

LINDA NG BOYLE

Curriculum Vitae

Industrial & Systems Engineering
Civil and Environmental Engineering (joint appointment)
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EDUCATIONAL HISTORY

University of Washington, Seattle, WA
Ph.D. Civil and Environmental Engineering
Aug 1998

Dissertation: Statistical analysis of in-vehicle traffic advisory systems on driving behavior

University of Washington, Seattle, WA
MS, Inter-Engineering
Mar 1994

Thesis: Statistical and econometric analysis of user requirements for advanced traveler information systems

State University of New York at Buffalo, Buffalo, NY
BS, Industrial Engineering
May 1986

EMPLOYMENT HISTORY

University of Washington
Seattle, WA, USA

Professor and Chair, Department of Industrial & Systems Engineering, 2014–present

Professor, Department of Civil & Environmental Engineering, 2014–present

Associate Professor, Department of Industrial & Systems Engineering, 2009–2014

Associate Professor, Department of Civil & Environmental Engineering, 2009–2014

University of Iowa
Iowa City, IA, USA

Associate Professor, Department of Mechanical & Industrial Engineering, 2008–2009

Assistant Professor, Department of Mechanical & Industrial Engineering, 2002–2008

Assistant Professor, Public Policy Center, 2002–2007

U.S. Department of Transportation–Volpe Center
Cambridge, MA, USA

Senior Researcher, Office of Safety and Security, 2000–2002

KDD & Associates
Seattle, WA, USA

Senior Traffic Engineering Consultant, 1998–2000

University of Washington
Seattle, WA, USA
Research Associate, Department of Civil & Environmental Engineering, 1998–2000
Research Assistant, Department of Civil & Environmental Engineering, 1995–1998
Research Assistant, Industrial Engineering Program, 1992–1994

The Boeing Company
Seattle, WA, USA
Industrial Engineer, 1987–1993

AWARDS AND HONORS

COE Community of Innovators Award: Research	2011	U. of Washington
NSF Career Award	2007-2013	NSF
IIE Outstanding Professor Award	2005	U. of Iowa
2 nd Old Gold Fellowship	2005	U. of Iowa
IIE Outstanding Educator Award	2003	U. of Iowa
Old Gold Fellowship	2003	U. of Iowa
Coral Sales Scholarship	1997	U. of Washington
TransNow Fellowship	1995-1997	U. of Washington

AFFILIATIONS AND OTHER APPOINTMENTS

Associate Faculty, Harborview Injury Prevention and Research Center, Seattle, WA

PUBLICATIONS

Refereed archival journal publications

(Notes: Publications prior to 2000 are published under maiden name of Ng. Google citation record available at: <https://scholar.google.com/citations?user=-iCRFrSAAAAJ&hl=en>

Footnote: Graduate students¹)

1. Kim, H.¹, **Boyle, L.N.**, Goodchild, A. (accepted). Delivery Process for an Office Building in the Seattle Central Business District, *Transportation Research Record*.
2. Miller, E.¹, **Boyle, L.N.**, Lee, J.D., Jenness, J. (accepted). The impact of voice control task modality, difficulty, and duration on cognitive workload and driving performance, *Transportation Research Record*.
3. Wu, Y.¹, **Boyle, L.N.**, McGehee, D. (in press) Evaluating Variability in Foot to Pedal Movements using Functional Principal Components Analysis. <https://doi.org/10.1016/j.aap.2018.02.011>.
4. Ajdari, A.¹, **Boyle, L.N.**, Kannan, N., Wang, J., Rivara, F., Vavilala, M.S. (in press). Simulation of the Emergency Department Care Process for Pediatric Traumatic Brain Injury, *Journal for Healthcare Quality*. doi.org/10.1097/JHQ.000000000000119
5. Ajdari, A.¹, **Boyle, L.N.**, Kannan, N., Rowhani-Rahbar, A., Wang, J., Mink, R., Ries, B., Wainwright, M., Groner, J.I., Bell, M.J., Giza, C., Zatzick, D.F., Ellenbogen, R.G., Mitchell, P.H., Rivara, F.P., Vavilala, M.S., (2017). Examining Emergency Department Treatment

- Processes in Severe Pediatric Traumatic Brain Injury. *Journal for Healthcare Quality*, 39, 6, pp. 334-344.
6. Chang, CC¹, **Boyle, LN**, Jenness, J., Lee, JD. (2017) Using Tactile Detection Response Tasks to Assess In-vehicle Voice Control Interfaces, *Transportation Research Part F: Traffic Psychology and Behaviour* 51, 38-46.
 7. Wu, Y.¹, **Boyle, L.N.**, McGehee, D., Roe, C.A. Ebe, K., Foley, J. (2017). Foot Placement during Error and Pedal Applications in Naturalistic Driving, *Accident Analysis & Prevention*, 99, 102-109.
 8. Haque, MM, Ohlhauser, A.D.¹, Washington, S., **Boyle, L.N.** (2016). Decisions and actions of distracted drivers at the onset of yellow lights. *Accident Analysis & Prevention*, 96, 290-299, PMID: 25891775.
 9. Hurwitz, D., Miller, E.¹, Jannet, M. **Boyle, L.N.**, Brown, S., Abdel-Rahim, A., Wang, H. (2016). Improving teenage driver perceptions regarding the impact of distracted driving in the Pacific Northwest. *Journal of Transportation Safety & Security*, 8, 2, 148-163.
 10. Miller, E.¹, **Boyle, L.N.** (2015). Driver's Behavior in Road Tunnels: Association with Driver Stress and Performance. *Transportation Research Record*, 2518, 60-67. doi: 10.3141/2518-08
 11. Neyens, D.M.¹, **Boyle, L.N.**, Schultheis, M. (2015). The effects of driver distractions for individuals with traumatic brain injuries. *Human Factors*, 57, 8, 1472-1488.
 12. Wu, Y.¹, **Boyle, L.N.**, McGehee, D., Roe, C.A., Ebu, K., Foley, J. (2015). Modeling types of pedal applications using a driving simulator. *Human Factors*, 57, 7, 1276-1288.
 13. Peng, Y.¹, **Boyle, L.N.**, (2015). Driver's adaptive glance behavior to in-vehicle information systems, *Accident Analysis and Prevention*, 85, 93-101.
 14. Wu, Y.¹, **Boyle, L.N.**, (2015). Drivers' engagement level in Adaptive Cruise Control while distracted or impaired. *Transportation Research Part F: Traffic Psychology and Behaviour*, 33, 7-15.
 15. Rhodes, K., Warren-Rhodes, K., Sweet, S., Helgenberger, M., Joseph, E., **Boyle, L.N.**, Hopkins, K.D. (2015). Marine ecological footprint indicates unsustainability of the Pohnpei, (Micronesia) coral reef fishery, *Environmental Conservation*, 42, 2, 182-190.
 16. Quistberg, D.A., Koepsell, T., Miranda, J., Johnston, B.D., **Boyle, L.N.**, Ebel, B.E. (2015). The walking environment in Lima, Peru and pedestrian-motor vehicle collisions: An exploratory analysis, *Traffic Injury Prevention*, 16, 3, 314-321. PMID: 24950345.
 17. Quistberg, D.A., Koepsell, T.D., Johnston, B.D., **Boyle, L.N.**, Miranda, J, Ebel, B. (2015) Bus stops and pedestrian-motor vehicle collisions in Lima, Peru: a matched case-control study, *Injury Prevention*, 21, e15-e22, PMID: 24357516.
 18. Peng, Y.¹, **Boyle, L.N.**, Lee, J.D. (2014). Reading, Typing, and Driving: How interactions with in-vehicle systems degrade driving performance, *Transportation Research Part F*, 27A, 182-191.
 19. Ghazizadeh, M.¹, **Boyle, L.N.** (2014). Crash injuries in four Midwestern states: Comparisons to regional estimates. *Journal of Transportation and Statistics*, 10, 1, 15-34.
 20. Vavilala, MS, Kernic, MA, Wang, J., Kannan, N., Mink, RB, Wainwright, MS, Groner, JI, Bell, M., Giza, CC, Zatzick, DF, Ellenbogen, RG, **Boyle, L.N.**, Mitchell, PH, Rivara, FP. (2014). Acute Care Clinical Indicators Associated with Discharge Outcomes in Children with Severe Traumatic Brain Injury, *Critical Care Medicine*, 42, 10, 2258-2266. PMID: 25083982

21. Quistberg, D.A., Koepsell, T., **Boyle, L.N.**, Miranda, J., Johnston, B.D., Ebel, B.E. (2014). Pedestrian signalization and the risk of pedestrian-motor vehicle collisions in Lima, Peru, *Accident Analysis and Prevention*, 70, 273-281. PMID: 24821630
22. Warren-Rhodes, K., McKay, C., **Boyle, L.N.**, Wing, M., Kiekebusch, E., Cowan, D., Stomeo, F., Pointing, S., Kaseke, K., Eckardt, F., Henschel, J., Seely, M., Rhodes, K. (2014). Physical ecology of hypolithic communities in the Central Namib Desert: the role of fog, rain, rock habitat and light, *Journal of Geophysical Research – Biogeosciences*, 118, 4, 1451-1460.
23. Pitera, K.¹, **Boyle, L.N.**, Goodchild, A. (2013). Economic analysis of on-board monitoring systems in commercial vehicles: Looking beyond traditional benefits. *Transportation Research Record*, 2379, pp. 64-71.
24. Tarko, A., **Boyle, L.N.**, Montella, A. (2013). Emerging research methods and their application to road safety, *Accident Analysis and Prevention*, 61, 1-2. PMID: 23896448.
25. O'Connor, S.S., Whitehill, J.M., King, K.M., Kernic, M., **Boyle, L.N.**, Bresnahan, B., Mack, C.D., Ebel, B.E. (2013). Compulsive cell phone use and history of motor vehicle crash. *Journal of Adolescent Health*, 53, 4, 512-519. PMID: 23910571.
26. Kernic, M.A., Rivara, F.P., Zatzick, D.F., Bell, M.J., Wainwright, M.S., Groner, J.I., Giza, C.C., Mink, R.B., Ellenbogen, R.G., **Boyle, L.**, Mitchell, P.H., Kannan, N., Vavilala, M. (2013). Triage of children with moderate and severe traumatic brain injury in trauma centers. *Journal of Neurotrauma*, 30, 13, 1129-1136. PMID: 23343131
27. Van Cleve, W., Kernic, M.A., Ellenbogen, R.G., Wang, J., Zatzick, D., Bell, M.J., Wainwright, MS, Groner, J.I., Mink, R.B., Giza, C.C., **Boyle, L.N.**, Mitchell, PH, Rivara, FP, Vavilala, M.S. (2013). National variability in intracranial pressure monitoring and craniotomy for children with moderate to severe traumatic brain injury, *Neurosurgery*, 73, 5, 746-752. PMID: 23863766
28. Pitera, K.¹, **Boyle, L.N.**, Goodchild, A., (2013). Process comparison of hours of recording for commercial vehicle operations: Electronic versus paper. *ASCE Journal of Transportation Engineering*, 139, 3, 266-272.
29. Thamsuwan O.¹, Blood, R.P., Ching, RP, **Boyle L.**, Johnson, P.W. (2013). Whole body vibration exposures in bus drivers: A comparison between a high-floor coach and a low-floor city bus. *International Journal of Industrial Ergonomics*, 43, 9-17.
30. Peng, Y.¹, **Boyle, L.N.**, Hallmark, S. (2013). Driver's lane keeping ability while distracted: insights from a naturalistic study. *Accident Analysis and Prevention*, 50, 628-634. PMID: 22836114.
31. Bradbury, K.¹, Stevens, J.¹, **Boyle, L.N.**, Rutherford, S. (2012). To go or not to go: Pedestrian behavior at intersections with standard pedestrian call buttons. *Transportation Research Record*, 2299, 174-179.
32. Peng, Y.¹, **Boyle, L.N.** (2012). Commercial driver factors in run-off-road crashes. *Transportation Research Record*, 2281, 128-132.
33. Westlake, B.¹, **Boyle, L.N.** (2012). Perceptions of driver distraction among teenage drivers, *Transportation Research Part F*, 15, 644-653.
34. Xiong, H.,¹ **Boyle, L.N.**, Moeckli, J., Dow, B., Brown, T. (2012). Use patterns among early adopters of adaptive cruise control (ACC). *Human Factors*, 54, 5, 722-733. PMID: 23156618.
35. Neyens, D.¹, **Boyle, L.N.** (2012). Crash risk factors related to individuals sustaining and drivers following traumatic brain injury. *Accident Analysis and Prevention*, 49, 266-273. PMID: 23036405.

36. Xiong, H.¹, **Boyle, L.N.** (2012). Driver's adaptation to adaptive cruise control: examination of automatic and manual braking, *IEEE Transactions on Intelligent Transportation Systems*, 13, 3, 1468-1473.
37. Ghazizadeh, M.¹, Lee, J.D., **Boyle, L.N.** (2012). Extending the technology acceptance model to assess automation, *Cognition, Technology & Work*, 14, 1, 39-49.
38. Warren-Rhodes, K., Schwarz, A., **Boyle, L.N.**, Albert, J., Agalo, S.S., Warren, R., Bana, A., Paul, C., Kodosiku, R., Bosma, W., Yee, D., Roennback, P., Crona, B., Duke, N. (2011). Mangrove ecosystem services and the potential for carbon revenue programmes in Solomon Islands, *Environmental Conservation*. 38, 4, 485-496.
39. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2010). Differences in off-road glances: effects on young drivers' performance. *ASCE Journal of Transportation Engineering*, 136, 5, 403-410.
40. **Boyle, L.N.**, Lee, J.D. (2010). Using driving simulators to assess driving safety. *Accident Analysis and Prevention*, 42, 785-787. PMID: 20380903
41. Ghazizadeh, M.¹, **Boyle, L.N.** (2009). Influence of driver distractions on the likelihood of rear-end, angular, and single-vehicle crashes in Missouri. *Transportation Research Record*, 2138, 1-5.
42. Lee, Y.¹ Lee, J.D., **Boyle, L.N.** (2009). The interaction of cognitive load and attention-directing cues in driving. *Human Factors*, 51, 271-280. PMID: 19750791
43. Bao, S.¹, **Boyle, L.N.** (2009). Driver safety programs: The influence on the road performance of older drivers. *Transportation Research Record*, 2096, 76-80.
44. Bao, S.¹, **Boyle, L.N.** (2009). Age-related differences in visual scanning at median-divided highway intersections in rural areas. *Accident Analysis and Prevention*, 41, 146-152. PMID: 19114149
45. Bao, S.¹, **Boyle, L.N.** (2008). Driver performance at two-way stop-controlled intersections on divided highways. *Transportation Research Record*, 2069, 26-32.
46. Neyens, D.¹, Donmez, B.¹, **Boyle, L.N.** (2008). The Iowa graduated driver licensing program: Effectiveness of crash reduction. *Journal of Safety Research*, 38, 4, 383-390. PMID: 18786425
47. Neyens, D.¹, **Boyle, L.N.** (2008). The influence of driver distraction on the severity of injuries sustained by teenage drivers and their passengers. *Accident Analysis and Prevention*, 40, 1, 254-259. PMID: 18215556
48. **Boyle, L.N.**, Tippin, J., Paul, A.¹, Rizzo, M. (2008). Driver performance declines in the moments surrounding a microsleep. *Transportation Research Part F*, 11, 2, 126-136. PMID: 20090864
49. Donmez, B.¹, **Boyle, L.N.**, Lee, JD (2008). Mitigating driver distraction with retrospective and concurrent feedback. *Accident Analysis and Prevention*, 40, 2, 776-786. PMID: 18329433
50. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2008). Accounting for time-dependent covariates in driving simulator studies. *Theoretical Issues in Ergonomics Sciences*, 9,3, 189-199.
51. Neyens, D.¹, **Boyle, L.N.** (2007). The effect of distractions on the crash types of teenage drivers. *Accident Analysis and Prevention*, 39, 1, 206-212. PMID: 16996017.
52. Hill, J.D.¹, **Boyle, L.N.** (2007). Driver stress as influenced by driving maneuvers and roadway conditions. *Transportation Research Part F*, 10, 9, 177-186. PMID: 16197912
53. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2007). Safety implications of providing real-time feedback to distracted drivers. *Accident Analysis and Prevention*, 39, 3, 581-590. PMID: 17109807

54. Warren-Rhodes, K, Rhodes, K, **Boyle, L.N.**, Pointing, S.B., Chen, Y, Liu, S., Zhou, P. and McKay, C. (2007) Cyanobacterial ecology across environmental gradients and spatial scales in China's hot and cold deserts. *FEMS Microbiology Ecology*, 61, 3, 470-482. PMID: 17672851
55. Lee, Y¹, Lee, J.D., **Boyle, L.N.** (2007). Visual attention in driving: The effects of cognitive load and visual disruption. *Human Factors*, 49, 721-733. PMID: 17702223
56. Warren-Rhodes, K, Weinstein, S, Piatek, J, Dohm, J, Hock, A., Minkley, N., Pane, D., Ernst, L., Fisher, G., Emani, S., Waggoner, A., Cabrol, N., Wettergreen, D., Grin, E., Coppin, P., Chong-Diaz, G., Moersch, J., Oril, G., Smith, T., Stubbs, K., Thomas, G., Wagner, M., Wyatt, M., **Boyle, L.N.** (2007). Robotic ecological mapping: Habitats and the search for life in the Atacama Desert, II. *Journal of Geophysical Research-Biogeosciences*, 112, 4.
57. Hill, J.D.¹, **Boyle, L.N.** (2006). Assessing the relative risk of severe injury in automotive crashes for older female occupants. *Accident Analysis and Prevention*, 38, 148-154.
58. Hill, J.D.¹ and **Boyle, L.N.** (2006). The safety implications of vehicle seat adjustments. *Journal of Safety Research*, 37, 2, 187-193. PMID: 16650432
59. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2006). The impact of distraction mitigation strategies on driving performance. *Human Factors*, 48, 4, 785-804. PMID: 17240725
60. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D., McGehee, D. (2006). Drivers' attitudes toward imperfect mitigation strategies. *Transportation Research Part F*, 9, 6, 387-398.
61. **Boyle, L.N.**, Mannering, F. (2004). Impact of traveler advisory systems on driving speed: some new evidence. *Transportation Research Part C*, 12, 1, 57-72.
62. **Ng, L.**, Barfield, W., Mannering, F. (1998). Analysis of private drivers' commuting and commercial drivers' work-related travel behavior. *Transportation Research Record*, 1621, 50-60.
63. **Ng, L.**, Barfield, W., Mannering, F. (1995). A survey-based methodology to determine information requirements for advanced traveler information systems. *Transportation Research Part C*, 3, 2, 113-127.
64. **Ng, L.**, Wessels, R., Do, D., Mannering, F., Barfield, W. (1995). Statistical analysis of commercial driver and dispatcher requirements for advanced traveler information systems. *Transportation Research Part C*, 3, 6, 353-369.
65. Mannering, F., Kim, S., **Ng, L.**, Barfield, W. (1995). Travelers' preferences for in-vehicle information systems: an exploratory analysis. *Transportation Research Part C*, 3, 6, 339-351.
66. Mannering F., Kim S., Barfield, W., **Ng, L.** (1994). Statistical analysis of commuters' route, mode and departure time flexibility. *Transportation Research Part C*, 2, 1, 35-47.

Refereed archival journal publications: Submitted

67. Xiong, H. ¹, **Boyle, L.N.** (in revision). When should Adaptive Cruise Control (ACC) provide automated vehicle braking?
68. Janssen, C., Boyle, L., Kun, A., Ju, W., Chuang, L. (submitted). A Hidden Markov Framework to Capture Human-Machine Interaction in Automated Vehicles
69. Liu, J. ¹, **Boyle, L.N.**, Banerjee, A. (in revision). Predicting interstate motor carrier crash rate level using classification models.
70. Miller, E.E.¹, Boyle, L. N., (in revision). Behavioral adaptations to lane keeping systems: Effects of exposure and withdrawal.

71. Miller, E.E.¹, Boyle, L. N., (submitted). Influences of trust in automation on driver behavioral adaptations.

Refereed archival journal publications: In preparation (to be submitted within 6 months)

72. Miller, E.E.¹, **Boyle, L.N.**, Willis, S. (in preparation). The relationship of driving performance and longitudinal cognitive abilities for older drivers.
73. Wu, X.¹, Guo, H.¹, **Boyle, L.N.** (in preparation). The impact of Washington's commercial driver training program on driver safety.
74. Hwang, S., Banerjee, A., **Boyle, L.N.** (in preparation). Identification of relationships among safety metrics to provide insights on interstate motor carrier safety.
75. Guo, H., Boyle, L.N., Jenness, J., Lee, J. (in preparation). Metrics to assess cognitive workload of driver distractions.

Conference proceedings and other non-journal articles

• **Fully refereed publications**

1. O'Brien, W., Wu, X., Boyle, L.N (accepted). Examining Speech-Based Auditory Alerts for Intersection Collision Warning Systems using a Driving Simulator, *Proceedings of the Human Factors and Ergonomics Society 62nd Annual Meeting* .
2. Miller, E.¹, **Boyle, L.N.** (2017) Driver adaptation to lane keeping assistance systems: Do drivers become less vigilant? In *Proceedings of the Human Factors and Ergonomics Society 61st Annual Meeting* (Vol. 61, No. 1, pp. 1934-1938). Sage CA: Los Angeles, CA: SAGE Publications.
Winner of the best student paper for the HFES Surface Transportation Technical Group.
3. Wu, X.¹, **Boyle, L.N.**, Marshall, D. (2017) Drivers' Avoidance Strategies when using a Forward Collision Warning (FCW) System. *Proceedings of the Human Factors and Ergonomics Society 61st Annual Meeting, Austin, TX*.
4. Cheng, C.C.¹, Sodnik, J., Boyle, L. (2016) Don't Speak and Drive: Cognitive Workload of In-Vehicle Speech Interactions. *Work-in-Progress and Interactive Demo for the 8th International Conference on Automobile User Interfaces and Interactive Vehicular Applications*, Ann Arbor, MI.
5. Wu, J.¹, Cheng, C.C.¹, **Boyle, L.**, Jenness, J. (2015). Impact of In-vehicle Voice Control Systems on Driver Distraction: Insights from Contextual Interviews, *Proceedings of the Human Factors and Ergonomics Society 59th Annual Meeting, vol. 59, 1, pp. 1583-1587*, Los Angeles, CA.
6. Wu, X.¹, **Boyle, L.**, Marshall, D. (2015). Sampling Biases Associated with Driver Distraction Tasks in a Simulated Environment, *Proceedings of the Human Factors and Ergonomics Society 59th Annual Meeting, vol. 59, 1, pp. 1621-1625*, Los Angeles, CA.
7. Reis, B.¹, **Boyle, L.N.**, Vavilala, M., Kannan, N., Saxe, H., Kernic, M.,...Mink, R. (2013). Assessing clinical care using interactive value stream mapping. *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting*, San Diego, CA, pp. 1536-1540.

8. Miller, E.¹, **Boyle, L.N.** (2013). Does direction of travel impact driver stress: Insights from an on-road study. *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting*, San Diego, CA, pp. 1864-1868.
9. Ghazizadeh, M., Venkatraman, V., Torres, M., Gibson, M., Lee, J.D., **Boyle, L.N.** (2013). Text readability and drivers' reading time: Insights from a visual occlusion study. *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting*, San Diego, CA, pp. 1879-1883. Winner of the best student paper for the HFES Surface Transportation Technical Group.
10. Xiong, H.¹, **Boyle, L.N.** (2013). Drivers' selected settings for adaptive cruise control (ACC): Implications for long-term use. *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting*, San Diego, CA, pp. 1928-1932.
11. Ghazizadeh, M., Lee, J.D., Peng, Y.¹, **Boyle, L.N.** (2013). Assessing text reading and text entry while driving using the visual occlusion technique. *Proceedings of the 7th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Lake George, NY, pp. 128-134.
12. Peng, Y.¹, **Boyle, L.N.**, Ghazizadeh, M., Lee, J.D. (2013). Factors affecting glance behavior when interacting with in-vehicle devices: Implications from a simulator study. *Proceedings of the 7th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Lake George, NY, pp. 474-480. (GS: 3)
13. Wu, Y.¹, **Boyle, L.N.**, McGehee, D.M., Angell, L., Foley, J. (2012). Task analysis of vehicle entry and backing. *Proceedings of the 4th International Conference on Automobile User Interfaces and Interactive Vehicular Applications*, Portsmouth, NH, pp. 195-200. (GS: 1)
14. Peng, Y.¹, Ghazizadeh, M., **Boyle, L.N.**, Lee, J.D. (2012). Commercial drivers' initial attitudes toward an on-board monitoring systems. *Proceedings of the Human Factors Society 56th Annual Meeting*, Boston, MA, 56, 1, pp. 2281-2285. (GS: 1)
15. Ghazizadeh, M., Peng, Y.¹, Lee, J.D., **Boyle, L.N.** (2012). Augmenting the technology acceptance model with trust: Commercial drivers' attitudes towards monitoring and feedback. *Proceedings of the Human Factors Society 56th Annual Meeting*, Boston, MA, 56, 1, pp. 2286-2290. (GS: 4)
16. Bato, J.¹, **Boyle, L.N.** (2011). Adaptive cruise control: User differences in urban and rural environments. *Proceedings of the Human Factors and Ergonomics Society 55th Annual Meeting*, Las Vegas, NV, 55, 1, pp. 1943-1947.
17. Ohlhauer, A.¹, **Boyle, L.N.**, Marshall, D., Ahmad, O. (2011). Drivers' behavior through a yellow light: Effects of distraction and age. *Proceedings of the Human Factors Society 55th Annual Meeting*, Las Vegas, NV, 55, 1, pp. 1919-1923.
18. Hallmark, S., Qiu, Y., **Boyle, L.N.** (2011). Assessing the likelihood of a lane departure event using naturalistic driving study data. *Proceedings of the Road Safety Simulation Conference*, West Lafayette, IN.
19. Ghazizadeh, M.¹, **Boyle, L.N.** (2011). Traffic injuries across central Midwestern states: comparisons between states and within region. *3rd International Conference on Road Safety and Simulation*, West Lafayette, IN.
20. Deits, C.¹, **Boyle, L.N.**, Morrison, J. (2011). Driving performance of drug-impaired bus drivers in work zone areas. *Proceedings of the 6th International Driving Symposium on*

Human Factors in Driver Assessment, Training, and Vehicle Design (Jun 2011), Lake Tahoe, NV.

21. Peng, Y.¹, **Boyle, L.N.**, Neyens, D., Short, J. (2010). Management's attitudes toward safety in commercial vehicle operations. *Proceedings of the Human Factors and Ergonomics Society 54th Annual Meeting*, San Francisco, CA., 54, 21, pp. 1890-1894.
22. Dickie, D.¹, **Boyle, L.N.** (2009). Drivers' understanding of adaptive cruise control limitations. *Proceedings of the Human Factors Society 53rd Annual Meeting*, San Antonio, TX, 53, 23, pp. 1806-1810.
23. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2008). Individual differences in off-road eye glances and the effects on driving performance. *Proceedings of the 10th Annual Advanced Transportation and Technologies*, Athens, Greece, 13 pgs.
24. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2008). Trust influences real-time and post-trip feedback in mitigating driver distraction. *Proceedings of the 10th Annual Advanced Transportation and Technologies*, Athens, Greece, 10 pgs.
25. Hallmark, S., **Boyle, L.N.**, Maze, T. Carriquiry, A. Hawkins, N. Smadi, O., Souleyrette, R., McDonald, T. (2008) Developing a correlation between road departure crash surrogate events and safety. *Proceedings of the 10th Annual Advanced Technologies in Transportation*, Athens, Greece, 15 pgs.
26. Hill, J.¹, **Boyle, L.N.**, Tippin, J., Faber, K, Rizzo, M. (2007). The effects of sleepiness on heart rate variability in a driving simulator. *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Stevenson, WA, pp. 306-313.
27. Lee, Y.¹, Lee, J.D., **Boyle, L.N.** (2007). The effect of voice interactions on drivers' guidance of attention. *Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Stevenson, WA, pp. 61-67.
28. Bao, S.¹, **Boyle, L.N.** (2007). Braking behavior at rural expressway intersections for younger, middle-aged, and older driver. *Proceedings of the 2007 Mid-Continent Transportation Research Symposium*, Ames, IA, pp. 1-8.
29. Bao, S.¹, **Boyle, L.N.** (2007). Visual search strategies of older drivers at rural expressway intersections. *Proceedings of the Human Factors Society 51st Annual Meeting*, Baltimore, MD, 51, 24, pp. 1560-1564.
Winner of the best student paper for the HFES Surface Transportation Technical Group.
30. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2006). Driving simulator experiments: Power for repeated measures vs. complete randomized design. *Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting*, San Francisco, CA, 50, 21, pp. 2336-2339.
31. Neyens, D.¹, **Boyle, L.N.** (2006). A theoretical framework of risk compensation in supply chain management decision making. *Proceedings of the Human Factors Society 50th Annual Meeting*, San Francisco, CA, 50, 15, pp. 1488-1491.
32. Bao, S.¹, **Boyle, L.N.** (2006). Strategic differences in mental rotation tasks based on gaze durations. *Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting*, San Francisco, CA, 50, pp. 1227-1231.
33. Paul, A.¹, **Boyle, L.N.**, Rizzo, M., Tippin, J. (2005). Variability of driving performance during microsleeps. *Proceedings of the 3rd International Driving Symposium on Human*

- Factors in Driving Assessment, Training, and Vehicle Design*. Rockport, ME (June 2005), pp. 18-24.
34. Paul, A.¹, **Boyle, L.N.**, Boer, E., Tippin, J., Rizzo, M. (2005). Steering entropy changes as a function of microsleeps. *Proceedings of the 3rd International Driving Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design (June 2005)*. Rockport, ME, pp. 441-447.
 35. Lee, Y.¹, Lee, J.D., **Boyle, L.N.** (2005). Change detection performance under divided attention with dynamic driving scenarios. *Proceedings of the 3rd International Driving Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design (June 2005)*. Rockport Maine, pp. 195-201.
 36. Hill, J.D.¹, **Boyle, L.N.** (2005). Differences in crash injury severity among older drivers in the state of Iowa compared with national trends. *Proceedings of the 2005 Mid-Continent Transportation Research Symposium (Aug 2005)*, Ames, IA, pp. 1-9.
 37. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2003). Taxonomy of mitigation strategies for driver distraction. *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting (Oct 2003)*, Denver, CO, pp. 1865-1869.
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 39. **Boyle, L.N.**, Najm, W. (2001). Analysis of off-roadway crashes for intelligent commercial vehicle applications. *Society of Automotive Engineers (SAE) Paper No. 2001-01-2820*. Chicago, IL, pp. 1-14.
 40. **Ng, L.**, Barfield, W. (1993). User information requirements for intelligent vehicle highway systems as a function of driver category. *Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting (Apr 1993)*, Seattle, WA. pp. 1077-1081.
- **Refereed by abstract only**
1. Li, N.¹, Boyle, L.N., (2017) Generalized Random-Effects Linear Models to Examine Driver Safety (Abstract No. 322753), 2017 *Joint Statistical Meeting*, Baltimore, MD.
 2. Wu, X.¹, Boyle, L.N., (2017) Evaluating Safety Performance Measures for Motor Carriers Using Hierarchical Models (Abstract # 322913), 2017 *Joint Statistical Meeting*, Baltimore, MD.
 3. Guo, H., Boyle, L.N., (2017), Using Lasso Regression for the Selection of Matching Variables to Analyze Crash Risk in SHRP 2 Data for a Case-Control Setting, 2017 *Joint Statistical Meeting*, Baltimore, MD.
 4. Wu, X.¹, Guo, H.¹, Boyle, L.N., (2015) The effectiveness of commercial driver training: A time series modeling approach (Abstract No. 317572) 2015 *Joint Statistical Meeting*, Seattle, WA.
 5. Wu, Y.¹, Boyle, L.N., McGehee, D., Ebu, K., and Foley, J. (2014) Predicting drivers' pedal responses using multinomial logit models with repeated measures (Abstract No. 313777) 2014 *Joint Statistical Meeting*, Boston, MA.

6. Peng, Y.¹, Boyle, L.N. (2013). Examining the effects of driver behavior using random coefficients modeling (Abstract No. 310251). *2013 Joint Statistical Meeting*, Montreal, Canada.
7. Golla, S.¹, Neyens, D.¹, **Boyle, L.N.**, Kernic, M., Vavilala, M., Pegasus Team (2012). Modeling the adherence to national guidelines for acute care of children with traumatic brain injuries (TBI) (Abstract # 279). *Industrial and Systems Engineering (ISE) Research Conference and Expo 2012*. Orlando, FL, May 19-23.
8. Reed, D.A., Zabinsky, Z., **Boyle, L.N.** (2011). A Framework for Optimizing Civil Infrastructure Resiliency. *Proceedings of the Structures Congress 2011*. Las Vegas, NV, Apr. 13-16. (GS: 5)
9. Reed, D.A., Zabinsky, Z., **Boyle, L.N.** (2010). Rule-based methods for infrastructure risk analysis. *Society for Risk Analysis (SRA) Conference*, Salt Lake City, UT, Dec. 6-9.
10. Neyens, D.¹, **Boyle, L.N.**, Manning, K., Ang, J., Schultheis, M. (2010). Driving performance while engaged in distracting tasks: The effects on drivers with traumatic brain injuries (Abstract # 309381). *2010 Joint Statistical Meeting*, Vancouver, BC.
11. **Boyle, L.N.**, Tippin, J., Rizzo, M. (2009) Drowsy driver performance in a simulated environment: a case-crossover analysis (Abstract # 305858). *2009 Joint Statistical Meeting*, Washington, DC.
12. Manning, K.J., Schultheis, M., Mitura, R., Klimchuck, D., Neyens, D.¹, Simone, L., Monagle, C., Ang, J., Salvucci, D., **Boyle, L.N.** (2009). Virtual reality driving: Can new measures help inform driving capacity in TBI? *2009 International Neuropsychological Society*, Atlanta, GA.
13. Lockhart, J.¹, **Boyle, L.N.**, Wilkinson, M., Sifrit, K.J. (2008). Eye glance behavior of drivers with visual field loss: a driving simulator study. *4th International Conference on Traffic and Transport Psychology*, Washington, DC.
14. Neyens, D.¹, Donmez, B.¹, **Boyle, L.N.** (2008). Variations in effect estimation techniques to assess graduated driver licensing programs (Abstract # 301754). *2008 Joint Statistical Meeting*, Denver, CO.
15. Neyens, D.¹, **Boyle, L.N.** (2007). Establishing efficient, human centric, decision rules for managing the blood supply chain. *Industrial Engineering RC 2007 Conference*, Nashville, TN.
16. Tippin, J., Rizzo, M., Sparks, J., **Boyle, L.N.** (2007). Visual vigilance in drivers with Obstructive Sleep Apnea Syndrome, *Neurology*, 68, 12, A150-A151 Supp.1.
17. Tippin, J., Rizzo, M., Sparks, J. and **Boyle, L.N.** (2007). Reduced useful field of view in drivers with Obstructive Sleep Apnea Syndrome, *Associated Professional Sleep Society Meeting*, Minneapolis, MN.
18. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. (2005). Accounting for the covariate effects in driving simulator studies, *Joint Statistical Meeting* (Abstract # 303743). Minneapolis, MN.
19. Najm, W., Stearns, M., **Boyle, L.N.** (2002). Evaluation framework for an automotive rear-end crash avoidance field operational test. *Intelligent Transportation Systems (ITS) America 2002*, Long Beach, CA.

20. **Boyle, L.N.**, Mannering, F. (1998). Three-stage least squares analysis of traveler information systems. *Institute of Operations Research and the Management Sciences (INFORMS) National Meeting*, Seattle, WA.

Books

1. Lee, JD, Wickens, CW, Liu, Y., Boyle, LN (2017). *Designing for People: An introduction to human factors engineering*, CreateSpace Independent Publishing Platform; 3 edition, 692 pgs. ISBN: 978-1539808008

Parts of books (chapters in edited books)

1. Manser, M., Creaser, J., and **Boyle, L.N.** (2013). Behavioral adaptation methodological and measurement issues. Rudin-Brown, M. and Jamson S. (Eds.), *Behavioral Adaptation and Road safety: Theory, Evidence and Action*, CRC Press, pp. 339-358.
2. **Boyle, L.N.** (2011). Analytical tools. Fisher, D., Caird, J., Rizzo, M, and Lee, JD (Eds.), *Handbook of Driving Simulation for Engineering, Medicine and Psychology*, CRC Press, Chapter 21 (14 pages).
3. Donmez, B. ¹, **Boyle, L.N.** and Lee, J.D. (2009). Designing feedback to mitigate distraction. Regan, M., Lee, J. and Yong, K. (Eds.), *Driver Distraction: Theory, Effects, and Mitigation*, CRC Press, pp. 519-532.
4. **Ng, L.**, Barfield, W., and Spyridakis, J. (1998). Survey methodologies for defining user information requirements. Barfield W. and Dingus T. (Eds.), *Human Factors in Intelligent Transportation Systems*. Lawrence Erlbaum Associates. pp. 287-324.
5. **Ng, L.**, and Barfield, W. (1998). Determining user requirements for intelligent transportation systems design. Barfield W. and Dingus T. (Eds.), *Human Factors in Intelligent Transportation Systems*. Lawrence Erlbaum Associates. pp. 325-357.

Journal issues/Proceedings edited

1. **Boyle, L.N.**, Chrysler, S., Karlaftis, M. (2016) Guest editors, Analytical methods for quantifying driver behavior in a dilemma zone, Special issue for *Accident Analysis and Prevention*, 96, 271-273.
2. Lee, J.D., and **Boyle, L.N.** (2015) Guest editors, Assessing cognitive distraction in driving, Special Issue for *Human Factors*, 57, 8.
3. **Boyle, L.N.**, Burnett, G., Frohlich, P., Iqbal, S. (2014). *Proceedings of the 6th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, 287 pgs. ISBN: 978-1-4503-3212-5.
4. Tarko, A., **Boyle, L.N.**, Montella, A (2013). Guest editors, Emerging research methods and their application to road safety, Special issue for *Accident Analysis and Prevention*, 61, 1-129.
5. Kun, A., **Boyle, L.N.**, Reimer, B., Riener, A., Healey, J., Zhang, W. (2012). *Proceedings of the 4th International Conference on Automotive User Interfaces and Interactive Applications in the Car*. 280 pgs, ISBN: 978-1-4503-1751-1
6. **Boyle, L.N.** and Lee, J.D. (2010). Guest editors, Assessing Safety with Driving Simulators, Special Issue for *Accident Analysis and Prevention*, 42 (3), 785–986.

Abstracts, letters, non-refereed papers, technical reports

1. **Boyle, L.N.** (2016) *Research Needs for Designing Vehicle Automation to Be Safer Than Drivers*, Report of Dagstuhl Seminar 16262 Automotive User Interfaces in the Age of Automation (Edited by Reiner, A., Boll, S., and Kun, A.L.)
<http://drops.dagstuhl.de/opus/volltexte/2016/6758>
2. Jenness, J.W., **Boyle, L.N.**, Lee, J. D., Chang, C-C.¹, Venkatraman, V., Gibson, M., Riegler, K. & Kellman, D. (2016, October). *In-vehicle voice control interface performance evaluation* (Final report. Report No. DOT HS 812 314). Washington, DC: National Highway Traffic Safety Administration.
https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/8122314_in_vehvoicecntrlrfaceperormeval.pdf
3. Moeckli, J., Brown, T., Dow, B., **Boyle, L.N.**, Schwarz, C., & Xiong, H.¹ (2015, August). *Evaluation of adaptive cruise control interface requirements on the National Advanced Driving Simulator*. (Report No. DOT HS 812 172). Washington, DC: National Highway Traffic Safety Administration.
<http://www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2015/812172-EvaluAdaptvCruiseContrlIntrfcRequiremtNADS.PDF>.
4. Lee, J.D., **Boyle, L.N.** (2015) Is talking to your car dangerous? It depends: prologue to the special section. Peer commentary on Assessing Cognitive Distraction in Driving, *Human Factors*, 57, 8, 1297-1291.
5. **Boyle, L.N.** (2014) Driver-vehicle data for human factors research. Romo, A., Mejia, B., Yang, CY (Eds). *Utilizing various data sources for surface transportation human factors research – workshop summary report - Nov 6-7, 2013* (Report No. FHWA-HRT-14-077), pp. 33-38.
<http://www.fhwa.dot.gov/advancedresearch/pubs/14077/14077.pdf>
6. **Boyle, L.**, Cordahi, G, Grabenstein, K., Madi, M. Miller, E.¹, Silberman, P. *Effectiveness of Safety and Public Service Announcements on Dynamic Message Signs* (Report No. FHWA-HOP-14-015). Washington, DC: Federal Highway Administration
<http://www.ops.fhwa.dot.gov/publications/fhwahop14015/fhwahop14028.pdf>
7. Kun, A., **Boyle, L.N.**, Reimer, B., Reiner, A. (2013). Interacting with technology in vehicles: Perspectives from the Automotive UI 2012 conference. *IEEE Pervasive Computing*, 12, 2, 80-82.
8. **Boyle, L.N.**, Lee, J. D., Peng, Y.¹, Ghazizadeh, M.¹, Wu, Y., Miller, E.¹ & Jenness, J. (2013, August). *Text reading and text input assessment in support of the NHTSA visual-manual driver distraction guidelines* (Report No. DOT HS 811 820). Washington, DC: National Highway Traffic Safety Administration.
<http://www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2013/811820.pdf>.
9. Richard, C.M., Campbell, J.L., Lichty, M., Brown, J.L., Chrysler, S., Lee, J.D., **Boyle, L.**, Reagle, G. (2012). *Motivations for Speeding, Volume I: Summary report* (Report No. DOT HS 811 658). Washington, DC; National Highway Traffic Safety Administration.
www.nhtsa.gov/staticfiles/nti/pdf/811658.pdf
10. **Boyle, L.N.**, Hallmark, S., Lee, J.D., McGehee, D., Neyens, D., Ward, N. (2011). SHRP2 Project S02: Integration of Analysis Methods and Development of Analysis Plan, 127 pgs. Available at http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2_S2-S02-RW-1.pdf

11. Hallmark, S., Hsu, Y-Y, **Boyle, L.**, Carriquiry, A., Tian, Y., Mudgal, A. (2009). SHRP2 S01E-RW-1 Evaluation of Data Needs, Crash Surrogates, and Analysis Methods to Address Lane Departure Research Questions Using Naturalistic Driving Study Data, 139 pgs. Available at http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2_S2-S01E-RW-1.pdf.
12. **Boyle, L.N.**, Peng, Y., Neyens, D., Short, J. (2010). Safety Climate of Commercial Vehicle Operations (Report No. MATC-UI: 125, 25-1121-0001-125), 22 pgs. Available on http://matc.unl.edu/assets/documents/finalreports/Boyle_SafetyClimateofCommercialVehicleOperation.pdf
13. Lockhart, J., **Boyle, L.N.**, Wilkinson, M. (2009). Driving with visual field loss: an exploratory simulation study (Report No. DOT HS 811 062). Washington, DC, U.S. Dept. of Transportation, 52 pgs. Available on <http://ntl.bts.gov/lib/30000/30500/30580/811062.pdf>.
14. Short, J., **Boyle, L.N.**, Shackelford, S., Inderbitzen, B., Daecher, C., Bergoffen, G., (2007). The role of safety culture in preventing commercial motor vehicle crashes. NCHRP report (CTBSSP #14).
15. Donmez, B., **Boyle, L.N.**, Lee, J.D. (2007). Safety Vehicles using adaptive Interface Technology (SAVE-IT: Task 4) Final report: Phase 2 Distraction Mitigation Evaluation. <http://www.volpe.dot.gov/coi/hfrsa/work/roadway/saveit/docs.html>
16. Knipling, R., **Boyle, L.N.**, Hickman, J., York, J, Daecher, C., Olsen, E., Prailey, T. (2004). Commercial truck and bus safety synthesis program (CTBSSP), Synthesis 4: Individual differences and the “high risk” commercial driver. NCHRP report. ISBN: 0-309-08810-0.
17. **Boyle, L.N.**, Meltzer, N., Hitz, J., Koopmann, J. (2002). Preliminary plan for case-control crash risk study. US DOT Report No. DOT-VNTSC-FMCSA-02-01.
18. Stearns, M., **Boyle, L.N.** (2002) HS-216: Evaluation of GM/Delphi rear-end collision countermeasures: Revised driver acceptance framework and survey data needs, Technical Information Exchange for U.S. Dept. of Transportation.
19. Najm, W., Koopmann, J., **Boyle, L.N.**, Smith, D. (2002). Development of test scenarios for off-roadway crash countermeasures based on crash statistics. US DOT Report No. DOT-VNTSC-NHTSA-01-02/DOT HS 809 505.
20. Ulfarsson, G., Shankar, V., Vu, P., Mannering, F., **Boyle, L.N.**, Morse, M. (2001). TravelAid. Final Report. Project No. T9903, Task 16. In-Vehicle Signing and Variable Speed Limit Evaluation. Available at <http://www.wsdot.wa.gov/research/reports/fullreports/511.1.pdf> (GS: 6)
21. Najm, W., Stearns, M., **Boyle, L.N.** (2001). Detailed plan for an independent evaluation of the automotive collision avoidance system field operational test. US DOT Govt. Report No. DOT-VNTSC-HS116-PM-01-09.
22. **Ng, L.**, Barfield, W. (1994). Generic Intelligent Driver Support: A Comprehensive Report on GIDS by JA Michon. Review in *Transportation Research* 28A, 4, pp. 370-371. [http://dx.doi.org/10.1016/0965-8564\(94\)90013-2](http://dx.doi.org/10.1016/0965-8564(94)90013-2)

Other significant research dissemination (web sites, software, Wikis, etc.)

1. Website: Human Factors and Statistical Modeling Laboratory, University of Washington. www.depts.washington.edu/hfsm.

2. YouTube video: PacTrans and Distracted Driving (posted Jan 21, 2015).
https://www.youtube.com/watch?v=bM_iNEyVxcg
3. YouTube video: UW360: Texting and Driving (posted Mar 10, 2014).
https://www.youtube.com/watch?v=_mPCkXwgVNs
4. News article: "What is a transportation statistician?"
<http://statttrak.amstat.org/2012/07/01/transportstatistician/>

OTHER SCHOLARLY ACTIVITY

Invited lectures, seminars, and workshops

1. 11th Annual Pacific Northwest (PNW) American Institute of Aeronautics and Astronautics (AIAA) Technical Symposium, Keynote Speaker, *Designing increasingly autonomous vehicles to be safer than humans*, Lynnwood, WA, November 18, 2017.
2. American Automobile Association (AAA) Foundation for Traffic Safety, Automation Workshop, Panel Speaker, Salt Lake City, UT, November 7, 2017.
3. Road Safety Simulation, Keynote Speaker, Den Haag, Netherlands, *Modeling drivers' behavior with increasingly autonomous vehicle systems*, October 19, 2017.
4. University of Utrecht, Netherlands, *The human's role in the transition to fully autonomous vehicles*, October 16, 2017.
5. Europe HFES, Keynote Speaker, Prague, Czech Republic, *Designing increasingly autonomous vehicles to be safer than humans*, October 26, 2016.
6. Technische Hochschule Ingolstadt, Germany, *Guest Lectureship*, June 20-25, 2016, October 31-November 4, 2016.
7. Queensland University of Technology, Australia, *Modeling the effects of drivers' adaptive behavior on system safety*, August 1, 2016.
8. Dagstuhl Seminar, *Automotive User Interfaces in the Age of Automation*, June 26–July 01, 2016.
9. Technische Hochschule Ingolstadt, Germany, *Modeling the effects of drivers' adaptive behavior on system safety*, June 24, 2016.
10. NAE 2016 Regional Meeting and Symposium, Keynote Speaker, *Autonomous Intelligent Agents: Technology and Policy*, Microsoft, Redmond, WA, April 26, 2016.
11. Texas A&M University, Industrial & Systems Engineering, College Station, TX, *Modeling the effects of drivers' adaptive behavior on system safety*, December 4, 2015.
12. University of Minnesota, Center for Transportation Studies, Minneapolis, MN, *Modeling the effects of drivers' adaptive behavior on system safety*, October 8, 2015.
<http://www.roadwaysafety.umn.edu/events/seminars/2015/100815/>
13. University of Minnesota, Dept. of Mechanical Engineering, Minneapolis, MN, *Human factors research for increasingly autonomous systems*, October 7, 2015.
14. American Automobile Association (AAA) Foundation for Traffic Safety, Washington, DC, *Workshop on Driver Adaptation to Vehicle Technologies, Modeling the effect of drivers' adaptive behavior on system safety*, August 13, 2015.

15. Apple, Cupertino, CA, *R Workshop on Data Manipulation and Visualization* [with John Lee, U. Wisconsin-Madison], March 19-20, 2015.
16. University of Toronto, Mechanical and Industrial Engineering, Toronto, Ontario, Canada, *Quantifying Road User Safety: The Statistical Challenges and Opportunities*, March 6, 2015.
17. University of Buffalo, Civil, Structural, and Environmental Engineering, NY, *Advances in Data Collection and Analysis to Enhance Road Safety*, November 3, 2014.
18. Northwestern University, Civil & Environmental Engineering, Evanston, IL, *Advances in Data Collection and Analysis to Enhance Road Safety*, October 30, 2014.
19. The National Academies-Panel on Research Methodologies and Statistical Approaches to Understanding Driver Fatigue Factors in Motor Carrier Safety and Driver Health, Washington, DC, *Statistical Challenges Associated with the Analysis of Truck Data*, September 3, 2014.
20. 14th COTA International Conference of Transportation Professionals, Changsha, China, *Advances in Data Collection and Analysis for Road User Safety*, July 6, 2014.
21. University of Leeds, Leeds, UK, *Statistics Workshop* [with John Lee, U. Wisconsin-Madison], June 22-23, 2014.
22. 1st International Road Traffic Accident Conference, Rose Wood Hotel, Abu Dhabi, UAE *Using naturalistic and driving simulator studies to examine driver behavior*, Mar 10, 2014.
23. FHWA Workshop on Utilizing Various Data Sources for Surface Transportation Human Factors Research, McLean, VA, *Driver-Vehicle Data for Human Factors Research*, November 6-7, 2013
24. Transportation Research Board Workshop, Washington, DC [with Matthew Karlaftis, National Technical University of Athens], *Transportation Data Analysis Competition*. Jan 11, 2013.
25. Human Factors & Ergonomics Society Workshop, San Diego, CA [with John Lee, U. Wisconsin-Madison], *WK3: Introduction to R and describing data*, Sept, 30, 2013.
26. Human Factors & Ergonomics Society Workshop, San Diego, CA [with John Lee, U. Wisconsin-Madison], *WK6: Data exploration and visualization with R*, Sept, 30, 2013.
27. University of Nebraska–Lincoln, NE [with Susan Chrysler, U. Iowa], *Workshop on How do you turn this driving simulator on? Tutorial for traffic engineering & road design research using driving simulation*. Apr 5, 2013.
28. Transportation Research Board Workshop, Washington, DC [with Susan Chrysler, U. Iowa], *How do you turn this driving simulator on? Tutorial for traffic engineering & road design research using driving simulation*. Jan 13, 2013.
29. Transportation Research Board ABJ70 Fall Webinar series, *Artificial or Real Intelligence? Understanding driver behavior at yellow lights: do various statistical methods serve to clarify or confuse*. Dec 7, 2012.
30. Human Factors & Ergonomics Society Workshop, Boston, MA [with John Lee, U. Wisconsin-Madison], *Introduction to R and basic statistical analysis*, Oct 22, 2012.
31. Human Factors & Ergonomics Society Workshop, Boston, MA [with John Lee, U. Wisconsin-Madison], *Data exploration and visualization with R*, Oct 22, 2012.
32. US Dept. of Transportation-RITA Transportation Innovation Series, Washington, DC, *The car of the future: Do drivers know how to adapt to new technology?* Jul 18, 2012.
<http://mediasite.yorkcast.com/webcast/Viewer/?peid=bf47b3067d2844d49cdd270dee9ee4551d>

33. Human Factors & Ergonomics Society Workshop, Las Vegas, NV [with John Lee, U. Wisconsin-Madison], *Introduction to R and basic statistical analysis*, Sep 19, 2011.
34. Human Factors & Ergonomics Society Workshop, Las Vegas, NV [with John Lee, U. Wisconsin-Madison], *Data exploration and visualization with R*, Sep 19, 2011.
35. International Workshop on Transportation Construction and Management for Sustainable Development, Harbin Institute of Technology, Harbin, China, *Human factors and statistical modeling: quantifying driver behavior*. Aug 20, 2011.
36. Montana State University, Industrial and Management Systems Engineering, Bozeman, MT, *Driver's understanding and use of adaptive cruise control: Implications for driver safety*, Sep 10, 2010.
37. Harbin Institute of Technology, Harbin, China, *Quantifying driver behavior and performance: Case studies using driver distraction*, May 25, 2010.
38. WA Transportation Safety Conference, Burien, WA, *Driver distractions: Are we asking our employees to do too much?* May 20, 2010.
39. Michigan Technological University, Mechanical Engineering, Houghton, MI, *Mitigating the effects of driver distraction*, Feb 11, 2010.
40. University of Washington, Harborview Injury Prevention Research Center, Seattle, WA, *Mitigating the effects of driver distraction for young drivers*, Aug 8, 2008.
41. University of Washington, Industrial Engineering, Seattle, WA, *Differences in driver performance at rural expressway intersections*, Apr 15, 2008.
42. Iowa State University, Dept. of Civil Engineering, Ames, IA, *Driver performance at rural expressway intersections*, Mar 07, 2008.
43. American Public Works Association, Iowa City, IA, *Human Factors, What is going on in the driver's head. The people who drive our roads*, Aug 16, 2007.
44. University of Michigan, HFES Student Chapter, Ann Arbor, MI, *The impact of driver distraction mitigation strategies on driving performance*, Mar 30, 2006.
45. Michigan State University, Dept. of Civil Engineering, Lansing, MI, *The impact of driver distraction mitigation strategies on driving performance*, Mar 29, 2006.

Presentations at conferences (presenter in bold)

Note: This section includes only those presentations not listed in *Conference Proceedings* or *Refereed Abstracts*.

1. **Kim, H.**¹, Boyle, L.N., Goodchild, A. "Delivery Process for an Office Building in the Seattle Central Business District." Presentation at *Transportation Research Board 95rd Annual Meeting*, Washington, DC, Jan 2018.
2. **Miller, E.**¹, Boyle, L.N., Lee, J.D., Jenness, J. "The impact of voice control task modality, difficulty, and duration on cognitive workload and driving performance." Presentation at *Transportation Research Board 95rd Annual Meeting*, Washington, DC, Jan 2018.
3. **Boyle, L.N.** "The transition to fully autonomous vehicles and the human's role", *Human Computer Interaction International 2017*, Vancouver, BC, July 2017.
4. **Gragg, K.**, Boyle, L.N., "Factors That Affect Bicycle-Vehicle Crashes: Implications from U.S. Crash Data". Poster presentation at *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2016.

5. **Miller, E.**¹, Boyle, L.N., “Statistical Considerations in Measures of Lateral Control”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2014.
6. Fu, C., **Neyens, D.**, Boyle, L.N., “Crash Types of Distracted Teenage Drivers: A Decade of Observations”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2014.
7. **Pitera, K.**¹, Boyle, L.N., Goodchild, A., “An analysis of the societal benefits and costs of using on-board monitoring systems for commercial vehicle operations”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2014.
8. **Boyle, L.N.** “What Do You See? Understanding Naturalistic Data Before the Inferential Analysis” *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2014.
9. **Kim, S.**¹, **Guo, H.**¹, Kwan, C.¹, Boyle, L.N. “User Preferences and Characteristics Associated with using High Occupancy Toll (HOT) Lanes”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC, Jan 2014.
10. Pitera, K.¹, **Boyle, L.N.**, Goodchild, A., “Economic analysis of onboard monitoring systems in commercial vehicles”, *Transportation Research Board 92st Annual Meeting*, Washington, DC, Jan 2013.
11. Haque, M., Ohlhauser, A.D.¹, **Washington, S.**, Boyle, L.N., “Examination of distracted driving and yellow light running: analysis of simulator data”, *Transportation Research Board 92st Annual Meeting*, Washington, DC, Jan 2013.
12. **Wu, Y.**¹, Boyle, L.N., “Adaptive Cruise Control: Driver characteristics that influence frequency of use”, *Transportation Research Board 92st Annual Meeting*, Washington, DC, Jan 2013.
13. **Boyle, L.N.**, Xiong, H.¹, Lee, J.D., “Drivers’ ability to respond to traffic conflicts using Adaptive Cruise Control”, *5th International Conference on Traffic and Transport Psychology (ICTTP)*, Netherlands, Aug 2012.
14. **Peng, Y.**¹, Boyle, L.N., “Run-Off-Road Crashes of Commercial Vehicle Drivers.” *Transportation Research Board 91st Annual Meeting*, Washington, DC, Jan 2012.
15. **Neyens, D.**¹, Boyle, L.N., “The effects of distracted and impaired drivers on the severity of pedestrian injuries.” *Transportation Research Board 91st Annual Meeting*, Washington, DC, Jan 2012.
16. **Pitera, K.**¹, Boyle, L.N., Goodchild, A., “Process Comparison of Hours of Service Recording for Commercial Vehicle Operations: Electronic versus Paper.” *Transportation Research Board 91st Annual Meeting*, Washington, DC, Jan 2012.
17. **Boyle, L.N.**, “Drivers understanding and use of adaptive cruise control.” *2011 ITS Washington Annual Meeting*, Bellevue, WA, Nov 2011.
18. **Boyle, L.N.**, Xiong, H.¹. “Safety Implications of Driver’s Use of In-vehicle Technology.” *International Conference of Chinese Transportation Professionals*, Nanjing, China, Aug 2011.
19. **Hallmark, S.**, Qiu, Y., Boyle, L.N., “Assessing the Likelihood of a Lane Departure Event using Naturalistic Driving Study Data.” *3rd International Conference on Road Safety and Simulation*, West Lafayette, IN, Sep 2011.
20. **Ghazizadeh, M.**¹, Boyle, L.N., “Traffic injuries across central Midwestern states: comparisons between states and within region”. *3rd International Conference on Road Safety and Simulation*, West Lafayette, IN, Sep 2011.

21. **Reed, D.**, Zabinsky, Z., and Boyle, L.N., “A Framework for Optimizing Civil Infrastructure Resiliency”, *ASCE Structures Conference*, Las Vegas, NV, Apr 2011.
22. **Boyle, L.N.**, “Analytical Tools: Topics from the Handbook of Driving Simulation for Engineering, Medicine, and Psychology: From Scenario Design to Data Interpretation”, *Transportation Research Board 90th Annual Meeting*, Washington, DC, Jan 2011.
23. **Reed, D.**, Zabinsky, Z., Boyle, L. “Rule-based methods for infrastructure risk analysis”, *Society for Risk Analysis Annual Meeting*, Salt Lake City, UT, Dec 2010.
24. **Boyle, L.N.** & Peng, Y. “On board monitoring of 270 trucks: data analysis case study. 2nd International Symposium on Naturalistic Driving, Blacksburg, VT, Aug 2010.
25. **Boyle, L.N.** “ARIMA model examining intervention of graduated driver licensing (GDL) programs”, *TRB Workshop on Time Series Modeling, Transportation Research Board (TRB) 89th Annual Meeting*, Washington, DC, Jan 2010.
26. **Boyle, L.N.**, “Examining outcomes of driver education programs”, *TRB Workshop on Driver Education, Transportation Research Board 89th Annual Meeting*, Washington, DC, Jan 2010.
27. **Boyle, L.N.**, Ghazizadeh, M, “Gender differences in crashes among teenage drivers”, *International Traffic Medicine Association (ITMA) 21st World Congress*. The Hague, Netherlands, Apr 2009.
28. Bao, S. ¹, **Boyle, L.N.**, “Driver safety programs: Influence on older driver’s road performance”, *Transportation Research Board (TRB) 88th Annual Meeting*, Washington, DC, Jan 2009.
29. **Ghazizadeh, M.**¹, Boyle, L.N., “The influence of driver distractions on the likelihood of rear-end, angular, and single-vehicle crashes”, *Transportation Research Board (TRB) 88th Annual Meeting*, Washington, DC, Jan 2009.
30. Lockhart, J.¹, Donmez, B.¹, **Boyle, L.N.**, “Variability in Forward Gaze Position of Distracted Drivers”, *Human Factors and Ergonomics Society 52st Annual Meeting*, New York, NY, Oct 2008.
31. Lockhart, J. ¹, Boyle, L.N., Wilkinson, M., **Sifrit, K.J.**, “Eye glance behavior of drivers with visual field loss: a driving simulator study”, *4th International Conference on Traffic and Transport Psychology*, Washington, DC, Sep 2008.
32. **Neyens, D.**¹, Donmez, B., Boyle, L.N., “Variations in effect estimation techniques to assess graduated driver licensing programs”, *Joint Meeting of the American Statistical Association*, Denver, CO, Aug 2008
33. Donmez, B.¹, **Boyle, L.N.**, Lee, JD, “Individual differences in off-road eye glances and the effects on driving performance”, *10th Annual Advanced Technologies in Transportation*, Athens, Greece, May 2008.
34. Donmez, B.¹, Boyle, L.N., **Lee, J.D.**, “Trust influences real-time and post-trip feedback in mitigating driver distraction”, *10th Annual Advanced Technologies in Transportation*, Athens, Greece, May 2008.
35. **Hallmark, S.**, Boyle, L.N., Maze, T. Carriquiry, A. Hawkins, N. Smadi, O., Souleyrette, R. and McDonald, T. “Developing a correlation between road departure crash surrogate events and safety”, *10th Annual Advanced Technologies in Transportation*, Athens, Greece, May 2008.
36. **Bao, S.** ¹, Boyle, L.N., “Driver performance at two way stop controlled intersections with median divided highways”, *Transportation Research Board (TRB) 87th Annual Meeting*, Washington, DC, Jan 2008.

37. **Bao, S.¹**, Boyle, L.N., “Visual search strategies of older drivers at rural expressway intersections”, *Human Factors and Ergonomics Society 51st Annual Meeting*, Baltimore, MD, Oct 2007.
38. **Bao, S.¹** and Boyle, L.N., “Braking behavior at rural expressway intersections for younger, middle-aged, and older drivers”, *2007 Mid-Continent Transportation Research Symposium*, Ames, IA, Aug 2007.
39. Hill, J.D.¹, **Boyle, L.N.**, Tippin, J., Faber, K, and Rizzo, M, “The effects of sleepiness on heart rate variability in a driving simulator”, *4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Stevenson, WA, Jul 2007.
40. **Lee, Y.¹**, Lee, J.D. and Boyle, L.N., “The effect of verbal interactions on drivers’ guidance of attention”, *4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, Stevenson, WA, Jul 2007.
41. **Tippin, J.**, Rizzo, M., Sparks, J., Boyle, L.N., “Reduced useful field of view in drivers with Obstructive Sleep Apnea Syndrome”, *Associated Professional Sleep Society Meeting*, Minneapolis, MN, Jun 2007.
42. **Tippin, J.**, Rizzo, M., Sparks, J., Boyle, L.N., “Visual vigilance in drivers with Obstructive Sleep Apnea Syndrome”, *American Academy of Neurology 59th Annual Meeting*, Boston, MA, May 2007.
43. **Neyens, D.¹**, Boyle, L.N., “The Iowa graduated driver licensing program: Effectiveness of crash reduction”, *Transportation Research Board (TRB) 86th Annual Meeting*, Washington, DC, Jan 2007.
44. **Donmez, B.¹**, Boyle, L.N., Lee, J.D., “Driving simulator experiments: issues in power and sample size”, *Human Factors and Ergonomics Society 50th Annual Meeting*, San Francisco, CA, Oct 2006.
45. **Neyens, D.¹**, Boyle, L.N., “A theoretical framework of risk compensation in supply chain management decision making”, *Human Factors and Ergonomics Society 50th Annual Meeting*, San Francisco, CA, Oct 2006.
46. **Bao, S.¹**, Boyle, L.N., “Strategic differences in mental rotation tasks based on gaze durations”, *Human Factors and Ergonomics Society 50th Annual Meeting*, San Francisco, CA, Oct 2006.
47. **Hill, J.D.¹**, Boyle, L.N., “The relationship between driver stress and crash injuries in adverse weather conditions”, *Transportation Research Board 85th Annual Meeting*, Washington, DC, Jan 2006.
48. **Donmez, B.¹**, Boyle, L.N., Lee, J.D., Scott, G. ¹ “Assessing differences in young drivers’ engagement in distractions”, *Transportation Research Board 85th Annual Meeting*, Washington, DC, Jan 2006.
49. Donmez, B.¹, **Boyle, L.N.**, Lee, J.D. “Analysis of driving simulator data: Important statistical considerations”, *Transportation Research Board 85th Annual Meeting*, Washington, DC. Jan 2006.
50. **Boyle, L.N.**, “Crash risks of young female drivers”, *Lifesavers Conference*, Charlotte, NC, Mar 2005.
51. **Donmez, B.¹**, Boyle, L.N., Lee, J.D., McGehee, D. “Driver acceptance of distraction mitigation strategies: Focus group and simulator studies”, *Transportation Research Board 84th Annual Meeting*, Washington, DC, Jan 2005.

52. **Najm, W.**, Stearns, M., Boyle, L. “Evaluation framework for an automotive rear-end crash avoidance field operational test”, *ITS America Annual Meeting 2002*, Long Beach, CA, May 2002.
53. **Stearns, M.**, Najm, W., Boyle, L. “An approach to user acceptance of a new technology”, *Transportation Research Board 81st Annual Meeting*, Washington, DC, Jan 2002.
54. **Boyle, L.**, Najm, W. “Analysis of off-roadway crashes for intelligent commercial vehicle applications”, *Society of Automotive Engineers 2001 International Truck and Bus Meeting and Exposition* (Session TB41), Chicago, IL, Nov 2001.
55. Boyle, L., **Mannering, F.** “Statistical analysis of the impact of traveler advisory systems on driving behavior”, *Transportation Research Board 79th Annual Meeting* (Session 488), Washington, DC, Jan 2000.
56. Boyle, L., **Mannering, F.** “Three stage least squares analysis of traveler information systems”, *INFORMS National Meeting* (Session SA15), Seattle, WA, Oct 1998.
57. **Ng, L.**, Barfield, W., Mannering, F. “Multivariate analysis of private drivers’ commuting and commercial drivers’ work related driving behavior”, *Transportation Research Board 77th Annual Meeting*, Washington, DC, Jan 1998.
58. Ng, L., Wessels, R., Do, D., **Mannering, F.**, Barfield, W. “Statistical analysis of commercial driver and dispatcher requirements for advanced traveler information systems”, *Transportation Research Board 75th Annual Meeting*, Washington, DC, Jan 1996.
59. **Mannering, F.**, Kim, S., Ng, L., Barfield, W. “Travelers’ preferences for in-vehicle information systems: an exploratory analysis”, *Transportation Research Board 75th Annual Meeting*, Washington, DC, Jan 1996.
60. Ng, L., Barfield, W., **Mannering, F.** “A survey-based methodology to determine information requirements for advanced traveler information systems”, *Transportation Research Board 74th Annual Meeting*, Washington, DC, Jan 1995.
61. **Mannering, F.**, Kim, S., Barfield, W., Ng, L. “Statistical analysis of commuters’ route, mode, and departure flexibility and the influence of traffic information”, *Transportation Research Board 73rd Annual Meeting*, Washington, DC, Jan 1994.

Professional society memberships

Institute of Industrial Engineers, Member, 2006–present
 American Statistical Association, Affiliate, 2003–present
 Human Factors and Ergonomics Society, Member, 2002–present
 Association for Computing Machinery, 2014–2016
 Puget Sound Human Factors and Ergonomics Society, Member, 2011-2013
 American Psychological Association, Division 21–Applied Experimental and Engineering Psychology, Affiliate, 2004–2012
 Society of Automotive Engineers, Member, 2001–2003

Referee/Reviewer

Source	Total
Peer-reviewed journal articles	
Accident Analysis and Prevention	110
Transportation Research Board	55

Source	Total
J. of the Human Factors and Ergonomics Society	16
Transportation Research – Part F	15
IEEE Transactions on Intelligent Transportation Systems	13
Traffic Injury Prevention	3
Vehicle Systems Dynamics	3
Computers and Industrial Engineering	2
Transportation Letters	2
Transportation Research – Part C	2
Applied Ergonomics	2
Ergonomics	2
International Journal of Sustainable Transportation	1
International Journal of Human Computer Studies	1
International Journal of Human Factors and Ergonomics	1
Perceptual and Motor Skills	1
J. of Transportation Engineering	1
Risk Analysis	1
Injury Prevention	1
Proceedings of the IME, Part D, J. of Automobile Engineering	1
J. of Cognitive Engineering and Decision Making	1
Archives of Pediatrics and Adolescent Medicine	1
Ergonomics in Design	1
J. of Intelligent Transportation System: Technology, Planning, & Operations	1
J. of Transportation Safety and Security	1
J. of Transportation and Statistics	1
J. of Statistics Education	1
Conference proceedings/abstracts	
International Driver Symposium on Human Factors in Driving Assessment	35
Human Factors & Ergonomics Society Conference	17
International Truck & Bus Safety & Security Symposium	3
Mid-Continent Transportation Research Symposium	8
Driving Simulation Conference – North America	8
International Conference on Application of Advanced Technologies in Transportation	3
IEEE Intelligent Transportation Systems Conference (ITSC)	3
Automotive – User Interface	3
SAE World Congress & Exhibition	2
Proposals	
U.S. DOT – Volpe Center	12
University Transportation Centers	8
QATR Foundation	8
National Academy of Sciences/SHRP 2	4
National Science Foundation (NSF), panels	5
National Institute of Health (NIH), panels	2
American Association for the Advancement of Science (AAAS)	1
UW-Milwaukee, Research Growth Initiative	1
Promotion and Tenure Cases	22

GRADUATE STUDENTS

Chaired Doctoral Degrees

1. Tolulope Korede Abe, Chair, *The Influence of Hospital Resource Factors on Adverse Health Outcomes*, ISE, Winter 2016, Amazon.
2. Chun-Cheng Chang, *Assessing Cognitive Workload of In-Vehicle Voice Control Systems*, Chair, ISE, Fall 2016, Ford Motor Company (Human Factors Researcher).
3. Yuqing Wu, Chair, *Quantifying Drivers Foot Movements and Pedal Misapplication Errors*, Fall 2015, Microsoft (Applied Scientist)
4. Yiyun Peng, Chair, *Behavioral Adaptation to In-Vehicle Technologies: Demands and Exposures*, Spring 2014, Expedia, Inc. (Senior Data Scientist)
5. Huimin Xiong, Chair, *Quantifying Drivers' Use of In-Vehicle Systems: Implications for Long-term Behavior*, Winter 2013, The Hartford (Product Data Analyst)
6. Kelly Pitera, Co-chair (with A. Goodchild), *Economic implications of the use of technology in commercial vehicle operations*, Fall 2012, Norwegian University of Science & Technology (Associate Professor)
7. David M. Neyens, Chair, *Driver distraction: Implications for individuals with traumatic brain injuries*, Fall 2010, Clemson University (Assistant Professor)
8. Shan Bao, Chair, *Quantifying drivers' visual workload at unsignalized intersections using eye glance measures*, Summer 2009, University of Michigan Transportation Research Institute (Research Scientist)
9. Birsen Donmez, Co-chair (with J. Lee), *Temporal dimensions of distraction mitigation strategies: implications for driving performance and behavior*, Summer 2007, University of Toronto (Associate Professor)
10. Yi-Ching Lee, Co-chair (with J. Lee), *Cognitive load and the guidance of attention in complex dynamic environments*, Summer 2006, George Mason University (Assistant Professor)
11. John D. Hill, Chair, *An integrated framework for the evaluation of the spatial and temporal components of driver stress*, Summer 2006, Indiana University, Kelley School of Business (Assistant Clinical Professor)

Current Doctoral Students

12. Xingwei Wu, Chair, Achieved candidacy, CEE, Summer 2016
13. Erika Miller, Chair, Achieved candidacy, CEE, Spring 2016
14. Huizhong Guo, Chair, Passed qualifying exam, CEE, Spring 2015
15. Steven Hwang, co-chair (with A. Banerjee), Passed qualifying exam, Winter 2017
16. Ning Li, Chair, Passed qualifying exam, Winter 2017
17. Jundi Li, co-chair (with A. Banerjee), began Fall 2016
18. Haena Kim, co-chair (with A. Goodchild), began Fall 2016

Chaired Masters Degrees

1. Kelsey Gragg, Chair, Spring 2017, Michigan DOT.
2. Joseph James Flood, Chair, MS CEE Research Project, Autumn 2014

3. Huizhong Guo, Chair, MS CEE Research Project, Winter 2014, PhD CEE program at UW
4. Erika Miller, Chair, Thesis: *Effects of roadway on driver stress: An on-road study using physiological measures*, Winter 2013, PhD CEE program at UW
5. Yuqing Wu, Chair, Thesis, *Statistical Analyses of the Perceptions and Trust of Adaptive Cruise Control Owners*, Winter 2012, Microsoft.
6. Kate Bradbury, Co-chair (with S. Rutherford), MS CEE Research Project, Summer 2011, CH2M Hill
7. Jaedi Stevens, Co-chair (with S. Rutherford), MS CEE Research Project, Summer 2011, CH2M Hill
8. Amanda Raven, Chair, Thesis: *Examining driver behavior at yellow lights: Findings using regression and data mining techniques*, Fall 2011, Alberta Health Services
9. Jarret Bato, Chair, Thesis: *Adaptive Cruise Control (ACC): Driver's use and perception of safety*, Spring 2011, T Mobile.
10. Chris Deits, MS Research Project: *Bus and drug study*, Summer 2011, Boeing.
11. Yiyun Peng, Chair, Thesis: *Driver's lane keeping ability when driving inattentively: Insights from a naturalistic study*, Summer 2010, Data Scientist, Expedia.
12. David Dickie, Chair, Thesis: *Survey of users on adaptive cruise control in the state of Iowa*, Spring 2010, Director, DD Analytics Cubed, Ltd.
13. Mahtab Ghazizadeh, Chair, Thesis: *Examination of crash data across Midwestern states*, Summer 2009, Apple.
14. Jessica Chaney, Chair, Thesis: *The influence of music among drivers*, Summer 2009.
15. Elizabeth Westlake, Chair, Thesis: *Driver distraction among teenage drivers*, Spring 2009, Proctor & Gamble.
16. Julie Lockhart, Chair, Thesis: *Driving with visual field loss: Implications from a driving simulator study*, Spring 2008, Daimler AG.
17. David Neyens, Chair, Thesis: *The influence of driver distraction on crash type and injury severity for teenage drivers*, 2006, Assistant Professor at Clemson University.
18. Aaron Bock, Chair, Thesis: *Gaze duration estimates and eye movements related to mental rotation tasks*, Fall 2005, Epic Systems
19. Amit Paul, Chair, Thesis: *Quantifying the cognitive abilities and performance of drivers with sleep disorders*, Spring 2005, Hastings Direct.
20. Li Li, Chair, Coursework only, Spring 2005.
21. Birsen Donmez, Chair, Thesis: *Evaluating driver distraction mitigation strategies based on a novel taxonomy*, Spring 2004, Associate Professor at University of Toronto.

Current Masters Students

none

Other significant student supervision

1. Membership on PhD degree committees

- Rahul Warriar, PhD committee (Mechanical Engineering), advisor: S. Devasia, current.
- Kiron Lebeck, PhD committee (Computer Science & Engineering), (advisor: T. Kohno), current.
- Aven Samareh, PhD committee (Industrial Engineering), (advisor: S. Huang), current.
- Ja Young Lee, PhD committee (U. Wisconsin–Madison, Industrial Engineering), (advisor: J. Lee), current.
- Guo, Wei, PhD committee (Industrial Engineering), (advisor: A. Banerjee), current.
- Fangfang Wang, PhD committee (Industrial Engineering), (advisor: P. Johnson), current.

- Margaret Hughes, Graduate School Representative (Occupational Health), *Effects of Occupational Exposures on Heart Rate Variability and Cardiovascular Outcomes in Truck Drivers* (advisor: P. Johnson), current.
- Vindhya Venkatraman, PhD committee (U. Wisconsin–Madison, Industrial Engineering), (advisor: J. Lee), Fall 2017.
- Ali Ajdari, PhD committee (Industrial Engineering), *Adaptive, Robust, and Non-stationary Fractionation, and Optimal Stopping in Radiotherapy* (advisor: A. Ghate), Fall 2017.
- Ornwipa Thamsuwan, PhD committee (Industrial Engineering), *Objective methods for characterizing physical exposures which may contribute to WMSDs in agricultural workers* (advisor: P. Johnson), Summer 2016
- Peng Chen, PhD committee (Urban Design and Planning Group), Dissertation: *Bicycling and the built environment: route choice and road safety* (advisor: Q. Chen), Winter 2016
- Mahtab Ghazizadeh, PhD committee (U. Wisconsin–Madison, Industrial Engineering), Dissertation: *Patterns of usage and technology acceptance over time: The case of older adults and an information and communication website* (advisor: J. Lee), Summer 2014
- Duane Alexander Quistberg, PhD GSR member (Public Health), Dissertation: *Epidemiology, pedestrian safety in Lima, Peru*, (advisor: B. Ebel), Dec 2012
- Yen-Yu Lin, PhD committee (Civil Engineering), Dissertation: *Eco-decision making for pavement construction projects* (advisor: S. Meunch), Aug 2012.
- Jay Jeong Kim, PhD committee (Industrial Engineering) (advisor: P. Johnson), Jun 2012
- Monica Lees, PhD committee (Industrial Engineering), Dissertation: *Drivers responses to alarms based on situation context* (advisor: J. Lee), Fall 2010
- Bobbie Seppelt, PhD committee (Industrial Engineering) *Supporting operator reliance on automation through continuous feedback* (advisor: J. Lee), Fall 2009
- Yulan Liang, PhD committee (Industrial Engineering) Dissertation: *Driver distraction* (advisor: J. Lee), Spring 2009
- Alaa Elway, PhD committee (Industrial Engineering), Dissertation: *Reliability/Sensor based decision models* (advisor: N. Gabraeel), 2009
- Lin Qiu, PhD committee (Civil Engineering), Dissertation: *Quantifying winter related crashes* (advisor: W. Nixon), 2008
- Hyunkyung Lee, PhD committee (Psychology), *Mechanisms of VTSM influence on amodally completed visual representation* (advisor: S. Vecera), 2008
- Ji Gao, PhD committee (Industrial Engineering), *Information sharing, trust in automation, and cooperation for multi-operator multi-automation systems* (advisor: J. Lee), 2005
- Heqin Xu, PhD committee (Mechanical Engineering), *Dimension-reduction methods in computational stochastic mechanics and reliability* (advisor: S. Raman), 2004
- Gi-yung Ryu, PhD committee (Industrial Engineering), *Localization of support vector machine* (advisor: D. Bricker), 2004
- Dan Hanson, PhD committee (Industrial Engineering), *Artificial neural network based survival analysis for hydro-mechanical systems* (advisor: G. Fisher), 2004

2. Membership on MS degree committees

- Xuelu Yang, MS Committee (Industrial Engineering), *Cost-Effectiveness Analysis of Adaptive Monitoring Strategies for Depression Treatment* (advisor: S. Liu), 2016
- Ornwipa Thamsuwan, MS committee (Industrial Engineering), *Whole body vibration exposures in bus drivers: Comparison between a high-floor coach and low-floor city bus* (advisor: P. Johnson), 2011

- TingTing Wang, MS committee (Civil Engineering), *Simultaneous equations of travel behavior* (advisor: C. Chen), 2010
- Justin Glasgow, MS committee (Industrial Engineering), *Optimizing information value: reflecting on rover sensor data* (advisor: G. Thomas), 2006
- Erin Pudenz, MS committee (Industrial Engineering), *Directed autonomy: A new model for a new mobile robot technology* (advisor: G. Thomas), 2006
- Monica Lees, MS committee (Industrial Engineering), *False alarms and adaptive cruise control* (advisor: J. Lee), 2005
- Tara Smyser, MS reading committee (Industrial Engineering), *Driving and eye tracking* (advisor: J. Lee), 2004
- S. Udupa, MS Non-thesis, reading committee, IE, Non-thesis, 2004
- Mei-chi Huang, MS reading committee (Civil Engineering), *Commuters' mode choice between bus transit systems in the city of Iowa City* (advisor: J. Stoner), 2004
- Robin Follmer, MS committee (Industrial Engineering), *Juice pasteurization simulation* (advisor: J. Lee), 2004
- Joshua Hoffman, MS committee (Industrial Engineering), *Text messaging in-vehicle* (advisor: J. Lee), 2004
- Heather Stoner, MS committee (Industrial Engineering), *Applying ecological interface design to the driving domain* (advisor: J. Lee), 2004
- Greg Brucker, MS reading committee (Industrial Engineering), Non-thesis research paper, 2003
- Emily Wiese, MS committee (Industrial Engineering), *Attention grounding: a new approach to IVIS implementation* (advisor: J. Lee), 2003

3. Undergraduate Research Supervision

Note: Industrial engineering student unless noted otherwise.

- 2018: West O'Brien, D. Prendez, P. Curry (CSE)
2017: Yoel Tekle, Warren Sprecher, West O'Brien
2016: Jiarui Wu, Stephanie Wang, Yoel Tekle, Warren Sprecher, Sean Hoon
2015: Sean Yagi, Jiarui Wu, Nicholas DiFulvio, Stephanie Wang
2014: Henry Chang, Kayla Fukuda (ME), Daniel Ullmon (CEE), Sean Yagi, Jiarui Wu, Nicholas DiFulvio, Kristen Higashi (CEE), Stephanie Wang
2013: Henry Chang, Kayla Fukuda, Daniel Ullmon (CEE), Sean Xuan
2012: Victoria Cartwright, Sarah Golla, Charles Meissner (Honors Project), Sean Xuan
2011: Michelle Bui, Sarah Golla, Murphy Kitchell (Olin U.), Ahn Phan, Erik Robertson (Business), Cheuk-Hung Ng
2010: Cheuk-Hung Ng, Karishma Sanghvi
2009: Matt Gooi, Alyson Witt
2008: Matt Gooi, Audrey Leung, Alyson Witt
2007: Mark Hoy, Audrey Leung, Gregory Scott, Jenna Smith, Gregor Vessor
2006: Renee Golinvaux, Mike Jiminez (EE), Ricki Monohon, Nate Otto, Gregory Scott (ME)
2005: Gregory Scott (ME)
2004: Mashala Macias, David Neyens
2003: Aaron Bock, Mashala Macias, John Mulherin (ME)
2002: Mashala Macias, John Mulherin (ME)

RESEARCH ACTIVITIES

Funded Research (as PI, co-PI, or co-Investigator)

Total funding amount: \$18.9M. My amount: \$3.5M

Funding Agency	Title	Your role with other PI's and co-PI's	Total Amount (in K)	Your Amount (in K)	Subcontracts if any, U. Matching	Dates (start-finish)
WSDOT	Advancing Multimodal Safety through Pedestrian Risk Reduction	PI (co-PI: Anne Moudon)	\$175K	\$100K		2/2017-6/2019
Toyota	Effectiveness of Short and Long Term Education Methods for Risk Mitigation and Associated Safety-Related Driving Skills	PI	\$598K	\$598K		9/2017-2/2020
JCATI	The Effectiveness of an Immersive Operator Control Station to Enhance Situation Awareness	PI	\$99.4K	\$99.4K		7/2017-6/2018
Seattle DOT	Bike and Pedestrian Safety Analysis (BPSA) in support of SDOT Vision Zero	PI	\$52K	\$52K		04/2017-09/2017
DMDII	Enabling Real-Time Supply Chain Visibility Through Predictive Analytics	Co-I (PI: Banerjee)	\$1,659K	\$20K	\$330K	10/2016-0/2018
Automobile Alliance	Independent Evaluation of the Simplified Test Method Developed by Wayne State University (WSU)	PI	\$80.0	\$80.0		7/2015-7/2016
USDOT/NHTSA	In-vehicle voice control interface performance evaluation (part 2) (DTNH22-11-D-00237)	co-PI (PI: Jenness, Westat)	\$100.0	\$100.0		9/2015-9/2017
USDOT/NHTSA	V2V Safety Applications Study (MiniSim Multi-Site study)	UW PI (PI: Marshall, U. Iowa)	\$327.5	\$327.5		12/2013-8/2016
USDOT/RITA	PACTRANS University Transportation Center	co-PI (PI: Wang)	\$6,500.0	\$65.0	\$2,000.0	1/2012-present
NIH	Pediatric Guideline Adherence and Outcomes (PEGASUS) Project (NINDS: 1R01NS072308-03)	Co-I (PI: Vavilala, Harborview)	\$2,500.0	\$30.0		9/2010-9/2015
Toyota	Task Analytic & Time Series Analysis of Driver Behavior	co-PI (PI: McGehee, U. Iowa)	\$998.0	\$160.0		9/2011-8/2015

Funding Agency	Title	Your role with other PI's and co-PI's	Total Amount (in K)	Your Amount (in K)	Subcontracts if any, U. Matching	Dates (start-finish)
USDOT/NHTSA	In-vehicle voice control interface performance evaluation (DTNH22-11-D-00237)	co-PI (PI: Jenness, Westat)	\$750.0	\$282.5		10/2012–9/2015
USDOT/FMCSA	Independent Evaluation of OBMS (DTMC75-09-H-00013)	PI	\$100.0	\$100.0		12/2012–8/2015
USDOT/FHWA	Effectiveness of Safety and Public Service Messages on Dynamic Message Signs (DTFH61-11-D-0019-02)	co-PI (PI: Madi, Booz Allen Hamilton)	\$106.0	\$106.0		9/2012–5/2013
NAS/TRB	SHRP 2 S07: Data collection	UW PI (PI: Campbell, Battelle)	\$268.6	\$268.6		1/2011–1/2014
NSF	Career: Modeling the effect of operators' adaptive behavior on system safety (IIS-1027609 (UI))	PI	\$464.8	\$464.8		2/2007–12/2013
USDOT/FMCSA	Independent Evaluation of OBMS (DTMC75-09-H-00013)	co-PI (PI, Blanco, VTTI)	\$3,500.0	\$672.3		9/2009–11/2012
USDOT/NHTSA	Text Reading/Text Input for NHTSA Visual Manual Distraction Guidelines (DTNH22-11-D-00237/0006)	PI (co-PI, Lee, U. Wisconsin)	\$253.0	\$150.5		4/2012–10/2012
CDC	Comparative effectiveness of two interventions for teen distracted driving	Co-I (PI, Ebel)	\$111.2	\$5.0		9/2010–8/2012
NIH	Defining Virtual Reality Driving in TBI (1R01HD050718-01 A2)	co-PI (PI, Schultheis, Drexel)	\$991.8	\$275.9		7/2007–2/2012
USDOT/FTA	Bus and Drug Simulator Study	co-PI (PI, Morrison, Cahill Swift)	\$425.0	\$40.0		10/2008–12/2010
NAS/TRB	SHRP 2 S02: Integration of Analysis Methods and Development of Analysis Plan	co-PI (PI, McGehee, U. Iowa)	\$423.8	\$77.4		4/2008–2/2010
USDOT/RITA	Transportation Center, Associate director for U. Iowa	co-PI (PI, Maze, ISU)	\$300.0	\$90.0	\$225.0	10/2007–9/2009
Iowa DOT	Teenage Driver Distraction Survey	PI	\$30.0	\$30.0		4/2008–3/2009
Iowa DOT	Night Visibility	PI	\$20.0	\$20.0		1/2008–12/2008

Funding Agency	Title	Your role with other PI's and co-PI's	Total Amount (in K)	Your Amount (in K)	Subcontracts if any, U. Matching	Dates (start-finish)
NAS/TRB	SHRP 2 S01 Phase 2: Evaluation of Data Needs, Crash Surrogates, and Analysis Methods to Address Lane Departure Research Questions Using Naturalistic Driving Study Data	co-PI (PI, Hallmark, Iowa State U.)	\$197.9	\$35.0		1/2008–12/2008
Iowa DOT	Senior driver safety program	PI	\$30.0	\$30.0		8/2007–5/2008
Mid Transportation Consortium	Spatial and Temporal crashes	PI	\$60.0	\$60.0	\$30.0	5/2007–5/2008
NAS/TRB	SHRP 2 S01 Phase 1: Evaluation of Data Needs, Crash Surrogates, and Analysis Methods to Address Lane Departure Research Questions Using Naturalistic Driving Study Data	co-PI (PI, Hallmark, Iowa State U.)	\$99.0	\$12.1		1/2007–12/2007
Iowa DOT	Medicaid study on older people's transportation needs	Co-PI (PI, Hanley, Iowa)	\$248.0	\$36.2		10/2006–12/2007
US DOT/NHTSA	Driving with Visual Field Loss: An exploratory simulator study	PI	\$83.0	\$83.0		8/2006–6/2007
Iowa DOT	Rural Expressway Intersections: Age-Related Differences	PI	\$60.0	\$60.0		3/2006–5/2007
Iowa DOT	Crash Risk of Older Drivers	PI	\$30.0	\$30.0		9/2004–12/2005
UMCPHP/CDC	Model of Emergency Response Plan	PI	\$80.0	\$40.0		3/2005–9/2005
Iowa Injury Prevention Research Center	Older Women Driver study	PI	\$15.0	\$15.0		9/2004–9/2005
Iowa Injury Prevention Research Center	Drivers with Sleep Apnea	PI	\$15.0	\$15.0		9/2004–6/2005
U. Iowa Carver	Gender Differences in Spatial Skills	PI	\$15.0	\$15.0		1/2004–5/2005
NAS	High Risk Commercial Drivers	Co-I (PI, Bergoffen, Mainway Services)	\$6.5	\$6.5		1/2004–8/2004

DOCUMENTATION OF TEACHING EFFECTIVENESS

Courses Taught & Student Evaluations

(University of Washington)

All students were asked to rate the courses on a scale of 0-5 [0 = very poor, 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent]. The first four items on the survey were; Item 1: “The course as a whole was”, Item 2: “The course content was”, Item 3: “The instructor’s contribution to the course was”, and Item 4: “The instructor’s effectiveness in teaching the subject matter was”. (Median scores are reported). Starting Fall 2014: course evaluations were conducted on-line.

Course	Title	Quarter	Credit Hrs	Enrollment	Evaluations? Response	Item 1	Item 3	Item 4	Median, Items 1-4
INDE 549/ ENVH 549	HF in Eng Design	Spr 17	3	11	Yes, 10/11	4.1	4.8	4.7	4.5
INDE 549/ ENVH 549	HF in Eng Design	Spr 16	3	13	Yes, 10/13	4.3	4.8	4.5	4.6
INDE 316/ STAT 316	Design of Experiment	Win 16	3	60	Yes, 25/60 (41%)	4.0	4.1	4.1	4.1
INDE 549/ ENVH 549	HF in Eng Design	Spr 15	3	17	Yes, 12/17 (70%)	3.8	4.1	4.1	3.9
INDE 316/ STAT 316	Design of Experiment	Win 15	3	61	Yes: 26/61 (42%)	4.0	4.2	4.1	4.1
INDE 351/549	HF in Eng Design	Spr 14	4/3	55	Yes: 52/55 (94%)	3.7	3.9	3.7	3.7
INDE 315	Prob & Stat for Engrs	Spr 14	3	149	Yes: 85/145 (58%)	3.7	3.3	3.3	3.4
INDE 546/ CIVE 584	Analyt Methods in HF and Transportation	Win 14	3	27	Yes, 22/27 (85%)	4.5	4.5	4.2	4.3
INDE 351/549	HF in Eng Design	Spr 13	4/3	51	Yes, 37/51	4.0	4.5	4.1	4.2
INDE 315	Prob & Stat for Engrs	Win 13	4	130	Yes, 80/130	3.4	3.6	2.9	3.3
INDE 546/ CIVE 584	Analyt Methods in HF and Transportation	Win 13	3	25	Yes, 21/25	3.3	3.8	3.2	3.6
INDE 351/549	HF in Eng Design	Spr 12	4/3	38	Yes, 22/38	4.2	4.7	4.6	4.4
INDE/ STAT 316	Design of Experiment	Win 12	4	45	Yes, 36/45	3.9	4.3	4.1	4.0
INDE 599/ CIVE 584	Analyt Methods in HF and Transportation	Win 12	3	14 (+3 audits)	Yes, 14/14 (100%)	4.2	4.4	4.4	4.3
INDE 351/549	HF in Eng Design	Spr 11	4/3	35	Yes, 23/24	3.8	4.1	3.8	3.9
INDE/ STAT 316	Design of Experiment	Win 11	4	49	Yes, 38/49	4.1	4.6	4.4	4.2
INDE/ CIVE 599	Analyt Methods in HF and Transportation	Win 11	3	15	Yes, 14/15	4.2	4.7	4.2	4.3
INDE 351/ 543	HF in Eng Design	Spr 10	4/3	41	Yes, 30/40	4.3	4.3	4.2	4.2
INDE 321	Statistical Quality Control	Win 10	4	31	Yes, 21/31	3.7	4.1	4.1	3.9

Course	Title	Quarter	Credit Hrs	Enrollment	Evaluations? Response	Item 1	Item 3	Item 4	Median, Items 1-4
INDE/CIVE 599	Analyt Methods in HF and Transportation	Fall 09	3	12	Yes, 11/12	3.6	3.4	3.6	3.5

(University of Iowa)

All students rated the courses on a scale of 1-6 [1=strongly agree, 2=moderately agree, 3=slightly disagree, 4=slightly agree, 5=moderately agree, 6=strongly agree]

Spr 2003: course evaluations were administered in class.

Sum 2003 to Spr 2009: course evaluations were administered on-line.

The two major survey items included Item 4: The instructor was effective, and Item 5: I acquired a basic understanding of the subject area. (Spr 03 [administered in-class] same items on evaluation form were identified as Items 1 and 2)

Mean scores are reported.

Course	Title	Semester	Credit Hrs	Enrollment	Evaluations? Response	Item 1 (4)	Item 2 (5)	Average
056:248	Analytical Methods in HF Eng	Spr 2009	3	14	Yes, 7/14	5.71	5.71	5.71
059:005 Sec 3	Eng. Problem Solving I	Fall 2008	3	32	Yes, 14/32	4.93	5.00	4.97
059:005 Sec 4	Eng. Problem Solving I	Fall 2008	3	32	Yes, 9/32	4.89	5.11	5.00
056:162 22S:133	Quality Control	Fall 2008	3	20	Yes, 3/20	4.00	4.67	4.335
056:191	IE Graduate Seminar	Fall 2008	1	41	No			
056:195	Advanced Six Sigma	Spr 2008	3	12	Yes, 5/12	5.60	5.40	5.50
056:240	Human Performance in Eng Sys	Spr 2008	3	10	Yes, 7/10	5.86	5.71	5.79
056:091	IE Professional Seminar	Spr 2008	1	32	No	-	-	-
056:195	Six Sigma Techniques	Win 2007	3	8	No	-	-	-
056:162 22S:133	Quality Control	Fall 2007	3	26	Yes, 9/26	5.00	5.56	5.28
056:091	IE Professional Seminar	Fall, 2007	0	27	No	-	-	-
056;195	Six Sigma Techniques	Sum 2007	3	8	Yes, 4/8	5.75	6.00	5.88
056:295	Analytical Methods in HF Eng	Spr 2007	3	7	Yes, 4/7	5.50	5.50	5.50
056:091	IE Professional Seminar	Spr 2007	0	32	No	-	-	-
056:162 22S:133	Quality Control	Fall 2006	3	37	Yes, 22/37	5.45	5.52	5.49
056:144	Human Factors	Fall 2006	3	28	Yes, 16/26	5.13	5.19	5.16
056:091	IE Professional	Fall, 2006	0	31	No	-	-	-

Course	Title	Semester	Credit Hrs	Enrollment	Evaluations? Response	Item 1 (4)	Item 2 (5)	Average
	Seminar							
056:195	Six Sigma Quality Control	Sum 2006	3	15	No	-	-	-
056:240	Human Performance in Eng Sys	Spr 2006	3	9	Yes, 8/9	5.31	5.23	5.27
056:162 22S:133	Quality Control	Fall 2005	3	20	Yes, 13/20	5.46	5.54	5.50
056:162 22S:133	Quality Control	Spr 2005	3	41	Yes, 24/41	4.54	5.00	4.77
056:295	Analytical Methods in HF Eng	Fall 2004	3	14 (+2 audits)	Yes, 13/14	5.31	5.23	5.27
056:162 22S:133	Quality Control	Spr 2004	3	52	Yes, 27/52	4.46	4.88	4.67
056:191	IE Graduate Seminar	Spr 2004	0	30	No	-	-	-
056:240	Human Performance in Eng Sys	Fall 2003	3	15	Yes, 12/15	5.25	5.08	5.17
056:162 22S:133	Quality Control	Spr 2003	3	58	Yes, 26/58	5.11	5.21	5.16

Teaching Awards, Nominations for Teaching Awards

IIE Outstanding Professor Award 2005 University of Iowa
IIE Outstanding Educator Award 2003 University of Iowa

SERVICE

Departmental service

2017 UW Discovery Days: ISE information session, Apr 22 (Sat)
2016 UW Discovery Days: ISE information session, Apr 23 (Sat)
2015-present U. Washington (UW) ISE Undergraduate Committee
2015-2016 UW ME/ISE Faculty Search (for Manufacturing)
2015 UW Discovery Days: ISE information session, Apr 25 (Sat)
2013-2014 UW ISE Faculty Search (for Statistics, for Transportation Logistics)
2013-2014 UW CEE Mentoring Committees (two people)
2013 UW Discovery Days: ISE information session, Apr 27 (Sat)
2012-2013 UW CEE Faculty Search (for Transportation)
2012-2013 UW ISE Faculty Search (for Health Care, for Manufacturing)
2012 UW Discovery Days: ISE information session, Apr 21 (Sat)
2012-2015 UW ISE Undergraduate Adviser
2010-2015 UW ISE ABET Coordinator
2010-2013 UW ISE representative on College of Engineering (COE) Faculty Council
2010 UW CEE faculty search committee (for Sustainability Infrastructure)

2006-2008 UI Institute of Industrial Engineers (IIE), Faculty Advisor
IIE Gold Award, 2006, 2007

2004–2006 UI Dept. of IE, Graduate Committee, Member
2002–2006 U. Iowa (UI) Industrial Engineering Honors program, Faculty Advisor

College service

2016 Women in Science and Engineering (WISE): ISE information session, May 7 (Sat)
2015 Speaker, Washington State Academic RedShirt–(STARS) program, Feb 12 (Thurs)
2014 Speaker, ADVANCE PreTenure Workshop on Budget Management, Mar 18 (Tues)
2014 Speaker, Washington State Academic RedShirt–(STARS) program, Mar 6 (Thurs)
2013 Speaker, Engineering for Society Seminar, Dec 4
2013 UW COE Engineering Discovery Days, Lab Demonstrations, Apr 26 (Fri)
2012 UW Engineering Discovery Days, Lab Demonstrations, Apr 20 (Fri)
2012-2013 UW COE Faculty Council
2011 UW Engineering Discovery Days, Lab Demonstrations (Fri, Sat)
2011 Speaker, UW COE Engineering for Society Seminar, Oct 5
2010 UW COE Lecture Series: Driven to Distraction, Nov. 3

2005, 06, 07 UI College of Engineering Open House, Faculty Judge

University service

2012,13,14,15 UW Graduate Ceremonies, College Marshall
2012 UW Faculty Senate, Member
2009 UI WISE workshop on “Negotiating Your First Tenure Track Position” Panelist
(Apr 16)
2008–2009 UI Review Committee for the Office of the Vice President for Student Services
2007–2009 UI Injury Prevention Research Center (IPRC), Executive Committee
2007–2009 UI Liaison for the American Society for Quality (ASQ)
2005–2008 UI Faculty Council, Member
2003–2009 UI Faculty Senate, Member
2002–2008 UI Women in Science and Engineering (WISE) Advisory Board

Professional society and other service

1. Editorial Activities

Editorial Board, Transportation Research Part F, 2015–present
Associate Editor, Accident Analysis and Prevention, 2008–present
(as of Mar 2018: handled over 380 papers)
Guest editor, Accident Analysis and Prevention, Special Issue on Emerging Research Methods
and Their Application to Road Safety, 2012-2013
Guest editor, Accident Analysis and Prevention, Special Issue on Simulator-Based Safety
Studies, 2008-2009
Editorial Board, Accident Analysis and Prevention, 2005–2008

2. Scientific Committee Activities

University of Buffalo, Advisory Board, Fall 2017–present
SaferSim Advisory Board, 2014–present
Transportation Research Board
Chair, Committee on Statistical Methods, ABJ80 (2011–present)
Member, Committee on Simulation and Measurement of Vehicle and Operator
Performance, AND30 (2003–2016)

Member, Committee on Statistical Methodology and Statistical Computer Software in Transportation Research, ABJ80 (2003–2011)
Member, Committee on Women's Issues in Transportation, ABE70 (2004–2007)

3. Conference Activities

Conference Organizer, 6th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (Automotive UI 2014), Seattle, WA (Sept, 2014)
Panelist for Doctoral Colloquium, 5th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (Automotive UI 2013), Eindhoven, NL (Oct, 2013)
Organizing Committee, International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, 2003 (Park City, UT), 2005 (Rockport, ME), 2007 (Stevenson, WA), 2009 (Big Sky, MT), 2011 (Lake Tahoe, NV), 2013 (Lake George, NY), 2015 (Snowbird, UT), 2017 (VT)
Conference Paper Chair, 4th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (Automotive UI 2012), Portsmouth, NH (Oct, 2012)
Committee Liaison, Research on Women's Issues in Transportation Conference, 2004 (Chicago, IL)
Co-host and Organizer, Driving Simulation Conference – North America, 2007 (Iowa City, IA)
Scientific Committee, Mid Continent Transportation Research Symposium, 2007 (Ames, IA)
Scientific Committee, 10th International Conference on Application of Advanced Technologies in Transportation, 2008 (Athens, Greece)

4. Educational outreach

2018 Women Techmakers Summit at Google Seattle, Panel, Seattle, WA, March 3.
St. Anne School, *Driver Safety Presentation*, Seattle, WA, Oct 27, 2017.
Holy Names Academy, *Keynote Speaker*, Seattle, WA, Apr 5, 2017.
Seattle Preparatory High School, *Engineering at the UW*, Seattle, WA, May 3, 2017.
Women in Science & Engineering, Panel, Seattle, WA, Feb 18, 2017.
Nathan Hale High School, Seattle, WA, *Driver safety and the car of the future*, Dec 5, 2012.
Roosevelt High School, Seattle, WA, *Driver distraction*, Jan 9, 2012.
Eastside Science Café, Kirkland, WA, *Distraction driving: How technology can help; not hinder*, Aug 9, 2010. <http://kcts9.org/education/science-café/distracted-driving-how-technology-can-help-not-hinder>

International, national or governmental service

Panel Member, The National Academies– Strengthening the Federal Motor Carrier Safety Administration Research & Technology Program, 2016–present
Panel Member, The National Academies–Review of the Compliance, Safety, and Accountability (CSA) Program of the Federal Motor Carrier Safety Administration, 2016–2017
Panel Member, The National Academies– In-Service Performance of Energy-absorbing W-beam Guardrail End Treatments: Phase 1, Washington, DC, 2015–2016
Board of Visitors, US Army Research Office–LifeSciences, Research Triangle Park, NC, 2010, 2013, 2015
Panel Member, The National Academies – Human Factors Science at the Army Research Laboratory, Aberdeen, MD, 2014-present
Panel Member, The National Academies – Soldier Systems Panel, Aberdeen, MD, 2009-2013
Reliability Expert Task Group, Use of in-vehicle video data to explore how to modify driver behavior that causes non-recurring congestion (SHRP 2 project), The National Academies, Transportation Research Board, 2008

Dr. Linda Ng Boyle
Curriculum Vitae
Mar. 1, 2018

Expert Panel on Older Drivers, US Dept. of Transportation–National Highway Transportation
Safety Administration (NHTSA), 2008
Peer Reviewer, US Dept. of Transportation–Federal Motor Carrier Safety Administration
(FMCSA), 2007, 2008