

CIVIL AND CONSTRUCTION ENGINEERING

OREGON STATE UNIVERSITY

College of Engineering

HUNTER-ZAWORSKI, Katharine M.

Associate Professor

A1. EDUCATION

1988 Ph.D. Civil Engineering,
Oregon State University

1980 M.S. Engineering Science and Mechanics
University of Tennessee, Knoxville

1978 B.A.Sc., Mechanical Engineering
University of British Columbia

A.2. PROFESSIONAL EXPERIENCE

Academic

2015-present Chair of the Sub Committee on Gerontology Technology for CHAR

2003-2014 Director
National Center for Accessible Transportation

2003-2009 Director
Rehabilitation Engineering Research Center for Accessible Public
Transportation

2002- Present Associate Professor
School of Civil and Construction Engineering
Oregon State University

July 2000 – Dec. 2000 Project Director,
Smart Jitney
Oregon University System

Sept.1999-June 2000 Senior Research Engineer
Western Transportation Institute
Montana State University

Sept. 1988-June 2002 Assistant Professor
Department of Civil Engineering
Oregon State University

1988-1999 Facilitator, Oregon Traffic Safety Commission Short Course Program

1986-1987 Graduate Research Fellow
Federal Highway Administration
Washington, D.C.

1985-1986,1988 Research Assistant
Department of Civil Engineering

FIELDS OF SPECIALIZATION

Rehabilitation and Transportation Engineering (ITS, traffic safety, railroad engineering, aviation, transit, and accessible transportation systems)

PROFESSIONAL ACTIVITIES

Registration

Oregon (P.E.) - 12,462

Professional Societies

Transportation Research Board (TRB)

AREMA

Sigma Xi (1991 - 2015)

Patent # 5.344.265 Securement System for a Rollable Mobility Aid

Professional Recognition

- 2015 Bill Bell Award, Transportation Research Board Committee for Accessible Transportation and Mobility
- 2010 Emeritus Member, Transportation Research Board Committee on Accessible Transportation
- 2010 Best Poster, International Conference on Accessible Transportation and Mobility, Hong Kong
- 2008 Oregon State University Alumni Distinguished Professor Award
- 2004 Roger Tate Award for Accessible Transportation, Transportation Research Board Committee for Accessible Transportation and Mobility
- 1996 Oregon State University Award for Outstanding Service to Persons with Disabilities
- 1995-1997 National Transit Institute Fellow,
- 1994 ITE Award for "Best Paper and Presentation", (with W. Kloos and A. Danaher), 1994 Annual Meeting in Dallas, TX
- 1989 The Premiers Award for Excellence in Accessible Design, The Province of British Columbia
- 1988 ITE Award for "Best Paper and Presentation" at 1988 Annual Meeting in Vancouver, B.C.
- 1981 ASME Centennial Medal
- 1978 Finalist and winner of ASME Student Design Competition
- 1978 Finalist and winner of RESNA Student Design Competitions
- 1973-1978 Several Scholarships at University of British Columbia,

Service activities are listed on page 24

PUBLICATIONS

Book Chapters

1. Watkins, K.E., K.M. Hunter-Zaworski, and S. Windmiller, "Bridging the Digital Divide: Ensuring Information Equity in Social Media in Agency Considerations and Policies", "Best Practices for Transportation Agency Use of Social Media." Bregman and Watkins Eds. Taylor and Francis / CRC Press, October 2013
2. Hunter-Zaworski, K.M., "Accessible Public Transportation." In Bauer, S.M., Bunning, M.E., Flag, J.L., Strobel, W.A. (Eds.) Industry profile on wheeled mobility. Rehabilitation Engineering Research Center on Technology Transfer. 2009. (primary author)
3. Hunter-Zaworski, K.M. and Nead, R., "Transportation, Driving and Community Access," *"Spinal Cord Injuries; Management and Rehabilitation,"* Sisto, Druin and Sliwinski, editors, Elsevier Inc, ISBN 9780323006996, 2008 Chapter 21, pgs 495-518. (primary author)

4. Hunter-Zaworski, K.M., "Accessible Public Transportation Services in America," in *"The Engineering Handbook on Smart Technology for Aging, Disability and Independence,"* A. Helal, M. Mokhtari and B. Abdulrazak, Editors, John Wiley & Sons. ISBN 0471711551, Computer Engineering Series, 2008. (primary author)
5. Hunter-Zaworski, K.M., "Universal Design in Public Transportation: "Segway" to the Future," *"Universal Design and Visitability,"* J. Nasar and Evans Cowley, J, Editors, Columbus Ohio, 2007, Chapter 4, pgs 51-68. (primary author)
6. Hunter-Zaworski, K.M., "A Study of Human Factors of Elderly and Handicapped Passengers in Public Transportation Safety," in *Mobility and Transport for Elderly and Disabled Persons,* (Norrbom and Stahl, Eds.), Gordon and Breach Science Publishers, Reading, England, 1991, pp. 576-591.
7. Hunter-Zaworski, K.M., "The Performance of Drivers with Physical Limitations at T-Intersections," in *Mobility and Transport for Elderly and Disabled Persons,* (Norrbom and Stahl, Eds.), Gordon and Breach Science Publishers, Reading, England, 1991, pp. 351-360.

Technical Journals

1. Hunter-Zaworski, K.M.(2017), "Analysis of Passenger Incident Data form Five Rail Transit Systems", *Safety* 2017, 3(3), 21 doi:10.3390/safety 3030021
2. Mather, A.J. and K.M Hunter-Zaworski (2016), "Investigation of Wheeled Mobility Device Orientation and Movement on Streetcars and Light Rail Vehicles during Normal and Emergency Braking" *Journal of Public Transportation,* Volume 19 Number 4
3. Mather, A.J. and K.M Hunter-Zaworski (2016), "Effects of Speed, Curves and Driver Behavior on Passive Securement Systems on Large Transit Buses" *Journal of Public Transportation,* Volume 19 Number 3
4. Andersen, D., and K.M. Hunter-Zaworski, (2015) " Effects on Platform-Train Interface Safety" *Transportation Research Record,* Volume 2524, pages 24-30 (secondary author)
5. J. Mueller, and K.M. Hunter-Zaworski, (2014) "Bicycle Network Connectivity for Passenger Rail Stations, *Transportation Research Record,* Volume 2448, pages 21-27 (secondary author)
6. Sperry, B.R., J. Mueller, and K.M. Hunter-Zaworski,(2013) "Development of a Multi-Criteria Decision Method for High-Speed Rail Corridor Evaluation, *Transportation Research Record,* Volume 2374 . pages 26-34 (secondary author)
7. Hunter-Zaworski, (2012)" Impacts of low speed vehicles on transportation infrastructure and safety, *Journal of Transport and Land Use,* Volume 5 No. 2,
8. Jannat, Mafruhatul and K.M., Hunter-Zaworski, (2012)"Planning Secondary Road Network for Low-Speed Vehicles in Small or Medium-Sized City: Using Google Earth" *Transportation Research Record,* Volume 2307 . pages 60-67 (secondary author)
9. Zaworski. J.R., K.M. Hunter-Zaworski, and M. Baldwin., "Bus Dynamics for Mobility Aid Securement Design," *Assistive Technology,* RESNA Press, Volume 19, Winter 2007, Pgs. 200-209. (secondary author)
10. Hunter-Zaworski, K.M., "Getting Around in an Aging Society," *Planning,* American Planning Association, May 2007, pages 22-24. (primary author)
11. Blacketer, R., J.R., Zaworski, and K.M. Hunter-Zaworski "Field Testing of Intrusion Detection Technologies for High-Speed Rail Grade Crossings," *Transportation Research Record* 1918, Washington, DC, 2005, pp.10-17. (third author)
12. Grile, C., K.M. Hunter-Zaworski, and C. Monsere, "Programming Safety Improvements on Pavement Resurfacing, Restoration, and Rehabilitation Projects," *Transportation Research Record* 1922, Washington, DC, 2005, pp.73-78. (secondary author)
13. Hunter-Zaworski, K.M., "Accessible Aircraft Boarding," *International Airport Review,* Volume 9, Issue 1, 2005, pg 77-84. (primary author)

14. Zaworski, J.R and K.M. Hunter-Zaworski, "Laboratory Evaluation of Intrusion Detection Technologies for High-Speed Rail Grade Crossings," *Transportation Research Record 1862*, Washington, DC, 2004, pp.119-126. (secondary author)
15. Hunter-Zaworski, K.M. and Zaworski, J.R., "Progress in Wheelchair Securement: 10 Years since the American With Disabilities Act," *Transportation Research Record 1779*, Washington, DC, 2002. (primary author)
16. Hunter-Zaworski, K.M., and R. Stewart "The Next Frontier in Accessible Traveler Information Systems: World Wide Web-Based Information Systems," *Transportation Research Record 1671*, Washington, DC, 1999, pp. 1-4. (primary author)
17. Hunter-Zaworski, K.M. and Zaworski, J.R., "Auto Engaging Mobility Aid Securement Systems and Low Floor Buses," *Transportation Research Record 1671*, Washington, DC, 1999, pp. 27-33. (primary author)
18. Hunter-Zaworski, K.M., and M.L. Hron, "Improving Bus Accessibility Systems for Persons with Cognitive Disabilities," *Transportation Research Record 1671*, Washington, DC, 1999, pp. 34-39. (primary author)
19. Hunter-Zaworski, K.M., and M.L. Hron, "Improving Bus Accessibility Systems for Persons with Sensory Disabilities," *Transportation Research Record 1671*, Washington, DC, 1999, pp. 40-47. (primary author)
20. Beckwith, D., and K.M. Hunter-Zaworski, "Passive Pedestrian Detection at Unsignalized Crossings," *Transportation Research Record 1636*, Washington, DC, 1998, pp. 96-103. (Secondary author)
21. Kloos, W., K.M. Hunter-Zaworski and A. Danaher, "Bus Priority at Traffic Signals in Portland: The Powell Boulevard Pilot Project," *Transportation Research Board Record 1503*, Washington, DC, 1995, pp. 29-33. (secondary author)
22. Hunter-Zaworski, K.M., "Accessing Public Transportation: New Technologies Aid Persons with Sensory or Cognitive Disabilities," *TR News Number 175*, November-December 1994, pp. 24-29. (primary author)
23. Hunter-Zaworski, K.M., Ullman, D.G. and Zaworski, J.R., "The Mechanics of Mobility Aid Securement/Restraint on Public Transportation Vehicles," *Transportation Research Record 1378*, 1993, pp. 45-51. (primary author)
24. Hunter-Zaworski, K.M., "T-Intersection Simulator Performance of Drivers with Physical Limitations," *Transportation Research Record 1281*, Transportation Research Board, 1990. (primary author)
25. Hunter-Zaworski, K.M., "A Synopsis of Accessibility Features of Skytrain – Vancouver's Rapid Transit System," *ITE Journal*, January 1989, pp. 23-27. (primary author)
26. Hunter-Zaworski, K.M., "Barriers and Safety Risks for Transportation Disadvantaged Air Travelers," *Transportation Research Record 1098*, Transportation Research Board, 1986. (primary author)

Conference Proceedings (Refereed)

1. Tabattanon, K. and Hunter-Zaworski, K.M., "Comparison of Responses to an Accessibility Survey for Design of an Accessible Sleeping Compartment ", *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018. (Secondary author)
2. Hunter-Zaworski, K.M., K Tabattanon, "Accessible Sleeper for the Next Generation Passenger Rail Vehicles" *Paper No. JRC 2018-6104*, *Proceedings 2018 Joint Rail Conference*, Pittsburgh, PA, April 2018(primary author)
3. Hunter-Zaworski, K.M., K. Severson and M Shurland, "Containment for occupied wheeled mobility devices on passenger rail trains," *Paper No. JRC 2018-6119*, *Proceedings 2018 Joint Rail Conference*, Pittsburgh, PA April 2018(primary author)

4. Hunter-Zaworski, K.M.,” Validation of space for accommodating wheeled mobility devices on the next generation of accessible passenger rail cars”, *Proceedings*, 14th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Lisbon. July 2015. (primary author)
5. Hunter-Zaworski, K.M.,” Wheelchair and seating orientation on transit buses: investigation of vehicle dynamics ”, *Proceedings*, 14th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Lisbon. July, 2015. (primary author)
6. Hunter-Zaworski, K.M., F. Berthlesdorf, and M.Shurland, “Validation of the Space for Accommodating Wheeled Mobility Devices on Accessible Passenger Rail Cars” *Paper No. JRC 2015-5627, Proceedings 2015 Joint Rail Conference*, San Jose CA March 2015 (primary author)
7. Anderson, Dylan and K.M. Hunter-Zaworski, “TCRP A – 40 Manual to Improve Rail Transit Safety at Platform/Train Interfaces: Summary of Train Interface Incidents” *Paper No. JRC 2015-5628, Proceedings 2015 Joint Rail Conference*, San Jose CA March 2015 (secondary author)
8. Hunter-Zaworski, K.M., R. Kiff, and M.Shurland, “Validation of the Accessible Lavatory Recommendations for the PRIIA Specifications of the Next Generation of Accessible Passenger Rail Cars” *Paper No. JRC 2014-3750, Proceedings 2014 Joint Rail Conference*, Colorado Springs, CO April 2014(primary author)
9. Hunter-Zaworski, K.M., U.H. Rutenberg, and M.Shurland, “Recommendations for the PRIIA specifications of the next generation of accessible passenger rail cars” *Paper No. JRC 2013-2554, Proceedings 2013 Joint Rail Conference*, Knoxville, TN April 2013, (primary author)
10. Hunter-Zaworski, K.M., T. O’Connell, M. Rothberg, and G. Freed, “Communicating Transit Information to People with Sensory Disabilities” *Proceedings 18th World Congress on Intelligent Transport Systems*, Orlando FL, October 2011(primary author)
11. Hunter-Zaworski, “Impacts of Low-Speed Vehicles on Transportation Infrastructure and Safety” *Proceedings World Symposium of Transport and Land Use Research*, Whistler BC. Canada July 28-30, 2011(primary author)
12. Hunter-Zaworski, K.M., “Sensory and Cognitively Impaired Travelers,” Plenary Speech, *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (primary author)
13. Hunter-Zaworski, K.M and Zaworski, J.R., “Safe Aircraft Stowage of Wheelchairs,” *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (primary author)
14. Hunter-Zaworski, K.M., Pavol, M., and Philbrik, K., “Minimum Spatial Requirements for an Aircraft Lavatory,” *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (primary author)
15. Zaworski, J.R and K.M. Hunter-Zaworski, “Changes in US aircraft boarding equipment regulations,” *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (secondary Author)
16. Zaworski, J.R and K.M. Hunter-Zaworski, “Challenges in accessible seating for aircraft”, *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (secondary Author)
17. Rutenberg, U. and K.M. Hunter-Zaworski, “Design Of A Personal Digital Assistant (PDA) To Access Real Time Travel” *Proceedings*, 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong. June 2010. (secondary Author)
18. Hunter-Zaworski, K.M., “Standards for Accessible Lavatories for Commercial Aircraft,” Paper No. 1095, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (primary author)
19. Hunter-Zaworski, K.M., “Accessible In Flight Entertainment Systems,” Paper No. 1096, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (primary author)

20. Hunter-Zaworski, K.M., "Community Bus Transportation: An Emerging Transit Mode," Paper No. 1097, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (primary author)
21. Zaworski, R.J. and K.M. Hunter-Zaworski, "Proposed Guidelines for Web Accessibility for the Travel Industry," Paper No. 1108, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.(secondary author)
22. Hunter-Zaworski, K.M., "U.S. Passenger Rail Accessibility: A Regional Perspective," Paper No. 1170, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (primary author)
23. Rutenberg, U., and K.M. Hunter-Zaworski, "Real Time Communication Onboard Vehicles for Sensory Impaired Passengers", Paper No. 1157, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (secondary author)
24. Rutenberg, U., and K.M. Hunter-Zaworski, "Access to Over the Road Buses for Passengers with Disabilities," Paper No. 1158, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (secondary author)
25. Hunter-Zaworski, K.M., and J.R. Zaworski, "Wheelchair Stowage on Aircraft," Paper No. 1169, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007. (primary author)
26. Hunter-Zaworski, K.M., "Communication Technologies in Transportation Terminals for Passengers with Sensory Impairments," *Proceedings*, ITS World Congress, San Francisco, November 9, 2005. (primary author)
27. Hunter-Zaworski, K.M., J.R. Zaworski, and U. Rutenberg, "Accessible Traveler Information Systems," *Proceedings*, 10th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hamamatsu, Japan, May 2004. (primary author)
28. Hunter-Zaworski, K.M., J.R. Zaworski, and U. Rutenberg, "Accessible Air Transportation Boarding Systems," *Proceedings*, 10th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hamamatsu, Japan, May 2004. (primary author).
29. Hunter-Zaworski, K.M. and J.R. Zaworski, "Progress in Wheelchair Securement: the Last Decade," *Proceedings*, 9th International Conference on Mobility and Transportation for Elderly and Disabled People, Warsaw, Poland, July 2001. (primary author)
30. Hunter-Zaworski, K.M., "Auto Engaging Mobility Aid Securement Systems and Low Floor Buses," *Proceedings*, 8th International Conference on Mobility and Transportation for Elderly and Disabled People, Perth, Australia, September 1998. (primary author)
31. Hunter-Zaworski, K.M., "Accessible Intelligent Transport System Technology, Development of Ergonomic Guidelines for Passenger Information Systems," *Proceedings*, 8th International Conference on Mobility and Transportation for Elderly and Disabled People, Perth, Australia, September 1998. (primary author)
32. Hunter-Zaworski, K.M., "The Development of Ergonomic Performance Guidelines for Customer Information Systems: A Synthesis of an International Effort," *Proceedings*, 7th International Conference on Mobility and Transport for Elderly and Disabled Persons, Reading, England, July 1995, Volume 1, pp. 343-349, Cranfield Press. (primary author)
33. Kloos, W., K.M. Hunter-Zaworski, and A. Danaher, "Bus Priority at Traffic Signals in Portland: The Powell Boulevard Pilot Project," Institute of Transportation Engineers 1994, Compendium of Technical Papers, ITE, Washington, DC, 1994. (secondary author)
34. Hunter-Zaworski, K.M., "The Development of Ergonomic Guidelines for Electronic Customer Information Systems," *Proceedings*, First World Congress on Intelligent Transportation Systems, Paris, France, December 1994. (primary author)
35. Hunter-Zaworski, K.M., "Universal Securement/Restraint System for Wheeled Mobility Aids on Public Transportation Vehicles," *Proceedings*, 6th International Conference on Mobility and

Transport for Elderly and Disabled Persons, Lyon, France, May 1992, pp. 678-682. (primary author)

36. Hunter-Zaworski, K.M., "Study of Human Factors of Elderly and Handicapped Passengers in Public Transportation Safety," *Proceedings*, 5th International Conference on Mobility and Transport for Elderly and Disabled Persons, Stockholm, Sweden, May 1989. (primary author)

Other Peer-Reviewed Publications

1. Hunter-Zaworski, K.M., "Safe Transport of Wheeled Mobility Devices by Airlines: the Canadian Initiative," *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018. (primary author)
2. Hunter-Zaworski, K.M., Rutenberg, U, "Seating of Passengers with Wheeled Mobility Devices on Intercity Trains," *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018. (primary author)
3. Hunter-Zaworski, K.M., Severson, K and M. Shurland, "The Dilemma of Occupant Protection and Maneuverability of large Wheeled Mobility Devices on Passenger Rail," *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018. (primary author)
4. Hunter-Zaworski, K.M., "Overview of Wheeled Mobility Devices and Public Transit Vehicles, What you should have learned in Physics Class," *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018. (Primary author)
5. K.M. Hunter-Zaworski, and M Rothberg et al, "Accessible Transit Passenger Communications" *Proceedings*, 14th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Lisbon, Portugal, July 2015
6. K.M. Hunter-Zaworski, "Validation of space for accommodating wheeled mobility devices on the next generation of accessible passenger rail cars" *Proceedings*, 14th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Lisbon, Portugal, July 2015
7. Mueller, Jonathan, and K.M. Hunter-Zaworski, "Bicycle Network Connectivity for Passenger Rail Stations," Paper Number 14-4723, *Proceedings*, Transportation Research Board Annual Meeting. Washington, DC January 2014. (Secondary author)
8. Mueller, Jonathan, and K.M. Hunter-Zaworski, "Evaluation of Alternative Pedestrian Traffic Control Devices," *Proceedings*, 2011 ITE Western District Annual Meeting, Anchorage Alaska, July 12, 2011.(secondary author)
9. Lesser, V., K.M. Hunter-Zaworski, L. Newton and D. Yang. "Using Multiple Survey Modes in a Study of Individuals with Disabilities," Presented at the American Association for Public Opinion Research, New Orleans, Louisiana, May, 2008. (secondary author)
10. Hunter-Zaworski, K.M., and J.R. Zaworski, "BRT and Rear Facing Wheelchair Seurement: An Essential New Approach," *Proceedings*, APTA Bus Technology Conference, Anaheim CA April 2006. (primary author)
11. Hunter-Zaworski, K.M., "Universal Design," American Planning Association, Lincoln Institute of Land Policy, Audio Conference and Training CD-ROM, January 2007. (primary author)
12. Hunter-Zaworski, K.M., J.R. Zaworski and V. Lesser, "Survey of Airport Features for Persons with Disabilities," Paper Number 06-0384, *Proceedings*, Transportation Research Board Annual Meeting. Washington, DC January 2006. (primary author)
13. Hunter-Zaworski, K.M., and J.R. Zaworski "Wheelchair Seurement for Urban Transit Vehicles: It's Time to Address the Other Side of the Problem," Paper Number 06-0893, *Proceedings*, Transportation Research Board Annual Meeting. Washington, DC January 2006. (primary author)

14. Zaworski, J.R., K.M., Hunter-Zaworski, and M Baldwin, "Bus Dynamics for Mobility Aid Securement Design," Paper Number 05-0964, *Proceedings*, Transportation Research Board Annual Meeting. Washington, DC January 2005. (secondary author)
15. Zaworski, J.R., and K.M. Hunter-Zaworski, "Railroad Intrusion Detection," 12th National Rural ITS Conference, Palm Harbor Florida, August 2003. (secondary author)
16. Quinn, M., R. Metoyer, and K.M. Hunter-Zaworski, "Para Parallel Implementation of the Social Forces Model," Pedestrian and Evacuation Dynamics Conference, London U.K. July 2003. (third author)
17. Hunter-Zaworski, K.M., and R. Fynn, "Cross Border Benefits of the COATS Project," *Proceedings*, ITE Quad Conference, Vancouver, B.C. April 2001(primary author)
18. Kloos, W., K.M. Hunter-Zaworski, and A. Danaher, "Winning Riders by Reducing Travel Times," *Proceedings*, American Public Transit Association, 1994 Bus Operations & Technology Conference, Richmond, VA, May 1994. (secondary author)
19. Hunter-Zaworski, K.M., "A Synopsis of Accessibility Features of Skytrain, The Advanced Light Rapid Transit System in Vancouver, B.C.," Best Paper Award at the 1988 Annual Meeting of the Institute of Transportation Engineers, Vancouver, September 1988. (primary author)
20. Hunter, K.M., V. Ko, and R Suggitt, "The Bed Turner," *Proceedings*, Sixth Annual Conference on Rehabilitation Engineering, June 1983. (primary author)
21. Hunter, K.M. and J.V Ford, "Torso Rotator," *Proceedings*, Fifth Annual Conference on Rehabilitation Engineering, August 1982. (primary author)
22. Hunter, K. M., "A Systematic Approach to Rehabilitation Engineering Design Problems," *Proceedings*, International Conference on Rehabilitation Engineering, Toronto, June 1980. (primary author)

Reports and Others

Technical Reports

1. Hunter-Zaworski, K.M., (2018) "*Modelling and Validation of Standards for a Sleeping Compartment on Accessible Passenger Rail Vehicles*" Final Report Rail Safety IDEA Project 31, the National Academies of Sciences, Rail Safety IDEA Program, Washington DC
2. Hunter-Zaworski, K.M. K. Tabattanon, (2018), "*Spatial Analysis of Accessible Seating Area on the Next Generation Passenger Rail Cars using 3-D Modeling and Digital Human Modeling*" Final Project Report, Pacific Northwest Transportation Consortium, Seattle, WA
3. Hunter-Zaworski, K.M., Rutenberg, (2017) "*Inclusive and Universal Design Guidelines for HSR passenger Cars: Beyond the ADA*," Final Report Federal Railroad Administration, USDOT, Washington DC
4. Hunter-Zaworski, K.M., Rutenberg, H.U (2017) "*Manual to Improve Rail Transit Safety at Platform/Train and Platform/ Guideway Interfaces*," the National Academies of Sciences, Transit Cooperative Research Program, Report 189
5. Hunter-Zaworski, K.M. and V. Lesser, L. Newton, and M. Rothberg,(2014) "*National Transit Communications Accessibility Survey Report*," The Carl and Ruth Shapiro Family National Center for Accessible Media at WGBH Boston,
6. Hunter-Zaworski, K.M., Rutenberg, H.U., "*Draft Functional Requirements for Accessible Single-level Trainsets and Standalone Cars*," US DOT , Federal Railroad Administration, Final Report, September 2014
7. Hunter-Zaworski, K.M., H.U. Rutenberg, "*Use of Mobility Devices on Paratransit Vehicles and Buses*", TCRP Report 171, National Academies, Washington D.C., August 2014
8. Hunter-Zaworski, K.M., H.U. Rutenberg, "*Use of Mobility Devices on Paratransit Vehicles and Buses*", Final Report, TCRP C-20, National Academies, Washington D.C., November 2013
9. Hunter-Zaworski, K.M., H.U. Rutenberg, "*Use of Mobility Devices on Paratransit Vehicles and Buses*", Guidance Document, TCRP C-20, National Academies, Washington D.C., November 2013

10. Hunter-Zaworski, K.M., Rutenberg, H.U., “*Draft Functional Requirements for Accessible Single-level Trainsets and Standalone Cars*,” US DOT , Federal Railroad Administration, Volume 1 Executive Summary, Volume 2 Draft Regulations, Volume 3, Reference Documents, July 2012
11. Hunter-Zaworski, K.M., J. Mueller, “Evaluation of Alternative Pedestrian Traffic Control Devices,” Final Report, Oregon Department of Transportation, Research Section SPR 721, March 2012.
12. Hunter-Zaworski, K.M., Cornell, L and Jannat, M., “Impacts of Low-Speed Vehicles on Transportation Infrastructure and Safety,” Oregon Transportation, Research and Education Consortium, Final Report, OTREC-RR-10-19, December 2010.
13. Hunter-Zaworski, K.M., “Accessible Aircraft Lavatory Guidelines,” Prepared for US Department of Transportation, Office of the Secretary, Washington DC, submitted August 2009.
14. Hunter-Zaworski, K.M. and Zaworski, J.R., “Dynamics of Small Transit Vehicles,” Final Report, Public Transit Division, Oregon Department of Transportation, June 2009.
15. Hunter-Zaworski, K.M. and Zaworski, J.R., “Independent Wheelchair Securement,” IDEA Project T-57 Final Report, National Academies, Washington DC, May 2009.
16. Hunter-Zaworski K.M., “Charting the Future of Accessible Public Transportation,” State of the Science Summary Report, National Center for Accessible Transportation, Oregon State University, January 2008.
17. Hunter-Zaworski, K.M. and Zaworski, J.R., “Assessment of Rear Facing Wheelchair Accommodation on BRT Vehicles,” IDEA Project T-38 Final Report, National Academies, Washington DC, December 2004.
18. Hunter-Zaworski, K.M. and Zaworski, J.R., “Field Testing of Intrusion Detection Technologies for High Speed Rail Grade Crossings,” Oregon Department of Transportation, Salem OR, December 2004.
19. Hunter-Zaworski, K.M. and Zaworski, J.R., “Evaluation of Intrusion Detection Technologies for High Speed Rail Grade Crossings,” Oregon Department of Transportation, Salem OR, December 2003.
20. Ryus, Paul, Danaher, A and Hunter-Zaworski, K.M., “Transit Capacity and Quality of Service Manual,” 2nd Edition, TCRP Report 100, Transportation Research Board, Washington DC, 2003.
21. Hunter-Zaworski, K.M. and Layton, R.D., “Adaptation of Workshops for TransNow, OSU and Transpeed,” U.S. Department of Transportation Regional Transportation Center TransNow, University of Washington, Seattle WA, October 2002.
22. Hunter-Zaworski, K.M. and Albert, S., “COATS Regional ITS Architecture,” Western Transportation Institute, Montana State University, Bozeman MT, December 2000.
23. Hunter-Zaworski, K.M., Hodgson, G. and Layton., R.D., “A Preliminary Assessment of the Effects of Access Management on Pedestrians, Bicycles and Transit,” U.S. Department of Transportation Regional Transportation Center TransNow, University of Washington, Seattle WA, October 1999.
24. Hunter-Zaworski, K.M., and Bricheux, C., “Application of Ergonomic Guidelines on Emerging Intelligent Transport System (ITS) Technologies for Application to Advanced Public Transportation Systems (APTS) Practice,” ITS-IDEA Project #40 Final Report, Transportation Research Board, Washington DC, February 1998.
25. Hunter-Zaworski, K.M., and Bricheux, C., “Design for All Ergonomic Guidelines for Information,” The National Academies Transportation Research Board ITS-IDEA Project #40, Washington DC, January 1998.
26. Hunter-Zaworski, K.M., “Evaluation of the Corridor Safety Improvement Program,” Final Report, Oregon Department of Transportation, Salem OR, December 1997.
27. Hunter-Zaworski, K.M. and Zaworski, J.R., “Evaluation of the Blue Star Weather Information System,” Oregon Department of Transportation, Salem OR, June 1997.
28. Hunter-Zaworski, K.M. and Zaworski, J.R., “Demonstration of the Oregon State University Securement System,” National Easter Seal Society, Project ACTION, Washington DC, January 1997.

29. Hunter-Zaworski, K.M., Bell, C.A. and Zaworski, D.D., "Low Volume Grade Crossing Treatments for the Oregon High Speed Rail Corridor," Oregon Department of Transportation, Salem OR, December 1996.
30. Hunter-Zaworski, K.M. and Price, N., "Evaluation of the Corridor Safety Improvement Program," Oregon Department of Transportation, Salem OR, December 1996.
31. Hunter-Zaworski, K.M. and Price, N., "Determination of Driver Behavior and Speeding," Oregon Department of Transportation, Salem OR, December 1996.
32. Hunter-Zaworski, K.M., Price, N. and Ryus, P., "Evaluation of Photo Radar in Portland, Oregon," City of Portland, Transportation Department, December 1996.
33. Hunter-Zaworski, K.M. and Ayres, K., "Bus Rapid Transit," U.S. Department of Transportation Regional Transportation Center TransNow, University of Washington, Seattle WA, December 1996.
34. Hunter-Zaworski, K.M. and Price, N., "Analysis of Computer Capabilities of Northwest Paratransit Providers," U.S. Department of Transportation Regional Transportation Center TransNow, University of Washington, Seattle WA, September 1996.
35. Hunter-Zaworski, K.M. and Zaworski, J.R., "Preparation of the OSU Securement System for a Demonstration Project," Final Report, U.S. Department of Transportation, Federal Transit Administration, Washington DC, Report No. *FTA-OR-26-0003-95*, October 1995.
36. Hunter-Zaworski, K.M., "Requirements for Power Mobility Aids," Final Report, Contract No. QA94001001, U.S. Architectural and Transportation Barriers Compliance Board, September 1995.
37. Hunter-Zaworski, K.M., "Impact of Urban Bikes on Buses," Final Report, USDOT Regional Center, Transportation Northwest, Seattle WA, September 1995.
38. Hunter-Zaworski, K.M., "Bus Signal Preemption System: Opticom Study," Final Report, USDOT Regional Center, Transportation Northwest, Seattle WA, September 1995.
39. Hunter-Zaworski, K.M. and Zaworski, J.R., "ITS Applications to High Speed Rail Grade Crossing Study," Final Report, USDOT Regional Center, Transportation Northwest, Seattle WA, September 1995.
40. Hunter-Zaworski, K.M., "The Development of Ergonomic Guidelines for Electronic Customer Information Systems," U.S. Department of Transportation, Federal Transit Administration, Report No. *FTA-OR-26-7000-94-1*, Washington DC, December 1994.
41. Hunter-Zaworski, K.M., "Powell Boulevard Bus Signal Priority Pilot Project," Final Report, USDOT Regional Center, Transportation Northwest, Seattle WA, September 1994.
42. Hunter-Zaworski, K.M. and Hron, M., "Improving Bus Accessibility Systems for Persons with Sensory and Cognitive Impairments," Final Report, U.S. Department of Transportation, Federal Transit Administration, Report No. *FTA-OR-11-0007-93-1*, Washington DC, August 1993.
43. Hunter-Zaworski, K.M., Ullman, D.G. and Zaworski, J.R., "Application of the Quality Functional Deployment Method in Mobility Aid Securement System Design: Volume 1," Final Report, U.S. Department of Transportation, Federal Transit Administration, Report No. *FTA-OR-11-0006-92-1*, Washington DC, December 1992, 134 pp.
44. Hunter-Zaworski, K.M., Ullman, D.G. and Zaworski, J.R., "The Development of an Independent Locking Securement System for Mobility Aids on Public Transportation Vehicles: Volume 2," Final Report, U.S. Department of Transportation, Federal Transit Administration, Report No. *FTA-OR-11-0006-92-2*, Washington DC, December 1992, 92 pp.
45. Hunter-Zaworski, K.M., Ullman, D.G. and Zaworski, J.R., "Application of the Quality Functional Deployment Method for the Development of an Independent Locking Securement System for Mobility Aids on Public Transportation Vehicles: Executive Summary," U.S. Department of Transportation, Federal Transit Administration, Report No. *FTA-OR-11-0006-92-2*, Washington DC, December 1992, 14 pp.
46. Hunter-Zaworski, K.M., "Second Conference on Mobility Aids and Public Transportation," USDOT Regional Center, Transportation Northwest, Seattle WA, August 1992, 73 pp.
47. Hunter-Zaworski, K.M., "Securement of Non-Traditional Style Wheelchairs on Public Transit Vehicles," USDOT Regional Center, Transportation Northwest, Seattle WA, September 1990.

48. Hunter-Zaworski, K.M., Safford. R. and Layton, R., “Human Factors in Public Transportation Safety,” USDOT Urban Mass Transportation Administration, Washington DC, March 1989.

Professional Meetings, Symposia, Webinars and Conferences

Presentations to Professional Groups (includes presentations of papers cited above)

1. Workshop Presenter, Hunter-Zaworski, K.M., “Overview of Wheeled Mobility Devices and Public Transit Vehicles, What you should have learned in Physics Class”, Proceedings, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018.
2. Speaker, “Comparison of Responses to an Accessibility Survey for Design of an Accessible Sleeping Compartment”, *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018.
3. Speaker, “Safe Transport of Wheeled Mobility Devices by Airlines: the Canadian Initiative,” *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018.
4. Speaker, “Seating of Passengers with Wheeled Mobility Devices on Intercity Trains”, *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018.
5. Speaker, “The Dilemma of Occupant Protection and Maneuverability of large Wheeled Mobility Devices on Passenger Rail”, *Proceedings*, 15th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Taipei, Taiwan. November, 2018
6. Workshop Leader, Human Factors Workshop, Oregon Department of Transportation, Corvallis, OR November 8-9, 2018
7. Facilitator and Leader, Forum on Transport of Wheeled Mobility Devices on Aircraft, Canadian Transportation Agency, Toronto, Canada, June 13, 2018
8. Workshop Presenter, “ADA Design”, Oregon Department of Transportation, Medford, Portland and Corvallis OR May 2,16 and 24, 2018
9. Workshop Presenter, Workzone Human Factors”, Oregon Department of Transportation, Corvallis OR May 8. 2018
10. Speaker, “Pedestrian and Bicycle Friendly Communities are more Inclusive and Integrated”, ITE Quad Conference, Portland Oregon May 7, 2018
11. Speaker, “Accessible Sleeper for the Next Generation Passenger Rail Vehicle”, Joint Rail Conference, Pittsburgh, PA April 18-20, 2018
12. Speaker, “Containment of Occupied Wheeled Mobility Devices on Passenger Trains,”, Joint Rail Conference, Pittsburgh, PA April 18-20, 2018
13. Speaker, Occupant Protection and the ADA, Session 623, Innovations in Passenger Rail Equipment and Systems Integration, 97th Annual Meeting Transportation Board, Washington DC, January 9, 2018.
14. Poster Presentation, “Accessible Sleeper Compartment, TRB Rail Safety IDEA Program, Session 577 97th Annual Meeting Transportation Board, Washington DC, January 9, 2018.
15. Workshop Presenter, “We Can Get There: Improving Accessibility and Creating Inclusive Cities Worldwide, Session 101, 97th Annual Meeting Transportation Board, Washington DC, January 7, 2018
16. Workshop Presenter, “Traffic Engineering Fundamentals: Human Factors and Retro-reflectivity, Oregon Department of Transportation, Corvallis, OR December 5-7, 2017
17. Workshop Leader, Human Factors Workshop, Oregon Department of Transportation, Corvallis, OR November 13-14, 2017
18. Invited Speaker, “*Rail Transit Passenger Safety*”, Danish Rail Safety and Security Conference November 1, 2017 Copenhagen, Denmark

19. Invited Speaker, "Accessible Pedestrian Infrastructure", Northwest Pavement Management Association Annual Conference, October 16, 2017, Vancouver WA.
20. Workshop Leader, Human Factors Workshop, Oregon Department of Transportation, Corvallis, OR December 19-20, 2016
21. Workshop Leader, "Challengers and Solutions in Accessible Transportation, Canadian Transportation Agency, Centre of Expertise for Accessible Transportation, Ottawa Ontario, December 12, 2016
22. Workshop Presenter, "Traffic Engineering Fundamentals: Human Factors and Retro-reflectivity, Oregon Department of Transportation, Corvallis, OR November 29-30, 2016
23. Speaker, "Last 20 Miles: Regional Passenger rail Connections and Emerging Public Transportation Modes Concept" Northwest Transportation Conference, Corvallis, OR March 16, 2016
24. Speaker, "Securement or Containment", Washington State Transportation Conference, Vancouver, WA August 24, 2015
25. Speaker, TCRP A-40 Manual to Improve Safety at the Platform Train Interface), APTA Rail Conference, Salt Lake City, UT, June 20, 2015
26. Panel Member, "Portland International Airport –Design for Older Travelers", Portland International Airport, April 28, 2015
27. Speaker, "Life Transitions and Transportation Options", Academy for Life Long Learning, Corvallis, April 21, 2015
28. Speaker, "Pedestrian and Bicycle Friendly Communities are more Inclusive and Integrated", Women's Transportation Seminar, Portland, OR April 14, 2015
29. Speaker, "Changing Passenger Demographics :Impacts on Passenger Terminal Design and Information Systems", 12th Annual Western Regional International Health Conference, Eugene OR April 12, 2015
30. Speaker, "Life Transitions and Transportation Options", OSU Gerontology Conference, Corvallis, April 2, 2015
31. Speaker, "Validation of the Space for Accommodating Wheeled Mobility Devices on Accessible Passenger Rail Cars", Joint Rail Conference, San Jose CA March 24, 2015
32. Speaker, "Accessible Intersections (Human Factors and Technology)", Northwest Region TTAP and BIA Symposium, Portland, OR , March 17, 2015
33. Speaker, "Changing Passenger Demographics: Impacts on Air Terminal Design and Information Systems", Session #584, Transportation Research Board Annual Meeting January 12, 2015
34. Speaker, " Technology to Improve Air Transport Accessibility", ABE60 Technology Sub-committee, Transportation Research Board Annual Meeting January 12, 2015
35. Workshop Leader, "ADA Design and Regulation" Transportation Safety Division ODOT, February 18, 2014 Corvallis OR and November4, 2014 Bend OR
36. Speaker, "Pedestrian and Bicycle Friendly Communities are more Inclusive and Integrated, Accessibility Summit, Carleton University, Ottawa, CA, July 12-2014
37. Workshop and Webinar Leader, TCRP A – 40: "Improving Rail Transit Safety at Platform/Train, Platform/Guideway, and Platform/Roadway Interfaces". Montreal PQ, Canada June 18, 2014 and webinar June 30, 2014
38. Speaker "Validation of the Accessible Lavatory Recommendations for the PRIIA Specifications of the Next Generation of Accessible Passenger Rail Cars" 2014 Joint Rail Conference, Colorado Springs, CO April 2014
39. Poster session (co presenter with K. Watkins, and S. Windmiller), "Bridging the Digital Divide: Ensuring Information Equity in Social Media", (14-3392) Transportation Board Annual Meeting, Washington DC, January 2014.
40. Workshop (co presenter J. Mueller), "Low Stress Bike and Pedestrian Interconnectivity Around Stations and Terminals", Transportation Board Annual Meeting, Washington DC, January 2014.
41. Invited Speaker, "Traveler Assistance: Passenger Transfers at Boarding", 1st Annual Air Travel Accessibility Conference, Washington DC, Dec. 10 , 2013

42. Speaker, "Human Factors", Retro-reflectivity Workshop, Corvallis, OR , June 6, 2013 and October 28, 2013
43. Invited Speaker, "Preparing for the Increased Financial Demand of Paratransit Transportation", Bus Con, Chicago, Sept 9 -11, 2013
44. Speaker, "Impact of Obesity on the Design of Transport Vehicles and Infrastructure" , Pacific Intermountain Parking Transportation Association Conference, Eugene OR July 14, 2013
45. Webinar co-leader (with U. Rutenberg) , "Use of Mobility Devices on Paratransit Vehicles and Buses" Canadian Urban Transit Association, Webinar, June 20, 2013
46. Speaker, "Recommendations for the PRIIA specifications on the next generation of accessible passenger rail cars 2013 Joint Rail Conference, Knoxville, TN, April 2013
47. Speaker and Workshop leader, "Wheeled Mobility Devices and Paratransit Vehicles and Buses" TCRP C-20 Project, Washington DC, June 26, 2012
48. Speaker and Leader, "Functional Requirements for Accessible High Speed and Intercity Passenger Rail Cars, Washington DC March 20, 2012
49. Speaker, "Communicating Transit Information to People with Sensory Disabilities" 18th World Congress on Intelligent Transport Systems, Orlando FL, October 2011
50. Speaker, "Impacts of Low-Speed Vehicles on Transportation Infrastructure and Safety" World Symposium of Transport and Land Use Research, Whistler BC. Canada July 28-30, 2011
51. Invited Speaker, "Accessible Real Time Passenger Information: the next frontier in accessible transportation" for FHWA Conference on Technological Innovations in Transportation for People with Disabilities" Workshop held on February 23, 2011.
52. Speaker, "Vehicle Dynamics Study of Smaller Public Transportation Vehicles Used as Paratransit or Shuttle Vehicles" ([11-1064](#)), Session #233 Transportation Research Board Annual Meeting. Washington DC, January 2011.
53. Speaker, "Accessible Real-Time Information for Travelers with Sensory and Cognitive Disabilities: Next Frontier in Accessible Transportation" ([11-1063](#)), Session #370 Transportation Research Board Annual Meeting. Washington DC, January 2011.
54. Plenary Speaker and Workshop Leader, "Dynamics of Paratransit Vehicles, Implications for Vehicle Operations and Procurement," Oregon Transit Association Conference, Seaside OR, October 27, 2010.
55. Plenary Speaker, "Sensory and Cognitively Impaired Travelers," 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
56. Speaker, "Safe Aircraft Stowage of Wheelchairs," 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
57. Speaker, "Minimum Spatial Requirements for an Aircraft Lavatory," 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
58. Speaker, "Changes in US aircraft boarding equipment regulations," 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
59. Speaker, "Challenges in accessible seating for aircraft," 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
60. Poster Presentation, "Traveler Assistance Training" 12th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hong Kong, June 2010.
61. Speaker "Accessibility in Airport Terminal Design and Operations," Session #216 Transportation Research Board Annual Meeting. Washington DC, January 2010.
62. Speaker "Wheelchair Analysis for Rear Facing Compartment Design," (10-1377), Session #315 Transportation Research Board Annual Meeting. Washington DC, January 2010.
63. Keynote Speaker, "Importance of a Women's Perspective in Engineering Design" WISE Seminar, November 7, 2009.
64. Keynote Speaker, "Accessible Public Transportation," Canadian Transportation Agency, Gatineau, PQ Canada, July 15, 2009.

65. Keynote Speaker, "Traveler Assistance Training," Canadian Transportation Agency, Gatineau, PQ Canada, July 15, 2009.
66. Workshop Leader, (with J.R. Zaworski) "Accessible Aircraft Seating" SAE Committee on Aircraft Seating, Washington DC, September 15-17, 2009.
67. Moderator, "Accessible Travel and Transportation" IBM/IEEE Accessing the Future Conference, Boston MA, July 20-21, 2009.
68. Workshop Leader, "Transportation as a Key to Employment" 2008 International Workshop on Leadership, Employment and Disability, (I-LEAD), Eugene OR, March 25, 2009.
69. Workshop Leader, "Accessible Air Travel" 25th International Seating Symposium, Lake Buena Vista FL, March 13, 2009.
70. Invited Speaker, "Accessible Terminal Transportation," Universal Access in Airports, Chicago IL, September 29-October 1, 2008.
71. Invited Keynote Speaker, "Universal Design in Airports," Universal Access in Airports, Chicago IL, September 29-October 1, 2008.
72. Workshop Leader, "Traveler Assistance Training," with Delta Airlines, West Palm Beach FL, August 8-9, 2008 and October 23-24, 2008.
73. Guest Speaker, "Mobility in an Aging Society," Women's Transportation Seminar, Portland OR, October 14, 2008.
74. Invited Speaker, "Accessible Public Transportation," NASA Space Grant, OSU, Corvallis OR, Sept 8, 2008.
75. Invited Speaker, "Access to the Skies," National Council on Disability Annual Meeting, Seattle WA, July 16, 2008.
76. Speaker, "Charting the Future in Accessible Public Transportation," Federal Laboratory Consortium, Portland OR, May 6, 2008.
77. Workshop Leader, "Transportation as a Key to Employment," 2008 International Workshop on Leadership, Employment and Disability, (I-LEAD), Eugene OR, March 14, 2008.
78. Workshop Leader, "Changes, Challenges and Choices," OSU Women's Conference, Corvallis OR, March 1, 2008.
79. Speaker, "Inclusive Design in Accessible Public Transportation," 2008 International Conference on Aging, Disability and Independence, St. Petersburg FL, Feb 21-23, 2008.
80. Speaker, "Real Time Communication and Information Systems," 2008 International Conference on Aging, Disability and Independence, St. Petersburg FL, Feb 21-23, 2008.
81. Invited Speaker, "Accessible Technologies for Pedestrians," 14th World Congress on Intelligent Transportation Systems, Beijing, The Peoples Republic of China, October, 2007.
82. Invited Speaker, "Inclusive Design for Real Time Communication Systems," 14th World Congress on Intelligent Transportation Systems, Beijing, The Peoples Republic of China, October, 2007.
83. Speaker, "Standards for Accessible Lavatories for Commercial Aircraft," 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.
84. Speaker, "Accessible In Flight Entertainment Systems," 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.
85. Speaker, "Community Bus Transportation: An Emerging Transit Mode," 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.
86. Speaker, "Proposed Guidelines for Web Accessibility for the Travel Industry," Paper No, 1108, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.
87. Speaker, "U.S. Passenger Rail Accessibility: A Regional Perspective," Paper No. 1170, *Proceedings*, 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.

88. Poster Presentation, (with Joe Zaworski), "Wheelchair Stowage on Aircraft," 11th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Montreal, Canada. June 2007.
89. Speaker, "Transportation and Aging," OSU Gerontology Conference, OSU, Corvallis OR, April 10, 2007.
90. Presenter, TRB Workshops Session 117, "Transportation Issues for Elderly and Disabled Persons," Presentation on NCAT Airport and Traveler Surveys, Sunday Jan 21, 2007.
91. Presenter, Universal Design Web –Cast Nov 8, 2006 for American Planning Association.
92. Speaker, "The Universal Access in Travel: Symposium & Exposition," Baltimore MD, Nov. 5-7, 2006.
93. Symposium Chair, State of the Science Symposium, Charting the Future in Accessible Transportation, Portland OR, October 31-November 1, 2006.
94. Invited Plenary Speaker, Conference on Universal Design and Visitability Conference, The Ohio State University, "Universal Design in Public Transportation: Segway to the Future," Columbus OH, July 12-14, 2006.
95. Workshop Leader, "Accessibility Challenges in Transportation," RESNA, Atlanta GA, June 25, 2006.
96. Workshop Presenter, (with R.D. Layton) "Safety Countermeasure," Corvallis OR, May 31, 2006.
97. Speaker, "Accessible Public Transportation and an Aging Society," OSU Center for Healthy Aging, Corvallis OR, May 10, 2006.
98. Poster Presentations, (with Joseph Zaworski, and Virginia Lesser), Poster Session #442, "Survey of Airport Features for Persons with Disabilities," (06-0384), Transportation Research Board Annual Meeting, Washington DC, January 2006.
99. Poster Presentation, (with Joseph Zaworski), Poster Session #241, "Wheelchair Securement for Urban Transit Vehicles: It's Time to Address the Other Side of the Problem," (06-0893), Transportation Research Board Annual Meeting, Washington DC, January 2006.
100. Speaker, "Communication Technologies in Transportation Terminals for Passengers with Sensory Impairments," ITS World Congress, San Francisco CA, November 9, 2005.
101. Speaker, "Accessible Public Transportation," OSU Mechanical Engineering Seminar, Corvallis OR, October 28, 2005.
102. Workshop Leader, (with R.D. Layton) "Design and Control for Older Drivers," Corvallis OR, April 28-29, 2005.
103. Workshop Leader, Apprenticeships in Science and Engineering Summer Conference, "Accessible Public Transportation," Corvallis OR, July 2005.
104. Poster Presentations, (with Cameron Grile, and Chris Monsere) Poster Session #237, "Programming Safety Improvements on Pavement Resurfacing, Restoration and Rehabilitation Projects," (05-0077), Transportation Research Board Annual Meeting, Washington DC, January 2005.
105. Speaker "Field Testing of Intrusion Detection Technologies at High Speed Rail Crossings," (05-0572), Session #442, Transportation Research Board Annual Meeting, Washington DC, January 2005.
106. Speaker "Bus Dynamics for Mobility Aid Securement Design," (05-0964), Session #306 Transportation Research Board Annual Meeting, Washington DC, January 2005.
107. Speaker "Accessible Traveler Information Systems," Session T(c)-1, 10th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hamamatsu, Japan, May 2004.
108. Speaker "Accessible Air Transportation Boarding Systems," Session M(b)-2, 10th International Conference on Mobility and Transportation for Elderly and Disabled Persons, Hamamatsu, Japan, May 2004.
109. Speaker, "Railroad Intrusion Detection-Laboratory Results," Transportation Research Board, Annual Meeting, Session #444, Washington DC, January 2004.
110. Workshop Leader, "Accessible Pedestrian Intersections," Corvallis OR, June 4, 2003.
111. Speaker, "Technology and Workforce Transformation: the Transit Industry," Industrial Engineering Research Conference (IERC), Portland OR, May 2003.

112. Speaker, "Use of Information Technologies in Civil Engineering Education," Colorado State University, Fort Collins CO, April 11, 2003.
113. Speaker, "Transportation Education at OSU," NWTTEA Conference, January 24, 2003.
114. Keynote Speaker, "Sustainable Transportation Planning for the 2010 Winter Olympics in Vancouver B.C.," Women's Transportation Seminar, Richmond BC, January 4, 2003.
115. Speaker, "Life Long Learning and Web Delivery of Transportation Education," NWTTEA Conference, September 13, 2002.
116. Conference Co-Chair, 2nd Conference on Aviation in Oregon, June 18-20, 2002 Redmond Oregon.
117. Speaker, "Central Oregon Aviation Education Initiative," 2nd Conference on Aviation in Oregon, Redmond OR, June 18-20, 2002.
118. Speaker, "Accessible Public Transportation," Portland State University, May 8, 2002.
119. Developed new short course on Accessible Intersections, Corvallis OR, April 23, 2002 and Gresham OR, April 30, 2002.
120. Speaker, "Impacts of New Air Travel Security Regulations on Travelers with Disabilities," Transportation Research Board, Annual Meeting, Washington DC, January 2002.
121. Workshop Leader, Workshop on Small Airport Security, Corvallis, OR/ October 9, 2001.
122. Speaker, "Cross Border Benefits of the COATS Project," ITE Quad Conference, Vancouver BC, April 5-7, 2001.
123. Workshop Leader, Short course on General Aviation infrastructure, Corvallis OR, February 5-7, 2001.
124. Workshop on Transportation Engineering for the Oregon P.E. Review in Bend OR, January 27, 2001. (with Chris Bell)
125. Speaker, "Progress in Wheelchair Securement: 10 Years since the Americans With Disabilities Act," Session #64, Transportation Research Board, Annual Meeting, Washington DC, January 2001.
126. Workshop Presenter, "Telemedicine, telecommuting and Tele-education Impacts on People with Disabilities," Transportation Research Board, Annual Meeting, Washington DC, January 2001.
127. Workshop Leader for ODOT/OSU course on Transportation Planning, Salem OR, October 6, 20, November 3, and 17, 2000.
128. Workshop Leader at Oregon Transit Association Annual Meeting, "Procurement of Advanced Transit Technologies," Portland, OR, October 3, 2000.
129. Leader of an ITS Peer to Peer Workshop, Redmond OR, January 31, 2000.
130. Leader of an ITS Peer to Peer Workshop, Moderated Workshop on ITS for the Illinois Association for Community Transportation/Illinois Rural Transit Assistance Center, Peoria IL, October 27, 1999.
131. Workshop Leader at Transportation Northwest Conference on Transportation Education, Seattle WA, July 16, 1999.
132. Speaker, "Accessible Traveler Information Systems: Web Based Information Systems," Session #62, Transportation Research Board, Annual Meeting, Washington DC, January 1999.
133. Speaker, "Evaluation of PhotoRadar for City of Portland," (with Nathaniel Price), Session #325, Transportation Research Board, Annual Meeting, Washington DC, January 1998.
134. Speaker, "Passive Pedestrian Detection at Unsignalized Crossings," (with Dana Beckwith), Session #387, Transportation Research Board, Annual Meeting, Washington DC, January 1998.
135. Speaker, "Auto Engaging Securement Systems and Low-Floor Buses," Session #425, Transportation Research Board, Annual Meeting, Washington DC, January 1998.
136. Poster Presentation, "Passive Pedestrian Detection Sensor Selection Using the Quality Functional Deployment Method," (with Dana Beckwith), Session #6, Transportation Research Board, Annual Meeting, Washington DC, January 1998.
137. Workshop Leader, "Pedestrian Safety," Oregon Safety Conference, Eugene OR, October 1997.
138. Workshop Leader, "Advanced Technology," National Transit Institute, San Bernardino CA, September 8, 1997.
139. Workshop Leader, Workshops on Pedestrian Safety, Oregon Department of Transportation, Portland, Grants Pass, Salem and Bend OR, 1997.

140. Workshop Leader (with Multisystems), "Workshop on Procurement of Advanced Technology," National Transit Institute, Seattle WA, April 1997.
141. Workshop Leader, "Workshop on Accessibility and Advanced Technology," 15th National Conference on Accessible Transportation, Orlando FL, November 11-14, 1996.
142. Workshop Leader, "Workshop on Procurement of Advanced Technology," National Transit Institute, Rutgers University, New Brunswick NJ, October 21-23, 1996.
143. Workshop Leader, "Workshop on Management and Organization," Tri-Met's Operations Division, Portland OR, September 20-21, 1996; November 7-8, 1996; November 15, 1996.
144. Workshop Leader, "Workshop on Accessible Communications Systems," AMTRAK, Washington DC, September 12, 1996.
145. Workshop Leader, "Workshop on Public Transportation," Tri-Met's Legal Department, Portland OR, July 5-6, 1996.
146. Workshop Leader, "Workshop on Advanced Technology and Transit," Victoria BC, June 17-18, 1996.
147. Workshop Leader, "Workshop on Design of Bicycle and Pedestrian Facilities," Corvallis OR, March 7-8, 1996.
148. Workshop Leader, "Workshop for the Southwest Transit Association," Santa Fe NM, January 29, 1996.
149. Workshop Leader, "Advanced Technology Procurement," Oregon Transit Association, Seaside OR, October 1995.
150. Workshop Leader, "Ergonomic Guidelines for Passenger Information Systems," Reading, England, July 1995.
151. Invited Panelist, "Review of Research Needs Regarding Information for Pedestrians Who are Blind or Visually Impaired at Intersections," Project ACTION Access Board, Washington DC, June 1995.
152. Workshop Leader, "Workshop on New Technologies in Transportation," Community Transportation Association of America, Annual Conference, Portland OR, May 1995.
153. Panel Member, Women's Transportation Seminar, Annual Meeting, Philadelphia PA, May 1995.
154. Invited Speaker, 1st National Conference on Transporting People with Disabilities, Orlando FL, April 1995.
155. Workshop Leader, "Workshop on Human Factors Issues of APTS," American Public Transit Association, Bus Technology Conference, Reno NV, April 1995.
156. Invited Presenter, "User Information Committee Meeting," Transportation Research Board, Washington DC, January 1995.
157. Speaker, "The Development of Ergonomic Guidelines for Electronic Customer Information Systems," Transportation Research Board Annual Meeting, Washington DC, January 1995.
158. Workshop Leader, Technology Sharing Program, University of Wisconsin-Milwaukee, Tampa FL, October 1994.
159. Workshop Leader, American Public Transit Association, Workshop on Advanced Public Transportation Systems, Richmond VA, May 1994.
160. Speaker, TransNow Regional Conference, Seattle WA, May 1994.
161. Organized and Chaired Third Conference on Mobility Aids and Public Transportation, Portland OR, May 2-3, 1994.
162. Workshop Leader, Association of Women in Science, Corvallis OR, April 1994.
163. Workshop Leader, Metropolitan Transit Commission (MTC), Oakland CA, January 1994.
164. Invited Speaker, Minnesota Public Transit Association Annual Meeting, St. Cloud MN, October 28, 1992.
165. Speaker, TRB's 13th National Conference on Specialized Transportation, Tampa FL, October 25-27, 1992.
166. Workshop Leader, Technology Sharing Program, University of Wisconsin-Milwaukee, Tampa FL, October 24, 1992.

167. Invited Speaker, American Public Transit Association, Annual Meeting, San Diego CA, October 19, 1992.
168. Invited Speaker and Workshop Leader, Oregon Transportation Association Annual Meeting, Portland OR, October 5, 1992.
169. Invited Speaker and Session Chair, TRB's National Conference on Advanced Technologies in Public Transportation, San Francisco CA, August 1992
170. Invited Speaker, Government Affairs Conference, American Public Transit Association, Portland OR, June 30, 1992.
171. Invited Speaker, Community Transport Association of America, Kansas City KS, May 19-22, 1992.
172. Invited Speaker, TransNow Annual Meeting of the Advisory Board, Seattle WA, May 4, 1992.
173. Invited Speaker, Independence 92, Vancouver BC, April 22-26, 1992.
174. Organized and sponsored the Second Conference on Mobility Aids and Public Transportation, Portland OR, March 16-17, 1992.
175. Invited Speaker, Access to the Skies, Seattle WA, January 9-11, 1992.
176. Invited Speaker, ADA Implementation Conference, American Public Transit Association, Seattle WA, December 9-10, 1991.
177. Invited Speaker, ADA Short Course, University of Wisconsin-Milwaukee, August 26, 1991.
178. Panelist, Transportation Research Board Annual Meeting, January 1991.
179. Speaker, Oregon Traffic Safety Commission Short Course, Traffic Engineering Fundamentals, December 12, 1990.
180. Speaker, Oregon State Annual Transportation Conference, Eugene OR, October 15, 1990.
181. Speaker, Washington State Annual Transportation Conference, Tacoma WA, September 5-6, 1990.
182. Organized and sponsored the Wheelchairs and Public Transportation Conference, Seattle WA, June 7-8, 1990.
183. Speaker, "The Status of Wheelchair Occupant Restraint Structures for Motor Vehicles: Transportable Devices," 69th Annual Meeting of the Transportation Research Board, Washington DC, January 1990.
184. Speaker, "T-Intersection Simulator Performance of Drivers with Physical Limitations," 69th Annual Meeting of the Transportation Research Board, Washington DC, January 1990.
185. Presenter, "Travelling Disadvantaged and Advanced Rapid Transit System in Vancouver, Canada: A report on all the accessibility issues," Fourth International Conference on Mobility and Transport for Elderly and Disabled Persons, Vancouver BC, July 1986.
186. Presenter, "Barriers and Safety Risks for Transportation Disadvantaged Air Travelers," Transportation Research Board Annual Meeting, Washington DC, January 1986.
187. Speaker, "Design Factors for the Accessible Advanced Light Rapid Transit System in Vancouver, B.C.," Transportation Research Board Annual Meeting, Washington DC, January 1985.

INTERNATIONAL ACTIVITIES

1. Scientific Committee Advisor, 15th International Conference on Transport for Elderly and Disabled Persons, (TRANSED 2018), Taipei, Taiwan November 12-15, 2018
2. Invited Speaker, "Rail Transit Passenger Safety" , Danish Rail Safety and Security Conference November 1, 2017 Copenhagen, Denmark.
3. Member, (2016-2017) Expert Panel on Transportation needs of an Aging Population, Council of Canadian Academies:
4. Workshop Leader, "Challengers and Solutions in Accessible Transportation, Canadian Transportation Agency, Centre of Expertise for Accessible Transportation, Ottawa Ontario, December 12, 2016
5. Scientific Committee Member, Plenary Speaker, Workshop leader, Session Chair and Moderator, 12th International Conference on Transport for Elderly and Disabled Persons, Hong Kong (2010)
6. Keynote Speaker, "Accessible Public Transportation", Canadian Transportation Agency, Gatineau, PQ Canada, July 15, 2009

7. Keynote Speaker, “Traveler Assistance Training”, Canadian Transportation Agency, Gatineau, PQ Canada, July 15, 2009
8. Scientific Committee Member, Session Chair and Moderator, 11th International Conference on Transport for Elderly and Disabled Persons, Montreal Canada (2007)
9. Plenary Session Chair 10th International Conference of Transport for Transport for Elderly and Disabled Persons, Hamamatsu, Japan, May 2004,
10. Keynote Speaker, “ Sustainable Transportation Planning for the 2010 Winter Olympics in Vancouver B.C.”, Women’s Transportation Seminar, Richmond B.C., January 4, 2003
11. Speaker, “Cross Border Benefits of the COATS Project”, ITE Quad Conference Vancouver B.C., April 5-7, 2001
12. Scientific Committee Member, 9th International Conference of Transport for Transport for Elderly and Disabled Persons, Warsaw Poland July 2001
13. Scientific Committee Member, 8th International Conference on Transport for Elderly and Disabled Persons, Perth, Australia 1998
14. Consultant to Transport Canada on Ergonomic Issues of Customer Information Systems, Montreal, Canada, July 1995.
15. Scientific Committee Member, 7th International Conference on Transport for Elderly and Disabled Persons, Reading, England, July 1995.
16. Consultant to Transport Canada on Audio-Visual Communications Systems, Montreal, Canada, 1994-2004
17. Chair of International Committee to Develop Ergonomic Performance Guidelines for Customer Information Systems, TRB-ECMT-EEC, 1993-1999.
18. Scientific Committee Member, 6th International Conference on Mobility and Transport for Elderly and Disabled Persons, Lyon, France, May 31-June 3, 1992.
19. Consultant to B.C. Transit, Vancouver, B.C., on Fixed Route Accessibility, 1990.
20. Consultant to Transport Canada’s Transportation Development Centre, Montreal, Quebec, on the Development of Wheelchair Occupant Restraint Standards, 1989.
21. Scientific Committee Member, 5th International Conference on Mobility and Transport for Elderly and Disabled Persons, Stockholm, Sweden, May 1989.

RESEARCH GRANTS

Prior Research

Principal Investigator

- “Modeling and validation of standards for a sleeper compartment on accessible passenger rail vehicles” Rail Safety IDEA project RS-31, National Academies, \$ 99,435, October 1, 2016 to June 4, 2018
- “Spatial analysis of accessible seating area on the next generation passenger rail cars using 3-D modelling and virtual reality” PacTrans, \$25,000, September 16, 2017 to September 15, 2018
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$250,000, October 1, 2017-September 30, 2018
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$250,000, October 1, 2016-September 30, 2017
- “Cost, Safety and Feasibility Review of Accessibility”, US Federal Railroad Administration, \$90,976 July 1, 2015 to December 5, 2016
- “Manual to Improve Rail Transit Safety at Platform/Train and Platform Guideway Interfaces ” the National Academies of Sciences, Transit Cooperative Research Program, Project Number TCRP A-40 , \$274,431, January 1, 2014-May 31, 2016
- “Redesign of Accessible Lavatories”, The Boeing Company, \$32,000, April 2013-December 2016
- Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$250,000, October 1, 2015-September 30, 2016

- “KINdReD” (Co-Principal Investigator with Drs. Robert Stone and Dan McAdams Texas A and M), NSF CMMI, Award Nos. 1200947, January 2012-December 2015.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$210,000, October 1, 2014-September 30, 2015
- “Researching Accessibility Gaps in Transit Hub Communication Systems and Standards”, U.S., Department of Education National Institute for Disability and Rehabilitation Research, \$598,735, October 1, 2009-September 30, 2014.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$210,000, October 1, 2013-September 30, 2014
- “Inclusive and Universal Design Specifications for HSR Passenger Rail Cars: Beyond ADA,”, U.S. Department of Transportation, Federal Railroad Administration. \$250,000, April 5, 2011-September 30, 2014.
- “Use of Mobility Devices on Paratransit Vehicles and Buses” the National Academies of Sciences, Transit Cooperative Research Program, Project Number TCRP C-20, \$398,510, November 1, 2011-November 30, 2013
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$210,000, October 1, 2012-September 30, 2013
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$210,000, October 1, 2011-September 30, 2012
- “Evaluation of Alternative Pedestrian Traffic Control Devices”, Oregon Department of Transportation, Research Section, \$110,000, October 1, 2009-December 31, 2011
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$210,000, October 1, 2010-September 30, 2011.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$180,000, October 1, 2009-September 30, 2010.
- “Impacts of Neighborhood Electric Vehicles on Transportation Infrastructure Safety and Regulation”. Oregon Transportation Research and Education Consortium”, \$70.611, October 1, 2009-March 31, 2011
- “Independent Wheelchair Securement, National Academies, IDEA Project T-57, \$78,000, November 1, 2008 –April, 2010.
- “Determination of Mid-Sized Vehicle Dynamics, ODOT, Public Transit Divisions, \$76, 232, July 1, 2008 – June 30, 2009
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$180,000, October 1, 2008-September 30, 2009.
- “Virtual Accessible Lavatory Validation Tool, “ The Boeing Company”. October 2006-June 2008, \$86,000
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$180,000, October 1, 2007-September 30, 2008.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$180,000, October 1, 2006-September 30, 2007.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$181,000, October 1, 2005-September 30, 2006.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$176,000, October 1, 2004-September 30, 2005
- “Update and Enhancements of ODOT’s Crash Reduction Factors, ODOT, (with Portland State University) , \$23,372, December 1, 2003- June 30, 2005
- “Rehabilitation Engineering Research Center for Accessible Public Transportation, U.S., Department of Education National Institute for Disability and Rehabilitation Research, \$4,975,000, October 1, 2003-December, 2009.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$158,000, October 1, 2003-September 30, 2004.

- “Assessment of Rear Facing Wheelchair Accommodation on BRT Vehicles” National Academies, IDEA Project T-38, \$81,700, August 27, 2003 –December 31, 2004
- “Field Study to Evaluate Intrusion Detection and Locked Gate Technology at Low Volume Grade Crossings on the HSR Corridor,” Oregon Department of Transportation, Federal Highway Administration, \$61,000, February 8, 2003-December 31, 2003.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$158,000, October 1, 2002-September 30, 2003.
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$157,291, October 1, 2001-September 30, 2002.
- “Adaptation of Workshops for NW Training Alliance” TransNow, Seattle, WA, \$60,350, March 1, 2001- February 2002
- “Highway Engineering Short courses and Technical Assistance,” (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$133,247, October 1, 2000-September 30, 2001.
- “Development of a Primer of Aviation,” NASA Montana Space Grant Consortium, \$25,125, January 31, 2000-March 31, 2002
- “Field Study to Evaluate Intrusion Detection and Locked Gate Technology at Low Volume Grade Crossings on the HSR Corridor,” Department of Transportation University Transportation Centers, Western Transportation Institute, \$69,944 and Federal Highway Administration, \$130,500, October 1, 1999-December 31, 2002.
- “Highway Engineering Short courses and Technical Assistance,” (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$128,288, October 5, 1998-September 30, 1999.
- “STIP Safety Investment Program Countermeasure Decision Matrix Development,” (with R.D. Layton), ODOT, \$9,887, August-September 1998.
- “Developing Laboratory Materials for the Required Junior Level Transportation Engineering Course,” (with M. Kyte, University of Idaho), TransNow, Seattle, WA, \$124,386, September 1997-August 1999.
- “Access Management Impacts on Pedestrians and Bicycles,” US Department of Transportation Regional Transportation Center, TransNow, Seattle, WA, \$186,191, September 1996-August 1999.
- “Application of Ergonomic Guidelines for APTS Technology to Practice,” TCRP / IDEA, \$66,885, October 1996-June 1998.
- “Bluestar Weather Information System Evaluation,” ODOT, \$41,396, November 1996-June 1997.
- “Determination of Motorist Behavior,” ODOT, \$25,343, March 1996-September 1996.
- “Photo Radar Evaluation,” City of Portland, \$17,000, September 1996-December 1996.
- “Pedestrian Design and Control Guide and Workshops,” (with R.D. Layton), ODOT, \$20,000, October 1995-June 1997.
- “Evaluation of the Corridor Safety Improvement Program,” ODOT, \$142,138, April 15, 1995-December 31, 1998.
- “Demonstration of the OSU Securement System,” Project ACTION, \$50,000, April 1995-July 1996.
- “Transit Operations,” TransNow (University of Washington), \$107,453, September 1, 1995-August 31, 1996.
- “Survey of Training for Paratransit Computerization,” TransNow (University of Washington), \$35,758, September 1, 1994-August 31, 1996.
- “Low Volume Grade Crossings for the Oregon High Speed Rail Corridor,” ODOT, \$14,000, September 1, 1994-June 30, 1996.
- “IVHS Solutions for High Speed Rail Crossings and Low Volume Roads,” TransNow (University of Washington), \$49,330, September 1, 1994-August 31, 1995.
- “Impact of Urban Bikes on Buses,” TransNow (University of Washington), \$18,799, September 1, 1994-August 31, 1995.

- “Bus Signal Pre-emption System,” TransNow (University of Washington), \$149,270, September 1, 1994-August 31, 1995.
- “Third Conference on Mobility Aids and Public Transportation,” May 1-3, 1994, TransNow, \$10,000.
- “Audio-Visual Communication Systems to Improve Transit Accessibility,” Federal Transit Administration, \$84,930, September 1, 1993-March 31, 1995
- “A Feasibility Study for the Application of Advanced Public Transport Systems Technology,” TransNow (University of Washington), \$80,000, September 1, 1993-August 31, 1994.
- “An Incremental Approach to Advanced Public Transportation Systems Technology,” Phase 2, TransNow (University of Washington), \$140,675, September 1, 1993-August 31, 1994.
- “An Incremental Approach to Advanced Public Transportation Systems: A Bus Pre-Emption System for Signalized Intersections,” USDOT through TransNow (University of Washington), \$102,067, September 1, 1992-August 31, 1993.
- “Finalization of the Oregon State University Securement System for a Demonstration Project,” USDOT, Federal Transit Administration, \$85,000, July 1, 1992-February 1996.
- “Design of a Universal Securement System for Public Transit,” USDOT Federal Transit Administration, \$84,494, September 30, 1990-January 1993.
- “Bus Accessibility Systems,” USDOT Federal Transit Administration, \$84,390, September 30, 1991-January 1993.
- “Universal Securement/Restraint System for Public Transportation,” Easter Seal's Project ACTION, \$244,028, March 1991-December 1992.
- “Mobility Devices and Public Transportation,” USDOT through TransNow (University of Washington), \$51,549, September 1, 1991-July 30, 1992.
- “Securement of Non-Traditional Style Wheelchairs on Fixed Route Transit Vehicles,” USDOT through TransNow (University of Washington), \$25,941, September 1, 1989-August 30, 1990.
- “Human Factors in Public Transportation Safety,” USDOT Federal Transit Administration, \$85,000, September 1987-March 1989.

Current Research(PI unless noted)

- “Redesign of Accessible Lavatories”, The Boeing Company, \$32,000 February 2017-December 2019
- “Transportation Engineering Short Courses (with R.D. Layton), ODOT, Oregon Traffic Safety Section, \$250,000, October 1, 2018-September 30, 2019
- “ Evaluation of Dynamic Performance of Wheeled Mobility Devices”, US Federal Railroad Administration, \$87,364 April 2017 to April 2019

- **ADVISING**

Graduate Advisees – Completed

Student (support)	Degree	Thesis	Graduated
Jessica Armstrong,. Co-Advisor (MIME)	Ph.D.	<i>Customer needs elicitation and disability simulation suit validation to benefit knowledge and methods for inclusive product design</i>	2018
Kamolnat Tabattanon Co-Advisor (MIME)	M.S.	<i>Expansion of the Design Process for An Accessible Passenger Rail Sleeper Compartment</i>	2018

Student (support)	Degree	Thesis	Graduated
Elizabeth Rios	M.S.	<i>Observational Study of Buffered Bike Lane Design Implementation of Roadway Bicycling in Portland, Oregon</i>	2017
Ye Li	M.S.	<i>Buffered and Protected Bike Lanes: A Systematic Review of the Influences of the Buffered and Protected Bike Lanes (Project).</i>	2017
Suchen Han	M.S.	<i>S.W. Western Boulevard Crosswalk Project</i>	2016
Andrea Mather	M.S.	<i>Wheeled Mobility Device Performance and Passive Securement Systems</i>	2016
Dylan Anderson (TCPR A -40) Eisenhower	M.S.	<i>Improving Safety of the Platform-Train Interface Through Operational and Technical Mitigation strategies</i>	2015
Storm Beck Dual FE/CE	M.S.	<i>The use of LiDAR to identify forest transportation networks</i>	2014
Ian Roholt	M.S.	<i>Developing an Analysis Framework to Compare Commuter Rail Service and Bus Service in the Mid-Willamette Valley</i>	2013
Floraliza Bornasal (Gates Fellowship)	M.S.	<i>Transportation Network Connectivity, Facilities Encouraging Walkability, and Crime</i>	2012
Mafruhathul Jannat (OTREC Project)	M.S.	<i>Development of LSV Planning Methodology</i>	2011
Kyler Kokenge, FE/CE 2 nd Dual Major Professor for CE(FE Support)	M.S.	<i>Opportunities and Challenges for Decision Support Systems in Timber Transportation</i>	2011
Andrew Bernath(ODOT Project)	M.S.	<i>Evaluation of Small Bus Dynamics</i>	2009
Wei Xu(Inherited from L Zhang)	M.S.	<i>The Review Of PPP Toll Roads In The US And The Simulation Of The Chicago Skyway</i>	2008
Divya Valluri(Inherited from L Zhang)	M.S.	<i>Estimating the Impacts of a Vehicle Mileage Fee using Discrete Continuous Choice Modeling</i>	2008
Elizabeth Toman, FE/CE 2 nd Dual Major Professor for CE(FE Support)	Ph.D.	<i>Reducing Sediment From Forest Roads During Wet Weather Use</i>	2007
Randall Johnson (PTVInternship)	M.S.	<i>Pedestrian Safety Evaluation of Curb Extensions: Albany Case Study</i>	2005
Melissa Lincoln	M.S.	<i>Pedestrian and Bicycle Conflict Studies</i>	2005
Matthew Little (ODOT Project)	M.S.	<i>Creation Of CRF Matrix For Use In Updating ODOT's CRF List</i>	2004
Ron Blacketer (ODOT Project)	M.S.	<i>Intrusion Detection at Railroad Grade Crossings</i>	2004
Erik Preston	M.S.	<i>Two State Gap Acceptance At Two -Way Stop Controlled Intersections With Two Way Left Turn Lane</i>	2004
Cameron Grile (ODOT)	M.S.	<i>Programming Safety Improvements on Pavement</i>	2004
Hongmei Gao	M.S.	<i>Evaluation of ODOT WIM Data</i>	2004
Matthew Baldwin(IDEA Project)	M.S.	<i>Evaluation of Bus Dynamics</i>	2004

Student (support)	Degree	Thesis	Graduated
Michelle M. Alexander (Internship)	M.S.	<i>Effects of Transit Signal Priority at a Congested Intersection</i>	2002
Glen Hodgson (Trasnow)	M.S.	<i>A Preliminary Assessment of the Effects of Access Management on Pedestrians, Bicycles and Transit</i>	1999
Inga Note(PTV- Internship)	M.S.	<i>Microscopic Simulation Analysis of a BRT Guideway</i>	1998
Caroline Bricheux (TCRP:IDEA Project)	M.S.	<i>Development of Ergonomic Guidelines for Passenger Information Systems</i>	1998
Nathanial Price (ODOT& TransNow Projects)	M.S.	<i>Driver Behavior</i>	1996
Dana Beckwith (City of Portland-Internship)	M.S.	<i>Passive Pedestrian Detection at Unsignalized Crossings</i>	1996
Kerry Ayres- Palanuk(Transnow& TriMet Intership)	M.S.	<i>BRT: A Smart Alternative for Medium Sized Cities</i>	1996
John Deskins (Transnow)	M.S.	<i>Bus Signal Preemption System:Opticom Study</i>	1995
Stuart Mathews (Air- Force Fellowship)	M.S.	<i>Corvallis-Philomath Transportation Model</i>	1995
Julie Sutherland (Transnow)	M.S.	<i>Bus Signal Priority:A Pilot Project in Portland</i>	1995
Marti Hron (FTA)	M.S.	<i>Improving Bus Accessibility Systems for Persons with Sensory and Cognitive Impairments</i>	1993
Thomas Bauer(Transnow)	M.S.	<i>Cost Benefit Analysis for Bus Preemption Systems</i>	1992
Amy Edwards (FTA)	M.S.	<i>Handicapped Accessible Public Transportation</i>	1991

Current Graduate Advisees

Student	Degree	Expected Graduation
Kaden Kinser	M.S.	June 2019

Graduate Thesis or Project Committees:

Dylan Horne	Ph.D.
Zach Barlow,	Ph.D.
Hamsa Zubaidi	Ph.D.
Ihsan Obaid	Ph.D
Hameed Mohammed	Ph.D.
Nabeel Albadairi,	Ph D.

MEng Advisor:

Graduated

1. Zach Williams M.ENG 2014
2. Dane Andersen M.ENG 2014
3. America Levenworth M.ENG 2009
4. Lloyd Fobi M.ENG 2009

Minor Professor or Committee Member:

MEng

Graduated

Brett Cowgill M.ENG 2011

MS and Ph.D.

Current Civil Engineering

Graduated-Civil Engineering

1. Sunny Lewis M.S 2018
2. Ellie Simpson M.S. 2018
3. Blaine Wruck M.S. 2018
4. Joe Claveria M.S. 2018
5. Merih Wahid Ph.D. 2017
6. Rachel Vogt M.S. 2015
7. Sarah McCrea M.S. 2015
8. Jasmine Pahukula M.S. 2015
9. Mafruhatul Jannat Ph.D. (Advised until 2012), 2015
10. Raul Avelar Ph.D (Civil Engineering) 2012
11. Sahar Nabae M.S. 2011
12. Raul Avelar M.S. 2010
13. Hong Zhou Ph.D. 2009
14. Tegan Houghton M.S. 2008
15. Michael Liebler M.S. 2008
16. Joshen Rohani M.S. 2007
17. Matthew Hewitt M.S. 2001-2002 (CEM)
18. Thaweesak Taekratok Ph.D. 2004
19. Kathleen Williams M.S. 2001
20. Ahmet Askan M.S. 1998
21. Mehmet Sacmaci M.S. 1997
22. David Zaworski M.S. 1996
23. Paul Ryus M.S. 1994
24. Robert Fynn M.S. 1993
25. Mike Mohrman M.S. 1993
26. Naveen Chandra M.S. 1993

Minor Professor or Committee Member:

Graduated-Other Engineering

All these students were supported by Grants and Projects that I was PI or Co-PI

1. Fred Berthelsdorf M.S. 2017 Mechanical Engineering (FRA)
2. Jessica Armstrong M.S. 2014 Mechanical Engineering-(Kindred)
3. Sherry Tucker M.S. 2008 Mechanical Engineering- Boeing
4. John Mast M.S. 2007 Mechanical Engineering RERC
5. Sushim Koshti M.S. 2007 Mechanical Engineering RERC
6. Dean Watts M.S. 1995 Mechanical Engineering FTA
7. Derald Herling M.S 1993 Mechanical Engineering Project ACTION and FTA
8. Garrett Clark M.S. 1993 Mechanical Engineering Project ACTION
9. Wahib Thabet M.S. 1993 Industrial Engineering Project ACTION

Graduated-Health and Human Performance

1. Adam Eisner M.S. 2015 Exercise and Sports Science
2. Kristof Kipp Ph.D. 2009 funded by RERC
3. Kenneth Philbrick M.S. 2008 funded by RERC
4. Brian Higginson Ph.D. 2007 funded by RERC
5. Lisa Welch M.S. 2006 funded by RERC
6. Jane LaRiviere Ph.D. 2002
7. Karen Bowen M.S. 1997
8. Jason Wallis M.S. 1993

Graduate Council Representative

Karina Roundtree	Ph.D. ??	Mechanical Engineering
Blake Buchalter	Ph.D. 2020	Health and Human Performance
Jodi Stinson	M.S. 2019	Health and Human Performance

Graduated

Aishee McKee	MS 2018	Health and Human Performance
Daniel Mosher	Ph.D. 2018	Mechanical Engineering
Daniel Hulse	Ph.D. 2018	Mechanical Engineering
Danielle Jackson	Ph.D. 2018	Mechanical Engineering
Ryan Schwendeman	M.S. 2018	Mechanical Engineering
Elizabeth Doran	M.S. 2013	Health and Human Performance
Ruben Gutzman,	M.S. 2012	Health and Human Performance
Hannah Thackery	M.S. 2011	Health and Human Performance
Cindy Perry	Ph.D. 2002	Industrial Engineering
Ki Kwang Lee	Ph.D. 1998	Health and Human Performance
Terry Smith	M.S. 1996	Industrial Engineering
Jan Buffa	Ph.D. 2005	Public Health
Chris Eisenbarth	Ph.D. 2004	Public Health
Julie Downing	Ph.D. 2003	Health and Human Performance
Tim Bowman	M.A.I.S. 1995	Health and Human Performance
Michael O'Leary	M.S. 1995	Health and Human Performance
Stuart Trost	M.S. 1994	Health and Human Performance

University Honors College (Honors Thesis Advisor)

Kristina Schnell	Hon. B.S. 2014	Energy Systems Engineering
Jordan Henderson	Hon. B.S. 2013	Civil Engineering
Kate Bradbury	Hon. B.S. 2010	Civil Engineering
Alison Tanaka	Hon. B.S. 2009	Civil Engineering
Jill Bartholomew	Hon. B.S. 2008	Mechanical Engineering
James Kirby	Hon. B.S. 2001	Civil Engineering

Other Advising

Kamolnat Tabattanon MS MIME Co advisor (support on IDEA grant)

International Degree (Thesis Advisor)

Justin Kuenne International B.S. 2017 (Civil Engineering)

External Committee

Matthew Manley Ph.D. 2010 Utah State U. (TRB Airport Cooperative Research Program (ACRP)
External Academic Advisor)
Roger Lindgren Ph.D. 2005 PSU Civil Engineering

SERVICE

University Service

Faculty Senate Committees

2016 – 2018 member University Honors College Council
2016- 2018 Chair Budget and Fiscal Planning Committee
2015-2017 COE Faculty Senator
2015-2016 member Budget and Fiscal Planning Committee
2013 Past President OSU Faculty Senate
2012 President OSU Faculty Senate
2012 Inter Institutional Faculty Senate (January-March, July-December)
2012 Liaison, Budget and Fiscal Planning Committee
2011-2014 OSU Faculty Senate Executive Committee (February 2014)
2011 President Elect OSU Faculty Senate
2011 Liaison, Graduate Council
2011 Liaison, P&T Committee
2008-2011 Administrative Appointments Committee
2008-2009 Transportation and Parking Committee 2008-2009
2008-2009 Baccalaureate Core Committee
2008-2009 Academic Regulations Committee
2008-2009 Faculty Senate Executive Committee, IIFS Senior Senator
2008-2009 NCAA Re-Certification: Compliance Sub-committee
2006-2009 OSU Senator to Inter-Institutional Faculty Senate
2006-2009 Honors College Council
2005-2010 College of Engineering Senator, Faculty Senate
2005 Chair of Undergraduate Program Review Bio-chemistry/Bio-Physics
2005 Member, Undergraduate Program Review Foreign Languages and Literature
2005 Co-Chair, Curriculum Council
2002-2005 Member, Curriculum Council
2004-2010 College of Engineering Senator
2001-2004 Faculty Status Committee
1999-2001 Bylaws and Nominations Committee
1994-1997 Honors College Council

Other University Committees

2017-Present Campus Planning Committee
2016- 2018 University Budget Committee
2013- Present Internal Advisory Committee for OSU NSF ADVANCE
2015-Present Chair of the Gerotechnology Group in Center for Healthy Aging Research(CHAR)
2016-2017 Interim Chair of BIOE Program (Adam Higgins on Sabbatical)
2015-Present OSU Transportation Committee
2014 -2016 Co Chair (Larry Roper) Administrative Structure and Duties Task Force
2014- 2017 Graduate Faculty Advisory Committee
2013-2014 OSU Transportation and Parking Task Force
2013--2014 OSU Leadership Council for Equity, Inclusion and Diversity
2013-2016 Graduate School Mentoring Task Force
2011-2014 University Planning Committee

2011-2013 OSU Campus Master Plan Update Committee
2010-2013 University Space Committee (co –Chair 2013)
2012-2013 Co-Chair University Space Committee
2013-2014 member Space Planning Task Force
2008-2015 Member Commission on the Status of Individuals with Disabilities
2012 University Cabinet
2012-2013 First Year Experience Task Force
2012-2013 Executive Marketing Cabinet
2011-2013 Undergraduate Education Committee
2011-2013 University Assessment Council
2011-2013 Athletic Special Admit Committee
2011-2013 Athletic Advisory Committee
2011-2013 Enrollment Management Task Force
2007-2010 TRIAD Faculty Club Treasurer
2006-2007 TRIAD Vice Chair President’s
2004-2009 Faculty Women’s Network Executive
1999-2004 Committee on the Status of Women
1992-1998 Chair, University Advisory Committee on Persons with Disabilities
1990-2007 Member, University Advisory Committee on Persons with Disabilities
1996-1999 Co –Head Usher, Commencement Committee
1993-1999 Commencement Committee

College

2014-present College of Engineering: BioMedical Engineering Task Force
2004-2008 College of Engineering Curriculum Committee member (2004, 2008-2009), ex-officio (2005)

Department

2016-present Chair, Search Committee for Architecture Engineering
2019 Ad Hoc Tenure Review Committee(Chair)
2015 Ad Hoc Mid Tenure Review Committee
2010-present AREMA Student Chapter Advisor
2013- 2016 CCE Awards Committee
2008-2009 Chair CCE Curriculum Committee
2008-2009 Member Faculty Status Committee
2008 A2K Interiors Committee
2006-2008 Chair Awards Committee
2005 Search Committee Transportation Engineering
2004 Search Committee Transportation Engineering
Search Committee Construction Engineering
Search Committee Infrastructure
2003 Search Committee Construction Engineering
Search Committee Transportation Engineering
2002 Search Committee Construction Engineering
2002-2004 Civil Engineering Curriculum Committee Chair
2001-2005 OSU ITE Student Chapter Advisor
1998-1999 Chair of the Recruitment and Retention Committee
1997 Curriculum Committee
1996 Curriculum Committee
1995 Graduate Committee
1994 Graduate Committee 1991 Curriculum Committee
1993-1999 OSU ITE Student Chapter Advisor

Search Committees (outside of Civil Engineering)

2018	Search Committee for Robotics, MIME/EECS
2014	Search Committee for UHC Prestigious Scholarship Advisor
2014	Search Committee for Design Professor MIME
2013-2014	Search Committee for four positions College of Public Health and Human Sciences
2013	Search Committee for Director of Performing Arts
2013	Search Committee for Faculty Position in Forest Operations
2011-2012	Search Committee for Dean College of Engineering
2011	AASA Movement and Disability Studies - 1 position
2010-2011	Affirmative Action Search Advocate (AASA) Environmental Safety and Occupational Health (HHS) - 3 positions
2010-2011	AASA Mechanical Engineering - 3 positions
2009	Search Committee Vice President for Research
	Search Committee for Faculty Position in Forest Engineering
2005	Search Committee LeMatta Professorship Forest Engineering
	Search Committee Wood Science and Engineering
2001	Search Committee for Assistant in Technology Transfer Office
1996	Search Committee for Assistant in Technology Transfer Office
	Chair of two Search Committees for Sign Language Interpreter

Service to the Profession

Reviewer

NAS/TRB National Cooperative Research Programs

2018-	NAS/TRB TCRP Project Panel Chair B 46
2001-2004	NAS/TRB TCRP Project Panel D 09
2000-2003	NAS/TRB TCRP Project Panel A-19-1
1999-2001	NAS/TRB TCRP Project Panel A-21
1998-2003	NAS/TRB TCRP Synthesis Project Panels
1998-2003	NAS/TRB TCRP Project Panel J-6,
1992-1996	NAS/TRB TCRP Project Panel B-1
1991-1997	NAS/TRB NCHRP. Project Panel G3-44,
2005	Reviewer for NIDRR RERC Competition

Journal Reviews

2013-present	Reviewer for Transportation Planning Journal
2012-present	Reviewer for Journal on Accident Analysis & Prevention
2010-present	Reviewer for ASCE Journal (Railroad Engineering)
2001-present	Reviewer for ASCE Transportation Engineering Journal
2001-present	Reviewer for Journal on Public Transportation
1990-present	Reviewer for TRB committees: Airports, Rail, Pedestrian and Accessible Transportation, Paratransit (4-10 papers per year)

Other

Transportation Research Board (TRB)

2011-present	Member AR020 Passenger Rail Equipment and Systems Integration Committee
2010-present	Member AV050 Airport Terminals and Ground Access Committee
1996-2003	TCRP/TOPS Committee and Transit Development Corporation Board Member

TRB: Committee of ABE60 (A1E09) Committee on Accessible Transportation and Mobility

2010-present Emeritus Member ABE60 Accessible Transportation and Mobility
2003-2009 Chair of ABE60 Committee on Accessible Transportation and Mobility
1995-2012 Member of the Scientific Committee for ABE60 International Conferences
1995-2003 Secretary to ABE60(A1E09) Committee
1993-2006 Chair of Subcommittee on Customer Information Systems, ABE60 (4),
1992-2006 Member National Conference Committee, ABE60
1991-2009 Member International Subcommittee, ABE60 (1),

Professional Committees

2015-2016 Willamette Valley SWE, Executive Committee
2010-present Faculty Advisor, AREMA Student Chapter
2010-present Railroad Engineering Educators Committee
1993-1995 Chairperson of the Human Factors Groups, APTS, ITS America
1991-1996 ITE International Educators Council
1990-1996 ITE Student Chapters Committee
1986 ASME, Willamette Valley Section, Membership Development
1982-1984 CMBES, National Treasurer
1982-1983 ASME, British Columbia Section: Chairman
1982-1983 CMBES, British Columbia Chapter: Chairperson
1981-1982 CMBES, British Columbia Chapter: Vice Chairperson
1981 ASME Medical Devices and Sporting Equipment Committee
1981 Canadian Standards Association: Technical Committee on Technology for Handicapped
1980-1982 ASME, British Columbia Section: Secretary

Service to the Public/Profession

Federal and State Commissions

2016-2017 Expert Panel Member, Council of Canadian Academies, “Adapting to the Transportation Needs of an Aging Population”
2016 USDOT ACCESS Committee for the Air Carrier Access Act (Neg-REG)
Chair of the Accessible Lavatory Working Group
1994-1997 ODOT Research and Planning Advisory Committee on DUII
1997-2000 ODOT Intelligent Transportation Strategic Plan, Technical Advisory Committee
1992-2000 USDOT Federal Advisory Committee on Narrow Bodied Aircraft Accessibility
1992-1999 ODOT Rural Transportation Assistance Program Committee

Other Public Service

Community Boards

2017-Present Benton County Bicycle Advisory Committee
2012-Present Oakwood Heights Fire Protection District Director
2009-Present Access Benton County
1998-2005 Volunteer Parent: Boy Scouts of America: Cub Scout Pack #462 1995-2000, Scout Troop #170
1997-2000, Oakwood Heights Road District Director
1996-2001 Sunday School Teacher First Presbyterian Church; Grades 4 and 5
1994-1996 St. Anselm's of Canterbury Senior Warden,
1993-2008 Volunteer Parent: American Youth Soccer Organization (AYSO)
1991-1993 Church of the Good Samaritan: Christian Education Committee

1993-1996 Corvallis Economic Development Partnership: Corvallis Airport Development Project
1993-1995 Benton County Special Transportation Advisory Committee
1983-1986 Westminster House Board Member and Vice Chairman