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CALIFORNIA

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Docket Management Facility
US Department of Transportation
1200 New Jersey Avenue, Southeast
West Building, Ground Floor, Room W12-140 Washington, DC 20590-0001

Re: National Highway Traffic Safety Administration (NHTSA) Docket No. NHTSA-2018-0092: Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation

Dear Docket Clerk:

The City of Los Angeles Department of Transportation (LADOT) values the opportunity to comment on the National Highway Traffic Safety Administration (NHTSA) on the Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation. LADOT recognizes changing technologies and the potential benefits to our residents through an autonomous future and looks forward to engaging in the development of the regulatory framework necessary to develop and deploy this technology.

LADOT is charged with managing the streets of Los Angeles for motorists, cyclists, pedestrians, transit, and the movement of goods. Our stated mission is to lead transportation planning, project delivery and operations in the City of Los Angeles¹. Our vision is a transportation system that provides access to safe and affordable transportation choices that treat everyone with dignity and support vibrant, inclusive communities². In addition, the City of Los Angeles laid out ambitious transportation policy goals including a Vision Zero campaign to end traffic fatalities by 2025³. It is within this framework that LADOT is planning for a transportation future that includes autonomous vehicles.

LADOT appreciates the role NHTSA plays in ensuring safety. We rely on your agency to uphold your stated mission to "save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity."⁴ When considering automated driving systems (ADS), we encourage NHTSA to continue to focus on creating and enforcing a regulatory framework that ensures the safety of autonomous vehicles as they are tested and brought to market.

¹ <http://ladot.lacity.org/what-we-do/about-us/vision-and-mission>

² <http://ladot.lacity.org/what-we-do/about-us/vision-and-mission>

³ <http://visionzero.lacity.org/what-is-vision-zero-la>

⁴ <https://www.nhtsa.gov/about-nhtsa/nhtsas-core-values>

Fundamental to any pilot is the ability to determine the effects of the new intervention. In order to determine both positive and negative impacts of ADS, data is essential. Reliable, objective collection of information is the only way to determine effectiveness. Manufacturers must share this data in a raw form (as opposed to aggregate) with policy makers to improve decision-making, design, and operations. The need for effective data collection and sharing is currently our priority and the theme of our comments in response to NHTSA.

Docket NHTSA-2018-0092 seeks comments to shape the design of a national pilot program to enable NHTSA to facilitate, monitor and learn from the testing and development of the emerging advanced vehicle safety technologies and to assure the safety of those activities. The following are LADOT's responses to the topics related to ADS safety research on which NHTSA is seeking comment:

A. Critical factors that should inform designing a pilot program for the safe on-road testing and deployment of vehicles with high and full driving automation and associated equipment

Data collection, sharing, and standardization are of utmost importance to cities in the deployment of automated vehicles on City streets. Automated vehicle operators should share data with cities and other agencies, to ensure that implementation of a pilot program is in compliance with the City's goals and priorities, especially safety priorities. Manufacturers, operators, and pilot program areas should provide data in standardized formats as determined by governing local agencies.

Operators should provide data in raw formats, including all data points, not embedded in summary statistics or formats, so that cities can better evaluate data, including outlier instances beyond summary statistics. Establishing data privacy principles, such as those adopted by LADOT,⁵ are key to enabling data sharing between jurisdictions and operators. Adoption of privacy principles ensures cities will be able to use data for safety, planning, and real-time traffic management, while protecting the privacy of vehicle passengers and operators.

Additionally, operators should comply with city digital infrastructure, via Application Program Interfaces (API's), data standards, two-way data sharing, or other specifications established by the governing agency as they currently comply with traffic control and other regulatory devices. For example, LADOT plans to develop digital infrastructure to communicate with autonomous and connected vehicles, providing 3D reference maps, real-time congestion information, and regulatory information such as real-time parking pricing and traffic direction. This two-way communication will help cities to work directly with operators to provide safe, equitable services and pilot cooperative methods to ensure the safety of passengers, pedestrians, and bicyclists.

B. The use of existing statutory provisions and regulations to allow for the implementation of such a pilot program; any additional elements of regulatory relief (e.g., exceptions, exemptions, or other potential measures) that might be needed to facilitate the efforts to participate in the pilot program and conduct on-road research and testing involving these vehicles

Autonomous vehicles should abide by the same standards as traditional human-driven vehicles. We are supportive of the efforts to create adequate testing and compliance measures. Specifically, that

⁵ http://www.urbanmobilityla.com/s/Information_Handling_Guidelines.pdf

the Federal Motor Vehicle Safety Standard (FMVSS) allow for testing to identify safety benefits of ADS. However, we emphasize that at this stage in technological development, NHTSA must continue to enforce safety regulations to the fullest extent possible, and to remove regulatory barriers only in the instance that they inhibit the full testing and compliance of future technologies. We encourage NHTSA to make FMVSS revisions with appropriate caution based only on empirical evidence and research on the ability for ADS systems to reduce collisions and improve safety conditions on our roadways.

Additionally, similar to vehicles adhering to the rules and regulations of traditional infrastructure, connected vehicles must adhere to regulations communicated via digital infrastructure provided by cities and other government agencies. A national pilot program provides an opportunity for operators to collaborate on the development and testing of digital infrastructure with cities that mirrors and holds the same legal weight as traditional infrastructure.

In preparing for the deployment of autonomous vehicle technology, we seek to maximize the potential benefits without infringing on existing policy goals. Given the absence of established research on the performance of this nascent technology in urban settings, we are hesitant to remove regulations that promote safety to accelerate the adoption of ADS technology. Instead, we hope to focus on building a regulatory framework that supports our policy goals, fosters a platform for innovation, and to make strategic investments that serve the residents and visitors of Los Angeles.

C. The nature of the safety and any other analyses that the Agency should perform in assessing the merits of individual exemption petitions and on the types of terms and conditions it should consider attaching to exemptions to protect public safety and facilitate the Agency's monitoring and learning from the testing and deployment, while preserving the freedom to innovate

It is important for the Agency to collect data on a number of statistics to measure safety benefits and impacts including, but not limited to:

- disengagements,
- collisions,
- near-misses,
- vehicle interactions with bicyclists and pedestrians,
- compliance with local laws and regulations,
- law enforcement interactions, and
- detailed trip and route data.

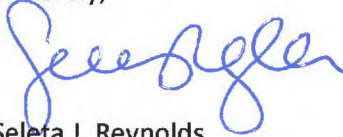
Data should be in a standardized format and available in real-time to NHTSA and other agencies.

LADOT will require trip data from automated vehicles operating in the City of Los Angeles to be provided in accordance with the LADOT Mobility Data Specification (MDS), which includes details on trip start, end, mid-points, and is accessible by the City via an API, as well as operator compliance with Agency MDS to ensure integration with the City's digital infrastructure.

Many of the specific questions outlined in Docket NHTSA-2018-0092 speak to the technical design elements of a vehicle with automated driver systems, and LADOT is not in a position to weigh in on these at this time. LADOT's primary responsibility lies in the public interest and we look forward to continuing to collaborate with federal, state, and local agencies to develop a regulatory framework that effectively manages the development and deployment of autonomous vehicles and benefits all users of the public right of way in cities nationwide.

Thank you for the opportunity to comment on Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation. Please feel free to contact my staff Jennifer Cohen at (213) 972-8404 or Jennifer.Cohen@lacity.org for additional information.

Sincerely,



Seleta J. Reynolds
General Manager