



2017

Department of Transportation
National University Transportation Center
Mobility21 Consortium Meeting

Tuesday, January 31st
8 am to 2:30 pm

UNIVERSITY OF PENNSYLVANIA
PRECISE

- 0800 Continental Breakfast
- 0900 Welcome Address
- 0910 Penn DoT UTC Overview
Rahul Mangharam & Megan Ryerson (*Penn*)
- 0915 Penn DoT UTC Past, Present, and Future
Dan Lee (*PENN*)
- 0930 Transportation Research in Pennsylvania: Traffic21/T-SET/Mobility21
Stan Caldwell (*Carnegie Mellon University*)
- 0945 Keynote: Transportation in Philadelphia:
The Office of Transportation & Infrastructure Systems, City of Philadelphia

Session 1: Improving Metropolitan Accessibility in the Philadelphia Region

- 1005 Setting the framework
Erick Guerra (*Penn*)
- 1020 Local barriers and opportunities
Mike Carroll (*Streets Department*)
- 1035 An economic perspective
Gilles Durantou (*Wharton*)
- 1050 A real estate perspective
William Martin (*Real Estate Advisor*)
- 1100 Coffee Break & Posters/Demo

Session 2: Infrastructure and Planning for Safe Smart Cities

- 1115 Planning Safe and Efficient Multimodal Transportation Infrastructure and Networks
Megan Ryerson (*Penn*)
- 1125 Planning 30th Street Station
Natalie Shieh (*Amtrak*)
- 1135 Road safety: Understanding the Present, Preparing for the Future
Helen Loeb (*Penn*)
- 1145 Towards LA's Strategy for Autonomous Technologies
Michael Lim (*City of Los Angeles*)
- 1215 Lunch

Session 3: Safety and Mobility in Smart Cities

- 1220 **Keynote Introduction**
Dean Fritz Steiner (*Penn*)
- 1220 **Keynote: Regional Transportation Planning in the Delaware Valley**
Barry Seymour (*Delaware Valley Regional Planning Commission*)
- 1300 **A Driver's License Test for AVs**
Rahul Mangharam (*Penn*)
- 1310 **Driverless Cars - Liability and Insurance**
Tom Baker (*Penn*)
- 1320 **Next Generation Stereo Systems for Roadway Awareness**
C J Taylor (*Penn*)
- 1330 **Multi-Driver Social Behavioral Prediction**
Jianbo Shi (*Penn*)
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- 1350 **Penn UTC: The Year Ahead Discussion**
- 1415 **End of meeting**

PRECISE

PENN RESEARCH IN EMBEDDED COMPUTING AND INTEGRATED SYSTEMS ENGINEERING

Department of Transportation National University Transportation Center

Mobility21 Consortium Meeting

The University of Pennsylvania has been the home for a DoT National and a Tier-1 UTC for the past several years. This month we were awarded a \$14MM National University Transportation Center for Improving Mobility called Mobility 21 which will investigate technologies, policies, incentives and training programs for improving the mobility of people and goods in the 21st century efficiently and safely. Mobility 21 will leverage connected and automated vehicle technologies, smart city technologies like adaptive traffic signals, real-time traveler information services, preventive maintenance techniques, predictive analytics and alternate modes of transportation like bicycles. The primary thrusts of Mobility 21 will be (a) Smart City Technologies, (b) Multi-Modal Connections, (c) Assistive Technologies for People with Disabilities, (d) Data Modeling and Analytical Tools, (e) Novel Modes of Transport, (f) Regional Planning, and (g) Improved Transportation Access to Disadvantaged Neighborhoods.

The Mobility 21 team is comprised of Carnegie Mellon University (lead), University of Pennsylvania, Ohio State University and the Community College of Allegheny County. Tackling the multi-faceted nature of Mobility 21 objectives requires coordinated technology and policy activities, and is supported by researchers spanning multiple disciplines: electrical and computer engineering, civil engineering, transportation engineering, computer science and robotics, public policy, and big data analytics. The Mobility 21 team places strong emphasis on technology transfer to transit agencies and real-world deployments. A Mobility 21 Partner Consortium has more than 70 members from the public, non-profit and private sectors including PennDOT, and the Cities of Pittsburgh and Philadelphia. Mobility 21 activities are supported by platforms and testbeds that include connected and automated vehicles (CAVs), V2X infrastructure, fleet vehicles, adaptive traffic signals and a mobility analytics center.

