

## Scope of Work: Bus Awareness Study for Transit Non-Riders

January 2024

### I. Introduction/Project Background

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The Massachusetts Department of Transportation (MassDOT)'s Office of Transportation Planning (OTP) is conducting a study to examine the challenges of attracting non-transit and/or rail-only riders to consider using Massachusetts Bay Transportation Authority (MBTA) bus service as a modal option to meet their travel needs.

The MBTA is currently engaged in several efforts to improve the level of service and the travel experience for bus riders, including the recently completed Bus Network Redesign (BNRD) plan as one part of the Better Bus Project. These ongoing projects have been particularly important as post-pandemic ridership counts have shown that the MBTA's existing bus system fared better than other modes in maintaining ridership throughout the pandemic and beyond.

From public outreach and consultation with riders in 2018-2019, MBTA riders told us that great bus service goes where people want to travel and is simple to use and easy to understand. However, the MBTA seeks measurable data and actionable intelligence on 1) what the specific barriers that might make riding the bus difficult are, and 2) repeatable data-driven metrics that would show progress in this area. The MBTA seeks data on barriers to bus usage from non-transit riders as well as rail riders who do not ride the bus to learn more about this large market segment.

This project seeks to support BNRD, the Better Bus Project, and other MBTA efforts by identifying the barriers and challenges that preclude potential riders from choosing the bus, and recommending actions the MBTA can take to better attract and retain new riders. This project seeks to answer the question: How can the MBTA make bus a viable and competitive transportation choice for more people in the MBTA service area? The information obtained through this project will help provide direction to the MBTA on how to market and conduct public outreach to attract non-riders to consider using the MBTA bus system for their trips.

Anticipated outcomes of this effort include:

- Recommendations for customer experience improvements based on feedback collected from current and potential MBTA bus riders.
- A final report that details the results of the research and public outreach conducted over the course of the study and identifies next steps for the MBTA.

This project is expected to take 12 months from Notice to Proceed. The anticipated budget for this project is \$500,000.

#### A. Deliverables

The selected consultant is expected to produce and deliver discrete products at the conclusion of each Task as listed below. Additionally, the selected team will be asked to repackage each discrete deliverable as a chapter or section in a Final Report that will be presented to MassDOT at the conclusion of the project.

In addition, the selected consultant will be required to share and transfer all the data and resources used in the compilation and development of each deliverable where relevant and applicable (as determined by MassDOT). Qualitative data and resources include but are not limited to reports, articles, scholarly research, interviews, and focus groups. Quantitative and spatial data include but are not limited to spreadsheets, statistical software files, and shapefiles.

## **B. Data**

All data proposed for use in this project work must be reviewed and approved by OTP independently of this scope. OTP owns and has access to data that can and may be used as part of this project; the selected consultant must review the data currently owned and retained by MassDOT and privilege this data over outside or additional resources. Should additional data be considered required or beneficial, all proposed data procurements must be approved by OTP in addition to this scope prior to Notice to Proceed. (OTP reserves the right to use and/or procure new supplemental data that may become available during the course of the study).

Should a data procurement be found to be beneficial or necessary by OTP, MassDOT will retain exclusive and non-transferable ownership of the procured data beyond applications to the immediate project. The rights and privileges associated with the procured data will be at the sole discretion of OTP. This means that OTP retains the right to make use, and have Designated Users make use, of any procured data for purposes deemed worthwhile for enhancing transportation planning activities in the Commonwealth of Massachusetts.

## **C. Project Management and Administration**

The selected consultant must schedule a kickoff meeting with the MassDOT Project Manager and other staff (as needed) upon Notice to Proceed. At the kickoff meeting, the selected consultant will recommend the number, frequency, and format of ongoing progress meetings with MassDOT staff as well as specific timelines and timeframes for turnaround and MassDOT review of draft and/or final versions of deliverables, when not pre-defined by MassDOT.

At the kickoff meeting, the selected consultant must also review the project Data Quality Control and Assurance Plan. The Data Quality Control and Assurance Plan should review the steps that the consultant expects to take to review and validate the work associated with the deliverables of this project.

Budget status and spending updates should be integrated into the regular check-in process with MassDOT Project Management at a frequency determined at the kickoff meeting. The selected consultant must notify MassDOT Project Management if forecasted spending in any one budget area is outpacing initial estimates.

## **II. Project Tasks**

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### **Task 1. Working Group Identification, Engagement Plan and Kickoff**

Task 1.1 will identify members of an internal Working Group and develop an ongoing Engagement Plan for keeping stakeholders engaged and apprised of the progress of the project. The Working Group will

be a critical backstop and sounding board with respect to the cost, time, and implementation of deliverables. The Working Group will be comprised of select staff from MassDOT OTP and the MBTA. Working Group meetings should be held throughout the course of the project and especially at key junctures when input and feedback is required. A presentation to the Working Group will be expected at the conclusion of each task.

**Task 1.1 Deliverables:**

- Final list of Working Group participants
- Working Group Engagement Plan
- Kickoff Meeting
- Ongoing presentations to the Working Group throughout project

***Task 1.2 Graphic Design Standards***

The consultant and the MassDOT project manager will coordinate to establish a series of graphic design standards to be used for all deliverables on this project.

- The MassDOT project manager will give final approval as to the graphic design standards applied to all final deliverables.
- MassDOT will provide the consultant with the relevant MassDOT logos and other digital design content.

**Task 1.2 Deliverables:**

- Templates for all slide decks, presentations, outreach materials and reports to be used for the project.

**Task 2. Identify Existing Data and Methods for Collecting Additional Data to Fill Knowledge Gaps**

***Task 2.1 Review Existing Data***

This task includes gathering and synthesizing previously collected data related to MBTA bus. This effort should focus on data and information related to identifying and prioritizing barriers to choosing the bus, representative of riders and non-riders. This data may come from specific bus-related research and planning efforts<sup>1</sup> inclusive of topics ranging from safety and accessibility to trip planning and transfers. Some examples may include the Better Bus Project, the Plan for Accessible Transit Infrastructure, *Focus40*, and meetings with MassDOT and MBTA offices to understand feedback they may have received about the bus experience in distinct efforts (e.g., feedback collected during the Orange Line Surge or the Sumner Tunnel Closure or during meetings related to station improvements). The selected consultant should coordinate, via MassDOT, with other entities within the MBTA service area such as the Boston Region MPO, MAPC, and selected municipalities to gather any relevant data or research that they have conducted. The consultant is also expected to synthesize general research on this topic from research institutions such as the Transportation Research Board (TRB), American Public Transportation Association (APTA), National Association of City Transportation Officials (NACTO) and others. Literature review elements should include, if available, strategies for comparing stated preference data such as that which will be yielded by this study, to revealed preference data.

**Task 2.1 Deliverables:**

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<sup>1</sup> Reports may include but are not limited to: [2018 State of the Bus System](#), [2018 Market Analysis](#), [2018 Bus Route Profiles](#), and the 2022 [Bus Network Redesign final report](#).

- A review/synthesis of previous public outreach and research findings.

#### *Task 2.2 Peer Agency Review*

In Task 2.2, the consultant will conduct a review of peer agency efforts similar to this scope. This review will include how transit agencies collected and analyzed similar data and how they have institutionalized the usage of that information. To the extent possible, the consultant will collect peer research data, including not just survey results but also revealed preference data where available, for comparison with surveys conducted as part of this study.

Task 2.2 includes interviews with peer agencies by phone or web meeting.

#### Task 2.2 Deliverables:

- A brief memo of findings.
- Electronic versions of all research and documentation reviewed under this task.
- Summary interview transcripts.

#### *Task 2.3 Survey Design*

This task will design a survey for members of the public to specifically target why they do or do not choose the bus as a travel mode. Survey groups will be limited to those living and working in the MBTA bus service area to avoid results (like expansion needs) that have been covered in previous planning efforts, like Bus Network Redesign. The final survey may go through several rounds of review and edits before finalizing. The survey should be designed for both in-person and online feedback. The consultant should design the survey such that all results are accessible to MassDOT/MBTA and with consideration of the survey instruments owned by MassDOT. Ideally, the survey will be designed in such a way that its outputs are comparable to data on observed rider behavior that MassDOT and the MBTA will develop in the future.

#### Task 2.3 Deliverables:

- Draft and final versions of the stakeholder survey, accessible in both paper and online formats.

#### *Task 2.4 Solicit Feedback from Stakeholders*

Stakeholders for this task include members of the public (specifically non-transit riders) and community groups.

This task will include facilitating the general population survey. The objective of this component is to develop a robust understanding of why non-transit riders do not consider using the MBTA bus system for their transportation needs. If partnership with community groups would be beneficial for this task, the selected consultant will provide a list of proposed relevant stakeholders to the MassDOT Project Manager for approval prior to gathering input from those stakeholders.

#### Task 2.4 Deliverables:

- Draft and final list of stakeholders to engage.
- Survey results
- A summary memo describing the findings of Task 2

### **Task 3. Identify Barriers to, and Strategies for, Encouraging Non-transit Riders to Consider MBTA Bus Service**

### *Task 3.1: Barrier Identification*

Using the data and feedback collected in Task 2, Task 3 will provide an analysis of what barriers are preventing existing non-transit riders from considering using bus service. This task will identify existing potential barriers for not considering the bus as a transportation option through physical infrastructure, scheduling, origin and destination and potential customer experience.

### *Task 3.2: KPI identification*

The consultant will work with MassDOT and the MBTA to build and/or recommend repeatable KPI(s) to measure progress towards this study's original goal: how to make the bus a viable option for more people. The consultant will use the data collected and reviewed in this project to recommend potential KPIs for this goal.

### *Task 3.3: Strategies Identification*

A third component of this task includes identifying potential strategies to address the barriers identified in Task 3.1. These strategies should address how the MBTA may approach implementing efforts to mitigate the barriers identified in Task 3.1. To note, recommendations for improvement should not include operational improvements that have been addressed in previous planning efforts, e.g.: managing headways.

### Task 3 Deliverables:

- A memo ranking and summarizing
  - o common barriers to people choosing the bus as a mode of transportation
  - o recommendations for repeatable KPIs to measure progress, and
  - o potential strategies the MBTA can undertake to continue to measure rider needs and behaviors as Bus Network Redesign and other projects are implemented and to improve the bus experience and encourage non-riders to take the bus.

## **Task 4. Recommendations and Final Report**

This task will synthesize the findings of the previous components to recommend potential strategies for attracting non-bus riders to use the MBTA bus service. Potential improvements recommended in this component should seek to demonstrate the benefits of using bus service, and to improve the customer experience of current and future MBTA riders. Recommendations should specifically address actions over which the MBTA has power and authority and may identify future work the MBTA can pursue with their partners.

### Task 4 Deliverables:

- Draft and final versions of a report and accompanying presentation detailing the synthesized findings of and recommendations from the first three tasks.