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*Civil and Environmental Engineering, Virginia Tech
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[Google Scholar Profile](#)

APPOINTMENTS

Professor of Civil Engineering

August 2014-

Virginia Tech

- Commonwealth Cyber Initiative Faculty Fellow, 2020-2022 (Renewable)
- CACI International Faculty Fellow, 2019-2024 (Renewable)
- Transportation Infrastructure Systems and Engineering Group Coordinator, 2017-Present
- Appointed Member, Resilient America Roundtable, National Academy of Science, 2014-2020
- Associate Lab Director, Hume Center for National Security and Technology, 2016 - 2019
- Research Leader for Resilience, Research Development Team - Office of the Vice President, National Capital Region, 2014 - 2017
- Associate Professor (with tenure), 2014 - 2020

Assistant/Associate Professor of Civil Engineering

2008-2014

Utah State University

- Associate Director, Utah Transportation Center, 2011-2014
- Principal Investigator and Program Manager, Utah LTAP Center (2008-2014)
- Tenured and Promoted to Associate Professor, June 2014

Postdoctoral Research Associate

2007-2008

University of Florida - Transportation Research Center

EDUCATION

Ph.D., Civil and Environmental Engineering

2004-2007

University of Massachusetts Amherst

“Modeling driver behavior in work zones: An evaluation of traffic flow impacts in freeway work zones with full lane closures” - Dissertation advisor: J. Collura

M.S., Civil and Environmental Engineering

2002-2003

Virginia Tech

Transportation and Infrastructure Systems Engineering

B.S., Civil and Environmental Engineering

1997-2002

Virginia Tech

Minor in Urban and Regional Planning

PEER-REVIEWED JOURNAL PAPERS (Italic = Heaslip Students)

58. *K. Kelarestaghi, A. Ermagun, K. Heaslip, & J. Rose, “Choice of Speed Under Compromised Dynamic Message Sign”, PLOS ONE , (Accepted).*

57. A. Ermagun, K. Kelarestaghi, & K. Heaslip, “Impact of Hacked Road Signs on Speed Change and Distraction Response Behavior”, *International Journal of Transportation Science and Technology* , (2020).
56. S. Dabiri, N. Marković, K. Heaslip, & C. Reddy, “A Deep Convolutional Neural Network based Approach for Vehicle Classification using Large-Scale GPS Trajectory Data”, *Transportation Research Part C: Emerging Technologies* **116**, (2020).
55. G. Hannoun, P. Murray-Tuite, K. Heaslip, & A. Fuentes, “Assisting Road Users Exposed to Nuisance Flooding”, *ASCE Journal of Transportation Engineering, Part A: Systems* **146**, 8 (2020).
54. G. Hannoun, P. Murray-Tuite, K. Heaslip, & T. Chantem, “Meso- and Micro-scopic Routing of an Emergency Response Vehicle with Connected Vehicle Technologies”, *International Journal of Emerging Technology and Advanced Engineering* **10**, 4 (2020).
53. A. Fuentes, K. Heaslip, A. Kidd, & A. D’Antonio, “Evaluating National Park Entrance Station Queues: A Case Study in Grand Teton National Park”, *Case Studies on Transport Policy* **7**, 2 (2019).
52. K. Kelarestaghi, K. Heaslip, & A. Ermagun, “Cycling Usage and Frequency Determinants in College Campuses”, *Cities* **90**, (2019).
51. A. Fuentes, K. Heaslip, A. Sisneros-Kidd, A. D’Antonio, & K. Kelarestaghi, “A Decision Tree Approach to Predicting Vehicle Stopping from GPS Tracks in a National Park Scenic Corridor”, *Transportation Research Record: The Journal of the Transportation Research Board* **2673**, 3 (2019).
50. S. Dabiri, C.T. Lu, K. Heaslip, & C. Reddy, “Semi-Supervised Deep Learning Approach for Transportation Mode Identification Using GPS Trajectory Data”, *IEEE Transactions on Knowledge and Data Engineering* **32**, 5 (2019).
49. K. Kelarestaghi, M. Foruhandeh, K. Heaslip, & R. Gerdes, “Intelligent Transportation System Security: Impact-Oriented Risk Assessment of In-Vehicle Networks”, *IEEE Intelligent Transportation Systems Magazine* , (2019).
48. S. Dabiri & K. Heaslip, “Developing a Twitter-Based Traffic Event Detection Model Using Deep Learning Architectures”, *Expert Systems with Applications* **118**, (2019).
47. G. Hannoun, P. Murray-Tuite, K. Heaslip, & T. Chantem, “Facilitating Emergency Response Vehicles’ Movement through a Road Segment in a Connected Vehicle Environment”, *IEEE Transactions on Intelligent Transportation Systems* **20**, 9 (2018).
46. J. Walker & K. Heaslip, “A Low-Cost Real-World Planning Strategy for Deploying a Dedicated Short-Range Communications Roadside Unit on a Highway Off-Ramp”, *Transportation Research Record: The Journal of the Transportation Research Board* **2672**, 19 (2018).
45. K. Kelarestaghi, K. Heaslip, V. Fessmann, M. Khalilikhah, & A. Fuentes, “Intelligent Transportation System Security: Hacked Message Signs”, *Transportation Cybersecurity and Privacy: An SAE International Journal* **1**, 2 (2018).
44. T. Tithi, B. Deka, C. Winstead, M. Li, & K. Heaslip, “Analysis of Friendly Jamming for Secure Location Verification of Vehicles for Intelligent Highways”, *IEEE Transactions on Vehicular Technology* **67**, 8 (2018).
43. M. Khalilikhah, G. Fu, K. Heaslip, & P. Carlson, “Analysis of In-Service Traffic Sign Visual Condition”, *Journal of Transportation Engineering, Part A: Systems* **144**, 6 (2018).
42. S. Dabiri & K. Heaslip, “Inferring Transportation Modes from GPS Trajectories Using a Convolutional Neural Network”, *Transportation Research Part C: Emerging Technologies* **86**, (2018).

41. A. Kidd, A. D'Antonio, C. Monz, K. Heaslip, D. Taff & P. Newman, "A GPS-Based Classification of Visitors' Vehicular Behavior in a Protected Area Setting", *Journal of Park and Recreation Administration* **36**, 1 (2018).
40. K. Kelarestaghi, W. Zhang, Y. Wang, L. Xiao, K. Hancock, & K. Heaslip, "Impacts to Crash Severity Outcome Due to Adverse Weather and Other Causation Factors", *Advances in Transportation Studies* **43**, (2017).
39. M. Khalilikhah & K. Heaslip, "Improvement of the Performance of Animal Crossing Warning Signs", *Journal of Safety Research* **62**, (2017).
38. M. Khalilikhah & K. Heaslip, "Prediction of Traffic Sign Vandalism That Obstructs Critical Messages to Drivers", *Transport* **33**, 2 (2017).
37. A. Fuentes, K. Heaslip, A. D'Antonio, M. Khalilikhah, & A. Soltani-Sobh, "Evaluation of Vehicle Parking Queueing in a National Park", *Transportation Research Record: The Journal of the Transportation Research Board* **2654**, 1 (2017).
36. M. Khalilikhah, V. Balali, & K. Heaslip, "Using Stationary Image Based Data Collection Method for Evaluation of Traffic Sign Condition", *International Journal of Transportation Science and Technology* **5**, 4 (2016).
35. M. Khalilikhah & K. Heaslip, "The Effects of Damage on Sign Visibility", *Journal of Traffic and Transportation Engineering (English Edition)* **3**, 6 (2016).
34. A. Soltani-Sobh, K. Heaslip, R. Bosworth, & Z. Song, "An Aggregate Time Series Analysis to Investigate Effect of Compressed Natural Gas Vehicles on Vehicle Miles Traveled", *Int. J. Mech. Eng. Autom.* **3**, 10 (2016).
33. A. Soltani-Sobh, K. Heaslip, P. Scarlatos, & E. Kaiser, "Reliability Based Pre-positioning of Recovery Centers for Resilient Transportation Infrastructure", *International Journal of Disaster Risk Reduction* **19**, (2016).
32. M. Khalilikhah & K. Heaslip, "Analysis of Factors Temporarily Impacting Traffic Sign Readability", *International Journal of Transportation Science and Technology* **5**, 2 (2016).
31. E. Meissner, T. Chantem, & K. Heaslip, "Optimizing Departures of Automated Vehicles from Highways while Maintaining Mainline Capacity", *IEEE Transactions on Intelligent Transportation Systems* **17**, 12 (2016).
30. A. Soltani-Sobh, K. Heaslip, A. Stevanovic, J. El Khoury, & Z. Song, "Evaluation of Transportation Network Reliability During Unexpected Events with Multiple Uncertainties", *International Journal of Disaster Risk Reduction* **17**, (2016).
29. A. Soltani-Sobh, K. Heaslip, R. Bosworth, & R. Barnes, "Compressed Natural Gas Vehicles", *Transportation Research Record: The Journal of the Transportation Research Board* **2572**, 1 (2016).
28. M. Khalilikhah, K. Heaslip, & K. Hancock, "Traffic Sign Vandalism and Demographics of Local Population", *Journal of Traffic and Transportation Engineering (English Edition)* **3**, 3 (2016).
27. D. Yook & K. Heaslip, "Acceleration of Double-Projection Method in Asymmetrically Formulated Traffic Assignment", *Journal of Computing in Civil Engineering* **30**, 6 (2016).
26. M. Khalilikhah, M. Habibian, & K. Heaslip, "Acceptability of Increasing Petrol Price as a TDM Pricing Policy", *Transport Policy* **45**, (2016).
25. A. Soltani-Sobh, K. Heaslip, & J. El Khoury, "Estimation of Road Network Reliability on Resiliency", *International Journal of Disaster Risk Reduction* **14**, 4 (2015).

24. M. Khalilikhah, K. Heaslip, & Z. Song, “Can Daytime Digital Imaging be used for Traffic Sign Retroreflectivity Compliance?”, *Measurement* **75**, (2015).
23. D. Yook & K. Heaslip, “The Effect of Crowding on Public Transit User Travel Behavior in a Large-Scale Public Transportation System through Modeling Daily Variations”, *Transportation Planning and Technology* **38**, 8 (2015).
22. A. Soltani-Sobh, K. Heaslip, R. Bosworth, & R. Barnes, “Effect of Improving Vehicle Fuel Efficiency on Fuel Tax Revenue and Greenhouse Gas Emissions”, *Transportation Research Record: Journal of the Transportation Research Board* **No. 2502**, (2015).
21. D. Desiraju, T. Chantem, & K. Heaslip, “Minimizing the Disruption of Traffic Flow of Automated Vehicles During Lane Changes”, *IEEE Transactions on Intelligent Transportation Systems* **18**, 1 (2015).
20. D. Yook & K. Heaslip, “Effective Modeling for a Distance-Based Fare Structure with a Time-Expanded Network”, *Journal of Public Transportation* **18**, 1 (2015).
19. D. Yook & K. Heaslip, “Determining Appropriate Fare Levels for Distance-based Fare Structure Considering Users’ Behaviors in a Time Expanded Network”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2415**, (2014).
18. D. Hurwitz, J. Swake, S. Brown, R. Young, K. Heaslip, K. Sanford-Bernhardt, & R. Turochy, “Influence of Collaborative Curriculum Design on Educational Beliefs, Communities of Practitioners, and Classroom Practice in Transportation Engineering Education”, *Journal of Professional Issues in Engineering Education and Practice* **140**, 3 (2014).
17. W. Boggs, D. Freckleton, & K. Heaslip, “Analysis of Sign Damage and Failure”, *Transportation Research Record: Journal of the Transportation Research Board* **No. 2337**, (2013).
16. J. Fishelson, D. Freckleton, & K. Heaslip, “Evaluation of Automated Electric Transportation Deployment Strategies”, *IET Intelligent Transport Systems* **7**, 3 (2013).
15. D. Hurwitz, K. Heaslip, S. Schrock, J. Swake, P. Marnell, H. Tuss, & E. Fitzsimmons, “Implications of Distracted Driving on Startup Lost Time for Dual Left Turn Lanes”, *Journal of Transportation Engineering* **139**, 9 (2013).
14. D. Hurwitz, K. Heaslip, & D. Moore, “Relating Transportation Systems Management and Operations Strategies to Policy Goals”, *Engineering Management Journal* **24**, 3 (2012).
13. D. Freckleton, K. Heaslip, W. Louisell, & J. Collura, “Evaluation of Transportation Network Resiliency with Consideration for Disaster Magnitude”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2284**, (2012).
12. T. Evans, K. Heaslip, W. Boggs, D. Hurwitz, & K. Gardner, “Assessment of Sign Retroreflectivity Compliance for the Development of a Management Plan”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2272**, (2012).
11. N. Urena-Serulle, K. Heaslip, W. Louisell, B. Brady, & J. Collura, “Resiliency of Transportation Network of Santo Domingo, Dominican Republic”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2234**, (2011).
10. M. Thomas & K. Heaslip, “Technological Change and the Lowest Common Denominator Problem”, *Journal of Town and City Management* **2**, 2 (2011).
9. A. Bill, S. Beyerlein, K. Heaslip, D. Hurwitz, K. Sanford-Bernhardt, M. Kyte, & R. Young, “Development of Knowledge Tables and Learning Outcomes for the Introductory Course in Transportation Engineering”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2211**, (2011).
8. K. Heaslip, M. Jain, & L. Elefteriadou, “Estimation of Arterial Work Zone Capacity Using Simulation”, *Transportation Letters: The International Journal of Transportation Research* **3**, 2 (2011).

7. K. Heaslip, J. Collura, & M. Knodler, “Evaluation of Work Zone Design Features to Aid Older Drivers”, *ITE Journal* **81**, 3 (2011).
6. K. Heaslip, K. Womack, & J. Muhs, “Automated Electric Transportation: A Way to Meet America’s Critical Issues”, *Leadership and Management in Engineering* **11**, 1 (2011).
5. K. Heaslip, S. Schrock, M. Wang, R. Rescot, Y. Bai, & B. Brady, “A Closed-Course Feasibility Analysis of Temporary Rumble Strips for Use in Short-Term Work Zones”, *Journal of Transportation Safety and Security* **2**, 4 (2010).
4. K. Heaslip, J. Jones, T. Harpst, & D. Bolling, “Implementation of Road Safety Audit Recommendations”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2182**, (2010).
3. J. Collura, K. Heaslip, K. Moriarty, F. Wu, R. Khanta, & A. Berthaume, “Using Simulation Models to Assess the Impacts of Highway Work Zone Strategies”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2169**, (2010).
2. S. Schrock, K. Heaslip, M. Wang, R. Jasrotia & R. Rescot, “Closed Course Test and Analysis of Vibration and Sound Generated by Temporary Rumble Strips for Short Term Work Zones”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2169**, (2010).
1. K. Heaslip, A. Kondyli, D. Arguea, L. Elefteriadou, & F. Sullivan, “Estimation of Freeway Work Zone Capacity Using Simulation and Field Data”, *Transportation Research Record: The Journal of the Transportation Research Board* **No. 2130**, (2009).

REFEREED CONFERENCE PROCEEDINGS - FULL PAPER

53. W. Louisell & K. Heaslip, “Cyber, Physical, and Operational Security in Civil Engineering Practice”, *ASCE Annual Convention 2020*, Virtual, October 2020.
52. W. Louisell & K. Heaslip, “Securing the Digitally Managed Water Supply”, *World Environmental and Water Resources Congress*, Virtual, May 2020.
51. A. Ermagun, K. Kelarestaghi, & K. Heaslip, “Travel Behavior Under Terrorist Attack Bluff”, *99th Transportation Research Board Annual Meeting*, Washington, DC, January 2020.
50. K. Kelarestaghi, A. Ermagun, K. Heaslip, & J. Rose, “‘Shunt Traffic’: Impact of Compromised Dynamic Message Signs on Route Divergence”, *99th Transportation Research Board Annual Meeting*, Washington, DC, January 2020.
49. B. Kim, K. Heaslip, M. Abi Aad, A. Fuentes, & N. Goodall, “Assessing Automated and Connected Vehicle Capacities on a Highway”, *99th Transportation Research Board Annual Meeting*, Washington, DC, January 2020.
48. A. Ermagun, M. Finney, K. Kelarestaghi, & K. Heaslip, “‘Speed Up to Hit the Worker’: Impact on Hacked Road Signs on Work Zone Safety”, *99th Transportation Research Board Annual Meeting*, Washington, DC, January 2020.
47. K. Kelarestaghi, A. Ermagun, & K. Heaslip, “Compromised Dynamic Message Signs and Driver Distraction”, *99th Transportation Research Board Annual Meeting*, Washington, DC, January 2020.
46. D. Kim, B. Kim, & K. Heaslip, “Identifying Transit Deserts Using Geospatial Analysis”, *98th Transportation Research Board Annual Meeting*, Washington, DC, January 2019.
45. K. Kelarestaghi, A. Ermagun, & K. Heaslip, “Cycling Usage and Frequency Determinants in College Campuses”, *97th Transportation Research Board Annual Meeting*, Washington, DC, January 2018.
44. M. Khalilikhah & K. Heaslip, “Comparison Between Stationary Image-Based Method and Handheld Device for Traffic Sign Retroreflectivity Measurement”, *96th Transportation Research Board Annual Meeting*, Washington, DC, January 2017.

43. Y. He, Z. Song, Z. Liu, & K. Heaslip, "Highway Grate Detection and Recognition Based on Aerial Image Processing", *96th Transportation Research Board Annual Meeting*, Washington, DC, January 2017.
42. K. Heaslip & M. Khalilikhah, "Analysis of Sign Visual Condition from Mobile LiDAR Imaging and Digital Photologs", *23rd World Congress on Intelligent Transport Systems*, Melbourne, Australia, October 2016.
41. A. Soltani-Sobh, K. Heaslip, A. Stevanovic, R. Bosworth, & D. Radivojevic, "Analysis of the Electric Vehicles Adoption over the United States", *19th EURO Working Group on Transportation Meeting (EWGT2016)*, Istanbul, Turkey, September 2016.
40. A. Soltani-Sobh, K. Heaslip, R. Bosworth, R. Barnes, & D. Yook, "An Aggregated Panel Data Analysis to Model Electric Vehicle Adoption Rates in the United States", *2016 International Transportation Economics Association Annual Conference*, Santiago, Chile, June 2016.
39. A. Soltani-Sobh, K. Heaslip, R. Bosworth, R. Barnes, & Z. Song, "Do Natural Gas Vehicles Change Vehicle Miles Traveled?", *95th Transportation Research Board Annual Meeting*, Washington, DC, January 2016.
38. M. Khalilikhah & K. Heaslip, "Important Environmental Factors Contributing to the Temporary Obstruction of Sign Messages", *95th Transportation Research Board Annual Meeting*, Washington, DC, January 2016.
37. A. Soltani-Sobh, K. Heaslip, R. Bosworth, & R. Barnes, "GIS-based Study of the Impacts of Air Pollutants on Traffic Sign Deterioration", *95th Transportation Research Board Annual Meeting*, Washington, DC, January 2016.
36. M. Khalilikhah & K. Heaslip, "Important Environmental Factors Contributing to the Temporary Obstruction of Sign Messages", *95th Transportation Research Board Annual Meeting*, Washington, DC, January 2016.
35. X. Xu, A. Chen, S. Jansuwan, K. Heaslip, & C. Yang, "Modeling Transportation Network Redundancy", *21st International Symposium on Transportation and Traffic Theory*, Kobe, Japan, August 2015.
34. Z. Song, N. Shirmohammadi, Y. Yin, & K. Heaslip, "Two-Stage Procedure of Using HOV and HOT Lanes for Traffic Incident Management", *97th Transportation Research Board Annual Meeting*, Washington, DC, January 2015.
33. M. Khalilikhah, K. Heaslip, W. Louisell, & M. Bagherian, "Analysis of Effects of Coarse Particulate Matter on Traffic Sign Retroreflectivity", *94th Transportation Research Board Annual Meeting*, Washington, DC, January 2015.
32. R. Chauhan, R. Gerdes, & K. Heaslip, "Demonstration of a False-data Injection Attack Against a FMCW Radar", *Embedded Security in Cars Conference (ESCAR)*, Hamburg, Germany, November 2014.
31. B. Deka, R. Gerdes, M. Li, & K. Heaslip, "Friendly Jamming for Secure Localization in Vehicular Transportation", *21st ACM Conference on Computer and Communications Security (CCS)*, Scottsdale, AZ, November 2014.
30. B. Deka, R. Gerdes, M. Li & K. Heaslip, "Analysis and Comparison of Secure Localization Schemes for Intelligent Transportation Systems", *10th International Conference on Security and Privacy in Communication Networks (SECURECOMM)*, Beijing, China, September 2014.
29. S. Dong, H. Wang, D. Hurwitz, & K. Heaslip, "Vehicle-Type Specific Headway Distribution in Freeway Work Zones", *93rd Transportation Research Board Annual Meeting*, Washington, DC, January 2014.

28. R. Gerdes, C. Winstead, & K. Heaslip, "An Efficiency-Motivated Attack Against Autonomous Vehicular Transportation", *29th Annual Computer Security Applications Conference - ACSAC 13*, New Orleans, LA, December 2013.
27. S. Jansuwan, S. Ryu, D. Freckleton, A. Chen & K. Heaslip, "Evaluation Framework of Automated Electric Transportation System", *92nd Transportation Research Board Annual Meeting*, Washington, DC, January 2013.
26. T. Lindheimer, K. Heaslip, W. Louisell, & K. Gardiner, "Development of a Work Zone Safety Audit Risk Assessment Tool", *91st Transportation Research Board Annual Meeting*, Washington, DC, January 2012.
25. W. Boggs, T. Evans, K. Heaslip, W. Louisell, & K. Gardiner, "Development of a Sign Asset Management Plan for Retroreflectivity Compliance", *91st Transportation Research Board Annual Meeting*, Washington, DC, January 2012.
24. A. Soltani-Sobh, J. Fishelson, K. Heaslip, & J. El Khoury, "Development of a Demand Uncertainty Based Model to Estimate Network Reliability", *91st Transportation Research Board Annual Meeting*, Washington, DC, January 2012.
23. D. Yook, K. Heaslip, & A. Chen, "Enhancement of the Double Projection Method Designed for Traffic Assignment", *91st Transportation Research Board Annual Meeting*, Washington, DC, January 2012.
22. X. Xu, A. Chen, S. Jansuwan, & K. Heaslip, "Road Network Redundancy Measures: Route Diversity and Network Spare Capacity", *91st Transportation Research Board Annual Meeting*, Washington, DC, January 2012.
21. J. Fishelson, D. Freckleton, & K. Heaslip, "An Evaluation of Automated Electric Transportation Deployment Strategies", *2011 Intelligent Transportation Systems World Congress*, Orlando, FL, October 2011.
20. J. Fishelson, D. Freckleton, & K. Heaslip, "Human Factors and Safety Challenges in the Transition to an Automated Electric Transportation System", *2011 Intelligent Transportation Systems World Congress*, Orlando, FL, October 2011.
19. L. Shirley & K. Heaslip, "The Resilient Family: A Methodology for Bridging Cultures and Disciplines Before and After a Disaster", *American Association of Family and Consumer Sciences 102nd Annual Conference and Exposition*, Phoenix, AZ, June 2011.
18. K. Sanford-Bernhardt, A. Bill, S. Beyerlein, K. Heaslip, D. Hurwitz, M. Kyte, & R. Young, "A Nationwide Effort to Improve Transportation Engineering Education", *American Society for Engineering Education 2011 Annual Conference and Exposition*, Vancouver, BC, June 2011.
17. K. Heaslip, B. Brady, & M. Thomas, "The Importance of Road Pricing to the Future of Roadway Infrastructure", *2011 Association of Private Enterprise Education International Conference*, Nassau, Bahamas, March 2011.
16. J. Fishelson, K. Heaslip, W. Louisell, & K. Womack, "An Evaluation Framework for an Automated Electric Transportation Network", *90th Transportation Research Board Annual Meeting*, Washington, DC, January 2011.
15. C. Vasquez, K. Heaslip, & M. Langford, "An Alternative Pavement Management System Approach for Local Governments", *90th Transportation Research Board Annual Meeting*, Washington, DC, January 2011.
14. K. Heaslip, W. Louisell, J. Collura, & N. Urena-Serulle, "A Sketch Level Method for Assessing Transportation Network Resiliency to Natural Disasters and Man-Made Events", *89th Transportation Research Board Annual Meeting*, Washington, DC, January 2010.

13. C. Vasquez, K. Heaslip, & W. Louisell, "A Practice Proven Pavement Management System for Local Governments", *89th Transportation Research Board Annual Meeting*, Washington, DC, January 2010.
12. X. Zhu, S. Srinivasan, G. Carrick, & K. Heaslip, "Modeling Location of Crashes Within Work Zones: Methodology and Case Study Application", *89th Transportation Research Board Annual Meeting*, Washington, DC, January 2010.
11. K. Heaslip, W. Louisell, & J. Collura, "Policy Implications in the Implementation of Regional Electronic Payment Systems", *Intelligent Transportation Society of America Annual Meeting*, Washington, DC, January 2009.
10. K. Heaslip, J. Collura, & M. Knodler, "Evaluation of Work Zone Design Features to Aid Older Drivers", *88th Transportation Research Board Annual Meeting*, Washington, DC, January 2009.
9. K. Heaslip, W. Louisell, & J. Collura, "Quantitative Evaluation of Transportation Resiliency for Regional Networks", *88th Transportation Research Board Annual Meeting*, Washington, DC, January 2009.
8. G. Carrick, K. Heaslip, S. Srinivasan, & X. Zhu, "A Case Study in Spatial Misclassification of Work Zone Crashes", *88th Transportation Research Board Annual Meeting*, Washington, DC, January 2009.
7. K. Heaslip, W. Louisell, & J. Collura, "An Algorithm to Quantify the Effects of Driver Behavior on Work Zone Capacity", *15th World Congress on Intelligent Transport Systems*, New York, NY, November 2008.
6. K. Heaslip, W. Louisell, & J. Collura, "Driver Population Adjustment Factors for the Highway Capacity Manual Work Zone Capacity Equation", *87th Transportation Research Board Annual Meeting*, Washington, DC, January 2008.
5. K. Heaslip & D. Henclewood, "The Effects of Increased Transit Efficiency on Mobility in Small Developing Countries", *87th Transportation Research Board Annual Meeting*, Washington, DC, January 2008.
4. K. Moriarty, J. Collura, M. Knodler, D. Ni, & K. Heaslip, "Using Simulation Models to Assess the Impacts of Highway Work Zone Strategies", *87th Transportation Research Board Annual Meeting*, Washington, DC, January 2008.
3. K. Heaslip, J. Collura, & W. Louisell, "Evaluation of Work Zone Design Strategies: Quantifying the Impact of Driver Behavior on Traffic Flow and Safety", *86th Transportation Research Board Annual Meeting*, Washington, DC, January 2007.
2. W. Louisell, J. Collura, M. Knodler, & K. Heaslip, "A Simplified Algorithm to Assess the Impacts of Driver Behavior on Delay and Safety in Work Zone Areas", *85th Transportation Research Board Annual Meeting*, Washington, DC, January 2006.
1. K. Heaslip, J. Collura, R. McQueen, & D. Erwin, "Policy Implications in the Implementation of Regional Electronic Payment Systems", *2004 Intelligent Transportation Society of America's Annual Meeting*, San Antonio, TX, May 2004.

REFEREED CONFERENCE PROCEEDINGS - FROM ABSTRACT

14. G. Hannoun, P. Murray-Tuite, K. Heaslip, & T. Chantem, "Using Connected Vehicle Technology to Improve Emergency Response Vehicle Travel in an Urban Transportation Network", *INFORMS Annual Meeting 2019*, Seattle, WA, October 2019.
13. A. Ermagun, K. Kelarestaghi, & K. Heaslip, "Does Forged DMS Information Undermine Common Planning Practices", *Association of Collegiate Schools of Planning 2019 Annual Conference*, Greenville, SC, October 2019.

12. G. Hannoun, P. Murray-Tuite, K. Heaslip, & T. Chantem, “Sequential Optimization of the Intra-link Movement of an Emergency Response Vehicle Along Transportation Segments in the Connected Vehicle Environment”, *INFORMS Annual Meeting 2018*, Phoenix, AZ, October 2018.
11. G. Hannoun, P. Murray-Tuite, & K. Heaslip, “Facilitating the Emergency Response Vehicle’s Movement Through a Transportation Network Link in the Connected Vehicle Environment”, *INFORMS Annual Meeting 2017*, Houston, TX, October 2017.
10. K. Heaslip, “Connections between the Resilience of the Built Environment and Community”, *6th International Conference of Building Resilience*, Auckland, New Zealand, September 2016.
9. M. Khalilikhah & K. Heaslip, “Public Transit Accessibility vs. Employment: A Comparative Assessment of Counties/Cities in Northern Virginia”, *2016 ITE Mid-Colonial District Annual Meeting*, Wilmington, DE, April 2016.
8. X. Xiangdong, A. Chen, S. Jansuwan, K. Heaslip, & C. Yang, “Modeling Transportation Network Redundancy”, *21st International Symposium on Transportation and Traffic Theory*, Kobe, Japan, August 2015.
7. A. Soltani-Sobh, K. Heaslip, R. Bosworth, R. Barnes, & D. Yook, “Investigating factors affecting electric vehicles adoption: an aggregated panel data analysis over U.S. states”, *28th Electric Vehicle Symposium*, Kintex, South Korea, May 2015.
6. K. Heaslip, “A Systems Approach to Transportation Infrastructure Resiliency”, *4th Annual TRANSLOG Conference*, Burlington, ON Canada, October 2012.
5. K. Heaslip & C. Vasquez, “Pavement Management Systems for Local Governments”, *Institute of Transportation Engineers Western District Meeting*, Anchorage, AK, July 2011.
4. K. Heaslip, “Are Time-of-Day Travel Patterns of Elderly Drivers Changing?”, *International Association for Time Use Research XXVIII Conference*, Washington, DC, October 2007.
3. K. Heaslip, J. Collura, & W. Louisell, “Evaluating the Impact of Driver Behavior on Traffic Flow and Safety in Freeway Work Zones”, *14th World Congress on Intelligent Transport Systems*, Beijing, China, August 2007.
2. K. Heaslip, “Application of FAIR Lanes to Help Alleviate Freeway Congestion”, *2007 ITE Annual Meeting*, Pittsburgh, PA, August 2007.
1. K. Heaslip, J. Collura, & W. Louisell, “Modeling Impacts of Driver Behavior on Highway Performance and Safety During Forced Merges in Work Zones”, *13th World Congress on Intelligent Transport Systems*, London, UK, October 2007.

BOOK CHAPTER

1. S. Dabiri, K. B. Kelarestaghi, & K. Heaslip, “Chapter 10: Probe People and Vehicle-Based Data Sources Application in Smart Transportation”, *In Artificial Intelligence and Machine Learning Applications in Civil, Mechanical, and Industrial Engineering*, IGI Global, 2019.

TECHNICAL REPORTS

26. K. Heaslip, D. Kim, M. Kaplan, & C. Dietrich, “Planning Corridors for Transit Signal Priority While Considering Pedestrian Delay”, *Virginia Department of Transportation*, Charlottesville, VA, 2020.
25. K. Heaslip, N. Goodall, B. Kim, & M. Abi Aad, “Planning Corridors for Transit Signal Priority While Considering Pedestrian Delay”, *Virginia Department of Transportation*, Charlottesville, VA, 2020.

24. S. McNeill, E. Lee, Y. Li, R. Chiquoine, K. Heaslip, & G. Hering, “The Connection between State of Good Repair and Resilience Measures for Pavements and Bridges”, *CAIT-UTC-NC 45*, Piscataway, NJ, 2019.
23. N. Tahvildari, J. Goodall, P. Murray-Tuite, K. Heaslip, & M. Cetin, “An Integrated Dynamic Modeling Approach for Flooding of Coastal Transportation Infrastructure: Assessment of Impacts on Emergency Operations”, *Mid-Atlantic Transportation Sustainability Center Final Report*, Charlottesville, VA, 2019.
22. P. Murray-Tuite, *G. Hannoun*, *A. Fuentes*, K. Heaslip, V. Sridhar, J. Goodall, & J. Sadler, “Transportation Infrastructure Flooding: Sensing Water Levels and Clearing and Rerouting Traffic out of Danger”, *Mid-Atlantic Transportation Sustainability Center Final Report*, Charlottesville, VA, 2017.
21. J. Gong, K. Heaslip, F. Farzan, S. Brink, & S. McNeil, “Big Data: Opportunities and Challenges in Asset Management”, *Center for Advanced Infrastructure and Transportation Final Report*, CAIT-UTC-030, 2016.
20. R. Gerdes, B. Biswas, & K. Heaslip, “Position Verification Systems for an Automated Highway System”, *Mountain Plains Consortium*, Report 15-284, 2015.
19. K. Heaslip, R. Bosworth, R. Barnes, *A. Soltani-Sobh*, & M. Thomas, “Do Changing Prices Portend a Shift in Fuel Consumption, Diminished Greenhouse Gas Emissions, and Lower Fuel Tax Revenue?”, *Mountain Plains Consortium*, Report 15-278, 2015.
18. C. Monz, A. D’Antonio, & K. Heaslip, “Moose-Wilson Corridor Use Levels, Types, Patterns and Impacts in Grand Teton National Park: Technical Report – Summer/Fall 2014 Data”, *National Park Service*, Jackson, WY, 2015.
17. R. Behunin, B. Wood, K. Heaslip, R. Zane, S. Lyman, R. Simmons, & D. Christensen, “USU Alternative and Unconventional Energy Research and Development”, *United States Department of Energy*, Denver, CO, 2014.
16. K. Heaslip, R. Bosworth, R. Barnes, A. Soltani-Sobh, M. Thomas, & Z. Song, “Effects of Natural Gas Vehicles and Fuel Prices on Key Transportation Metrics”, *Washington State Department of Transportation*, Report WA-RD 829.1, 2014.
15. C. Monz, A. D’Antonio, & K. Heaslip, “Moose-Wilson Corridor Use Levels, Types, Patterns and Impacts in Grand Teton National Park: Technical Report – Winter 2014 Data”, *National Park Service*, Jackson, WY, 2014.
14. C. Monz, A. D’Antonio, & K. Heaslip, “Moose-Wilson Corridor Use Levels, Types, Patterns and Impacts in Grand Teton National Park: Technical Report – Summer/Fall 2013 Data”, *National Park Service*, Jackson, WY, 2014.
13. K. Heaslip & R. Winstead, “Research Implementation and Leadership Engagement: 2012 UDOT Research Peer Exchange”, *Utah Department of Transportation*, Salt Lake City, UT, 2013.
12. K. Heaslip, *W. Boggs*, *D. Squire*, & *T. Evans*, “Plan Recommendation for Traffic Sign Management”, *Utah Department of Transportation*, Salt Lake City, UT, 2013.
11. K. Heaslip, *T. Lindheimer*, *B. Haslem*, *K. Gardiner*, & *M. Langford*, “Evaluation of Utah Work Zone Practices”, *Utah Department of Transportation*, Salt Lake City, UT, 2011.
10. K. Heaslip, *W. Boggs*, *T. Evans*, & *M. Langford*, “Evaluation of an Independent CADD Platform for UDOT”, *Utah Department of Transportation*, Salt Lake City, UT, 2011.
9. J. Collura, K. Heaslip, M. Knodler, D. Ni, W. Louisell, A. Berthaume, R. Khanta, K. Moriarty, & F. Wu, “Evaluation and Implementation of Traffic Simulation Models for Work Zones”, *New England Transportation Consortium*, Project No. 05-8, 2010.

8. S. Schrock, K. Heaslip, M. Wang, R. Jasrotia, R. Rescot, & B. Brady, “A Closed Course Feasibility Analysis of Temporary Rumble Strips for Use in Short Term Work Zones”, *Mid-America Transportation Center*, Lincoln, NE, 2010.
7. K. Heaslip, “Cache Valley Transit District Rider Survey Results”, *Utah Transportation Center*, Logan, UT, 2008.
6. S. Srinivasan, G. Carrick, K. Heaslip, & X. Zhu, “Analysis of Crashes in Freeway Work Zone Queues”, *Southeastern Transportation Center*, Knoxville, TN, 2008.
5. L. Elefteriadou & K. Heaslip, “Field Data Collection and Analysis for Freeway Work Zone Capacity Estimation”, *Florida Department of Transportation*, Tallahassee, FL, 2008.
4. L. Elefteriadou, D. Arguea, A. Kondyli, & K. Heaslip, “Impact of Trucks on Arterial LOS and Freeway Work Zone Capacity Part B: Freeway Work Zone Capacity”, *Florida Department of Transportation*, Tallahassee, FL, 2008.
3. L. Elefteriadou, D. Arguea, A. Kondyli, & K. Heaslip, “Impact of Lane Closures on Roadway Capacity: Development of a Two-Lane Work Zone Lane Closure Analysis Procedure: Part A”, *Florida Department of Transportation*, Report Number TRC-FDOT-59056-a-2008, 2008.
2. L. Elefteriadou, D. Arguea, A. Kondyli, & K. Heaslip, “Impact of Trucks on Arterial LOS and Freeway Work Zone Capacity: Part B”, *Florida Department of Transportation*, Report Number TRC-FDOT-54954-b-2007, 2007.
1. J. Collura, K. Heaslip, & M. Knodler, “Demonstration and Evaluation of Highway Improvements to Aid Older Road Users”, *United States Department of Transportation, Federal Highway Administration*, DTFH61-03-RA-00103, 2006.

RESEARCH FUNDING AT VIRGINIA TECH - \$7,001,472 Awarded

- United States Department of Transportation, “Student Fellowship for Review of Artificial Intelligence in Transportation”, \$35,000 (PI, 3/20 - 2/21).
- Commonwealth Cyber Initiative, “Cyber Physical Systems Security and Modeling”, \$50,000 (PI, 7/20 - 6/21).
- Nanosonic, Inc., “Vehicle Communication via Induction Paint”, \$50,000 (Co-PI, 10/19 - 5/20).
- Center for High Performance Manufacturing, “Energy Efficient Material Processing through Automated Process Monitoring and Controls”, \$984,312 (Co-PI, 4/19 - 4/20).
- Ford Motor Company, “AV Infrastructure - ROADSENSE”, \$300,000 (Co-PI, 1/19 - 12/20).
- United States Department of Energy (USDOE), “Enabling Secure and Resilient XFC: A Software/Hardware-Security Co-Design Approach”, \$2,500,000 (Co-PI, 10/18 - 6/21).
- Virginia Department of Transportation (VDOT), “Planning Corridors for Transit Signal Priority while Considering Pedestrian Delay”, \$60,000 (PI, 8/18 - 8/19).
- Virginia Department of Transportation (VDOT), “Assessment of Capacity Changes Due to Automated Vehicles on Interstate Corridors”, \$160,000 (PI, 4/18 - 8/19).
- Greater Washington Partnership, “Project Management for Employer-Led Solutions Taskforce”, \$45,000 (PI, 1/18 - 6/18).
- National Science Foundation (NSF), “[SCC-Planning: Caution: Heavy Load Ahead](#)”, \$99,354 (Co-PI, 9/17 - 8/18).

- MIT Lincoln Lab/Department of Homeland Security, “Aviation Cyber Initiative Research and Development”, \$499,484 (Co-PI,). - *Awarded - VT and MIT could not reach contract terms.*
- District Department of Transportation (DDOT), “Intelligent Transportation Systems Cyber Audit”, \$748,492 (PI,). - *Awarded - VT and DDOT could not reach contract terms.*
- DDOT, “Automated Enforcement of Bus Lanes and Bus Zones”, \$40,000 (PI,). - *Awarded - VT and DDOT could not reach contract terms.*
- DDOT, “Renewable Energy Generation for Transportation Infrastructure”, \$70,000 (PI,). *Awarded - VT and DDOT could not reach contract terms.*
- Mid-Atlantic Transportation Sustainability University Transportation Center (MATS UTC), “An Integrated Dynamic Modeling Approach for Flooding of Coastal Transportation Infrastructure: Assessment of Impacts on Emergency Operations”, \$179,974 (Co-PI, 5/17 - 5/18).
- Rutgers University/USDOT, “The Connection Between State of Good Repair and Resilience”, \$60,129 (PI, 9/16 - 12/17).
- Security and Software Engineering Research Center (S2ERC), “Mapping Industrial Control Systems”, \$140,621 (PI, 7/16 - 7/17).
- MATS UTC, “Transportation Infrastructure Flooding: Sensing Water Levels and Clearing and Rerouting Traffic Out of Danger”, \$199,106 (Co-PI, 5/16 - 8/17).
- NSF, “[CPS: Synergy: Collaborative Research: Semi-Automated Emergency Response System](#)”, \$750,000 (Co-PI, 9/15 - 12/19).
- Northern Virginia Transportation Commission, “Analyzing and Demonstrating the Economic Benefits of Transit Investment in Northern Virginia”, \$30,000 (PI, 9/15 - 12/15).

RESEARCH FUNDING AT UTAH STATE - \$7,074,773 Awarded

- National Science Foundation (NSF), “[TWC: Medium: Secure and Resilient Vehicle Platooning](#)”, \$1,213,284 (Co-PI, 6/14 - 5/18).
- Utah Department of Transportation (UDOT), “Implementation of Aerial LiDAR Technology to Update Highway Feature Inventory”, \$80,000 (Co-PI, 2014 - 2016).
- Western Michigan University/USDOT, “Transportation Research Center for Livable Communities”, \$180,000 (Co-PI, 2014 - 2016).
- National Park Service, “Moose-Wilson Road Visitor Movement Study”, \$383,345 (Co-PI, 2013 - 2014).
- North Dakota State University/USDOT, “Mountain Plains Consortium”, \$777,082 (PI, 2012 - 2016).
- Rutgers University/USDOT, “Center for Advanced Infrastructure and Transportation”, \$756,250 (Co-PI, 2012 - 2013).
- United States Forest Service, “Pavement Management System Implementation Intermountain Region”, \$122,752 (PI, 2012 - 2013).
- UDOT, “2012 UDOT Research Peer Exchange”, \$26,932 (PI, 2012).
- Washington State Department of Transportation, “Effects of VMT, GHGs, and Revenue from Changing Fuel Prices and Availability”, \$100,000 (PI, 2012 - 2013).
- UDOT, “Development of a Sign Management Plan and System for UDOT”, \$50,000 (PI, 2011 - 2013).

- United States Department of Energy, “Alternative and Unconventional Energy Research and Development”, \$946,979 (Co-PI, 2011 - 2013).
- Utah Transportation Center (UTC), “Transportation Network Resiliency Framework Development”, \$80,000 (PI, 2010 - 2011).
- UTC, “Integrated Corridor Pricing Structure Modeling and Evaluation”, \$25,000 (PI, 2010 - 2011).
- UDOT and UTC, “Evaluation of Utah Work Zone Design Practices”, \$50,000 (PI, 2010).
- UDOT, “Evaluation of an Independent CADD Platform for UDOT”, \$30,000 (PI, 2010).
- UDOT, “Safety Enhancement Program for Local Governments”, \$90,000 (PI, 2009 - 2012).
- UDOT and USDOT, “Utah Local Technical Assistance Program (Utah LTAP)”, \$1,589,326 (PI, 2009 - 2014).
- UTC and USU College of Agriculture, “Transportation Correlation to Quality of Life”, \$15,000 (PI, 2009).
- Federal Highway Administration (FHWA), “Product Demonstration Showcase (Highways for Life)”, \$75,000 (PI, 2009).
- Illinois Institute of Technology and FHWA, “Highway Work Zone Safety”, \$90,000 (PI, 2009 - 2010).
- UDOT, “Utah Local Signing Program”, \$90,000 (PI, 2009).
- American Association of State Highway and Traffic Officials, “NTPEP: Field Evaluation of Pavement Marking Materials”, \$285,839 (PI, 2009).
- Cache Metropolitan Planning Organization (CMPO), “Data Collection Development of CMPO’s Long Term Transportation Planning Model”, \$8,000 (PI, 2008).
- Cache Valley Transit District, “Fare Free Transit Rider Preferences”, \$9,894 (PI, 2009).

INVITED TALKS

56. Information Security for Connected and Automated Vehicles, Virginia Information Technologies Agency Information Security Officer Advisory Group Meeting, Virtual 6/20
55. Securing “Smart” Critical Infrastructure while Preserving Efficiency, 2019 GE Edge & Controls Symposium, Niskayuna, NY 9/19
54. Electric Vehicle Charging Infrastructure Cybersecurity, International Conference on Transportation & Development 2019, Alexandria, VA 6/19
53. Current Research on Automation of the Driving Process, Transportation Research Forum, Washington, DC 5/19
52. Future Transportation Research Areas, University of Seoul Transportation Seminar, Seoul, South Korea 11/18
51. The Role of Transportation Systems in Building Resilience and Aiding Recovery in the United States, Korea Research Institute for Human Settlements International Seminar, Sejong City, South Korea 11/18
50. Understanding Vehicle & Infrastructure Cybersecurity Challenges for Intelligent Transportation Systems & Connected/Automated Vehicles, Virginia Cyber Security Partnership, Chester, VA 6/18
49. Is the Message Getting Across?: Sharing Cybersecurity Threat Intelligence Among Agencies and Operators, ITS America Annual Meeting, Detroit, MI 6/18

48. Transportation Cyber-Physical Security: Things We Should Know, USDOT Talking Technology and Transportation in Education (T3e) Webinars, Online 5/18
47. Cybersecurity Risks for Automated Vehicles, University of Michigan Transportation Seminar, Ann Arbor, MI, 2/18
46. Potential Cybersecurity Risks for Automated Vehicles in the Commonwealth of Virginia, Virginia Information Technology Agency, Chester, VA, 2/18
45. Transportation Cybersecurity for Automated Vehicles, Midwestern Transportation Conference, Ames, IA, 8/17
44. Shifting Gears: New Pathways to Autonomous Mobility, Young Professionals in Transportation, Women's Transportation Seminar, and Transportation Research Forum Joint Event, Washington, DC, 8/17
43. Transportation Cybersecurity for Automated Vehicles, Intelligent Transportation Society of Virginia, Richmond, VA, 5/17
42. Interaction of Industrial Internet of Things (IoT) with the Wider IoT and the Impact of Critical Infrastructure Security, EMERGE 2017 Workshop, Arlington, VA, 4/17
41. Autonomous systems, AI and Self-Driving Cars, Fairfax County Innovation Discourse, Fairfax, VA, 4/17
40. Smart Cities and Municipal Management, Smart Cities Summit, Boston, MA, 12/16
39. Transportation, IoT, Smart Cities, and Intelligent Infrastructure, Washington DC Section of the Institute of Transportation Engineers, Falls Church, VA, 12/16
38. Cyber-Physical Systems and the Intelligent Infrastructure of Tomorrow, National Science Foundation Leadership, Arlington, VA, 12/16
37. How a Wirelessly Charged Driverless Car Can Change Everything, Virginia Engineers Conference, Portsmouth, VA 9/16
36. Panel: In-Motion Charging and Automated/Connected Vehicles - Synergistic Potential, Conference on Electrified Roads and Vehicles, Logan, UT, 5/16
35. Transportation Infrastructure's Role in Promoting Resilience in an Interconnected World, University of Massachusetts/New England Section of the Institute of Transportation Engineers Technical Day, Amherst, MA, 3/16
34. The Impact of Automated Vehicles on Roadway Design and Capacity Analysis, 2016 Virginia Section of the Institute of Transportation Engineers Spring Meeting, Blacksburg, VA, 3/16
33. How a Wirelessly Charged Driverless Car Could Change Everything, Virginia Tech Creative Learning Academy for Senior Scholars (VT CLASS), Ashburn, VA, 3/16
32. Using Big Data to Support Asset Management Decision Making, 5th International Transportation Systems Performance Measurement and Data Conference, Denver, CO, 6/15
31. Connected Vehicles and Cybersecurity, 2015 IEEE Transportation Electrification Conference and Expo, Dearborn, MI, 6/15
30. A Method for Prioritizing Measures for Resilience, Charleston Resilience Network, Charleston, SC, 4/15
29. How a Wirelessly Charged Driverless Car Could Change Everything, Boyer Endowed Lecture, Department of Civil and Environmental Engineering, UMass Amherst, Amherst, MA, 3/15
28. A Method for Prioritizing Measures for Resilience, City of Cedar Rapids and Linn County, IA Working Group on Resilience, Cedar Rapids, IA, 3/15

27. Vehicle Automation: An Enabling Technology for Wireless Power Transfer, Conference on Electric Roads and Vehicles, Park City, UT, 2/15
26. Traffic and LiDAR Data Management, Big Data for Transportation Infrastructure Management Workshop, New Brunswick, NJ, 12/14
25. Characterization of Damage of UDOT's Sign Population, 2nd American Society of Civil Engineering Transportation and Development Institute Congress, 6/14
24. Continuing Momentum in Communicating Your Message: Getting Through the Valley of Death, Council of University Transportation Centers Annual Meeting, Lincoln, NE 6/14
23. United States Automated Vehicle Research and Demonstration, Workshop on the Future of Road Vehicle Automation, Palo Alto, CA 7/13
22. Work Zone Design for Local Governments, Utah League of Cities and Towns Road School, St. George, UT, 4/13
21. Potential for Natural Gas Vehicle Market Penetration, Rocky Mountain Petroleum Accountants Society, Salt Lake City, UT, 4/13
20. Vehicle Electrification Research at Utah State University, United States Department of Transportation Roadway Electrification Workshop, Turner-Fairbank Highway Research Center, McLean, VA, 12/12
19. Teaching ITS to a Web 2.0 Generation, 2012 Intelligent Transportation Society of America Annual Meeting, National Harbor, MD, 5/12
18. Using Technology to Assist with Traffic Data Collection, Utah League of Cities and Towns Road School, St. George, UT, 4/12
17. Sign Retroreflectivity Management: The Federal Mandate, UDOT Annual Conference, Sandy, UT, 11/11
16. How LTAP can Assist Local Governments and UDOT with Asset Management, UDOT Annual Conference, Sandy, UT, 11/11
15. A Tool for the Improvement of Work Zone Safety, UDOT Annual Conference, Sandy, UT, 11/11
14. Educating the Future Generation of ITS Professionals, Intelligent Transportation Systems World Congress, Orlando, FL, 10/11
13. Automated Electric Transportation: Transforming America's Transportation Future, Intelligent Transportation Society of America Webinar Series, 11/10
12. Intelligent Transportation Systems Research at USU, Ecole d'ingénieurs en Génie des Systèmes Industriels (EIGSI), La Rochelle, France, 7/10
11. Intelligent Transportation Systems Research at USU, Institut National de Recherche en Informatique et en Automatique (INRIA), Paris, France, 7/10
10. Automated Electric Transportation, Continental Corporation, Regensburg, Germany 7/10
9. Preparing the Next Generation of ITS/EPS Professionals, Intelligent Transportation Society of America Annual Meeting, Houston, TX, 5/10
8. Preparing the Next Generation of Transportation Security Professionals, Intelligent Transportation Society of America Annual Meeting, Houston, TX, 5/10
7. Traffic Calming Techniques for Local Roadways, North Logan Planning Commission, North Logan, UT, 10/08

6. Modeling Impacts of Driver Behavior on Highway Performance and Safety During Forced Merges in Work Zones, 2006 Intelligent Transportation Systems World Congress, London, UK, 10/06
5. The Value and Benefits of HOT Lanes, FAIR Lanes and Toll Roads to the Toll-Paying Driver, 2006 ITS America Annual Meeting and Exposition, Philadelphia, PA, 5/06
4. Automated Speed Enforcement in Work Zones, 2006 Massachusetts ITE Transportation Research Symposium, Boston, MA, 2/06
3. Modeling Driver Behavior in Work Zones, Doctoral Student Research in Transportation Operations and Traffic Control Session at the 2006 Transportation Research Board Annual Meeting, Washington, DC, 1/06
2. Making Work Zones Safer for Older Drivers, 2005 New England ITE Annual Meeting, Warwick, RI, 12/05
1. Pedestrian Safety Audit of the UMass Amherst Campus, 2005 Massachusetts ITE Transportation Research Symposium, Cambridge, MA, 2/05

POPULAR MEDIA APPEARANCES

25. Politifact.com, "[Understanding infrastructure: The cost of repairing our roads, bridges and dams](#)", January 6, 2020
24. Bristol Herald Courier, "[In response to criticism on roundabouts, officials praise efficiency, safety and cost](#)", August 31, 2019
23. Politifact.com, "[Political uncertainty envelops Trump's vow to revamp U.S. infrastructure](#)", January 7, 2019
22. Washington Post, "[Metro union's strike vote was two years in the making](#)", July 16, 2018
21. WTOP-FM, "[DC considers adding bus lane cameras on top of speed, red light photo tickets](#)", April 25, 2018
20. WAMU 88.5 FM, "[WMATA Rail Electrical Arcing Interview](#)", April 17, 2018
19. SiriusXM Business Radio Powered by Wharton, Knowledge@Wharton, "[Would Trump's Infrastructure Plan Drive the U.S. Forward or Backward?](#)", February 20, 2018
18. Architectural Digest, "[How President Trump's Infrastructure Plan Could Hurt Many Voters Who Helped Elect Him](#)", February 15, 2018
17. Huffington Post, "[Trump's New Infrastructure Plan Is Kind Of Underwhelming](#)", February 12, 2018
16. Esquire, "[Forget It, Jake. It's Infrastructure Week.](#)", February 12, 2018
15. WTOP-FM, "[Reality Check: 2017 Virginia Governor's Race, Candidates for Va. Governor have Similar Positions on Transportation: What Voters Need to Know](#)", October 23, 2017
14. Wired, "[Live The Maddening Life of a Traffic Engineer With A 3 Dollar Game](#)", September 20, 2017
13. WAMU 88.5 FM, "[Metro Defends Decision to Run Trains Manually Despite Inefficiencies and Worker Stress](#)", June 9, 2017
12. WAMU 88.5 FM, "[Metro to Investigate Rumbling and Shaking in Homes Above Green Line](#)", January 9, 2017
11. Wired, "[Uber's Mildly Helpful Data Tool Could Help Cities Fix Streets](#)", January 8, 2017
10. Roxboro (PA) Patch, "[SEPTA Strike Day 1: Picketers Delay Regional Rail](#)", November 1, 2016

9. WAMU 88.5 FM, "Metropocalypse Podcast, Episode 21: Shocks to the System", October 31, 2016
8. Washington Post, "Blue Line riders ask why they're always Metro's 'punching bag'", April 9, 2016
7. SF Gate, "BART snarl likely to last weeks; busy station stays closed", March 19, 2016
6. Washington Post, "Metro riders form union to serve as platform to address concerns", September 13, 2015
5. Digitaltrends.com, "National parks are turning into 'The Truman Show' with GPS tracking of visiting humans", September 13, 2015
4. Seattle Times, "National parks track a new species: Homo sapiens", September 13, 2015
3. Mashable (Associated Press), "Why scientists are tracking how humans move through national parks", June 19, 2015
2. Richmond Times-Dispatch, "Mass transit a catalyst for growth of region", September 11, 2014
1. Standard-Examiner (Ogden, UT), "USU team guards against hacker threats to automated cars", August 29, 2014

THESES/DISSERTATIONS SUPERVISED

1. Bumsik Kim – PhD 12/20 "Modeling Automated Vehicles and Connected Automated Vehicles on Highways" *VT*
2. Cara Dietrich – MS 12/20 "The Impact of COVID-19 on Public Transit and Micromobility Ridership" *VT*
3. Gaby Joe Hannoun – PhD 6/19 "Optimization of an Emergency Response Vehicle's Intra-Link Movement in Urban Transportation Networks Utilizing a Connected Vehicle Environment" *VT*
4. Adesh Vrushabharaju-Jain – MS (Project) 5/19 "Renewable Energy Technology in Public Transportation" *VT*
5. Andrew Thorpe – MS (Project) 5/19 "Effect of Roundabout Geometric Characteristics on Safety" *VT*
6. Kaveh Bakhsh Kelarestaghi – PhD 5/19 "A Risk Based Approach to Intelligent Transportation Systems Security" *VT*
7. Antonio Fuentes – PhD 1/19 "Proactive Decision Support Tools for National Park and Non-Traditional Agencies in Solving Traffic-Related Problems" *VT*
8. Karan Bedi – MS (Project) 12/18 "Performance Evaluation of a Network in Blacksburg" *VT*
9. Sina Dabiri – PhD 12/18 "Application of Deep Learning in Intelligent Transportation Systems" *VT*
10. Ganapathi Badireddi – MS (Project) 12/18 "Automated Enforcement of Bus Lanes and Bus Zones" *VT*
11. Jonathan Walker – PhD 8/18 "A Method of Ascertaining the Null Points from a Dedicated Short-Range Communication (DSRC) Roadside Unit (RSU) at a Highway On/Off-Ramp" *VT*
12. Yanbo Chen – MS (Project) 7/18 "PCI Forecasting Model and Selection of Pavement Treatment Strategies for Flexible Pavement within Iowa" *VT*
13. Akhil Infant – MS (Project) 5/18 "Considerations for Implementing Real-Time Information Systems for Transit: A Literature Review" *VT*
14. Gaby Joe Hannoun – MS 12/17 "Framework for better Routing Assistance for Road Users exposed to Flooding in a Connected Vehicle Environment" *VT*

15. [Ashish Anand](#) – MS (Project) 12/17 “Using New York’s Taxi Trip Records to Analyze People’s Mobility Patterns in Manhattan” *VT*
16. [Mirla Abi Aad](#) – MS 12/17 “Evaluating Responses to Contraflow for Hurricane Evacuation” *VT*
17. [Fatema Siddiquee](#) – MS (Project) 8/17 “A Study on Travel Functions using VISSIM Generated Data” *VT*
18. [Majid Khalilikhah](#) – PhD 5/16 “Traffic Sign Management: Data Integration and Analysis Methods for Mobile LiDAR and Digital Photolog Big Data” *USU*
19. [Ali Soltani-Sobh](#) – PhD 5/15 “Transportation Economics and Energy” *USU*
20. [Antonio Fuentes](#) – MS 7/14 “An Analysis of Sensitivity in Economic Forecasting for Pavement Management Systems” *USU*
21. [Donghyung Yook](#) – PhD 8/14 “Models and Solution Algorithms for Asymmetric Traffic and Transit Assignment Problems” *USU*
22. [James Fishelson](#) – MS 8/13 “Platooning Safety and Capacity in Automated Electric Transportation” *USU*
23. [Joshua Jones](#) – MS 5/13 “A Method to Quantify Road Safety Audit Data and Results” *USU*
24. [Wesley Boggs](#) – MS 12/12 “An Analysis of Traffic Sign Performance for the Establishment of a Maintenance Plan” *USU*
25. [Sunil Pant](#) – MS 12/12 “Transportation Network Resiliency: A Study of Self-Annealing” *USU*
26. [Derek Freckleton](#) – MS 12/12 “Traffic Operations Analysis of Merging Strategies for Vehicles in an Automated Electric Transportation System” *USU*
27. [Devin Squire](#) – MS 10/12 “Developing a Framework to Analyze The Effect of Mobile Technology Within A Department of Transportation” *USU*
28. [Travis Evans](#) – MS 5/12 “Development of Assessment Strategies for Sign Retroreflectivity” *USU*
29. [Kirk Jackson](#) – Undergraduate Honors Thesis 5/12 “Pavement Deterioration Models from Collected in Field Data” *USU*
30. [Cristian Vásquez](#) – MS (Project) 12/11 “An Alternative Pavement Management System Approach for Local Governments.” *USU*
31. [Brandon Brady](#) – MS (Project) 12/11 “Environmental Effects on Sign Retroreflectivity in Utah” *USU*
32. [Tomas Lindheimer](#) – MS 12/10 “Safety Evaluation of Work Zone Practices in Utah” *USU*
33. [Ajit Makhija](#) – MS (Project) 7/10 “Discrete Choice Model Estimation of Transit Ridership” *USU*
34. [Nayel Urena Serulle](#) – MS 7/10 “Transportation Network Resiliency: A Fuzzy Systems Approach” *USU*
 - **Other (coursework only) MS completion:** [Phillip Gotthelf](#) ’19 (*VT*), [Xiaoran Li](#) ’19 (*VT*), [Karanveer Kapania](#) ’18 (*VT*), [Samuel Tyler](#) ’14 (*USU*), [Byron Haslem](#) ’12 (*USU*), [Luis Hidalgo](#) ’12 (*USU*), [Juan Rodriguez](#) ’12 (*USU*), and [William Jones](#) ’10 (*USU*)
 - **Current Graduate Students:** (*PhD*) - [Doyeon Kim](#). (*Masters*) - [Emily Jannace](#), [Ian McManus](#), and [Marcella Kaplan](#)

- **Graduate Committee Member (at Virginia Tech):** (*PhD*) – Mihir Rimjha, Mahsa Foruhandeh (ECE), Mohammad Aljamal, Taqwa Alhadidi, Alexandria Noble, Aphisit Phoowarawutthipanich, Douglas Cobb, and Abdelwahab Al Hammadi. (*Masters*) - Helena Brewer, Sk. Md. Ishraque, Michael Glass, Mia Kuier Li, Sayantan Tarafdar, Yu-Te (Kevin) Wu, Andrea Ruano Duke, Marcus Cadman, Sina Dabiri (CS), Kyle Maeger, Mihir Rimjha, Mani Bollempalli, Eshanali Keshteh Gar, Elham Hajhashemi, Shalini Sankaranarayanan, Harshala Sardar, Amal Chacko, Mohit Mathew, Noelle Wilcox, Nida Syed, Atizaz Ali, Snehanshu Banerjee, Kunal Singh, Paranjyoti Lahkar, and Woojung Kim.
- **Graduate Committee Member (at Utah State University):** (*PhD*) - Sarawut Jansuwan, Songyot Kitthamkeorn, Songkyu Ryu, and Ryan Barnes. (*Masters*) - Jaimel Cury, Erik Robison, Tawan Sridma, Burke Peterson, Joshua Jensen, Brolin Bundy, Christopher Pali, Megan Emmons, Sara Beck, Trevor Price, Pooja Kavathekar, Spencer Jackson, Bhaswati Deka, and Colton Smith.

TEACHING

Virginia Tech, Civil and Environmental Engineering

- **CEE 5634: Mass Transit Systems**

Term	Students	Evaluations	Teaching Effectiveness Score
*Spring 2015	9	8	5.0
Spring 2016	22	9	5.0
Spring 2017	32	29	5.34
Spring 2018	14	11	5.54
Spring 2019	13	12	5.50
Spring 2020	15	11	5.91

Notes: "Overall, the instructor's teaching was effective."

1 = Strongly Disagree to 6 = Strongly Agree, * = New Preparation

- **CEE 3604: Introduction to Transportation Engineering**

Term	Students	Evaluations	Teaching Effectiveness Score
Spring 2016 (Online)	34	16	3.13
Fall 2018 (Classroom)	47	26	4.08

- **CEE 4984: Special Study: Critical Infrastructure Cybersecurity**

Term	Students	Evaluations	Teaching Effectiveness Score
*Fall 2017	10	9	5.2

- **CEE 4624/5624: Planning of Transport Facilities/Transportation & Land Use**

Term	Students	Evaluations	Teaching Effectiveness Score
*Spring 2018 (4624)	11	10	5.11
*Spring 2018 (5624)	16	11	5.27
Spring 2019 (4624)	7	6	5.83
Spring 2019 (5624)	6	6	6.0
Fall 2019 (4624)	21	19	5.8
Fall 2020 (4624)	50	32	5.69

- CEE 5220/6220: **Traffic Engineering**

Term	Students	Evaluations	OQC	IE
*Fall 2008	9	7	5.1	5.3
Fall 2009	12	12	5.0	4.9
Fall 2010	18	17	5.4	5.4
Fall 2011	17	14	5.5	5.6
Fall 2012	7	6	5.5	5.6
Fall 2013	7	2	5.0	4.5

Notes: OQC = Overall Quality Course, IE = Instructor Effectiveness
 1 = Poor to 6 = Excellent, * = New Preparation

- CEE 3210: **Introduction to Transportation Engineering**

Term	Students	Evaluations	OQC	IE
*Spring 2009	50	45	4.1	3.9
Spring 2010	60	56	4.3	4.2
Spring 2011	61	53	4.2	4.1
Spring 2012	34	28	4.8	4.6
Spring 2013	34	27	4.5	4.5
Spring 2014	53	37	4.3	4.3

- CEE 6260: **Public Transportation**

Term	Students	Evaluations	OQC	IE
*Fall 2010	11	11	5.6	5.6
Spring 2013	5	5	5.7	5.7

- CEE 5240/6240: **Urban and Regional Transportation Planning**

Term	Students	Evaluations	OQC	IE
*Fall 2011	16	13	4.7	4.6

- CEE 5230/6230: **Geometric Design of Highways**

Term	Students	Evaluations	OQC	IE
*Spring 2014	8	8	4.8	4.8

AFFILIATIONS/CONSULTING

- TRANSPORTATION RESEARCH BOARD, MEMBER
 - Member of ACP55: Standing Committee on Traffic Control Devices, January 2020 - Present
 - Member of AHD55: Signing & Marking Materials Committee, January 2012 - 2020 (Committee Dissolved)
 - Member of AHB55: Work Zone Traffic Control Committee, Member from 2005 – 2011, 2014 - 2020, Paper Review Coordinator, 2019 (Committee Dissolved)
 - Friend of AHB30: Vehicle Highway Automation, Member from 2010 – 2016
 - Friend of A1E06: Committee on Public Transportation Marketing and Fare Policy, Member from 2004 - 2007
 - Friend of AHB45: Committee on Traffic Flow Theory & Characteristics, 2006 – Present
 - Friend of AHB40: Committee on Highway Capacity & Quality of Service, 2007 – Present
 - Friend of ABE90: Transportation in Developing Countries, 2007 – Present
 - Friend of ABE40: Critical Transportation Infrastructure Protection, 2009 – Present
- INSTITUTE OF TRANSPORTATION ENGINEERS, MEMBER
 - Faculty Advisor, Virginia Tech NCR Student Chapter, 2014 – 2017
 - Faculty Advisor, Utah State University Student Chapter, 2007 – 2014
 - President, UMass Amherst Student Chapter, 2005 – 2006
 - President, Virginia Tech Student Chapter, 2002 – 2003
 - Committee Member, VASITE University Chapter Relations, 2004
- AMERICAN SOCIETY OF CIVIL ENGINEERS, MEMBER
- CHI EPSILON, NATIONAL CIVIL ENGINEERING HONOR SOCIETY, MEMBER

HONORS

- AT VIRGINIA TECH
 - 2019 G.V. Loganathan Faculty Achievement Award for Excellence in Civil Engineering Education
 - 2017 Virginia Tech Favorite Faculty Award
 - 2017 Transportation Research Board Annual Meeting Practice Ready Paper Designation for “Evaluation of Vehicle Parking Queuing in a National Park: Case Study of the Laurence S. Rockefeller Preserve in Grand Teton National Park”
 - 2016 Transportation Research Board Annual Meeting Practice Ready Paper Designation for “Important Environmental Factors Contributing to the Temporary Obstruction of the Sign Messages”
 - 2015 Transportation Research Board Annual Meeting Practice Ready Paper Designation for “Effect of Improving Vehicle Fuel Efficiency on Fuel Tax Revenue and Greenhouse Gas Emissions”
 - 2015 Outstanding Alumni, University of Massachusetts Institute of Transportation Engineers Student Chapter
- AT UTAH STATE
 - 2013-2014 Outstanding Young Alumni, Virginia Tech Department of Civil & Environmental Engineering
 - 2014 Civil & Environmental Engineering Teacher of the Year
 - 2013 Transportation Research Board Annual Meeting Practice Ready Paper Designation for “Analysis of Sign Damage and Failure: Utah Case Study”

- 2013 Civil & Environmental Engineering Undergraduate Research Mentor of the Year
 - 2012 Transportation Research Board Annual Meeting Practice Ready Paper Designation for “Evaluation of Transportation Network Resiliency with Consideration for Disaster Magnitude”
 - 2012 Civil & Environmental Engineering Outstanding Researcher
 - 2011 Civil & Environmental Engineering Outstanding Researcher
 - 2011 College of Engineering Undergraduate Research Mentor of the Year
 - 2011 Civil & Environmental Engineering Undergraduate Research Mentor of the Year
 - 2010 Energy Dynamics Laboratory Engineering Collaborator of the Year (with Kevin Womack)
- STUDENT AWARDS
 - *Emily Jannace* - 2019-20 New Horizon Graduate Scholar (\$24,000), 2019 Dwight David Eisenhower Transportation Fellowship - United States Department of Transportation - Federal Highway Administration (\$35,000)
 - *Kaveh Kelarestaghi* - 2018-19 Deloitte Foundation Data Analytics Fellowship (\$10,000)
 - *Antonio Fuentes* - 2015-2019 New Horizon Graduate Scholar (\$48,000), and 2015 Pratt Fellowship Recipient (\$5,000)
 - *Derek Freckleton* - 2012 Institute of Transportation Engineers Intermountain Section Student Best Paper Award, 2011 Institute of Transportation Engineers Intermountain Section Student Best Paper Award, and 2011 Mountain Plains Consortium Student Retreat Best Presentation Award
 - *Luis Hidalgo* - 2011 Institute of Transportation Engineers Intermountain Section Ellis Mathes Scholarship (\$2,000)
 - *James Fishelson* - 2012 National Science Foundation East Asia Pacific Summer Institute Program Fellowship (\$5,000), 2011 Institute of Transportation Engineers Intermountain Section Ellis Mathes Scholarship (\$2,000), and 2011 National Science Foundation Graduate Research Fellowship, Honorable Mention
 - *Michael Langford* - 2011 ASCE Rocky Mountain Conference Student Technical Paper, 2nd Place
 - *Kirk Jackson* - 2012 USU Undergraduate Research Student Showcase, College of Engineering Honorable Mention, Selected for Undergraduate Research Day on Capitol Hill, Salt Lake City, UT, January 2012, and 2011 Mountain Plains Consortium Student Retreat Best Undergraduate Presentation Award (4th Overall)

SERVICE TO THE UNIVERSITY

- AT VIRGINIA TECH
 - *Group Coordinator*, Transportation Infrastructure & Systems Engineering (CEE), 2017-Present
 - *Member*, Future Curriculum Working Group (CEE), 2019-Present
 - *Member*, Performance Review Document Development Committee (CEE), 2017-18
 - *Stakeholder Committee Member*, Intelligent Infrastructure for Human Centered-Communities Destination Area (Provost’s Office), 2016-Present
 - *Executive Committee Member*, Intelligent Infrastructure for Human Centered-Communities Destination Area Faculty Design Team (Provost’s Office), 2016-2017
 - *Faculty Lecturer*, C-Tech2 (College of Engineering), 2016 & 2019
 - *Chair*, Information Systems Lab Project Manager Search Committee (Hume Center), 2016
 - *Member*, Faculty Evaluation Committee (CEE), 2016-17
 - *Member*, NCR Research Leader in Cyber Security Search Committee (NCR VP’s Office), 2015
 - *Member*, Grants Coordinator Search Committee (CEE), 2014

- AT UTAH STATE UNIVERSITY

- *Chair*, Transportation Engineering Research Assistant Professor Search Committee, 2013
- *Member*, University Transportation Sustainability Council, 2011 – 2014
- *Member*, Civil & Environmental Engineering ABET Committee, 2011 – 2014
- *Guest Lecturer*, Civil & Environmental Engineering Freshmen Seminar, 2008 – 2011
- *Guest Lecturer*, Honors 1340: Technological Change in the 20th Century, 2011 & 2012
- *Instructor*, Utah State University Fundamentals of Engineering Review Class, 2010
- *Course Instructor*, Utah State University Curling Class, 2010 - 2014
- *Member*, Utah State University College of Engineering Strategic Planning - Untenured Prof. Committee, 2010
- *Co-Chair*, Engineering Undergraduate Research Program Selection Committee, 2009
- *Faculty Advisor*, USU Institute of Transportation Engineers Student Chapter, 2008 – 2014

SERVICE TO THE PROFESSION

- Committees

- *Member*, Transportation Research Board (AHD55): Committee on Signing and Marking Materials, 2012 – Present
- *Member*, Transportation Research Board (AHB55): Work Zone Traffic Control Committee, 2005 – 2011, 2014 - Present
- *Member*, Institute of Transportation Engineers Transportation Curriculum Advisory Committee, 2007 – Present

- Faculty Promotion and Tenure

- *Review for Promotion to Associate Professor and Tenure*, One Faculty Member, 2020 – Present
- *Review for Promotion to Professor*, One Faculty Member, 2020 – Present

- Workshop & Conference Sessions

- *Invited Member*, USDOT 2019 ITS Professional Capacity Building University Workshop, Tampa, FL, 2019
- *Invited Member*, USDOT 5th ITS Professional Capacity Building University Workshop, McLean, VA, 2017
- *Invited Member*, USDOT 4th ITS Professional Capacity Building University Workshop, Washington, DC, 2016
- *Scientific Program Chair*, International Symposium for Next Generation Infrastructure, Washington, DC, 2015
- *Workshop Organizing Committee*, Workshop on the Future of Road Vehicle Automation, Palo Alto, CA, 2013
- *Workshop Organizing Committee*, National Science Foundation Transportation Educators Workshop, Seattle, WA, 2012
- *Workshop Organizing Committee*, Workshop on the Future of Road Vehicle Automation, Irvine, CA, 2012
- *Invited Member*, “Intelligent Transportation Systems Educators Expert Panel” Intelligent Transportation Society of America, Washington, DC, 2012
- *Session Chair*, “Helping Your State DOT Host a Multi-State Peer Review of Their Research Program”, Council of University Transportation Centers Annual Meeting, Memphis, TN, 2013

- *Session Chair*, “Automation Transition & Deployment Strategies”, Workshop on the Future of Road Vehicle Automation, Irvine, CA, 2012
- *Session Chair*, “Combining Wireless Electric Vehicle Charging with Automation: Opportunities & Challenges”, 2011 Intelligent Transportation Systems World Congress, Orlando, FL, 2011.
- *Session Chair*, “Current Work in Automated Electric Transportation Research”, 2011 Intelligent Transportation Systems World Congress, Orlando, FL, 2011.
- *Session Chair*, “Traffic Control Enhancement & Impediments”, ITE Western District Annual Meeting, Anchorage, AK, 2011
- *Session Chair*, “Student Forum”, ITE Western District Annual Meeting, Anchorage, AK, 2011
- Paper and Proposal Review
 - *Paper Reviewer*, ISCRAM 2020, the 17th International Conference on Information Systems for Crisis Response and Management
 - *Paper Reviewer*, Transactions on Knowledge Discovery from Data
 - *Paper Reviewer*, World Electric Vehicle Journal
 - *Paper Reviewer*, International Journal of Disaster Risk Reduction
 - *Paper Reviewer*, 2018 IEEE International Conference on Intelligent Transportation Systems
 - *Paper Reviewer*, International Journal of Critical Infrastructure Protection
 - *Paper Reviewer*, Public Transport
 - *Paper Reviewer*, COTA International Symposium for Emerging Transportation Technologies (COTA ISETT2018)
 - *Paper Reviewer*, IEEE Transactions on Intelligent Transportation Systems
 - *Paper Reviewer*, Journal of Computing in Civil Engineering
 - *Paper Reviewer*, Transportation Research Part A
 - *Paper Reviewer*, Transportation Letters: The International Journal of Transportation Research
 - *Paper Reviewer*, Journal of Intelligent Transportation Systems
 - *Paper Reviewer*, Transportation Research: Part C
 - *Paper Reviewer*, American Society of Civil Engineers - Journal of Transportation Engineering, Part A: Systems
 - *Paper Reviewer & Program Committee Member*, 5th International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS)
 - *Paper Reviewer*, Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board
 - *Proposal Reviewer*, Swiss National Science Foundation
 - *Proposal Reviewer*, IIHCC 2020 Grant Solicitation
 - *Proposal Reviewer*, ICTAS Junior Faculty Award
 - *Proposal Reviewer*, National Science Foundation
 - *Proposal Reviewer*, Oregon Transportation Research and Education Consortium
 - *Proposal Reviewer*, University of Massachusetts Transportation Center
 - *Proposal Reviewer*, Mid-America Transportation Center
 - *Proposal Reviewer*, Region 2 University Transportation Center
 - *Proposal Reviewer*, Mountain Plains Consortium
 - *Proposal Reviewer*, Region X ”PacTrans” Transportation Center
 - *Proposal Reviewer*, Center for Connected Multimodal Mobility Transportation Center

- *Proposal Reviewer*, University of California-Davis, Institute of Transportation Studies
- *Proposal Reviewer*, Florida Atlantic University, Freight Mobility Research Institute
- *Proposal Reviewer*, University of Florida, The Southeastern Transportation Research, Innovation, Development and Education (STRIDE) Center