



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

Karl Iagnemma
CEO and Co-Founder
nuTonomy Inc.
21 Drydock Ave.
Boston, MA 02210

October 20, 2017

Dear Karl,

The City of Boston has had the opportunity to review your request to amend the Test Plan, that governs nuTonomy's autonomous vehicle (AV) operations on city roadways, to begin demonstrations of the technology through an AV passenger pilot. Beginning with the launch of on-street testing in January 2017, the City's collaboration on AVs was envisioned as a shared research experience for AV companies, policy makers, and residents. We remain continually interested in exposing AVs to the public in new ways that will help us all better understand how the technology may influence our lives and the urban environment.

This letter confirms approval from the City of Boston to amend the Test Plan with a Phase C3 and Phase C4, describing shared research goals as it relates to the passenger pilot. 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 continued partnership and shared learnings detailed in the quarterly reports, as well as your participation in events like "Robot Block Party" to engage with residents and visitors on the future of mobility. We also 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.

Phase C3: nuTonomy Beta Test			
Who	What	Place	Milestone
Passengers pre-selected by nuTonomy. 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 complement public transit	South Boston Waterfront <i>(current Phase C)</i>	40 passengers

Summary of Phase C3 Requested by City and MassDOT

Phase C4: General Public			
Who	What	Place	Milestone
Passengers opting in through a ride-hailing platform of nuTonomy's choice.	Trips that explore the passenger experience and potential use cases to complement public transit	South Boston Waterfront <i>(current Phase C)</i> .	No-limitations on number of passengers

PHASE PROGRESSION

A letter/report documenting learnings from Phase C3 should be submitted to all parties listed on the MOU with the request to move to Phase C4. Review and feedback of this report will be completed in a swift manner by the City of Boston.

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 nuTonomy to identify a small pool of seniors and individuals with mobility impairments willing to be part of the passenger experimentation. Although stipulated for the beta test, the City prefers to

WAIVERS

Each passenger must consent through the **nuTonomy Vehicle Passenger Waiver** developed by nuTonomy. 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 C3

In addition to the data sharing agreed to in quarterly reports under the current testing plan, the following should be detailed for the Beta Test.

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 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 C4

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 (blockface level specificity)	<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>