'Driverless Future' forum brings transportation experts, governor to UVa written by Newspack Team | September 30, 2017



The University of Virginia, the city of Charlottesville and the Virginia Autonomous Systems Center of Excellence held an all-day public forum Saturday on the implications of autonomous vehicles for Charlottesville and other small cities. The event also gave many people a chance to take their first ride in a self-driving car.

"The Driverless Future: Asking the Big Questions" took place at the Darden School of Business and featured appearances by Gov. Terry McAuliffe, UVa President Teresa A. Sullivan and notable transportation experts.

Louis Nelson, UVa's associate provost for outreach, said he was pleased that the event raised many questions for further research at UVa.

"It immediately becomes apparent that a single discipline is never going to solve an overarching problem," Nelson said. "We need to have ethicists at the table with the software developers who are writing code for self-driving cars."

McAuliffe established the Autonomous Systems Center of Excellence this year to encourage the development of self-driving vehicles, aerial drones and autonomous submarines in Virginia.

"I want us to own the air, land and sea," McAuliffe said. "We have to invest early in unmanned systems if Virginia is going to be the national leader in all three of those spaces."

McAuliffe said he has urged the General Assembly to "see where the technology goes first, and then create the legislation" to avoid over-regulating autonomous testing in the state.

On Saturday, attendees lined up in a Darden parking lot to take a short ride around the business school in an autonomous Lincoln MKZ programmed by Perrone Robotics, a vehicle software company in Crozet. The rides were overseen by a professional safety driver.

Spencer Marazita, a 10-year-old from Crozet, marveled at how the car turned its own steering wheel and stopped for other vehicles and pedestrians.

"I trusted it," he said. "The car's sensors can navigate really well."

Spencer said he would still keep an eye on the road if he were in a self-driving car by himself, but, "I guess I might look at my phone more," he said.

Paul Perrone, founder and CEO of Perrone Robotics, said that on average Americans spend 90 minutes per day driving — which adds up to more than four years in a typical lifespan.

"In self-driving cars, we would not be forced to stare forward, strapped into our seats," he said. "We would be free to live our lives as if we weren't in a car. It could give us an 'extended lifetime,' with more time for playing, working, sleeping and being with our families."

Many participants in Saturday's panel discussions spoke about autonomous vehicles' potential to make driving safer.

The National Highway Traffic Safety Administration reported 35,092 deaths from traffic wrecks in 2015. While statistics for 2016 are still being confirmed, last year's death toll is expected to be even higher.

"Many Americans don't think about how many people we lose to traffic accidents," said David Strickland, a former director of the NHTSA and current counsel for the Self-Driving Coalition for Safer Streets. "It has been one of our largest public health issues for a long time."

"[Self-driving cars] have sensors all around them that can see what no pair of eyes on a swiveling human head can possibly see," said Perrone. "These cars will ultimately drive more safely than human drivers, and one day may become impervious to accidents."

Strickland participated in a panel discussion on the economic implications of driverless vehicles with Robert Grant, Lyft's senior director of public policy for North America; and Colin Tooze, Uber's director of public policy for the Southeast region.

Lyft and Uber both have invested in developing self-driving technology, and Uber began piloting an autonomous vehicle fleet in Pittsburgh last year.

Tooze said a fleet of shared autonomous vehicles could transform American cities that today have congested streets and vast acreage reserved for parking.

"There is an alternative to a world that looks like a parking lot and moves like a traffic jam," Tooze said.

"A shared self-driving network could reduce the number of cars in cities by 90 percent. ... That would make our cities unrecognizable."

Andrew Mondschein, an assistant professor of urban and environmental planning at UVa, said in another panel discussion that cities could not ignore their immediate parking needs without putting businesses at risk.

"Managing parking is a holding action we must take until maybe 20 years from now," he said.

Mondschein said Charlottesville's Comprehensive Plan updating process is an opportunity for the city to address current transportation issues while preparing for an uncertain future.

"I think it's important for every chapter of the Comprehensive Plan to engage driverless vehicles in some way," he said.

The final panel discussion on Saturday focused on how autonomous vehicles could improve quality of life for Charlottesville's socially and economically marginalized residents.

Strickland said too many innovative urban transportation solutions have catered to the preferences of young professionals and affluent city-dwellers.

"I do not think we have done an excellent job, policy-wise ... in how we serve those who aren't on the Starbucks side of the street," Strickland said.

"We don't want to just be here as evangelists for millennials who want to drink more without having to drive," said Charlottesville Mayor Mike Signer. "The real question is about how these technologies can be adapted to serve [marginalized] communities."

Tanya Denckla-Cobb, director of UVa's Institute for Environmental Negotiation, recently convened an eight-person focus group at the Mary Williams Community Senior Center in Charlottesville to learn more about how seniors view self-driving cars. Denckla-Cobb said the focus group members seriously doubted the safety and practicality of autonomous driving.

Jenny Roe, director of the Center for Design and Health at UVa, said Charlottesville would need to perform extensive community outreach and offer incentives to bring low-income residents into an autonomous transportation network.

"I sense that there is a stigma to using the bus in Charlottesville, and we need to avoid this with driverless vehicles," Roe said. "We really need to understand people's travel behaviors, their motivations and barriers to mobility."