TPEC | TRANSPORTATION POLICY AND ECONOMIC COMPETITIVENESS PROGRAM

Equity issues of self-driving vehicles

TPEC researchers are studying the important issue of equity in the development and implementation of self-driving vehicles (SDVs).

As part of its work, TPEC formed the Self-Driving Task Force in the spring of 2017. The intent of the task force was to identify how various SDV deployment strategies could improve mobility and access for transportation-dependent Minnesotans: seniors, people with disabilities, and others who are not able to drive themselves.

The task force was made up of representatives from the Minnesota Department of Transportation, Metro Mobility, local governments, nonprofits, and organizations from the Twin Cities and Greater Minnesota.

At the close of its work, the task force constructed a Matrix of Users to cross-compare geography, barriers to participation, and the potential forms of self-driving transportation that may be implemented in Minnesota. The matrix separated Minnesota's population into four geography ranges: central city, suburban, small city, and rural locales.

Among the conclusions of the task force is that deployment models would likely vary across the state. "For example, we found that simple policy incentives could lead the private market to provide a variety of innovative services in urban areas," says Frank Douma, director of the State and Local Policy Program at the Humphrey School and a TPEC researcher. "However, government intervention would likely be needed to ensure significant enhancements to transportation in small towns and rural areas."

As follow-up to the task force, TPEC initiated a number of public engagement sessions. In Grand Rapids, Minnesota, the researchers held two meetings with representatives from foundations and public agencies, people with disabilities, and others. "We found the participants to be very interested in the subject," says Adeel Lari research fellow at the Humphrey School and a TPEC researcher. "They wanted to know how self-driving vehicles can be used to improve transit. They also wanted to know what the implementation of driverless vehicle technology could or would look like in the community."

This year, TPEC researchers engaged the Region 9 Board of Directors and other local groups in Mankato and met with Saint Cloud's area planning organization. An additional presentation is planned for July in Fergus Falls to the West Central Initiative (a foundation and regional development organization).

Douma and Lari will use the findings of these sessions to help better articulate the best methods for deploying these technologies in different parts of the state. TPEC will continue this work later this year by starting a similar initiative in transportation-disadvantaged urban areas.

READ MORE:
Self-Driving Vehicles Task Force Report and Matrix of Users (2017).

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A demonstration of a EZ10 All Electric Autonomous Bus was held April
30 on the U of M Minneapolis campus. Vehicles like this could provide increased mobility and
access to people with disabilities and others who currently cannot drive themselves.