



Jeffrey Hickman, Ph.D.

Human Factors, Practice Leader

5707 S. Laburnum Avenue
Richmond, VA 23231



(540) 239-4878

jhickman@rimkus.com

Background

Dr. Jeffrey Hickman has a B.S. in Psychology from the University of Florida and a Ph.D. in Clinical Psychology from the Virginia Polytechnic Institute and State University. His Ph.D. research focused on behavioral safety and safety in large-scale systems. After completing his Ph.D., Dr. Hickman was employed at the Virginia Tech Transportation Institute for 18 years. He has considerable experience assisting clients to understand human factors issues related to warnings, slips/trips/falls, occupational/industrial safety, and vehicle operator behavior.

Dr. Hickman's safety research and experience include human factors, behavior, fatigue, drowsiness, duty status, attention, glance patterns, electronic device use, regulations, drugs and alcohol, warnings, advanced driver assistance systems (ADAS), automated driving systems (ADS), and many other safety technologies. Dr. Hickman investigated the effects of visual displays and infotainment systems on driver attention. His research on driver distraction is often cited as a rationale for texting-while-driving bans but is also the primary source for the lawful use of a hands-free cell phone while driving. He has assisted organizations with developing distraction/cell phone policies and wrote a chapter on driver distraction in the National Safety Council's Motor Fleet Safety Manual 5th Edition.

Dr. Hickman supported studies evaluating various hours-of-service regulations and driver sleep patterns. These results have been used to support and/or propose new hours-of-service regulations. He led the development of the North American Fatigue Management Program. In addition, he was involved in several efforts to document effective safety management techniques heavy vehicle operations. His expertise is broadly defined as human factors occupational/industrial safety and health, including behavioral safety, safety culture, prompts, warnings, safety management techniques, education and training, personal protective equipment, and operator health.

Dr. Hickman is a current member of the SAE Truck and Bus Automation Safety Committee, SAE Driver Metrics Committee, Human Factors and Ergonomics Society (including the Forensics Professional, Safety, and Surface Transportation Committees), and the National Institute for Occupational Safety and Health Transportation, Warehousing and Utilities Council. He is the former chair of SAE Task Force: J3198 - Driver Drowsiness and Fatigue in the Safe Operation of Vehicles – Definition of Terms and Concepts. He has been the principal investigator or co-investigator on 65 research projects totaling over \$43 million. Dr. Hickman has delivered more than 130 professional presentations and published over 100 peer-reviewed publications and technical reports.

Products, Contexts, and Environments

- **Led the development of the North American Fatigue Management Program.**
- **Worked with Various Advanced Driver Assistance Systems**
 - Lane departure warning
 - Forward collision warning
 - Pedestrian warning system
 - Automatic emergency braking
 - Electronic stability control
- **Experience with Various Onboard Safety Systems/Telematics**
 - Lytx
 - SmartDrive
 - Samsara
 - Netradyne
 - Geotab
 - Omnitrac
- **Wrote the original chapter on driver distraction in the National Safety Council's Motor Fleet Safety Manual 5th Edition.**
- **Warnings, design, evaluation, and research**
- **Informed national and state policy on hours of service and electronic device use.**
- **Evaluated Various Hours-of-Service Regulations for the Federal Motor Carrier Safety Administration**
 - 11th hour of driving
 - 30-minute break requirement
 - 2-night provision in the 34-hour restart
- **Created a guidelines document for Transport Canada on Limiting Driver Distraction from video displays in vehicles.**
- **Developed a Defensive Driving Program for snowplow operators.**
- **Member of a working group at the National District Attorneys Association to develop a work product on driver distraction.**
- **Surface Vehicles**
 - Heavy and light-duty trucks
 - Motorcoaches
 - Passenger vehicles
 - Motorcycles
 - Transit buses
- **Above-ground and below-ground mining**

- **Taught the SAE class, Driver Distraction from Electronic Devices: Insights and Implications.**

- **Awards from:**

- Federal Motor Carrier Safety Administration
- National Highway Traffic Safety Administration
- Federal Highway Administration
- Mine Health and Safety Administration
- National Transportation Research Center, Inc.
- National Institute for Occupational Safety and Health
- National Science Foundation
- Transport Canada
- National Surface Transportation Center for Safety Excellence
- Transportation Research Board
- National Safety Council
- Canadian Council of Motor Transport Administrators
- American Automobile Association Foundation for Traffic Safety

Professional Experience

- **Rimkus**

2021 – Present

- Human Factors, Practice Leader
- Special Consultant

- **Virginia Tech Transportation Institute**

2003 – 2021

- Research Scientist/Program Leader (2009-2021)
- Senior Research Associate (2006-2009)
- Research Associate (2003-2006)

Education

- **Psychology, B.S.:** University of Florida (1997)
- **Clinical Psychology, M.S.:** Virginia Polytechnic Institute and State University (2002)
- **Clinical Psychology, Ph.D.:** Virginia Polytechnic Institute and State University (2005)

Committees/Memberships

- **Human Factors and Ergonomics Society:** Member (2022-Present)
 - Forensics Professional, Safety, and Surface Transportation Committees
- **SAE International:** Member (2019-Present)
- **SAE Truck and Bus Automation Safety Committee:** Member (2021-present)
- **SAE Driver Metrics Committee:** Member (2019-present)
- **NORA Transportation, Warehousing and Utilities Council:** Member (2013-present)
- **Virginia Tech Commission on Research** (2020-2021)
- **Partnership of Automated Vehicle Academic Advisory Council:** Member (2020-2021)
- **Partnership of Automated Vehicle Freight/Trucking Group:** Member (2020-2021)

- **SAE Task Force: J3198 - Driver Drowsiness and Fatigue in the Safe Operation of Vehicles – Definition of Terms and Concepts:** Chair (2019-2020)
- **Transportation Research Board ANB70 Health and Wellness subcommittee:** Chair (2010-2018)
- **Transportation Research Board ANB70 Truck and Bus Safety:** Member (2013-2018)

Publications

- Hickman, J.S., Shah, R., Soccolich, S., Hammond, R., and Jupe, J. (2024). **Cell phone conversations while driving a heavy vehicle: risk as a function of event type.** In Proceedings of the 9th International Conference on Driver Distraction and Inattention, pp. 74-77.
- Krum, A., Mabry, E., Hanowski, R., Stojanovski, O., Manke, A., Adebisi, A., Hammond, R., Hickman, J., Miller, A., Camden, M., Potts, I., Harwood, D., Jin, X., Pugliese, B., Ridgeway, C., Werner, A., Walker, M., Kerns, L., Meissner, K., Parks, L., Argueta, O., Griffor, E., Sarkar, A., Stephens, M., Yang, G., Levin, J., Faulkner, D., Petersen, M., Golusky, M., Tidwell, S., Crowder, T., Bragg, H., Terranova, P., and Thapa, S. (2024). **Trucking Fleet Concept of Operations for Automated Driving System-equipped Commercial Motor Vehicles.** Blacksburg, Virginia: Virginia Tech Transportation Institute.
- Hickman, J.S., Han, S., Soccolich, S., and Guo, F. (2023). **Effect of the Length of Medical Certification on Safety.** Washington, DC: Federal Motor Carrier Safety Administration.
- Hickman, J.S., and Camden, M.C. (under Agency review). **Development of Driver Training Material and Fleet Management Guidelines aimed at Mitigating Driver Distraction in the Motor Carrier Industry in Canada.** Ottawa, ON: Transport Canada.
- Camden, M.C., Hickman, J.S., Soccolich, S.A., Miller, A., and Hanowski, R.J. (under Agency review). **Phase I: Crash Risky by Commercial Motor Vehicle Driver Schedules.** Washington, DC: Federal Motor Carrier Safety Administration.
- Winkowski, C., Sarkar, A., Hickman, J.S., and Abbott, L. (in press). **Residual Network Based Driver Gaze Classification in Naturalistic Driving Studies.** Transportation Research Record.
- Glenn, T.L., Mabry, J.E., and Hickman, J.S. (2022). **A Catalog of Health and Wellness Programs for Commercial Drivers.** (Report No. 22-UI-120). National Surface Transportation Safety Center for Excellence.
- Mabry, J.E., Glenn, T.L., Soccolich, S., Hickman, J.S., and Durmer, J. (2022). **Safety Benefits of a Carrier-Implemented Sleep Apnea Program for Commercial Motor Vehicle Drivers.** (Report No. 22-UI-111). National Surface Transportation Safety Center for Excellence.
- Sundharam, V., Sarkar, A., Svetovidov, A., Hickman, J.S., and Abbott, A. (2022). **Characterization, detection, and segmentation of work zone scenes from naturalistic driving data.** Transportation Research Record.
- Krum, A.J., Miller, A., Sarkar, A., Soccolich, S., Engstrom, J., Hanowski, R.J., Grove, K., and Hickman, J. (2021). **Naturalistic Driving Data Baseline for Highly Automated Commercial Motor Vehicle On-Highway Applications.** (Contract No. DTMC7517F00058; TO DTMC7517F00058). Washington, D.C.: Federal Motor Carrier Safety Administration, USDOT.
- Camden, M.C., Hickman, J.S., and Hanowski, R.J. (2022). **Reversing poor safety records: Identifying best practices to improve fleet safety.** Safety, 8(2), 15p.
- Sarkar, A., Hickman, J.S., McDonald, A., Huang, W., Vogelpohl, T., and Markula, G. (2021). **Steering or braking avoidance response in SHRP2 rear-end crashes and near-crashes: A decision tree approach.** Accident analysis and Prevention, 154, 106055.
- Sarkar, A., Alambeigi, H., McDonald, A., Markula, A., and Hickman, J. (2021). **Role of peripheral vision in brake reaction time during safety critical events.** Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 65(1), 695-699.

- Sarkar, A., Krum, A., Hanowksi, R., and Hickman, J. (2021). **Responsibility Sensitive Safety Analysis of Truck Following in US Highway**. Advances in Human Aspects of Transportation, 270, 8 pages.
- Camden, M.C., Hickman, J.S., Soccolich, S.A., and Toliver, J. (2021). **Evaluation of an automatic, individual computer-based driver education and training program**. Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine.
- Camden, M.C., Hickman, J.S., Hanowski, R.J., and Walker, M. (2021). **Critical issues for large truck safety**. In R. Vickerman (Ed.), International Encyclopedia of Transportation (1st ed.). Amsterdam: Elsevier.
- Papakis, I., Sarkar, A., Svetovidov, A., Hickman, J. S., and Lynn Abbott, A. (2021). **Convolutional neural network-based in-vehicle occupant detection and classification method using second strategic highway research program cabin images**. Transportation Research Record. <https://doi.org/10.1177/0361198121998698>.
- Camden, M. C., Soccolich, S. A., Hickman, J. S., Rossi-Alvarez, A., and Hanowski, R. J. (2020). **Commercial motor vehicle crash risk by time of day** (Report No. 20-UI-097). National Surface Transportation Safety Center for Excellence.
- SAE. (2020). **Driver Drowsiness and Fatigue in the Safe Operation of Vehicles - Definition of Terms and Concepts**. J3198. SAE International. Dr. Hickman was lead author.
- Camden, M.C., Medina-Flintsch, A., Hickman, J.S., Feng, X., and Hanowski, R.J. (2020). **Developing a web-based return-on-investment calculator for truck safety technologies**. Report. No. 20-UT-096. National Surface Transportation Safety Center for Excellence.
- Filtness, A.J., Hickman, J.S., Mabry, J.E., Glenn, L., Huiying, M., Camden, M., and Hanowski, R.J. (2020). **Associations between Caffeine Use, Driving and Health Behaviours in Truck Drivers**. Safety Science, 126, 104664.
- Camden, M.C. and Hickman, J.S. (2020). **Enhancing fleet safety with research-proven technologies**. Liquid Recycling, 2, 21-23.
- Camden, M.C., Hickman, J.S., Tidwell, S., Soccolich, S.A., Hammond, R., and Hanowski, R.J. (2020). **Defensive Driving for Snowplow Operators**. Project No. 1031541/CR18-01. St. Paul, MN: Clear Roads Pooled Fund.
- Glenn, T.L., Camden, M.C., and Hickman, J.S. (2020). **Alcohol and Drug Testing: Information Guidelines for Occupational Drivers**. Report #20-UI-094. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Hickman, J.S., Mabry, J.E., Glenn, L., Guo, F., Mao, H., Hanowski, R.J., Whiteman, J., and Herbert, W. (2020). **Commercial Driver Safety Risk Factors (CDSRF)**. Report# FMCSA-RRR-17-014. Washington, DC: Federal Motor Carrier Safety Administration.
- Burks, S.V., Anderson, J.E., Panda, P., Haider, H.S., Haider, B.A.R., Shi, D., Li, Y., Cagle, M., Ostroushko, D., Sun, Z., Zaharick, J., Hickman, J.S., Mabry, J.E., Berger, M., Czeisler, C., and Kales, S.N. (2020). **The Pre-Registry Commercial Drivers Medical Exam: Screening Sensitivity and Certification Lengths for Two Safety-related Medical Conditions**. Journal of Occupational and Environmental Medicine, 62(3), 237-245.
- Camden, M.C., Soccolich, S.A., Hickman, J.S., Walker, M., and Hanowski, R.J. (2020). Report# 20-UI-093. **Examining the Relationship between CMV Driver Retention and Safety**. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Camden, M.C., Tidwell, S., Golusky, M., Hammond, R., Soccolich, S.A., Hickman, J.S., and Hanowski, R.J., (2020). **Sharing the Road with Heavy Vehicles: Hands-On Demonstrations with Teen Drivers**. Itasca, IL: National Safety Council.

- Barker, T., Daniels, C., Hickman, J.S., Mendez, A., Norman, M., Howard, J., Lavalas, R., and Thomka, J.E. (2020). **Distracted Driving CDL Enforcement for Prosecutors and Law Enforcement**. Arlington, VA: National District Attorneys Association.
- McDonald, A.D., Sarkar, A., Hickman, J., Alambeigi, H., Markula, G., and Vogelpohl, T. (2020). **Modeling driver behavior during automated vehicle platooning failures**. Report 03-036. Washington, DC: United States Department of Transportation, Office of the Secretary of Transportation.
- Mabry, J.E., Hickman, J.S., and Glenn, T.L. (2020). Report#20-UI-085. **Pre-Employment Screening Best Practices in the Commercial Motor Vehicle Industry**. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Gopalswamy, S., Saripalli, S., Shell, D., Hickman, J.S., and Hsu, Y-C. (2020). **Formalizing Human Machine Communication in the Context of Autonomous Vehicles**. Washington, DC: United States Department of Transportation, Office of the Secretary of Transportation.
- Camden, M.C., Medina-Flintsch, A., Hickman, J.S., and Hanowski, R.J. (2020). **Large Truck Technology Return-on-Investment Calculator: User Guide and Instruction Manual**. Report#20-UI-081. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Burks, S.V., Anderson, J.E., Haider, R., Ginader, T., Solberg, N., Sandback, N., Pokutnaya, D., Toso, D., Hughs, N., Haider, H.S., Brockman, R., Toll, A., Solberg, N., Eklund, J., Cagle, M., Hickman, J.S., Mabry, J.E., Berger, M., Czeisler, C.A., and Kales, S.K. (2020). **Employer-mandated obstructive sleep apnea treatment and healthcare cost savings among truckers**. *Sleep* 4(3), 1-15.
- Dunn, N., Soccolich, S., and Hickman, J. (2020). **Commercial Motor Vehicle Driver Risk Based on Age and Driving Experience**. Report#20-UI-079. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Glen, T.L., Mabry, J.E., Soccolich, S.A., and Hickman, J.S. (2020). **Undiagnosed Obstructive Sleep Apnea in Commercial Motor Vehicle Drivers: Application of STOP-Bang**. Report#20-UI-077. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Camden, M.C., Tidwell, S., Mabry, J.E., Golusky, M., Hammond, R., Hickman, J.S., Hanowski, R.J., Grove, K., Miller, A., and Dunn, N. (2019). **Teen Driver Education: Sharing the Road with Commercial Motor Vehicles**. Contract No. FM-MHP-0330-17. Washington, DC: Federal Motor Carrier Safety Administration.
- Camden, M.C., Soccolich, S.A., Hickman, J.S., and Hanowski, R.J. (2019). **Identifying equipment factors associated with snowplow operator fatigue**. *Safety*, 5, 62. DOI:10.3390/safety5030062.
- Camden, M.C., Hickman, J.S., Soccolich, S.A., and Hanowski, R.J. (2019). **Reducing risky driving: Assessing the impacts of an automatically-assigned, targeted web-based instruction program**. *Journal of Safety Research*, 70, 105-115.
- Camden, M.C., Hickman, J.S., and Hanowski, R.J. (2019). **Effective Strategies to Improve Safety: Case Studies of Commercial Motor Carrier Safety Advancement**. Report#19-UI-072. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Mabry, J.E., Glenn, T.L., and Hickman, J.S. (2019). **Commercial Motor Vehicle Operator Fatigue Detection Technology Catalogue and Review**. Report#19-UI-069. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Hickman, J.S., Hanowski, R.J., Price, J., and Mabry, J.E. (2019). **10th International Conference on Managing Fatigue: Managing Fatigue to Improve Safety, Wellness, and Effectiveness**. *Accident Analysis and Prevention*, 126, 1-2.
- Camden, M.C., Medina-Flintsch, A., Hickman, J.S., Bryce, J., Flintsch, G., and Hanowski, R.J. (2019). **Prevalence of operator fatigue in winter maintenance operations**. *Accident Analysis and Prevention*, 126, 47-53. DOI: <https://doi.org/10.1016/j.aap.2018.01.009>.

- Hickman, J.S., Camden, M.C., Klauer, S.G., and Hanowski, R.J. (2019). **Guidelines on Limiting Distraction from Visual Displays (VDs) in Vehicles**. Ottawa, ON: Transport Canada.
- Camden, M.C., Medina-Flintsch, A., Hickman, J.S., Hanowski, R.J., and Tefft, B. (2018). **Do the benefits outweigh the costs? Societal benefit-cost analysis of three large truck safety technologies**. *Accident Analysis and Prevention*, 121, 177-184.
- Bortkiewicz, A., Gadzicka, E., Kosobudzki, M., Dania, M., Szymczak, W., Jozwiak, Z., Szyjowska, A., Viebig, P., Alicja Pas-Wyroślak, A., Siedlecka, J., Makowiec-Dąbrowska, T., and Hickman, J.S. (2018). **Analysis of bus drivers reaction to simulated traffic collision situations - eye-tracking studies**. *International Journal of Occupational Medicine and Environmental Health*. <https://doi.org/10.13075/ijomeh.1896.01305>
- Hickman, J.S., Scopatz, B., Lantz, B., Bergoffen, G., Wu, Y., Camden, M.C., Mao, H., Guo, F., and Hanowski, R.J. (2018). **Phase II: Crash Risk by Driver Schedule**. Task 3 Letter Report: Average Duty Status, Duty Period, and Status of the Hours-of-Service Rule Change by Driver. Washington, D.C: Federal Motor Carrier Safety Administration.
- Hickman, J.S., Levy, F., Burks, S., Viscelli, S., and Lee, J. (2018). **Effect of Automated Truck on the Truck Driver Workforce**. National Science Foundation (Grant# 1744348): Arlington, VA. <https://www.vtti.vt.edu/atw/files/NSF%20Workshop%20Truck%20Driver%20Final%20Report.pdf>.
- Park, G.D., Hickman, J.S., Pitoniak, S.P., and Rosenthal, T.J. (2018). **Challenges in hazard detection for commercial motor vehicle drivers: A driving simulator training study**. *Transportation Research Record*, 26772(34), 29-38. <https://doi.org/10.1177%2F0361198118792132>.
- Hickman, J.S., Bocanegra, J., and Hanowski, R.J. (2018). **A Synthetic Approach to Compare the Large Truck Crash Causation Study and Naturalistic Driving Data**. *Accident Analysis and Prevention*. 112, 11-14.
- Camden, M.C., Hickman, J.S., Soccolich, S.A., and Hanowski, R.J. (2017). **Identification and Recommendations for Correction of Equipment Factors Causing Fatigue in Snowplow Operations (Report No. CR 15-02)**. St. Paul, MN: Clear Roads Pooled Fund and the Minnesota Department of Transportation.
- Soccolich, S.A., Hickman, J.S., and Hanowski, R.J. (2017). **Fatigue and Distraction in Occupational Light Vehicle Drivers**. Report#16-UI-057. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Camden, M.C., Medina-Flitch, A., Hickman, J.S., Miller, A.M., and Hanowski, R.J. (2017). **Leveraging Large Truck Technology and Engineering to Realize Safety Gains: Automatic Emergency Braking Systems**. Washington D.C.: AAA Foundation for Traffic Safety.
- Camden, M.C., Medina-Flitch, A., Hickman, J.S., Miller, A.M., and Hanowski, R.J. (2017). **Leveraging Large Truck Technology and Engineering to Realize Safety Gains: Lane Departure Warning Systems**. Washington D.C.: AAA Foundation for Traffic Safety.
- Camden, M.C., Medina-Flitch, A., Hickman, J.S., Miller, A.M., and Hanowski, R.J. (2017). **Leveraging Large Truck Technology and Engineering to Realize Safety Gains: Air Disc Brakes**. Washington D.C.: AAA Foundation for Traffic Safety.
- Camden, M.C., Medina-Flitch, A., Hickman, J.S., Miller, A.M., and Hanowski, R.J. (2017). **Leveraging Large Truck Technology and Engineering to Realize Safety Gains: Video-Based Onboard Safety Monitoring Systems**. Washington D.C.: AAA Foundation for Traffic Safety.
- Camden, M.C., Hickman, J.S., Hanowski, R.J., and Williams, A.K. (2017). **Pilot testing a naturalistic driving study to investigate winter maintenance operator fatigue during winter emergencies**. *Safety*, 3(3), 19. <https://doi.org/10.3390/safety3030019>

- Medina-Flintsch, A., Hickman, J.S., Guo, F., Camden, M.C., Hanowski, R.J., and Kwan, Q. (2017). **Benefit-cost analysis of lane departure warning and roll stability control in commercial vehicles.** Journal of Safety Research, 62, 73-80.
- Dinges, D.F., Maislin, G., Hanowski, R.J., Mollicone, D.J., Hickman, J.S., Maislin, D., Kan, K., Hammond, R.L., Soccolich, S.A., Moeller, D.D., and Trentalange, M. (2017). **Commercial Motor Vehicle (CMV) Driver Restart Study: Final Report.** Report# FMCSA-RRR-15-011. Washington, D.C: Federal Motor Carrier Safety Administration.
- Hickman, J.S., Guo, F., Camden, M.C., Dunn, N.J., and Hanowski, R.J. (2017). **An observational study of the safety benefits of electronic logging devices using carrier-collected data.** Traffic Injury Prevention, 18(3), 312-317.
- Bocanegra, J., Hickman, J.S., and Hanowski, R.J. (2016). **Comparative Analysis of the Large Truck Crash Causation Study and Naturalistic Driving Data.** Report# FMCSA-RRR-13-018. Washington, DC: Federal Motor Carrier Safety Administration.
- Hickman, J. S., Knipling, R. R., Olson, R. L., Fumero, M. C., Blanco, M., and Hanowski, R. J. (2016). **Light Vehicle-Heavy Vehicle Interaction Data Collection and Countermeasure Research Project.** Report# FMCSA-RRR-11-029. Washington, D.C: Federal Motor Carrier Safety Administration.
- Burks, S.V., Anderson, J.E., Bombyk, M., Haider, R., Ganzhorn, D., Jiao, X., Lewis, C., Lexvold, A., Liu, H., Ning, J., Toll, A., Hickman, J.S., Mabry, J.E., Berger, M., Malhotra, A., Czeisler, C.A., and Kales, S.N. (2016). **Nonadherence with employer-mandated sleep apnea treatment and increased risk of serious truck crashes.** Sleep, 39(5), 1-9.
- Camden, M.C., Soccolich, S.A., Hickman, J.S., and Hanowski, R.J. (2015). **Drug use and involvement in a safety-critical event: Pilot study using naturalistic truck data.** Transportation Research Record: Journal of the Transportation Research Board, 2516, 75-80.
- Hickman, J.S., Soccolich, S., Fitch, G.M., and Hanowski, R.J. (2015). **Driver Distraction: Eye Glance Analysis and Conversation Workload.** Report RRR-14-001. Washington, D.C: Federal Motor Carrier Safety Administration.
- Camden, M. C., Hickman, J. S., and Hanowski, R. J. (2015). **Effective Use of Commercially Available Onboard Safety Monitoring Technologies: Guidance for Commercial Motor Vehicle Carriers.** Report No. 15-UT-032. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Marburg, T.L., Hickman, J.S., and Hanowski, R.J. (2015). **Common Data Elements between the Large Truck Crash Causation Study Investigations and Commercially Available Onboard Monitoring Systems.** Report 15-UI-031. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Hickman, J.S., Guo, F., Camden, M.C., Hanowski, R.J., Medina, A., and Mabry, J.E. (2015). **Efficacy of roll stability control and lane departure warning systems using carrier-collected data.** Journal of Safety Research, 52, 59-63.
- Wiegand, D.M., Hickman, J.S., and Geller, E.S. (2014). **Automobile safety in adulthood.** In Gullotta TP, Bloom M, eds. Encyclopedia of Primary Prevention and Health Promotion (2nd Edition). New York, NY: Springer Publishing, pp. 1597-1610.
- Soccolich, S., and Hickman, J.S. (2014). **Potential Reduction in Large Truck and Bus Traffic Fatalities and Injuries using Lytx's DriveCam Program.** Blacksburg, VA: Virginia Tech Transportation Research Institute. Retrieved at: <http://info.drivecam.com/LivesSaved-Study.html>.
- Camden, M.C., Hickman, J.S., Soccolich, S.A., and Hanowski, R.J. (2014). **Prescription and Over-the-Counter Drug Use and its Relationship to Involvement in Safety-Critical Events.** Report 14-UI-028. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.

- Dunn, N.J., Hickman, J.S., and Hanowski, R.J. (2014). **Crash trifecta: A complex driving scenario describing crash causation.** In N. Stanton, S. Landry, G. Di Bucchianico, & A.Vallicelli (Eds) Advances in Human Factors and Transportation Part III, pp. 369-375. Danvers, MA: AHFE Conference © 2014.
- Dunn, N.J., Hickman, J.S., Soccolich, S, and Hanowski, R.J. (2014). **Phase I: A Quantitative Evaluation of Detention Times in Commercial Motor Vehicle Operations.** Report RRR-13-060. Washington, D.C: Federal Motor Carrier Safety Administration.
- Dunn, N.J., Hickman, J.S., and Hanowski, R.J. (2014). **Crash Trifecta: A Complex Driving Scenario Describing Crash Causation.** Report 14-UI-025. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Camden, M.C., Medina-Flitsch, A., Hickman, J.S., Bryce, J., Flintsch, G., and Hanowski, R.J. (2014). **Environmental Factors Causing Fatigue in Equipment Operators during winter Operations.** St. Paul, MN: Clear Roads Pooled Fund. Retrieved from: http://www.clearroads.org/downloads/Factors-Causing-Fatigue-Final-Report_MnDot.pdf.
- Hickman, J.S., Camden, M.C., Guo, F., Dunn, N.J., and Hanowski, R.J. (2014). **Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders.** Report RRR-13-059. Washington, D.C: Federal Motor Carrier Safety Administration.
- Camden, M.C., Hickman, J.S., Mabry, J.E. Hanowski, R.J., Knipling, R., James, F.O., and Herbert, W.G. (2013). **Guidelines and Materials to Enable Motor Carriers to Implement a Fatigue Management Program.** North American Fatigue Management Program. <http://www.nafmp.com/en/about-nafmp/nafmp-implementation-manual.html>.
- Hickman, J.S., Guo, F., Camden, M.C., Medina, A., Hanowski, R.J., and Mabry, J.E. (2013). **Onboard Safety Systems Effectiveness Evaluation Final Report.** Report# FMCSA-RRT-12-012. Washington DC: Federal Motor Carrier Safety Administration.
- Mabry, J.E., Hickman, J.S., and Hanowski, R.J. (2013). **Case Study on Worksite Health and Wellness Program for Commercial Motor Vehicle Drivers.** Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Mabry, J.E. Hickman, J.S., and Hanowski, R.J. (2012). **Case Study on the Impact of Treating Sleep Apnea in Commercial Motor Vehicle Drivers.** Report 12-UF-017. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Hanowski, R.J., Olson, R.L., Hickman, J.S., and Bocanegra, J. (2013). **Driver distraction in commercial vehicle operations.** In Driver Distraction and Inattention: Advances in Research and Countermeasures by M. Reagan, T. Victor, and J.D. Lee (Eds.). Ashgate Publishing Groups: United Kingdom.
- Hanowski, R.J., Bergoffen, G., Hickman, J.S., Guo, F., Murray, D., Bishop, R., Johnson, S., and Camden, M. (2012). **Research on the Safety Impacts of Speed Limiter Device Installations on Commercial Motor Vehicles.** Washington, DC: Federal Motor Carrier Safety Administration.
- Hickman, J.S., and Hanowski, R.J. (2012). **An assessment of commercial motor vehicle driver distraction using naturalistic driving data.** Traffic Injury Prevention, 13(6), 566-574.
- Hickman, J.S., Guo, F., Hanowski, R.J., Bishop, R., Bergoffen, G., and D. Murray. (2012). **Safety benefits of speed limiters in commercial motor vehicles using carrier-collected crash data.** Journal of Intelligent Transportation Systems, 16(4), 177-183.
- Hickman, J.S., and Hanowski, R.J. (2011). **Use of a video monitoring approach to reduce at-risk driving behaviors in commercial vehicle operations.** Transportation Research Part F: Traffic Psychology and Behavior, 14(3), 188-198.

- Victor, T. Hickman, J.S., Camden, M., Jarlengrip, J., Larsson, C., Morgan, J., Tidwell, S., and Toole, L. (2011). **U34: Driver Distraction: An Inattention-Mitigation Component for Behavior-Based Safety Programs in Commercial Vehicle Operations (IM-BBS)**. NTRCI-50-2011-023. Knoxville, TN: National Transportation Research Center, Inc.
- Soccolich, S., Hickman, J.S., and Hanowski, R.J. (2011). **Identifying High-Risk Commercial Truck Drivers Using a Naturalistic Approach**. Report 11-UF-012. Blacksburg, VA: The National Surface Transportation Safety Center for Excellence.
- Morgan, J.F., Tidwell, S.A., Medina, A., Blanco, M., Hickman, J.S., and Hanowski, R.J. (2011). **Commercial motor vehicle driving simulator validation study (SimVal): Phase II (Report No. FMCSA-RRR-11-014)**. Washington, DC: Federal Motor Carrier Safety Administration.
- Blanco, M., Hickman, J.S., Hanowski, R.J., and Morgan, J.F. (2011). **The commercial driver**. In the Handbook of Driving Simulation for Engineering, Medicine, and Psychology by R. Fisher, M. Rizzo, J. Caird, & J. Lee (Eds). Boca Raton, FL: CRC Press.
- Hanowski, R.J., Hickman, J.S., Blanco, M., and Fitch, G. (2011). **Long-haul truck driving and traffic safety: Studying drowsiness and truck driving safety using a naturalistic driving method**. In Sleep, Sleepiness and Traffic Safety by J. Verster and Ch. F. P. George (Eds.). Nova Publishers: New York, NY.
- Hickman, J.S., Hanowski, R.J., and Bocanegra, J. (2010). **Distraction in commercial trucks and buses: Assessing prevalence and risk in conjunction with crashes and near-crashes**. Report No. FMCSA-RRR-10-049. Washington, DC: Federal Motor Carrier Safety Administration.
- Hanowski, R.J., and Hickman, J.S. (2010). **Distracted driving in commercial vehicle operations**. In the Motor Fleet Safety Manual, 5th Edition by J.E. Brodbeck (Ed). National Safety Council: Itasca, IL.
- Hickman, J.S., and Hanowski, R.J. (2009). **Evaluating the Safety Benefits of a Low Cost Driving Behavior Management System in Commercial Vehicle Operations: Final Report**. Contract No. DTMC75-07-D-00006, Task Order #1. Federal Motor Carrier Safety Administration: Washington, D.C.
- Brock, J.F., Vlahos, N.J., Camden, M.C., Hickman, J.S., Short, J., and Bergoffen, G. (2009). **Research in Support of Rulemaking Activities: Web-Based Instruction (WBI)**. Contract DTMC75-08-Q-00015. Federal Motor Carrier Safety Administration: Washington, D.C.
- Hanowski, R.J., Hickman, J.S., Olson, R.L., and Bocanegra, J. (2009). **Evaluating the 2003 hours-of-service regulations for truck drivers: The impact of time-on-task on critical incident risk**. Accident Analysis and Prevention, 41, 268-275.
- Olson, R.L., Hanowski, R.J., Hickman, J.S., and Bocanegra, J. (2009). **Driver Distraction in Commercial Vehicle Operations: Final Report**. Contract DTMC75-07-D-00006, Task Order 3, Federal Motor Carrier Safety Administration. Washington, D.C.
- Hickman, J.S., Bocanegra, J., Bowman, D.S., and Hanowski, R.J. (2009). **Hazardous Materials (HM) Serious Crash Analysis – Phase III**. DTMC75-07-H-00008, Task Order 3, Federal Motor Carrier Safety Administration. Washington, D.C.
- Blanco, M., Hickman, J.S., Olson, R.L., Bocanegra, J., Hanowski, R.J., Greening, M., Madison, P., Holbrook, G.T., and Bowman, D. (2008). **Investigating Critical Incidents, Driver Restart Period, Sleep Quantity, and Crash Countermeasures in Commercial Vehicle Operations Using Naturalistic Data Collection**. Contract DTNH22-00-C-07007, Task Order 21, Federal Motor Carrier Safety Administration. Washington, D.C.
- Hanowski, R.J., Olson, R.L., Bocanegra, J., and Hickman, J.S. (2008). **Analysis of Risk as a Function of Driving-Hour: Assessment of Driving-Hours 1 Through 11**. Contract No. DTMC75-07-D-00006, Task Order 3, Federal Motor Carrier Safety Administration. Washington, D.C.

- Hanowski, R.J., Hickman, J.S., Fumero, M.C., Olson, R.L., and Dingus, T.A. (2007). **The sleep of commercial vehicle drivers under the 2003 hours-of-service regulations.** Accident Analysis and Prevention, 39(6), 1140-1145.
- Hanowski, R.J., Hickman, J.S., Wierwille, W.W., and Keisler, A. (2007). **A descriptive analysis of light vehicle – heavy vehicle interactions using in situ driving data.** Accident Analysis and Prevention, 39(1), 169-179.
- Baker, S., Bowman, D., Hickman, J.S., Nakata, A., and Hanowski, R.J. (2007). **Focus Groups in Support of an Operator Drowsiness Monitoring System: Final Report.** U.S. Department of Transportation. Washington, D.C.
- Hanowski, R. J., Olson, R. L., Bocanegra, J, Hickman, J. S., Dingus, T. A., and Sudweeks, J. D. (2007). **Critical Incidents that Occur in the 10th and 11th Hour of Driving in Commercial Vehicle Operations: Does Risk Increase in the 11th Hour?** Final Letter report sent to Federal Motor Carrier Safety Administration.
- Hickman, J. S., Knipling, R. R., Inderbitzen, R. E., Wiegand, D. M., Bergoffen, G., and Hanowski, R. J. (2007). **Synthesis report on the impact of behavior-based safety techniques on commercial motor vehicle drivers.** Transportation Research Board Commercial Truck & Bus Synthesis Program Project MC-15. Washington D.C.: Transportation Research Board.
- Wierwille, W.W., Bowman, D.S., Alden, A., Gibbons, R.B., Hanowski, R.J., Blanco, M., Leeson, B., and Hickman, J. S. (November, 2006). **Enhanced camera/video imaging systems (E-CVIs) for heavy vehicle: Investigated technologies and recommended approaches.** Project Number DTNH22-05-D-01019, Task Order #6. Blacksburg, VA: Virginia Tech Transportation Institute.
- Hanowski, R. J., Olson, R. L., Hickman, J. S., and Dingus, T. A. (2006). **The 100-Car Naturalistic Driving Study: Analysis of light vehicle/heavy vehicle interactions from the light vehicle driver's perspective.** Contract No.DTNH22-00-C-07007. Washington, D.C.: National Highway Traffic Safety Administration.
- Klauer, G. K., Sudweeks, J. S., Hickman, J. S., and Neale, V. L. (2006). **The relationship between risky driving behaviors and crash risk.** Contract No. 51090. AAA Foundation for Traffic Safety.
- Hanowski, R. J., Spaulding, J., Gaskins, C., Schaudt, A., Miller, S., Holbrook, T., Olson, R. L., Dingus, T. A., Hickman, J. S., Huey, R., and Llaneras, E. E. (2004). **Field evaluation of alternative automotive systems for reducing illegal passing of school buses.** National Highway Transportation and Safety Administration Project DTNH22-00-07007. Washington, D.C.: Department of Transportation.
- Knipling, R. R., Boyle, L. N., Hickman, J. S., York, J. S., Daecher, C., Olsen, E. C. B., and Prailey, T. D. (2004). **Synthesis report on individual differences & the “high-risk” commercial driver: Implications for carrier human resource management.** Transportation Research Board Commercial Truck & Bus Synthesis Program Project MC-04. Washington D.C.: Transportation Research Board.
- Geller, E.S., Hickman, J.S., and Pettinger, C.B. (2004). **The airline lifesaver: A 17 year analysis of a technique to prompt safety-belt use.** Journal of Safety Research, 35(4), 357-366.
- Hickman, J.S., and Geller, E.S. (2003). **A self-management for safety intervention to increase safe driving among short-haul truck drivers.** Journal of Organizational Behavior Management, 23(4), 1-20.
- Hickman, J.S., and Geller, E.S. (2003). **A safety self-management intervention in mining operations.** Journal of Safety Research, 34(3), 299-308.
- Knipling, R. R., Hickman, J. S., and Bergoffen, G. (2003). **Synthesis 1: Effective Commercial Truck and Bus Safety Management Techniques.** Transportation Research Board Commercial Truck & Bus Synthesis Program Project MC-02, ISSN 1544-6808, ISBN 0-309-08754-6. Washington D.C.: Transportation Research Board.

- Geller, E. S., Hickman, J. S., and Lea, B. N. (April, 2001). **Implementing behavior-based safety in mining operations.** Final Report for Grant #1 R01 CCR315316-01/02 from the National Institute for Occupational Safety and Health (627 pages).
- Geller, E.S., Hickman, J. S., and Click, R.D. (2000). **Addressing the human aspects of mining safety: From behaviors to attitudes to culture change.** Thirty-First Annual Institute on Mining Health, Safety, and Research, p. 81-91.