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STATION



Automation, Vehicle Connectivity & Platooning

Electrification & Fueling Future Freight

Financing Interstate 2.0

Digitization of Logistics & Supply Chain

Logistics of the Last Mile

Employment & Environmental Impacts

Moving America Forward: Next Generation of Truck Freight Transport Summit

A summit for trucking technology design, development and deployment and the evolving freight transportation markets

24-25 October 2018 University of Pennsylvania/PRECISE Center Singh Center for Nanotechnology 3205 Walnut St, Philadelphia, PA

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DoT Mobility21 National University Transportation Center at the University of Pennsylvania & Carnegie Mellon University

Program

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Digitization in Logistics & Supply Chain

Co-Chair(s): John Paul MacDuffie, Director, Wharton's Program on Vehicle and Mobility Innovation; Steve Burks, Professor of Economics and Management, University of Minnesota at Morris

We explore the transition to new capacity and real-time truck freight
market designs. Digitization of end-to-end logistics brings efficiencies of
increased visibility into arbitrage opportunities, automatic capacity trading,

accessibility to fragmented labor of local independent contractors and meshing of multi-modal delivery services.

The Next Generation of Freight & the Truck Driver

S Co-Chair(s): Steve Viscelli, Senior Fellow, Kleinman Center for Energy Policy, University of Pennsylvania; Jean Tyrell, Project Manager, C AmeriGas

T The trucking industry is not only the primary mover of goods in the US
but also a major employer and thus critical to the economic health of the
O nation. Trucks, like all vehicles on public roads, are involved congestion
N and accidents that affect quality of life and can result in significant costs in

- N and accidents that affect quality of life and can result in significant costs in terms of injuries and deaths. This panel will explore the potential for making
- 2 the industry safer, more efficient and a better place to work with a range of stakeholders including policymakers, labor and environmental groups.

Financing Interstate 2.0

Co-Chair(s): Paolo Pezzotta, President, Integrated Transport Planning, Inc.; Jim Mullen, Chief Counsel, US Department of Transportation

We explore financing scenarios of AV-enabled systems that are gradually introduced within existing driver fleet operations and alternatively, establishing a separate operations platform for high-speed dedicated lanes. This panel will answer questions on Who will own and operate these new lanes: government or the private sector or some PPP framework? What are

3 financial models for leasing capacity and the implications of ownership on overall economic output and the distribution of financial gains.

Electrification & Fueling Future Freight

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Co-Chair(s): Mike Roeth, Executive Director, the North American Council for Freight Efficiency

We are in the midst of an explosion of technologies aimed at efficiency and alternative power sources, including natural gas, which have made

O the shift from diesel easier for the industry to envision. This panel

will explore the challenges from the basic power needs of trucks to uncertainty about the return on investment in new technology to distribution systems for new fuels.

Automation, Vehicle Connectivity & Platooning

Co-Chair(s): Jeff Hickman, Research Scientist, Virginia Tech Transportation Institute; Steve Boyd, Founder and Vice President of External Affairs, Peloton

This panel will discuss the implementation and commercialization of
automation and platooning technologies (by analyzing the technological
feasibility, use cases and deployments, and the regulatory environment).

- Industry experts will identify pain points with unmanned truck
- development and testing and analyze near-term solutions. This panel will also examine different levels of autonomy and geographical locations of deployment.

Logistics of the Last Mile

Co-Chair(s): Erick Guerra, Professor, School of Design, University of Pennsylvania; Mike Carroll, Deputy Managing Director, oTIS

- E Digitization and vehicle automation present specific opportunities and
- C challenges for last mile trucking. As automation reduces the cost of long
 - haul trucking, how will the process of moving goods from distribution
 - warehouses to final destinations change? What are the implications
- o for labor practices and public policy? Increases in package delivery are
- N already putting a strain on existing city infrastructure. In Philadelphia and
 - elsewhere, delivery trucks and vans regularly block parking spaces and
- travel lanes to unload goods. As more companies begin to outsource food and parcel deliveries to private entrepreneurs, what are the emerging opportunities and policy challenges for last-mile trucking and delivery?