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December 10, 2018

Ms. Heidi Renate King  
Deputy Administrator  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue SE  
Washington, DC 20590-0001

**Re: Advance Notice of Proposed Rulemaking - Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving Automation (Docket No. NHTSA 2018-0092)**

Dear Ms. King,

Waymo appreciates the opportunity to offer our feedback on the above-referenced Advance Notice of Proposed Rulemaking regarding a potential pilot program for collaborative research on motor vehicles with full or high automation (the "ANPRM"). We commend the National Highway Traffic Safety Administration ("NHTSA") for its efforts to consider how the Agency may facilitate the safe testing, development, and deployment of highly automated vehicles. As the ANPRM notes, "ADS vehicle technologies possess the potential to save thousands of lives, as well as reduce congestion, enhance mobility, and improve productivity." At Waymo, we strive to transform this immense potential into an everyday reality.

The ANPRM proposes creating a national pilot program to facilitate, monitor, and learn from the safe testing, development, and deployment of highly automated vehicles. Under existing regulatory frameworks, such testing and development is already being conducted today by many companies and researchers throughout the country. For example, at Waymo, we have been testing our highly automated vehicles on public roads since 2009; our vehicles have completed over 10 million miles of public road testing. If established, a pilot program should complement private testing efforts already permitted under existing law and regulations.

Moreover, existing regulatory frameworks allow for deployment of automated vehicles. As the ANPRM notes, in the Agency's January 2018 request for comment, "NHTSA stated that it believes that vehicles with traditional interior designs, e.g., ones including steering wheels and foot pedals, that meet the existing FMVSS would still comply with the FMVSS even if those vehicles were designed to be operated as vehicles with high and full driving automation." Similarly, the U.S. Department of Transportation's *Automated Vehicles 3.0* states that "NHTSA's current safety standards do not prevent the development, testing, sale,

or use of ADS built into vehicles that maintain the traditional cabin and control features of human-operated vehicles.” A pilot program, if established, should also complement the deployment of highly automated vehicles already permitted under existing law and regulations. To strike this balance, any pilot program should be entirely voluntary, and participation in a pilot program should not become an explicit or de facto prerequisite prior to on-road testing or deployment of highly automated vehicles.

In *Automated Vehicles 3.0*, the Department and the Agency noted that “in an upcoming rulemaking, NHTSA plans to seek comment on proposed changes to particular safety standards to accommodate automated vehicle technologies” (p. 7). We believe a rulemaking to enable certification of highly automated vehicles with non-conventional configurations is an essential step towards unlocking the full safety potential of self-driving technologies. The Agency’s continued progress on that rulemaking is critical, given the rapid pace of technological development. A pilot program, if any, should facilitate the Agency’s continued progress on this rulemaking, and must not delay, detract, or distract from that progress.

In order for a pilot program, if any, to facilitate future rulemaking to enable certification of non-conventional vehicle designs, it should be established and implemented as quickly as possible. A pilot program would fit squarely within the Agency’s existing authority, and establishing one does not necessarily require an additional rulemaking. As the ANPRM highlights, Congress has continually imbued the Agency with “broad authority” to initiate and conduct research, testing, and evaluation of vehicle technologies and associated data.

As the Agency noted in the ANPRM, the “accelerating pace of technological change is incompatible with lengthy rulemaking proceedings,” particularly because those rulemakings often take “at least 6-8 years.” Such a lengthy rulemaking process for a pilot program could create significant and unnecessary delay. This delay could slow the advancement of self-driving technology, especially if the Agency delays substantive work on changing safety standards (as *Automated Vehicles 3.0* noted) until it has collected research data from a not-yet-established pilot program. In that event, issuance of a final rule facilitating Level 4 and 5 automated vehicles with non-conventional designs would likely not occur until the conclusion of a very long sequence of events.

The Agency may wish to use the pilot program to facilitate granting exemptions from FMVSS for vehicles with non-conventional configurations which currently cannot be certified under existing FMVSS. This may be a useful purpose for the pilot program, but such a pilot should not delay, detract, or distract from the Agency’s progress in amending the FMVSS to remove barriers to certifying non-conventional vehicle configurations. While exemptions may provide a short term solution for non-conventional vehicle configurations, the rulemaking to enable certification of such vehicles is the key to realizing the full safety potential of this technology.

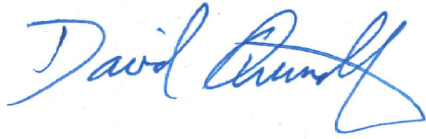
In sum, while a pilot program could be an additional tool for the Agency to collect data, it is not necessary for the safe testing and deployment of highly automated vehicles. If the Agency does establish a pilot program, any pilot program the Agency creates should (i) remain voluntary, (ii) complement testing and deployment of highly automated vehicles already permitted under existing law, and (iii) facilitate and not slow progress towards removing barriers to certifying vehicles with non-conventional configurations. The Agency

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has ample authority to establish a pilot program and conduct other desired research projects without additional rulemaking.

Thank you again opportunity to offer these suggestions for the Agency's consideration.

Sincerely,

A handwritten signature in blue ink that reads "David Quinalty". The signature is fluid and cursive, with a large, stylized initial "D" and a long, sweeping underline.

David Quinalty  
Head of Federal Policy and Government Affairs