

## Uber Seeks Permission to Relaunch Self-Driving Tests in Pennsylvania

By Evan Zimmerman, J.D. Candidate 2020 | November 13, 2018

Uber has [asked](#) Pennsylvania regulators for permission to resume testing of its self-driving cars, the company announced November 2. Uber's self-driving car ambitions were seemingly dashed when one of its test vehicles [crashed](#) in Tempe, Arizona this March, tragically killing a pedestrian. There have been concerns about the driver, who may [have been watching \*The Voice\*](#) while driving and [may face charges](#). The crash put the spotlight on Uber's software, however, as it [recognized the pedestrian but failed to react in time](#). Uber [ended self-driving tests in Arizona](#) after the governor banned them and temporarily suspended all testing on public roads pending an NTSB investigation, including [terminating its operations in Pittsburgh](#). Ever since Uber and Carnegie Mellon announced a [partnership](#)—to some [criticism](#)—Pennsylvania had been ground zero for its self-driving efforts.

Testing on public roads is critical for self-driving cars. Self-driving cars are machine learning technologies, meaning that they teach themselves from data, so increasing miles driven on public roads is paramount—according to one [RAND study](#), possibly 8 billion miles of real-world testing are needed. Uber's autonomous vehicles division has a [long history of technological struggle](#), and is widely reported to be far behind its peers with [only 13 miles per intervention—lower than its peers by a factor of 100](#). Overall, though, [most crashes in self-driving tests are caused by humans](#); Google famously went without a crash for years. [Human error is a contributing factor in over 90% of traffic deaths](#), leading some to [calculate](#) that self-driving cars could save 300,000 lives per decade. With [Waymo](#) and [Tesla](#) leading in miles logged, [Uber](#) is hardly ahead of [Cruise](#).

Regulations are key for testing. Testing on public roads requires state approval from individual Departments for Motor Vehicles, and all self-driving cars interact with several federal regulators via the Department of Transportation. The government has produced several voluntary guidelines, including the DOT's [Automated Vehicles 3.0 guidelines](#). U.S. Secretary of Transportation Elaine Chao has directed the NHTSA to [consider permitting cars without steering wheels](#). California and Arizona are the main testing grounds for autonomous vehicles, and there has been a regulatory race to permit self-driving tests, with [both states](#) recently announcing that fully self-driving cars will be permitted on their roads. Some other states, like [Florida](#), have also been aggressively permissive; others, like [New York](#), just recently permitted drivers to take their



hands off the wheel while self-parking, which has been commercially available since 2003. States also compete on disclosures, with California requiring a safety disclosure and Arizona requiring none at all. Uber will likely be under close scrutiny as it [cautiously restarts](#) its efforts.

Former CEO Travis Kalanick called self-driving “[existential](#)” for Uber, as labor is the company’s most significant cost. Though the NHTSA Tempe report is expected early next year, Pittsburgh’s regulators expressed confidence in Uber’s new controls. Uber’s [first self-driving car](#) was a Volvo XC90, launched in 2016 in Pittsburgh.