

# **CONFERENCE AGENDA**

#### Thursday, April 4th, 2024

*Pre-conference activities* 9:15 – 12:15 pm

**TECHNICAL TOURS**. Each tour involves approximately one mile of walking. They depart from the Van Metre Hall lobby shortly after 9 am and *return to the conference venue at noon*.

**TOUR 1: WASHINGTON UNION STATION**. This tour explores Washington Union Station (WUS) 's remarkable transportation role and plans for expanding and enhancing this iconic facility. We'll learn about the challenges rail providers currently face, the anticipation of additional service in the year ahead, and efforts to revamp the station. Attendees can also meet group at Shake Shake restaurant in WUS at 9:50 am. Roundtrip Metrorail fare included.

TOUR 2: VIRGINIA RAILWAY EXPRESS COMMUTER RAIL & HIGHLIGHTS OF ALEXANDRIA. This tour features a technical discussion of the trends and innovations involving the commuter railroad's headquarters and a walking tour. Our talks at VRE's Alexandria Station and headquarters will be followed by a brief historically oriented Alexandria walking tour led by a local expert. Attendees can meet outside Van Metre Hall at 9 am or the VRE office (1500 King Street) at 9:50 am. We will travel using rideshare services to and from Alexandra, which is included with registration.

Lunch on Your Own 12:15 – 1 pm

Conference Activities 1 – 1:25 pm

The symbol + denotes graduate student presenter or co-author

#### WELCOME SESSION Room 120

• Introduction by Michael Edwards, Joseph Schwieterman, Emily Hamilton, and 2024 Host Committee. Screening of a four-minute film on TRF.

#### 1:30 - 3 pm

#### SESSION 1.0 FINANCIAL CHALLENGES IN THE HIGHWAY AND MARITIME SECTORS

Room 120. Moderator: Alejandro Molnar, The World Bank

• Highway revenue impacts in the era of Electric Vehicles, Deepak Benny+, Samuel Labi, Chishala I

- Highway revenue impacts in the era of Electric Venicles, Deepak Benny+, Samuel Labi, Chisnala I Mwamba+, Jelin Sabu+, David Orlando Holguin Mejia+, Purdue University
- The Fate and Impact of Challenged Public-Private Partnership Projects: An Assessment of U.S.
   Experience, Jonathan Gifford, Carter B. Casady, Muhammet Mustafa Sever+, Marina Manganaris,
   Divya Rana, Cindy Quiroz, George Mason University. Discussant: Alejandro Molnar, The World Bank
- <u>Global Port Infrastructure Sufficiency Index</u>, Ju Dong Park, Gyeongsang National University, Jan Hoffmann, United Nations Conference on Trade and Development, Seunghyun An, Korea Maritime Institute

### SESSION 1.2 ANALYSIS OF THE DEMAND FOR RAIL TRANSIT AND PASSENGER VEHICLE TRAVEL Room 121, Andrew Jennings, transportation consultant

- Rail Rationalization and Ridership Response: Station Closures in Chicago, Gregory Newmark, Morgan State University, and John Allen
- Comparison and Evaluation of Factors Influencing Travel Demands between Rail Stations for the Washington D.C. Metrorail System, Md Saiful Alam+, Janna Kamilah Chapman+, Hiroyuki Iseki, Taylor Matthew Oshan, University of Maryland, College Park
- The Right Thing to Do? Demand Response Transit to Alleviate Transportation Insufficiency, Amy Hofstra, P. S. Sriraj, Kazuya Kawamura. Discussant: Andrew Jennings, Transportation Consultant

## SESSION 1.3 SMALL-GROUP DISCUSSION Q&A WITH TRANSPORTATION PROFESSIONALS Room 118, Introductions by Emily Hamilton, DePaul University

- Conversation with Jeff Plungis, Principal, Transport Politic Communications, formerly Bloomberg News, 1:30 2:15 pm. Attendance is limited to 20.
- A conversation with Dana Yanocha, Senior Research Manager, Institute for Transportation and Development Policy, 2:20 2:55 pm. Attendance is limited to 20.

### SESSION 1.4 SMALL-GROUP DISCUSSION ON INTERNATIONAL GRAIN TRANSPORTATION (Concludes at 2 PM) | Multipurpose Room

• Estimating Demand and Supply Capacity of U.S. Hay Export to Korea, *EunSu Lee, New Jersey City University* 

3 - 3:20 PM

COFFEE BREAK SPONSORED BY C. GREGORY BERESKIN

#### 3:20-4:50 pm

#### SESSION 2.1 IMPROVING THE MOBILITY AND SAFETY OF USERS OF TRANSPORTATION Room 120, Moderator: *Piere Vilain, KPMG*

- Spatiotemporal Modeling for Enhanced Road Safety: Bayesian Hierarchical Approach with INLA-SPDE in Analyzing Large Truck Crashes, Texas (2016-2021), Paul Olukoye Omulokoli+, Dr. Judith Mwakalonge, Dr. Saidi Siuhi, Dr. Gurcan Comert, South Carolina State University
- The influence of driver characteristics on willingness to pay for not meeting Heavy Goods Vehicles on rural roads in Norway. Stephen Nkesah+, Nord University, Norway
- Strategies of Integration with Innovative Mobility Options to Complement Public Transit
   Networks. Insights from the Chicago Metropolitan Area, Pietro Buffoni+, University of Illinois at Chicago

#### SESSION 2.2 SETTING PRIORITIES FOR STATE AND LOCAL TRANSPORTATION INVESTMENTS Room 121, Moderator: Gregory Newmark, Morgan State University

- Rural Planning Organizations and State Departments of Transportation, *PS Sriraj and Pietro Buffoni+*, *University of Illinois Chicago*,
- The Importance of Transportation Policies in Local Elections, Xavier Harmony+, Virginia Polytechnic Institute and State University. Discussant: Gregory Newmark, Morgan State University.
- An Optimization Model for maximizing Federal grants for State DOTs, Deepak Benny+, Samuel Labi, Saeel Shrivallabh Pai+, Purdue University. Discussant: Gregory Newmark, Morgan State University.

### SESSION 2.3 CASE STUDY IN LOGISTICS: TEMPERATURE AND TIME-SENSITIVE TRANSPORTATION (Concludes at 4:20 PM)

Room 118, Moderator: Michael Edwards, University of Missouri – Saint Louis

• Resilient Supply-Chain with Real-time EoT Visibility for Temperature and Time Sensitive

<u>Transportation</u>, Peter Yan and Shirley Hongping Shen, Cortex Innovation, Yulia Vorotyntseva, Saint Louis University, Hope Yen, University of Texas – Austin.

Poster setup starts at 4:30 pm, coordinated by Blythe Chesney, DePaul University.

#### 5:00-6:30 pm

#### POSTER SESSION, Multipurpose Room

- A new Eastern Bay Area Rapid Transit (Ebart) System as a Candidate for the next Chesapeake Bay Crossing Alternative, George Donohue, George Mason University
- A Study of the Efficiency of World's Major Container Ports: A Data Envelopment Analysis Approach, Yongshin Park, St. Edward's University, Ju Dong Park, Gyeongsang National University and Yuan Xu, Dalian Maritime University
- An Evaluation of the Gap between Supply Chain Management Curricula and Industry Demands, Christopher Mondy and Jill Bernard Bracy, University of Missouri St. Louis

- Analysis of Distracted Pedestrians Crossing Behavior: An Immersive Virtual Reality Application, Methusela Sulle+, South Carolina State University
- Built Environment Disparity: Assessing the Impact of Urban Design on Active Living across
  Different Socio-economic Groups in Los Angeles, Mintesnot Woldeamanuel, California State
  University, Northridge
- <u>Commercial Motor Vehicle Rural Crash Prevention Dashboard Tools in North Dakota, Yun Zhou, Kimberly Vachal, Ihsan Ullah Khan, and Vimlesh Kumar, North Dakota State University</u>
- Comprehensive Review of Distracted Driving Programs in the United States, Hongyun Chen, Charles H. Hruda+, Keenan Hubbard+, Amelia Lawson+, Kiara Meggitt-Goff+, Nolan Metz+ and Jacob Wilhelm+, Embry-Riddle Aeronautical University
- <u>Determine the Impact of Access on Safety Performance of Pedestrian and Bicyclist</u>, Charles H. Hruda+, Amelia M. Lawson+ and Hongyun Chen, *Embry-Riddle Aeronautical University*
- Developing computer vision and sensor models for Parking facilities using Machine Learning techniques: Optimizing Parking Space Allocation, *Eric Osei+*
- <u>Drivers Route Preferences Involving Heavy Goods Vehicles in Rural Roads: A Choice Experiment, Stephen Nkesah, Nord University, Norway</u>
- Enhancing Road Safety: Investigating Animal-Autonomous Vehicle Collision Avoidance Using F1/10 Vehicles to Warn Human Drivers and Nearby Traffic, *Denis Ruganuza+*, *Paul Olukoye+ Methuselah Sulle+*, *Dr Judith Mwakalonge*, *Dr Gurcan Comert*, *Dr Saidi Siuhi, South Carolina State University*
- Estimating Freight Transportation Emissions Through Freight Movement and Telematics Data, Mitra Salehi Esfandarani, Paul Ciannavei, Aleksandra Maguire and Paul Bingham, S&P Global Market Intelligence
- Examination of Urban Micromobility Dynamics: A Geospatial Analysis of Scooter Crash Hotspots and Temporal Pattern, *Tumlumbe Juliana Chengula+*, *Judith Mwakalonge*, *Saidi Siuhi*, *and Gurcan Comert*, *South Carolina State University*
- Freight Rail Service: Were Delay Charges Higher During the COVID-19 Pandemic?, Elvis Ndembe, Prairie View A&M University
- <u>Illinois Pedestrian-Oriented Riverfront Development: Highlighting Best Practice</u>, *Emily Hamilton+*, *DePaul University*
- Mind the Gap: Illinois Residents and Regions Underserved by Amtrak and Bus Transportation, Alexandra Klimczak+, DePaul University
- Navigating PPE Disruptions: Lessons Learn From 3M's Pandemic Experience, Hsin Jung Huang+, Min Han Tsai+, Yi Hsuan Chan+, Manisha Reddy Lankela+, Yulia Vorotyntseva, Saint Louis University,
- Synthesizing Research for Regional Rail Authority, Robert Munson,
- The Impact of a Country's Logistics Performance on Food Insecurity, *Camil Martinez and Andrés Naranjo*, Los Andes University
- The role of socioeconomic and environmental factors on pediatric vehicular heatstroke (PVH) deaths and sentiment analysis: An investigation, *Tumlumbe Juliana Chengula+*, *South Carolina State University*

TRF RECEPTION: 5:30 - 6:30 pm

Multipurpose Room

Our reception will be held in the same area as the Poster Session. Brief remarks by the Annual Forum committee at 6:15 pm. Beer, wine, soft drinks, and light food items, including vegetables, flatbread, and pizza.

### Friday, April 5th, 2024

The symbol + denotes graduate student presenter or co-author

#### 8:45 am- 10:15 am

### SESSION 3.1 RELATIONSHIP BETWEEN TRANSPORTATION SYSTEMS AND ECONOMIC PERFORMANCE Room 118, Moderator: *Ian Savage, Northwestern University*

- <u>Does rail transit access affect firm dynamics? Analysis of firm births and closures in Maryland,</u>
   <u>USA</u>, Basheer Saeed, University of Duhok, Kurdistan Region, Iraq, Ph.D., Hiroyuki Iseki University of Maryland, College Park. Discussant: Alejandro Molnar, The World Bank
- <u>Urban and infrastructure determinants of freight cost in India</u>, *Alejandro Molnar*, *Forhad Shilpi*, *The World Bank*, Pierre Vilain, Ph.D., KPMG
- Exploring the Association Between Road Traffic Fatalities and National Culture, Utpal Dutta, University of Detroit Mercy. Discussant: Ian Savage, Northwestern University

#### SESSION 3.2 ISSUES IN AIRPORTS AND AVIATION

Room 120, Moderators: Michael Bomba, University of North Texas

- <u>International Air Travel and Cruise Tourist Demand in The Bahamas,</u> *Dr. Tamilla Curtis, Dr. Li Zou, Embry-Riddle Aeronautical University*
- Business Resilience in the European and US Airline Industries, 2018-2023, Aisling Reynolds-Feighan, University College Dublin, Discussant: Ken Button, George Mason University
- The On-Time Performance Effects of a Policy Change in Airport Slot Restrictions: A Synthetic Control Analysis, Jules Yimga, Embry-Riddle Aeronautical University

#### 10:15 – 10:35 PM COFFEE BREAK SPONSORED BY TRE'S CHICAGO CHAPTER

10:35 - 12:05 PM

SESSION 4.1 AGRICULTURE TRANSPORTATION AND POLICY, SESSION 1, SPONSORED BY THE U.S. DEPARTMENT OF AGRICULTURE (USDA)

Room 120, Moderator: Kranti Mulik, USDA

<u>Transportation Issues Affecting Fresh Food Distribution: A Comparison Study of Rural vs. Urban U.S. Regina M. Hirsch University of Wisconsin, Madison, Center for Integrated Agricultural Systems (CIAS), Michelle Miller University of Wisconsin, Madison, Center for Integrated Agricultural Systems (CIAS), Ai Chih Chang New Jersey Institute of Technology, Junmin Shi New Jersey Institute of Technology
</u>

- Inferring impacts of weather extremes on the US crop transportation network, Theodoros Skevas, University of Missouri, Wyatt Thompson, University of Missouri, Benjamin Brown, University of Missouri, Delmy Salin, USDA Agricultural Marketing Service, Jesse Gastelle, USDA Agricultural Marketing Service
- Food Transportation and Price Impacted by Diesel Price and Truck-Driver Shortage Pre-, Amid and Post Pandemic, *Jim Shi and Jasmine Chang*.
- Estimating the Determinants of Bulk Agricultural Truck Rates Across the U.S, *Jake Wagner, Washington State University.*

### SESSION 4.2 INTERNATIONAL TRANSPORTATION SYSTEM AND CONTAINER SHIPMENTS Room 118, Moderator: *Uptal Dutta, University of Detroit Mercy*

- The Cartel Before the Horse? More Analysis of the Early 2000s Air Cargo Cartel,
   James Nolan, University of Saskatchewan, Zoe Laulederkind, University of Wisconsin-Milwaukee,
   Discussant: Aisling Reynolds-Feighan, University College Dublin
- Two-way relationship between warehousing and distribution centers and maritime logistics clusters, Ricardo Ungo, Old Dominion University, Anthony Pagano, University of Illinois at Chicago
- <u>The Linkage Direction of Public Logistics Data in Korea,</u> Jaesung Choi, Korea Research Institute for Human Settlements.

### SESSION 4.3 INTERNATIONAL LOGISTICS PERFORMANCE AND CROSS-BORDER FREIGHT Room 122, Moderator: *Michael Edwards, University of Missouri – Saint Louis*

- Understanding the Incidence and Consequence of Disruptions and Closures of Border Crossing Along the Texas-Mexico Border, *Michael Bomba, University of North Texas, Discussant: Gregory Bereskin, St. Ambrose University.*
- Measuring Relative Logistics Performance and the Impact of National Culture in the Post- <u>Pandemic Environment</u>, Carl Scheraga, Fairfield University. Discussant: Gregory Bereskin, St. Ambrose University, Discussant: Yao Cheng, University of Maryland

12:10 - 1:40 pm

#### TRF AWARDS LUNCHEON

Multipurpose Room, Van Metre Hall

Keynote Speaker: Michael Sussman, Founder & CEO of Strategic Rail Finance and OnTrackNorthAmerica.

A hot buffet with vegetarian options will be served. Our program will include a brief TRF organizational update, our keynote speaker, and the 2024 TRF Awards, including Distinguished Researcher, Best Paper, Best Student Paper, and Best Poster Awards, with several cash prizes being awarded. Presentation of awards by Michael Edwards, University of Missouri – St. Louis, Ian Savage, Northwestern University, and Joseph Schwieterman, DePaul University.

### SESSION 5.1 AGRICULTURE TRANSPORTATION AND POLICY – SESSION 2 Room 118, Moderator: *James Nolan, University of Saskatchewan*

- Analysis of U.S. Containerized Grain, Dried Distillers Grains, and Other Feed Exports Trend,
   Wesam Helmi+, Kimberly Vachal, Jeremy Mattson, North Dakota State University/ Upper Great
   Plains Transportation Institute. Discussant: Wyatt Thompson, University of Missouri
- The Impact of Covid-19 on Containerized U.S. Agricultural Export Volumes. *Jake Wagner, Washington State University.*
- The Impact of the U.S.-China Trade War on Air and Ocean Shipments, Li Zou, Embry-Riddle Aeronautical University, Martin E. Dresner, University of Maryland, College Park, Chunyan Yu, Embry-Riddle Aeronautical University. Discussant: Ricardo Ungo, Old Dominion University

### SESSION 5.2 COST ESCALATION AND PERFORMANCE OF TRANSPORTATION SYSTEMS AND STRATEGIES Room 120, Moderator: Baruch Feigenbaum, Reason Foundation

- Inland Waterways System Funding: Problems and Solutions, Jay Derr, Reason Foundation
- <u>Evaluating Advance Refunding Strategies in Response to the Covid-19 Pandemic in U.S.</u>
   <u>Transportation Infrastructure Projects</u>, *Jonathan Gifford*, *Carter Casady*, *Muhammet Mustafa Sever+*, *George Mason University*. *Discussant:* Baruch Feigenbaum, Reason Foundation
- <u>Forecasting Regional Inflation and Costs for Transportation Agencies, Jung Bae, Andrew Komendantov, Elizabeth Shi, KPMG LLP</u>

# SESSION 5.3 INNOVATIONS IN HIGHWAY DESIGN TO PROMOTE EFFICIENCY AND SAFETY Room 121, Moderator: Minseok Kim, Maryland Department of Transportation State Highway Administration

This session features analysis of strategies involving roads and highways in the State of Maryland.

- An Integrated Intelligent Intersection Control System (III-CS) for Safety Improvement and Delay Minimization, Yao Cheng, Ph.D., University of Maryland
- <u>Developing an Integrated Smart Traffic Incident Management Supporting System for Enhanced</u> Efficiency and Safety, *Yen-Lin Huang, University of Maryland*
- Real-time Signal Optimization for Commuting Arterials: Tackling Unbalanced Flows and Mutual Blockages, Yi-Ting Lin, *University of Maryland*.

3:15 - 3:30 PM

COFFEE BREAK

3:30 - 4:55 PM

### SESSION 6.1 SUSTAINABILITY, CARBON EMISSIONS, AND ECONOMIC CYCLES IN TRANSPORTATION Room 118, Moderator: *Jule Yimga, Embry-Riddle Aeronautical University*

- Sustainability Analysis of Construction Projects with a CPM Schedule, Achintyamugdha Sharma, Priyanka Deka, Goutam Jois, Umesh Jois, Jois Construction Management. Discussant: Joseph Schwieterman, DePaul Universiyt
- <u>Comparison of carbon emissions of infrastructure elements in rail, road, and air transport, Ingavon Scheliha+, Juliane Roesing+, RWTH Aachen University</u>
- Economic Cycles and Infrastructure Deployment, *Richard Mudge, Compass Transportation and Technology*

### SESSION 6.2 CHALLENGES AND INEFFICIENCIES IN PUBLIC TRANSIT AND TAXI SERVICES Room 120, Moderator: Jack Ventura, TRF Washington Chapter, formerly Surface Transportation Board

- Are We Back Yet? Identifying The New Normal Post-COVID Norms, Pierre Vilain, Lucile Kellis, M.Sc., Nicholas Daly, KPMG LLP
- <u>Solving the Airport Taxi Problem</u>, Ray Mundy, Ph.D., University of Missouri Saint Louis. **Discussant:** Aisling Reynolds-Feighan, University College Dublin
- The Promises and Perils of a Free Rural Transportation Service in Northern Saskatchewan, Canada, Jacob Alhassan, University of Saskatchewan College of Medicine. Discussant: Jack Ventura, formerly Surface Transportation Board

#### Post-conference activities

5:10 – 5:40 pm

MIXER HOSTED BY TRF CHAPTERS - Uncle Julio's at 4301 Fairfax Drive in Arlington

6 - 7:30 pm

#### **EVENING DINNER AND SOCIAL GATHERING (\$50)**

Join us for TRF's post-conference dinner outing at Uncle Julio's, a Mexican restaurant featuring "made-from-scratch" entrées and desserts. Attendees will be able to choose from a list of menu options, including vegetarian fare, and there will be a cash bar. Uncle Julio's at 4301 Fairfax Drive in Arlington, next to a major hotel, is a 15-minute (0.7 mile) walk from the conference center and a half-mile from the Virginia Square Metro Station. Attendees can ride together if they prefer not to walk to and from the restaurant.

#### Saturday, April 6, 2024

Gathering at 10:30 am at the Blue Bottle Coffee, Washington Union Station, 50 Massachusetts Ave NE Unit M160, Washington. Our outing will start with a 25-minute tour and discussion of the Washington Union Station Intercity Bus Facility exploring the current state of long-distance bus travel with Joe Schwieterman (10:30 - 10:55), followed by a small-group discussion over coffee 10:55 am - 11:30 am.

This replaces the previous planned outing to the *National Air & Space Museum*. After the discussions end at 11:30, attendees can visit Washington DC sites, which are within walking distance. The meeting spot is a 40-minute Metrorail ride from Van Metre Hall (fare not included). Free. No advance registration is required! *Late or having difficulty finding us? Text 312.869.0131*. Coffee purchase is on your own.