

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

**February 7, 2008 Meeting**

10:00 AM –12:30 PM, State Transportation Building, Conference Room 4, 10 Park Plaza, Boston

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

Barbara Lucas, Vice Chair, Metropolitan Area Planning Council (MAPC)

**Decisions**

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

- Approve the work program for MetroWest Transit Authority Service Planning Support as revised
- Approve the minutes of the January 17<sup>th</sup> meeting as presented

**Meeting Agenda**

Members and staff observed a moment of silence in memory of Gordon Feltman, member from the Town of Bedford, who had recently passed away.

**1. Public Comments**

There were none.

**2. Chair's Report – Barbara Lucas, MAPC, and David Mohler, EOTPW**

B. Lucas began the Chair's Report by raising the issue that the MPO has been receiving more and more project proposals for Municipal TIP Input Day, and that the MPO needs to have enough time to accommodate all proponents. Members discussed the possibility of holding Municipal TIP Input Day over two days.

One suggestion was to reserve one day for proponents of already programmed projects and other day for those who wish to have projects programmed. There was concern that this option might pose problems for municipal staffers who might not have that amount of time to devote should they have to come in on two days.

Another option was to organize the sessions so that municipal staffers would only have to come in on one day. The sessions could be organized so that projects are addressed by geographical region, not just by MassHighway district, as is the practice now. It was noted that more time might need to be allotted to cities that are proposing multiple projects.

Staff was asked to provide maps of the project locations for TIP Day. Also, staff was asked to avoid scheduling the meetings during school vacation week.

Hayes Morrison, MPO staff, noted that TIP contacts have been informed that TIP Day will be held on April 17<sup>th</sup>. So far, 42 towns (with a total of 123 projects) have RSVPed. There are 13 new conceptual projects. TIP contacts should be informed as soon as possible about changes to the TIP Day date or format.

D. Mohler then took the chair's seat. He informed members that two state legislators – Senator Anthony Galluccio and Representative William Brownsberger – responded to the MPO's letter requesting the Legislature's support for the passage of the state transportation bond bill. (See attached.)

He also announced that EOTPW will be holding a public meeting regarding the Route 39 bus corridor on February 25<sup>th</sup>. A flyer was distributed at the meeting. (See attached flyer.)

It was also noted that MPO staff is preparing a letter-of-interest to seek federal grant money for planning studies to support freight work. The deadline for submission is Friday, February 15<sup>th</sup>. Full proposals are due in March. Pam Wolfe, MPO staff, explained that the proposed study would create baseline information on freight traffic in the region and would focus on the major modes used. Staff was asked to circulate the proposal to members.

D. Mohler stated that he will be attending the AMPO Policy Board meeting discussing reauthorization and that he would like input from members about discussion issues the MPO might want raised at the meeting.

### **3. Subcommittee Chairs' Reports – Steve Woelfel, MassHighway, and Barbara Lucas, MAPC**

S. Woelfel reported that the Unified Planning Work Program (UPWP) Subcommittee met this morning. The Subcommittee discussed two projects that are over-budget: the MBTA Transit Signal Priority study, and the Safety and Operational Improvements at Selected Locations study. The Subcommittee approved an additional \$15,000 for the first study and \$27,000 for the latter. (The funds will be coming out of the funds set-aside and not yet needed for hiring staff for the Regional Household Survey work. This staff has not yet been hired, so less money will be needed for them this year.)

B. Lucas announced that the Suburban Mobility and Transportation Demand Management (TDM) Subcommittee will meet, following this meeting. Proponents of several TDM proposals will be attending the meeting to provide more information on their proposed projects. The Subcommittee will be working on making final recommendations.

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

The next meeting of the Advisory Council will be held at Quincy City Hall. The Advisory Council will be submitting a comment letter on the RFR for EOTWP's freight and rail plan study.

## 5. Action Items

### **Work Program for MetroWest Transit Authority Service Planning Support – Karl Quackenbush, Deputy Director, CTPS**

Members were presented with the work program for MetroWest Transit Authority Service Planning Support at the January 17<sup>th</sup> meeting. Staff distributed a revised version of the work program, which showed changes based on members' comments from the previous meeting. The changes included the following:

- the addition of text to indicate that staff will compare running times on the existing MWRTA routes with scheduled times to determine schedule reliability;
- a clarification of Task 3 that explains the markets that will be considered when examining travel patterns (these markets will include work and non-work travel, and both discretionary and non-discretionary trips);
- the acknowledgement under Task 4 that a connection to the Green Line in Newton could potentially attract trips from along the MBTA network to destinations on the MWRTA system, and;
- the addition of a clause in Task 5 to indicate that MPO staff will provide ongoing technical support to the MWRTA if resources are available.

B. Lucas asked about the availability of existing ridership data. Clinton Bench, MPO staff, explained that the MWRTA has not done complete ride checks for the service. The MWRTA has some automated data on schedule adherence and anecdotal data from drivers. MPO staff will need to do data collection as part of Task 2. K. Quackenbush noted that the work program's budget accommodates this work.

A motion to approve the work program for MetroWest Transit Authority Service Planning Support as revised was made by B. Lucas, and seconded by Jim Gillooly, City of Boston. The motion passed unanimously.

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

A motion to approve the minutes of the meeting of January 17 was made by S. Woelfel, and seconded by Paul Regan, MBTA Advisory Board. The motion passed. Richard Reed, Town of Bedford, abstained.

B. Lucas wondered about the reduced level of attribution of members' remarks in this set of minutes and asked whether this style represents a change in approach. P. Wolfe stated that this does not and that staff usually attributes comments when major points are made. Staff was advised to provide more attribution, particularly in those instances.

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

Staff distributed a memorandum regarding the selection of illustrative projects for the long-range regional transportation plan, *JOURNEY TO 2030*. (See attached.) The memo describes the criteria and selection process that was used for rating projects in the plan.

During the process for selecting highway projects, the MPO developed a Universe of Projects list and rated the projects based on their consistency with the MPO's policies. Three committee meetings were held to discuss criteria and another three meetings were held to discuss ratings and rankings.

For the selection of transit projects, the MPO used the project list from the MBTA's 2003 Program for Mass Transportation (PMT). Each project was prioritized during the PMT evaluation process based on how well each project met the PMT goals and objectives, which are consistent with MPO policies. The projects were rated as being of high, medium, or low priority. The MPO adopted the PMT priorities for MPO transit projects. The MBTA is currently updating the PMT and staff recommends using that information in the development of the next long-range plan.

Staff believes that the criteria used for the selection of projects in the financially constrained plan should be consistent with those used for illustrative projects. Therefore, the criteria used should be the same as that used in the selection of plan projects. Since the plan projects have been rated and ranked using these criteria, staff thinks that this information should be used when considering possible illustrative projects for inclusion in the plan. A list of illustrative projects that have been included in past plans was provided to members.

During a discussion period, members weighed the pros and cons of including illustrative projects in the long-range plan.

Paul Regan, MBTA Advisory Board, raised a question about how the MPO would treat illustrative projects compared to how it would treat projects that just missed being included in the TIP or plan. He asked whether, by creating a category for illustrative projects, the MPO would be stating that if the MPO had more funds it would program illustrative projects over other projects. A. McGahan stated that all projects were rated and ranked using the same process. It is the MPO's decision whether to include regionally significant illustrative projects in the plan or use funds for TIP projects (which do not have to be listed in the plan if not regionally significant).

Kristina Johnson, Advisory Council, raised a question about how illustrative projects are vetted and expressed concern that the decision to include them in the plan might open the MPO up to a barrage of projects. She stated that the MPO should be careful not to send a message to the federal transportation agencies that implies fiscal irresponsibility.

J. Gillooly suggested that, given the ambiguity around future funding, listing illustrative projects in the plan could be a way for the MPO to endorse projects – particularly transit projects – for which funding has not yet been found. He urged caution, however, and noted that the MPO needs a compelling reason to include illustrative projects in this plan given the current practice of not listing illustrative projects in the most current plan. He stated that maybe the MPO should not change direction and rather maintain the status quo of not listing illustrative projects especially due to the current funding crisis.

Joe Cosgrove, MBTA, noted that projects are advanced through various avenues, such as the awarding of congressional earmarks, and that listing illustrative projects in the plan might be a way for the MPO to weigh in on other agendas for funding projects. It might help the MBTA to advance projects that are not yet in fiscally constrained plans.

B. Lucas stated that in considering illustrative projects, the MPO should take an approach that addresses 1) projects that need to happen so that other projects can happen (such as track expansion at South Station), and 2) projects that will not be raised in the MBTA's Program for Mass Transportation (PMT) but for which there is support (such as electrification of the rail lines). She voiced support for showing in the plan that there are good projects that are not funded.

P. Regan expressed concern that by including illustrative projects in the plan, the MPO would be diluting the message that it has been sending to the Legislature, Governor, and Congress regarding the chronic under-funding of maintenance of the transportation system. The MPO has been emphasizing the need for funding to maintain the existing system. Illustrative projects tend not to be projects that meet these needs. He stated that the MPO should emphasize that near term problems need to be addressed. He suggested that there might be other venues – such as the strategic statewide plan – where illustrative projects could be included. K. Johnson agreed that the statewide plan would be a better venue for illustrative projects. D. Mohler noted that this plan is under development and it is not clear at this time whether it would include a project list.

Lynn Duncan, City of Salem, expressed concern that the MPO would spend more time developing an illustrative list than a list of doable projects. She stated that the MPO should mention the funding crisis in the plan but not list illustrative projects.

Shirin Karanfiloglu, Massachusetts Turnpike Authority, stated that there is no harm in the MPO having a list of illustrative projects or a vision for the future. The MPO could list projects with a footnote stating that the MPO does not have sufficient funding for current projects.

J. Cosgrove suggested that, rather than having a “wish list,” the MPO might list those illustrative projects for which funding will be sought. He also noted that, since the federal transportation legislation is going to be reauthorized, it might be worth noting illustrative projects. P. Regan added that while the MPO is preparing for reauthorization, it is most important to state the region's critical near-term needs to Congress.

Staff was asked to prepare text about illustrative projects for inclusion in the plan amendment.

#### **7. Walkable Community Workshop Program – *Cathy Buckley Lewis, MPO Staff***

C. Buckley Lewis announced that the MPO held eight Walkable Community Workshops in 2007. The workshops were well attended and participants were enthusiastic. The workshops generated follow-up activities among local pedestrian or bicycle committees and in municipalities. One 2008 workshop is already scheduled for Stoneham.

D. Mohler stated that the Walkable Community Workshops Program is a very good program and that it has been well received and appreciated by municipalities. He noted that it has been replicated by a sister MPO.

B. Lucas requested that the information staff has learned from the workshops help inform the Regional Pedestrian Plan.

**8. TIP Update – Hayes Morrison, MPO Staff**

Staff distributed a memorandum summarizing the activities that have been completed and that are underway in the development of the FFYs 2009 – 2012 TIP. (See attached.) The last in this year's series of TIP How-To Seminars will be held in Framingham on February 13<sup>th</sup>.

**9. Update on Transportation Safety Planning in the Boston Region – Maureen Kelly, MPO Staff**

Staff provided an overview of the contents of a white paper on Roadway Safety Planning in the Boston Region. (See attached white paper and PowerPoint presentation.) The paper provides an overview of the federal legislation that guides safety planning, discusses the Massachusetts Strategic Highway Safety Plan (SHSP), and provides a snapshot of how the MPO's work fits into the SHSP.

SAFETEA-LU established the Highway Safety Improvement Program (HSIP) as a core program with increased funding for projects that address safety. In order for states to receive their full amount of funding, they must have a SHSP. Massachusetts approved its SHSP in September 2006 and is now eligible for \$15 million per year statewide from FFY 2008 through FFY 2011.

The SHSP includes six emphasis areas where the state is focusing its efforts. Three closely pertain to the MPO's work: Data Systems, Infrastructure, and Higher Risk Transportation Users.

The SHSP goal under Data Systems is to provide accurate, complete, and timely traffic records data to decision-makers working to improve safety. When the SHSP is fully implemented, projects funded with HSIP funds will have to be prioritized based on crash data. The MPO is a stakeholder in efforts to improve crash data since it is important the MPO has complete and consistent data across municipalities to conduct region-wide comparisons and identify the region's most hazardous locations. An issue of concern is that in the data files available to the MPO since 2002 there are inconsistencies in crash reporting from municipality to municipality, and some appear to be under-reporting crashes to the Registry of Motor Vehicles (RMV). MassHighway, the RMV, and UMassSafe are working with police departments to improve data collection.

The goal under the Infrastructure area is to reduce fatalities and injuries resulting from intersection and lane departure crashes, and to expedite safety related infrastructure

projects. The focus for MPOs is to incorporate strong safety criteria in the TIP process, develop ways to prioritize safety projects, and identify high crash locations.

The goal of the Higher Risk Transportation Users area is to improve safety for pedestrians, bicyclists, older drivers, young drivers, and motorcyclists. As the lead agency, MassHighway has been developing several tools for identifying hazardous locations: the Top 200 High Crash Intersection Location report, a draft Top Bicycle/Pedestrian Locations report, and a Top Interchange Crash list (under development). The SHSP identifies improving pedestrian and bicycle safety as a role for MPOs, which would involve identifying top crash locations and implementing location specific strategies. Statewide guidance will be developed on addressing the needs of older drivers through infrastructure improvements. (The SHSP does not identify infrastructure solutions to address the safety of young drivers and motorcyclists.)

Two other safety topics were discussed: Intelligent Transportation Systems (ITS) and Evacuation Planning. The MPO stated in *JOURNEY TO 2030*, that it intends to 1) support ITS to provide for safety, and 2) participate in regional planning for safety initiatives, such as evacuation and contingency measures.

Currently all TIP projects are vetted by MassHighway or the MBTA to ensure that they conform to the regional ITS architecture. The MPO funds many projects with ITS elements. Examples of currently programmed projects with significant ITS components were provided.

Two MPO members have participated in evacuation/contingency planning. The City of Boston has prepared an evacuation plan for the city, and MAPC has worked with the subregions to develop natural hazard mitigation plans.

There are several ways the MPO could continue its participation in regional planning for safety: 1) keep participating in regional planning across jurisdictions, 2) provide information on highway capacity, traffic counts, chokepoints, location of planned construction projects in order to support evacuation planning, and 3) conduct modeling to simulate the transportation impacts from emergency events under various scenarios.

During a discussion period following the presentation, Michael Chong, FHWA, asked whether the state would be programming any of its annual \$15 million HSIP allotment before the funds lapse in FFY 2009. D. Mohler noted that FHWA has directed the state to reprioritize the STIP, which involves reprioritizing the Safety, Bridge, and Interstate Maintenance Programs, and that this step has not been taken yet due to the need to address the availability of state funds. The HSIP funding is not yet programmed in the STIP. M. Chong stated that FHWA would like safety projects in the STIP to be selected by a data-driven process.

B. Lucas asked if the \$15 million would come from the regional targets. D. Mohler stated that FHWA has asked MassHighway to comment on this issue and that MassHighway will be issuing a letter with a recommendation. It is possible that

MassHighway will recommend adding a sub-category in the TIP for safety projects. (He also noted that FHWA is using the HSIP definition for safety projects, which may differ from what MPO considers safety projects.)

B. Lucas and Jim Gallagher, MAPC, raised concerns that the MPO is using old crash data (1999-2001) due to deficiencies of the new data (2003-2005). They also expressed concern that by only checking to see if proposed projects are in Top 200 clusters, it would not be clear whether proposed projects would be addressing safety problems. M. Kelly noted that starting in FFY 2009 staff will be using the new data (that was used to develop the Top 200 clusters) in the TIP process and she indicated that the MPO's data analysts would provide safety-related information from that data to the TIP process.

J. Gallagher noted that the new data is probably incomplete in some communities and pointed out that other regional agencies supplement RMV crash data by collecting police reports on crashes at the proposed project locations. D. Mohler stated that it has not been determined if staff will do that level of analysis. P. Wolfe added that staff has been considering how to address this issue and that staff has not ruled out the possibility of doing that level of work.

H. Morrison stated that, in December, the TIP Criteria Subcommittee decided to move from using the Top 1000 intersection data for 1999-2001 to using the Top 200 clusters from 2003-2005. She also stated that Mobility Management System information related to safety has been incorporated into the TIP process.

D. Mohler expressed his hope that the MPO and MassHighway would coordinate so that if a project is underway in a Top 200 cluster area MassHighway would look to make sure the project addresses safety problems there. He suggested that information about such safety improvement work in the project area might be added to the Project Information Form (PIF).

David Koses, City of Newton, suggested that the PIF might include checkboxes to indicate whether municipalities have taken steps to improve safety, such as running safety programs or passing laws designed to improve safety.

Steve Olanoff, Advisory Council, noted that the MPO should move away from relying on input about safety from MPO members who are familiar with particular project locations.

### **10. Members' Items**

D. Mohler will be attending the Somerville Aldermen's meeting to discuss the Green Line and commuter rail connections.

L. Duncan raised an issue that the City of Salem is experiencing with its TMA project, which is to be funded with MPO Suburban Mobility funds. The city has worked with EOTPW to develop a scope and has gone through the RFP process and chosen a consultant. The city, however, does not yet have a contract with EOTPW and therefore cannot execute a contract with the consultant. L. Duncan asked D. Mohler to check on

the status of the contract. She also asked about how to deal with the project's delay given that the next round of Suburban Mobility funding will be coming up. B. Lucas stated that second and third year funding may be applied for as appropriate, not just on the fixed annual schedule.

J. Cosgrove announced that the MBTA's Blue Line cars are going into revenue service next week. Also, the MBTA board is scheduled to approve a \$90 million contract for the purchase of 75 bi-level commuter rail coaches.

## **11. Adjourn**

**Transportation Planning and Programming Committee Meeting Attendance  
Thursday, February 7, 2008, 10:00 AM**

**Member Agencies**

EOTPW  
City of Boston  
  
City of Newton  
City of Salem  
City of Somerville  
Federal Highway  
Administration  
MAPC  
  
MassHighway  
MassPike  
MBTA  
MBTA Advisory Board  
Advisory Council  
Town of Bedford

**Representatives and Alternates**

David Mohler  
Jim Gillooly  
Thomas Kadzis  
David Koses  
Lynn Duncan  
Thomas Bent  
Michael Chong  
  
Barbara Lucas  
Jim Gallagher  
Steve Woelfel  
Shirin Karanfiloglu  
Joe Cosgrove  
Paul Regan  
Kristina Johnson  
Richard Reed

**MPO Staff/CTPS**

Clinton Bench  
Annette Demchur  
Tom Humphrey  
Maureen Kelly  
Cathy Buckley Lewis  
Anne McGahan  
Hayes Morrison  
Karl Quackenbush  
Arnie Soolman  
Pam Wolfe



COMMONWEALTH OF MASSACHUSETTS  
**MASSACHUSETTS SENATE**

STATE HOUSE, BOSTON 02133-1053

**SENATOR ANTHONY D. GALLUCCIO**  
**MIDDLESEX, SUFFOLK & ESSEX**

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COMMITTEES:

Public Service (Chair)

Municipalities & Regional Government

Public Health

State Administration & Regulatory Oversight

January 23, 2008

Mr. David Mohler, Chair  
Transportation Planning and Programming Committee  
Boston Metropolitan Planning Organization  
Boston, MA 02116

Dear Mr. Mohler,

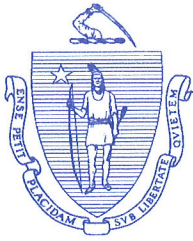
Thank you for your letter regarding the transportation bond bill. I share your sentiments regarding the importance of this bill and attended a hearing on the bill before the Transportation Committee yesterday. I am confident that, after attending the hearing, my colleagues are working to move this bill expeditiously following appropriate review.

I very much look forward to working with the Boston Region Metropolitan Planning Organization. Please do not hesitate to contact me if I can be of further assistance with this or any other matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Anthony D. Galluccio".

Anthony D. Galluccio  
State Senator  
Middlesex, Suffolk & Essex



The Commonwealth of Massachusetts

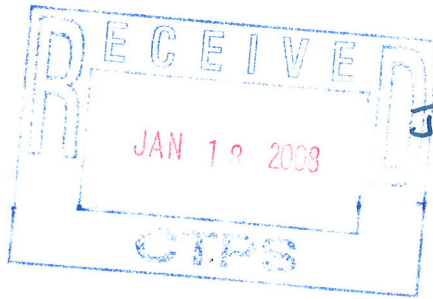
HOUSE OF REPRESENTATIVES  
STATE HOUSE, BOSTON 02133-1054

**WILLIAM N. BROWNSBERGER**  
REPRESENTATIVE  
24TH MIDDLESEX DISTRICT  
ROOM 23, STATE HOUSE

TEL. (617) 722-2140  
CELL: (617) 771-8274  
E-Mail: Rep.WilliamBrownsberger@hou.state.ma.us

**Committees:**

Environment, Natural Resources and Agriculture  
Mental Health and Substance Abuse  
State Administration and Regulatory Oversight



January 17, 2008

Dave,

Thank you for your letter re moving  
the Transportation Bond Bill and  
also the need to fund the recommendations  
of the TFC.

I share your deep practical concern  
on these issues and will do all I can  
to further these goals.

Very best regards,

Bill Brownsberger



## **Make Your Voice Heard on Improvements to the Route 39 Bus Corridor!**

We hope you will join us at a public meeting to discuss potential improvements to the Route 39 bus corridor (Forest Hills Station to Back Bay Station). This effort is an initiative of the Massachusetts Executive Office of Transportation & Public Works in coordination with the Massachusetts Bay Transportation Authority.

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**Monday, February 25, 2008  
6:00pm-7:30pm  
Agassiz School  
20 Child Street  
Jamaica Plain**

**(MBTA bus route 39 serves the Agassiz School)**

If you have questions about the meetings, please call (617) 973-7342. If you require special accommodations, please notify us as soon as possible and we will do our best to accommodate you.

These are important meetings for people who use public transportation. Please have this translated.

Estas son reuniones importantes para las personas que usan el transporte público. Favor de hacerlo traducir.

Essas são reuniões importantes para personas que usam transporte público. Favor traduzir.

Reyinyon sa yo se reyinyon ki enpòtan pou moun ki itilize transpò piblik. Tanpri fè tradwi avi sa a.

## MEMORANDUM

**To:** Transportation Planning and Programming Committee  
**From:** Anne McGahan  
**Date:** January 17, 2008  
**Re:** Illustrative Projects Selection for JOURNEY TO 2030

The December 6, 2007 Transportation Planning and Programming Committee (Committee) meeting included a discussion of illustrative projects. A memorandum was distributed that provided the definition of illustrative projects and information on previous Boston MPO actions on this subject and recent actions by other MPOs. At that meeting, the Chair directed staff to consider what the criteria should be for illustrative projects in JOURNEY TO 2030.

The definition of illustrative projects states that the financial plan in the Long-Range Transportation Plan may include, for illustrative purposes, additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available. Although illustrative projects are not part of the fiscally constrained transportation plan, the inclusion of a listing of such projects presents an opportunity for the MPO and transit agencies to identify additional projects for future consideration in the event that additional future funding sources were subsequently reasonably available.

As part of the JOURNEY TO 2030 process, staff spent a considerable amount of time developing criteria and rating projects with those criteria. The ratings were used in the selection of projects in the recommended plan. The actual project ratings can be found in Appendix C of JOURNEY TO 2030. For highway projects, the process was as follows:

1. The Universe of Highway Projects list was created and is composed of projects that were included in a previously adopted Regional Transportation Plan; projects previously studied, currently being studied, or in development; and projects included in comments received during the public outreach process for the 2000–2025 and 2004–2025 Plans and JOURNEY TO 2030. The highway Universe of Projects is in Appendix B.
2. A description was developed for each project if enough information was available for that project.
3. Each project that had enough information was then rated according to its consistency with MPO policies. These ratings are included in Appendix C along with additional mobility management system information on each project where available. In addition, staff provided a ranking of projects for Committee review. After a lengthy discussion, the Committee decided to publish the ratings without the rankings.

The Committee had initial discussions on project selection criteria in their December 15, 2005, January 5, 2006, and January 19, 2006 Committee meetings with discussions on the ratings and rankings at the October 5, 2006, November 30, 2006, and December 21, 2006 meetings. As a result of these meetings, the Committee also spent a considerable amount of time discussing the ratings and rankings for use in project selection.

For transit projects the process was as follows:

1. The 2003 Program for Mass Transportation established a list of feasible transit projects. Since the PMT used an extensive public outreach process, in which the MPO was involved, the MPO decided that this list would be used as the Universe of Transit project list for JOURNEY TO 2030. The transit Universe of Projects is in Appendix B.
2. During the PMT process, each project was evaluated and prioritized using performance measures to determine how well each project met the PMT goals and objectives. These goals and objectives are consistent with the MPO's policies.
3. In the PMT, the projects were then rated as a high, medium, or low priority within the same mode. These ratings are included in Appendix C.
4. The MPO adopted the PMT priorities for MPO transit projects.

The MBTA is now in the process of updating the 2003 PMT. Again this is a major undertaking that will prioritize transit projects and programs in the region. Their process is to develop visions, goals and objectives, develop steps to determine preferred mobility strategies, and develop targets to achieve the PMT vision. The anticipated outcome will be to propose packages of programs and projects that will provide the best mobility options for the region. Since this process is being undertaken, and the MPO is participating in that process, it is suggested that the MPO use this information in future long-range plan development.

Staff thinks that the criteria that was used for the selection of projects in the financially constrained plan should be consistent with those used for illustrative projects and should therefore be the same as that used in the selection of the recommended plan projects. Since these projects have already been rated as well as ranked using these criteria, staff thinks that this information should be used in any MPO consideration of possible projects to be included as illustrative projects in the Plan.

The illustrative projects that have been included in past transportation plans have all been expansion projects. A list of those projects is provided below.

## **Illustrative Projects in Past Long-Range Transportation Plans and Comments from JOURNEY TO 2030**

### *Requests for Projects in the JOURNEY TO 2030 Process:*

- T Under D – MassPort, ABC
- North-South Rail Link – Representative Mary Grant (Beverly), APT
- Red Line Extension to Route 128/I-95 – MAGIC
- Urban Ring 3 – CLF, ABC, Brookline, Fred Salvucci
- Light Rail/Silver Line – Avi Green
- Littleton, Route I-495/119 Exit – Senator Spilka
- I-495 Corridor Improvements – Senator Spilka, Paul Yorkis

### *Regional Transportation Plan 2004-2025 of the Boston Region MPO:*

- Urban Ring, Phase 3
- Silver Line South Extension to Ashmont and Mattapan

### *Boston Region MPO Transportation Plan 2000-2025:*

- Urban Ring, Phases 2\* & 3
- North-South Rail Link
- Light Rail on Washington Street

### *1997 Transportation Plan for the Boston Region*

- South Boston Piers Transitway, Phase 2 (South Station to Boylston)\*
- North-South Rail Link
- Inner Circumferential Transit (Urban Ring)
- Logan Airport Intermodal Transit Connector\*

Based on the recent discussion surrounding the Transportation Finance Commission Report and the need to maintain the existing infrastructure, the Planning and Programming Committee should first determine whether or not illustrative projects should be included in a Plan Amendment. If the Committee finds that illustrative projects should be included, the Committee can review the evaluation criteria ratings and rankings that were provided in the development of JOURNEY TO 2030 and determine if these should be used to choose illustrative projects. They can then determine how many illustrative projects and which should be selected.

\* Included in JOURNEY TO 2030

## MEMORANDUM

**TO:** Transportation Planning and Programming Committee

**DATE:** February 7, 2008

**FROM:** Hayes Morrison, TIP Manager

**RE:** Development of the FFY 2009 – 2012 TIP

The following is an overview of the Transportation Improvement Program (TIP) activities accomplished and currently underway in the development of the draft FFY 2009 – 2012 TIP and an outline of plans for work to be conducted this spring in this process.

### **IN JANUARY AND FEBRUARY:**

Staff have conducted TIP “How To” seminars on these dates:

**January 30, 2008**      TIP “How To” seminar at the Beverly Public Library – Barnett Room, 32 Essex Street, 9 AM.

There were 17 local officials and one consultant in attendance at this meeting. The questions were oriented to the completion of Proponent Provided Information forms and referencing the TIP Handbook.

**February 5, 2008**      TIP “How To” seminar at the Hanover Town Hall – Selectman’s Room, 550 Hanover Street, 9 AM.

There were eight local officials and two consultants in attendance at this meeting. The questions were much the same as they were in Beverly. People seem to be very informed about the process and the feedback has been positive.

And have one outstanding for the date below:

**February 13, 2008**      TIP “How To” seminar at the Framingham Town Hall – Blumer Room, 150 Concord Street, 9 AM.

To date 42 municipalities have RSVP’d for municipal TIP Input Day and 44 have requested information and reported they will be updating their forms. There are 156 projects for which municipalities would like to update the Project Information Forms and 123 to be presented at Municipal TIP Input Day.

### **IN MARCH AND APRIL:**

Municipal TIP Input Day is April 17. Approximately two weeks prior to this, printed TIP Input Books will be sent out to members of the Transportation Planning and Programming Committee with an updated evaluation matrix. In addition, TIP contacts will receive their municipality’s forms so that they will know what forms the members of the committee are reviewing.

**ROADWAY SAFETY PLANNING  
IN THE  
BOSTON REGION**

Maureen Kelly

*Reviewed by*

Kathy Jacob  
Efi Pagitsas  
Karl Quackenbush  
Pam Wolfe

January 24, 2008

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## **INTRODUCTION**

The purpose of this paper is to provide members of the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization (MPO) with an overview of the federal regulations and state policy that relate to the MPO's work in planning and programming transportation projects designed to increase roadway safety.

Under federal law, states are now required to implement a Strategic Highway Safety Plan (SHSP) in order to be eligible to expend the maximum amount of their allotted federal safety dollars. In 2006, Massachusetts developed an SHSP, which identified six key emphasis areas where the state will focus its safety efforts.

This paper's section on "MPO Planning Activities by SHSP Emphasis Area" (beginning on page 13) has been organized to show how the activities of the Boston Region MPO fit into SHSP emphasis areas. The following, final section describes other safety-related topics that pertain to the MPO's work. Both sections offer points for discussion about further work that the MPO might consider pursuing to improve safety on the transportation system of the Boston region.

## **FEDERAL POLICY BACKGROUND**

### **SAFETEA-LU Highway Safety Improvement Program**

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), signed into law in 2005, established the Highway Safety Improvement Program (HSIP) as a core program with separate funding. The HSIP is designed to address roadway safety problems and reduce fatalities and serious injuries on public roadways. The program is intended to allow states to target transportation funds for their most critical safety needs.

The legislation provides \$5.1 billion nationwide from federal fiscal year (FFY) 2006 to FFY 2009 for roadway safety improvement projects (primarily infrastructure projects; see attached list of eligible project types). Of that amount, \$880 million is set aside for eliminating hazards at railway-highway crossings. The remainder is distributed among the states according to a formula based on the following ratios:

- Each state's lane miles of federal-aid highways to total lane miles of federal-aid highways in all states
- Each state's vehicle miles traveled on federal-aid highways to the total vehicle miles traveled on federal-aid highways in all states
- Each state's number of fatalities on the federal-aid system to the total number of fatalities on the federal-aid system in all states

The legislation also provides that \$90 million is set aside nationally each fiscal year for construction and operational improvements on high-risk rural roads.<sup>1</sup> If a state certifies that it has met its needs for construction and operational improvements on high-risk rural roads, that state can use its portion of those funds for any safety improvement project eligible under the HSIP.

Flexible funding is allowed to states that have implemented a federally approved Strategic Highway Safety Plan (SHSP). These states may use up to 10% of their HSIP allotment for other, non-infrastructure types of safety projects, such as those that focus on education, enforcement, or emergency medical services, provided they meet their rail grade crossing and infrastructure safety needs as defined in their SHSPs.

Massachusetts developed an SHSP in 2006. The apportionment of HSIP funds to Massachusetts is \$15 million per year for FFY 2008 through FFY 2011.<sup>2</sup> Details on the

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<sup>1</sup> Defined as "rural major or minor collectors or rural local roads with fatal/incapacitating injury crash rates above the statewide average for those functional classes of roadways; or likely to experience an increase in traffic volume that leads to a crash rate in excess of the average statewide rate." (Federal Highway Administration, "Fact Sheets on Highway Provisions."  
<http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm>.)

<sup>2</sup> FHWA letter to EOTPW regarding the FFY 2008–2011 Transportation Improvement Program, May 4, 2007.

Commonwealth's SHSP are provided under the "Massachusetts Policy Background" section. SHSPs in general are discussed below.

## **Strategic Highway Safety Plans**

As stated in SAFETEA-LU, the purpose of an SHSP is "to identify the State's key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads."

States must have implemented an SHSP by October 1, 2007, in order to fully obligate their HSIP funds. Otherwise, a state would receive HSIP funding at FFY 2007 levels until an SHSP is implemented. It is advantageous for states to have an SHSP because it allows states to receive significantly more money for safety improvement projects. Without an SHSP, states would only be able to obligate funds for projects eligible under the Rail-Highway Crossings Program and Hazard Elimination Program, which were in effect before SAFETEA-LU was enacted.<sup>3</sup>

States are required to develop the SHSP in coordination with the governor's highway safety representatives, MPOs, regional planning agencies (RPAs), representatives of major transportation modes, state and local traffic enforcement officials, Operation Lifesaver,<sup>4</sup> and other stakeholders.

The SHSP must be a data-driven plan developed with input from four key sources, referred to as the "4 Es": engineering, education, enforcement, and emergency medical services.

States with SHSPs are required to:

- Identify safety problems on public roads using a crash data system to identify hazardous locations and determine which ones are in most need of improvement
- Establish "performance-based goals" for solving safety problems (both behavioral and infrastructure)
- Produce a program of projects to address those problems
- Evaluate the SHSP on a regular basis to ensure the accuracy of the data and to reassess the priorities of the proposed projects
- Report annually on at least 5% of the state's most hazardous locations, potential solutions, estimated costs of those solutions, and impediments to implementing the solutions
- Report on the progress of safety improvement projects and their results in terms of their effects on reducing fatalities and serious injuries

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<sup>3</sup> Prior to SAFETEA-LU, the Rail-Highway Crossings and Hazard Elimination Programs were funded through the Surface Transportation Program.

<sup>4</sup> Operation Lifesaver is a nonprofit public-education program focused on reducing collisions and increasing safety at railroad crossings and on railroad rights-of-way.

## **Other SAFETEA-LU Programs and Provisions Relating to Safety**

### ***Intelligent Transportation Systems***

Since the early 1990s, federal policy has promoted the use of intelligent transportation systems (ITS). The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) initiated the development of the National ITS Architecture, which provides the framework for regional ITS systems to conform to a national standard. SAFETEA-LU updated previous legislation by requiring the development of a five-year National Intelligent Transportation System plan, which set goals for the research and deployment of ITS in metropolitan and rural areas. The goals of the federal ITS program are among other things, to improve the efficiency (reducing congestion) and safety of the transportation system and improve response to crashes, natural disasters, and other emergencies.

### ***TRANSIMS***

SAFETEA-LU includes a provision for assisting states and MPOs to implement the Transportation Analysis Simulation System (TRANSIMS), a travel-forecasting program with several safety-related applications. These applications include congestion analysis, planning for responses to natural disasters and other transportation disruptions, and emergency evacuation studies. (This program is not being implemented in Massachusetts.)

### ***Data Improvements***

The legislation also includes a provision that provides grant funding for states to improve the quality and accessibility of their safety data, to link state data systems, and to improve the interoperability of systems.

### ***Other***

Other HSIP programs and provisions include:

- The Safe Routes to School Program, which enables and encourages primary and middle school students to walk or bicycle to school<sup>5</sup>
- A program for roadway safety improvements that benefit older drivers and pedestrians (for example, improvements to traffic signs and pavement markings)
- Penalties for states that have not enacted or enforced a drunk-driving law
- Permitting of idling-reduction facilities, which provide power to commercial vehicles at rest areas on interstate rights-of-way (this promotes reducing vehicle idling and increases safety by enabling truck drivers to rest)

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<sup>5</sup> The Safe Routes to School Program includes funding for infrastructure-related projects that improve walking and bicycling conditions for students who walk or bicycle to school. In Massachusetts, this program is administered by MassRIDES.

- Grants to a national nonprofit to conduct roadway safety programs aimed at improving the quality of data on road hazards and on design features that increase the severity of crashes, raising awareness of such hazards, and promoting safety research
- A grant to a national nonprofit that promotes bicycle and pedestrian safety
- Providing guidance to states on the improvement or replacement of highway features (such as bridge railings, guardrails, and barriers) of the National Highway System
- Regulations and studies concerning safety measures for people who work in close proximity to federal highways, such as toll collectors
- Work zone safety grants for injury prevention training and information distribution

## MASSACHUSETTS POLICY BACKGROUND

When Massachusetts developed its Strategic Highway Safety Plan in 2006, federal, state, regional, and local agencies and organizations with an interest in improving roadway safety were involved. The Boston Region MPO was among the stakeholders that participated in the development of the plan. MassHighway's commissioner signed the SHSP on behalf of the governor in September 2006, and the Federal Highway Administration approved the plan.

As stated in the SHSP, "over time, the SHSP will serve as an umbrella document that unifies the Commonwealth's overall approach to improving safety on all public roads." The overarching goal of the plan is to: "*reverse the increasing trend of traffic-related fatalities and injuries upon implementation of the Massachusetts SHSP (toward zero fatalities and injuries).*" Measurable goals are to: 1) "*achieve a 20% reduction from 476 (2004) lives lost in traffic-related fatal crashes by 2010*"; and 2) "*achieve a 20% reduction from 5,554 (2004) in nonfatal traffic-related injuries requiring hospitalizations by 2010.*"<sup>6</sup>

Based upon federal traffic safety statistics, the motor-vehicle-related fatality rate in Massachusetts is one of the lowest in the nation. In 2006, Massachusetts had a fatality rate of 6.68 persons per 100,000 residents, while the national rate was 14.24.<sup>7</sup> The number of roadway fatalities in Massachusetts increased between 1998 and 2001 (from 406 in 1998 to 477 in 2001), then flattened between 2002 and 2005 (to 459 in 2002, 462 in 2003, 476 in 2004, and 442 in 2005).<sup>8</sup>

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<sup>6</sup> Massachusetts Highway Department, *Massachusetts Strategic Highway Safety Plan*, September 2006, pp. 2-5 and 2-6.

<sup>7</sup> U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2006: Massachusetts*, p. 2.

<sup>8</sup> Governor's Highway Safety Bureau, *Massachusetts Highway Safety Performance Plan: Federal Fiscal Year 2007*, pp. 2-6 and 2-10.

## **SHSP Emphasis Areas**

The SHSP defines six key emphasis areas where the state should focus its safety efforts, sets goals under each emphasis area, and describes the role of various public agencies in meeting those aims. The emphasis areas and goals as stated in the plan are listed below.<sup>9</sup>

### ***Data Systems***

*Provide accessible, accurate, complete, consistent, integrated, and timely traffic records data to aid decision-makers working to reduce transportation related fatalities, injuries, and economic loss in Massachusetts.*

### ***Infrastructure***

*Reduce the number of fatalities and incapacitating injuries resulting from intersection and lane departure crashes and expedite safety-related infrastructure projects.*

### ***At-Risk Driver Behavior***

*Reduce the number of fatalities and incapacitating injuries involving unbelted drivers and passengers, speeding, and impaired driving.*

### ***Higher-Risk Transportation Users***

*Reduce the number of fatalities and incapacitating injuries involving young drivers and encourage greater compliance with the Massachusetts Junior Operator Law.*

*Reduce the number of fatalities and incapacitating injuries involving older drivers and encourage statewide implementation of infrastructure and system improvements that better accommodate older driver needs.*

*Design and manage the roadway system to reduce the risk to pedestrians and reduce pedestrian fatalities and injuries requiring hospitalization.*

*Design and manage the roadway system to reduce the risk to bicyclists and reduce bicyclist fatalities and injuries requiring hospitalization.*

*Raise the public awareness of motorcycle safety, educate riders and officials of the special vulnerabilities of motorcycle operation, and ultimately decrease the number of crashes involving motorcyclists.*

### ***Public Education and Media***

*Broaden the awareness of safety issues through dissemination of messages to the public and elected officials; assist other Emphasis Area Teams with implementation of their*

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<sup>9</sup> Massachusetts Highway Department. *Massachusetts Strategic Highway Safety Plan*. September 2006; 3-2 and 3-3.

*education- or media-related strategies; and assist the Executive Leadership Committee<sup>10</sup> with roll-out of the SHSP.*

### ***Safety Program Management***

*Work with the Executive Leadership Committee to institutionalize the SHSP through a Memorandum of Understanding (MOU) among agencies that includes a commitment to meet regularly to address safety issues raised by the Steering/Advisory Committee and to communicate how safety is being addressed within each individual agency.*

The SHSP describes first-year strategies toward meeting these goals. These “TIER I” strategies have been or will be implemented by various lead agencies, including the following: Executive Office of Public Safety and Security (EOPSS), Executive Office of Transportation and Public Works (EOTPW), MassHighway, Registry of Motor Vehicles (RMV), Department of Public Health (DPH), National Highway Traffic Safety Administration (NHTSA), Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), and University of Massachusetts Traffic Safety Research Program (UMassSafe).

At a December 2007 meeting of the SHSP Steering/Advisory Committee, a second set of strategies for moving forward was distributed (see attached). Participants were asked to consider whether their agencies would have an interest in taking a lead on these “TIER II” strategies.

### **Recent FHWA Guidance**

In May 2007, FHWA provided guidance that advised EOTPW and MassHighway to collaborate with MPOs in the state to establish a funding goal for the state’s safety program. FHWA recommended adopting a goal for obligating and expending the state’s annual federal apportionment of \$15 million per year statewide (from FFY 2008 to FFY 2011) on safety projects. The guidance recommends that the agencies consider establishing regional Transportation Improvement Program (TIP) targets for safety projects, creating a statewide line item, combining those two options, or employing another mechanism for determining how to allot safety funds.

FHWA also advised that the state should eventually only advance projects (funded by safety dollars) that are “derived from a Highway Safety Improvement Program (HSIP), a prioritized list of safety projects as determined by crash data.” FHWA noted that important parts of the HSIP are the Top 200 High Crash Intersection Location Report, (prepared by MassHighway), as well as a list of high-crash lane departure locations (prepared by MassHighway and UMassSafe) and a High Crash Interchange Location Report (which MassHighway is expecting to release soon).

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<sup>10</sup> The SHSP Executive Leadership Committee is an inter-agency group composed of top officials from state and federal agencies. The committee meets quarterly. The Steering/Advisory Committee is composed of agency staff members.

Through the end of FFY 2008, FHWA will determine eligibility for federal safety funds on a case-by-case basis, based on crash data. Thereafter, starting in FFY 2009, projects will be identified through the implemented safety plan.

In a December 2007 letter, FHWA directed the state to reexamine the Safety Program in the FFYs 2008–2011 State Transportation Improvement Program (STIP) and consider increasing the amount programmed for safety projects closer to the \$15 million per year goal.

## **REGIONAL POLICY BACKGROUND**

In the spring of 2007, the Boston Region MPO released its 25-year vision for transportation planning in the region. Chapter 7 of *JOURNEY TO 2030*, the regional transportation plan for the 101-municipality area of eastern Massachusetts, outlined the MPO's policy on enhancing safety on the transportation system and stated that the MPO's guiding principles are to:

- *Support designs and fund projects and programs that address safety problems and enhance safe travel for all system users. This includes designs and projects that encourage motorists, public transportation riders, bicyclists, and pedestrians to share the transportation network safely.*
- *Support, through planning and programming, the installation, operation, upgrading, and timely maintenance of system infrastructure, including intelligent transportation systems (ITS), to provide for safety.*
- *Participate in regional planning for safety initiatives, such as evacuation and contingency measures.*

## **MPO PLANNING ACTIVITIES BY SHSP EMPHASIS AREA**

This section has been organized to show how the activities of the Boston Region MPO fit into five of the emphasis areas defined in the Massachusetts SHSP (the areas that fall within the MPO's purview) and to offer points for discussion about work that the MPO might consider doing to improve the safety of the transportation system for the future. It is important to note that the MPO is one of many entities addressing these emphasis areas.

### **Data Systems**

Federal guidance is moving states toward prioritizing safety projects based on a data-driven process. As such, SAFETEA-LU calls for states to improve the quality, timeliness, and interoperability of data systems that are used to determine locations in need of safety improvements. As part of the SHSP, states should advance their capabilities for "*traffic records data collection, analysis, and integration with other sources of safety data.*"<sup>11</sup> (In addition to crash data, these other sources could include roadway, citation, medical, vehicle registration, and driver history data.) Massachusetts is currently receiving federal grant money to improve the quality and interoperability of data systems that would be used to identify problem locations.<sup>12</sup>

The Boston Region MPO is a stakeholder in the work underway to improve records collection and accessibility because having data that are timely and of good quality is crucial to the MPO's work in identifying safety needs in the region, developing solutions, prioritizing projects, and guiding investment decisions.

Currently, crash data from the RMV are a key resource used by MPO staff to determine high-crash locations in the region. MPO staff have used RMV data to produce the Top-1000 High-Crash Intersection List from 1995 to 2001. These data are also used in conducting traffic analysis studies (including traffic congestion monitoring); determining safety trends; developing accident diagrams that help identify infrastructure flaws within intersections; conducting bicycle and pedestrian studies; and evaluating projects for the Transportation Improvement Program (TIP).

#### ***Data Quality and Access to Data***

In 2001, the Commonwealth began using a new crash report format, which contains more data fields and is intended to provide more data on crashes. The new forms were

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<sup>11</sup> SAFETEA-LU, Section 148 of Title 23.

<sup>12</sup> SAFETEA-LU, Section 408 funding.

designed to conform to Model Minimum Uniform Crash Criteria (MMUCC) guidelines.<sup>13</sup> The purpose of MMUCC is to provide a means for states to improve the collection of crash data and collect data in a standardized way that facilitates comparisons across states.

While the new format offers a means for the collection of more detailed information on crashes, the post-2001 crash data files that are available to the MPO differ from the earlier data files in that some data fields are incomplete or missing, such as those that indicate whether the crash involved a bicyclist or pedestrian, whether there were traffic controls at the crash site, and fields that describe weather conditions, sequencing of events, and the ages of operators or injured parties. These data enable MPO staff to better determine whether crashes are infrastructure-related (due to poor signalization or intersection design flaws, for example) or are due to non-infrastructure-related factors (such as weather conditions or an inexperienced operator).

Also, the number of crash records in the post-2001 data files vary substantially across municipalities. MassHighway statistics on crash reporting show a decline in recent years in the number of reported accidents from some municipalities. In partnership with state agencies, UMassSafe recently conducted a survey of police departments to identify problems with crash reporting and potential solutions. Fifty-five percent of survey participants responded that data transfer from the police to the RMV could be improved by the use of electronic crash report submission. MassHighway, the RMV, and their consultants are addressing what is seen as an underreporting problem by contacting towns and assisting police to get the capability to submit crash reports electronically.

MPO staff have identified the need to have access to more comprehensive data that is consistent across municipalities, so that regionwide comparisons can be made and so that the results of studies that would determine the highest-priority locations in need of safety improvements in the region are not skewed.

The MPO's planning work would also be enhanced if MPO staff had access to the data needed to produce crash diagrams, which are useful for determining precisely where within intersections accidents are occurring. For certain projects, staff will visit police stations to access original police accident reports (containing the level of detail required to construct crash diagrams); however, this process is costly, time consuming, and labor intensive. In addition, MPO staff have identified the need for funding to support work to make databases more usable for MPO needs.

Having data sets that are more complete and comparable over time will likely become increasingly important when the SHSP is fully implemented, as the state will be required to report on whether implemented safety projects had the effect of reducing fatalities and serious injuries.

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<sup>13</sup> The MMUCC is a collaborative effort of the National Highway Traffic Safety Administration, Federal Highway Administration, Federal Motor Carrier Safety Administration, and Governors Highway Safety Association.

*Note:* Massachusetts is among the states that have developed a Crash Outcome Data Evaluation System (CODES). CODES links crash data to medical data. The system was developed by NHTSA in response to a mandate by Congress to study the effectiveness of seat belts and motorcycle helmets. The MPO does not currently have access to this database.

### ***MPO Activities***

To address the need for comprehensive data, the MPO staff is participating, along with MassHighway, in the work of the state's Traffic Records Coordinating Committee (TRCC), a multi-agency/organization group overseen by the Executive Office of Public Safety and Security (EOPSS). The TRCC's mission is to *"provide a forum for the creation, implementation, management, and dissemination of accessible, accurate, complete, consistent, integrated, and timely traffic records data to aid decision-makers working to reduce transportation-related fatalities, injuries, and economic loss in Massachusetts."*<sup>14</sup> (Any state agency with an interest in improving records coordination may be considered for membership on this committee.)

The TRCC is working to improve the accessibility and usefulness of six state data systems:

- Roadway Inventory System (EOTPW's Office of Transportation Planning)
- Crash, Driver, and Vehicles Systems (RMV)
- Citation/Adjudication System (Merit Rating Board)
- Injury Surveillance System (Department of Public Health and Division of Health Care Finance & Policy)

The TRCC recently conducted a needs assessment survey among agencies and organizations that use these data sets. In response to the survey, MPO staff requested improvements to data collection and stressed the need for agencies to provide access to complete crash data, to address underreporting of accidents, and to improve procedures for transmitting data between agencies.

MPO staff will monitor developments as the TRCC creates a plan for improving records collection and will articulate the MPO's data needs before this body. Staff will also keep abreast of pilot projects that address the issues of data timeliness, accuracy, and completeness.

In addition, MPO staff plan to coordinate with appropriate TRCC agencies, as opportunities arise, to conduct outreach to underreporting cities and towns in order to improve accident records collection. The MPO's annual TIP outreach process may provide opportunities for the MPO to communicate the link between accident reporting and a municipality's prospects for having its safety projects programmed in the TIP.

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<sup>14</sup> Traffic Records Coordinating Committee FFY 2006-2007 Charter.

## Infrastructure

As the SHSP is implemented, MPOs can participate, as the Boston Region MPO has been doing, by incorporating strong safety criteria in the project-planning process and developing processes for prioritizing safety projects, which would include identifying high-crash locations and problem intersections in each community.<sup>15</sup>

The SHSP specifically calls for measures to reduce intersection crashes and lane departure crashes on Massachusetts roadways.<sup>16</sup> Between 2002 and 2004, in this state, 39% of accidents at intersections resulted in fatalities or incapacitating injuries. Nearly a third of those accidents occurred at intersections with traffic signals. During this same time period, Massachusetts exceeded the national average for lane departure crashes, with those crashes representing 25% of all incapacitating-injury crashes and 46% of all fatal crashes in the state.<sup>17</sup> The SHSP states that regional agencies should support MassHighway's work to identify top intersection and lane departure crash locations in the region and develop location-specific strategies to mitigate the safety deficiencies.<sup>18</sup>

MassHighway is providing several tools for identifying problem areas. The agency has developed the Top 200 High Crash Intersection Location Report list for 2003 to 2005.<sup>19</sup> It has also released a draft of the top bicycle and pedestrian crash locations in the state, which it has compared to the intersection list to identify the most dangerous intersections. Road safety audits are underway at selected locations, and per MassHighway, future steps will include working with MPOs and RPAs to address safety problems at these locations. Also, MassHighway is currently developing a Top Interchange Crash List.

MassHighway and UMassSafe also conducted an analysis of lane departure crashes, which was completed in the spring of 2006. These data were mapped and distributed at the regional level, with the expectation that MPOs and RPAs would identify top locations in need of improvement. With funding from MassHighway, UMassSafe is conducting road safety audits at top lane departure crash locations in the state.

### *MPO Activities*

#### *Identifying High-Crash Locations*

In the past, the MPO developed the Top 1000 High Crash Intersection lists from 1995 to 2001 and lane departure crash maps. Currently, the MPO is conducting work to identify and recommend improvements for 15 intersections as well as performing other studies for bicycle and pedestrian intersection improvements.

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<sup>15</sup> Massachusetts Highway Department, *Massachusetts Strategic Highway Safety Plan*, September 2006, pp. 3-5 and 3-11.

<sup>16</sup> Intersection crashes are those that occur at four-way, T, Y, or five-or-more-point intersections. Lane departure crashes are those in which a vehicle runs off the road or collides head on with another object. (SHSP, p. 1-8.)

<sup>17</sup> SHSP, pp. 1-8 and 1-9. (Figures are based on analysis by UMassSafe.)

<sup>18</sup> SHSP, p. 3-5.

<sup>19</sup> These data include information on at-grade crashes, but not crashes that occur on highway overpasses, underpasses, or rotaries.

The MPO's Mobility Management System (MMS) is also used to identify areas in the region that could be in need of safety-related infrastructure improvements. Special studies are conducted that highlight corridors and intersections in need of safety improvements.

*Improving Safety through the Transportation Improvement Program*

The MPO has strong safety criteria that it uses in the TIP project-evaluation process so that safety is considered as a factor equal to other planning factors. In this process, the MPO considers "safety need" and "safety effectiveness."

Inputs to the MPO's evaluation process for highway improvement and expansion projects include proponent-provided information. On the MPO's Project Information Form (PIF), project proponents are asked to provide information about safety issues and crash history in the project area or at the transportation facility and to explain how the project will address safety issues.

Project evaluation generally includes a review of three years' worth of RMV crash data. The total number of crashes that occurred at the project location, number of fatalities, and number of accidents that involved pedestrians or bicyclists are collected from these data. MPO analysts also use RMV data to determine the top three intersections for crashes in the project's corridor. Beginning with the FFY 2009 TIP element, staff will check to see if the proposed projects are on the Top 200 High Crash Intersection Location Report list. (Prior to FFY 2009, staff used the Top 1000 High Crash Intersections lists.)

Average daily traffic (ADT) counts for the corridor are also analyzed to identify areas of congestion, which can impact safety. During the project review process, project proponents may provide ADT counts to supplement counts from the MPO's data sources or submit police records to substantiate safety problems.

For all proposed projects, MPO staff generate information about the possibility for bicycle and pedestrian accommodation, which could provide safer conditions for those users of the transportation system.

Projects programmed in the FFYs 2008–2011 TIP that provide safety improvements (including signalization improvements or improvements that address traffic operations problems at intersections in other ways) include the following:

- *Bedford, Billerica, and Burlington – Middlesex Turnpike (Mitre Extension), Phase 1* (includes improvements to two intersections; one improvement is the addition of turning lanes for safety)
- *Bedford, Billerica, and Burlington – Middlesex Turnpike Improvement Project, Phase 3* (improvements to four intersections along the Middlesex Turnpike, including traffic signal improvements and the addition of turning lanes for safety)
- *Boston – Tremont Street, Phase 1* (reconstruction includes safety improvements, pedestrian improvements, and traffic control signal upgrades)

- *Boston – Massachusetts Avenue* (safety improvements along Massachusetts Avenue from Albany Street to Westland Avenue that will improve traffic flow, enhance lighting, and provide new sidewalks and wheelchair ramps)
- *Concord – Route 2 (Crosby’s Corner)* (safety improvements at the intersection of Route 2, Cambridge Turnpike, and Route 2A that will provide safe access to homes and businesses along the corridor)
- *Everett – Route 99 (Broadway)* (improvements including traffic signal upgrades at two intersections along Route 99)
- *Foxborough, Norfolk, and Wrentham – Route 115 (Pond/Pine Street)* (safety and transportation improvements on Route 115 between Needham/North Street and Route 140, and on Pine Street between Route 115 and Route 1)
- *Newton – Route 30 (Commonwealth Avenue), Phase 3* (reconstruction of Commonwealth Avenue from the vicinity of Grant Avenue to the Boston city line, with the addition of new traffic signals at the intersections with Grant Avenue, Hammond Street, and Mount Alvernia Road/Old Colony Road)
- *Somerville – Beacon Street* (reconstruction of Beacon Street from the Cambridge city line to Oxford Street, including new sidewalks and signal improvements)
- *Wakefield – Salem Street – Three Intersections* (installation of traffic signals at the intersections of Salem Street with Pleasure Island Road, Montrose Avenue, and the Route 128 northbound on/off ramp)
- *Watertown – Intersection Improvements at Three Locations* (improvements that include four-way stop control and installation of traffic-sensing devices)
- *Weymouth – Route 53/Middle Street* (a road-widening project that includes improvements to the traffic signal at Route 53/Middle Street and a new signal installation at the intersection of Winter and Middle Streets)

Recent, completed MPO studies that directly address intersection and lane departure crashes include the following:

- *Mid-North Shore Subregional Transportation Study* (recommended transportation improvements for Lynn, Swampscott, and southern Salem that would reduce congestion, increase mobility, and enhance overall safety in the study area)
- *Newton Corner Rotary, Phase 2* (studied potential improvements to the rotary at Interchange 17 of the Massachusetts Turnpike that would improve safety)
- *Route 60, West Malden, and East Medford: Pedestrian Mobility, Bus Service, and Traffic Improvements Study* (addressed pedestrian safety issues in the Route 60 corridor)
- *Safety and Operational Improvements at Selected Intersections* (evaluated 15 intersections in the region to develop recommendations for improving safety for drivers, bicyclists, and pedestrians)
- *Safety and Operational Improvements for the I-93/Route 24 Interchange Study* (identified traffic safety and operational problems on the ramps and roadways at the I-93/Route 24 interchange and recommended improvements)

### *Next Steps*

As SAFETEA-LU will require states to evaluate the effectiveness of implemented safety projects in terms of reducing fatalities and serious injuries, MPO staff will keep abreast of activities at the state level and determine if the MPO could play a part in this work.

## **Higher-Risk Transportation Users**

### *Pedestrians and Bicyclists*

The SHSP identifies improving pedestrian and bicyclist safety as a role for MPOs and RPAs. Specifically, regional agencies can participate – with MassHighway as the lead agency – in identifying top pedestrian and bicycle crash locations and in developing and implementing location-specific strategies to mitigate safety deficiencies.<sup>20</sup>

Improving pedestrian safety may also encompass the needs of another group of higher-risk transportation users, persons over age 65. The SHSP states that accommodating the safety needs of the growing population of seniors will be an important part of transportation planning over the next decade. As implementation of the SHSP moves forward, statewide guidance on infrastructure improvements that would accommodate the needs of seniors will be developed.

The Metropolitan Area Planning Council conducted a survey, as part of the development of the MPO's Regional Bicycle Plan, which identified safety as a major concern among people considering bicycling as a means of transport. Forty-five percent of respondents reported that they would ride a bicycle more often for shopping or visiting friends if there were a safer route, and 43% reported that they would ride a bicycle to work more often if they had access to safer routes.<sup>21</sup>

### *MPO Activities*

The Boston Region MPO has been addressing pedestrian and bicycle issues on a number of levels.

The MPO aims to consider the accommodation of pedestrians and bicyclists in the evaluation of all TIP projects. As noted previously, the MPO uses proponent-provided information on safety issues and crash history and RMV data on crashes that involve pedestrians and bicyclists to evaluate the safety elements of proposed TIP projects. (MPO analysts use more than three years' worth of RMV data to evaluate these crash locations.)

In March 2007, the MPO released its Regional Bicycle Plan, which included a recommendation that the MPO incorporate pedestrian and bicycle accommodation as part of the "standard operating procedure" in the TIP project selection process. By doing so, the MPO would be in line with policies being implemented by the state. MassHighway's *Project Development and Design Guidebook*, for instance, calls for all MassHighway-

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<sup>20</sup>SHSP, p. 3-6.

<sup>21</sup> Boston Region MPO, *Regional Bicycle Plan*, March 2007, p. 16.

funded projects to consider pedestrian and bicycle accommodation in project planning, design, and construction for roadways upon which bicycles are allowed (such consideration is required by Massachusetts law).

The MPO has programmed funding for projects that increase safety and mobility for bicyclists and other users of the transportation system. Several trail projects are programmed in the FFYs 2008–2011 TIP: the Assabet River Rail Trail, Bruce Freeman Memorial Bicycle Path, Border to Boston Bikeway (design), Tri-Community Bikeway, Upper Charles Trail, and a bicycle path from Somerville to Belmont. Funding is also programmed for the MBTA Enhancement Program, a component of which includes bicycle rack improvements at transit stations. In addition, the MPO funds the Regional Bike Parking Program, which reimburses communities for the purchase of bicycle racks.

The MPO has also recently funded the Bicycle and Pedestrian Improvements in Town Centers and Bicycle and Pedestrian Improvements in Urban Centers studies, and work is now underway on the Regional Pedestrian Plan. Furthermore, the MPO conducts a Walkable Community Workshop Program through which staff work with interested communities to improve pedestrian safety and accessibility.

## **Public Education and Media**

This emphasis area deals largely with communications to the public and media regarding traffic safety. Since the Boston Region MPO has an established program for conducting outreach to the public and the media, the MPO is positioned to promote safety by that means. Through public workshops, distribution of materials to the press and municipal contacts, and its monthly newsletter, *TRANSREPORT*, the MPO staff plans to convey information about safety's place in the TIP process and in the MPO's long-range planning process.

## **Safety Program Management**

The agencies that compose the SHSP's Executive Leadership Committee have signed a Memorandum of Understanding (MOU) under which they have agreed to meet regularly and address issues raised by the Steering/Advisory Committee, which includes regional planning agencies. MPO staff are participating in the meetings of the Steering/Advisory Committee.

## **MPO PLANNING ACTIVITIES IN OTHER AREAS**

### **Intelligent Transportation Systems**

As noted previously, the federal ITS program is intended, among other things, to improve the efficiency and safety of the surface transportation system and improve emergency response to crashes, natural disasters, and other emergencies. The goal of the ITS program specifically includes an “emphasis on decreasing the number and severity of collisions.”<sup>22</sup>

EOTPW spearheaded the development of the Regional ITS Architecture for Metropolitan Boston, which was completed in 2004 and is consistent with the national architecture. The Boston Region MPO staff participated in the development of the architecture.

A number of ITS programs are currently operating in the region that serve traffic management, transit operation, traveler information, and emergency management functions. These programs include several MassHighway-operated systems: the Incident Management Program; the Massachusetts Interagency Video Information System (MIVIS), (which integrates video feeds from multiple ITS systems); the Traffic Operations Center; and the 511 Travel Information System. Other ITS systems in the region include the City of Boston’s Traffic Management Center, MassPike’s Central Artery/Tunnel Operations Control Center, the MBTA Operations Control Center, the Massport Landside Operations Control Center, electronic toll- and fare-collection systems, private traveler-information service providers, and smaller operations centers run by the Department of Conservation and Recreation and municipalities. The emergency management functions of the State Police, MBTA Police, Boston Emergency Management Agency, and Massachusetts Emergency Management Agency also rely on ITS systems.

### ***MPO Activities***

The Boston Region MPO has adopted as one of its guiding principles the notion of supporting ITS to provide for safety. In *JOURNEY TO 2030*, the MPO stated that one of its policies is to “*support, through planning and programming, the installation, operation, upgrading, and timely maintenance of system infrastructure, including intelligent transportation systems (ITS), to provide for safety.*”

MPO-funded projects with ITS elements are vetted prior to programming in the TIP to ensure that they adhere to Massachusetts’s Regional ITS Architecture. In the case of roadway projects, the MassHighway district offices and the MassHighway Project Review Committee determine compliance, and in the case of transit projects, the transit agency proposing the project determines compliance.

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<sup>22</sup> SAFETEA-LU (2005), Subtitle C – Intelligent Transportation System Research, Section 5303.

The MPO currently provides funding for operation of the City of Boston's Traffic Management Center. Funding is also programmed in the FFYs 2008–2011 TIP for the MBTA's Redundant Operations Control Center, Public Address System, and Enhancement Program (all of which include ITS components).

The MPO may want to consider suggesting to project proponents during the TIP process that ITS solutions (such as traffic signal preemption, signal timing improvements, and pedestrian warning systems) might be considered to improve safety and reduce congestion.

## **Evacuation Planning**

According to the SHSP, the state will be aiming to improve the security of the transportation infrastructure; this will include increasing efforts to inspect, monitor, and provide surveillance on roadway infrastructure. Related efforts will include work on plans for mass evacuations. MassHighway will be the lead agency in these efforts; however, other agencies may be called upon to contribute.<sup>23</sup>

### ***MPO Activities***

The Boston Region MPO has stated among its guiding principles the intention to participate in regional planning for safety. Specifically, in *JOURNEY TO 2030*, the MPO stated that one of its policies is to “*participate in regional planning for safety initiatives, such as evacuation and contingency measures.*”

Some MPO member agencies and municipalities have already initiated planning. The City of Boston has developed Operation Exodus, an evacuation plan that involves using the MBTA system and defined evacuation routes. With funding from the Federal Emergency Management Agency (FEMA), MAPC has worked with municipalities in the region to develop Natural Hazard Mitigation Plans.

With the approval of the MPO, staff could conduct further research into evacuation-planning efforts that are being made in the region (by EOTPW, MassHighway, Boston and surrounding municipalities, Homeland Security, and other MPOs) and determine the role the MPO might play in regional evacuation planning. For potential future work, the MPO staff does have the capability to conduct studies that simulate transportation impacts of potential emergency events, to analyze evacuation options, and to make recommendations for managing the transportation system in the event of a crisis.

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<sup>23</sup> Massachusetts Highway Department, *Massachusetts Strategic Highway Safety Plan*, September 2006, pp. 3-5 and 3-10.

## Projects Eligible for HSIP Funding

“(3) HIGHWAY SAFETY IMPROVEMENT PROJECT.—

“(A) IN GENERAL.—The term ‘highway safety improvement project’ means a project described in the State strategic highway safety plan that—

“(i) corrects or improves a hazardous road location or feature; or

“(ii) addresses a highway safety problem.

“(B) INCLUSIONS.—The term ‘highway safety improvement project’ includes a project for one or more of the following:

“(i) An intersection safety improvement.

“(ii) Pavement and shoulder widening (including addition of a passing lane to remedy an unsafe condition).

“(iii) Installation of rumble strips or another warning device, if the rumble strips or other warning devices do not adversely affect the safety or mobility of bicyclists, pedestrians, and the disabled.

“(iv) Installation of a skid-resistant surface at an intersection or other location with a high frequency of accidents.

“(v) An improvement for pedestrian or bicyclist safety or safety of the disabled.

“(vi) Construction of any project for the elimination of hazards at a railway-highway crossing that is eligible for funding under section 130, including the separation or protection of grades at railway-highway crossings.

“(vii) Construction of a railway-highway crossing safety feature, including installation of protective devices.

“(viii) The conduct of a model traffic enforcement activity at a railway-highway crossing.

“(ix) Construction of a traffic calming feature.

“(x) Elimination of a roadside obstacle.

“(xi) Improvement of highway signage and pavement markings.

“(xii) Installation of a priority control system for emergency vehicles at signalized intersections.

“(xiii) Installation of a traffic control or other warning device at a location with high accident potential.

“(xiv) Safety-conscious planning.

“(xv) Improvement in the collection and analysis of crash data.

“(xvi) Planning integrated interoperable emergency communications equipment, operational activities, or traffic enforcement activities (including police assistance) relating to workzone safety.

“(xvii) Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of motorists and workers), and crash attenuators.

“(xviii) The addition or retrofitting of structures or other measures to eliminate or reduce accidents involving vehicles and wildlife.

“(xix) Installation and maintenance of signs (including fluorescent, yellow-green signs) at pedestrian-bicycle crossings and in school zones.

“(xx) Construction and yellow-green signs at pedestrian-bicycle crossings and in school zones.

“(xxi) Construction and operational improvements on high risk rural roads.

## SHSP TIER II Strategies

**Implementation of the Massachusetts Strategic Highway Safety Plan**  
*Status of TIER II Strategies*

Strategy Description	Status (if known)
<b>CROSS-CUTTING SAFETY STRATEGIES</b>	
II-1. Develop a Safety Toolbox to provide technical assistance to local communities	This initiative is well underway. The toolbox papers have had an initial review and are in the editing mode. A contact phone number and URL have already been assigned. This initiative will be completed and go live by the end of the calendar year.
II-2. Tailor messages regarding speed, alcohol-impaired driving, and occupant protection to specific audiences, particularly in high-risk locations or communities	
II-3. Conduct an evaluation of traffic violations, convictions, penalties, dismissals, and pleas bargains in Massachusetts courts for offenses related to speeding, failure to wear seat belts, and alcohol impairment	
II-4. At the state and local levels, encourage greater knowledge and use of Massachusetts and national design guidelines	MHD has published its Project Development and Design Guidebook, and has convened statewide meetings and training sessions in its use. In addition, when the Work Zone Safety and Mobility Rule implementation goes into effect, there will be an update to portions of the Guidebook relative to work zones.
<b>DATA SYSTEMS STRATEGIES</b>	
II-5. Support activities to improve data collection procedures and data quality, including the use of electronic license swiping equipment for police officers	
<b>INFRASTRUCTURE EMPHASIS AREA STRATEGIES</b>	
II-6. Develop a safety problem assessment checklist	This is underway by MHD through an ASAP grant. A checklist will become part of MHD maintenance efforts to assess the condition of signalized intersections when routine work is performed at the intersection.
II-7. Evaluate the benefits of a statewide access management policy	

Strategy Description	Status (if known)
<b>AT RISK DRIVER BEHAVIOR STRATEGIES</b>	
II-8. Explore the possibility of developing and maintaining a web-based statewide safety calendar	The Safety Tips website has been started in conjunction with numerous transportation partners. It was activated on November 1st and is hosted by MHD, with links on the other partner's website, and links to the other partner's websites. The link to access the site is <a href="http://www.mhd.state.ma.us/safetytips">http://www.mhd.state.ma.us/safetytips</a> . HSD is assisting MHD with its Safety Tips Website, as are many others.
II-9. Support the statewide deployment of the State Courts Against Road Rage Program	
II-10. Coordinate clearinghouses of safety materials (HSD and MDPH)	
<b>HIGHER-RISK TRANSPORTATION SYSTEM USERS STRATEGIES</b>	
II-11. Conduct literature/program review to identify existing sources of information regarding best practices in prevention and driver behavior modification methods	
II-12. Develop statewide guidance on infrastructure improvements that accommodate older driver needs	
II-13. Conduct an assessment of the mobility needs of older persons in Massachusetts	
II-14. Develop and disseminate an awareness campaign to encourage planning for future mobility needs	
II-15. Publicize pedestrian and bicyclist safety resources	EOPSS/HSD expects to finalize in December 2007, its Bicycle-Skate-Scooter-Roller Blade-Helmet Poster for distribution statewide by spring 2008.
II-16. Provide input to the safety chapter of the updated Massachusetts Pedestrian Transportation Plan	
II-17. Consider providing reasonable bicycle and pedestrian accommodations in new roadway and bridge projects	
II-18. Publicize motorcycle safety resources	
II-19. Conduct detailed analysis of motorcycle crash problem in Massachusetts	
<b>PUBLIC EDUCATION AND MEDIA STRATEGIES</b>	
II-20. Use information on best practices from states and locals to enhance media campaign materials	

## Roadway Safety Planning in the Boston Region

February 7, 2008

## SAFETEA-LU

- Highway Safety Improvement Program
  - Safety is a core program with separate funding
  - Increased funding for safety projects
  - Requires states to develop Strategic Highway Safety Plan
  - Massachusetts SHSP approved by state in September 2006
  - Apportionment: \$15 million/year statewide from FFY 2008 - 2011

## Strategic Highway Safety Plan

- Purpose: *“to identify the State’s key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads.”*
- Multi-agency collaboration on implementation
- MassHighway is a lead agency on many activities

## Requirements for States

- Identify safety problems using a crash data system
- Establish performance-based goals
- Produce a program of projects
- Evaluate SHSP regularly
- Report annually on top 5% hazardous locations and potential solutions
- Report on progress of safety projects in terms of reducing fatalities and injuries

## Massachusetts SHSP Emphasis Areas

- **Data Systems**
- **Infrastructure**
- At-Risk Driver Behavior
- **Higher Risk Transportation Users**
- Public Education and Media
- Safety Program Management

## Data Systems

- Good data crucial for identifying safety problems and developing solutions
- MPO Data Needs: Complete and consistent data for region-wide comparisons and for identifying the most hazardous locations in the region
- Post-2001 Crash Data Files
  - Crash reporting varies across municipalities
  - Missing data fields

## Infrastructure

- Incorporating strong safety criteria in TIP process
- Developing processes for prioritizing safety projects
- Identifying high crash locations
  - Intersections
  - Lane Departures

## Identifying Hazardous Areas MassHighway and UMassSafe

- Top 200 High Crash Intersection Location Report
- Draft Top Bicycle and Pedestrian Crash Locations
- Top Interchange Crash List (under development)
- Lane Departure Analysis

## Higher Risk Transportation Users

- **Pedestrians**
- **Bicyclists**
- **Older Drivers (age 65+)**
- **Young Drivers (age 16-24)**
- **Motorcyclists**

## Higher Risk Transportation Users

- Designing and managing roadways to reduce risk to pedestrians and bicyclists
  - Identifying top crash locations
  - Implementing location-specific strategies
- Reducing risk to older drivers
  - Statewide guidance to be developed on addressing needs through infrastructure improvements

## Intelligent Transportation Systems

- Federal ITS Program goals include:
  - Improved emergency response
  - Decreasing the number and severity of collisions
- *JOURNEY TO 2030*:
  - MPO guiding principle: support ITS to provide for safety

## ITS MPO Activities

- TIP Projects with ITS conform to Regional ITS Architecture
- Examples of currently programmed ITS projects:
  - Boston's Traffic Management Center
  - MBTA Redundant Operations Control Center
  - MBTA Public Address System
  - MBTA Enhancement Program

## Evacuation Planning

- State plans to improve transportation infrastructure security, including planning for mass evacuations
- *JOURNEY TO 2030*:
  - MPO guiding principle: participate in regional planning for safety initiatives, such as evacuation and contingency measures

## Evacuation Planning

- MPO Member Activities:
  - Boston's Operation Exodus (an evacuation plan)
  - MAPC's Natural Hazard Mitigation Plans

## Evacuation Planning

- Potential MPO Activities:
  - Participate in regional planning (across jurisdictions)
  - Provide information on highway capacity, traffic counts, safety, chokepoints, and planned highway construction
  - Modeling to simulate transportation impacts from emergency events under various scenarios

## Summary: MPO Safety Activities

- Traffic Records Coordinating Committee
- Safety-related studies (MMS and other studies)
- TIP Development
- Funding ITS
- Inputs to evacuation plans