`DOMINIQUE LORD

Zachry Department of Civil and Environmental Engineering, Texas A&M University
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ACADEMIC AND RESEARCH EXPERIENCE

PROFESSOR AND A.P. AND FLORENCE WILEY FACULTY FELLOW **2019-Present**
PROFESSOR **2015-2019**
DVISION HEAD, TRANSPORTATION & MATERIALS **2014-2016**
ASSOCIATE PROFESSOR AND ZACHRY DEVELOPMENT PROFESSOR I **2011-2015**
ASSOCIATE PROFESSOR (with Tenure) **2010-2011**
ASSISTANT PROFESSOR **2004-2010**
Zachry Department of Civil and Environmental Engineering
Texas A&M University

Teach undergraduate (CVEN 456, CVEN 307) and graduate (CVEN 617, CVEN 626, CVEN 635, CVEN 681) courses in transportation engineering, traffic engineering, highway geometric design and highway safety.
Supervise master's and Ph.D. students (see list below).
Participate in university, college and departmental committees (see list below).

ASSOCIATE MEMBER **2008-Present**
Interuniversity Research Centre on Enterprise Networks,
Logistics and Transportation (CIRRELT)
University of Montreal

Associate Members are professors or researchers working for the academia, government or industry; holds a doctorate; and, apart from exceptional cases, devotes less than 60% of his or her research time to projects in line with the research themes of the CIRRELT. This is an unpaid position.

ASSOCIATE RESEARCH SCIENTIST **2001-Present**
Center for Transportation Safety
Texas A&M Transportation Institute (formally known as the Texas Transportation Institute until 2012)

Leading studies on roundabout safety and the development of predictive models for multilane rural highways
Participate on current research projects in transportation safety: California Call Box, Median Barrier Guidelines, Rollover Causation and Mitigation Study, Pedestrian Warrants at Unsignalized Intersections, and In-service Performance Evaluation of Roadside Safety Features.
Prepare research proposals for FHWA, TxDOT, BTS, NSF, CDC, Caltrans and NCHRP.
Supervise research assistants.

VISITING ASSISTANT PROFESSOR **2003**
Department of Civil Engineering, Texas A&M University, College Station

Courses taught: Highway Design (CVEN 456)

VISITING ASSISTANT PROFESSOR **2002**
Department of Nuclear Engineering, Texas A&M University, College Station

Taught Product Safety Engineering (SENG 313)

POST-DOCTORAL RESEARCHER **2000-2001**
Ryerson University

Fundamental research on accident analysis methodology.
Validation of accident prediction models developed as part of FHWA-RD-98-133.
Developed accident prediction models at signalized/unsignalized intersections (US and Toronto data).
Involved in accident modeling for an FHWA research project to validate/recalibrate intersection crash prediction models.
Associate researcher for a study comparing driver and pedestrian behaviour in Quebec and Ontario (in collaboration with the CRT at the University of Montreal).

RESEARCH ASSISTANT **1995-2000**
University of Toronto/Ryerson University **1992-1994**

Participated in a study on drivers' training program for the MPI in Manitoba, Canada.
Created models to predict traffic flow breakdowns on freeways under congested conditions.
Developed and applied an algorithm to estimate missing traffic counts at intersections (U.S. project).
Supervised a traffic safety study for left-turning accidents at signalized intersections in Toronto, Canada.
Developed accident prediction models to estimate the number of accidents at interchanges.
Developed accident prediction models to assess and optimize safety on computerized transportation networks.
Performed research on traffic conflicts and human factors issues between left-turning vehicles and pedestrians at signalized intersections.
Participated in the improvement of two equations used in the capacity analysis of signalized intersections.

RESEARCH ASSISTANT **1994-1995**
University of Montreal - École Polytechnique (Center for Research on Transportation)

Prepared a literature review on the identification of hazardous highway sections.
Conducted analyses to identify hazardous highway sections in the Montréal region.
Performed sensitivity analyses for upgrading vertical and horizontal alignment designs for rural highways.

LECTURER **2001**
Department of Civil Engineering, Ryerson University

Taught 3rd year Transportation Engineering (CVL316)
Received very good evaluation from students.

TEACHING ASSISTANT **1995-1999**
University of Toronto **1992-1993**

Marked assignments and mid-terms for courses in Linear Algebra, Transport Engineering I, Transport Engineering II, and Traffic Engineering. Delivered lectures in Traffic Engineering.

DISSEMINATION OF RESEARCH/EXPERTISE: TRAINING AND MEDIA

EXAMINER **2001-2002**
Association of Professional Engineers of Ontario

National examiner for the Professional Engineering Exam in Transportation Engineering.

SEMINARS & INTERVIEWS **1994-Present**

Texas A&M News (Oct. 14, 2020)
(https://today.tamu.edu/2020/10/13/researchers-develop-framework-to-identify-health-impacts-of-self-driving-vehicles/)
Auto Insurance Report, Phone Interview (Feb. 28, 2020)
New England Public Radio, Radio Interview. (Feb. 21, 2020)
WallHub, Internet Interview, Cheap Car Insurance in 2019
(https://wallethub.com/cheap-car-insurance#expert=dominique-lord)
NEWS 1130, Radio Interview, British Columbia (May 8, 2019)
(https://www.citynews1130.com/2019/05/11/speed-cameras-safer-for-officers-at-intersections/)
Toronto Star (June 27, 2018)
(https://www.thestar.com/opinion/contributors/thebigdebate/2018/07/03/should-speed-limits-be-lowered-to-save-lives-not-necessarily.html)
Newsday, Long Island, NY (June 6, 2018)
(https://www.newsday.com/long-island/politics/red-light-cameras-nassau-county-1.19080982)
Milwaukee Journal Sentinel, Milwaukee, WI (December 5, 2017)
(https://www.jsonline.com/story/opinion/columnists/david-haynes/2017/12/13/speeding-red-light-cameras-recklessdriving/933047001/)
Newsday, Long Island, NY (Aug. 29, 2017)
(http://www.newsday.com/long-island/suffolk/suffolk-official-defends-county-s-red-light-camera-program-1.14102384)
Journal newspaper chain of Oak Park, Illinois (Nov. 29, 2016)
(http://www.oakpark.com/News/Articles/1-10-2017/A-street-paved-with-gold/?utm_campaign=WJ-News&utm_medium=Outbound-Email&utm_source=WJ-News-1-10-2017)
Politifact-Pennsylvania (June 8, 2016)
(http://www.politifact.com/pennsylvania/statements/2016/jun/14/tom-mccarey/radar-guns-and-cameras-dont-stop-accidents-huh/)
Newsday, Long Island, NY (April 7, 2016)
(http://www.newsday.com/long-island/suffolk/some-suffolk-red-light-camera-sites-see-rise-in-injury-accidents-1.11670932)
Auto Insurance Center (March 17, 2016)
(http://www.autoinsurancecenter.com/report-predicts-spike-in-pedestrian-deaths.htm)
Auto Insurance Center (Feb 19, 2016) (http://www.autoinsurancecenter.com/red-light-speed-cameras.htm)
News Talk AM770, Calgary (Feb 3, 2016)
Chicago Tribune (January 28, 2016)
(http://www.chicagotribune.com/news/watchdog/redlight/ct-chicago-red-light-cameras-met-0131-20160129-story.html)
Nerdwallet (August 2015)
(http://www.nerdwallet.com/blog/auto-insurance/red-light-camera-tickets-car-insurance-rates/)
WalletHub (July 2015)
(http://wallethub.com/edu/best-worst-states-for-summer-road-trips/4648/#dominique-lord)
AOLMedia (Jan. 6, 2015)
Glendale Cherry Creek Chronicle (http://glendalecherrycreek.com/, Denver, Dec. 29, 2014)
KCBS (San Francisco, Dec. 23, 2014)
St. Lambert Journal/Brossard Journal (Interview: ITS issues, April 28, 2010)
St. Lambert Journal (Interview: highway safety, March 31, 2010)
Guest speaker on Citytv's Talkback Live in Toronto, Ont.
Performed a seminar at C.O. Charles College (Police Academy) on traffic engineering and safety.
Conducted presentations on traffic safety issues for numerous research groups in the Province of Quebec.

CONSULTING AND INDUSTRY EXPERIENCE

ROAD SAFETY AND TRAFFIC ENGINEERING CONSULTANT **1995-Present**

INTERNATIONAL

Prepared the initial bidding documents for the follow up on the traffic safety study in Burkina, Faso.
Prepared the bidding documents for a traffic safety study in Burundi, Central Africa.
Supervised (Mission Chief) a $0.5M (CAN) traffic safety project in Burkina Faso, Western Africa between February and July 2000. This project was financed by the Canadian International Development Agency.
Conducted a traffic safety study of Highway A-1 in Vietnam in 1995 as part of a road rehabilitation project. This project was financed by the World Bank. The work was performed in Montreal, Canada.

U.S. and CANADIAN

Conducted a before-after study using the EB method on behalf of the Chicago Tribune on the red-light camera program in Chicago, Illinois.
(http://ceprofs.civil.tamu.edu/dlord/Papers/Chicago_Tribune_Final_Report.pdf)
Sub-consultant for two projects related to the development of predictive models for urban segments and intersections (Wayne State University – projects starting in fall 2013 - still on-going)
Conducted the safety analyses for evaluating red-light and speed cameras in the Province of Quebec.
Helped writing the user manual for the CrimeStat Statistical Software Program and write computer codes for different modules of the program (Ned Levine & Associates)
Developed predictive models for the revised chapter on multilane highways for the Highway Safety Manual
Prepared a document on the effects of physical characteristics at signalized intersections on pedestrian safety and behavior (CRT Montreal)
Performed a study on the safety of RTOR for the MTQ.
One of three national external reviewers for a safety audit review of the l'Acadie Roundabout Reconstruction project ($60M Can).
Developed accident prediction models as part of a transportation safety study in Durham and Halton regions.
Performed an analysis of vehicle accidents at signalized intersections as part of a traffic impact study in Montreal, Canada.
Participated in a traffic impact study in Ottawa, Canada where I applied accident prediction models to a transportation network.
Developed accident prediction models for a roundabout safety study project.
Supervised the data collection process for a traffic safety project on intersection safety.
Performed capacity analyses at signalized intersections in Laval, Canada.
Modeled traffic flows on a highway corridor as part of a traffic impact study on the South Shore of Montreal, Canada.

ASSOCIATION QUÉBÉCOISE DU TRANSPORT ET DES ROUTES **1991-1995**

Active member of the Traffic Engineering and Road Safety Committees
ASSISTANT TO THE TRAFFIC ENGINEER **Summer 1992**
City of Côte St. Luc, Quebec **Summer 1991**

Prepared and performed several traffic engineering studies.
Participated in the improvement of problematic intersections and highway corridors.

EDUCATION

DOCTOR OF PHILOSOPHY (Transportation Engineering) **2000**
Dissertation title: The Prediction of Accidents on Digital Networks:
Characteristics and Issues Related to the Application of Accident Prediction Models
(Thesis Supervisors: Prof. Ezra Hauer/Prof. Bhagwant N. Persaud)
Department of Civil Engineering

University of Toronto

MASTER OF APPLIED SCIENCE (Transportation Engineering) 1994
Thesis title: Pedestrian Conflicts and Left-Turning Traffic at Signalized Intersections
(Thesis Supervisor: Prof. Ezra Hauer)
Department of Civil Engineering
University of Toronto

BACHELOR OF ENGINEERING (Civil) /MINOR IN MANAGEMENT 1992
Project title: Feasibility Study of a Reserved H.O.V. Lane for the Approach of the Victoria Bridge during the Morning Peak Period
(Project Supervisor: Prof. R.G. Rice)
Department of Civil Engineering and Applied Mechanics
McGill University

AWARDS, PRIZES AND RECOGNITIONS

Best paper award – TRB ANB25 Committee	2020
Leadership Impact Award (Civil Engineering Department)	2020
HSIS First Place Award Paper (Given to Xiaoyu (Sky) Guo, Yongxin Peng And Chaolun (Samuel) Ma for a paper I supervised; the paper was published in the ITE Journal, December 2020)	2020
2019 ITE D.B. Fambro Award (awarded to Soheil Sohrabi – I'm co-author of the paper)	2019
2018-2019 Williams Brothers Construction Engineering Fellow	
Contributions Award (Faculty of Engineering)	2019
A.P. and Florence Wiley Faculty Fellow	2019
Best Paper: 2015 Young Researcher Award (TRB Committee ANB20)	2016
Williams Brothers Construction Company Fellow (Dwight Look College of Engineering, TAMU)	2015
"Circle of Ambassadors" for Professional Accomplishments (College Charles Lemoyne High School)	2015
Service Impact Award (Zachry Department of Civil Engineering)	2014
Best Paper Nominee (two papers) (TRB Committee ANB20)	2011
Best Paper: 2010 Young Researcher Award (TRB Committee ABJ80)	2011
Civil Engineering Excellence in Research (Zachry Dept. of C.E.)	2010
Lambertois Award – Professional Life (Award given by the City of St. Lambert, Qc)	2010
CUTC-ARTBA New Faculty Award	2009
Truman R. Jones Excellence in Graduate Teaching (Zachry Dept. of C.E.)	2009
Best Paper: 2009 Young Researcher Award (TRB Committee ANB20)	2009
Best Paper Nominee (two papers) (TRB Committee ANB20)	2009
Best Paper Nominee (TRB Committee AHB65)	2007
Best Paper: 2006 Young Researcher Award (TRB Committee ABJ80)	2006
NSF CAREER Proposal (recommended for funding)	2006
TAMU Teaching Peer Review Group	2006
ITE Transportation Achievement Award given to TCRP/NCHRP (co-author of report)	2006
Nominated by OIQ for Young Engineer Achievement Award (CCPE)	2004
D. Grant Mickle Award (TRB) (second award)	2004
Committee ANB20 Best Paper Award (TRB)	2004
New Investigator Award for Non-intentional Injuries (CDC)	2003
Young Researcher Award (TRB Committee A3B05)	2003
D. Grant Mickle Award (TRB)	2002

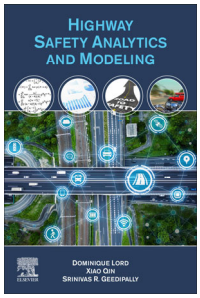
Committee A3A08 Best Paper Award (TRB)	2002
CARSP Student Paper Competition	2000
Research Assistantship (University of Toronto/Ryerson University)	1992-2000
2nd Prize Student Presentation (Dist. 7, ITE)	1996
Open Fellowship (University of Toronto)	1995-1999
Scholarship for Graduate Studies in Transportation (CTRF)	1993-1994
2nd Prize Student Research Paper Competition (CTRF)	1992
Allen Cook Prize in Transportation (McGill University)	1992
David Adrian Selby Award (CSCE)	1992

PUBLICATIONS

BOOKS, BOOK CHAPTERS AND MANUALS

Highway Safety Analytics and Modeling

Textbook by Lord, D., Qin, X., and Geedipally, S.R. (2021) published on March 1st, 2021 by Elsevier.



Information about the textbook:

https://ceprofs.civil.tamu.edu/dlord/Highway_Safety_Analytics_and_Modeling.htm

https://www.elsevier.com/books/highway-safety-analytics-and-modeling/lord/978-0-12-816818-9

The Study of Crime and Place: A methods Handbook Edited by Liz Groff and Cory Haberman (Temple University Press).

Levine, N., and D. Lord (2021) Count Regression Modeling, forthcoming chapter.

Levine, N., and D. Lord (2021) Supplemental Material for Count Regression Models, forthcoming appendix.

International Encyclopedia of Transport

Shirazi, M., and D. Lord (2021) Use/analysis of crash data and under reporting of crashes, International Encyclopedia of Transportation, Volume 2: Transport Safety and Security, pp. 726-730. (https://doi.org/10.1016/B978-0-08-102671-7.10132-0)

https://www.elsevier.com/books/international-encyclopedia-of-transportation/vickerman/978-0-08-102671-7

Safe Mobility

Lord, D., and S. Washington (2018) Safe Mobility: Challenges, Methodology and Solutions. Volume 11 of Transport and Sustainability, Emerald Publishing Ltd, Bingley, UK.

Volume 11: Challenges, Methodology and Solutions (link to Amazon.com for pre-order) (https://goo.gl/HYHr5p) (click here for the link of the book)

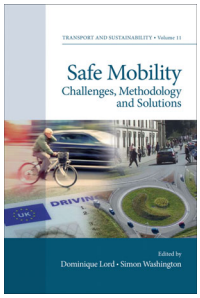


Table of Contents: https://goo.gl/XHEBH4

The book discusses the technical issues and policies relating to road safety and safe mobility in general, with a special emphasis on the human factors, physical and operational characteristics, as well as analysis methodologies and interpretation of data. The ultimate objective is to provide a state of the practice book series on safe mobility prepared by leading highway safety experts internationally. The book was published on April 18th, 2018.

CrimeStat IV (January 15, 2014 - all chapters were peer-reviewed):

Levine, N., and D. Lord (2013) CrimeStat IV: Chapter 15 - OLS Regression Modeling (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2015.pdf)

Lord, D., B.-J. Park, and N. Levine (2013) CrimeStat IV: Chapter 16 - Poisson Regression Modeling (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2016.pdf)

Levine, N., D. Lord, B.-J. Park, S. Geedipally, H. Teng, and L. Sheng (2013) CrimeStat IV: Chapter 17 - Estimating Complex Models with Markov Chain Monte Carlo Simulation (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2017.pdf)

Levine, N., D. Lord, and B.-J. Park (2013) CrimeStat IV: Chapter 18 - Binomial Regression Modeling (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2018.pdf)

Levine, N., D. Lord, B.-J. Park, S. Geedipally, H. Teng, and L. Sheng (2013) CrimeStat IV: Chapter 19 - Spatial Regression Modeling (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2019.pdf)

Levine, N., D. Lord, B.-J. Park, S. Geedipally, H. Teng, and L. Sheng (2013) CrimeStat IV: Chapter 20 - The CrimeStat Regression Module (Part V: Spatial Modeling II). Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Chapter%2020.pdf)

Lord, D., and B.-J. Park (2013) CrimeStat IV: Appendix C – Negative Binomial Regression Models and Estimation Methods. Ned Levine & Associates and the National Institute of Justice, Washington, D.C. (http://nij.gov/topics/technology/maps/Documents/crimestat-files/CrimeStat%20IV%20Appendix%20C.pdf)

CrimeStat 3.3:

Levine, N., D. Lord, and B.-J. Park (2010) CrimeStat Version 3.3 Update Notes: Part 2: Regression Modeling. The National Institute of Justice, Washington, D.C. (http://www.icpsr.umich.edu/CrimeStat/)

Lord, D., and B.-J. Park (2010) Appendix D – Negative Binomial Regression Models and Estimation Methods. In CrimeStat Version 3.3 Update Notes: Part 2: Regression Modeling. The National Institute of Justice, Washington, D.C.

PEER-REVIEWED JOURNAL PUBLICATIONS

Overview

Scopus: h-index = 36 (34 without self-citations) (based on 145 papers – at least 2 papers are missing)

Scopus: Citations = 6,669 (5,895 without self-citations)

Web of Science: 5,781 (5,096 without self-citations) (based on 136 papers – Beta search) (I will not update this number often, as I am waiting for combining my author names into one.)

Web of Science: h-index = 33

Google Scholar: h-index = 50; i10-index = 139

Google Scholar: Citations = 13,004 (https://scholar.google.com/citations?user=A1GQZYgAAAAJ&hl=en)

Microsoft Academic: Citations = 11,500 (based on 222 publications – some papers may be duplicates and includes TTI reports) (https://academic.microsoft.com/#/detail/2122696152)

According to this paper "Fifty Years of Accident Analysis & Prevention: A Bibliometric and Scientometric Overview" (Zou et al., AA&P, 2020, 105568), I am listed in the top 5 researchers who had the most impact in the history of this journal.

According to this paper "Mapping the knowledge domain of road safety studies: A scientometric analysis" (Zou and Vu, AA&P, 2019, 105243), I am listed as the researcher who has the greatest impact highway safety research.

Top 5 most cited author in *Accident Analysis & Prevention* since 2005 (28 papers) (was 1st for several years). Second most cited paper in AA&P since 2005 (Poisson, Poisson-gamma and zero-inflated regression models of motor vehicle crashes: balancing statistical fit and theory) (was 1st for 7 years).

According to this paper "Ioannis, J.P.A., Bass, J., Klavans, R., and Boyack, K.W., 2019. A standardized citation metrics author database annotated for scientific field. PLoS. https://doi.org/10.1371/journal.pbio.3000384" I was ranked at 66,111 among 6.8 million researchers who were evaluated for their citations and impact in science. The updated 2020 paper can be found here: "Updated science-wide author databases of standardized citation indicators" (https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918) (ranked 52,619).

Made the preliminary list of the most influential (number of papers for high citations) researchers in my field on the Thomson Reuters Community: (http://community.thomsonreuters.com/t5/InCites-Customer-Forum/Preliminary-publication-of-new-lists-of-Highly-Cited-Researchers/td-p/36685). Unfortunately, I was excluded from the final list since TR changed the selection criteria to simplify the process. Since I publish in different fields (engineering, social science, economics/management, etc.), all my citations are split among the journals associated with these different

fields, which reduces the impact of my research. In fact, all highly-cited transportation engineering professors who were on the preliminary list have also been excluded. (June 10, 2014)

Submitted for publication

Khodadadi, A., M. Shirazi, S. Geedipally, and D. Lord (2021) A Comparative Study to Evaluate the Application of Different Negative Binomial-Lindley Variations in Crash Data Modeling. Paper submitted for publication.

Iio, K., Y. Zhang, and D. Lord (2021) A Method to Estimate Traffic Volume Based on Mobility Footprint Cardinality. Paper submitted for publication.

Islam, A.S.M., M. Shirazi, and D. Lord (2021) Finite Mixture Negative Binomial-Lindley to Model Heterogeneous Crash Data with Many Zero Observations. Paper submitted for publication.

Sohrabia, S., B. Dadashova, D. Lord, H. Khreis, I.N. Sener, and J. Zmu (2021) Safety and Equity Impacts of Automated Vehicles: A Quantification Framework and Empirical Analysis. Currently revising the paper.

Sohrabi, S., and D. Lord (2020) Navigating to Safety: Necessity, Requirements, and Barriers to Considering Safety in Route Finding. Paper submitted for publication. (Currently revising the paper)

Published, in press or forthcoming

*=Graduate student I supervised and/or work related to his or her dissertation/thesis. Please note that I published several papers with students from other professors, often based on courses they took from me.

142. Yang, J., X. Guo, M. Xu, L. Wang, and D. Lord (2021) Alcohol-impaired Motorcyclists versus Car Drivers: A Comparison of Crash Involvement and Legal Consequence from Adjudication Data. *Journal of Safety Research*, forthcoming.

141. Intini, P., Berloco, N., Cavalluzzi, G., Colonna, P., Lord, D., Ranieri, V., Colonna, P. (2021) The variability of urban safety performance functions for different road elements: an Italian case study. *European Transport Research Review*, Vol. 13 No. 1, pp. 1-14.
(Open Source: https://doi.org/10.1186/s12544-021-00490-6) (Paper presented at the 99th Annual Meeting of the Transportation Research Board.)

140. Li, W., S.M. Mousavi*, B. Dadashova, D. Lord and B. Wolshon (2021) Toward a Crowdsourcing Solution to Identify High-Risk Highway Segments Through Mining Driving Jerks. *Accident Analysis & Prevention*, 155, 106101.

139. Khodadadi*, A., I. Tsapakis, S. Das, D. Lord, and Y. Li (2021) Application of Different Negative Binomial Parameterizations to Develop Safety Performance Function for Non-Federal Aid System Roads. *Accident Analysis & Prevention*, Vol. 156, 106103.

138. Kuo*, P-F, and D. Lord (2021) A Visual Approach for Defining the Spatial Relationships among Crashes, Crimes, and Alcohol Retailers: Applying the Color Mixing Theorem to Define the Colocation Pattern of Multiple Variables. *Accident Analysis & Prevention*, Vol. 154, 106062.

137. Sohrabi*, S., A. Khodadadi, S.M. Mousavi, B. Dadashova, and D. Lord (2021) Quantifying Autonomous Vehicle Safety: A Scoping Review of the Literature, Evaluation of Methods, and Directions for Future Research. *Accident Analysis & Prevention*, Vol. 152, 106003.

136. Iio, K., Gou, X., Lord, D. (2021) Examining driver distraction in the context of driving speed: An observational study using disruptive technology and naturalistic data. *Accident Analysis &*

Prevention, Vol. 153, 105983. (Paper presented at the 99th Annual Meeting of the Transportation Research Board.)

135. Mousavi*, S.M., D. Lord, S.R. Mousavi, and M. Shirinzad (2021) Investigating the Safety and Operational Benefits of Mixed Traffic Environments with Different Automated Vehicles Market Penetration Rates in the Proximity of a Driveway. *Accident Analysis & Prevention*, Vol. 152, 105982 (Paper presented at the 99th Annual Meeting of the Transportation Research Board.)

134. Shirazi, M., Lord, D., Geedipally, S.R. (2020) A Simulation Analysis to Study the Temporal and Spatial Aggregations of Safety Datasets with Excess Zero Observations. *Transportmetrica – Part A*, Vol. 17, No. 4, pp. 1305-1317. (Paper also presented at the 99th Annual Meeting of the Transportation Research Board)

133. Sohrabi*, S., H. Khreis, and D. Lord (2020) Impacts of Autonomous Vehicles on Public Health: A Conceptual Model and Policy Recommendations. *Sustainable Cities and Society* 63, 102457.

132. Guo, X., L. Wu* and D. Lord. (2020) Generalized Criteria for Evaluating Hotspot Identification Methods. *Accident Analysis & Prevention* 145, 105684.

131. Guo, X., Y. Peng, and C. Ma (2020) Key Safety Criteria for Selecting a Smart Corridor: Random Forest Machine Learning Approach using HSIS Data from Washington State. *ITE Journal*, pp. 35-44. (Winner for ITE Excellent in Highway Safety Data Award Competition) (I could not be a co-author, but I provided a lot of input. I was a mentor for this paper.)

130. Geedipally, S.R., Dash, S., Pratt, M., Lord, D., (2020) Determining Skid Resistance Needs on Horizontal Curves for Different Levels of Precipitation. *Transportation Research Record 2674* (9), pp. 358-370.

129. Geedipally, S.R., Lord, D., Pratt, M., Fitzpatrick, K, Park, E.-S. (2020). Safety Performance of One-Way Arterials. Transportation Research Record 2674 (10), pp. 548–559

128. Dadashova, B., Arenas-Ramires, B, Mira-McWillaims, J., Dixon, K., and Lord, D. (2020). Analysis of crash injury severity on two Trans-European Transport Network corridors in Spain using discrete-choice models and random forests. *Traffic Injury Prevention*, 21(3), pp. 228-233

127. Kuo, P.-F., and D. Lord (2020) Applying the Colocation Quotient Index for Crash Severity Analyses. Accident Analysis & Prevention, Vol. 135, pp. 105368.

126. Kuo, P.-F., and D. Lord (2019) A Promising Example of Smart Policing: A Cross-national Study of the Effectiveness of a Data-Driven Approach to Crime and Traffic Safety. *Case Studies on Transport Policy*, Vol. 7, No. 4, pp. 761-771.

125. Sohrabi, S., and D. Lord (2019) Impacts of Red-Light Cameras on Intersection Crash Frequency: A Hierarchical Spatial Model. ITE Journal, Vol. 12 (December), pp. 29-36. (ITE D.B. Fambro Award)

124. Zhao, X., D. Lord, and Y. Peng (2019) Examining Network Segmentation for Traffic Safety Analysis with Data-Driven Spectral Analysis. *IEEE Access*, Vol. 7, Issue 1, December 2019, pp. 120744-120757. (https://ieeexplore.ieee.org/document/8809775?source=authoralert)

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7. Lord, D. (2002) Issues Related to the Application of Accident Prediction Models for the Computation of Accident Risk on Transportation Networks. *Transportation Research Record 1784*, pp. 17-26.

6. Persaud, B.N., D. Lord, and J. Palminaso (2002) Issues of Calibration and Transferability in Developing Accident Prediction Models for Urban Intersections. *Transportation Research Record 1784*, pp. 57-64.

5. Persaud B.N., R. Retting, P.Garder and D. Lord (2001) Observational before-after study of U.S. roundabout conversions using the empirical Bayes method. *Transportation Research Record* 1751, pp. 1-8.

4. Persaud, B.N., R.A. Retting, P.E. Gårder, and D. Lord (2001) Crash Reductions Following Installation of Roundabouts in the United States. *American Journal of Public Health*, Vol. 91, No. 4, pp. 628-631.

3. Lord, D., and B.N. Persaud (2000) Accident Prediction Models With and Without Trend: Application of the Generalized Estimating Equations (GEE) Procedure. *Transportation Research Record 1717*, pp. 102-108.

2. Hurdle, V.F., and D. Lord (1998) Analysis of Two Left-Turn Equations from the Highway Capacity Manual. *Transportation Research Record 1646*, pp. 17-78.

1. Lord, D. (1996) Analysis of Pedestrian Conflicts with Left-Turning Traffic. *Transportation Research Record 1538*, pp. 61-67.

CONFERENCES WITH PEER-REVIEW PROCESS

Note: Several papers presented at these conferences below were published in a Transportation Research Record or another journal, as listed in the above section.

*=Graduate student I supervised and/or work related to his or her dissertation/thesis. Please note that I published several papers with students from other professors, often based on courses they took from me.

116. Khodadadi, A., I. Tsapakis, S. Das, D. Lord, and Y. Li, 2021. Application of Different Negative Binomial Parameterizations to Develop Safety Performance Function for Non-Federal Aid System Roads. Paper accepted for presentation at the 100th Annual Meeting of the TRB.

115. Geedipally, S.R., Lord, D., Pratt, M., Fitzpatrick, K, and Park, E.-S., 2020. Safety Performance of One-Way Arterials. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

114. Intini, P., Berloco, N., Cavalluzzi, G., Colonna, P., Lord, D., Ranieri, V., 2020. The Variability of Urban Safety Performance Functions for Different Road Elements: An Italian Case Study. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

113. Iio, K., Lord, D., Zhang, Y., 2020. Average Annual Daily Traffic Estimation by Mobile Device Footprint Cardinality. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

112. Iio, K., Gou, X., Lord, D., 2020. Examining Driver Distraction as a Function of Driving Speed: An Observational Study using Disruptive Technology and Naturalistic Data. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

111. Mousavi, S.M., Lord, D., Mousavi, S.R., Shirinzad, M., 2020. Safety Performance of Autonomous Vehicles on an Urban Arterial in Proximity of a Driveway. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

110. Shimu, T.H., Lord, D., Geedipally, S.R., Wu, L., Wunderlich, R., 2020. Investigating Factors that Contributed to the Large Reduction and Subsequent Increase in Roadway Fatalities in the United States between 2005 and 2016. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

109. Shirazi, M., Lord, D., Geedipally, S.R., 2020. A Simulation Analysis to Study the Temporal and Spatial Aggregations of Safety Datasets with Excess Zero Observations. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

108. Sohrabi, S., Khreis, H., Lord, D., 2020. Autonomous Vehicles and Public Health: A Conceptual Model and Policy Recommendation. Paper presented at the 99th Annual Meeting of the Transportation Research Board.

107. Geedipally, S.R., Dash, S., Pratt, M., Lord, D., 2020. Determining Skid Resistance Needs on Horizontal Curves for Different Levels of Precipitation. Paper to be presented the 99th Annual Meeting of the Transportation Research Board.

106. Sohrabi, S., H. Khreis, and D. Lord, 2020. Beauty or the Beast? The Impacts of Autonomous Vehicles on Public Health. Journal of Transport & Health. Vol: 14, Supplement: S, pp. S32-S33. Article Number: 100765

105. Mousavi, S.M., O.A. Osman, and D. Lord (2019) Impact of Urban Arterial Traffic LOS on the Vehicle Density of Different Lanes of the Arterial in Proximity of an Unsignalized Intersection for Autonomous Vehicle vs. Conventional Vehicle Environments. Paper presented at the ASCE International Conference on Transportation & Development, Alexandria, VA, June 9-12, 2019.

104. Shaon, M.R.R., X. Qin, A. Shirazi, D. Lord, and S. Geedipally (2018) Development of a Random Parameters Negative Binomial-Lindley Generalized Linear Model to analyze Over-Dispersed Data. Paper presented at the 97th Annual Meeting of the TRB, Washington, DC.

103. Shirazi*, M., and D. Lord (2018) Characteristics Based Heuristics to Select a Logical Distribution between the Poisson Gamma and the Poisson Lognormal for Crash Data Modeling. Paper presented at the 97th Annual Meeting of the TRB, Washington, DC.

102. Geedipally, S.R., D. Blower, C. Flannagan, R. Wunderlich, and D. Lord (2018) In-depth Investigation of Factors That Contributed to the Decline in Fatalities from 2008 to 2011 in the United States. Paper presented at the 97th Annual Meeting of the TRB, Washington, DC.

101. Flannagan, C., R. Wunderlich, S.R. Geedipally, D. Lord, and D. Blower (2018) Using crash prediction models that incorporate economic factors for state highway safety planning. Paper presented at the 97th Annual Meeting of the TRB, Washington, DC.

100. Xavier*, C., D. Lord, C. Silvestri Dobrovolny, and R. Bligh (2017) Evaluating the Relevancy of Current Crash Test Guidelines for Roadside Safety Barriers on High Speed Roads. TRB First International Roadside Safety Conference, San Francisco, June 12-15, 2017.

99. Mitra, S., S.R. Geedipally, and D. Lord (2017) Safety analysis of urban signalized intersections in Kolkata, India using a combined proactive and reactive approach. Presented at the 96th Annual Meeting of the TRB, Washington, DC.

98. Wu*, L., D. Lord, and S.R. Geedipally (2017) Developing Crash Modification Factors for Horizontal Curves on Rural Two Lane Undivided Highways using a Cross-Sectional Study. Presented at the 96th Annual Meeting of the TRB, Washington, DC. (accepted for publication).

97. Geedipally, S.R., M. Shirazi*, and D. Lord (2017) Exploring the Need for Having Region-Specific Calibration Factors. Presented at the 96th Annual Meeting of the TRB (accepted for publication).

96. Shirazi*, M., S.R. Geedipally, and D. Lord (2017) A Monte Carlo Simulation Analysis for Validating the SDF Calibration Methodology and Determining the Sample Size Requirements. Presented at the 96th Annual Meeting of the TRB (Published in *Accident Analysis & Prevention*).

95. Ash, J.E., Y. Zou, D. Lord, and Y. Wang (2016) Comparison of Confidence and Prediction Intervals for Different Mixed-Poisson Regression Models. Paper presented at the 95th Annual Meeting of the Transportation Research Board.

94. Wu*, L., and D. Lord (2016) Investigating the Influence of Dependence between Variables on Crash Modification Factors Developed using Regression Models. Paper presented at the 95th Annual Meeting of the Transportation Research Board.

93. Heydari, S., L. Fu, D. Lord, and B.K. Mallick (2016) A Flexible Modeling Approach Using Dirichlet Process Mixtures: Application to Municipality-Level Railway Grade Crossing Crash Data. Paper presented at the 95th Annual Meeting of the Transportation Research Board.

92. Shirazi*, M., D. Lord, and S.G. Geedipally (2016) Sample-Size Guidelines for Recalibrating Crash Prediction Models: Recommendations for the Highway Safety Manual. Paper presented the 95th Annual Meeting of the Transportation Research Board.

91. Wu*, L., D. Lord, and Y. Zou (2015) Validation of CMFs Derived from Cross Sectional Studies Using Regression Models. Paper presented at the 94th Annual Meeting of the Transportation Research Board, Washington, D.C.

90. Vangala*, P., D. Lord, and S.R. Geedipally (2015) An Application of the Negative Binomial-Generalized Exponential Model for Analyzing Traffic Crash Data with Excess Zeros. Paper presented at the 94th Annual Meeting of the Transportation Research Board, Washington, D.C.

89. Iragavarapu, V., S.H. Khazraee, D. Lord, and K. Fitzpatrick (2015) Pedestrian Fatal Crashes on Freeways in Texas. Paper to be presented at the 94th Annual Meeting of the Transportation Research Board, Washington, D.C.

88. Iragavarapu, V., D. Lord, and K. Fitzpatrick (2015) Analysis of Injury Severity in Pedestrian Crashes using Classification Regression Trees. Paper presented at the 94th Annual Meeting of the Transportation Research Board, Washington, D.C.

87. Park B.-J., C. Lee, D. Lord, and D-G. Kim (2014) Finite Mixture Modeling Approach for Developing Crash Modification Factors in Highway Safety Analysis. To be presented at the 19th International Conference of Hong Kong Society for Transportation Studies. Hong Kong, Dec. 13-15, 2014.

86. Hadi*, K.S., A.J. Saez-Castillo, S.R. Geedipally, and D. Lord (2014) Application of the hyper-Poisson generalized linear model for analyzing motor vehicle crashes. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

85. Kuo*, P.-F., and D. Lord (2014) Estimating the Safety Impacts in Before-After Studies using the Adjusted Method. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

84. Hawkins, G.E., P.-F. Kuo*, and D. Lord (2014) Statistical Analysis of the Traffic Safety Impacts of On-Premise Digital Signs. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

83. Peng*, Y., D. Lord, and Y. Zou (2014) Applying the Generalized Waring model for investigating sources of variance in motor vehicle crash analysis. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C. (paper published in AA&P)

82. Wu*, L., Y. Zou, and D. Lord (2014) Comparison of Sichel and Negative Binomial Models in Hotspot Identification. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

81. Heydari, S., Miranda-Moreno, L.F., Lord, D., Fu, L. (2014) A Methodology to Estimate and Update SPF Parameters under Limited Data Conditions: A Sensitivity Analysis. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

80. Geedipally, S.R., J.A. Bonneson, M.P. Pratt, and D. Lord (2014) Injury Severity Analysis of Crashes on Ramps and at Crossroad Ramp Terminals. Presented at the 93rd Annual Meeting of the TRB, Washington, D.C.

79. Zou*, Y., S.R. Geedipally, and D. Lord (2013) Evaluating the Double Poisson Generalized Linear Model. Paper presented at the 92nd Annual Meeting of the TRB, Washington, D.C.

78. Geedipally, S.R., J.A. Bonneson, M.P. Pratt, and D. Lord (2013) Severity distribution function for freeway segments. Paper presented at the 92nd Annual Meeting of the TRB, Washington, D.C.

77. Ko*, M., D. Lord, and J. Zietsman (2013) Environmental Conscious Highway Design for Vertical Grades. Paper presented at the 92nd Annual Meeting of the TRB, Washington, D.C.

76. Zou, Y., D. Lord, Y. Zhang, and Y. Peng* (2013) Comparison of Sichel and Negative Binomial Models in Estimating Empirical Bayes Estimates. Paper presented at the 92nd Annual Meeting of the TRB, Washington, D.C.

75. Heydari, S., L.F. Miranda-Moreno, L. Fu, and D. Lord (2013) How to specify priors for full Bayes road safety studies? 4th International Conference on Road Safety and Simulation, Rome, Oct. 23rd-25th, 2013.

74. Kuo*, P.-F., and D. Lord (2012) Accounting for Site-Selection Bias in Before-After Studies for Continuous Distributions: Characteristics and Application Using Speed Data. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

73. Cheng*, L., S.R. Geedipally, and D. Lord (2012) Examining the Poisson-Weibull Generalized Linear Model for Analyzing Crash Data. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

72. Zou, Y., D. Lord, Y. Zhang, and Y. Peng* (2012) Application of the Bayesian Model Averaging in Predicting Motor Vehicle Crashes. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

71. Ye*, F., T.P. Garcia, M. Pourahmadi, and D. Lord (2012) Extension of a Negative Binomial GARCH Model: Analyzing the Effects of Gasoline Price on Fatal Crashes in Texas. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

70. Peng*, Y., S.R. Geedipally, and D. Lord (2012) Investigating the Effect of Roadside features on Single-Vehicle Roadway Departure Crashes on Rural Two-Lane Roads. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

69. Ko*, M., D. Lord, and J. Zietsman (2012) Environmental Conscious Highway Design for Vertical Crest Curves. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

68. Howson*, J.E., D. Lord, and D. Lance Bullard (2012) The Effect of Driver Height on the Death Rate in Single-Vehicle Rollover Accidents. Paper presented at the 91st Annual Meeting of the TRB, Washington, D.C.

67. Zou, Y., D. Lord, and S.R. Geedipally (2012) Over- and Under-Dispersed Crash Data: Comparing the Conway-Maxwell-Poisson and Double-Poisson Distributions. Paper presented at the 91st Annual Meeting of the Transportation Research Board, Washington, D.C.

66. Lord, D., and P-F. Kuo* (2011) Examining the Effects of Site Selection Criteria for Evaluating the Effectiveness of Traffic Safety Improvement Countermeasures. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

65. Ye*, F., and D. Lord (2011) Comparing Three Commonly Used Crash Severity Models on Sample Size Requirements: Multinomial Logit, Ordered Probit and Mixed Logit Models. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

64. Ye*, F., and D. Lord (2011) Investigating the Effects of Underreporting of Crash Data on Three Commonly Used Traffic Crash Severity Models: Multinomial Logit, Ordered Probit and Mixed Logit Models. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

63. Peng*, Y., and D. Lord (2011) Applying the latent class growth model into a longitudinal analysis of traffic crashes. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

62. Geedipally, S.R., and D. Lord (2011) Examining the Crash Variances Estimated by the Poisson-Gamma and Conway-Maxwell-Poisson Models. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

61. Geedipally, S.R., D. Lord, and G.R.S. Reddy* (2011) Evaluating TxDOT'S Safety Improvement Index: a Prioritization Tool. Paper presented at the 90th Annual Meeting of the TRB, Washington, D.C.

60. Iragavarapu*, I., and D. Lord (2011) Examining potential factors affecting the safety performance and design of exclusive truck facilities. Paper presented at the 1st Conference of Transportation Research Group (TRG) of India, Bangalore, India, December 7-10, 2011.

59. Ye, Z., Y. Zhang, and D. Lord (2011) Investigating Goodness-of-fit Statistics for Generalized Linear Crash Models with Low Sample Mean Values. Presented at the 3rd International Conference on Road Safety and Simulation, September 14-16, 2011, Indianapolis, USA. (Also Presented at the 86th Annual Meeting of the Transportation Research Board, Washington, D.C.) (now paper in AA&P, see above)

58. Kuo*, P.-F., D. Lord, and T.D. Walden (2011) Using Geographical Information Systems to Organize Police Patrol Routes Effectively by Grouping Hot Spots of Crash and Crime Data. Presented at the 3rd International Conference on Road Safety and Simulation, September 14-16, 2011, Indianapolis, USA.

57. Park, P.Y., and D. Lord (2010) Investigating Regression-to-the-Mean in Before-and-After Speed Data Analysis. . Paper presented at the 89th Annual Meeting of the TRB, Washington, D.C.

56. Geedipally, S.R., S. Patil, and D. Lord (2010) Examining Methods for Estimating Crash Counts According to their Collision Type. Paper presented at the 89th Annual Meeting of the TRB, Washington, D.C. (TRB Award paper)

55. Park*, B.-J., K. Fitzpatrick, and D. Lord (2010) Evaluating the Effects of Freeway Design Elements on Safety. Paper presented at the 89th Annual Meeting of the TRB, Washington, D.C.

54. Geedipally, S.R., and D. Lord (2010) Hot Spot Identification by Modeling Single-Vehicle and Multi-Vehicle Crash Separately. Paper presented at the 89th Annual Meeting of the TRB, Washington, D.C.

53. Lord, D., P.-F. Kuo*, and S.R. Geedipally (2010) Comparing the Application of the Product of Baseline Models and Accident Modification Factors and Models with Covariates: Predicted Mean Values and Variance. Paper presented at the 89th Annual Meeting of the TRB, Washington, D.C.

52. Park*, B.-J., D. Lord, and J. Hart (2010) Bias Properties of Bayesian Statistics in Finite Mixture of Negative Regression Models for Crash Data Analysis. Presented at the 89th Annual Meeting of the TRB, Washington, D.C.

51. Chanam, L., K. Meghan Wieters, C. Giusti, and D. Lord (2010) The Environment and Obesity among Latino Adults: A case study exploring the roles of environments in promoting physical activity and reducing obesity among colonia residents. Paper presented at the “Obesity Research Workshop” by the Inter-University Program for Latino Research, held at the University of Notre Dame, July 26-28, 2010. (by invitation) (received an award from the “Latino Overweight and Obesity Education Awareness and Prevention Initiative”)

50. Ko*, M., L.L. Higgins, S.T. Chrysler, and D. Lord (2010) Effect of Driving Environment on Drivers’ Eye Movements. Presented at the 89th Annual Meeting of the Transportation Research Board, Washington, D.C. (This paper was written as a term paper in CVEN 626.)

49. Fitzpatrick, K., D. Lord, and B.-J. Park* (2009) Horizontal Curve Accident Modification Factors with Consideration of Driveway Density on Rural, Four-Lane Highways in Texas. Presented at the 88th Annual Meeting to the TRB, Washington, D.C.

48. Park*, B.-J., and D. Lord (2009) Application of Finite Mixture Models for Vehicle Crash Data Analysis. Presented at the 88th Annual Meeting to the TRB, Washington, D.C.

47. Jonsson, T., C. Lyon, J.N. Ivan, S. Washington, I. van Schalkwyk, and D. Lord (2009) Investigating Differences in the Performance of Safety Performance Functions Estimated for Total Crash Count

and Crash Count by Crash Type. Presented at the 88th Annual Meeting to the TRB, Washington, D.C.

46. Geedipally*, S.R., D. Lord, and B.-J. Park (2009) Analyzing Different Parameterizations of the Varying Dispersion Parameter as a Function of Segment Length. Presented at the 88th Annual Meeting to the TRB, Washington, D.C. (Best Paper for Young Researcher, TRB Committee AHB65)

45. Miranda-Moreno, L., L. Fu, S. Ukkusuri, and D. Lord (2009) How to Incorporate Accident Severity and Vehicle Occupancy into the Hotspot Identification Process? Presented at the 88th Annual Meeting to the TRB, Washington, D.C. (nominated for Best Paper for Young Researcher, TRB Committee AHB65)

44. Washington, S.P., D. Lord, and B. Persaud (2009) The Use of Expert Panels in Highway Safety: A Critique. Presented at the 88th Annual Meeting to the TRB, Washington, D.C.

43. Lord, D., and M. Mahlawat (2009) Examining the Application of Aggregated and Disaggregated Poisson-gamma Models Subjected to Low Sample Mean Bias. Presented at the 88th Annual Meeting to the TRB, Washington, D.C.

42. Miranda-Moreno, L., D. Lord, and L. Fu (2008) Bayesian road safety analysis: incorporation of past experiences and effect of hyper-prior choice. Presented the 87th Annual Meeting of the TRB, Washington, D.C.

41. Li, X., D. Lord, Y. Zhang, and Y. Xie (2008) Predicting Motor Vehicle Crashes using Support Vector Machine Models. Presented at the 87th Annual Meeting of the TRB, Washington, D.C.

40. Fitzpatrick, K., D. Lord, and B.-J. Park* (2008) Accident Modification Factors for Medians on Freeways and Multilane Highways. Presented at the 87th Annual Meeting of the TRB, Washington, D.C.

39. Geedipally, S.R. and D. Lord (2008) Effects of the Varying Dispersion Parameter of Poisson-gamma models on the Estimation of Confidence Intervals of Crash Prediction models. Presented at the 87th Annual Meeting of the TRB, Washington, D.C.

38. Park*, B.-J., and D. Lord (2008) Adjustment for the Maximum Likelihood Estimate of the Negative Binomial Dispersion Parameter. Presented at the 87th Annual Meeting of the TRB, Washington, D.C.

37. Ye*, Z., and D. Lord (2007) Estimating the Variance in Before-After Studies. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

36. Xie, Y., D. Lord, and Y. Zhang (2007) Predicting Motor Vehicle Collisions using Bayesian Neural Networks: An Empirical Analysis. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

35. Park, E.S., and D. Lord (2007) Multivariate Poisson-Lognormal Models for Jointly Modeling Crash Frequency by Severity. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

34. Zhang, Y., Z. Ye, and D. Lord (2007) Estimating the Dispersion Parameter of the Negative Binomial Distribution for Analyzing Crash Data Using a Bootstrapped Maximum Likelihood Method. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

33. Lord, D., and J.A. Bonneson (2007) Development of Accident Modification Factors for Rural Frontage Road Segments in Texas. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

32. Tong*, J., and D. Lord (2007) Investigating the Application of Beta-Binomial Models in Highway Safety. Paper presented at the Canadian Multidisciplinary Road Safety Conference XVII, Montreal, June 3-8, 2007.

31. Gokhale*, B., J. Zietsman, and D. Lord (2007) Landfill Gas as a Liquefied Natural Gas Fuel Source for Refuse Trucks. Paper presented at the AWMA 100th Annual Conference and Exhibition, Pittsburgh, PA.

30. van Schalkwyk, I., D. Lord, S. Chrysler, and L. Staplin (2007) Older Drivers and Roundabouts - Assessing Traffic Control Feature Characteristics Through the Use of Focus Groups and Structured Interviews. Presented at the 86th Annual Meeting of the TRB, Washington, D.C.

29. Lord, D. (2006) Modeling Motor Vehicle Crashes using Poisson-gamma Models: Examining the Effects of Low Sample Mean Values and Small Sample Size on the Estimation of the Fixed Dispersion Parameter. Presented at the 85th Annual Meeting of the TRB, Washington, D.C.

28. Agrawal, R., and D. Lord (2006) Effects of Sample Size on the Goodness-of-fit Statistic and Confidence Intervals of Crash Prediction Models Subjected to low Sample Mean Values. Presented at the 85th Annual Meeting of the TRB, Washington, D.C.

27. Stevens*, C.R., and D. Lord (2006) Evaluating the Safety Effects of Daylight Saving Time on Fatal and Non-Fatal Injury Crashes in Texas. Presented at the 85th Annual Meeting of the TRB, Washington, D.C.

26. Lord, D., and J.A. Bonneson (2006) Role and Application of Accident Modification Factors (AMFs) within the Highway Design Process. Presented at the 85th Annual Meeting of the TRB, Washington, D.C.

25. Brewer, M.A., K. Fitzpatrick, J.A. Whitaker*, and D. Lord (2006) Exploration of Pedestrian Gap Acceptance Behavior at Selected Locations. Presented at the 85th Annual Meeting of the TRB, Washington, D.C.

24. Whitacre*, J.A., and D. Lord (2006) A Look at the Zero Tolerance Law in Texas. Paper presented at the Canadian Multidisciplinary Road Safety Conference XVI, Winnipeg, June 11-16, 2006.

23. Miaou, S.-P., R.P. Bligh, and D. Lord (2005) Developing Median Barrier Installation Guidelines: A Benefit/Cost Analysis using Texas Data. Presented at the 84th Annual Meeting of the TRB, Washington, D.C.

22. Lord, D., D. Middleton, and J. Whitacre* (2005) Does Separating Trucks from Other Traffic Improve Safety? Presented at the 84th Annual Meeting of the TRB, Washington, D.C.

21. Lord, D., and J.A. Bonneson (2005) Calibration of Predictive Models for Estimating the Safety of Ramp Design Configurations. Presented at the 84th Annual Meeting of the TRB, Washington, D.C.

20. Lord, D., S.P. Washington, and J.N. Ivan (2004) Statistical Challenges with Modeling Motor Vehicle crashes: Understanding the Implications of Alternative Approaches. Presented at the 83rd Annual Meeting of the TRB, Washington, D.C.

19. Lord, D., A. Manar, and A. Vizioli (2004) Modeling Crash-Flow-Density and Crash-Flow-V/C Ratio for Rural and Urban Freeway Segments. Presented at the 83rd Annual Meeting of the TRB, Washington, D.C.

18. Lord, D., H.A. Abdou, A. N'Zué, G. Dionne, and C. Laberge-Nadeau (2003) Traffic Safety Diagnostic and Application of Countermeasures for Rural Roads in Burkina Faso. Presented at the 82nd Annual Meeting of the TRB, Washington, D.C.

17. Miaou, S.-P., and D. Lord (2003) Modeling Traffic-Flow Relationships at Signalized Intersections: Dispersion Parameter, Functional Form and Bayes vs Empirical Bayes. Presented at the 82nd Annual Meeting of the TRB, Washington, D.C.

16. Persaud, B.N., H. McGee, C. Lyon, and D. Lord (2003) Development of a Procedure for Estimating the Safety Effects for a Contemplated the Traffic Signal Installation. Presented at the 82nd Annual Meeting of the TRB, Washington, D.C.

15. Lord, D. (2003) Synthesis on the Safety of Right Turn on Red in the United States and Canada. Paper presented at 82th Annual Meeting of the TRB. National Research Council, Washington, D.C.

14. Lord, D. (2002) Issues Related to the Application of Accident Prediction Models for the Computation of Accident Risk on Transportation Networks. Presented at the 81st Annual Meeting of the TRB, Washington, D.C.

13. Persaud, B.N., D. Lord, and J. Palminaso (2002) Issues of Calibration and Transferability in Developing Accident Prediction Models for Urban Intersections. Presented at the 81st Annual Meeting of the TRB, Washington, D.C.

12. Bergeron, J., J.-P. Thouez, H. Bélanger-Bonneau, R. Bourbeau, D. Lord, and A. Rannou (2002) Étude des conflits entre piétons et automobilistes. Presented at the 9th Annual Meeting of International Traffic Injury Prevention, IX PRI World Congress, Madrid, Spain. (In French)

11. Thouez J.-P., D. Lord, J. Bergeron, R. Bourbeau, Y. Bussiere, H. Bélanger-Bonneau, A. Rannou, and M.-E. Latremouille (2002) Physical and environmental characteristics of signalized intersections and pedestrian behavior. In Sucharov L.J., and C.A. Brebbia (ed.) Urban Transport IX Urban transport and the environment in the 21st century. Southampton:WIT press, pp.143-148.

10. Persaud B.N., R. Retting, P.Garder and D. Lord (2001) Observational before-after study of U.S. roundabout conversions using the empirical Bayes method. Presented at the 80th Annual Meeting of the TRB, Washington, D.C.

9. Lord, D., M.H. Abdou, C. Laberge-Nadeau, G. Dionne, and A. N'Zué (2001) Élaboration d'un plan d'actions en matière de sécurité routière au Burkina Faso, *published in the Proceedings of the Canadian Multidisciplinary Road Safety Conference XII*, University of Western Ontario, June 10-13. (in French) (also published in Routes et Transports, Vol. 30, No. 3, pp. 9-19)

8. Lord, D., and B.N. Persaud (2000) Accident Prediction Models With and Without Trend: Application of the Generalized Estimating Equations (GEE) Procedure. Presented at the 79th Annual Meeting of the TRB, Washington, D.C.

7. Lord, D. (2000) Procedure to Estimate Missing Year-to-Year Traffic Counts at Intersections. *Presented at the 2000 CSCE Annual Meeting*, June 7-10, London, Canada.

6. Lord, D., A. Georgi, B. Abduhlai, K.C. Choo, and P. Koutsoulias (1999) Safety Issues in Dynamic Route Guidance, *presented at the 6th World Congress on ITS*, Paper 1355, November 8 to 12, Toronto, Canada.

5. Lord D., A. Smiley, and A. Haroun (1998) Pedestrian Accidents with Left-Turning Traffic at Signalized Intersections: Characteristics, Human Factors and Unconsidered Issues, *presented at the 77th Annual TRB Meeting*, TRB, National Research Council, Washington, D.C.

4. Lord, D. (1997) Pedestrian Accidents with Left-Turning Traffic: Characteristics, Human Factors and Countermeasures, *published in the Proceedings of the Canadian Multidisciplinary Road Safety Conference X*, June 8-11, Ryerson Polytechnic University, pp. 520-531.

3. Lord, D. (1996) Analysis of Pedestrian Conflicts with Left-Turning Traffic. Presented at the 79th Annual Meeting of the TRB, Washington, D.C.

2. Lord, D. (1995) Pedestrian Conflicts and Left-Turning Traffic at Signalized Intersections, *published in the Proceedings of the Canadian Multidisciplinary Road Safety Conference IX*, May 28-30, Université de Montréal - École Polytechnique, pp. 269-282.

1. Wong, B., and D. Lord (1994) Feasibility Study of a Reserved H.O.V. Lane for the Approach of the Victoria Bridge During the Morning Peak Period, *published in the Proceedings of the 29th Annual Meeting of the Canadian Transportation Research Forum*, May 15-18, Canadian Transportation Research Forum, pp. 872-892. (award paper)

GUEST INVITED PUBLICATIONS AND CONFERENCES

8. Sohrabi, S., Sharifi, F., Burris, M., Lord, D. (2019) Ethical Dilemmas in Autonomous Vehicles: A Review of Literature and Direction for Future Research. 2019 Road Safety & Simulation Conference, Iowa City, Iowa, 14-17 October 2019.

7. Pratt, D., and D. Lord (2017) Safety Analysis Tool for Six-Lane and One-Way Urban Streets. Transportation and Engineering Safety Conference. State College, PA.

6. Lord, D., and S.R. Geedipally (2014) Models for Analyzing Count Data with a Lot of Zeros. Presented at the Annual Joint Statistical Meeting, Aug. 2nd-7th, Boston, MA.

5. Lord, D. (2009) Safety Performance of Rural Multilane Highways. Presented at the 2009 Annual Meeting and Exhibit of the Institute of Transportation Engineers. August 9-12, 2009, San Antonio, TX.

4. Lord, D., and S.R. Geedipally* (2009) Methodology for Estimating Crash Risk between Heavy Vehicles and Bridge Piers. Presented at the 2009 Annual Meeting and Exhibit of the Institute of Transportation Engineers. August 9-12, 2009, San Antonio, TX.

3. Lord, D., and S.-P. Miaou (2004) Modélisation des accidents aux intersections : Évaluation des formes fonctionnelles pour établir la relation statistique entre les accidents et les débits de circulation. Routes et Transports, Vol. 33, No. 2, pp 2-12. (In French)

2. Lord, D. (2002) Synthèse et discussions des expériences du virage à droite au feu rouge dans les provinces canadiennes et les états américains. *Routes et Transports,* Vol. 31, No. 2, pp. 10-20. (in French)

1. Lord, D., E. Hauer, and J. Bamfo (1999) Deux nouvelles méthodes pour examiner la relation entre les accidents et les variables explicatives, *Routes et Transports*, Vol. 28, No. 3, Association québécoise du transport et des routes, pp. 11-20 (also *poster presented at the Special Conference of the AQTR/CITE*, May 3-5, Association québécoise du transport et des routes.) (jn French)

CONFERENCE WITH REFEREED ABSTRACT

13. Mars, R., D. Lord, L. Green, M. Martin, and B. Chigoy (2018) Speeding Behavior Modelling in the Presence of Passengers for Vulnerable User Groups. 2018 ITE Annual Meeting – Western Districts, Keystone, Colorado, June 24th – June 27th, 2018.

12. Shirazi, M., & Lord, D. (2017) An Approach Towards Automation Of Model Selection. Poster presented at the 2017 INFORMS Annual Meeting, Oct. 22nd – Oct. 25th, 2017, Houston, TX

11. Lee, C., and C. Giusti, D. Lord, and M. Wieters (2010) Environment and Walking Among Underserved Rural Populations: A Case Study Exploring the Roles of Social and Physical Environments in Colonia. Paper presented at the 2010 Annual Conference of the Active Living Research, February 9-11, 2010, San Diego, CA.

10. Middleton, D.A., and D. Lord (2005) Safety and Operational Aspects of Exclusive Truck Facilities. Paper presented at the 2005 International Truck and Bus Safety and Security Symposium, Alexandria, VA.

9. Lord, D., I. van Schalkwyk, L. Staplin, and S. Chrysler (2005) Reducing Older Driver Injuries at Intersections Using More Accommodating Roundabout Design Practices. Presented at the National Roundabout Conference, Vail, CO.

8. Lord, D., A. Manar, and A. Vizioli (2003) Modélisation des accidents en fonction des caractéristiques microscopiques du débit de circulation. Presented at the 38th Annual Meeting of the AQTR, Sherbrooke, Quebec. (In French) (also published as invited article in *Routes et Transports,* Vol. 32, No. 3, pp. 5-16.)

7. Lord, D., B.N. Persaud, R.A. Retting, and P.E. Gårder (2001) *Évaluation de l'impact sur la sécurité des carrefours giratoires en utilisant la méthode empirique bayésienne*, 36th Annual Conference, Association québécoise du transport et des routes, April 1-3. (in French)

6. Lord, D. (1999) Procédure pour estimer les débits de circulation des années manquantes en vue d'une meilleure évaluation du niveau de sécurité aux intersections, *poster presented at the Special Conference of the AQTR/CITE*, May 3-5, Association québécoise du transport et des routes. (jn French)

5. Lord, D., and B.N. Persaud (1999) L'utilisation des analyses longitudinales pour estimer le niveau de sécurité : une amélioration sur la précision des modèles de régession, *poster presented at the Special Conference of the AQTR/CITE*, May 3-5, Association québécoise du transport et des routes. (jn French)

4. Lord, D., and V.F. Hurdle (1998) Analyse de deux équations du "Highway Capacity Manual" : le cas des carrefours à feux avec virage à gauche permis*, published in the Proceedings of the 33rd Annual Meeting of the AQTR (Tome 2)*, April 20-21, Association québécoise du transport et des routes, pp. 298-314. (in French)

3. Lord, D., and A. Smiley (1997) Accidents impliquant les piétons et les véhicules tournant à gauche aux carrefours à feux : leurs caractéristiques et les facteurs humains, *published in the Proceedings of the 32nd Annual Meeting of the AQTR (Tome 1)*, April 6-10, Association québécoise du transport et des routes, pp. 201-202. (in French)

2. Lord, D., K.G. Baass, and B. Brown (1995) Une analyse de sensibilité de certains facteurs utilisés pour le dépistage de sites dangereux, *published in the Proceedings of the 30th Annual Meeting of the AQTR (Tome 1)*, April 5-7, Association québécoise du transport et des routes, pp. 105. (in French)

1. Lord, D. (1995) L'utilisation des conflits routiers dans le cadre des analyses de sécurité piétonnière, *published in the Proceedings of the 30th Annual Meeting of the AQTR (Tome 1)*, April 5-7, Association québécoise du transport et des routes, pp. 373-375. (in French)

SELECTED RESEARCH REPORTS AND PAPERS

13. Lord, D., M.A. Brewer, K. Fitzpatrick, S.R. Geedipally, and Y. Peng. Analysis of Roadway Departure Crashes on Two-Lane Rural Roads in Texas. FHWA/TX-11/0-6031-1, Texas Transportation Institute, College Station, TX, December 2011.

12. Geedipally, S.R., D. Lord and C. Eugene Buth (2011) Estimating the Crash Risk involving Heavy Vehicles and Bridge Piers. Working Paper. Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.

11. Vieira Gomes, S., S.R. Geedipally, and D. Lord (2010) Estimating the Safety Performance of Urban Intersections in Lisbon, Portugal. Working Paper. Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.

10. Eisele, W.L., C.E. Yager, M.A. Brewer, W.E. Frawley, E. Park, D. Lord, J.A. Robertson, P. Kuo. Safety and Economic Impacts of Converting Two-Way Frontage Roads to One-Way: Methodology and Findings. TTI Report 0-5856-1, Texas Transportation Institute, College Station, TX, January 2011.

9. Buth, C.E., W.F. Williams, M.S. Brackin, D. Lord, S.R. Geedipally, A. Abu-Odeh (2010) Analysis of Large Truck Collisions with Bridge Piers: Phase 1. Report of Guidelines for Designing Bridge Piers and Abutments for Vehicle Collisions. TTI Report 9-4973-1, Texas Transportation Institute, College Station, May 2010.

8. Stamatiadis, N., J.G. Pigman, J. Sacksteder, W. Ruff, D. Lord. Impact of Shoulder Width and Median Width on Safety, NCHRP Report 633, Transportation Research Board, Washington, D.C., 2009.

7. Bonneson, J.A., K. Fitzpatrick, D. Lord, K.H. Zimmerman. Incorporating Safety into the Highway Design Process: Summary Report, TTI Report Number: 0-4703-S, Texas Transportation Institute, College Station, October 2009.

6. Giusti, C.H., C. Lee, D. Lord, K.M. Wieters. Transportation Infrastructure and Quality of Life for Disadvantage Populations: A Pilot Study of El Cenizo Colonia in Texas. SWUTC/08/167162-1, Texas Transportation Institute, College Station, September 2008.

5. Lord, D., Persaud, B.N., Washington, S.P., Ivan, J.N., van Schalkwyk, I., Lyon, C., Jonsson, T., and Geedipally, S.R. (2008) Methodology for Estimating the Safety Performance of Multilane Rural Highways. NCHRP 17-29 Project, National Cooperation Highway Research Program, Washington, D.C.

4. Bonneson, J.A., D. Lord, K.H. Zimmerman, K. Fitzpatrick, M.P. Pratt Title: Development of Tools for Evaluating the Safety Implications of Highway Design Decisions, TTI Report Number 0-4703-4, Texas Transportation Institute, College Station, February 2007.

3. Lord, D., I. van Schalkwyk, L. Staplin, and S. Chrysler (2005) Reducing Older Driver Injuries at Intersections Using More Accommodating Roundabout Design Practices. TTI Report CTS-05-01. Texas Transportation Institute, College Station, TX.

2. Lord, D., S.P. Washington, J.N. Ivan (2005) Statistical Challenges with Modeling Motor Vehicle Crashes: Understanding the Implications of Alternative Approaches. TTI report CTS-04-01. Texas Transportation Institute, College Station, TX.

1. Lord, D., H.A. Abdou, A. N'Zué, G. Dionne , and C. Laberge-Nadeau (2003) Investigating Sites Located on Two-Lane Rural Roads in Burkina Faso for Safety Improvements. Research Report, College Station, TX.

I participated in numerous research activities at TTI. Other research reports I have co-authored can be obtained here:

http://tti.tamu.edu/publications/catalog/?title=&report_author=lord&report_number=&keyword=&publication_year=&action=submit&search=advanced

FUNDED RESEARCH

Recent relevant research projects I was or am currently involved as a key researcher.

Agency	Key Researchers	Title	Project Amount	Period
FHWA	Raul Moran PI Dominique Lord	Safety Countermeasure Optimization for Connected Vehicles	To be provided	June 2021-Dec. 2022
FDOT	Srinivas Geedipally PI Dominique Lord Co-PI	Developing Safety Performance Function and Crash Modification Factor for Managed Lanes Separation Treatments	$80,000	Sept. 2020-April 2022
TxDOT	Srinivas Geedipally PI Dominique Lord	0-7083 Develop Highway Safety Manual (HSM) Safety Performance Functions (SPFs) and Calibration Factors for Texas	$300,000	Sept. 2020-Aug, 2022
FHWA	Kay Fitzpatrick PI Dominique Lord	Development of Pedestrian-Intersection Crash Modification Factors	$310,000	Jan. 2020-June 2022
TxDOT	Mike Pratt PI Dominique Lord	Enhancing Freeway Safety Prediction Models	$275,000	Sept. 2019-Dec 2021
TxDOT	Mike Pratt PI Dominique Lord	Evaluation of Roadside Treatments to Mitigate Roadway Departure Crashes	$220,000	Sept. 2018-Feb 2020
NCHRP	Karen Dixon PI Dominique Lord	17-92: Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures	$500,000	May 2019 – April 2022
Safe-D	Ioannis Tsapakis Dominique Lord	Use of Disruptive Technologies to Support Safety Analysis and Meet New Federal Requirements	$1,601,000	Aug. 2018-May 2020
TxDOT	Raul Moran PI Dominique Lord	Evaluation of Roadside Treatments to Mitigate Roadway Departure Crashes	$220,000	Sept. 2018-Feb 2020
TxDOT	Srinivas Geedipally PI Dominique Lord	IAC (Task B)	$40,000	Sept. 2018-Aug. 2019
FHWA	Subasish Das Dominique Lord	Rural Speed Safety Project for USDOT Safety Data Initiative	$240,000	July 2017-Dec 2018
Safe-D UTC	Alireza Talebpour PI Dominique Lord	Preventing Crashes in Mixed Traffic with Automated and Human-Driven Vehicles	$140,000	May 2018-Aug 2019
Safe-D UTC	Dominique Lord PI Srinivas Geedipally	Big Data Methodologies for Simplifying Traffic Safety Analyses	$100,000	May 2017-Dec. 2018
FHWA	Raul Avelar PI Dominique Lord	Evaluation of Safety Improvements, Phase X	$410,000	May 2018-Jan-2020
TxDOT	Srinivas Geedipally PI	IAC (Task C)	$40,000	Jan 2017 – Aug. 2017

	Dominique Lord			
Michigan State University/MDOT	Raul Avelar PI Dominique Lord	OR14-027: Michigan Rural Safety Performance Function (SPFs) Development and Support	$70,000	Oct. 2015 – Sept. 2017
NCHRP	Karen Dixon PI Dominique Lord	NCHRP 17-79: Safety Effects of Raising Speed Limits to 75 mph and Higher	$500,000	Sept. 2016-Aug. 2019
TxDOT	Mike Pratt PI Dominique Lord	State of the Practice: Curve Crash Trends and Pavement Management Practices	$300,000	Sept. 2017-Aug. 2019
TxDOT	Mike Pratt PI Dominique Lord	Developing Pavement Safety-Based Guidelines for Improving Horizontal Curve Safety	$300,000	Sept. 2016-Aug. 2018
TxDOT	Srinivas Geedipally PI Dominique Lord	IAC (Task C)	$60,000	Sept. 2015-Aug. 2016
NCHRP	Melissa Findley PI Dominique Lord	03-117: Traffic Control Devices and Measures for Deterring Wrong-Way Movements	$300,000	July 2015- July 2017
NCHRP	Srinivas Geedipally PI Dominique Lord	NCHRP 17-67:Identification of Factors Contributing to the Decline of Traffic Fatalities in the United States	$300,000	Spt. 2014-Feb. 2018
NCHRP	Karen Dixon PI Dominique Lord	17-66: Guidance for Selection of Appropriate Countermeasures for Opposite Direction Crashes	$350,000	Aug, 2014 – Aug. 2016
UTC	Dominique Lord PI Srinivas Geedipally	Developing a procedure for estimating the required sample size for safety performance function calibration factors	$72,000	Sept. 2014-Dec. 2015
TxDOT	Troy Walden PI Dominique Lord	Safety Analysis in Support of TxDOT Traffic Operations Responsible for Task C: Develop a Methodology for Identifying, Evaluating and Prioritizing Systemic Improvements	$250,000	Sept. 2013 – Aug. 2014
NCHRP	Dominique Lord PI Kay Fitzpatrick Srinivas Geedipally	17-58: Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials	$600,000	Jan. 2013 – March 2016
Signage Foundation, Inc.	Gene Hawkins PI Dominique Lord Co-PI	Statistical Analysis of the Relationship between On-Premise Digital Signage and Traffic Safety	$93,000	Jan. 2012 – Nov. 2012
TxDOT	Kay Fitzpatrick PI Dominique Lord Marcus Brewer	Evaluation of Pedestrian and Bicycle Safety Engineering Countermeasures	$711,000	Sept. 2011- Aug. 2013
TxDOT	Brooke Ullman PI Mike Pratt PI (last year of project) Dominique Lord Srinivas Geedipally	Surface Treatments to Alleviate Crashes on Horizontal Curves	$318,598	Sept. 2011- Aug. 2013
TxDOT	Gene Hawkins PI Dominique Lord Several others	Guidelines for Continuous and Safety Roadway Lighting	$199,988	Sept. 2010- Aug. 2012
NCHRP	James E. Bonneson PI Dominique Lord Srinivas Geedipally	Enhanced Safety Prediction Methodology and Analysis Tool for Freeways and Interchanges	$700,000	Nov. 2009-Feb. 2012
LNEC in Portugal	Dominique Lord PI	Developing Accident Prediction Models for Urban Areas	$55,000	Dec. 2007 – Nov. 2009
TxDOT	Dominique Lord PI Kay Fitzpatrick	Analysis of Roadway Departures on Two-Lane Rural Roads	$390,000	Sept. 2007 – Aug. 2011
TxDOT	Bill Eisele PI Dominique Lord	Safety and Economic Impacts of Converting Two-way Frontage Roads to One-way	$311,000	Sept. 2007 – Aug. 2009
TxDOT	Gene Buth PI Dominique Lord	Guidelines for Designing Bridge Piers and Abutments for Vehicle Collisions	$315,000	April 2007 – Aug. 2010
SWUTC	Dominique Lord Co-PI Cecilia Giusti Co-PI Chanam Lee Co-PI All Co-PIs	Transportation Infrastructure and Quality of Life for Disadvantage Populations: A Pilot Study of Two Colonias in Texas	$50,000	Sept. 2006 – Aug. 2008
University of Kentucky	Dominique Lord PI	Safety Impacts of Design Element Trade-Offs	$25,000	Sept. 2007 – July 2008
TxDOT	Danny Morris PI John Mounce Dominique Lord	Safety Analysis in Support of Traffic Operations	$100,000	Sept. 2006 – Aug. 2007

FHWA	Shawn Turner PI Kay Fitzpatrick Dominique Lord Sub-consultants	Evaluation of Pedestrian and Bicycle Safety Engineering Countermeasures	$475,000	Jan. 2006 – June 2009
TxDOT	Sue Chrysler PI Dominique Lord	Guidelines for Signs and Marking on Toll Roads.	$130,000	Sept. 2006 – Aug. 2007
TxDOT	James A. Bonneson PI Karl Zimmerman Kay Fitzpatrick Dominique Lord	Incorporating Safety into the Highway Design Process	$998,600	Sept. 2003 – Aug. 2009
NCHRP	Dominique Lord PI Shaw-Pin Miaou Sub-consultants	17-29: Methodology to Predict the Safety Performance of Rural Multilane Highways	$700,000	July 2004 – April 2008
NCHRP	Kay Fitzpatrick PI Shawn Turner Paul Carlson Eun-Sug Park Dominique Lord	Innovative Pedestrian Treatments at Unsignalized Crossings	$550,000	Nov. 2002 – March 2006
NIH/CDC	Dominique Lord PI Ida van Schalkwyk	Reducing Older Driver Injuries at Intersections Using More Accommodating Roundabout Design Practices	$99,500	Sept. 2003 – Aug. 2004

GRADUATE STUDENT SUPERVISION

Ph.D. COMMITTEE CHAIR

Srinivas Geedipally
Started: Sept 1st, 2005
Dissertation title: Examining the Application of Conway-Maxwell-Poisson Models for Analyzing Crash Data
Graduated: December 2008

Byung Jung Park
Started: Sept 1st, 2006
Dissertation title: Application of the Finite Mixture of Negative Binomial Regression Models for Vehicle Crash Data Analysis
Graduated: May 2010

Fan Ye
Started: Jan 1st, 2007
Dissertation title: Investigating the Effects of Sample Size, Model Misspecification, and Underreporting in Crash Data on Three Commonly Used Traffic Crash Severity Models
Graduated: May 2011

Pei-Fen Kuo
Started: Sept 1st, 2007
Dissertation title: Estimating the Effects of Site Selection Criteria for Evaluating the Effectiveness of Traffic Safety Improvement Countermeasures
Graduated: May 2012

Myunghoon Ko
Started: Sept 1st, 2008
Dissertation title: Incorporating Vehicle Emission Models into the Highway Design Process
Graduated: December 2011

Yichuan Peng
Started: Sept 1st, 2008
Dissertation title: Examining the generalized Waring regression model for the analysis of traffic crashes
Graduated: May 2013

Seyed Hadi Khazraee Khoshroozi
Started: January 1st, 2012
Thesis title: Full Bayesian Poisson-Hierarchical Models for Crash Data Analysis: Investigating the Impact of Model Choice on Site-Specific Predictions
Graduated: August 2016

Lingtao Wu
Started: September 1st, 2012
Dissertation title: Examining the Use of Regression Models for Developing Crash Reduction Factors
Graduated: May 2016

Mohamadali Shirazi
Started: September 1st, 2013
Thesis title: Advanced Statistical Methods for Analyzing Crash Datasets with Many Zero Observations and a Long Tail: Semiparametric Negative Binomial Dirichlet
Process Mixture and Model Selection Heuristics
Graduated: Dec 2018

Maryam Mousavi
Started: January 1st, 2016
DIssertation title: Examining the Impact of Non-Infrastructure Variables on the Safety Performance of Autonomous Vehicles at Signalized Intersections Using Machine Learning Techniques
Graduated: Dec. 2020

Soheil Sohrabi
Started: January 1st, 2018
Dissertation title: Evaluating Automated Vehicles Safety Performance: Examining the Application of Survival Analysis for AV Safety Validation
Graduated: TBD

Khodadadi, Ali
Started: January 1st, 2019
Dissertation title: TBD
Graduated: TBD

Guneet Saini
Started: January 1st, 2021
Dissertation title: TBD
Graduated: TBD

<u>M.S. COMMITTEE CHAIR</u>

Bhushan Gokhale
Started: Sept 1st, 2004
Thesis title: Application of Landfill Gas as a Liquefied Natural Gas for Refuse Trucks in Texas
Graduated: December 2006

GiridharReddy SingiReddy
Started: Sept 1st, 2005
Thesis title: Evaluating TxDOT's safety Improvement Index (SII): A Prioritization Tool
Graduated: December 2007

Vichika Iragavarapu

Started: Sept 1st, 2005
Thesis title: Examining Potential Factors Affecting the Safety Performance and Design of Exclusive Truck Facilities
Graduated: December 2007

Thanh Le
Started: Sept 1st, 2007
Thesis title: Application of Microscopic Simulation to Evaluate the Safety Performance of Weaving Sections
Graduated: December 2009

Lingzi Cheng
Started: September 1st, 2010
Thesis title: Examining the Poisson-Weibull Generalization Model for Analyzing Crash Data
Graduated: August 2012

Yaotian Zou
Started: September 1st, 2010
Thesis title: Over- and Under-Dispersed Crash Data: Comparing the Conway-Maxwell-Poisson and Double-Poisson Distributions
Graduated: August 2012

Praphyusha Vangala
Started: September 1st, 2012
Thesis title: Negative Binomial-Generalized Exponential Distributions: Generalized Linear Model and Its Applications
Graduated: August 2015

Bharadwaj Bommanayakanahalli
Started: January 1st, 2016
Thesis title: Improved Guidelines for the Recalibration of Prediction Models over Time based on Model Uncertainty
Graduated: August 2018

Tahmida Hossain Shimu
Started: September 2017
Graduated: May 2019
Thesis title: Examining the Factors Causing a Drastic Reduction and Subsequent Increase of Roadway Fatalities on United States Highways between 2005 and 2016

Aman Sharma
Started: January 2018
Graduated: December 2019
Thesis title: Analyzing Crash Potential in Mixed Traffic with Autonomous Vehicles.

Ankit Jhamb
Started: September 2018
Graduated: August 2020
Thesis title: Examining Crash Location Characteristics in Texas between 2003 and 2017 to Assess the Effects of the Great Recession on Fatalities.

<u>UNDERGRADUATE (Scholars Program)</u>

Connie Xavier
Started: Sept. 14, 2014

Thesis title: Evaluating the Effectiveness of Crash Test Guidelines
Graduated: May 2015

George Gillette
Started: Sept. 14, 2016
Thesis title: Investigation of Pedestrian-Cyclist Interactions through Machine Vision
Graduated: May 2017

M.E. DEGREE CHAIR

Uthej Vattipalli
Shuang "Bobie" Guo, Grad: TBD
Kunal Bathia, Grad: TBD
Kuriachan Job, Grad: 2019
Iman Rahim, Grad: 2018
Zifeng Liu, Grad: 2016
Darshan Padmanabha, Grad: 2016
Rudraradhya Hiremath, Grad: 2016
Adrian Contreras, Grad: 2015
Elizabeth Nelson, Grad: 2015
Sangyong You, Grad: 2014
Welling Wu, Grad**:** 2012
Hien Pham, Grad: 2012
Yajie Zou, Grad: 2010
Sriram Banda, Grad: 2008
Charles R. Stevens, Grad: 2005
Seong-Hee Cho, Grad: 2005

Ph.D and M.S. COMMITTEE MEMBER

Jennifer McDonald (Ph.D. in Psychology, TBD)
Chung-Wei Shen (Ph.D., 2012)
Siqi Li (M.S., TBD)
Yanru Zhang (M.S., Aug. 2011)
Mehdi Azimi (Ph.D., TBD)
Chihyi Wang (Ph.D. in Statistics, TBD)
Fang Wen (M.S., Dec. 2010)
Nai-wei Chen (Ph.D. in Statistics, December 2011)
Uday Manepalli (MS, Missouri University of S&T, December 2010)
Stijn Daniels (Ph.D., Hasselt University in Belgium, May 2010)
Mandeep Singh (M.Sc., Dec 2009)
Xiugang Li (Ph.D., May 2009)
Yuanchang Xie (Ph.D., September 2007)
Zhirui Ye (Ph.D., September 2007)
Maneesh Malahwat (M.Sc., December 2007)
Madhuri Gogula (M.Sc., March 2006)
Linhua Li (M.S., June 2006)

PROFESSIONAL ASSOCIATIONS

Professional Engineers of Ontario (Member)
Ordre des ingénieurs du Québec (Member)
Association québécoise du transport et des routes (Member)

The Canadian Association of Road Safety Professionals (Member)
Institute of Transportation Engineers (Member)
Transportation Research Board (Member)
American Society for Civil Engineers (Member until 2017)

PROFESSIONAL SERVICE

Membership **1994-Present**

TRB Special Task Force for the Highway Safety Manual (Scientific Review Committee)
Member of TRB Committee ABJ80 (Statistical Methods) (2004-2014)
Member of TRB Committee ANB20 (Safety Data, Analysis and Evaluation) (2010-2020)
Member of TRB Committee ANB25 (Highway Safety Performance) (2012-2020)
Member of TRB Committee ACS20 (Safety Performance and Analysis) (2020-2022)
Friend of TRB Committees of ANF10 (Pedestrians)

Scientific Reviewer **1995-Present**

Senior Position:
Transportation Research Record – Handling Editor (2020-Present)
Analytic Methods in Accident Research - Associate Editor (2013-Present)
Accident Analysis & Prevention – Board Member (2005-Present)

Proposal and Ph.D. Dissertation Review:
National Scientific Foundation (NSF)
Hong Kong Research Grants Council
Virginia Tech Transportation Institute
Fonds québécois de la recherche sur la nature et les technologies (FQRNT) (formally known as FCAR)
Fundação para a Ciência e Tecnologia (Portugal)
Hasselt University (Belgium)
Macquari University (Australia)

Journals (partial list):
Journal of Transportation Engineering (ASCE), Risk Analysis, Accident Analysis & Prevention (Editorial Board: January 2006 - present), Analytic Methods in Accident Research, Journal of Transportation and Statistics, Transportation Journal, Safety Science, Journal of Transport Geography, Transportation Research – Part A, Transportation Research – Part B, Transportation Research - Part C, Journal of Intelligent Transportation Systems, Transportmetrica, Canadian Journal of Civil Engineering (Guest Associate Editor+regular reviews), European Journal of Transport and Infrastructure Research, Journal of Statistical Computation and Simulation, IEEE, Statistics in Medicine, International Journal of Injury Control and Safety Promotion, and many more journals.

UNIVERSITY AND COMMUNITY SERVICE

Honors & Awards Committee (College of Engineering)	2019-Present
Promotion & Tenure Committee (CE Department) (elected)	2020-Present
Division Head, Transportation & Materials	2014-2016
College of Engineering Representative – Member	
- Transportation working group for the Texas Office for Homeland Security	2014-2016
Member - CE Endowed Position Committee - Zach Dept. of Civil Eng.	2013-2017
Chair - Awards Committee - Zach Dept. of Civil Eng.	2013-Present
TAMU-ITE Student Chapter Faculty Representative	2010-2014-2019
College of Engineering Representative – Faculty Advisory Board:	
Disability Services (University)	2009-2012

Member of the Tenure and Promotion Committee,	2010-2018
Sub-committee chair for the 3-rd year review of Dr. Bruce Wang	2010-2011
Sub-committee member for the tenure and promotion of Dr. Luca Quadrifoglio	2010-2011
Faculty member responsible for the System Engineering Safety Certificate	2007-Present
Graduate Task Force, Member, Appointed	2005-2006
Sub-committee Degree Requirements	
Sub-committee Assistantships and Scholarships	
Sub-committee member for various Graduate Transportation Awards	2004-Present

COMPUTING KNOWLEDGE

Transportation: EMME/2, LOGIT, HCS, QRS II, SIDRA

Others: Windows XP&7, UNIX, WordPerfect 11, Quattro Pro 11, Paradox 11, Microsoft Office XP 2007, 2010& 2013 QuickBASIC, C/C++, GLIM, Genstat, SAS, AutoCAD, Civil 3D, MathCAD, WinBUGS

EXTRACURRICULAR ACTIVITIES

Financial Officer for the Social Committee of the Lexington Corporation	1999-2000
Financial Officer and Vice-President for the ITE Student Chapter	1995-1998
First Floor Representative at the Rowell Jackman Hall Residence	1995-1996
Montréal Young Board of Trade	1994-1995
President of the St. George Graduate Residence Committee	1993-1994
Member of the St. George Graduate Residence Committee	1992-1993
Student-editor for the bimonthly journal *Canadian Civil Engineer*	1990-1992
Commissionner for the *Fédération québécoise des sports cyclistes*	1991-1992