Uber is at fault for fatal self-driving crash, but it's not alone

Federal investigators split the blame for the fatal Uber self-driving crash between the ride-hailing company, the safety driver in the vehicle, the victim, and the state of Arizona in a blistering official report that also took the federal government to task for failing to properly regulate the industry.

In a hearing of the National Transportation Safety Board in Washington, DC on November 19th, the three-member panel heard from a team of investigators who had been sifting through the details of the crash for over a year now. At the end of the two-and-a-half-hour hearing, the board issued its determination of probable cause in the event that shook the autonomous vehicle industry.

The board cited the following as contributing to the fatal crash:

- The failure of the Uber self-driving vehicle operator, Rafaela Vasquez, to monitor the road and the automated driving system because she was "visually distracted throughout the trip by her personal cell phone." Police had determined that Vasquez was streaming *The Voice* on her smartphone at the time of the crash. NTSB investigators confirmed that she spent 34 percent of her time in the Uber vehicle that night glancing down at her phone, with the final glance taking place six seconds before impact. Vasquez only returned her gaze to the road one second before the crash, investigators said.

- The “inadequate safety risk assessment procedures” at Uber’s Advanced Technologies Group. The board blasted Uber’s lack of a safety division within ATG, noting that the company did not have a dedicated safety manager in place who was responsible for risk assessment and mitigation.
- Uber’s “ineffective” monitoring of vehicle operators. There were cameras in the vehicle monitoring safety drivers, but there was no oversight to ensure that those drivers weren’t violating the company’s policies prohibiting things like cellphone use.
- Uber’s inability to address the “automation complacency” of its safety drivers monitoring the automated driving systems. Riding with these vehicles can be very dull, and Uber lacked a system in place to ensure its safety drivers weren’t getting overly complacent.
- The victim, Elaine Herzberg, was found to have methamphetamines in her system, and her impairment may have led her to cross the street outside the crosswalk, thus leading to her death.
- Arizona’s “insufficient” policies to regulate automated vehicles on its public roads were found to have contributed to the crash.

The run-up to the hearing featured the emergence of new information that cast a negative light on Uber’s autonomous testing efforts. Earlier this month, the NTSB released a trove of new documents that revealed that Uber did not have a formal safety plan in place at the time of the crash.

The board also found that Uber’s autonomous vehicles were not properly programmed to react to pedestrians crossing the street outside of designated crosswalks. Moreover, Uber revealed to the board that its self-driving test vehicles had been involved in over three dozen crashes prior to the fatal one in Tempe.

Just this week, an *Automotive News* investigation revealed that

Uber removed a critical safety feature from its self-driving system that could have prevented the death of Herzberg in Tempe. Still, Uber is likely to avoid criminal repercussions, as the local prosecutor on the case has said she is declining to press charges.

“We deeply regret the March 2018 crash that resulted in the loss of Elaine Herzberg’s life, and we remain committed to improving the safety of our self-driving program,” Nat Beuse, Uber ATG Head of Safety, said in a statement today. “Over the last 20 months, we have provided the NTSB with complete access to information about our technology and the developments we have made since the crash. While we are proud of our progress, we will never lose sight of what brought us here or our responsibility to continue raising the bar on safety.”

Up until Herzberg’s death, many companies pursuing self-driving cars were racing to get them on the road as quickly as possible. But now, most operators acknowledge the timeline will be much longer than originally predicted.

https://www.theverge.com/2019/11/19/20972584/uber-fault-self-driving-crash-ntsb-probable-cause