



City of Boston | 1 City Hall Sq. | Boston, MA 02201

Ryan Chin & Jenny Berlin
Co-Founders
Optimus Ride
88 Black Falcon
Boston, MA 02210

January 5, 2018

Dear Ryan and Jenny,

The City of Boston has had the opportunity to review your request advance to testing to include passengers within the Flynn Marine Industrial Park and nighttime and moderate precipitation testing without passengers. Based upon your progress to date - with over 200 miles of safe testing in the Marine Park we are pleased to permit this request through an updated section of the Test Plan.

This letter confirms approval from the City of Boston to amend the Optimus Ride Test Plan from March 2017, through the creation of a "Requirement #4" and accompanying Phase C1 and Phase C2 in the Test Plan. Pending reciprocal MassDOT approval, this permits the carriage of passengers in two separate testing phases.

As stated in Mayor Walsh's Executive Order on Autonomous Vehicles, the City is committed to the goal of having AV technology "ensure more equitable access to opportunity for those least well served by transportation options today, including seniors, youth and those with physical disabilities." We thank you for working with the City to ensure that a portion of the passengers in this pilot reflect those user groups.

The City appreciates your efforts to bring safe and reliable transportation solutions to the people of Boston and continuing to share your learnings as detailed in the quarterly reports. We thank you for your continued attention to safety in your operational procedures and look forward to the feedback from passengers in the coming months.

Sincerely,

Gina N. Fiandaca

Commissioner, Boston Transportation Department

CC: Kate Fichter, Assistant Secretary for Policy Coordination, MassDOT

Requirement #4: Passenger Carriage

The intention of permitting passengers in autonomous vehicles is to test real world use cases, human-machine interfaces, and to socialize the technology to a broader audience. For both safety and understanding of how well passengers will augment the current testing operations, there will be a phased approach.

OPERATIONAL DESIGN DOMAIN

Optimus Ride is approved to test autonomous vehicles without passenger at nighttime and during inclement weather, defined as rain at 2.5mm/hour-7.5mm/hour. ***Passenger carriage testing must occur in fair weather conditions only.***

Phase C1: Optimus Ride “Closed User” Group Demo			
Who	What	Place	Milestone
Passengers pre-selected by Optimus Ride. At least fifteen percent of passengers to be seniors, people with a mobility impairments, vision impairments or other sensory impairments that make driving their own vehicle problematic.	Trips that explore the passenger experience and potential use cases to service connections beyond a typical walkshed (.25 miles) within the Marine Park	Raymond Flynn Marine Park	40 passengers

Phase Progression: Summary of Phase C1 Requested by City and MassDOT

Phase C2: Optimus Ride “Broader User” Group Demo			
Who	What	Place	Milestone
Passengers opting in through Optimus Ride’s ride-hailing or through other arrangements with tenants, employees, or guests of the Marine Park area.	Trips that explore the passenger experience and potential use cases to complement public transit	Raymond Flynn Marine Park	No-limitations on number of passengers

PHASE PROGRESSION

A letter/report documenting learnings from Phase C1 should be submitted to all parties listed on the MOU with the request to move to Phase C2. Review and feedback of this report will be completed in a swift manner by the City of Boston. Phase progression approval will be determined by the Commissioner of the Boston Transportation Department.

PRIORITY USER GROUP

Continuing to build upon the goals identified herein, it is important to think about how this technology can unlock access to new groups. If necessary, the City can work with Optimus Ride to identify a small pool of seniors and individuals with mobility impairments willing to be part of the passenger experimentation.

WAIVERS

Each passenger must consent through the **Optimus Ride Vehicle Passenger Waiver** developed by Optimus Ride. A Photo/Video release, which can be part of the Passenger Waiver, must be issued to each passenger to record video or photograph passengers during their trip. An opt-in to sharing email addresses with the City for future follow-up on autonomous vehicle efforts should be included in the registration process.

PAYMENT

To build towards equitable access to this technology in its early stages and as to not conflate this experimentation with current Ride-for-Hire regulations, passenger trips in autonomous vehicle test rides must be free of charge.

SHARED RESEARCH AGENDA PHASE C1

In addition to the data sharing agreed to in quarterly reports under the current testing plan, the following should be detailed for the Closed User Group Demo.

Metric	Reason for Sharing
Number of Passenger Trips	<i>to assess exposure of the technology</i>
Passenger home zip code	<i>to assess exposure of the technology</i>
Map of Typical route(s) used for passenger test	<i>to assess use cases and curb planning</i>
Qualitative feedback on the user experience	<i>to help focus future research and public outreach initiatives</i>
Qualitative feedback on curbside operations	<i>to help future city operations and management of the public realm</i>
Email Contact information for passengers who opt-in	<i>to assist the City with community engagement in future AV policy development</i>

SHARED RESEARCH AGENDA PHASE C2

In addition to the data sharing agreed to in quarterly reports under the current testing plan, the following should be detailed:

Metric	Reason for Sharing
Average Number of Passengers per Trip	<i>to assess shared use of service</i>
Passenger home zip code	<i>to assess exposure of the technology</i>
Origin and Destination coordinates of each trip (<i>blockface level specificity</i>)	<i>to assess use cases complementary to public transit and curb-use planning</i>
Qualitative feedback on the user experience	<i>to help focus future research and public outreach initiatives</i>
Qualitative feedback on curbside operations	<i>to help future city operations and management of of the public realm</i>
Email Contact information for passengers who opt-in	<i>to assist the City with community engagement in future AV policy development</i>