

## Uber Resumes Testing of its Autonomous Vehicles After Significant Changes to Its Safety Plan

Advancing autonomous vehicles to widespread use requires significant testing, and if that testing is performed in real world conditions, safety of third parties must be an ongoing and evolving paramount concern. The March 2018 crash of an Uber Advanced Technologies Group (UATG) autonomous vehicle in Arizona resulted in the death of a pedestrian. Local and federal findings included that the sole human back-up driver was inattentive immediately prior to the accident and that vehicle's emergency braking systems (including Volvo's own system) were not enabled at the time of the accident. As a result of the crash, UATG suspended all testing to self-examine and improve safety. [It released a report](#) based in part upon a review of the crash investigation to the National Highway Transportation Safety Administration (NHTSA) in November 2018. The report addresses operational, technical, and organizational changes to be imposed to improve the safety of UATG autonomous vehicles.

Based on these improvements, Uber submitted a Notice of Testing Highly Automated Vehicles Application to the Pennsylvania Department of Transportation (PA DOT) in November 2018. On December 17, 2018, PA DOT issued a [Letter of Authorization](#) to Uber to begin testing of its autonomous vehicles (good for one year).

The Authorization is consistent with the [Commonwealth's Automated Vehicle Testing Guidance](#) issued on July 23, 2018.

Significant changes to UATG's testing, including its Safety and Risk Mitigation Plan, as authorized by PA DOT, are as follows:

- Operate a limited number of vehicles;
- Operate those vehicles only during daylight hours on weekdays;
- Operate them only in good weather;
- Operate in them in areas where most roads have restricted speed limits of 25mph;
- Operate them with **two** human backup drivers;
- Operate them with more highly trained and audited backup drivers;
- Operate them with the automatic emergency braking system and Volvo emergency braking system in operation.

[UATG commenced testing under the Notice on December 20, 2018.](#) Safety related to the testing of autonomous vehicles remains the subject of ongoing debate at the federal, state, and local and private levels. The proposed changes to UATG's testing of its autonomous vehicles are consistent with Pennsylvania's July Guidance and Uber's November 2018 report. We will continue to monitor and review evolving public and private guidance on the safe testing of autonomous vehicles.