

# CM<sup>2</sup> University Transportation Center & Partners at the 100<sup>th</sup> Annual Meeting of the Transportation Research Board



January 12-13, 21-22 & 25-29, Online Program

## Tuesday, January 12

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
2:00-3:30PM		Committee Meeting	Transportation Planning and Analysis Section	<b>Chandra Bhat</b> Robert Hazlett	University of Texas, Austin Act 11 Consulting, PLLC

## Wednesday, January 13

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
		Committee Meeting	The Saliency of Megaregional Geographies for Inter-Metropolitan Transportation Planning and Policy Making	<b>Gian-Claudia Sciara</b> <b>Michael Oden</b>	University of Texas, Austin

## Friday, January 22

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
3:50 PM	P21-20513	Navigating A New Normal in Public Transit and Shared Mobility	How Are COVID-19 and Social Equity Shifting the Mobility Transformation?	<b>Carol Lewis</b> (Moderator)	Texas Southern University

## Monday, January 25

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
10:00-11:30AM	TRBAM-21-00599	Automated/Autonomous Vehicles in Shared Mobility	Shared Autonomous Vehicle Fleet Performance: Impacts of Parking Limitations and Trip Densities	Haonan Yan <b>Kara M. Kockelman</b> Krishna M. Gurumurthy	University of Texas, Austin
10:00-11:30AM	TRBAM-21-01485	Automated/Autonomous Vehicles in Shared Mobility	Shared Autonomous Vehicle Fleet Operations For First-Mile Last-Mile Transit Connections With Dynamic Ride-Sharing	Yantao Huang <b>Kara M. Kockelman</b> Venu Garikapati	University of Texas, Austin National Renewable Energy Laboratory (NREL)
11:30AM-1:00PM	TRBAM-21-00822	Planning for the Transportation Impacts on Urban Form	Sharing the Road with Autonomous Vehicles: Perceived Safety and Regulatory Preferences	Gopindra Sivakumar Nair <b>Chandra Bhat</b>	UT Center for Transportation Research University of Texas, Austin

2:30-4:00 PM	TRBAM-21-02676	Advances in Network Equilibrium Models	Effects of Origin-Destination Matrix Errors on User Equilibrium in Networks	Priyadarshan Patil Carlin Liao <b>Stephen Boyles</b>	University of Texas, Austin
2:30-4:00 PM	TRBAM-21-03275	Advances in Network Equilibrium Models	Network Assignment-Based Estimation of Origin-Destination Matrices with a Full Travel Demand Model	William Alexander Carlin Liao Rishabh Thakkar Karthik Velayutham <b>Stephen Boyles</b>	University of Texas, Austin
2:30-4:00 PM	TRBAM-21-00287	Current Issues in Aviation	Understanding the Role of Online Media Platforms in Airport Capital Projects and Community Outreach	Max Li <b>Megan Ryerson</b>	Massachusetts Institute of Technology (MIT) University of Pennsylvania
2:30-4:00 PM	TRBAM-21-02306	Current Issues in Aviation	Long-Distance Airport Substitution and Air Market Leakage: Empirical Investigations in the U.S. Midwest	Kaleab Yirgu Amy Kim <b>Megan Ryerson</b>	University of Alberta University of Pennsylvania

## January 26

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
10:00-11:30AM	P21-21036	Effective Practices and Lessons Learned: Humanitarian Relief and Evacuations During the Pandemic	Responding to and Recovering from Three Hurricanes During a Pandemic	<b>Brian Wolshon</b>	Louisiana State University
11:30AM-1:00PM	TRBAM-21-03427	Public Transportation and Shared Mobility	Peak-Load Pricing and Demand Management for Ridesourcing Platforms	Cesar Yahia <b>Stephen Boyles</b>	University of Texas, Austin
11:30AM-1:00PM	TRBAM-21-02851	Emergency Response, Incident Management, and Public Health	Freeway Incident Diversion Behavior as a Measure of Transportation Network Resiliency	Ravindra Gudishala Saurabha Bawankule Chester Wilmot <b>Brian Wolson</b>	Arcadis US Inc Louisiana State University
11:30AM-1:00PM	TRBAM-21-00955	Safety Performance and Analysis, Act 1: Pedestrians, Bicyclists, E-Bikes, and Couriers	Predicting Pedestrian Crash Occurrence And Injury Severity In Texas	Mashrur Rahman <b>Kara M. Kockelman</b> Kenneth Perrine	University of Texas, Austin
11:30AM-1:00PM	TRBAM-21-00670	Implications of Land Use for Travel and Modeling	Anticipating Land Use Impacts Of Self-Driving Vehicles In The Austin, Texas Region	<b>Kara M. Kockelman</b> Tyler Wellik	University of Texas, Austin

1:00-2:30PM	TRBAM-21-01451	Advances in Travel Behavior Research	Preparing Data For Microsimulation Of Smart Transport Systems: A Tool For Exploiting Existing Travel Model Results And Open-Source Data	Jun Liu <b>Kara M. Kockelman</b>	University of Alabama University of Texas, Austin
1:00-2:30PM	TRBAM-21-00703	Advances in Travel Behavior Research	The Travel Behavior of Immigrants in the U.S.: The Immigrant Effect for Carsharing, Ridesharing, and Bikeshearing Services	Sangwan Lee <b>Michael Smart</b> Aaron Golub	Portland State University Rutgers University Portland State University
1:00-2:30PM	TRBAM-21-00853	Advances in Travel Behavior Research	A Socio-Technical Model of Autonomous Vehicle Adoption Using Ranked Choice Stated Preference Data	Katherine Asmussen Aupal Mondal <b>Chandra Bhat</b>	University of Texas, Austin
1:00-2:30PM	TRBAM-21-01491	Advances in Travel Behavior Research	A Multiple Discrete Extreme Value Choice Model with Grouped Consumption Data and Unobserved Budgets	<b>Chandra Bhat</b> Aupal Mondal Katherine Asmussen Aarti Bhat	University of Texas, Austin Pennsylvania State University
1:00-2:30PM	TRBAM-21-01130	Advances in Travel Behavior Research	Adoption and Frequency of Use of Ride-Hailing Services in a European City: an Individual-Level Model in Madrid, Spain	Juan Gomez Alvaro Aguilera-Garcia Jose Manuel Vassallo  Felipe Dias <b>Chandra Bhat</b>	Universidad Politécnica de Madrid  University of Texas, Austin
2:30-4:00 PM	TRBAM-21-02006	Board the Bus - Rural, Intercity, and Specialized Bus Transportation for 2021	Transportation Network Systems (TNCs) and Automated Vehicles (AVs): Bridging the Gap from City to Rural Areas	Selena Scott <b>Gwendolyn Goodwin</b> Teidra Darrett	Texas Southern University
2:30-4:00 PM	TRBAM-21-00235	Artificial Intelligence and Machine Learning Methods for Transportation Applications (Part I)	How Does Machine Learning Compare To Conventional Econometrics For Transport Data Sets? A Test Of ML Vs MLE	Weijia (Vivian) Li <b>Kara M. Kockelman</b>	Chang'an University University of Texas, Austin
2:30-4:00 PM	TRBAM-21-03481	Transportation Equity: Understanding and Addressing	Transitions into and out of Car Ownership Among Low-	<b>Nicholas Klein</b> Rounaq Basu	Cornell University Massachusetts Institute of Technology

		Transportation Disadvantage	Income Households in the United States	<b>Michael Smart</b>	Rutgers University
2:30-4:00 PM	TRBAM-21-03059	Transportation Equity: Incorporating Equity into the Transportation Decision-Making Process	Practical Strategies for Achieving Transportation Justice: Seeing Beyond State-Sponsored Approaches	<b>Alex Karner</b> Jonathon London  Dana Rowangould Kevin Manaugh	University of Texas, Austin University of California, Davis University of Vermont McGill University
2:30-4:00 PM	TRBAM-21-03875	Transportation Equity: Incorporating Equity into the Transportation Decision-Making Process	Framework for Leveraging Data from Autonomous Trucks to Support State Maintenance Operations	Morgan Avera <b>C. Michael Walton</b>	University of Texas, Austin

### Wednesday, January 27

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
10:00-11:30AM	TRBAM-21-04365	Route Choice Behavior and Resilient Networks	Post-Disaster Recovering Sequencing Strategy for Road Networks	Can Gokalp Priyadarshan Patil <b>Stephen Boyles</b>	University of Texas, Austin
2:30-4:00 PM	P21-20960	Dwight David Eisenhower Transportation Fellowship Program Posters, Part 3	Autonomous Vehicles and Transit Operations	<b>Lydia Ndagire</b>	Texas Southern University
4:00-5:30PM	TRBAM-21-02506	Research Trends in Freight Planning and Logistics	The Capacitated Vehicle Routing Problem with Drones Considering Stochastic Demands and Restricted Return Trip	Tengkuo Zhu <b>Stephen Boyles</b>	University of Texas, Austin

### Thursday, January 28

Time	Event #	Session Title	Presentation Title	Presenters/Researchers	Affiliated Institution
10:00-11:30AM	TRBAM-21-00413	Artificial Intelligence and Machine Learning Methods for Transportation Applications (Part II)	Mining Heterogeneous Impact of Destination Attributes in Travel Demand Forecast for Different Urban Districts: A Deep Learning Approach	<b>Shunhua Bai</b> <b>Junfeng Jiao</b>	University of Texas, Austin
11:30 AM – 1:00 PM	TRBAM-21-03748	Bus System Operations, Technology, and Applications, Part 1	Bus Network Redesigns and Public Transit Equity Analysis: Evaluating System-wide Changes in Richmond, Virginia	Seth LaRue Haijing Liu Raviya Mysorewala Mashrur Rahman	University of Texas, Austin

				Timothy McCarthy <b>Alex Karner</b>	
11:30 AM – 1:00 PM	TRBAM-21-00952	Emergency Evacuations	Strategic Evacuation for Regional Events: With and Without Autonomous Vehicles	Jooyong Lee <b>Kara M. Kockelman</b>	University of Texas, Austin
2:30-4:00PM	TRBAM-21-03900	Emerging methods in transportation data analysis	A New Closed Form Multiple Discrete-Continuous Extreme Value (MDCEV) Choice Model with Multiple Linear Constraints	Aupal Mondal <b>Chandra Bhat</b>	University of Texas, Austin
2:30-4:00PM	TRBAM-21-03607	Emerging and Future Mobility	Shared Autonomous Vehicles for Small Urban Areas: Agent- based Simulation	Qifan Nie Zihe Zhang Jun Liu Steven Jones Andrew Graettinger <b>Kara M. Kockelman</b>	University of Alabama  University of Wisconsin, Milwaukee University of Texas, Austin
4:00-5:30PM	TRBAM-21-00159	Featured Research on Congestion Pricing	Technologies For Congestion Pricing	Lewis Clements <b>Kara M. Kockelman</b> William Alexander	University of Texas, Austin
4:00-5:30PM	TRBAM-21-02881	New Research on Travel Demand Management	Impacts Of Flextime On Departure Time Choice For Home-Based Commuting Trips In Austin, Texas	Mashrur Rahman Krishna Murthy Gurumurthy <b>Kara M. Kockelman</b>	University of Texas, Austin
<b>Friday, January 29</b>					
<b>Time</b>	<b>Event #</b>	<b>Session Title</b>	<b>Presentation Title</b>	<b>Presenters/Researchers</b>	<b>Affiliated Institution</b>
10:00- 11:30AM	TRBAM-21-01579	Modeling of Emerging Mobility Systems and Services: Pooling, Hailing, and Micro- mobility	Pooled Versus Private Ride- Hailing: A Joint Revealed and Stated Preference Analysis Recognizing Psycho-Social Factors	Shuqing Kang Aupal Mondal <b>Chandra Bhat</b> Aarti Bhat	University of Texas, Austin  Pennsylvania State University
10:00- 11:30AM	TRBAM-21-02564	Pavement Texture and Friction	Enhanced Friction Prediction Models based on Field Texture Data	Chirstian Sabillon-Orellana Tarek Allam <b>Ruohan Li</b> Joaquin Hernandez Shimin Zhang Jorge Prozzi	University of Texas, Austin

11:30 AM – 1:00 PM	TRBAM-21-04314	Approaches to Travel Model Estimation	A Joint Model of Sustainable Mode Choice for Commute, Shift Potential and Alternative Mode Chosen	Ganesh Ambi Ramakrishnan- -Karthik Srinivasan Aupal Mondal <b>Chandra Bhat</b>	Indian Institute of Technology, Madras  University of Texas, Austin
11:30 AM – 1:00 PM	TRBAM-21-03015	Current Issues in Urban Air Mobility (UAM)	Life-Cycle Analysis Of Electric Vertical Take-Off And Landing Vehicles	Khashayar Khavarian  Kara M. Kockelman	Sharif University of Technology University of Texas, Austin