E.O. 12866 Meeting Materials Occupant Protection for Automated Driving Systems

ry 20, 202.

Vehicle designed for zero occupants. There are no manual controls on the vehicle. пиго

luro R2

A video showing Nuro's service is available <u>here</u>.

Steer Study

- In 2020, Nuro commissioned Steer, a consultancy, to conduct an independent study to evaluate the potential economic impacts and wider benefits of introducing delivery autonomous vehicle ("AV") services in the US.
- Steer assessed three scenarios and projected that, under their middle scenario, from 2025 - 2035
 Americans could use AV delivery services instead of personal cars for much of their daily shopping and errands. They estimated that this would create 3.4 million new jobs, produce \$4.1 trillion in total economic benefits, save 21 billion hours of people's time, and decrease CO₂ emissions by 407 million tons.

Final Report

Economic Impacts of Autonomous Delivery Services in the US

September 2020



Full Report

Virginia Tech Transportation Institute Study

- In 2021, Nuro worked with safety experts at the Virginia Tech Transportation Institute ("VTTI") to quantify the safety benefits of occupantless vehicle designs such as R2, over and above the substantial safety gains from autonomy software. VTTI researchers analyzed historic crash data to assess what would have happened with a different vehicle design, holding the driver's behavior constant.
- The researchers estimated that for every mile of driving replaced by a zero-occupant design vehicle, the risk of fatality or injury could be reduced by approximately 60%.

Estimating Crash Consequences for Occupantless Automated Vehicles



Final Report Delivered by the Virginia Tech Transportation Institute

February 2021

By Christina Witcher, Scott Henry, Julie McClafferty, Kenneth Custer, Kaye Sullivan, Jeremy Sudweeks, and Miguel Perez

• Full Report