticipated date for final design approval of the pedestrian bridge. This is the bridge that MassHighway spoke to last week and the one the borings were taken for.

**Belmont, Billerica, Burlington – 29491 – Middlesex Turnpike, Phase 2 of 3, \$13,841,840**

Since the distribution of the May 1 staff recommendation for FFY 2008 Amendment, MassHighway has indicated that the Belmont, Billerica, Burlington – 29491 – Middlesex Turnpike, Phase 2 of 3, previously funded in FFY 2008, should be moved out of the current programming year. This is not an exempt project; however, it is currently programmed in FFYs 2008 and 2009 elements of the FFYs 2007 – 2010 TIP. Because of this, the Boston Region MPO can significantly reduce the funding dedicated to the project in FFY 2008. Staff is recommending reducing the funding associated with this project from \$10,541,712 of STP funding in FFY 2008 to \$1,000,000. This would result in a need for \$9,541,712 in STP funds to be made available in FFY 2009.

Reasons for the project not being ready for advertisement in FFY 2008 are:

- The project requires a variance from the Wetlands Protection Act (WPA). Though the first stages of the process have been completed, there are several additional steps that are part of the process that will take a minimum of six months to complete, which does not appear to be possible in the remaining FFY 2008 timeframe. Steps in the process and their status are:
  - the local Conservation Commissions have issued "denials" for the project in their respective towns
  - Requests for Superseding Orders of Conditions have been sent to the DEP  
MassHighway must wait for the DEP denials prior to filing the WPA Variance request
  - The DEP will review the request application, hold a public hearing, and have a public comment period
  - MassHighway must then address public comments and other issues

The designer is working to deliver the WPA Variance for the project by the end of FFY 2008. It was the municipalities' and design engineers' position that if everything went according to plan, the Variance could be issued in time for FFY08 advertising. MassHighway does not concur.

**2) Detailed information on the potential replacement projects**

**Summary of Projects:**

1) Wakefield – 603311 – Signals and Intersections at 3 Locations - The project consists of the installation of traffic signals at the intersections of Salem Street with Pleasure Island Road, Montrose Avenue, and the Route 128 Northbound On/Off Ramp. Roadway improvements will also be provided in the form of a reconstructed roadway and the installation of new signs and pavement markings, drainage improvements, and sidewalks with ADA accessible ramps.

- Project Est. \$2,254,636
- Design at 100% Submitted

- ROW cert. Issued (4/1/08)
- MassHighway has indicated this project could be ready in FFY 2008
- Project was included in the FFY 2009
- MPO Project Information Form attached

2) Topsfield – 602747 – Ipswich Road - The proposed project consists of the reconstruction Ipswich Road from Main Street extending easterly to Route 1 for a distance of approximately 1300 meters. The proposed project shall include pavement reconstruction with new sidewalks with ADA conforming wheelchair ramps, and granite curb on the north side of Ipswich Road. Hot mix asphalt berm is proposed for the south side of the roadway. Also included are drainage improvements, traffic signing, pavement markings, and other incidental work.

- Project Est. \$3,936,780
- Design at 100% Submitted
- ROW cert. Issued (5/6/08)
- MassHighway has indicated this project could be ready in FFY 2008
- Project not currently programmed
- MPO Project Information Form Attached

3) Dedham – 602009 – Washington Street - This is an Urban Principal Arterial NON - NHS Discontinuance project currently maintained by District Four. The project consists of full depth reconstruction including removal of trolley tracks, landscaping, and upgraded drainage. Once the project is complete, ownership of the roadway will be transferred to the Town of Dedham.

- Project Est. \$7,020,530
- Design at 100% Submitted
- ROW to be completed soon, MassHighway responsibility
- MassHighway has indicated this project could be ready in FFY 2008
- Project not currently programmed
- MPO Project Information Form Attached

4) Littleton – 604530 – Goldsmith St - The proposed project consists of improvements to Goldsmith Street, from the intersection with Route 2A/110 to the intersection with Shaker Lane, a distance of approximately 1.45 miles. Sidewalk and landscaping improvements will also be provided.

- Project Est. \$4,750,000
- Design at PS&E Submitted
- ROW certification issued (2/7/06)
- MassHighway has indicated this project could be ready in FFY 2008
- Project not currently programmed
- MPO Project Information Form Attached

### **3) Information on the impact on the FFY 2008 element and the FFY 2009 element**

The removal of the two projects detailed in section one, combined with adjustments to other project costs creates a gap of \$16,562,242 in the FFY 2008 element. Presented to you above are \$17,961,946 worth of replacement projects.

Moving Bedford, Billerica, Burlington – Middlesex Turnpike into the FFY 2009 element creates a deficit of \$9,541,712 in FFY 2009.

Here are some possible ways to ease this impact on FFY 2009:

1) Moving Wakefield – 603311 – Signals and Intersections at 3 Locations forward into the FFY 2008 element of the TIP frees up \$1,976,000 in FFY 2009.

New Balance: \$9,541,712 - \$1,976,000 = \$7,565,715

2) Staff has become aware that Milford – 601274 – Upper Charles Trail, Phase Two currently programmed in the FFY 2009 element of the FFYs 2008 – 2011 TIP will not be ready to advertise in FFY 2009.

Reason for the project not being ready for advertisement in FFY 2009 is:

- Milford's proposed lease agreement with the New England Power Company (National Grid) does not meet the right-of-way requirements applicable to all projects subject to Title 23 of the United States Code (see letter from FHWA to MassHighway attached).

New Balance: \$7,565,715 - \$4,264,000 = \$3,301,715

Further action will need to be taken to eliminate the \$3.3M deficit in FFY 2009.