January 28, 2019

The Honorable Muriel Bowser Mayor of Washington, District of Columbia Office of the Mayor John A. Wilson Building 1350 Pennsylvania Avenue, NW Washington, DC 20004

## Dear Mayor Bowser:

As leaders and advocates involved in consumer and safety issues, we are writing to strongly oppose the District of Columbia (DC) moving forward with a driverless vehicle testing program with Ford Motor Company without necessary controls and oversight. Many of us signing this letter are also organization leaders or residents of DC. While we are strong proponents of proven technology that advances safety, unfortunately driverless vehicles equipped with experimental technology do not yet meet that criterion. Not only is the true status and capability of the technology obfuscated by a lack of transparency and public access to safety data, additionally, these testing vehicles are allowed under current law to be excluded from certain federal motor vehicle safety requirements. Giving the green light to testing on the District's roads is premature at best, and could be deadly at worst.

We urge you to take certain practical and prudent actions to ensure the safety of all road users. These include involving the public in the review and implementation of the proposed plan; requiring essential cybersecurity protections; establishing commonsense scientific protocols for identifying and evaluating adverse impacts on public safety; investing in necessary street improvements to accommodate the safe operation of driverless cars operating alongside pedestrians, bicyclists, public transit users and other motorists; and, developing effective countermeasures to address any increase in congestion and decrease in public transit use.

Navigating the District's roads presents many significant and unique challenges for the real world testing of driverless vehicles. The growth of pedestrians, bicycles and scooters sharing our streets increases the interactions and the likelihood that driverless vehicles could collide with these vulnerable road users. Indeed 2018 was a deadly year in the District, marking the highest number of traffic fatalities since 2008. Road users outside the vehicle accounted for a majority of the traffic deaths. We are concerned that this demonstration project will only increase the exposure and risk of harm to pedestrians and bicyclists.

While it has been reported that a safety driver and an engineer will be in Ford's test vehicles, this commitment is temporary and apparently voluntary as Ford has already stated it will remove the human driver and engineer when it alone decides the technology is ready. Also, Ford has not submitted a testing plan that has been made public for review and comment. Further, relying on a human driver as a safeguard has been ineffective. Last March in Tempe, Arizona, a pedestrian was needlessly killed in a crash even though the self-driving Uber had a human driver. Moreover, there are no minimum published protocols or training standards for these testing drivers or others in the vehicles, making the District's road users dependent on Ford adequately preparing them for the numerous dangerous scenarios.

Further, District roads, which have major infrastructure challenges including street and road sign disrepair, deep potholes and faded pavement markings as well as being subject to abrupt road closures for motorcades and public protests, could make it difficult for any driverless vehicle to safely navigate our city. No amount of pre-mapping will be able to address all of these issues. Recent research shows that driverless vehicles can easily be confused by such situations leading to dangerous errors. In one experiment a standard stop sign with only a few alterations was interpreted by a driverless car as a 45 mph speed limit sign. The potential consequences of these types of mistakes are daunting. Substantial investments in our infrastructure that benefit human drivers now and help to prepare our roads for self-driving cars should occur before we invite driverless vehicles onto our streets.

Congestion is a serious concern in our metro region. Despite claims that driverless technology will improve our congested roads, transportation experts have already found that the proliferation of mobility services like Lyft and Uber (precursors for mass deployment of driverless vehicles) have instead increased congestion and reduced mass transit use. This impact should be closely monitored and a plan should be developed for the District and published for public comment. The plan should include how the impact will be measured and evaluated, and proposed actions to mitigate and remedy unintended consequences of increased congestion and displacement of other modes of transportation.

Cybersecurity and hacking are other critical safety concerns. Driverless car technology is vulnerable to security lapses, just like our computers and connected electronic devices. Our Nation's capital may also pose as a potential target for terrorists who could seek to hack the control systems of these vehicles and use them as weapons of destruction. Mandating cybersecurity protection with specific safety standards is an essential safeguard and should be required. Before any testing program begins, minimum cybersecurity safety requirements should be verified by all parties of interest (i.e., the Secret Service, Department of Homeland Security), and published for public comment.

While the District convened the Interagency Working Group on Autonomous Vehicles (Working Group) with representation comprised exclusively from its own government agencies, the recommendations (Autonomous Vehicles Principles Statement) are non-binding, and the concerns and priorities of outside stakeholders and organizations were limited to those engaged by the Working Group. This is totally inadequate. Independent oversight of operations is needed to ensure that all participants are protected, both those knowingly participating inside the vehicle and the unwitting public outside. Establishing scientific protocols and an expert institutional review board (IRB) is a common practice for experiments involving human subjects and should be implemented before this project begins. The IRB should evaluate the proposal, suggest improvements, approve or reject the proposal, and, if needed, recommend its termination if safety is threatened before commencing the program or during its operation. Additionally, the IRB should audit the program if and when it is implemented and oversee it to make certain the plan is being followed.

Scientific protocols and independent review of driverless vehicle technology are also necessary to alleviate the growing skepticism of the American public. Numerous public opinion polls have found that consumer confidence has dropped following dangerous and deadly interactions with self-driving vehicles on public roads. The public's response is rational and yet another indicator that improvements are urgently needed.

In order to guarantee the project meets the needs of District residents, citizens from all Wards should have a voice as well as all stakeholders. These include non-profit and public interest groups

representing public health and safety, schools, small business owners, and bicycle, pedestrian and disability rights advocates. Furthermore, any crashes or other safety critical incidents involving these vehicles must be immediately reported by Ford, investigated by authorities and made public. The public has a right to assess this experiment, and city leaders and Ford have an obligation to make the data publicly available.

Over the course of our careers advocating for countermeasures to reduce the preventable carnage on our roads, we have strongly and successfully advocated for the adoption of proven technologies in vehicles like airbags, rollover prevention systems and more recently, rearview cameras that have collectively saved tens of thousands of lives and prevented millions of injuries. Driverless car technology offers the possibility to prevent crashes, save lives and reduce injuries. However, DC residents and road users should not be subject to the very real dangers of the proposed beta testing. Shortcuts in rushing this project and the nascent technology will only serve to shortchange public support and safety.

Sincerely,

Catherine Chase, President Joan Claybrook, President Emeritus Advocates for Highway and Auto Safety Public Citizen and Former NHTSA Administrator cchase@saferoads.org ioan@joanclaybrook.com Jackie Gillan, President Emeritus Jack Gillis. Executive Director Advocates for Highway and Auto Safety **Consumer Federation of America** jgillan@saferoads.org jack@consumerfed.org Sally Greenberg, Executive Director Jason Levine, Executive Director National Consumers League Center for Auto Safety sallyg@nclnet.org jlevine@autosafety.org

cc: The Honorable Phil Mendelson, Chairman, Council of the District of Columbia The Honorable Kenyan R. McDuffie, Chair ProTempore, Council of the District of Columbia The Honorable Brianne K. Nadeau, Ward 1 Councilmember The Honorable Jack Evans, Ward 2 Councilmember The Honorable Mary M. Cheh, Ward 3 Councilmember The Honorable Brandon T. Todd, Ward 4 Councilmember The Honorable Charles Allen, Ward 6 Councilmember The Honorable Vincent C. Gray, Ward 7 Councilmember The Honorable Trayon White, Sr., Ward 8 Councilmember