

# Fatal Crash May Slow Advance of Self-Driving Cars

Advocates worry about more regulatory oversight and slow deployment of technology



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A Tesla Model S, equipped with Autopilot hardware and software, driving hands-free on a highway in Amsterdam in October 2015. Photo: Jasper Juinen/Bloomberg News

By

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Advocates of driverless cars worry that the fatal crash of a Tesla Motors Inc. vehicle in self-driving mode will provoke additional regulatory oversight and slow deployment on U.S. roads of the rapidly advancing technology.

The National Highway and Traffic Safety Administration aims this month to release a framework for regulating self-driving cars, which could include [requiring auto makers to win approval](#) for their technologies before releasing them.

That sort of [approval process wasn't applied to Tesla's Autopilot](#) system to enable hands-free driving on highways, which the electric-car maker made available on Tesla vehicles via a software update in October. Regulators said Thursday that an Ohio man was using Autopilot when his Tesla Model S crashed into a 18-wheel truck in Florida on May 7, killing him.

"There will be repercussions" in regulations, said Dean Pomerleau, a Carnegie Mellon University professor who has worked on driverless cars for 25 years and led several NHTSA research programs. "I think NHTSA is going to

want Tesla to turn off Autopilot at least until they learn more.”

Even before Thursday’s news, many people working on driverless cars worried that Tesla’s Autopilot was an accident waiting to happen.

Mr. Pomerleau said he sold his Tesla stock the day he learned the company was releasing Autopilot. “Anyone who has worked in this area realized that this was inevitable,” he said.

Andrew Ng, chief scientist at Chinese tech giant Baidu Inc., which is building its own driverless cars, had said last month on Facebook, “It’s irresponsible to ship an autonomous driving system that works 1,000 times and lulls a false sense of safety, then...BAM!” Mr. Ng, who wasn’t referring to the fatal Florida crash, declined to comment.

Tesla said in a statement Thursday that the Florida crash was the first fatality in over 130 million miles driven with Autopilot and that the feature “results in a statistically significant improvement in safety when compared to purely manual driving.” The company said drivers must acknowledge before they use it that Autopilot is still in a test phase. Autopilot instructs drivers to keep their hands on the wheel at all times and automatically slows the car if it detects hands are off the wheel for an extended period.

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Several driverless-car advocates on Friday criticized Tesla for testing an unfinished technology on drivers, particularly one that requires drivers to remain alert while also making them believe the car is in control. Shortly after Tesla released Autopilot, [several drivers posted videos online](#) of themselves sitting in the back seat or reading a newspaper while the car drove itself.

“You can tell drivers to be alert at all times, but can you presume that everyone who read the disclosure will do just that?” asked former NHTSA Administrator David Strickland. “There’s a raft of YouTube videos that show that’s not the case.” Mr. Strickland now advises a coalition of companies working on fully autonomous self-driving cars, including Google parent Alphabet Inc., Ford Motor Co. and Uber Technologies Inc.

Alphabet for years has said it believes driverless cars must be fully autonomous to meet its safety standards. The company says semiautonomous systems that require drivers to sometimes take control of the car can be unsafe because drivers put too much trust in the machine and can’t retake control if needed. When the company gave its driverless cars to Google employees to test several years ago, video from the cars showed workers often took their eyes off the road, including one instance in which a driver searched through his backpack in the back seat for a laptop charger while the car drove itself.

Alphabet is now testing a prototype without a steering wheel or pedals. That vehicle has only a large green “Go” button and a red “Stop” button. That sort of fully autonomous car is harder to design and perfect, “but it’s the right thing to do,” Alphabet’s research-lab chief, Astro Teller, said in a speech last year.

Such vehicles are years away from acceptance by regulators and the public, said Karl Brauer, a senior analyst at Kelley Blue Book. “Ultimately we may be better off with cars without controls, but that future is pretty far off,” he said.

Brad Templeton, a former Alphabet driverless-car engineer who now consults companies on the technology, said

Alphabet has paid hundreds of people to test drive its autonomous vehicles for more than 1.6 million miles. Tesla, meanwhile, leveraged its customers to test its technology, he said.

Despite criticism of Tesla, Mr. Templeton said there is an argument that the company's approach is for the greater good. Driverless cars "are going to save lots of lives," he said. "And letting customers test vehicles could advance the technology faster. Is it OK for customers to do this knowingly? I don't know."

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