Smart Initiatives and Intelligent Transportation Systems Applications for Efficient and Sustainable Freight Mobility

Walter E. Washington Convention Center, 144C Sunday, January 13th, 2019 1:30 pm - 4:30 pm

Evangelos I. Kaisar, PhD, Florida Atlantic University, presiding Kuilin Zhang, PhD, Michigan Technological University, presiding

The workshop explores emerging logistics and supply chain initiatives: city and green logistics systems, methods for last-mile deliveries, multimodal freight mobility, port resiliency and logistics terminals operations.

Freight operations are advancing rapidly and the engagement of specialists in this field is necessary to ensure that advances in freight operations are accounted for to successfully plan for the future. Through this workshop, issues affecting the planning, design, safety and sustainability of the nation's intermodal freight transportation system will be addressed, as they relate to new 'smart freight' and ITS technologies.

The involvement of speakers and participants from the academia, federal & state agencies and industry will ensure a multidimensional discussion. Participants will engage with each other on urban freight topics in a participatory way by actively discussing research needs. Towards the end of the workshop a facilitated prioritization discussion will be conducted to identify the most urgent research needs in freight transportation related to Smart Mobility and ITS applications and a wrap-up and questions session on next steps for getting highest-priority projects into the research pipeline.

























A special thanks to our Sponsors:

Standing Committee on Freight Transportation Planning and Logistics (AT015)
Standing Committee on Transportation Network Modeling (ADB30)

TRB 98th Annual Meeting | Workshop 1090

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1:30 pm - 1:35 pm Welcome and Overview of Workshop

Dr. Evangelos I. Kaisar, FAU & Dr. Kuilin Zhang, MTU

1:35 pm - 3:00 pm Sustainable Freight Mobility

On-Demand 'Instant Deliveries': An Overview of Trends and Impacts
Dr. Laetitia Dablanc, University of Paris - East

Impacts of Smart Initiatives and ITS on Firm Site Selection Decisions Mr. Peter Plumeau, EDR Group, Inc.

Cargo Routing and Disadvantaged CommunitiesDr. Miguel Jaller Martelo, University of California, Davis

Predicting Truck Stop Activites Using Machine Learning
Dr. Lynette Cheah, Singapore University of Technology & Design

3:00 pm - 4:20 pm Smart Freight Initiatives

Fly Zone: Investigating the Energy and Impacts of Using Drones for Urban Freight Delivery
Dr. Victor Walker, Idaho National Laboratory
Dr. Amy Moore, Oak Ridge National Laboratory

Modeling Adoption of Autonomous Vehicle Technologies by Freight Organizations
Dr. Sabyasachee Mishra & Dr. Mihalis Gkolias, University of Memphis
Dr. Evangelos Kaisar, Florida Atlantic University

The Impact of Signal Priority Strategies on Multimodal Corridors

Ms. Stavroula Manta & Dr. Evangelos I. Kaisar, Florida Atlantic University
Dr. Mohammed Hadi, Florida International University
Ms. Gabrielle Matthews & Ms. Anastasia Richmond, Florida Department of Transportation

TPIMS: Successfully Utilizing Technology and Communication in Truck Parking Ms. Davonna C. Moore, Kansas Department of Transportation

4:20 pm - 4:30 pm Research Prioritization Discussion

Dr. Evangelos I. Kaisar, FAU & Dr. Kuilin Zhang, MTU