Disclosure Statements and Other Forms

APG and PB have provided our disclosure statement and other forms as required as attachments to this RFP.

Section B: Technical Proposal

Understanding of Scope **B.**1

The Roxbury-Dorchester-Mattapan Transit Needs Study represents an opportunity to assess the current and future transit needs of the wedge-shaped corridor that is just beyond walking access to the Orange and Red Lines. Many residents are transit-dependent and must rely on existing bus service to meet their travel needs.

Understanding Mobility Needs

The benefit of this study will be a better understanding of current mobility needs of the people living and working in this corridor, as well as the perceived effectiveness of existing bus services. While there is a dense web of crisscrossing bus services, the study will help determine if the current structure meets the origin-destination and schedule needs of the residents and employees in the study corridor.

A New Start

To be successful, this needs assessment study will require a significant effort to engage the community in all facets of the project – from the determination of travel needs to the development of alternative strategies for enhancing existing services. We believe the key to a successful study is gaining public trust in and support for the study process. That is why we are proposing a planning team lead by professionals with roots in this corridor. Putting a new, community-rooted face on the planning team is one element in

is outside of walking distance from existing transit stations.

Map from Route 28X project illustrates how the Warren Street/Blue Hill Avenue corridor

demonstrating to the communities that this study is truly a new start.

We know that this may not be easy. Community opposition to the Route 28X Enhancement Proposal as a stimulus-funded quick action project was clear and definitive. It must be made clear that this study does not come with a predetermined outcome. It is not the rebirth of the 28X proposal. It is the beginning of a process that seeks community input for a successful outcome. It will be essential that the communities come to believe this is a new start.

To establish this measure of trust, it will be necessary for the ARCH team to reach out in many ways to community groups and leaders, including elected officials, religious leaders, leaders of community groups,

Restart the Process at Step 1

We will need to assist you in communicating that this transit needs will restart the process at Step 1. The scope even includes determining study parameters including establishing the limits of the study area to ensure it includes the destinations outside downtown Boston. As Kelley Chunn from our team observed during the 28X process, this is the needs study that many in the community have sought. Early outreach should include the message that this study is partially in response to requests from community members.

Emphasizing the "Blank Slate"

As you have envisioned it in the RFR scope, the study starts with a blank slate. Therefore, it provides the opportunity to consider a range of strategies to fill the gap between transit needs and current services. For example, a more diffused program of schedule and route adjustments coupled with improved patron amenities (e.g., bus shelters, better passenger information) may provide greater and more immediate rider benefits than a longer range capital improvement project to implement light rail or bus rapid transit. Your scope clearly encourages a range of strategies be considered:

- ✓ Minor schedule and route adjustments (similar to current MBTA Operations Planning initiatives that "tweak" schedules periodically to better meet current needs)
- ✓ Improved passenger amenities
- ✓ Restructuring bus routes to provide direct services, matching the origin-destination desires of the community (e.g., direct service to major employment centers outside the urban core of Boston, such as Longwood and Boston University medical areas)
- ✓ Enhancing feeder service to the Red and Orange Lines
- ✓ Providing coordinated bus feeder service with the improved Fairmont Line
- ✓ Run time improvements, including bus queue jump lanes, bus priority signal preemption, and consolidation of bus stops
- ✓ "Urban Express" routes that include some features of BRT systems without having to be a true BRT system
- ✓ Alternatives for BRT or LRT services

While current funding may not support the more capital-intensive improvements at this time, having a menu that includes minimal cost improvements allows for a strategy of incremental improvements. The advantage of this approach is the opportunity to identify short-term options that can be quickly implemented and their benefits quickly realized by the ridership.

B.2 Project Approach and Methods

Our project approach follows the seven tasks as set forth in the RFR.

SETTING THE PLANNING FRAMEWORK - TASK 1: CONFIRM STUDY AREA; IDENTIFY COMMUNITY GOALS AND OBJECTIVES, AND EVALUATION CRITERIA

The kickoff for this study is important to establish, simply said, that this is a new start, there is no preconceived plan, and the slate is open.

TASK 1A: CONFIRM STUDY AREA MAP

While this subtask is included at the start of the study, we believe the definition of the study area should be ongoing, at least through Tasks 1 through 3. As the RFR indicates, the study area should acknowledge the growing diffusion of employment centers within the core of Boston. Traditionally, one may consider downtown and the Back Bay as the primary destinations of work trips. However, other major employment centers can also be considered to include the Longwood and Boston Medical Areas as well as the Kenmore Square area. As one looks ahead over the next 10 to 20 years, other employment centers may emerge in Cambridge and Somerville along the proposed Green Line Extension.

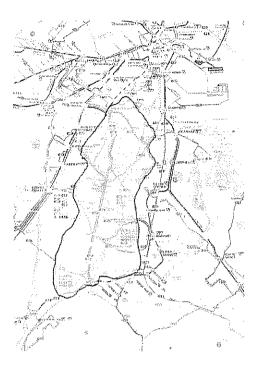
We should wait for the results to come in within Task 3 to finalize the map. The data to be collected will establish the distribution of destinations for trips originating in the study corridor. Once this distribution is studied, we can identify which trips extend beyond the corridor in directions not well-served by the existing rapid transit network. At this point, we can determine what changes to the study area might be needed.

TASK 1B: COMMUNITY GOALS AND OBJECTIVES

We see this subtask as linked with Task 2, and we direct you to read about our approach to public engagement under the heading of Task 2.

We see this task as having two related aspects:

- Developing a set of objectives for future transit investments, based on input from stakeholder and public meetings
- ✓ Obtaining input from current MBTA riders on their travel routes and experiences (good and bad) with the current service provided



Some of the objectives to be discussed include:

- ✓ Define the primary markets for MBTA service (e.g. residents with jobs in the urban core, carless households, disabled persons, elderly, youth, etc.)
- ✓ Define the most critical times of day to consider for transit service improvements (e.g., peak service hours, school trip hours, off-peak day, evenings, weekends, or holidays)
- ✓ Define the role of transit in an intermodal context of transit, automobiles, bicycling, and walking
- ✓ Determine common trips of regular MBTA customers
- ✓ Determine which MBTA services work well and which do not (this may be a time of day difference for some trips).

Input from the 28X Outreach Process

In preparation for submitting a proposal for the Route 28X design project, Kelley Chunn attended a number of the public meetings on that project. Though there were a number of negative comments from that public process, there were also some comments that can serve as a foundation for rider's input to the Transit Needs Survey:

- ✓ Need for a rider survey of improvement suggestions
- ✓ Don't change from CNG buses to diesel buses
- ✓ Don't create a negative impact on the City's "Main Streets" district
- ✓ Will improved transit services cost more than the regular bus?
- ✓ Consider light rail in comparison to bus alternatives
- ✓ Maintain clean buses and improve customer service by upgrading the training of bus drivers
- ✓ Add bus shelters to all bus stops
- ✓ Provide a Mattapan Square T Station as mentioned in the MBTA Capital Investment Program FY07-FY11
- ✓ Include residents of Mattapan, Dorchester and Roxbury as part of the planning or advisory
- ✓ Conduct community meetings on common ground so that all communities will be represented
- ✓ Stay in touch with the community and respect their concerns.

Other Methods of Outreach

As we describe under Task 2, we would look to initiate a wide ranging variety of outreach approaches with this Task 1B. These include:

- ✓ Project web site
- ✓ Links to the project website at websites of community organizations
- ✓ E-mail address for project comments and information requests (e.g., Info@RDMTNS.info)
- ✓ Project blog
- ✓ Project e-mail list (compiled from meetings and website)
- ✓ Social media (e.g., Twitter, Facebook, other)
- ✓ Local newspapers (Bay State Banner, Dorchester Reporter, Mattapan Reporter)
- ✓ Local broadcast media (Boston Neighborhood TV and Touch 106.1 FM radio)
- ✓ Flyers in Sunday church bulletins
- ✓ E-mail lists from community groups
- ✓ Posting flyers at bus stops
- ✓ Seat drop flyers on buses
- ✓ Information tables at Dudley Station or other major locations
- ✓ Information tables at fellowship after religious services
- ✓ Volunteers to hand out information at bus stops

These and other similar methods would be effective to get a wide range of response from current MBTA users as to their typical trips, and what works and what doesn't work with the present MBTA services.

Technical Memorandum No. 1: RDM Transit Needs Study Goals and Objectives

We will prepare a technical memorandum summarizing the results of the first set of public meetings and the other outreach to current MBTA users. This memorandum will be circulated to meeting attendees and posted on the project website

TASK 1C: EVALUATION CRITERIA

This task will focus on the development of evaluation criteria to rate and rank the various options during Task 4. The list in the RFR will be amended by input from the public meetings during Tasks 1B and 3. Not all criteria are of equal importance. We will work to categorize criteria as follows:

- ✓ Pass/fail criteria: These include potential "fatal flaws" that would render an alternative as unfeasible.
- ✓ Essential criteria: These are the most important criteria; if most are not met, pursuing the alternative would not be worthwhile from a service improvement or cost standpoint.
- ✓ Optional criteria: These are aspects that are desirable, but not essential. These criteria could tip the scale if there is a tie between alternatives based on the three criteria categories.

Technical Memorandum No. 2: RDM Transit Needs Study Evaluation Criteria

We will prepare a technical memorandum summarizing the prioritization of evaluation criteria and outlining how the criteria will be applied to rating and ranking alternatives in Task 4.

Task 1 Deliverables

- √ Project study area map
- ✓ Participate in a series of stakeholder meetings to solicit input to the Goals and Objectives memo. Organize and run two public meetings to reach a common understanding of study scope and goals, including the following: site search; meeting supplies; notification through project email list, media advisories and targeted print media advertisements, flyer distribution at high traffic transit locations in the study area and flyer posting on study area bus routes; sufficient staff support. In addition to meetings, use the project website and direct outreach to corridor transit

riders to inform the Goals and Objectives discussion.

- ✓ Technical Memorandum No. 1: Transit Needs Goals and Objectives
- ✓ Technical Memorandum No. 2: Evaluation Criteria

SETTING A FRAMEWORK FOR DIALOGUE - TASK 2: DEVELOP A CIVIC ENGAGEMENT PLAN AND PROJECT WEBSITE

TASK 2A. CIVIC ENGAGEMENT PLAN

We believe this is *the* critical task for the success of the study. From Day One, MassDOT, with the consultant team, must be able to convincingly communicate the following:

- ✓ This is a New Start.
- ✓ The voice of the community will be heard.
- ✓ The slate is blank no preconceived agenda or project.
- ✓ Mass DOT is open to any suggestions, including the "do nothing" option.

Our strategic approach to civic engagement includes the following:

- ✓ A consultant team led by members with roots in the community: Charles W. Bradley, Michael Fergus and Kelley Chunn can say "we understand because we also lived and worked here."
- ✓ Setting the foundation for dialogue by early briefings with elected officials and community leaders.
- ✓ Taking the meetings to all neighborhoods within the corridor.
- ✓ Employing all manner of effective communications from broadcast to print to the web and social media.
- ✓ Involving the community members in outreach and data collection.
- ✓ Checking in: Asking "how are we doing?" We won't assume just because we're following the Civic Engagement Plan that the plan is working. We'll ask.

The study aims to learn about travel patterns and how well existing transit serves the. A primary focus will be how well MBTA riders are served by the existing bus routes and schedules. In reaching this goal, other stakeholders, including elected officials, community leaders and groups, and city agencies will also provide important input.

The following summarizes our plan for outreach activities designed to "envision, engage, and enable" our audience:

- ✓ Establish a RDM Transit Study Advisory Group to coordinate community input and serve as a project advisor
- ✓ Hold small group meetings with elected officials, local leaders and stakeholders, and representatives of the business, religious, and residential communities

✓ Host a series of four RDM community charettes to focus on the survey questions noted below. In urban planning, the charette (sometimes called an "inquiry by design") has become a technique for consulting with diverse stakeholders. This type of charette typically involves intense and possibly multiple meetings, involving public officials, residents and other stake holders. They meet in sub-groups around a specific challenge. Each sub-group then presents its work to the full group as material for future dialogue.

Startup

We anticipate that Task 2 will be our first task. At our kickoff meeting, we would begin the discussion of our draft Engagement Plan. We recommend that we initiate the first steps of public engagement (namely, Task 1B) even as we are continuing to prepare the engagement plan. We believe that by including the input of key stakeholders, we can develop a more comprehensive engagement plan.

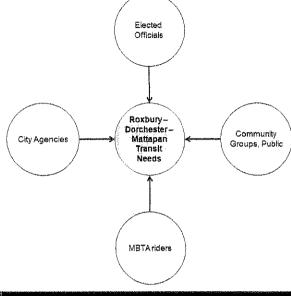
Our recommended first steps include:

- Meeting(s) with elected officials: provide briefing on the overall scope of the study and seek input on civil engagement (e.g., best ways to communicate with residents who ride the buses, best times and locations for public meetings)
- ✓ Meetings with key community leaders

 (e.g., ministers of major churches,
 managers of community service providers, etc.), with the same objectives as the meetings with elected officials
- ✓ Following this, there should be a wide-reaching effort to get the word out about the study via all stakeholders including the major community groups listed in the table on the next page: churches, service provider organizations, businesses, residents.
- ✓ Early in the process, before the first public meeting, form an advisory committee consisting of representatives of MBTA riders, residents, citizen and business groups and other major stakeholders.

The first charette will kick off the outreach process and feature all key stakeholders described above. We will design the charette process to recognize the joint interests of stakeholders, promote joint ownership of solutions, and build consensus as an attempt to defuse tensions between residents and officials.

- ✓ Host charettes at community venues such as the Dudley, Grove Hall and Mattapan Libraries and Roxbury Community College
- ✓ Conduct sample surveys at key T stops at Mattapan Square, Morton Street, Grove Hall and Dudley Street
- ✓ Conduct sample surveys at supermarkets such as Stop & Shop at Grove Hall and Tropicana Foods on Washington Street



The success of the transit needs study depends

Whom to Engage?

Our sub consultant Kelley Chunn compiled a preliminary list of stakeholders (see table on page 15-16). These include elected officials, MBTA riders (present and potential future riders), community organizations, city agencies, and others.

Stakeholde	ers	
	Primary Focus Audience	 ✓ Aides to the MA Congressional Delegation ✓ Senator Sonia Chang-Diaz (2nd Suffolk) ✓ Sen. John Hart (1st Suffolk) ✓ Rep. Willie Mae Allen (6th Suffolk) ✓ Rep. Linda Dorcena-Forry (12th Suffolk) ✓ Rep. Gloria Fox (7th Suffolk) ✓ Rep. Marie St. Fleur (5th Suffolk) ✓ Rep. Elizabeth Malia (11th Suffolk) ✓ Rep. Byron Rushing, 9th Suffolk ✓ Councilor Chuck Turner, District 7 ✓ Councilor Charles Yancey, District 4 ✓ Current MBTA riders ✓ Potential MBTA riders (e.g., people who drive due to lack of direct transit service) ✓ Residents without cars
	Pr Fr	Residents without cars
	Community Groups	Major Places of Worship Jubilee Morningstar Baptist St. Angela's Charles Street AME 12th Baptist Mohammed's Mosque Social Service Providers Central Boston Elder Services Boys & Girls Clubs Roxbury YMCA Urban League of Eastern Mass Roxbury Comprehensive Community Health Center Mattapan Community Health Center Mattapan Branch Library Dudley Branch Library Grove Hall Branch Library Business Organizations Dudley Main Streets Grove Hall Board of Trade Touch Radio, Grove Hall Mattapan Business Association Other Community and Advocacy Groups The Party for Socialism & Liberation (pslweb.org) Mattapan Civic Improvement Board Neighborhood Crime Watch Groups The T Riders Union Roxbury Environmental Empowerment Project/REAP Greater Four Corners New Vision Community Development Corporation/Quincy-Geneva Housing Development

		✓ MBTA riders
a di Tanàna	·	✓ Residents
\$1		✓ Businesses, such as Ali's Roti, Dunkin Donuts,
is and the second	as as	Simco by the Bridge, Brother's Restaurant, Bon
	Inter	Apetit Restaurant
	<u> </u>	✓ Stop & Shop
	att.	✓ Churches
÷ -	Ō	✓ Schools – Jeremiah E. Burke, Boston Latin Academy
- Å		✓ Others – Franklin Park Zoo
_3		✓ Boston Transportation Department (BTD)
	S	✓ Boston Redevelopment Authority (BRA)
	. <u></u>	✓ Boston Public Works Department (BPWD)
*1	Agencies	✓ Boston Water and Sewer Commission (BWSC)
	•	✓ Boston Parks and Recreation Department (BPRD)
t,	it	✓ Boston Fire Department (BFD)
- 1	S	✓ Boston Police Department (BPD)
9		✓ Boston Emergency Medical Services (EMS)

Where to Meet?

We recommend that the public meeting be held on a rotating basis through all the neighborhoods along the corridor, including:

- ✓ Dudley Square/Street
- ✓ Roxbury/Warren Street/Upper Blue Hill Avenue
- ✓ Grove Hall
- ✓ Franklin Field
- ✓ Walk Hill
- ✓ Mattapan Square

Initially, consider the following locations:

- ✓ Dudley Branch Library
- ✓ Grove Hall Library
- ✓ Mattapan Branch Library
- ✓ Roxbury Community College

How to Engage MBTA Riders

The RFR emphasizes the importance of engaging those who currently ride MBTA buses within the study corridor. There may be many reasons some riders cannot attend and speak out at public meetings in the evening, from parents who need to attend to their children to works on the 2nd and 3rd shifts to those who need transportation to meetings to those who find existing service adequate.

There are a number of alternate means of obtaining input from MBTA riders:

- ✓ The best way to reach riders is when they are riding for the bus or waiting for a bus, for example with seat drop questionnaires or quick interviews with riders waiting at bus stops.
- ✓ The next best way may be to **meet them at places in the community** such as churches (e.g., fellowship after Sunday services), community health centers (in waiting rooms), or other organizations.
- ✓ We would suggest engaging community organizers or students from Roxbury Community College to assist with quick interviews or handing out and collecting questionnaires. This may improve the rate of response.
- ✓ On-line questionnaire.

✓ Questionnaires at information tables at community events.

Considerations for Questionnaires

The questionnaires should reflect the 10 themes outlined on the YouMoveMass web site.

- ✓ Reliability: How can we improve transit reliability?
- ✓ Maintenance: How can we improve the maintenance of the transit system?
- ✓ Design: How could we improve the design of the system?
- ✓ Infrastructure: What challenges do you face in sharing roads, sidewalks, and multi-use paths with others?
- ✓ Capacity: How can we increase capacity on our existing transportation corridors?
- ✓ User friendly: How can we make your trip more welcoming and comfortable?
- ✓ Broader System: How can we broaden the system to serve more people?
- ✓ Equity Funding: How do we fund the transit system in a way that is consistent and equitably distributed across all income groups and modes?
- ✓ Environmental Impact: How do we make our transportation system environmentally sustainable?
- ✓ Access: How we increase and improve access to our transportation system?

These general survey questions can to be modified for use at transit stops and other field venues, at community meetings or charettes and on line.

- ✓ What's your public transportation story?
- ✓ Why is public transportation important to you?
- ✓ How do you use public transportation?
- ✓ Which bus lines do you use most?
- ✓ What works best when you take the T?
- ✓ Do you encounter problems taking the T?

How to Get the Word Out

We recommend a variety of approaches to getting information out to the community for purposes including:

- ✓ Project web site
- ✓ E-mail address for project comments and information requests (e.g., Info@RDMTNS.info)
- ✓ Project blog
- ✓ Project e-mail list (compiled from meetings and website)
- ✓ Social media (e.g., Twitter, Facebook, other)
- ✓ Local newspapers (Bay State Banner, Dorchester Reporter, Mattapan Reporter)
- ✓ Local broadcast media (Boston Neighborhood TV and Touch 106.1 FM radio)
- ✓ Flyers in Sunday church bulletins
- ✓ E-mail lists from community groups
- ✓ Posting flyers at bus stops
- ✓ Seat drop flyers on buses
- ✓ Information tables at Dudley Station or other major locations

✓ Volunteers to hand out flyers at bus stops

These methods can be used to advertise public meetings as well as disseminate general information about the study:

	Billboards	✓ Dudley, Grove Hall and Mattapan Squares
act	Community Newspapers	✓ Dorchester Community News ✓ Dorchester Reporter ✓ Mattapan Reporter ✓ Bay State Banner
Media	Electronic Media	 ✓ Project web page ✓ Project blog ✓ Info@RDMTNS.info ✓ Twitter, Facebook ✓ E-mail lists
	Community Broadcast Stations	 ✓ WILD Radio ✓ Boston Neighborhood Network TV News (community cable access)

Frequency of Public Meeting

We concur with the RFR scope that the 4 sets of major public meetings (Task 1, 3, 4 and 6) is appropriate for the overall objectives of this study. The table below outlines

6			
Group of Public Meeting	Task	Meeting Agenda	Meeting Format
#1	Task 1 - Goals/Objectives	 ✓ Set the tone for the study: New Start and "Blank Slate" ✓ Study objectives ✓ Geographic extent of study area ✓ Travel experience of current MBTA riders 	 ✓ Opening remarks by elected officials and MassDOT officials ✓ Overview presentation ✓ Service questionnaires ✓ Q&A
#2	Task 3 – Existing Conditions	 Presentation of data collection and analysis 	
#3	Task 4 – Alternatives Development	✓ Solicitation of suggestions for service improvements or new services (BRT, semi-BRT, LRT)	✓ Break-out groups ✓ Provide maps to mark-up with routes
#4	Task 6 – Recommendations and Concept Plans	✓ Presentation of 5 to 10 alternatives ✓ Selection of 3 alternatives	

Project Advisory Committee (Task Force)

A Project Advisory Committee (PAC) should be formed in advance of the first round of public meetings. The PAC should include representatives from each of the neighborhoods within the study corridor. Members from the Route 28X Advisory Committee should be contacted about joining the PAC. It also may be useful to consult with elected officials and other community leaders regarding a makeup of the PAC.

"Primer" On Transit

As part of the Task 4 round of public meetings, our sub consultant PB will present a "primer" on transit focused on the modes likely to be considered (e.g., local bus, BRT, BRT-local bus hybrid, LRT). They will discuss vehicle types, guideway types, motive power, and the level of service in terms of operating speeds. We will also mention enhancements for modes sharing roadways with other vehicles (e.g., signal pre-emption, queue jumps, and amenities for bus stops). The presentation will be appropriate for a lay audience who is familiar with riding the current MBTA system.

Other Services

We will provide meeting materials including handouts and PowerPoint presentations. When requested, we will provide materials in accessible formats. We will also provide meeting translations (in Spanish and Haitian Creole), and will prepare meeting summaries.

TASK 2B: PROJECT WEBSITE

We will work MassDOT's IT department in developing a project-specific website to provide public information and solicit public input. Our sub consultant, Onyx Spectrum, will contribute ideas on website layout and how to maximize the effectiveness of the site for reaching its intended audience. We will provide you with formatted content for posting, including:

- ✓ E-mail address (e.g., info@RDMTNS.info)
- ✓ Links to the MassDOT website from the websites of community organizations
- ✓ Links to the MassDOT website from social media (e.g., Twitter, Facebook, etc.)

Applying Electronic Media to Civic Engagement

While the project scope specifically addresses a project website, this study would benefit from employing the full range of electronic media to facility the Civic Engagement Plan. The following is a list of strategies the team will incorporate working with the DOT IT department to support the outreach and feedback efforts:

- ✓ Creation of "mobile" forums at key bus stop locations.
 - A questionnaire for use on mobile devices will be created.
 - Student team members will visit key locations share information with riders about the scope and purpose of the study and to solicit feedback from riders who do not have mobile devices (questions will be read and responses entered into the student's mobile device)
 - For riders with access to mobile devices, information will be provided to riders on how to access the questionnaire.
 - Voices of riders can also be recorded to garner feedback on their experiences and provide input into any proposed plans on their route. These "voices" can be included on the website.
- ✓ Use of "Go to Meeting" or similar application to provide online webinar-only presentations and forums and to broadcast and complement live community meetings.
- ✓ Community meetings can be recorded (audio only or audio and video) for playback via web for community members who could not attend certain forums. For accountability and tracking, visitors should be asked to "optionally" register so their attendance can be counted. While listening and / or viewing, the visitor should have the option to provide feedback or submit questions.
- ✓ Use of vacant ad space on the buses to "advertise" the mobile forums and how to access the questionnaire via the rider's mobile device.

- ✓ Incorporate web-based questionnaires into project website using a variety of open source questionnaire applications or those currently licensed by the MBTA.
- ✓ Use of Facebook and Twitter to identify stakeholders and push information (reports, times and dates for community meetings etc). These strategies have been successful, since people have control to opt in or out and the MBTA can control the level of interaction with "Friends".
- ✓ YouTube can be used to broadcast videos submitted by community members that express their transportation vision for their communities.
- ✓ Select three to five key stakeholders (grass roots community leaders) to post information to a blog on the project site. This can be extremely useful in garnering the "pulse" of the communities.
- ✓ The project website will need to support the following objectives of the project team, MBTA and the community:
 - Provide the community with an overview of the project, including related materials and information from other communities that have implemented similar projects (YouMove).
 - Enable the project owners to present information to the community and solicit feedback.
 - Provide a calendar of meetings and events.
 - Enable community members to rsvp for meetings, post questions, join a mailing list.
 - Provide resource links for community members, legislators and other interested parties.
 - Provide minutes to meetings and attendee lists on the project website and give the visitor the ability to submit comments on the minutes via the web. Accountability is key and if people know that there attendance is on the web they will hopefully be more vested in the success of the study outcomes.
- ✓ Many of the interactive and informational pieces from the YouMove Massachusetts website should be incorporated into the project website on a scale that will complement the communities in the study and their specific needs and requirements.
- ✓ We would propose that Section 508 compliance, although not always a requirement, is nevertheless good practice. Section 508 requires Federal agencies to make their electronic and information technology accessible to people with disabilities. Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. We would recommend that at least some level of Section 508 compliance should be incorporated into the project website to increase accessibility by community members with disabilities.

Task 2 Deliverables

- ✓ Technical Memorandum No. 3: Civic Engagement Plan
- ✓ Materials for the project website (ongoing)

Understanding the Framework of Transit in the Study Corridor - Task 3: Existing Conditions and Issues Identification

TASK 3A: EXISTING CONDITIONS AND DATA COLLECTION

Existing Transit Services

The main objective of this part of the study will be to assess the operations of the various transit routes and services within, and connecting to, the study area. Particular emphasis will be given to the present MBTA bus services, as well as to the rapid transit services including the Silver Line, Red Line and

Orange Line, and the Fairmont commuter rail operation. We anticipate using data on service frequency, maximum passenger loads, and schedule adherence using Central Transportation Planning Staff (CTPS) trip summary and load profile reports.

Based on previous studies that we have reviewed, such as The Assessment of Dudley South Corridor Bus service and Potential Improvements – CTPS, 2009, we would expect that the major transit issues in the study area will revolve around problems confronting bus service, notably schedule adherence, crowding, frequency, average travel speeds, and intersection performance. We will also identify and analyze route attributes such as the distance between stops, boarding and alighting totals, the number and location of passenger shelters and methods of fare payment.

We will also address opportunities afforded by the already programmed actions, such as the new Fairmont Line stations at Washington Street-Geneva Avenue/Four Corners, Talbot Avenue and Blue Hill Avenue.

In order to fully address these issues, we propose to meet early in the project with MBTA Bus Operations staff and with MBTA Service Planning staff. Similarly, we would recommend conducting an early meeting with Boston Transportation Department (BTD) staff to discuss traffic issues.

Based on previous studies and our long-term work with the MBTA, we recognize that the study area is characterized by neighborhoods that contain high population densities, significant percentages of minority populations, and low per capita incomes. Of particular interest is the proportion of passengers who do not transfer to or from other transit modes (i.e., their trip is made only on bus) and whose transit access and egress is by foot. This suggests that bus service is the only mode of transportation used by many riders. Given the relatively high rates of transit usage during the week and on weekends, it would appear that MBTA bus services are the sole means of transportation for many riders within the area.

Similarly, we are aware that previous studies have indicated that riders are most concerned with reliability, safety and security, and frequency of service.

We will utilize this information, updated and expanded as necessary by our team, to fully identify existing serve concerns and longer-term service development issues.

Technical Memorandum No. 4: Summary of Existing Transit Services

Upon completion of the compilation of the data collected on existing transit services and with consideration of the input from existing MBTA riders, we will summarize all these findings in a technical memorandum.

Existing Traffic Data

We will review the existing traffic data available from various sources, including the Route 28X process, BTD studies, and other available sources. We would propose a meeting with BTD to ascertain their understanding of major traffic issues in the study corridor as well as to learn of any other available sources of traffic data that may be relevant. If these sources do not provide adequate traffic data, we will propose additional data collection.

Land Use, Economic Development and Environmental Data

We will compile and review available data on existing land use patterns, population, economic development and environmental for the defined study area. We will also identify any future development plans that could affect the feasibility or relative attractiveness of any alternatives developed during the study.

Sources of data would include the US Census, the MPO travel model and GIS data layers available from city and state agencies. We would expect to review and present most data at a study area-wide level of detail, with disaggregation of details to specific corridors or census tracts being employed only on an asneeded basis.

In consultation with MassDOT and the City of Boston, recent and proposed commercial/industrial developments, residential subdivisions, and other proposed projects with significant trip generation in the study area will be identified and mapped. Inclusion of such developments and other potential trip generators should be coordinated with CTPS and the MPO travel model, so that we can develop a land use and economic projection that is in close conformity with the established regional forecasting efforts.

Using the above collected data, a base map will then be assembled in a GIS format for presentation to the public and for use in the subsequent tasks.

Technical Memorandum No. 5: Summary of Existing Land Use, Economic Development Characteristics, and Environmental Concerns.

Upon completion of the above work, we will summarize the findings in a technical memorandum.

TASK 3B: FUTURE YEAR CONDITIONS AND ISSUES IDENTIFICATION

We will work with CTPS to develop and analyze travel conditions in the study area for the horizon year of 2030. Team member PB has worked extensively and continually with CTPS travel demand forecasting staff for over a decade encompassing work with the North Shore MIS and subsequent Blue Line Extension Project, and on the Green Line Northwest MIS. We are thus aware of the scope, data requirements, output capabilities and limitations of the CTPS travel demand forecasting process. We are also cognizant of the various nuances concerning fares, transfer polices, parking availability and fees, etc. which need to be addressed as part of the travel demand forecasting process.

As a result of our collaboration with CTPS for this study, demand for public transit and traffic conditions will be forecasted for a "no-build" condition, which assumes that no alternatives are implemented. Throughout the region, only existing or planned projects that can reasonably be expected to be in place by 2030 will be included in the analysis. Anticipated deficiencies and issues in the study area will be identified, quantified, and evaluated.

PB will conduct the traffic analysis for existing and future conditions using SYNCHRO traffic modeling software and supporting SYNCHRO with VISSIM traffic simulations at isolated locations. CTPS has a traffic model of the corridor which they will be providing existing and future traffic volumes. We will use their geometric data to develop corridor intersection models using SYNCHRO. We will develop up to six VISSIM intersection simulations to present transit stop alternatives based on intersection and roadway geometries.

We are also aware of, and sensitive to, issues pertaining to various transportation projects and programs that the Commonwealth has endeavored to undertake, but which presently are programmed only as "illustrative" projects in the current Program for Mass Transit (PMT).

The results of the travel demand forecasting process will be combined with the analyses developed under Task 3A to identify particular problems, potential solutions and improvements in the study area. We recognize that many of these issues will need to be addressed on an individualized basis. For example, although problems with bus speed, crowding and schedule adherence may occur throughout the study area, they are not all-encompassing and need to be dealt with along specific route segments and locales.

Wherever feasible, issues will be presented in graphical or map form suitable for presentation at a public meeting. We also recognize that the results of issues such as "bus bunching" may be immediately recognizable to the general public (i.e., a crowded late bus immediately followed by a nearly empty onschedule bus), but the causative factors may not be readily understood. We typically assign senior operations and engineering persons to such tasks, since they have accumulated the skills and understanding necessary to inform the public as to the operational issues (and solutions) which underlie such situations.

Technical Memorandum No. 6: Key Issues for Transit Planning (2010 and 2030)

We will prepare a technical memorandum that presents an outline of the key issues for the study area, both at present and, through interpretation of the results of CTPS travel demand model forecasts, in 2030.

Task 3 Deliverables:

- ✓ Technical Memorandum No. 4: Summary of Existing Transit Services
- ✓ Technical Memorandum No. 5: Summary of Existing Land Use, Economic Development Characteristics, and Environmental Concerns.
- ✓ Technical Memorandum No. 6: Key Issues for Transit Planning (2010 and 2030)

DEVELOPING A RANGE OF ACTIONS - TASK 4: ALTERNATIVES DEVELOPMENT

Solicitation of Public Input

This task will start with a round of public meetings and a meeting of the Advisory Committee to solicit suggestions for a range of short-term to long-term improvements to transit services. To foster an opportunity to talk with those proposing alternatives, we recommend break-out groups where there is more time for an individual to explain his/her proposal and think it through in a small group setting.

Additional Alternatives

The consultant team and MassDOT may add alternatives not suggested by the public solicitation process. This an opportunity to add in some concepts based on the professional experience of the team in consideration of the data amassed in Task 3.

We would look especially for **operational changes** with minimal cost impacts, yet positive benefits for a segment of the ridership. Particularly for work trips, we would look at the major benefits:

- ✓ Reducing trip time
- √ Reducing/eliminating transfers
- ✓ Addressing overcrowding
- ✓ Improving schedule reliability.

As in Task 3, meeting with MBTA Operations Planning and Bus Operations may provide additional insight that may lead to some consultant added alternatives.

Another tier of consultant-suggested alternatives would be route extensions or revisions that may increase operating costs but provide significant benefit to the ridership. Such might be an extension of Route 28 to the Longwood Medical and Academic Area (LMA) or Route 25 via Harrison Avenue or Albany Street into the Boston University Medical Area (BMA), should the travel data indicate these areas as destinations for work or medical related trips.

We would also look at the application of ITS technology to detect approaching buses at key intersections, thus allowing either phase pre-emption or phase extension strategies. PB has successfully employed these applications on urban BRT and other urban bus projects around the nation, thereby reducing run times and providing greater schedule reliability.

Alternatives developed by the consultant team and/or MassDOT should be tempered with consideration of acceptability to riders and the community. For example, while modifying bus routes or schedules to feed the new stations and improved service on the Fairmont Line may result in travel time reductions for those destined of the South Station area, one needs to realize there is some reluctance in the community to using commuter rail for a trip within Boston. Based on our experience, while many residents are comfortable taking the bus, various factors, such as unfamiliarity, concern about higher fares, or simply the relative infrequency of service, make many hesitant to consider this option.

Technical Memorandum No. 7: Transit Alternatives

The memorandum will consist of a listing of transit alternatives that come from the public solicitation process and those contributed by the consultant team and MassDOT. These alternatives will be posted on the project website and distributed to study participants. The memorandum will provide some general level of organization, such as long term, medium term and short term.

Task 4 Deliverables:

✓ Technical Memorandum No. 7: Transit Alternatives

INITIAL SCREENING - TASK 5: ALTERNATIVES EVALUATION

In this task, we will help you organize the "menu" of transit alternatives developed in Task 4. As suggested in the RFR scope, this could take the form of a 3 X 3 matrix such as the following:

	Implementation Schedule		
	Short Term	Medium Term	Long Term
High Reward			
Benefit to Riders Medium Reward			
Low Reward			

We would propose to assign the implementation category by considering similar projects in recent years. The short-term alternatives would typically include tweaks to bus operations including schedule adjustments, route modifications, and even some minor revisions to stop locations. Some of these short-term alternatives would likely be no cost operations tweaks, while others would be characterized by low costs that involve only operations and do not involve capital improvements.

The medium- and long-term projects would include capital investments, such as new vehicle procurements, improved bus stop amenities, changes to traffic signalization, creation of bus lanes, queue jumps, and other projects involving construction. A medium-term project might involve improvements with limited construction impacts (e.g., new bus shelters) while a long-term project would include significant construction impacts (e.g., BRT facilities).

To determine the "reward" to riders, we would apply the evaluation criteria developed in Task 1C. We anticipate some alternatives might drop out due to "fatal flaws" or because they simply are unfeasible given existing roadway constraints. The benefit to riders will also be based on CTPS's application of the travel demand model to determine changes to ridership, travel time, and general travel conditions in the study area.

Once all feasible alternatives from Task 4 are placed in the matrix, the initial screening would look at those with low reward and a long implementation period. These would likely be the first to be eliminated. The following is a likely assessment of which categories of alternatives would make it to the public

meeting. In this matrix, green represents favorable, yellow is marginally favorable, and red is unfavorable.

	Implementation Schedule		
	Short Term	Medium Term	Long Term
High Reward			
Benefit to Riders Medium Reward	Also the Market St. W.		
Low Reward			

For example, for the Commonwealth to fund a long-term project, it would need to be one with the greatest benefits to riders. On the other hand, a short-term, zero-to-low cost alternative is likely to be considered regardless of the level of reward.

Working with MassDOT and our proposed matrix, a short list of 5 to 10 alternatives will be identified and brought to the public for the next round of evaluation.

Technical Memorandum No. 8: Evaluation Summary of Alternatives

It is important that this memorandum clearly establishes the process and rationale for the rating of each alternative. This memorandum will provide the rationale for each rating, a discussion of the major benefits/impacts of each alterative, and an estimate of relative cost/ease of implementation. The report will be organized around the low reward-high reward and short term-long term continua.

Task 5 Deliverables:

✓ Technical Memorandum No. 8: Evaluation Summary.

DETERMINING RECOMMENDED COURSES OF ACTION - TASK 6: RECOMMENDATIONS AND CONCEPT PLANS

Developing Recommended Alternatives

This task will involve bringing the 5 to 10 alternatives that come out of the screening in Task 5 to the public to achieve consensus on 3 final alternatives. This would be one alternative in each implementation horizon (long-term, medium-term, and short-term).

Developing Consensus

Before presenting this challenge at a series of public meetings, the consultant team and MassDOT should define what an acceptable level of consensus would be. In planning studies where implementation is not imminent, the degree of consensus does not have to be as fine as for a construction project, where whatever is agreed to will soon be "set in stone." For this level of planning, there can be some vagueness in certain details that are typically worked out as a project moves into design.

We would recommend checking in with elected officials, community leaders and the Advisory Committee with regard to defining an acceptable level of consensus. This is particularly true in the event that no single alternative is the choice of all.

Finally, we might suggest that, in the case of no clear consensus, more than one alternative be retained. For any long term alternative, it is likely to require further study and MEPA/NEPA reviews. In these processes, it is not uncommon to carry forward more than one alternative into the alternatives analysis phase of the environmental review process.

Also, in the case of short-term, low-to-no cost alternatives, if the cost is sufficiently low, it may be affordable to entertaining implementation of a number of such alternatives.

Public Meetings

With an understanding of consensus established, the round of public meetings will be held to weigh opinion as to the preferred alternatives. Other input may be obtained directly from study participants via electronic media, questionnaires or brief interviews.

Concept Plans, Operating Scenarios, and Cost Estimates

Once the choice of final alternatives is set, we will develop appropriate concept plans or sections, operations scenarios, and implementation cost estimate.

Task 6 Deliverables:

✓ Maps, cross sections, other graphics such as renderings as necessary, operating plan, and cost estimates for each of the three recommended alternatives.

SUMMARIZING THE STUDY - TASK 7: FINAL REPORT

As a summary of the study, we will prepare a Final Report incorporating the Technical Memoranda prepared for Task 1 through 6. The report will also include an Executive Summary and Appendices.

Task 7 Deliverables:

✓ Final Report

B.3 Project Controls

Implementation of project controls begins at project kickoff and runs through contract completion. The key components include:

- ✓ Schedule Control
- ✓ Budget Control
- ✓ Document Control
- ✓ Coordination and Communications (Internal and External) Control
- ✓ Progress Reporting

Schedule Control

Our first task will be development of the overall project schedule for Task 1 through 7. This will include the major design tasks and deliverables as well as penciling in the schedule of the major public meetings. This schedule will be updated monthly and included in a monthly Progress Report.

Budget Control

The budget control process involves monitoring the consultant teams' expenditure on a monthly basis so that it may be compared to progress measured as the physical percent complete on a task or subtask basis.

The budget control component will include:

- ✓ Task budgets established for consultant team
- ✓ Monitoring of monthly expenditures vs. physical progress to determine the performance index. This will be included in a monthly Progress Report.

Document Control

This component of the project management plan will identify and monitor the maintenance and filing of project documents (reports, other deliverables) both in hard copy and on a web-based project workspace

(accessible only by MassDOT, consultant team and other authorized users). An index of major documents and their status and file location will be included.

Coordination and Communications (Internal and External) Control

This aspect of project controls will document by means of logs and other methods including the following;

- ✓ Communications with MassDOT project manager
- ✓ Coordination with MBTA departments and staff
- ✓ Coordination with City and State agencies

Progress Reporting

Monthly Progress Reports will be submitted to summarize progress, monitor progress and budget expenditures, and identify any items of concern.

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