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

January 20, 2011 Meeting
10:00 AM – 1:00 PM, State Transportation Building, Conference Rooms 2 & 3, 10 Park Plaza, Boston
David Mohler, Chair, representing Jeffrey Mullan, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)

Decisions

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

- approve the work scope for the *I-495 Corridor/MetroWest Development Compact: Land Use Study*
- approve the minutes of the meeting of January 6 with recommended changes
- move the MPO elections from the Metropolitan Area Planning Council's (MAPC) annual meeting in May to MAPC's fall council meeting in October

Meeting Agenda

1. Public Comments

There were none.

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

D. Mohler reported the following items:

The Transportation Planning and Programming Committee will meet on January 27. The long-range transportation plan (LRTP) will be the topic on the agenda.

The Federal Highway Administration (FHWA) has awarded the 2010 Exemplary Human Environment Initiative Award to MassDOT for its Healthy Transportation Compact.

Luisa Paiewonsky, Administrator of the MassDOT Highway Division, has resigned for family reasons. D. Mohler praised Ms. Paiewonsky, noting that she has served 20 years in her position. He recommended that the MPO send a letter to Ms. Paiewonsky.

D. Mohler and Paul Maloney, FHWA, gave an update on the MPO's federal recertification review. The FHWA and the Federal Transit Administration (FTA) met with representatives of the Metropolitan Area Planning Council and are planning to send their draft report to the MPO in the near future, possibly by the end of next week.

3. Subcommittee Chairs' Reports – *Eric Bourassa, Metropolitan Area Planning Council*

Proposals requesting funding from the MPO's Clean Air and Mobility Program are due on February 1st.

4. Regional Transportation Advisory Council – *Laura Wiener, Regional Transportation Advisory Council*
The Advisory Council's January meeting was cancelled due to a snowstorm. The agenda for the February meeting includes a presentation on the MPO's Transportation Improvement Program (TIP) criteria. The Advisory Council will be preparing a letter to the MPO on that subject. The Advisory Council's Freight Committee will be preparing a comment letter regarding the Needs Assessment for the LRTP, which will be discussed at the Advisory Council's meeting in February.

5. Director's Report – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff*
There was no report.

6. I-495 Land Use Work Scope – *Eric Bourassa, Transportation Manager, MAPC, and Karl Quackenbush, Acting Director, Central Transportation Planning Staff*
Members heard a presentation on the work scope for the *I-495 Corridor/MetroWest Development Compact: Land Use Study* at the meeting of January 6. This study would be a joint effort by MAPC and the Central Massachusetts Regional Planning Agency (CMRPA), and it will be funded by the Executive Office of Housing and Economic Development (EOHED). The Transportation Planning and Programming Committee is asked to approve the work scope for MPO staff's contributions.

The study will compare a trends extended analysis (to the year 2035) to a smart growth scenario for the I-495 corridor. MAPC and CMRPA will work with municipalities in the study area to identify priority areas for development and preservation.

At the meeting of January 6, D. Mohler asked if the study's smart growth scenario will have land use pattern changes beyond those identified in MetroFuture. He also asked how those changes would affect the MPO's LRTP. E. Bourassa responded to this question by stating that MAPC hopes that the smart growth scenarios will be MetroFuture scenarios. He stated that MAPC will not ask the MPO to change the demographic set used for the LRTP as a result of this study.

A motion to approve the *I-495 Corridor/MetroWest Development Compact: Land Use Study* work scope was made by Joe Cosgrove, MBTA, and seconded by Paul Regan, MBTA Advisory Board. The motion passed unanimously.

7. Meeting Minutes – *Pam Wolfe, Manager of Certification Activities, MPO Staff*
A motion to approve the minutes of the meeting of January 6 – with a clarification to page 2 recommended by Steve Olanoff, Advisory Council – was made by P. Regan, and seconded by J. Cosgrove. The motion passed unanimously.

In response to a request from Jim Gallagher, D. Mohler directed staff to re-post documents relating to action items on the MPO's website for the public to easily access. Under the current practice, documents that have been posted for a previous meeting are

available on the website under "past meetings." P. Wolfe noted that draft meeting minutes are not posted on the public website until they are approved by the MPO.

Later in the meeting, the minutes were reopened at the request of Mary Pratt, Town of Hopkinton.

A motion to reopen the minutes of the meeting of January 6 was made by E. Bourassa, and seconded by Ginger Esty, Town of Framingham. The motion passed. MassDOT voted no. All others voted yes.

A motion to approve the minutes of the meeting of January 6 – with changes recommended by M. Pratt to page 9 – was made by J. Cosgrove, and seconded by E. Bourassa. The motion passed. MassDOT voted no. All others voted yes.

8. Recommendation on Local Member Election Process – *Eric Bourassa, Transportation Manager, MAPC, and Paul Regan, MBTA Advisory Board*
E. Bourassa discussed the two regional organizations' proposal to reschedule the date of the annual MPO elections from MAPC's annual meeting in May to MAPC's fall council meeting in October. (See attached memorandum.)

Holding the MPO elections in May is problematic for a couple of reasons. The MPO makes important decisions about the TIP in the late spring and newly elected members do not have the opportunity to become fully educated about the TIP process before having to participate in those decisions. Also, the MPO elections coincide with MAPC's Council elections, and this can be confusing. With the MPO's approval, MAPC and the MBTA Advisory Board would send letters to municipalities in the region before March to explain that the MPO election process would begin in August.

S. Olanoff suggested extending the time between the distribution of ballots and the election to six weeks.

A motion to move the MPO elections from MAPC's annual meeting in May to MAPC's fall council meeting in October was made by Melissa Santucci, Town of Braintree, and seconded by Jim Gillooly, City of Boston. The motion passed unanimously.

9. MBTA Charlie Card Trip-Paths Pilot Study Work Scope – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff*
Members were provided with the work program for the *MBTA CharlieCard Trip-Paths Pilot Study*. (See attached.) This study is in the MPO's current Unified Planning Work Program (UPWP).

K. Quackenbush described the work program. The study will provide the MPO with information on passenger origin and destination stations, which is important for transportation planning, but often costly to obtain. The MPO's planning work requires information on passengers' station to station travel both to calibrate the MPO's regional

model and for work that the MPO staff does for the MBTA to comply with FTA's National Transit Database (NTD) reporting requirements.

In this study, staff would use Automate Fare Collection (AFC) data to determine origin and destination information. The AFC system records information about where a passenger enters the transit system, but not where the passenger exits the system. In this study, staff would use the origin information for passengers taking round-trip journeys on the transit system to hypothesize their destinations, and create origin-destination tables.

Staff is proposing to work with the MBTA to use the AFC data. The MBTA would code the data, prior to releasing it to the MPO staff, in order to protect passenger privacy. The staff would process the data (from seven sequential days last fall), construct trips, and compare that data to other sources (such as the MBTA's on-board passenger survey). Staff would then recommend whether using AFC data is an effective method for creating origin-designation tables.

Members asked questions and made comments:

Will staff look at data from all seven days? (J. Gillooly)
Staff will look at all five weekdays and see if there is commonality. If there is a good match for weekdays, staff will construct tables for weekends. (K. Quackenbush)

Will fares using both CharlieCards and CharlieTickets be included in the AFC data? (J. Gillooly)
Yes. CharlieCards, Charlie Tickets and passes represent about 95% of the fares on the rapid transit system. (K. Quackenbush)

What does the MBTA do in-house with the AFC data? (P. Regan)
The MBTA has not done this analysis. (Joe Cosgrove, MBTA)

Do you have a sense of how good a match will be needed to decide if this technique will be good enough? (David Koses, City of Newton)
No, not yet. We will have to examine the data first. (K. Quackenbush)

If a passenger takes more than two trips a day, how would those trips be matched? (J. Gallagher)
The same logic could be applied. There would be an assumption that a passenger left from the same station that he or she entered. The time stamp would be used to order multiple trips. (K. Quackenbush)

If this method works, is there a potential to automate a lot of the work CTPS does manually now? (D. Mohler)
A specific activity – conducting in-person surveys for NTD reporting – would be obviated. (K. Quackenbush)

Are there any issues with matching data due to seasonality? Are there plans to do additional "data dumps"? (Lourenço Dantas, Massachusetts Port Authority)
There are no plans to do additional data dumps. Seasonality problems are not anticipated. The surveys staff will be using were conducted in the spring and fall when there are few problems. (K. Quackenbush)

Why is this valuable information? (L. Wiener)
This information is necessary for the MBTA to comply with NTD reporting requirements. The means by which the staff collects this data now (in-person surveys) is costly and produces sparse data. The proposed method would provide a much more data rich source and data that staff can have more confidence in. This information will also help in recalibrating the regional model to better replicate travel patterns and enable better travel forecasting. Additionally, the data can be used to determine conformity to MBTA load standards. (K. Quackenbush)

Wig Zamore, Mystic View Task Force and Somerville Transportation Equity Partnership, expressed support for the work program.

Members will vote on this work program on February 3.

10. Intercity Bus Study Work Scope – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff*
Members were provided with the work program for the *Intercity Bus Study*. (See attached.) K. Quackenbush described the work program, which will involve a comprehensive examination of the intercity, intracity, and commuter bus network in the state. The study will examine ridership, consider actions that the Commonwealth can take to retain healthy routes or expand portions of the system, and identify possible funding mechanisms.

The following tasks are included in the work program: creating a profile of the bus network; examining current and possible points of connection between services, including those operated by RTAs; identifying potential improvements; examining funding issues; identifying possible fare collection changes; reviewing capital needs; reviewing Department of Public Utility regulations; making suggestions for marketing services; and reviewing services offered by other states.

This work program will be funded by a Rural Intercity Transit Planning Contract.

Members asked questions:

Don't private bus companies already conduct this research? Is the private sector asking the state to coordinate these services? (P. Regan)
This study is a MassDOT Rail and Transit Division initiative. MassDOT spends Section 5311F funds on intercity bus routes. Part of MassDOT's mission is to preserve rural bus services. Given that there is interest in expanding rail service, there may be places where

bus service would make more sense than rail service and places where bus connections could be made to rail service. (D. Mohler)

Is this study trying to find out if there is good connectivity in the system or if it is affordable to provide commuter bus service to those who live far from the urban area? Providing publicly subsidized, commuter service to areas far from the city is unaffordable and is contrary to the principles of smart growth and transit oriented development. (P. Regan)
The objective of the work program is to get a handle on the bus system. Some bus companies do not take passenger counts. A statewide inventory is useful. The policy implications can be considered later. (E. Bourassa) The study may indicate areas that could be better served. (D. Mohler)

Will this study analyze services in which buses deviate from the fixed route? (G. Esty)
The focus of the study is on intercity and intracity routes. (K. Quackenbush) The study is not focused on regional transit authority (RTA) routes. (D. Mohler)

Will this study have to be programmed in the UPWP? (J. Cosgrove)
Yes. There will have to be an amendment to the UPWP. (D. Mohler) FTA does not require this to be programmed in the TIP, but MassDOT believes it would be appropriate to program it. (K. Quackenbush)

Members made other comments as well:

M. Pratt stated that the efficiency of RTA buses should be addressed since they are publicly funded.

D. Koses suggested that it would be useful to survey the amenities at bus pick-up points.

Steve Olanoff, Regional Transportation Advisory Council, expressed support for the marketing aspect of the work program. He noted that people may not know about available bus services.

D. Mohler also noted that MassDOT welcomes the MPO's comments on the work program. He stated that MassDOT will have the study done, if not by CTPS, then by another entity. MassDOT believes that CTPS is appropriately positioned to do this work.

11. Demographics – *Tim Reardon, Senior Regional Planner, MAPC*
T. Reardon gave a PowerPoint presentation on the socioeconomic projections and allocations of regional totals to municipalities. These projections, when adopted by the MPO, will be used in the MPO's long-range transportation plan.

He provided the regional population, housing, and employment figures which MassDOT issued last month, compared to figures from MetroFuture, MAPC's long-range land use plan. (See below.) The population and housing figures from the two sources are

comparable, but employment figures differ due to the economic situation and differences in methodology.

	MetroFuture	*Regional Totals*
Population	*395,000*	*405,310*
Housing Units	*260,000*	*267,524*
Employment	*242,000*	*56,161*
Employment (2010-30/35)	*170,000*	*153,000*

MAPC solicited information from its member municipalities about projects that have been completed, are under construction, and are planned. This information has been updated for 77 municipalities in the region representing about 90% of the region's population. MAPC collected and verified data on approximately 1,700 projects. MAPC collected this data by employing an interactive web tool that allows municipalities to update information online.

The following figures are for municipalities in the region, not including Boston:

Housing Units		*66,000*
	Already Complete	*19,000*
	Under Construction/Planned	*47,000*
Jobs		*171,000*
	Already in Place	*32,000*
	In Development/Planned	*139,000*

The following figures are for Boston:

Housing Units		*36,000*
	Already Complete	*5,000*
	Under Construction/Planned	*31,000*
Jobs		*201,000*
	Already in Place	*17,000*
	In Development/Planned	*183,000*

MAPC applied a "discount" to projects that are not already in construction based on several factors such as: a project's planning or permitting status; whether a project is a Chapter 40B development; if a project has environmental issues or if it has a MEPA certificate; if it is located in a community oriented development area or near transit; and development type.

T. Reardon showed maps indicating the projected locations of housing and employment development. He then provided figures showing the discounted figures compared to the regional totals:

	Regional Totals	*Community Comment After Discounting*
Housing (2000-35)	*268,000*	*87,000*
Employment (2010-35)	*153,000*	*157,000*

These figures show that economic development in the pipeline now comprises all the projected regional employment growth.

Members asked questions:

How are stalled projects handled? Do the maps show what is permitted or the discounted value that MAPC has applied? (D. Mohler)
The maps show what is permitted. The discounted figures are used in the projections. (T. Reardon)

Is there any indication about which employment sectors will be coming back? (M. Santucci)
The data was broken out by sector and employment ratios were applied. There were a lot of retail jobs. (T. Reardon)

Was the EMC development in Southborough counted among the projects in the 101 municipalities of the MPO region? (M. Pratt)
The project was divided among the two towns that it is located in. (T. Reardon)

Are the jobs in the employment pipeline generally those that will be developed in the short-term rather than toward 2035? (J. Gillooly)
Long-term institutional plans and major zoning initiatives, which may have a 25 year horizon, are included. The improvements in Quincy Center, for example, will have a 20-year build-out. (T. Reardon)

What would your argument to the state be? Are their regional totals not valid or should they be adjusted? (J. Gillooly)
The state projections show a rapid economic recovery from 2010-20. The challenge after 2020 will come from a constricting labor force with the retirement of the Baby Boomer generation. For the projections, most of the jobs were allocated to the 2010-20 years. The employment numbers should not be increased without increasing the population numbers. (T. Reardon)

Where is the disconnect on the housing trends between the regional totals and MAPC's projections? (J. Gillooly)
Municipalities are more focused and optimistic on economic development. (T. Reardon)

Why is not much growth shown in the I-495 corridor? (G. Esty)

The percentage of growth in the corridor is high, but the absolute values are low. MAPC received comments from almost every municipality in the I-495 corridor. (T. Reardon)

Could the low housing number be due to one- or two-unit housing units? (D. Koses)
It's possible, but municipalities did provide information on those types of units. (T. Reardon)

Will the communities that did not comment to MAPC show no growth in employment? (D. Mohler)
Yes. A next step may be to look at the distribution of jobs and employment sectors and reallocate figures to communities that did not provide information. The communities in which there would be significant job growth have responded. (T. Reardon)

What are you proposing for the next steps? (J. Cosgrove)
The next steps will involve scrutinizing community comments for additional discounting, checking with municipalities on certain numbers, researching the location of recent or likely employment losses, and redistributing figures based on that information. (T. Reardon)

When will MAPC provide the final projections to the MPO? The schedule for the LRTP has the MPO voting on the projections next week. (Anne McGahan, Plan Manager, MPO Staff)
The draft projections will be available for next week. MAPC still needs to work through issues involving discounting, and can come back to the MPO with recommendations for resolving those issues. (T. Reardon)

Much of the projected growth in the Seaport District was predicated on the opening of Silver Line 3, which has not occurred. Did MAPC go into that level of detail? (D. Mohler)
No, but MAPC did compare the permitted size of developments and the actual build size. (T. Reardon)

Members made other comments and suggestions:

J. Gillooly suggested that MAPC provide more specificity on the upper range of figures on the housing map.

J. Gillooly stated that he would like to have the opportunity to discuss the figures with colleagues prior to the MPO's vote. He suggested that there be a five percent reserve account to use for disagreements on the allocation of numbers.

M. Santucci commented that the figure for the employment projection (157,000) may actually be lower because jobs lost in the poor economy would need to be re-established.

On another topic, J. Cosgrove noted that the MBTA would be requesting an adjustment to the UPWP to address a funding issue regarding the *Positive Train Control* project. Members will address this item at the meeting of February 3.

12. Plan Update – *Anne McGahan, Plan Manager, MPO Staff*
Members were provided with a revised schedule for the development of the long-range transportation plan (LRTP). (See attached.) A. McGahan summarized the schedule.

Staff will post the draft Needs Assessment chapters for the radial corridors by January 25, in advance of public outreach events that will be held in February. Staff had planned for the MPO to vote to adopt the demographic projections by January 27 so that modeling work could begin. The modeling of the 2035 No Build network would then be completed by March 7. The current schedule allows for the running of two Build model runs. The schedule cannot be adjusted to change milestones or dates currently scheduled to take place after May 5; this schedule must be kept to allow the MPO to approve a TIP that comes from a conforming (for air quality) LRTP.

Members discussed the timing of the MPO's action to adopt the demographic projections. If members delay their vote until February 3, staff would not have a portion of the Needs Assessment to release for public review. J. Gillooly expressed that members should have time to review the demographic information with colleagues prior to the MPO's vote. L. Dantas commented that it would be good to stay on schedule so that there could be two Build model runs showing alternatives for the LRTP's network of projects. Following the discussion, T. Reardon stated that MAPC can provide the demographic figures to the MPO at the start of business on January 26, prior to the MPO's meeting on January 27. The projections will be an action item at the meeting of January 27.

A. McGahan then provided an overview of a draft outline for the LRTP document, *Paths to a Sustainable Region*. (See attached.) In response to a question from D. Koses, A. McGahan stated that staff can begin writing the LRTP chapters after the Needs Assessment is finished.

E. Bourassa inquired as to when MassDOT would provide the financial figures for the LRTP.

D. Mohler directed staff to prepare a schedule of the LRTP development broken down by MPO meetings.

J. Gallagher asked for a similar schedule for the public process. A. McGahan replied that the MPO is providing information on the MPO's website, in *TRANSREPORT*, and at public meetings. The MPO is accepting public comments throughout the LRTP development process. P. Wolfe added that information is also being released on MPOinfo – the MPO's e-mail listserve – and that the Regional Transportation Advisory Council will be providing significant reviews. D. Mohler asked staff to prepare a document that summarizes the public outreach for the LRTP.

13. Route 126 Corridor: Transportation Improvement Study, Bellingham to Framingham – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff, and Seth Asante, Project Manager, MPO Staff*

S. Asante gave a report on the *Route 126 Corridor Transportation Improvement Study*. (See the attached PowerPoint presentation.) The study examined the Route 126 corridor from Bellingham to Framingham, which has traffic congestion, safety, and pedestrian mobility problems. These problems were identified through the MPO's Congestion Management Process and from concerns voiced by the communities along the corridor.

The majority of Route 126 is owned and maintained by municipalities in the corridor, however MassDOT owns maintains portions of the roadway in Ashland, Bellingham, and Holliston. The average daily traffic on Route 126 ranges from 11,000 to 30,000 vehicles per day.

The objective of the study was to identify the transportation-related problems along the corridor and to evaluate multi-modal solutions to those problems. Prior to beginning the study, the MPO formed an Advisory Task Force made up of state elected officials, representatives of the municipalities in the corridor, MassDOT, MAPC, the MetroWest RTA, the 495/MetroWest Partnership, MetroWest Regional Collaborative, and SouthWest Advisory Planning Committee. Two public meetings were held and the MPO staff presented information about the existing conditions on the corridor at an MAPC subregion meeting. Staff received feedback from the Advisory Task Force and from municipalities in the corridor.

Several problems were identified during the study: pedestrian and bicycle circulation problems, a high number of crashes at intersections, traffic congestion, congestion that impacts transit operations, and poor drainage and pavement conditions.

The MPO staff and Advisory Task Force developed recommendations to address those problems. Those recommendations include:

- creating new sidewalks, replacing damaged sidewalks, improving signage at midblock crossings, improving lighting, and installing pedestrian crossing beacons
- installing new traffic signals at certain locations, retiming and upgrading traffic signals, and making geometric improvements to improve traffic flow
- realigning certain roadway approaches to improve sight distance, and implementing traffic calming measures
- rehabilitating pavement, and improving drainage infrastructure

S. Asante showed maps highlighting the locations of recommended improvements. (Shown on attached PowerPoint presentation.)

The next steps would be for municipalities to initiate projects through the MassDOT and MPO processes, advance projects to the design stage, and determine whether some projects would qualify for Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds.

Members then made comments and asked questions:

G. Esty expressed concern that the portion of Route 126 in the downtown Framingham area was excluded from the study. S. Asante noted that Framingham was represented on the Advisory Task Force, and that the MPO staff was advised by municipal personnel not to study that area since BETA Engineering was conducting a study of that portion of the corridor at the time. G. Esty remarked upon one of BETA's recommendations – to sink Route 135 under Route 126 – and expressed that the MPO should have been studying the whole corridor rather than a contractor with a financial interest. K. Quackenbush added that the grade separation is a larger issue than could be handled in the scope of the MPO study and that addressing that portion of the corridor would have consumed too large a fraction of the study's budget. The purpose of the study was to examine parts of the corridor that are not already being studied.

M. Pratt expressed support for G. Esty's comments and opposition to the proposed grade separation. She also expressed that there were insufficient public meetings about the study in the MetroWest and Framingham area. S. Asante noted that there was a meeting in Ashland which was attended by the state senators representing the MetroWest municipalities.

M. Pratt asked if staff has communicated the study recommendations to the Town of Bellingham, which has received MPO funds for a project to improve Pulaski Boulevard. S. Asante replied that staff has discussed the recommendations with Bellingham's public works director and town manager, who are in agreement with the staff's assessment.

14. State Implementation Plan Update – *Matthew Ciborowski, Office of Transportation Planning, MassDOT*

M. Ciborowski provided an update on several projects included in the State Implementation Plan:

Fairmount Line Improvement Project
Construction is on-going at a variety of locations. Two contracts were awarded in December for bridge construction in the Neponset area. The contract to build Newmarket Station has been awarded and the project is under construction. Community issues related to the Blue Hill Avenue Station are still being worked on.

Construction of 1,000 New Parking Spaces
This project is on target to be completed on schedule.

Green Line Extension
The MBTA has advertised for Green Line vehicle procurement. MAPC will be hosting a community visioning process regarding a proposed terminus at Route 16. The process will kick-off on February 16. MAPC is conducting a land use study for the Route 16 area, which will consider transit oriented development.

15. Members Items
There were none.

16. Adjourn
A motion to adjourn was made by Tom Kadzis, City of Boston, and seconded by G. Esty. The motion passed unanimously.

Transportation Planning and Programming Committee Meeting Attendance
Thursday, January 20, 2011, 10:00 AM

Member Agencies	Representatives and Alternates
MassDOT	David Mohler
MassDOT Highway	David Anderson
	John Romano
City of Boston	Jim Gillooly
	Tom Kadzis
City of Newton	David Koses
City of Somerville	Michael Lambert
Massachusetts Port Authority	Lourenço Dantas
MAPC	Eric Bourassa
	Eric Halvorsen
MBTA	Joe Cosgrove
MBTA Advisory Board	Paul Regan
Regional Transportation Advisory Council	Laura Wiener
	Steve Olanoff
Town of Bedford	Richard Reed
Town of Braintree	Melissa Santucci
Town of Framingham	Ginger Esty
Town of Hopkinton	Mary Pratt

MPO Staff/CTPS
Michael Callahan
Maureen Kelly
Robin Mannion
Anne McGahan
Hayes Morrison
Efi Pagitsas
Sean Pfalzer
Karl Quackenbush
Pam Wolfe

Other Attendees	
Matthew Ciborowski	MassDOT Office of Transportation Planning
Jim Gallagher	
Paul Maloney	Federal Highway Administration
Tom O'Rourke	Neponset Valley Chamber of Commerce
Karen Pearson	MassDOT Office of Transportation Planning
Chris Reilly	Town of Lincoln
Bryan Slack	MassDOT District 3
Wig Zamore	Mystic View Task Force/ Somerville Transportation Equity Partnership

Route 126 Corridor Transportation Improvement Study

January 20, 2011

Seth Asante

Boston Region Metropolitan Planning Organization

OUTLINE

- Background
- Public participation
- Problems
- Recommendations
- Next steps

STUDY ORIGIN

- The corridor is characterized by traffic congestion and pedestrian mobility problems.
- Community officials expressed concerns about pedestrian circulation and safety problems.
- The MPO included the study in the FFY 2009 and FFY 2010 UPWPs.

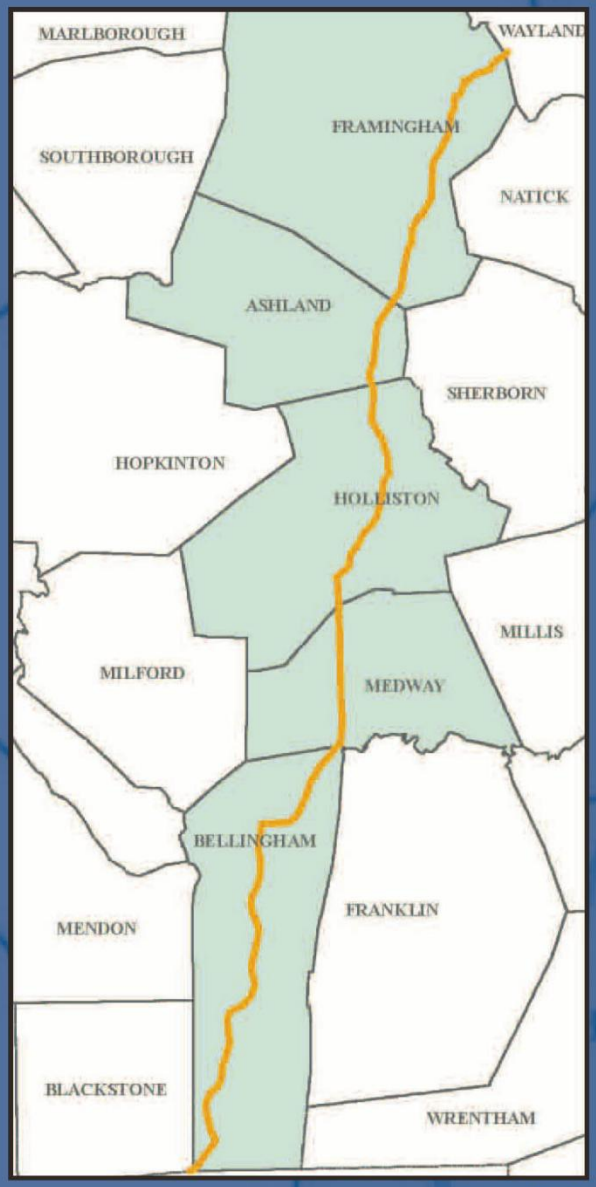
THE ROUTE 126 CORRIDOR

- Corridor: from Bellingham to Framingham
- Land uses: residential, commercial, educational, recreational, and religious
- Jurisdiction: town or MassDOT Highway Division
- Traffic: 11,000 - 30,000 vehicles per day

Route 126 Corridor:

Transportation Improvement Study

Bellingham to Framingham



Boston Region Metropolitan Planning Organization

STUDY OBJECTIVES

- Identify transportation-related problems
- Evaluate multimodal solutions to the problems

PUBLIC PARTICIPATION

- State elected officials
- Representatives from Ashland, Bellingham, Framingham, Holliston, and Medway
- MassDOT, MAPC, and MWRTA
- 495/MetroWest Partnership, MetroWest Regional Collaborative, and SouthWest Advisory Planning Committee

PROBLEMS

- Pedestrian/bicycle circulation problems
- Intersections with high number of crashes
- Traffic congestion at several locations
- Congestion also impact transit operations
- Poor drainage and pavement condition

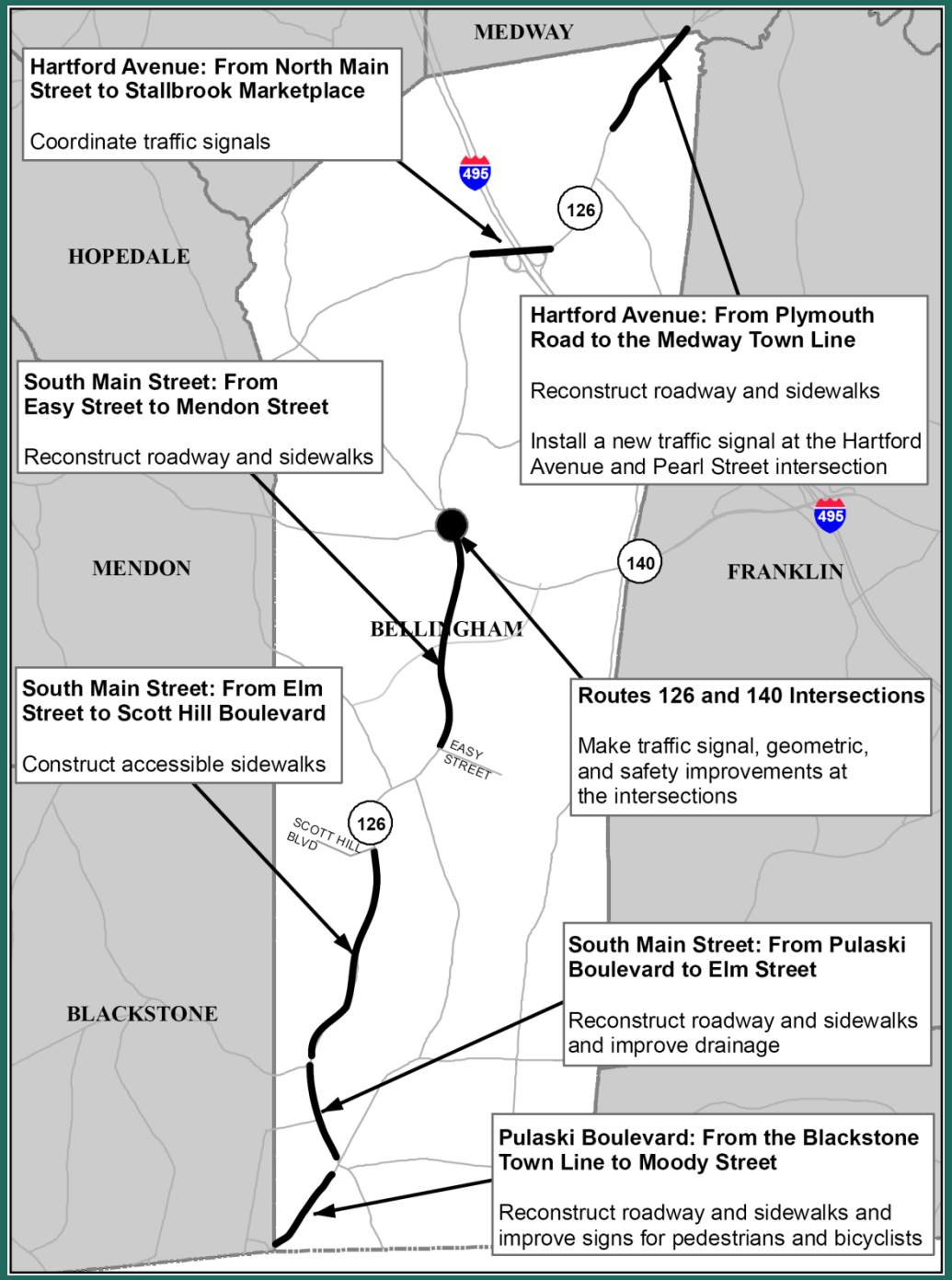
RECOMMENDATIONS

- **Pedestrian/bicycle mobility**
  - New sidewalks, replacement of broken and crumbled sidewalks, midblock crossings, crosswalk enhancements, and improved signage
- **Traffic congestion**
  - New traffic signals, retiming and coordination of traffic signals, equipment upgrade, geometric improvements

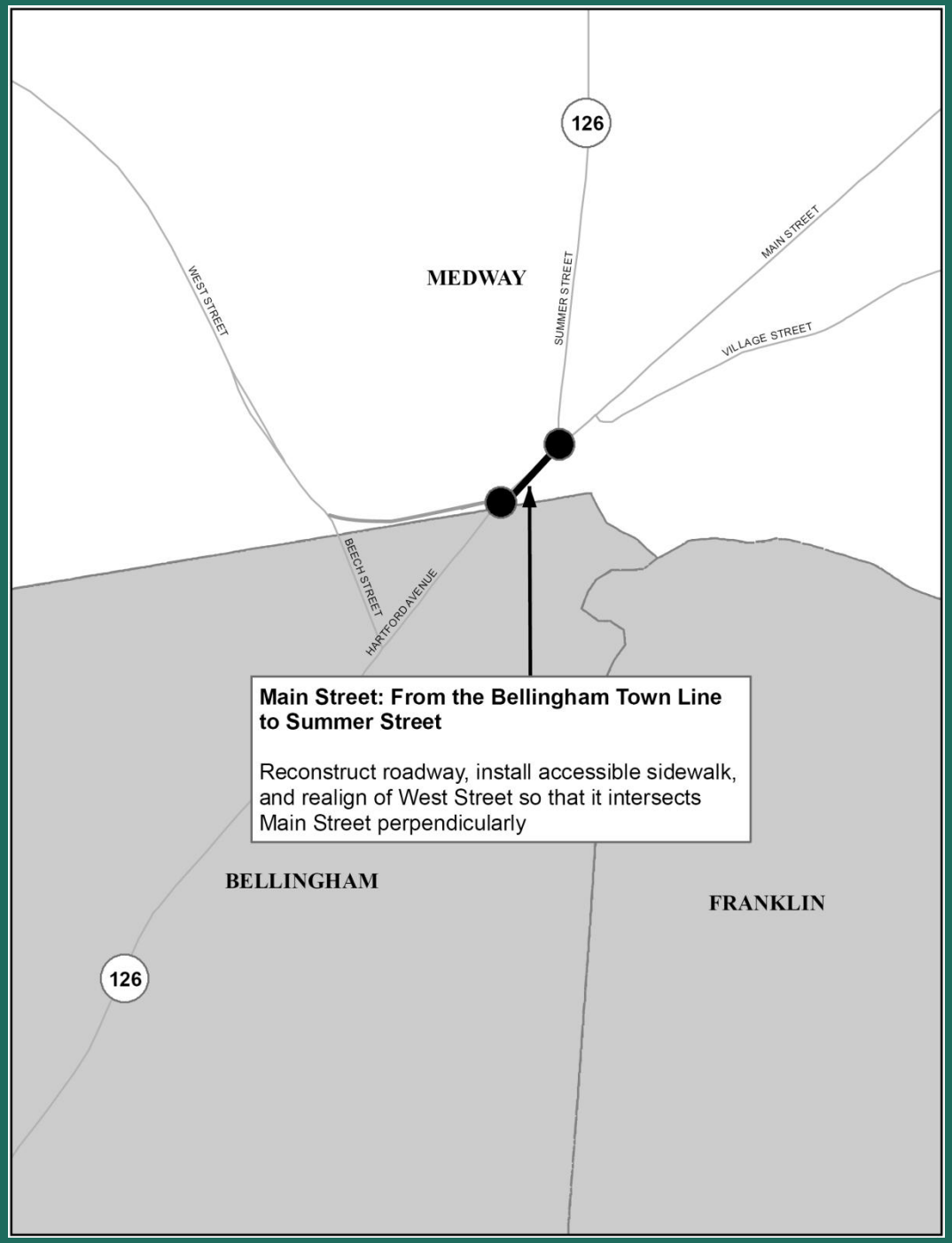
RECOMMENDATIONS

- **Traffic safety**
  - Improved sight distance and signage, reduced conflicts, traffic calming
- **Pavement and drainage**
  - Pavement rehabilitation and drainage-related improvements

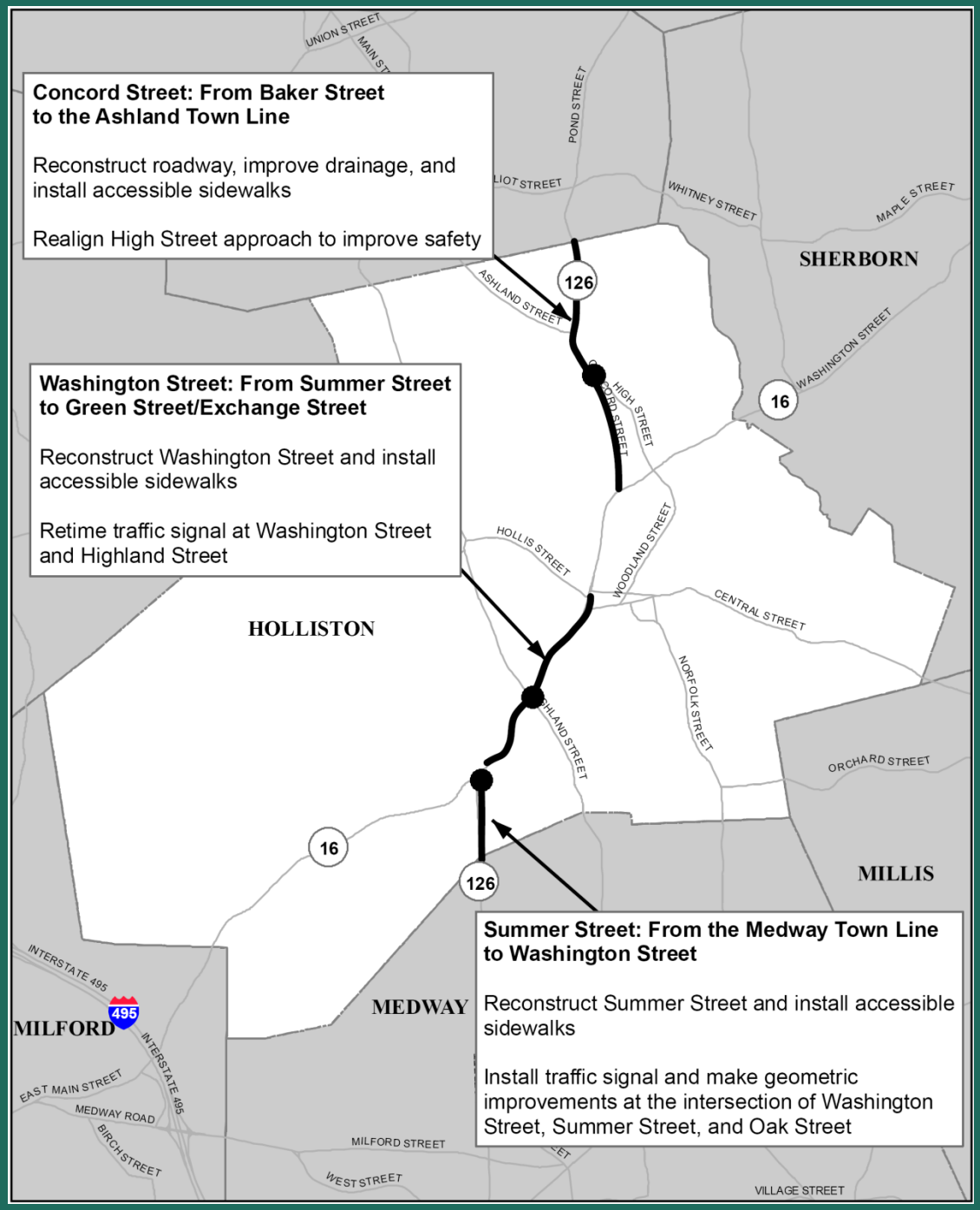
BELLINGHAM


MEDWAY
Hartford Avenue: From North Main Street to Stallbrook Marketplace
Coordinate traffic signals
495
126
HOPEDALE
Hartford Avenue: From Plymouth Road to the Medway Town Line
Reconstruct roadway and sidewalks
Install a new traffic signal at the Hartford Avenue and Pearl Street intersection
South Main Street: From Easy Street to Mendon Street
Reconstruct roadway and sidewalks
495
MENDON
140
FRANKLIN
BELLINGHAM
Routes 126 and 140 Intersections
Make traffic signal, geometric, and safety improvements at the intersections
South Main Street: From Elm Street to Scott Hill Boulevard
Construct accessible sidewalks
EASY STREET
SCOTT HILL BLVD
126
South Main Street: From Pulaski Boulevard to Elm Street
Reconstruct roadway and sidewalks and improve drainage
BLACKSTONE
Pulaski Boulevard: From the Blackstone Town Line to Moody Street
Reconstruct roadway and sidewalks and improve signs for pedestrians and bicyclists

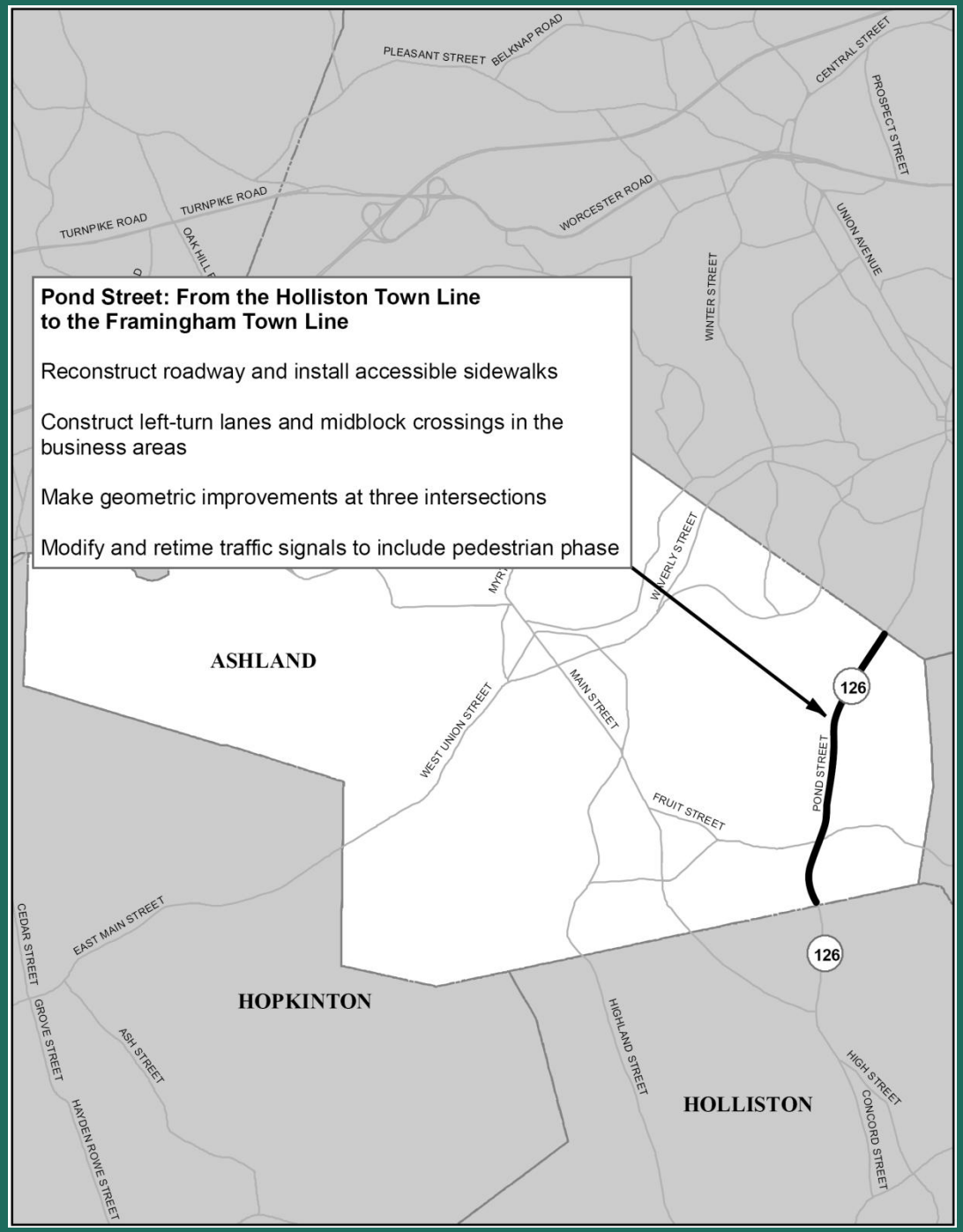
MEDWAY


126
MEDWAY
WEST STREET
SUMMER STREET
MAIN STREET
VILLAGE STREET
BEECH STREET
HARTFORD AVENUE
Main Street: From the Bellingham Town Line to Summer Street
Reconstruct roadway, install accessible sidewalk, and realign of West Street so that it intersects Main Street perpendicularly
BELLINGHAM
FRANKLIN
126

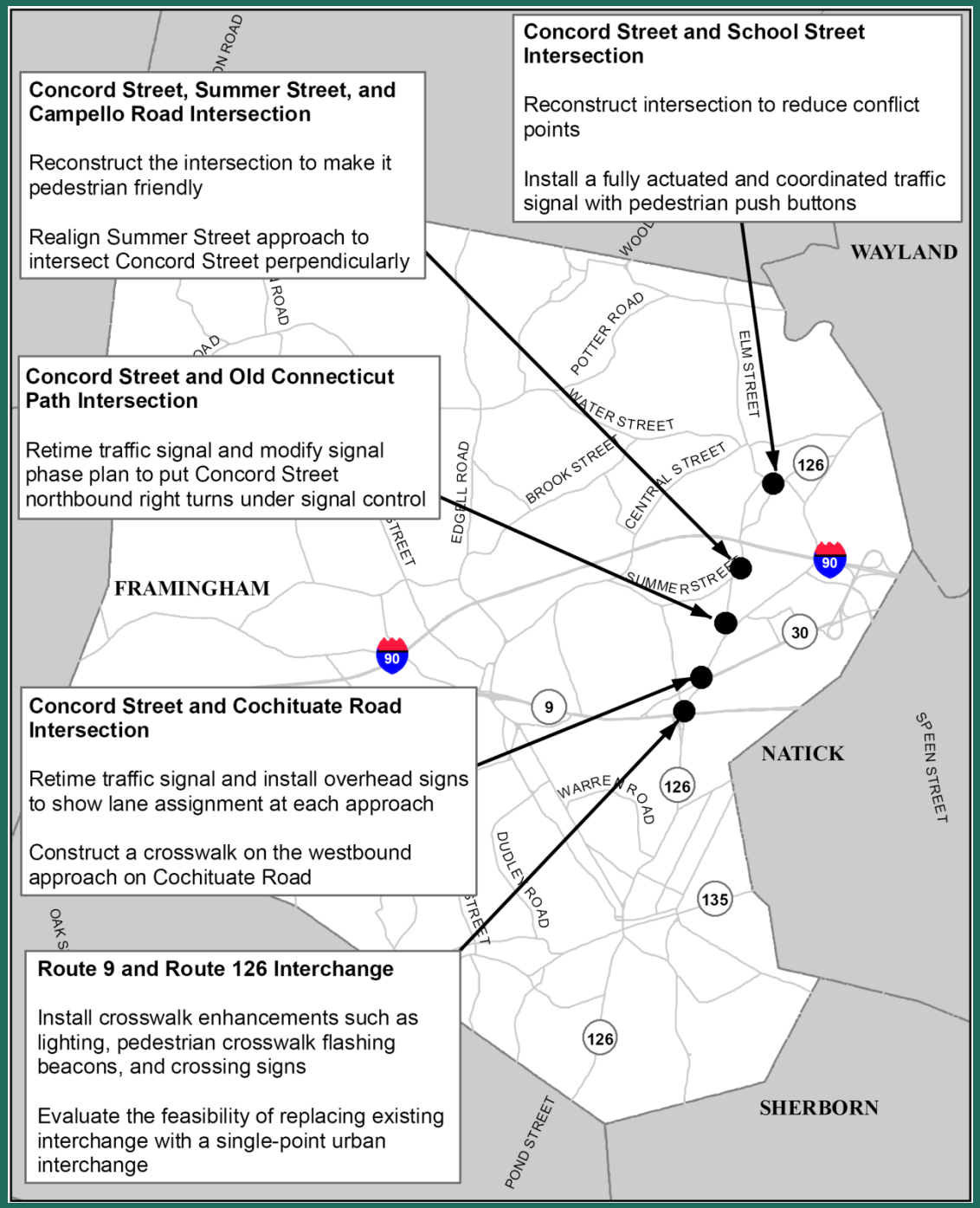
HOLLISTON


Concord Street: From Baker Street to the Ashland Town Line
Reconstruct roadway, improve drainage, and install accessible sidewalks
Realign High Street approach to improve safety
Washington Street: From Summer Street to Green Street/Exchange Street
Reconstruct Washington Street and install accessible sidewalks
Retime traffic signal at Washington Street and Highland Street
Summer Street: From the Medway Town Line to Washington Street
Reconstruct Summer Street and install accessible sidewalks
Install traffic signal and make geometric improvements at the intersection of Washington Street, Summer Street, and Oak Street
HOLLISTON
SHERBORN
MILLIS
MEDWAY
MILFORD
UNION STREET
POND STREET
WHITNEY STREET
MAPLE STREET
ASHLAND STREET
HIGH STREET
WASHINGTON STREET
HOLLIS STREET
WOODLAND STREET
CENTRAL STREET
NORFOLK STREET
ORCHARD STREET
INTERSTATE 495
EAST MAIN STREET
MEDWAY ROAD
BIRCH STREET
MILFORD STREET
WEST STREET
VILLAGE STREET
126
16
495

ASHLAND


Pond Street: From the Holliston Town Line to the Framingham Town Line
Reconstruct roadway and install accessible sidewalks
Construct left-turn lanes and midblock crossings in the business areas
Make geometric improvements at three intersections
Modify and retime traffic signals to include pedestrian phase
PLEASANT STREET
BELKNAP ROAD
CENTRAL STREET
PROSPECT STREET
TURNPIKE ROAD
TURNPIKE ROAD
WORCESTER ROAD
UNION AVENUE
WINTER STREET
WAVERLY STREET
ASHLAND
MAIN STREET
WEST UNION STREET
126
POND STREET
FRUIT STREET
126
EAST MAIN STREET
CEDAR STREET
GROVE STREET
ASH STREET
HAYDEN ROWE STREET
HOPKINTON
HIGHLAND STREET
HIGH STREET
CONCORD STREET
HOLLISTON

FRAMINGHAM


Concord Street and School Street Intersection
Reconstruct intersection to reduce conflict points
Install a fully actuated and coordinated traffic signal with pedestrian push buttons
Concord Street, Summer Street, and Campello Road Intersection
Reconstruct the intersection to make it pedestrian friendly
Realign Summer Street approach to intersect Concord Street perpendicularly
Concord Street and Old Connecticut Path Intersection
Retime traffic signal and modify signal phase plan to put Concord Street northbound right turns under signal control
Concord Street and Cochituate Road Intersection
Retime traffic signal and install overhead signs to show lane assignment at each approach
Construct a crosswalk on the westbound approach on Cochituate Road
Route 9 and Route 126 Interchange
Install crosswalk enhancements such as lighting, pedestrian crosswalk flashing beacons, and crossing signs
Evaluate the feasibility of replacing existing interchange with a single-point urban interchange
WAYLAND
FRAMINGHAM
NATICK
SHERBORN
POTTER ROAD
ELM STREET
WATER STREET
BROOK STREET
CENTRAL STREET
EDGELL ROAD
SUMMER STREET
WARREN ROAD
DUDLEY ROAD
POND STREET
126
90
30
9
135

NEXT STEPS

- Initiate projects through MassDOT and MPO process
- Advance projects to design
- Determine whether some projects qualify for CMAQ program for funding

Memorandum

From: Metropolitan Area Planning Council and MBTA Advisory Board
To: Boston Region MPO
Date: January 20, 2011

As the public entities responsible for administering the municipal election process for the Boston Region Metropolitan Planning Organization (MPO), the Metropolitan Area Planning Council (MAPC) and the Massachusetts Bay Transportation Authority Advisory Board (Advisory Board) have received numerous requests to move the municipal elections from the MAPC Annual Meeting in May to the MAPC fall meeting in October.

Many communities have noted that the Transportation Improvement Program (TIP) development process begins in January, allowing MPO members the opportunity to become educated on the TIP process and specific transportation projects. The MPO makes critical decisions regarding the TIP, and sometimes the Regional Transportation Plan (RTP), in June and July of each year. The timing of the municipal elections to occur immediately before these important votes and then have potential new MPO members make decisions on transportation projects that they are not familiar with, is unsound.

Therefore, MAPC and the Advisory Board recommend moving the municipal elections from MAPC's Annual Meeting in May to MAPC's fall Council Meeting in October. The current city and town seats on the MPO held by Newton and Hopkinton are up for election in 2011. Moving the MPO municipal election to October would mean that these two municipalities would serve for an additional five months.

If the MPO approves this recommendation, MAPC and the Advisory Board will notify the 101 cities and towns in the region of the change in the timing of the MPO municipal elections, and will send the election materials out to each municipality in August 2011.

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www.bostonmpo.org

Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Karl H. Quackenbush
Acting Director, MPO Staff

MEMORANDUM

DATE **February 3, 2011**

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

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

RE **Work Program for: MBTA CharlieCard Trip-Paths Pilot Study**

ACTION REQUIRED

Review and approval

PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization vote to approve the work program for the MBTA CharlieCard Trip-Paths Pilot Study in the form of the draft dated February 3, 2011.

PROJECT IDENTIFICATION

Unified Planning Work Program Classification
Technical Support/Operations Analysis Projects

CTPS Project Number
14321

Client
Boston Region Metropolitan Planning Organization

CTPS Project Supervisors
Principal: Elizabeth M. Moore
Manager: Thomas J. Humphrey

Funding
MassDOT §5303 Contract #TBD

IMPACT ON MPO WORK

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

BACKGROUND

The MBTA's Automated Fare Collection (AFC) system records the number of passengers entering each rapid transit prepayment station through the electronic faregates, but does not directly provide any information as to the locations at which these passengers will exit the rapid transit system. Historically, to obtain station-to-station ridership totals, it has been necessary to rely on passenger surveys. Such surveys are too costly to conduct on a regular basis, and must extrapolate findings from small percentages of all riders.

Station-to-station ridership totals are needed to comply with the National Transit Database (NTD) requirement of reporting average passenger trip length by mode each year. They are also used in calibrating the CTPS regional model which provides forecasts of ridership on potential new transit services, and in monitoring compliance of average vehicle loads with MBTA service standards.

The 2008-2009 MBTA systemwide survey results indicate that 90 percent of the riders who enter the rapid transit system on a given day make two or more one-way rapid transit trips over the course of the day. Each of the trips that begins at a prepayment station (as opposed to a Green Line surface stop) will be recorded as an entry at that station. Each farecard used to enter the system has a unique serial number that is recorded, along with a time and date stamp, every time it is used to open a faregate. Consequently, the AFC system can show all of the faregates where a given farecard has been used over a given span of hours.

To protect passenger confidentiality, when the data are used in this manner, the MBTA substitutes randomly assigned numbers for the actual numbers. CTPS will not have access to any databases that identify individual farecard users. Many farecards are in use only briefly, so a different set of random numbers will be required for each set of records to be examined together.

It is reasonable to hypothesize that a passenger making more than one one-way trip on the rapid transit system on a given day will start each trip at either the same station where the exit from the previous trip occurred or at another station in the same general area. If this hypothesis is correct, the station-to-station travel of any farecard appearing more than once in a report for a single day could be depicted by treating each entry point as the exit point from the previous trip, and treating the initial entry point as the exit point from the final trip.

OBJECTIVE

The purpose of this study is to test whether reasonably accurate station-to-station rapid transit ridership tables can be created by using AFC records of entry locations of farecards used two

or more times on a given day. The MBTA and CTPS have not previously attempted to create such tables. If the proposed method is successful, it could reduce the need to conduct special passenger counts and surveys to determine origin-destination patterns, resulting in substantial cost savings. Although not included in this Work Program, the method could be further adapted to calculate transfer volumes between the rapid transit system and the MBTA bus network.

Because there are no complete actual records of station-to-station travel, the accuracy of the proposed method will be judged by its consistency with origin-destination tables derived from other sources, including the 2008-2009 passenger survey and past boarding and alighting counts conducted by CTPS, and with trips reported as part of three travel surveys conducted by TransitWorks from 2005 to 2009. Passengers can exit as well as enter stations through AFC fare-gates, but farecards are not used in exiting. The AFC reports include the times when each fare-gate has opened for exiting passengers, but do not show how many passengers exited while the gate was open. Non-AFC exit gates are not equipped with any counting devices.

WORK DESCRIPTION

Task 1 Collect AFC Data

CTPS will work with the MBTA to obtain AFC transaction data for every station faregate, surface Green Line farebox, and other farecard reader, organized by station and route for seven sequential days in the fall 2010 rating. These will be the most recent data available during the anticipated schedule for this work program. Fall ridership is usually representative, as it is not impacted significantly either by vacations or by extreme weather conditions. The serial number for each transaction will have been replaced with a random code that ensures that different transactions with the same serial number also receive the same random code.

Product of Task 1

AFC transaction data for each station and route for seven sequential days.

Task 2 Process Data

In this task, CTPS will process separately the AFC data for each of the seven days for which records have been provided. From the records for each day, CTPS will use database queries to produce, for each rapid transit station, a table showing the number of farecard serial numbers also recorded at each other individual station or surface Green Line farebox or portable farecard reader. (Surface Green Line farebox records show the route on which a farecard was used, but not the specific boarding location.) Each record of the use of a farecard includes the time at which it was used. These times will be used to determine the chronological order of the use of cards with numbers appearing at more than one location.

Farecard numbers appearing only once will also be totaled for the location where they appear. A farecard appearing once could represent a passenger actually making only a single one-way trip on the sample day, a passenger using a different farecard for different trips on the same day, or a passenger making some trips with an unrecorded entry, such as showing a pass to a Green Line operator without tapping it on a farebox.

Product of Task 2

A set of tables showing for each station for each sample day, the number and percentage of the farecards used for entries at that station used subsequently at each other station.

Task 3 Analyze Results

In this Task, CTPS will compare the station-to-station results from the five weekday samples for consistency among them. The patterns found in these tables will also be compared with those in origin-destination tables derived from other sources, including the 2008-2009 passenger survey and past boarding and alighting counts conducted by CTPS, and with trips reported as part of three travel surveys conducted by TransitWorks from 2005 to 2009. For purposes of comparison, spreadsheet models previously developed by CTPS to generate origin-destination tables from boarding and alighting counts will be updated to incorporate the most recent available count data. CTPS has not conducted boarding and alighting counts or passenger surveys on the rapid transit system on weekends, but if the method of generating origin-destination tables from AFC data produces acceptable results from weekday data, it should also produce acceptable results from Saturday or Sunday data.

Product of Task 3

A summary of findings as to similarities and differences between the results of the AFC-based station-to-station ridership tables and tables produced by other methods.

Task 4 Document Recommendations

Based on the results of the preceding tasks, CTPS will make recommendations as to whether the AFC-based station-to station ridership estimation method is suitable for further application as is, is potentially suitable for further application with some refinements, or does not appear to be worth pursuing further at this time. If the method does prove suitable for further application, the frequency at which new sets of tables should be generated will be included in the recommendations. All of the recommendations will be presented in a technical memorandum.

ESTIMATED SCHEDULE

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

ESTIMATED COST

The total cost of this project is estimated to be $39,930. This includes the cost of 14.1 person-weeks of staff time, and overhead at the rate of 90.69 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

KHQ/TJH/tjh

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Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Karl H. Quackenbush
Acting Director, MPO Staff

MEMORANDUM

DATE **January 20, 2011**

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

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

RE **Work Program for: Intercity Bus Study**

ACTION REQUIRED

Review and approval

PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of the Massachusetts Department of Transportation, vote to approve the work program for Intercity Bus Study in the form of the draft dated January 20, 2011.

PROJECT IDENTIFICATION

Unified Planning Work Program Classification
Planning Studies

CTPS Project Number
11375

Client
Massachusetts Department of Transportation
Project Supervisor: Matthew Ciborowski

CTPS Project Supervisors
Principal: Elizabeth M. Moore
Manager: Jonathan Belcher

Funding
Future MassDOT §5311F Rural Intercity Transit Planning Contract

IMPACT ON MPO WORK

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

BACKGROUND

The private carrier intercity and commuter bus network in Massachusetts has seen a reduction in locations served within Massachusetts over the past 30 years. Operating subsidy programs and state-financed vehicles were provided in the past but are no longer. Further reductions in service and attrition of carriers may occur in the future. This study will examine changes that have taken place in intercity and commuter bus service in Massachusetts since 1980, identify the reasons for those changes, and consider what opportunities there are to foster the retention of valuable routes, improvement of service, and desirable expansion of the network in the future. The study will also review the potential for regional transit authorities in the state to provide service as a feeder to the intercity bus network, will review the potential for use of the MBTA CharlieCard on intercity and commuter bus services, and will consider the capital needs of an improved and expanded intercity bus network, including vehicles, stops, stations, and parking facilities.

OBJECTIVES

This study will look at how existing intercity and commuter bus services that provide service within Massachusetts have changed since 1980, examine how they relate to rail and local bus services, and identify the reasons for the changes that have occurred. The study will look at not only intrastate but also interstate bus services, including how the latter have historically served markets within Massachusetts, whether they do so now, and the degree to which they constrain the potential for expanded intrastate services through the use of existing infrastructure. Based on these examinations of intercity and commuter bus services, the study will consider what past issues have prevented retention or expansion of valuable services and will identify what would be required in the future, including possibly some funding support, to facilitate better meeting the needs of unserved and underserved markets, to foster desirable system growth, and to promote improved mobility options in the state.

WORK DESCRIPTION

The work required to accomplish the study objectives will be carried out in nine tasks, as described below:

Task 1 Describe Existing Intercity Bus, Commuter Bus, and Rail Networks

CTPS will provide a description of the existing intercity bus services (including both intra- and inter-state services), commuter bus services, and rail network, including a

description of the bus routes, a listing of communities served, a summary of equipment required to supply the service, and a summary of service frequencies for each route and community. A comparison will also be made to the bus and rail networks as of 1980, with additions to and reductions of the networks described. The expansion of the statewide rail network over the last 30 years, as well as proposed further expansion of the rail network will be included in the description. Existing public timetables, Department of Public Utility (DPU) documents, and CTPS archives of timetables will be used to complete this task.

CTPS will also count and survey existing intrastate bus service passengers. CTPS staff will distribute and collect surveys on those bus trips operating to and from Boston in order to establish existing ridership totals and to determine the existing means of access and frequency of use of present intrastate bus service.

Products of Task 1

- A map of the existing intercity/commuter bus network and rail network.
- Summary tables of the existing networks and changes made to them since 1980.
- A passenger survey to establish existing passenger counts and ridership patterns.

Task 2 Identify Relationships between Intercity and Local Bus Services

CTPS will examine where intercity carriers, commuter bus services and local transit providers presently connect and where intercity carriers presently utilize station facilities owned by regional transit authorities (RTAs). CTPS will also identify locations where RTAs have expanded or otherwise modified their own route networks since 1980 in response to changes in the private carrier intercity bus network, and will examine the potential for local transit services to act as feeders to intercity services.

Products of Task 2

- A summary table identifying locations where intercity carriers and RTAs connect and where intercity carriers utilize RTA facilities.
- A summary table of changes made to RTA networks since 1980 as a response to changes made to the intercity bus network.
- A review of potential changes to schedules and routes to improve coordination of local bus and intercity bus services, including opportunities for local services to act as feeders for intercity services.

Task 3 Identify Greatest Potential for Modified, Expanded, or New Services

CTPS will obtain existing ridership data for intercity carriers that operate entirely within the state. In cases were carriers cannot or will not provide ridership figures, CTPS field staff will count boardings at Boston terminal locations in order to establish ridership. In addition to existing riderhip patterns, CTPS will examine existing population and travel data to identify desirable modified, expanded, or new intercity and commuter bus services within Massachusetts including the possible new or improved reverse commute services.

CTPS will also look at the potential to improve existing parking facilities, to make better use of existing underutilized parking facilities, and to provide new parking facilities in conjunction with new or expanded services.

CTPS will examine existing state practices and policies that support intercity and commuter bus transportation and will consider changes that could be implemented to foster desirable retention and expansion of the networks.

Products of Task 3

- A summary of existing ridership by route for those private carrier routes operating entirely within Massachusetts.
- A list of communities in Massachusetts that have no fixed-route bus service of any type, with ranking criteria applied to suggest which communities have the greatest need for new RTA or intercity bus service.
- A list of potential changes to or expansion of the existing intercity and commuter bus networks.
- A summary of existing parking facilities and the potential to improve or expand parking for existing services.
- A summary of existing state practices and policies that support intercity and commuter bus service.
- A review of changes to state practices and policies that could facilitate desirable retention and expansion of the networks.

Task 4 Identify Existing and Potential Funding Sources

CTPS will review existing funding sources for intercity and commuter bus capital and operating expenses and determine which existing or proposed services qualify for federal or state programs that provide permanent funding or seed money for start-up.

Product of Task 4

A list of operating and capital funding sources for intercity and commuter bus services that includes a summary of which existing and proposed services might qualify to apply for each funding source.

Task 5 Identify Possible Fare Collection System Changes

CTPS will summarize existing intercity and commuter bus fare structures and fare collection methods and will identify possible methods for private carrier intercity or commuter bus services to interact with the MBTA's automated fare collection (AFC) system and for local transit services to provide through-ticketing with intercity services.

Products of Task 5

- A summary of existing intercity and commuter bus fares and fare collection methods and suggestions for how they could interact with the MBTA's AFC system.

- A summary of the potential of RTA's to provide through ticketing with interstate service as part of the National Bus Traffic Association (NBTA) ticketing network, and the potential to market RTA service as part of the national intercity bus network.

Task 6 Review the Capital Needs of the Existing Network and the Potential Needs of an Expanded Network

CTPS will summarize the existing availability of accessible vehicles, the total vehicle requirements of intercity and commuter bus service, station facilities, parking facilities, and midday layover facilities. CTPS will then consider future capital requirements for supporting the existing network, and the level of investment that would be required to support an expanded network. CTPS will also examine the capacity of the existing South Station Bus Terminal and examine whether the facility could accommodate an increase in carriers and/or services.

Products of Task 6

- A summary of existing intercity and commuter bus vehicle requirements, of the existing number of accessible vehicles in intercity and commuter bus fleets, of stop locations, of station facilities, of parking facilities, and of midday layover facilities.
- A summary of the capital needs of an expanded network.
- A summary of existing service levels at the South Station Bus Terminal and potential constraints to adding services at this facility.
- Statewide maps and/or diagrams as requested to illustrate proposals for an expanded network

Task 7 Identify Possible Regulatory Constraints to Adding New Services

CTPS will review existing Department of Public Utility (DPU) regulations regarding the implementation of new intercity bus services in the state, and consider which DPU requirements must be met for new services to be implemented.

Products of Task 7

- A review of existing DPU requirements for private carriers establishing new fixed-route services.
- A summary of existing DPU certificates of operating rights.

Task 8 Identify Methods for Improving the Marketing of Intercity and Commuter Bus Services

CTPS will review existing marketing information and the availability of schedules and maps for intercity bus service in Massachusetts, and will suggest ways of improving marketing to increase ridership.

Products of Task 8

- A review of existing intercity bus and commuter bus marketing methods in Massachusetts.
- A review of potential marketing improvements or changes for encouraging ridership growth.

Task 9 Identify Best Practices through a Peer Review and Examine Potential Service Standards

CTPS will perform a peer review of existing state-funded intercity bus services and will consider adopting service standards that could be applied to new or expanded services.

Products of Task 9

- A review of existing peer programs to provide state subsidies to intercity bus operations.
- A review of potential service standards to apply to new or expanded intercity bus service.

Task 10 Produce a Technical Memorandum

CTPS will compile the results of Tasks 1through 9 in a technical memorandum that summarizes all of the findings of the study and makes recommendations for improving and funding intercity bus service within the state.

ESTIMATED SCHEDULE

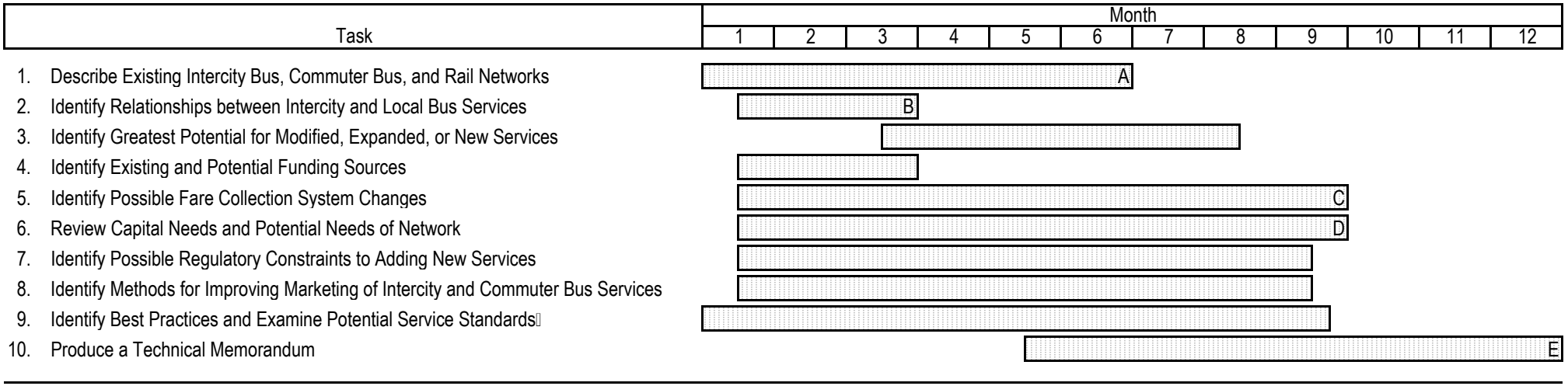
It is estimated that this project will be completed 12 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

ESTIMATED COST

The total cost of this project is estimated to be $167,057. This includes the cost of 81.5 person-weeks of staff time, overhead at the rate of 90.69 percent, and travel. A detailed breakdown of estimated costs is presented in Exhibit 2.

KHQ/JB/jb

Exhibit 1
ESTIMATED SCHEDULE
Intercity Bus Study



Products/Milestones

A: Passenger Survey Results
B: Summary table of RTA and intercity bus connections
C: Summary table of existing intercity bus and commuter bus fares
D: Diagrams illustrating expanded network
E: Technical Memorandum

Exhibit 2
ESTIMATED COST
Intercity Bus Study

Direct Salary and Overhead	$163,057

Task	Person-Weeks								Direct Salary	Overhead (@ 90.69%)	Total Cost
	M-1	P-5	P-4	P-3	SP-3	SP-1	Temp	Total			
1. Describe Existing Intercity Bus, Commuter Bus, and Rail Networks	0.5	2.0	1.0	0.0	1.0	7.0	21.0	32.5	$20,982	$19,028	$40,010
2. Identify Relationships between Intercity and Local Bus Services	0.5	0.0	2.0	0.0	0.0	0.0	0.0	2.5	$3,258	$2,955	$6,213
3. Identify Greatest Potential for Modified, Expanded, or New Services	0.5	1.0	3.0	0.0	0.0	1.0	1.0	6.5	$7,193	$6,523	$13,717
4. Identify Existing and Potential Funding Sources	0.5	0.0	2.0	2.0	0.0	0.0	0.0	4.5	$5,316	$4,821	$10,138
5. Identify Possible Fare Collection System Changes	0.5	0.0	1.0	3.0	0.0	0.0	0.0	4.5	$5,126	$4,648	$9,774
6. Review Capital Needs and Potential Needs of Network	0.5	2.0	3.0	0.0	0.0	0.0	0.0	5.5	$7,669	$6,955	$14,624
7. Identify Possible Regulatory Constraints to Adding New Services	1.0	2.0	2.0	0.0	0.0	0.0	0.0	5.0	$7,268	$6,591	$13,858
8. Identify Methods for Improving Marketing of Intercity and Commuter Bus Services	1.0	0.0	2.0	0.0	0.0	0.0	0.0	3.0	$4,077	$3,697	$7,774
9. Identify Best Practices and Examine Potential Service Standards	2.5	0.0	2.0	1.0	0.0	0.0	0.0	5.5	$7,562	$6,858	$14,420
10. Produce a Technical Memorandum	4.0	2.0	6.0	0.0	0.0	0.0	0.0	12.0	$17,059	$15,471	$32,529
Total	11.5	9.0	24.0	6.0	1.0	8.0	22.0	81.5	$85,509	$77,548	$163,057

Other Direct Costs	$4,000
Travel	$2,000
Printing	$2,000

TOTAL COST	$167,057

Funding
Future MassDOT §5311f #

Schedule for Paths to a Sustainable Region 2035
January 20, 2011

Task	Completion Date
Establish Corridors	completed
Document Existing Transportation System & Services	completed
Summarize Data and Update Information	
EJ - existing conditions and needs	completed
Review/summarize previous work/studies	completed
Summarize previous comments	completed
Update Visions and Policies	completed
CMP Coordination/Develop Performance Measure	ongoing
Complete Updated 2030 No-Build Run for Needs	completed
Complete 2009 Base Case Model	completed
Complete Needs Assessment	1/25/2011
TPPC Adopts Land Use Assumptions	1/27/2011
Receive Final Demographic Inputs for 2035 from MAPC to CTPS	1/27/2011
TPPC Approves Draft Needs Assessment for Public Review	1/27/2011
Receive Projections of Future Revenues (MassDOT)	1/31/2011
Public Review of Needs Assessment	2/2/2011 to 2/16/11
Receive Final Demographic Inputs for 2035 for 63 communites outside of the MPO from MassDOT to CTPS	2/11/2011
Final Universe of Projects and Programs Identified from Needs Assessment	2/17/2011
TPPC Begins to Identify Projects and Programs	2/17/2011
Complete Final Model Results for 2035 No-Build	3/7/2011
Develop and Model Alternative Networks	4/14/2010
TPPC votes on Recommended Projects and Programs	5/5/2011
EJ and AQ Analysis of Recommended Plan	6/2/2011
TPPC votes on Circulation of Draft Plan	6/9/2011
Public Comment Period begins on Draft Plan	6/13/2011
Public Comment Period ends	7/12/2011
TPPC receives comments	7/14/2011
TPPC meets to discuss comments and responses	7/28/2011
MPO Adopts Final Plan	8/4/2011

Paths to a Sustainable Region
Draft Outline
1-20-11

Executive Summary

Introduction and Plan Process

- MPO Structure
- Plan process and Public Outreach Process including information about the Needs Assessment

MPO's Visions and Policies

Transportation System Operations and Management (objectives and performance measures for each set of bullets will be discussed)

- System Preservation, Modernization & Efficiency – State of Good Repair
- Mobility – CMP, TDM, TSM, etc.
- Safety and Security

Livability and the Environment (objectives and performance measures for each set of bullets will be discussed)

- Environmental – ACEC, wetlands, flood hazard areas, etc.
- Climate Change
- Livability

Transportation Equity (objectives and performance measures will be discussed)

The Region's Corridors – Summary of Needs for Each Corridor and a prioritization of the needs for the MPO area

Financial Plan

Recommended Plan

- Project Selection Process
- Model results
- Recommended plan projects and programs (could be presented in a number of ways – by corridor, by need, by vision)
- Illustrative projects, if included

Environmental Justice Assessment

Air Quality Conformity Determination

Appendices as required