

Memorandum of Understanding (MOU)
for Pilot Program To Test Bridj Service In the City of Cambridge
28 OCT 2014

Summary of Service:

Bridj is a direct, flexible mass transit system that supplements existing public transit in the Greater Boston Area. Bridj has applied for a jitney license from the City of Cambridge, and needs the support of the City of Cambridge to grow its innovative service throughout Cambridge's neighborhoods and beyond.

Bridj's mission is to increase mobility for every urban resident by providing:

1. **Accessibility:** Connecting neighborhoods to jobs that would otherwise be out of reach due to a prohibitively long commute;
2. **Convenience:** Providing Bostonians and Cantabrigians with a convenient, environmentally sustainable, and affordable alternative to driving in the city; and
3. **Flexible Capacity:** Alleviating the peak demand stress on public transit infrastructure.

Bridj Service Goals:

1. Bridj will improve connectivity in and around the City of Cambridge;
2. Bridj will have no net negative impact to existing bus service at MBTA stops, bike lanes and overall congestion in Cambridge; and
3. Bridj may reduce congestion in Cambridge by taking cars off the road.

The Cambridge Traffic, Parking and Transportation Department (TP&T) has two primary areas of responsibility when reviewing jitney license applications 1.) The appropriateness of the route(s) and 2.)

The appropriateness of the stop locations on the public rights of way.

TP&T wants routes to be on streets that are most appropriate for the vehicles and to protect heavily residential streets from unnecessary trips or noise. Stop locations need to be where the vehicle can safely pull to the curb without blocking travel lanes, bike lanes or delaying MBTA bus operations.

Purpose of MOU:

The purpose of this MOU is to identify the areas of concern for TP&T of Bridj's application and the way in which those concerns will be handled during the 6 month pilot period of Bridj operations within the City of Cambridge. Bridj is seeking the most flexible and convenient service for their riders. TP&T is seeking to identify those areas of concern where special attention will be paid to ensure that the Bridj service does not adversely impact MBTA service at bus stops or interfere with the department's management of its streets and curb regulations. Due to the flexibility of routes and stops that Bridj is seeking, this MOU is related to use of all city streets and all MBTA bus stops.

Proposal:

Bridj proposes to operate for six (6) months within the City of Cambridge as a pilot program to allow time for Bridj and TP&T to evaluate the impacts of the system on the transportation infrastructure within the City.

Routing Conditions:

- a. Bridj will not operate vehicles of a weight and/or size qualifying it as a 'truck' over truck-restricted routes in the City of Cambridge.
- b. Bridj will operate on DCR regulated parkways in accordance with an operating permit granted by DCR.
- c. Bridj will not use Pearl or Magazine streets unless they have a stop on those streets. Through trips will use Waverly/Albany, Sidney, Brookline, or River instead.

Stops Conditions:

Cambridge TP&T supports Bridj use of the MBTA bus stops within the City as the safest most appropriate locations to stop for passengers to board or alit from their vehicles. The following conditions apply to the most congested and challenging stops.

- a. Bridj will not stop at Cambridge Street toward Inman Square in front of Cambridge Rindge and Latin School, as this location is highly congested due to school bus operations.
- b. Bridj will use the Galleria Mall shuttle stop on Main Street in Kendall Square instead of the MBTA stop on Main Street in Kendall Square.
- c. Other streets or stop locations utilized by Bridj during the Pilot Program will also be reasonably evaluated and addressed as needed.
- d. Use of the following MBTA Bus Stops will be evaluated using the evaluation program outlined below. These 4 stops are heavily used by MBTA buses and the MBTA bus service reliability or the management of the curb uses to avoid double parking or blocking bicycle lanes may be adversely impacted.
 - i. Mass Avenue in Harvard Square opposite Holyoke Street
 - ii. Mass Avenue at 77 Mass Avenue - MIT
 - iii. Central Square stops between Western/River/Pearl Streets and Prospect Street (both sides of the street)
 - iv. Mass Avenue at Upland Road (Porter Square, both sides of street)

Evaluation Program Outline:

- 1. Duration
 - 6 months.
- 2. Implementation and Evaluation
 - a. Evaluation will fall under the Traffic, Parking and Transportation Department (TP&T), Community Development Department with input from MBTA.
 - b. The evaluation will be shared with the License Commission.
- 3. Participants
 - a. GroupZoom, Inc. (dba Bridj).
 - b. Traffic, Parking and Transportation Department (TP&T)
 - c. Community Development Department (CDD)
 - d. MBTA

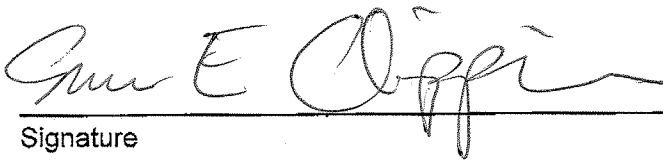
4. Means of Public Notice about Pilot Program
 - a. City of Cambridge website
 - b. Notice to MBTA drivers
 - c. Notice to Cambridge Bicycle Committee

5. Safety and Visual Evaluation
 - a. If they reserve a seat ahead of time, TP&T and CDD staff and members of the License Commission may ride Bridj service at any time to evaluate performance.

6. Evaluation Criteria
 - a. Data should be collected by the City, Bridj, MBTA or an independent party and made available to be analyzed by the City jointly with Bridj. Criteria may include the following (tolerance threshold to be determined):
 - i. Noise and safety issues on Pearl and Magazine streets:
 1. Any crashes involving Bridj vehicles along the roadways in question.
 2. Qualitative assessment of residential concerns regarding Bridj vehicles utilizing these roadways.
 3. Complaints from residents
 - ii. Impact on MBTA bus stop congestion. Metrics may include:
 1. Travel time for busses between MBTA bus stops prior to and after stops in question as measured by MBTA Automatic Passenger Count (APC) data (controlling for seasonal variations as needed). The analysis is to evaluate if MBTA bus travel times from one stop to another increase and to what extent may it be due to Bridj, such as a MBTA bus being delayed pulling into a stop because of a Bridj vehicle. "Before" data of MBTA travel times will use the City's Transit Service Analysis study conducted by IBI Group, July 2013 which used spring 2014 APC data for Route 1 and fall 2013 APC data for routes 69, 73, 77 ("Before" data may need to be adjusted to take into account the seasonal effects on traffic).
 2. The number of 'blocked bus stop' signals initiated by MBTA operators at the stops in question correlated with Bridj service hours.
 3. Bridj service is growing and is provided based on demand and the supply of vehicles it can employ. In light of this, Bridj may not run service to all of the locations in question during the pilot period. Bridj will notify the City monthly the number of stops at each location that will need to be evaluated. Specific evaluation locations will need to align with current Bridj service. Further discussion may be needed to determine a process to evaluate those locations not used during the pilot.
 - iii. Impact in and around MBTA stops:

1. Increase in driver, pedestrian and cyclist crashes adjacent to stops in question.
 2. Any reported incidents involving Bridj vehicles in the vicinity of stops in question.
 3. Comments and complaints from people impacted by Bridj use of the stop.
- iv. Bridj impact on congestion:
1. Mode shift of Bridj users in Cambridge. Survey information will be collected by Bridj and a report provided to TP&T at end of the Pilot Program.
 2. Estimated number of cars not traveling to Cambridge due to Bridj service. Bridj should provide a report to TP&T at the end of program.
 3. Any other information that Bridj has to support achieving their service goals and/or their areas of success.
- v. Optional:
Time lapse video or other means of observation (on select service days) of Bridj operations at stops in question:
1. Number of times a Bridj vehicle blocks a MBTA bus from pulling to the curb
 2. Number of times a Bridj vehicle blocks the travel or bicycle lane due to MBTA bus at curb
7. Reporting Requirements
- a. Bridj and TP&T will check in bi-monthly or as needed to discuss the criteria outlined in the MOU and track progress of the program.
 - b. TP&T jointly with Bridj will prepare a summary pilot report for the License Commission in preparation for consideration of a permanent regulatory mechanism for Bridj service in Cambridge.
8. To evaluate the impact of MBTA bus stop congestion, Bridj will make available the following information :
- a. Timetables for service in Cambridge including stop location and times.
 - b. Total stops by location per week at the MBTA stop locations in question (Kendall Square, Central, Porter and Harvard Squares).
Bridj will provide information about ridership and trip origin information in the form most appropriate for evaluating the bus stop locations of concern.
 - c. Summary of Bridj rider surveys such as rider Origin and Destination, previous mode before using Bridj, number of cars not traveling in Cambridge.
9. Bridj Vehicles will be clearly marked "Bridj" so they are identifiable.

City of Cambridge By



10/28/14

Signature

Date

Susan E. Clippinger
Director of Cambridge Traffic Parking and Transportation Department

Bridj By



10/28/2014

Signature

Date

Mathew George
Founder and CEO, GroupZoom Inc. (dba Bridj)

Additional Information

How Need Is Determined

We use robust data analytics to model and predict travel demand throughout the city. In addition, we directly source route origin and destination requests from members of the public. Based on this information, Bridj can quickly deploy an infrastructure-free, "pop-up" bus line to responsively serve that demand. Our business model allows us to fill both service gaps in the public transit system (such as Brookline direct to Kendall Square) and temporal surges (such as Green Line peak-hour over capacity).

How Service Is Delivered

Bridj charts vehicles, primarily 13-passenger Sprinter vans, from fully licensed and insured professional livery and bus companies. Our service is available to anyone who wants to ride. On the ground, Bridj requires no infrastructure and operates with a light footprint while providing service.

- Our contracted minibuses pull up to a safe spot on the side of the road (often at an MBTA bus stop, for which we have received the go-ahead from the Boston Transportation Department), load passengers within seconds, and leave without holding up traffic.
- We guarantee our passengers a seat, and strive to provide a smooth and hassle-free ride for all.
- Each passenger receives a receipt for each journey, ensuring that we are accountable, and can respond to any issues with personalized service.

How Bridj Is Unique

Our service is fundamentally different from both public transit and the transportation network companies of the "sharing economy" in several respects. Unlike public transit, we are demand-responsive and easily deployable. Unlike taxis, we aggregate demand to efficiently and sustainably move people to close to where they want to go. Because our customers request and purchase a seat ahead of time, there are no empty vehicles clogging city streets while searching for passengers. And, unlike some transportation network companies, all of our vehicles are commercially regulated, properly insured, and driven by professionals.