

# **TEXAS LONGHORN PRESENTATION SCHEDULE**

TRANSPORTATION RESEARCH BOARD 97<sup>th</sup> ANNUAL MEETING, JANUARY 2018

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## Workshops

Sunday, January 7, 2018					
Workshop No.	Committee Sponsor	Participants	Time	Location	Title
190	ADB30	Sebastian Astroza	1:30PM-5:00PM	Convention Center, 146B	Flexible Multiple Discrete- Continuous Choice Structures and Mixed Modeling

# **Committee Meetings**

Monday, January 8, 2018					
Committee Sponsor	Participants	Time	Location	Title	
A0010	Jorge Prozzi, presiding	6:00PM-7:30PM	Marriott Marquis, Independence B (M4)	International Research Needs Subcommittee, A0010(2)	

#### Tuesday, January 9, 2018

Committee Sponsor	Participants	Time	Location	Title
ADB30	Stephen Boyles, presiding	8:00AM-9:45AM	Marriott Marquis, Independence H (M4)	Transit, Freight, and Logistics Modeling Subcommittee, ADB30(1)
AFK50	Amit Bhasin, presiding	7:30PM-9:30PM	Marriott Marquis, Marquis Ballroom Salon 5 (M2)	Advanced Models to Understand Behavior and Performance of Asphalt Mixtures Subcommittee, AFK50(1)

## Wednesday, January 10, 2018

Committee Sponsor	Participants	Time	Location	Title
ADB00	Chandra Bhat, presiding	12:15PM-2:15PM	Marriott Marquis, Capitol Hill (M3) <i>BY INVITATION</i>	Travel Analysis Methods Section Executive Board
AHB15	Kristie Chin	2:30PM-6:00PM	Convention Center, Salon C	Automation and Big Data in Texas Cities
AFD10	Md Al Amin	2:30PM-6:00PM	Marriott Marquis, Georgetown University (M1)	An Extended Goal Programming Framework for Maintenance Budget Allocation Considering Multiple Stakeholders

# **Lectern Sessions**

## Monday, January 8, 2018

Session No.	Committee Sponsor	Participants	Time	Location	Title
200	ABJ50	Venktesh Pandey Natalia Ruiz-Juri	8:00AM-9:45AM	Convention Center, 151A	Using National Performance Management Research Data Set (NPMRDS) for Corridor Performance Measures: a US 281N Corridor Case Study
204	ADB30	Stephen Boyles Chi Xie Xing Wu	8:00AM-9:45AM	Convention Center, 156	Path-Constrained Traffic Assignment: Continuously Distributed Bounds on Travel Weights
204	ADB30	Cesar Yahia Venktesh Pandey Stephen Boyles	8:00AM-9:45AM	Convention Center, 156	Network Partitioning Algorithms for Solving the Traffic Assignment Problem Using a Decomposition Approach
267	ADB40	Gopindra Sivakumar Nair Sebastian Astroza Chandra Bhat Sara Khoeini Ram Pendyala	10:15AM-12:00PM	Convention Center, 156	An Application of a Rank Ordered Probit Modeling Approach to Understanding Level of Interest In Autonomous Vehicles
267	ADB40	Kenneth Perrine Kara Kockelman Yantao Huang	10:15PM-12:00PM	Convention Center, 156	Anticipating Long-Distance Travel Shifts Due to Self- Driving Vehicles

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Session No.	Committee Sponsor	Participants	Time	Location	Title
276	AFF40	Brennan Dubuc Arvin Ebrahimkhanlou Salvatore Salamone	10:15AM-12:00PM	Convention Center, 206	Stress measurement in seven-wire strands using higher order guided ultrasonic wave modes
339	ADB10	Pragun Vinayak Felipe Dias Sebastian Astroza Chandra Bhat Ram Pendyala Venu Garikapati	1:30PM-3:15PM	Convention Center, 156	Accounting for Multi- Dimensional Dependencies Among Decision-Makers Within a Generalized Model Framework: An Application to Understanding Shared Mobility Service Usage Levels
340	ADB30	Kara Kockelman Kenneth Perrine YaWei He	1:30PM-3:15PM	Convention Center, 146B	Optimal Locations of U.S. Fast Charging Stations for Long-Distance Trips by Battery Electric Vehicles
350	AFN10	Kevin Folliard	1:30PM-3:15PM	Convention Center, 202A	Delayed Ettringite Formation (DEF): Mechanisms and Preventive Measures
406	ADB50	Patricia Lavieri Felipe Dias Natalia Ruiz-Juri James Kuhr Chandra Bhat	3:45PM-5:30PM	Convention Center, 145A	A Model of Ridesourcing Demand Generation and Distribution

# Tuesday, January 9, 2018

Session No.	Committee Sponsor	Participants	Time	Location	Title
475	ADA60	Alex Karner Amit Kumar Catherine Ross Rohan Katyal	8:00AM-9:45AM	Convention Center, 156	Traffic and Incident Management Using Crowdsourced Data: Challenges and Lessons Learned from Practice
488	AFS70	Gholam Hossein Roodi Amr M. Morsy Jorge Zornberg	8:00AM-9:45AM	Convention Center, 209A	Soil-Geosynthetic Interface Shear in Different Testing Scales
533	ADB40	Sebastian Astroza Chandra Bhat Venu Garikapati Ram Pendyala Patricia Mokhtarian	10:15AM-12:00PM	Convention Center, 145A	Representing Heterogeneity in Structural Relationships Among Multiple Choice Variables Using a Latent Segmentation Approach



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Session No.	Committee Sponsor	Participants	Time	Location	Title
539	AFD20	Sareh Kouchaki 10:15AM-12:00PM Hossein Roshani Jorge Prozzi Cristina Cordoba Joaquin Hernandez		Convention Center, 208	Evaluation of Using Line Laser Scanner to Improve the Measurement of Average Least Dimension in Chip Seal Design Methods
669	ADB40	Chandra Bhat	3:45PM-5:30PM	Convention Center, 145A	Advancing TDM: Developing the Workforce
669	ADB40	Chandra Bhat	3:45PM-5:30PM	Convention Center, 145A	Advancing TDM: Addressing Fundamental Research Questions
695	ANF10	Junfeng Jiao Nicole McGrath	3:45PM-5:30PM	Convention Center, Salon B	Evaluating Walkability Through GIS Spatial Analysis in South Florida

## Wednesday, January 10, 2018

Session No.	Committee Sponsor	Participants	Time	Location Title	
743	ADD10	Zhanmin Zhang	8:00AM-9:45AM	Convention Center, 140B	One Belt One Road: Applying Megaregional Economic Development Strategies in Asia
745	AFB40	Michael Barrett	8:00AM-9:45AM	Convention Center, 209A	Mitigation of Impacts to Groundwater Quality from Highway Runoff in a Karst Terrain
749	AFD90	Sareh Kouchaki Hossein Roshani Joaquin Hernandez Jorge Prozzi	8:00AM-9:45AM	Convention Center, 203	Field Investigation of Relationship between Pavement Surface Texture and Friction
805	ADD50	Richard Marcantonio Aaron Golub Alex Karner Louise Dyble	10:15AM-12:00PM	Convention Center, 156	Realizing the Potential of Equity Analyses of Regional Transportation Plans: Law, Practice, and Proposals for Reform
805	ADD50	Alex Karner Aaron Golub	10:15AM-12:00PM	Convention Center, 156	Assessing the Equity Impacts of a Transportation Improvement Program



Session No.	Committee Sponsor	Participants	Time	Location	Title
815	AHB35	Xiaoxiao Zhang Jiaqi Ma Brian Smith Jun Liu	10:15AM-12:00PM	Convention Center, Salon C	Operational Performance Evaluation of the Managed Lane Strategy for Early Deployment of Cooperative Adaptive Cruise Control

# **Poster Sessions**

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## Monday, January 8, 2018

Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
241	ABJ40	Chandra Bhat William Brazil Brian Caulfield	8:00AM-9:45AM	Convention Center, Hall E	The Potential Role of Eye Tracking in Stated Preference Survey Design and Piloting	B326
250	AHB20	Venktesh Pandey Cesar Yahia Stephen Boyles Jia Li	8:00AM-9:45AM	Convention Center, Hall E	Evaluation of Active Traffic Management (ATM) Strategies under Recurring and Non- recurring Congestion: an IH-35 Corridor Case Study	A202
314	AFD90	Natalia Zuniga Garcia Jorge Prozzi Andre Smit	10:15AM-12:00PM	Convention Center, Hall E	Predicting Friction with Improved Texture Characterization	A194
315	AFH10	Junghye Son Nabeel Khwaja Duane Milligan	10:15AM-12:00PM	Convention Center, Hall E	A Time-Cost Model for Predicting Durations of Highway Construction Projects	A161
379	ABE25	Venktesh Pandey Stephen Boyles	1:30PM-3:15PM	Convention Center, Hall E	Dynamic Pricing for Managed Lanes with Multiple Entrances and Exits	B484
386	ABJ70	Venktesh Pandey Weijia Xu Lei Huang Si Liu Natalia Ruiz-Juri	1:30PM-3:15PM	Convention Center, Hall E	Processing large-scale video data to support transportation safety, planning, and operations: a flexible approach to data storage and integration.	B362



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Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
392	AHB30	Pavle Bujanovic C. Michael Walton Taylor Lochrane Jia Hu Tomislav Bujanovic	1:30PM-3:15PM	Convention Center, Hall E	Cooperative Adaptive Cruise Control Algorithm with Priority Weights Assigned to Downstream Vehicles for Increased Safety	A240
394	ANB20	Chandra Bhat Sebastian Astroza Patricia Lavieri	1:30PM-3:15PM	Convention Center, Hall E	A Model for the Analysis of Pedestrian Injury Counts by Severity Level	A207
448	AFK40	Ramez Hajj Angelo Filonzi Andre Smit Amit Bhasin	3:45PM-5:30PM	Convention Center, Hall E	Design and Performance of Mixes for Use as an Ultra Thin Overlay	A133
451	AHB40	Natalia Zuniga Garcia Randy Machemehl Heidi Ross	3:45PM-5:30PM	Convention Center, Hall E	Multimodal Level of Service Methodologies: Arterial Corridors' Multimodal Assessment	A242

#### Tuesday, January 9, 2018

Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
513	ADC20	Jun Liu Behram Wali Asad Khattak David Greene	8:00AM-9:45AM	Convention Center, Hall E	Fuel Economy Gaps Within & Across Garages: Exploring Variations and Heterogeneity	B390
566	ADC70	Jun Liu Behram Wali Asad Khattak David Greene	10:15AM-12:00PM	Convention Center, Hall E	Analyzing within Garage Fuel Economy Gaps to Support Vehicle Purchasing Decisions – A Copula Based Approach	B370
573	AHB45	Gopindra Sivakumar Nair Chandra Bhat Robert Heath Natalia Ruiz-Juri Mohammed Eltayeb	10:15AM-12:00PM	Convention Center, Hall E	A Microsimulation Approach to Quantify the Safety Benefits of Connected Vehicles: A Road Hazard Warnings Application	A230
636	AFD10	Oscar Daniel Galvis Arce Juan Porras-Alvarado Zhanmin Zhang	1:30PM-3:15PM	Convention Center, Hall E	Benefit-Cost Estimate for Skid Resistance Improvements at the Network Level Using Markov Chains	A140



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Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
640	AFK20	Angelo Filonzi Ramez Hajj Indu Venu Sabaraya Dipesh Das Navid Saleh Amit Bhasin	1:30PM-3:15PM	Convention Center, Hall E	Investigating the Ability of Nanomaterials to Effectively Disperse in Asphalt Binders for Use as a Modifier	A211
641	AFK20	Fardin Khabaz Farshad Fallah Hamzeh Haghshenas Yong-Rak Kim	1:30PM-3:15PM	Convention Center, Hall E	Molecular Dynamics Modeling and Simulation of Bitumen Chemical Aging	A186
642	AFK20	Amit Bhasin Panos Apostolidis A. Tom Scarpas Cor Kasbergen Sandra Erkens	1:30PM-3:15PM	Convention Center, Hall E	Study of Asphalt Binders Fatigue with a New Dynamic Shear Rheometer Geometry	A200
642	AFK20	Nazmus Sakib Amit Bhasin	1:30PM-3:15PM	Convention Center, Hall E	Estimating polarity-based distribution of bitumen using simplified chromatographic techniques	A201
660	AP040	Krishna Murthy Gurumurthy Kara Kockelman	1:30PM-3:15PM	Convention Center, Hall E	Analyzing the Dynamic Ride-Sharing Potential for Shared Autonomous Vehicle Fleets Using Cellphone Data from Orlando, Florida	B462
717	AFK50	Angelo Filonzi Ramez Hajj Andre Smit Amit Bhasin	1:30PM-3:15PM	Convention Center, Hall E	Validating Inverse Stereology Methods to Generate Two Dimensional Area Gradations for Computational Modeling	A180
709	ADA20	Qinglu Ma Kara Kockelman Marc Segal	3:45PM-5:30PM	Convention Center, Hall E	Making the Most of Curb Spaces in a World of Shared Autonomous Vehicles: A Case Study of Austin, Texas	B374
713	ADD55T	Alex Karner Yizheng Wu Dana Rowangould Jonathan London	3:45PM-5:30PM	Convention Center, Hall E	Modeling health equity in active transportation planning	B483

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Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
718	AFK50	Amit Bhasin Andrise Buchweitz Klug Adalberto Faxina Andressa Ng	3:45PM-5:30PM	Convention Center, Hall E	Evaluation of the Fatigue Performance of Fine Aggregate Matrices Prepared with Reclaimed Asphalt Pavements and Shale Oil Residue	A141
718	AFK50	Amit Bhasin Andressa Ng Adalberto Faxina Andrise Buchweitz Klug	3:45PM-5:30PM	Convention Center, Hall E	Evaluation of The Fatigue Damage Behavior of Fine Aggregate Matrices Prepared with Modified Binders Using the VECD Theory	A140
725	AHD18	Natalia Zuniga Garcia Jorge Prozzi Wilfrido Martinez Andre Smit Feng Hong	3:45PM-5:30PM	Convention Center, Hall E	Economic Analysis of Pavement Preservation Techniques	A106
726	AP050	Neil Quarles Kara Kockelman	3:45PM-5:30PM	Convention Center, Hall E	Costs and Benefits of Electrifying and Automating U.S. Bus Fleets	B402

# Wednesday, January 10, 2018

Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
774	ADB10	Felipe Dias Sebastian Astroza Venu Garikapati Ram Pendyala Chandra Bhat Patricia Mokhtarian	8:00AM-9:45AM	Convention Center, Hall E	A Multivariate Exploration of Emotional Feelings of Subjective Well-being During Travel Episodes	B395
775	AHB45	Tian Lei Christian Claudel	8:00AM-9:45AM	Convention Center, Hall E	A Viability Theory Based Algorithm for Computing Solutions to the Lighthill- Whitham-Richards Model Involving Partial Autonomous Vehicle Flows	A235
783	ANF20	Margaret Kent Alex Karner	8:00AM-9:45AM	Convention Center, Hall E	Prioritizing low-stress and equitable bicycle infrastructure using a novel accessibility measure	A196



THE UNIVERSITY OF TEXAS AT AUSTIN CENTER FOR TRANSPORTATION RESEARCH

Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
828	ADB20	Qichun Dai Patricia Lavieri Chandra Bhat	10:15AM-12:00PM	Convention Center, Hall E	Using Virtual Accessibility and Physical Accessibility as Joint Predictors of Activity-Travel Behavior	B396
829	ADB40	Guangming Wang Kara Kockelman	10:15AM-12:00PM	Convention Center, Hall E	Three Methods for Anticipating and Understanding Uncertainty of Outputs from Transportation and Land Use Models	B341
829	ADB40	Chandra Bhat	10:15AM-12:00PM	Convention Center, Hall E	New Matrix-Based Methods for the Analytic Evaluation of the Multivariate Cumulative Normal Distribution Function	B384
829	ADB40	Sebastian Astroza Prerna Bhat Chandra Bhat Ram Pendyala Venu Garikapati	10:15AM-12:00PM	Convention Center, Hall E	Understanding Activity Engagement Across Weekdays and Weekend Days: A Multivariate Multiple Discrete- Continuous Modeling Approach	B383
829	ADB40	Abhilash Singh Sebastian Astroza Venu Garikapati Ram Pendyala Chandra Bhat Patricia Mokhtarian	10:15AM-12:00PM	Convention Center, Hall E	Quantifying the contribution of various factors to household vehicle miles of travel	B382
831	AHB30	Jun Liu Asad Khattak	10:15AM-12:00PM	Convention Center, Hall E	Mapping Location-Based Driving Volatility for Connected and Automated Vehicles	A200
832	AHB45	Punith Kotagi Gowri Asaithambi Krishna Murthy Gurumurthy	10:15AM-12:00PM	Convention Center, Hall E	Development of Microscopic Simulation Model for Bidirectional Mixed Traffic on Urban Roads	A211
834	ANB20	Jun Liu Asad Khattak Chong Chen Dan Wan Jiaqi Ma Jia Hu	10:15AM-12:00PM	Convention Center, Hall E	Revisiting Hit-and-Run Crashes: A Geo-Spatial Modeling Method	A134
855	ABC10	Jenfeng Jiao	2:30PM-4:00PM	Convention Center, Hall E	Investigating Uber Price Surges During a Special Event in Austin, Texas	B304



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Session No.	Committee Sponsor	Participants	Time	Location	Title	Board No.
861	ABR20	Srijith Balakrishnan Zhanmin Zhang	2:30PM-4:00PM	Convention Center, Hall E	Developing Priority Index for Managing Utility Disruptions in Urban Areas with Focus on Cascading and Interdependent Effects	B326
864	ADB30	Chi Xie Xing Wu Stephen Boyles	2:30PM-4:00PM	Convention Center, Hall E	Path Constrained Traffic Assignment: Continuously Distributed Bounds on Travel Weights (18-04790)	A121
864	ADB30	Cesar Yahia Venktesh Pandey Stephen Boyles	2:30PM-4:00PM	Convention Center, Hall E	Network Partitioning Algorithms for Solving the Traffic Assignment Problem Using a Decomposition Approach (18-06570)	A122
864	ADB30	YaWei He Kara Kockelman Kenneth Perrine	2:30PM-4:00PM	Convention Center, Hall E	<i>Optimal Locations of U.S. Fast Charging Stations for Long- Distance Trips by Battery Electric Vehicles (18-00710)</i>	A175



# **Receptions and Special Events**

#### Sunday, January 7, 2018

Host	Name	Time	Location	Info
TRB	Careers in Motion Networking Fair	10:00AM-2:00PM	Convention Center, Hall E	
TRB	New Attendee Orientation	2:30PM-4:00PM	Convention Center, Ballroom AB	
TRB Exhibit Hall Opening Reception		4:00PM-7:00PM	00PM Convention Center, Hall D	
UT CAEE/CTR Friends and Family Reception		7:00PM-8:30PM Marriott Marquis Capital/Congress Room (M4)		
TRB Young Members Council	Young Professionals Reception	9:00PM-10:30PM	Convention Center, Ballroom South Pre-Function C	

#### Monday, January 8, 2018

Host	Name	Time	Location	Info
ITE	Student Member Reception	6:00PM-8:00PM	ITE Office, 1627 Eye Street NW, Suite 600, Washington, DC 20006	Student members and non-members welcome
UT ITE/ITS	Chapter Social	7:00PM-9:00PM	Capitol City Brewing Company, 1100 New York Ave NW, Washington DC 20005	Appetizers provided

#### Wednesday, January 10, 2018

Host	Name	Time	Location	Info
TRB	Chairman's Luncheon	12:00PM-2:00PM	Convention Center, Ballroom AB	Separate ticket required