# Agenda ABJ80 Statistical Methods Committee

Tuesday, Jan 14, 2014 7:30 PM to 10:00 PM, Marriott Harding

<u>Chair</u>: Linda Ng Boyle, University of Washington <u>Secretary</u>: Ida van Schalkwyk

Scope: The ABJ80 Committee is concerned with the appropriate application of statistical methods in the field of transportation. The committee serves as a resource on statistical matters for all other TRB committees and related National Academies of Science committees; will foster understanding and use of statistics through the dissemination and educational activities; and will identify and foster research needed in statistics for use in transportation.

7:30 to 7:40 pm	Introductions
7:40 to 7:45 pm	Approval of 2013 Annual Meeting Minutes (Ida van Schalkwyk)
7:45 to 7:50 pm	Committee Rotation Requirements and Membership Updates
7:50 to 8:00 pm	Workshops/Sessions Sponsored and Co-Sponsored by ABJ80 in 2014 (Linda Boyle, Matthew Karlaftis)
8:00 to 8:15 pm	Paper review process, statistics, and identification of issues ( <i>Linda Boyle, Xiao Qin</i> )
8:15 to 8:20 pm	Paper Award (Promod Chandhok)
8:20 to 8:25 pm	Social Media Activities (Naveen Eluru)
8:25 to 8:40 pm	TRB Circular on Analytical Tools for Transportation Researchers and Practitioners ( <i>Linda Boyle, Gord Lovegrove</i> )
8:40 to 8:45 pm	Subcommittee Assignments (Strategic Planning, Research Needs Statements, Paper review, etc.)
8:45 to 8:55 pm	SHRP 2 activities (Ken Campbell)
8:55 to 9:05 am (flo	ating 15 minutes) TRB initiatives and Data Section News (Bernardo Kleiner)
9:05 to 9:10 pm	Research needs statements (Karin Bauer, Thomas Jonsson)
9:10 to 9:35 pm	ABJ80 Strategic Needs Statement (David Reinke)
9:35 to 9:45 pm	Future Committee Activities and Sessions (Linda Boyle, TBD)
9:45 to 9:50 pm	ABJ80 Mid-year meeting/JSM Conference: Invited Papers in Transportation Statistics (Aug 2-7, 2014, Boston, MA) ( <i>Promod Chandhok, Feng Guo</i> )
9:50 to 10:00 pm	Call to Audience/relevant activities of other committees, conferences, etc. Traffic Records Forum ( <i>Bob Scopatz</i> )
10:00 pm	Adjourn

## TRB 2014 ABJ80 Sponsored or Co-Sponsored Sessions/Workshops/Meetings

#### Workshop 208: Transportation Data Competition

Sunday 1:30PM- 4:30PM, *Hilton, Columbia Hall 9* Linda Ng Boyle, Matthew Karlaftis, presiding <u>Other co-sponsors</u>: Statewide Transportation Data and Information Systems (<u>ABJ20</u>), Information Systems and Technology (<u>ABJ50</u>), Vehicle User Characteristics (<u>AND10</u>), Simulation and Measurement of Vehicle and Operator Performance (<u>AND30</u>)

## Transportation Statistics Interest Group (TSIG) Open Meeting

Sunday 5:00PM- 6:00PM, *Hilton, Fairchild* Li Leung, Bureau of Transportation Statistics, presiding <u>Other co-sponsors:</u> Visualization in Transportation (ABJ95)

#### Poster Session 370 Research in Statistical Methods in Transportation

Monday 2:00PM- 3:45PM, *Marriott, Salon 2* Xiao Qin, South Dakota State University, presiding

- 1. Spatiotemporal Analysis of Dynamic Origin-Destination Data Using Latent Dirichlet Allocation: Application to Vélib' Bikesharing System of Paris, 14-0647, E02
- 2. Safety-Oriented Pavement Performance Thresholds: Multiobjective Optimization and Goal Programming Analysis, 14-0739, E04
- 3. Naïve Bayes Classifier Ensemble for Traffic Incident Detection, 14-1014, E06
- 4. Applying the Generalized Waring Model for Investigating Sources of Variance in Motor Vélib' Bikesharing System Vehicle Crash Analysis, 14-1352, E08
- Application of Hyper-Poisson Generalized Linear Model for Analyzing Motor Vehicle Crashes, 14-4511, E10
- 6. Effects of Lowering Speed Limits in Urban Areas: Bayesian Perspective, 14-1508, E12
- 7. The Poisson Inverse Gaussian (PIG) Generalized Linear Regression Model for Analyzing Motor Vehicle Crash Data, 14-1522, E14
- 8. Improved Computational Framework for Efficient Probabilistic Inference of Damage in Truss Structures Based on Vibration Measurements, 14-3462, E16
- 9. Latent Segmentation Generalized Ordered Logit Model to Examine Factors Influencing Driver Injury Severity, 14-4544, E18

## Lectern Session 398: Statistical Challenges in the Analysis of Naturalistic Driving Data

Monday 3:45PM- 5:30PM, *Marriott, Maryland B* Paul P. Jovanis, Pennsylvania State University, presiding <u>Other co-sponsors</u>: Safety and System Users (<u>AN000</u>), Safety (<u>ANB00</u>)

## Statistical Methodology (ABJ80) Committee Meeting

Tuesday 7:30PM- 10:00PM, *Marriott, Harding* Linda Ng Boyle, University of Washington, presiding

## Lectern Session 789: Standardization of Measurement of Driving Performance

Wednesday 10:15AM- 12:00PM, *Marriott, Thurgood Marshall North*Susan T. Chrysler, University of Iowa, presiding
<u>Other co-sponsors</u>: Vehicle User Characteristics (<u>AND10</u>), Simulation & Measurement of Vehicle
& Operator Performance (<u>AND30</u>)

#### Lectern Session 811: Analytical Models for Safe and Sustainable Transport

Xiao Qin, South Dakota State University, presiding Wednesday 2:30PM- 4:00PM, *Marriott, Delaware A* 

- 1. Data Mining and Complex Network Algorithms for Traffic Accident Analysis
- 2. Comparison of Sichel and Negative Binomial Models in Hot Spot Identification
- 3. Validation of Probabilistic Model for Design of Freeway Entrance Speed Change Lanes
- 4. Examining Driver Injury Severity in Two-Vehicle Crashes: Copula-Based Approach
- 5. Exploratory Empirical Random Parameter Hazard-Based Analysis of Travel Distance for Sustainable Transport Habits