

## **MEMORANDUM OF UNDERSTANDING TO FACILITATE TESTING OF AUTONOMOUS VEHICLES**

This Memorandum of Understanding (hereinafter, the "Agreement") is made by and among the Massachusetts Department of Transportation (hereinafter "MassDOT"), the Massachusetts Department of Conservation and Recreation ("DCR") and the Massachusetts cities and towns of Arlington, Boston, Braintree, Brookline, Cambridge, Chelsea, Medford, Melrose, Newton, Revere, Somerville, Weymouth, Winthrop, and Worcester (DCR and the cities and towns collectively referred to hereinafter as, the "Participants").

WHEREAS, roughly 94 percent of automobile crashes are caused by human error, and autonomous vehicle technology might reduce injuries and save lives; and

WHEREAS, technological innovation has resulted in the rapid advancement of the automation of certain functions of driving; and

WHEREAS, vehicles might, in the future, be capable of being driven safely with varying degrees of automation including without human monitoring; and

WHEREAS, the development and deployment of automated vehicles could have very significant impacts on rural, suburban, and urban areas, in both positive and negative ways; and

WHEREAS, it is the goal of MassDOT and the Participants that the safe testing and deployment of autonomous vehicles produce societal benefits, including a reduction in injuries and lives lost to vehicle crashes; a decrease in property damage; a reduction in congestion and related emissions, total vehicle miles traveled, and time spent traveling; an improvement in the efficiency of truck freight movement and delivery services; and a reduction in carbon emissions; and

WHEREAS, it is in the Participants' interest to support and participate in the advancement of these technologies in ways that benefit the Commonwealth's rural, suburban, and urban areas, by enabling safe testing of autonomous vehicles on public roadways; and

WHEREAS, the development of autonomous vehicle technology is expected to promote economic growth, bring new jobs, provide research opportunities for the Commonwealth's academic institutions, create new opportunities for partnerships around science, technology, engineering, the arts, and mathematics education, and allow the Commonwealth to serve as host to the emergence of new technologies and innovation; and

WHEREAS, it is the goal of MassDOT and the Participants to ensure that autonomous vehicles make mobility possible for those who are limited by the current transportation options our system provides. The aging population and those with visual, auditory, and other mobility-related impairments all stand to greatly benefit from this technology if applied with those types of users in mind; and

WHEREAS, it is the goal of MassDOT and the Participants to reduce vehicular impacts, reduce wear and tear on the Commonwealth's roadways, and free up space for other uses and modes of travel through the adoption of autonomous vehicles; and

WHEREAS, it is in the interest of MassDOT and the Participants to encourage the development of autonomous vehicles that are energy-efficient, and powered by electricity or other low emissions fuel sources; and

WHEREAS, MassDOT and the Participants believe that the future of transportation, commerce, and economic development of communities large and small relies in part on the growth of innovative technologies that may, among other things, improve passenger, bicycle, and pedestrian safety; increase mobility options; and foster greater economic productivity and security for all; and

WHEREAS, MassDOT and the Participants believe that planning for autonomous vehicles should enhance the integral connection between land use and transportation; and

WHEREAS, MassDOT and the Participants desire to implement a collaborative and phased approach for the testing of autonomous vehicles, wherein the parties will share test results, findings and research goals.

NOW, THEREFORE, MassDOT and the Participants agree to collaborate to support and facilitate the safe testing of autonomous vehicles and partnerships with the automotive and technology industries, and further agree as follows:

1. MassDOT, in collaboration with the Participants, shall develop a universal Application to Test Autonomous Vehicles on Public Ways in Massachusetts (the "Application") by December 31, 2018.
2. Each Participant shall, within six months of executing this Agreement, identify approved testing locations for at least one Testing Phase within its respective jurisdiction. These approved locations will be identified in the Testing Phase Schedule in the Application. To support a variety of testing needs, MassDOT and the Participants shall endeavor to identify diverse driving environments and contiguous cross-border testing routes.
3. MassDOT, in collaboration with the Participants, shall, at least every six months, review the technological advancements, federal policy progress, and developments in the autonomous vehicle industry and thereby adjust or modify the Application and/or the Testing Phase Schedule as appropriate.

This Agreement constitutes the entire and complete agreement between the parties and may not be amended except in writing agreed to and executed in the same manner as the Agreement itself.

This Agreement may be extended as an addendum for additional cities, towns, and agencies in the Commonwealth who want to sign on as Participants at a later date. All signatories to this original Agreement and any addendum will be listed online at [www.mass.gov](http://www.mass.gov) under "How to Test Autonomous Vehicles in Massachusetts."

IN WITNESS THEREOF, the parties hereto have executed this Agreement on this 21st day of June, 2018, by their duly authorized agents.