#### **General Biographical Information**

# G. SCOTT RUTHERFORD, PH.D, P.E.(206)Professor(206)Department of Civil & Environmental Eng(206)University of Washingtonscott110 Wilson Ceramic Lab, Box 352700seattle, Washington 98195-2700

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# Academic Background

Ph.D.	Northwestern University	1974
M.S.C.E.	Washington State University	1968
B.S.C.E.	Washington State University	1966

#### **Professional History**

Professor, Department of Civil & Environmental Engineering, University of Washington, 1995present

Director, Sustainable Transportation Master's Degree Program, 2011-present

Interim Director, TransNow, Federal Regional X, University Transportation Center, 2010-2012

Chair, Department of Civil & Environmental Engineering, University of Washington, 2002-2006

Director, Valle Scholarship and Scandinavian Exchange Program, 2002-present

Director, TransNow Advanced Institute and Intern Program, 2006-2012

Director, Engineering Professional Programs, University of Washington, 2006-2012

Acting Chair, Department of Civil & Environmental Engineering, University of Washington, 2001-

2002

Director of Graduate Studies, Department of Civil & Environmental Engineering, UW, 2000-2003

Adjunct Professor, Department of Urban Design and Planning, University of Washington, Seattle, WA, 1995-present.

Associate Professor, Department of Civil Engineering, University of Washington, Seattle, WA, 1981-1995.

Director, Transportation Innovations Unit, Washington State Transportation Commission, 1990-1995.

Director, Washington State Transportation Center (TRAC), Seattle, WA, 1983-1990.

Director of Research, Washington State Department of Transportation, Olympia, WA, 1983-1987.

Director, Northwest Technology Transfer Center, Olympia, WA, 1983-1986.

Transportation Consultant, self-employed, Washington, DC, 1978-1981.

6/2014

Vice-President, Systems and Management Planning Division, Schimpeler-Corradino Associates, Louisville, KY, 1977-1978.

Senior Transportation Analyst, Operations Research Group, DeLeuw, Cather & Company, Washington, DC, 1974-1977.

Assistant Professor of Civil Engineering, University of California, Davis, CA, 1973-1974.

Design Engineer, Engineering Department, Standard Oil Company of California, San Francisco, CA, 1968-1970

#### **Refereed Journal Publications**

Robertson, J.A., C.Y. Lin, G.S. Rutherford, and M.D. Stein (1969) Turbulence effects on drag of angular blunt bodies, *Journal of Hydraulics Division*, American Society of Civil Engineers, March 1969.

Robertson, J.A. and G.S. Rutherford (1972) Turbulence effects on drag of sharp-edged bodies, Technical Note — *Journal of Hydraulics Division*, American Society of Civil Engineers, July 1972.

Rutherford, G.S., J.L. Schofer, M. Wachs, and M. Skutsch (1973) Goal formulation for sociotechnical systems, *Journal of the Urban Planning and Development Division*, American Society of Civil Engineers, September 1973.

Rutherford, G.S. and J.L. Schofer (1976) Analysis of some characteristics of pedestrian travel, *Transportation Research Record 605*.

Fuller, R.V., G.S. Rutherford, C.C. Schimpeler, and V.E. Unger (1978) Financial analysis methodology for regional rapid transit system development, *Transportation Research Record* 680.

Rutherford, G.S. (1979) Use of the gravity model for pedestrian travel distribution, *Transportation Research Record 728*.

Dial, R.B., D. Levinsohn, and G.S. Rutherford (1980) Integrated transit-network model INET): a new urban transportation planning system program, *Transportation Research Record 761*.

Nielsen, R.S. and G.S. Rutherford (1984) Restructuring the DOT research organization: Washington State case study, *Transportation Research Record 1002*.

Strombom, C.B. and G.S. Rutherford (1984) Socio-economic and travel forecasts for alternatives analysis in the Puget Sound region, *Transportation Research Record 976*.

Rutherford, G.S., Roberta L. McLaughlin, and Edward von Borstel (1985) Traffic circles for residential intersections, *Transportation Research Record 1010*.

Rutherford, G.S. (1985) Peer assessment: applications to engineering classes with group projects, *Civil Engineering Education*, Vol. VII, No. 1, Spring 1985.

Rutherford, G. Scott and Norma Pennock (1985) Travel demand forecasting with quick response microcomputer systems: application and evaluation, *Transportation Research Record 1010*.

Rutherford, G.S. and C.A. Wellander (1986) Cost effectiveness of park-and-ride lots in the Seattle metropolitan areas, *Transportation Research Record 1081*.

Rutherford, G.S. and J. Lattemann (1988) The use of future scenarios in long-range public transportation planning, *Transportation Research Record 1202*.

Rutherford, G.S. and Rhonda L. Brooks (1989) Technology Transfer: A strategy for innovation adoption at the Washington State Department of Transportation, *Transportation Research Record 1229*.

Rutherford, G.S. and Ruth K. Kinchen (1990) Agency practice for monitoring violations of high occupancy vehicle facilities, *Transportation Research Record 1280*.

Jacobson, Leslie, G. Scott Rutherford, and Ruth Kinchen (1991) Public attitude toward the Seattle area HOV system and effectiveness of the HERO hotline program, *Transportation Research Record 1299*.

Rutherford, G. Scott, Lawrence Frank, and Andrea Tull (1991) Development of private services at park-and-ride lots in Central Puget Sound, *Transportation Research Record 1308*.

Rutherford, G. Scott and Martin D. Pietz (1992) Managing a collaborative state DOT/university research program, *Transportation Research Record* 1359.

Rutherford, G. Scott, Shauna L. Badgett, John M. Ishimaru, and Stephanie MacLachlan (1994) Transportation demand management: case studies of medium-sized employers, *Transportation Research Record* 1459

Niemeier, Debbie, Zelda Zabinski, and Zhaohui Zeng, G. Scott Rutherford (1995) Optimization models for the transportation project programming process, *Journal of Transportation Engineering*, ASCE, Jan/Feb 1995 Vol. 121 No. 1.

Niemeier, Debbie, Tracy Reed, G. Scott Rutherford, and Pat Morin (1996) Statewide programming: implementing transportation policy objectives, *Journal of Infrastructure Systems*, ASCE, March 1996 Vol.2, No.1.

Rutherford, G.S., K.F. Turnbull and R. H. Henk, (1997) Transportation Research Circular No. 474, Second National Symposium on Integrated Transportation Management, Transportation Research Board..

Wallace, Brett, Fred L. Mannering and G. Scott Rutherford (1999) Evaluating the Effects of TDM Strategies on Trip Generation by Using Poisson and Negative Binomial Regression, *Transportation Research Record. 1718* 

Wallace, Brett, Jennifer A. Barnes, (2000) Evaluating the Effects of Traveler and Trip Characteristics on Trip Chaining, with Some Implications for TDM Strategies, *Transportation Research Record* 

Ed McCormack, G. Scott Rutherford, Martina G. Wilkinson (2001) The Travel Impacts of Mixed Land Use Neighborhoods in Seattle, *Transportation Research Record* 

Rhonda Young, Jennifer Barnes, G. Scott Rutherford (2002) Multimodal Investment Choice Analysis for Washington State Transportation Projects: Phase 1 Results, *Transportation Research Record #1817* 

Herbert S. Levinson, Samuel Zimmerman, Jennifer Clinger, G. Scott Rutherford (2002) Bus Rapid Transit: An Overview, *Journal of Public Transportation*. Vol 5, No. 2.

Young, R.K., Zhong, T., Lowry, M., Rutherford, G.S., and T. L. Nyerges, (2007), "An Analytic-Deliberative Online Framework for Transportation Programming", The International Journal of Technology, Knowledge and Society, United Kingdom.

Young, R.K., Tao Zhong, Michael Lowry, G. Scott Rutherford, (2007) "A Model for Public Involvement in Transportation Improvement Programming Using Participatory Geographic Information Systems, Environment and Urban Systems", Computers, Environment, and Urban Systems, Elsevier UK.

Lowry, Michael, G. Scott Rutherford, Timothy L. Nyerges, (2008), "Internet Portal for Large-Group Participation in Transportation Programming", The Journal of the Transportation Research Board, Washington D.C.

Schramm\*, LisaRene, Kari Watkins\*, and G. Scott Rutherford. "Amenities That Effect Variability of Travel Time on BRT Systems." *Transportation Research Record #2143, pp. 77-84, 2010* 

Watkins, Kari, Brian Ferris, Alan Borning, G. Scott Rutherford and David Layton. "Where Is My Bus? Impact of mobile real-time information on the perceived and actual wait time of transit riders." *Transportation Research Part A*, Vol. 45, No. 8, pp 839-848, Oct 2011.

Bradbury, Kate, Jaidi Stevens, Linda Ng Boyle, Scott Rutherford, "To go or not to go: Pedestrian behavior at intersections with standard pedestrian call buttons", *Journal of the Transportation Research Board*, 2012.

Watkins\*, Kari, Brian Ferris\*, and G. Scott Rutherford. "Explore: An Attraction Search Tool for Transit Trip Planning." *Journal of Public Transportation, 2013* 

Watkins, Kari, Alan Boring, G. Scott Rutherford, Brian Ferris and Brian Gill. "Attitudes of Bus Operators Towards Real-Time Transit Information Tools," *Transportation*, Vol. 40, No. 5, 2013.

#### **Fully-Refereed Conference Proceedings**

Scardino, C. and G.S. Rutherford, The energy crisis--observed gasoline price elasticities in three American cities, *Proceedings of the 68th Annual Meeting of the Air Pollution Control Association*, June 1975.

Currey, J.P., G.S. Rutherford, W.E. Piske, and C. Scardino, Travel impacts of fuel shortages and price increases, *Proceedings of the 45th Annual ITE Meeting*, August 1975.

Rutherford, G.S., Land use and the automated highway system: different outcomes, different impacts, to appear in *Proceedings of the ANHSC Panel On Land Use and the Automated Highway System*, Carnegie Mellon University, August, 1996.

Rutherford, G.S., Ed McCormack, Martina Wilkinson, Travel impacts of urban form: implications from an analysis of two Seattle area travel diaries, in *Proceedings - Travel Model Improvement Program Conference on Urban Design*, Telecommuting and Travel Behavior, Williamsburg, Virginia, October 1996.

Rutherford, G. Scott and Robert Vance, (2003) "Fexcar Seattle Carsharing Program Evaluation", Transportation Research Board Annual Meeting CD, National Academies.

Avery, R, C.P. Thomas, Yinhai Wang and G.S. Rutherford, (2003) Development of a Length-Based Vehicle Classification System Using Uncalibrated Video Cameras, Transportation Research Board Annual Meeting CD, National Academies.

Avery, R.P., Y. Wang and G.S. Rutherford, 2004, "Length-Based Vehicle Classification Using Images from Uncalibrated Video Cameras", IEEE Conference on Intelligent Transportation Systems", Washington D.C. pp. 737-742.

Lowry, M. and Scott Rutherford, "Travel Time Savings for a Traveler Information System", (2006), Transportation Research Board Annual Meeting CD, National Academies, Lowry, M. and Scott Rutherford, "Travel Time Savings for a Traveler Information System", Transportation Research Board Annual Meeting CD, National Academies.

Nyerges, Tim, Terry Brooks, Piotr Jankowski, G. Scott Rutherford and Rhonda Young, "Web Portal Implementation to Support Public Participation in Transportation Decision Making", Digital Government Conference May 2006, San Diego.

Zhong, T., M. Lowry, R. Young, G.S. Rutherford (2007) "A New Model for Public Involvement in Transportation Improvement Programming", Transportation Research Board Annual Meeting CD, National Academies.

Zhong, T.M., M. Lowry, R. Young, G.S. Rutherford, and T. Nyerges, (2007) "An Analytic-Deliberative Framework for Transportation Programming", Transportation Research Board Annual Meeting CD, National Academies.

Abstract and Non-Refereed Conference Proceedings and Other Non-Journal Articles

Rutherford, G.S. and N. Pennock, Using QRS for corridor technology assess, ASCE, *Microcomputer Applications within the Urban Transportation Environment*, Mark Abkowitz, editor, 1986.

Rutherford, G.S. and J. Lattemann, Avoiding transportation future shock, *Civil Engineering*, February 1989, 60-62.

Rutherford, G. S. and J.P. Mahoney, Future highway design considerations due to automated vehicles, Society of Automotive Engineers Technical Paper Series 892456, November 1989.

Rutherford, G.S., Light rail--heavy politics, Pacific Northwest Executive, Fall 1989.

Rutherford, G. Scott, Mark E. Hallenbeck, Les N. Jacobson, Freeway and arterial guidance radio system, *Proceedings of the 6e Congress International de L'ATEC*, Paris, France, July 1989.

Rutherford, G.S. and R. Neal Robertson, Traffic and safety research payoffs, *ASCE Proceedings of the ASCE Highway Division Conference: Engineering* 21<sup>st</sup> Century Highways, San Francisco, April 1989.

Spillar, Robert J. and G.S. Rutherford, The effects of population density, and income on per capita transit ridership in western American cities, Compendium, ITE National Meeting, Orlando, Florida, 1990.

Freeway and Arterial Management in Washington State, *Proceedings of the Seminar on Future Road Transportation Systems in Infrastructures in Urban Areas*, June 5, 1991, Chiba, Japan.

Rutherford, G.S., Challenges facing the transportation profession due to new transportation technologies and environmental concerns, *Proceedings-The Centennial Celebration*, National Chiao Tung University, Republic of China, December 1995.

Peter Dewey, G. Scott Rutherford, The Evolution of a Successful Travel Demand Management Program, *Proceedings* Annual Meeting of the Institute of Transportation Engineers, Nashville, TN 2000

Samuel Zimmerman, Herbert S. Levinson, G. Scott Rutherford, Jennifer Clinger, Bus Rapid Transit: An Overview, 2<sup>nd</sup> International Conference on Smart Urban Transport – Integration and Performance, Brisbane, Australia, November 19-21, 2001.

D.D. Markley, N.L. Conrad. and G.S. Rutherford, Serving the University of Washington Husky Stadium, ITE 2001 Annual Meeting Proceedings.

#### **Sponsored Research**

1981-82	Transportation information, Washington State Department of Transportation, \$70,000, 10/81-4/82, funded.
1981-82	Performance measures (a), Washington State Department of Transportation, \$10,000, 10/81-12/82, funded.
1982	Performance measures (b), Washington State Department of Transportation,

	\$13,390, 7/82-12/82, funded.
1982-86	Park & ride lots, Washington State Department of Transportation, \$85,602, 9/82- 4/86, funded.
1983-85	Spokane light rail, Washington State Department of Transportation, \$85,840, 3/83- 3/85, funded
1983-85	LTC TRAC operation budget, Washington State Department of Transportation, \$50,000, 7/83-6/85, funded
1983-87	UTPS documentation, UMTA, \$49,428, 7/83-10/87, funded.
1984-85	State-of-the-art assessment of median barrier systems, Washington State Department of Transportation, \$7,323 6/84-6/85, funded.
1984-85	Induction loop, Washington State Department of Transportation, \$24,946, 6/84- 6/85, funded.
1984-85	Bridge deck program, Washington State Department of Transportation, \$45,443, 7/84-9/85, funded.
1984-86	Statewide data rationalization, Washington State Department of Transportation, \$79,972, 8/84-12/86, funded.
1984-87	Tech transfer items, Washington State Department of Transportation, \$39,000, 9/84-12/87, funded.
1984	Traffic signal optimization services, Washington State Energy Office, \$1,954, 10/84- 12/84, funded.
1985	EXPO impact on transportation, Washington State Department of Transportation, \$24,940, 1/85-6/85, funded
1985	Inventory traffic options, Washington State Energy Office, \$5,146, 6/85-10/85, funded.
1985-86	WIM bridge system — Federal Highway Administration (UW), Washington State Department of Transportation, \$28,000, 6/85-7/86, funded.
1985-86	I-5: effects of closing, Washington State Department of Transportation, \$30,000, 8/85-7/86, funded.
1985-87	Traffic forecasting (UW), Federal Highway Administration, \$6,308, 9/85-4/87, funded.

1985-87	Half-cell corrosion (UW), Washington State Department of Transportation, \$49,624, 10/85-1/87, funded.
1985-86	Strategic plan implementation, Washington State Department of Transportation, \$26,609, 11/85-11/86, funded.
1985-86	Database development & programming, Washington State Department of Transportation, \$16,391, 11/85-12/86, funded.
1985-87	HOV lane — cost effectiveness, Washington State Department of Transportation, \$36,860, 11/85-6/87, funded.
1986-88	Ferry data, scheduling & billing, WSF/Washington State Department of Transportation, \$65,000, 5/86-6/88, funded
1986-87	Sign reflectivity, Washington State Department of Transportation, \$16,000, 5/86- 8/87, funded.
1986-87	Truck accidents: double-bottomed, Washington State Department of Transportation, \$10,000, 5/86-7/87, funded.
1986-87 1986-88	Temporary traffic barriers (UW), Washington State Department of Transportation/Federal Highway Administration, \$21,534, 5/86-5/87, funded. Technology transfer — Washington State Department of Transportation,
1900 00	Washington State Department of Transportation, \$92,000, 7/86-6/88, funded.
1986-88	Bridge deck management, Washington State Department of Transportation, \$37,401, 7/86-4/88, funded.
1986-87	Ferry fare structure — elasticity, Washington State Department of Transportation, \$15,083, 7/86-5/87, funded.
1986-88	Traffic & safety analysis procedure, Washington State Department of Transportation, \$65,000, 9/86-1/88, funded.
1986-87	Highway research design manual, Washington State Department of Transportation, \$20,000,10/86-12/87, funded.
1986-87	UTPS microcomputer — RTAP, Federal Highway Administration, \$25,000, 10/86- 10/87, funded.
1986-87	METRO scenario, METRO, \$19,000, 11/86-3/87, funded.
1986-88	Freeway management, Washington State Department of Transportation, \$40,000, 11/86-5/88, funded.

1986-90	State travel forecasting, Washington State Department of Transportation, \$111,100, 11/86-6/90, funded.
1986-89	Ferry diesel bottoming, Washington State Energy Office, \$45,000, 11/86-6/89, funded.
1986-87	Mapping conference, Washington State Department of Transportation, \$17,500, 12/86-9/87, funded.
1987	Auto occupancy monitoring, Washington State Department of Transportation, \$21,000, 1/87-10/8, funded.
1987	Transportation systems management (TSM), METRO, \$17,422, 6/87-11/87, funded.
1987-89	NCHRP-advanced technology for highways, NCHRP, \$69,999, 7/87-6/89, funded.
1987-89	Freeway management coordination, Washington State Department of Transportation, \$47,500, 7/87-7/89, funded.
1987-89	UTPS center, UMTA, \$80,000, 9/87-12/89, funded.
1987-88	Analysis of off-peak ferry ridership, Washington State Department of Transportation, \$31,185, 10/87-4/88, funded.
1987-89	Ferry pricing strategies analysis, Washington State Department of Transportation, \$54,000, 10/87-12/89, funded.
1988-89	Ferry vessel scheduling system, Washington State Department of Transportation, \$70,000, 2/88-6/89, funded.
1988-90	TRAF software for I-405 HOV lane construction, Federal Highway Administration, \$57,626, 3/88-3/90, funded.
1988-89	Mode choice — psychological aspects, Washington State Department of Transportation, \$49,985, 3/88-10/89, funded.
1988-90	Park-and-ride lots — private development, UMTA/METRO, \$210,000, 4/88-6/90, funded.
1988-89	SHRP WIM assistance II, SHRP, \$19,879, funded.
1988-89	HOV compliance monitoring, Washington State Department of Transportation, \$25,374, 7/88-10/89, 7/88-11/89, funded.
1988	Training and technology implementation, Washington State Department of

	Transportation, \$49,000, 7/88-12/88, funded.
1988-89	Arterial control and integration (FAME), Washington State Department of Transportation, \$61,640, 7/88-11/89, funded.
1988-89	SHRP WIM assistance, NSF/SHRP, \$12,600, 7/88-6/89, funded.
1988-89	Training short course—urban travel demand forecasting, Washington State Department of Transportation, \$10,700, 8/88-6/89, funded.
1988-89	Storm monitoring, SHRP/Matrix, \$33,435, 10/88-10/89, funded.
1988-89	WIM — plan development, Washington State Department of Transportation, \$10,000, funded.
1989-90	TIGER file — state level transportation applications, USDOT/Federal Highway Administration, \$15,000, 2/89-6/90, funded.
1989-91	TRAC service, Washington State Department of Transportation, \$51,9687/89-6/91, funded.
1989-90	SR-520 — increasing operational capacity, Washington State Department of Transportation/Federal Highway Administration, \$20,000, 8/89-8/90, funded.
1989-91	Freeway/arterial integrated control, Federal Highway Administration/Washington State Department of Transportation, \$103,500, 8/89-8/91, funded.
1989-91	FAME management support, Washington State Department of Transportation, \$20,000, 8/89-12/91, funded.
1989-90	Ferry crew scheduling, Washington State Department of Transportation/WSF, \$25,000, 8/89-11/90, funded.
1989-90	Weather monitoring, SHRP/Matrix, \$57,536, 10/89-10/90, funded.
1989-91	Urban systems — support services, Washington State Department of Transportation, \$98,000, 12/89-6/91, funded.
1989-90	SHRP WIM assistance III, SHRP, \$19,612, 12/89-6/90, funded.
1990-91	WIM Washington State Department of Transportation Support, Washington State Department of Transportation, \$25,000, 12/89-6/90, funded.
1990	San Juan Island Transport, transport, \$8,880, 4/90-12/90, funded.
1990-95	Transportation innovation assessment, Washington State Department of

	Transportation, \$1,849,277, 6/90-6/95, funded.
1990	Freeway management tools & systems, Washington State Department of Transportation, \$40,000, 6/30/90, funded.
1990	Goodwill games traffic impacts, Washington State Department of Transportation, \$18,000, 7/90-12/90, funded.
1990-91	SHRP WIM assistance IV, SHRP, \$24,807, 7/90-6/91, funded
1990-91	Traffic performance, TransNow, \$30,000, 9/90-8/91, funded.
1990-92	Storm monitoring/communications, SHRP/Matrix, \$56,303, 10/90-1/92, funded.
1991-92	SHRP WIM assistance V, SHRP, \$25,000, 6/91-6/92, funded.
1991-92	Capacity improvements, Washington State Department of Transportation, \$164,000, 8/91-8/92, funded.
1993-95	Transit improvement—HOV design, Washington State Department of Transportation, \$125,000, 10/93-3/95, funded.
1995	Capacity improvements-supplement, Washington State Department of Transportation, \$36,000, 4/95-6/95, funded.
1995-97	Priority of mobility improvements, Washington State Department of Transportation, \$150,000, 7/95-6/97, funded.
1995-96	Transportation/economic linkages, Washington State Department of Transportation, \$11,000, 7/95-12/96, funded.
1996-98	Enhancement and application of TDM, Washington State Department of Transportation, \$100,000, 8/96-8/98, funded.
1996-97	Travel demand manual, TransNow, \$34,326, 9/96-8/97, funded.
1996-97	Transportation/economic linkages-supplement, Washington State Department of Transportation, \$2,500, 12/96-6/97, funded.
1997-98	Travel demand forecasting manual, Washington State Department of Transportation, \$30,000, 7/97-6/98, funded.
1998-99	Traffic Intern Program, Washington State Department of Transportation, \$238,464, 4/98-7/99, funded.
1998-00	Reusable Modeling Components for Simulating Land Use, Transportation and Land

	Cover, National Science Foundation, \$481,668, 9/98-8/00, funded. (with Paul Waddell UrbAf, Alan Borning Computer Science, Marina Alberti Urban Planning) funded.
1998-99	Travel Demand Management Strategy 2, Washington State Department of Transportation, \$26,264, 9/98-8/99, funded.
1999-99	Intermodal Mobility Analysis, Washington State Department of Transportation, \$60,000, 1/99-10/99, funded.
1999-01	Traffic System Management Intern Program, Washington State Department of Transportation, \$331,000, funded.
2000-01	Multimodal Investment Choice Analysis, Washington State Department of Transportation, \$350,000, 6/00 – 7/2001, funded.
2000-01	Tacoma Narrows Bridge Documentation Plan, Washington State Department of Transportation, \$31,200, 2/00-12/00, funded.
2000-01	Implementation Guidelines for Bus Rapid Transit Systems, DMJM/Transportation Research Board, \$25,500, 7/00 – 7/01,funded.
2001-03	Transportation Systems Center Intern Program, Washington State Department of Transportation, \$342,629, Funded.
2002-03	Flexcar Evaluation, USDOT/TransNow, 9/02 – 8/03 \$37,219, funded
2003-08	NTI Short course on Bus Rapid Transit, DMJM, \$30,000, 2/03- 2/08 , funded
2003-03	Traffic Intern Program, Washington State Department of Transportation, \$20,000
2003-04	Documentation of User/Agency Benefits for Information-Based ITS Strategies \$65,502
2003-05	Traffic Intern Program, Washington State Department of Transportation, \$426,691
2003-07	
	An Internet Platform to Support Public Participation in Transportation Decision Making, \$2,600,000, NSF Co-PI
2005-07	Traffic Intern Program, Washington State Department of Transportation, \$391,733,
2006-08	Funded
2007-08 2009-11	In-Vehicle Traffic Congestion Device Evaluation, USDOT/WSDOT Co-PI \$630,000 Funded
2003-11	Ferry Passenger Demand, WSDOT, \$30,000 Funded

2009-10	Traffic Intern Program, Washington State Department of Transportation, \$475,000, Funded
	Multi-model Measurement and Evaluation of Travel Time Reliability \$45,000 TransNow Funded
2010-11	Perceived and Actual Wait Times at Bus Stops Using Bluetooth, TransNow, \$79,000 Total \$21,770 USDOT/TransNow Funded
2011-13	Traffic Intern Program, Washington State Department of Transportation, \$514,973 Funded
2011	Traffic Intern Program Supplement, WSDOT, \$43,659 Funded
2013	WSDOT Toll Division and TSMC Intern Program \$656,521

# **Project Reports**

Mount St. Helens' transportation alternatives: additional alternatives, Washington State Department of Transportation, October 1984.

Spokane light rail feasibility study, Washington State Department of Transportation, July 1984 (with D. Wright and N. Pennock).

Feasibility of light rail transit for Spokane, Washington State Department of Transportation, January 1985.

State-of-the-art assessment of median barriers, Washington State Department of Transportation, August 1985 (with C.J. Khisty).

Inventory on traffic signal timing optimization candidates, (with M.E. Hallenbeck). Washington State Energy Office, October 1985.

Improving fuel consumption through traffic signal timing optimization, Washington State Energy Office, January 1986 (with M.E. Hallenbeck).

Database management system, Washington State Department of Transportation, April 1986 (with S. Sannes).

Cost effectiveness of park-and-ride lots in the Puget Sound area, Washington State Transportation Department, October 1986 (with C.A. Wellander).

7UTPS/SLIM application manual and case study, United States Department of Transportation, May 1987 (with M.E. Hallenbeck and E.D. McCormack).

UTPS/SLIM — simplified limited instructional manual-program documentation, United States Department of Transportation, June 1987 (with M.E. Hallenbeck and E.D. McCormack).

The use of future scenarios in long range public transportation planning, Washington State Department of Transportation, November 1987 (with J. Lattemann).

UTPS microcomputer — case study and training aids — instructions to lecturers, Federal Highway Administration, December 1987 (with M.E. Hallenbeck and R.K. Kinchen).

Washington State Department of Transportation freeway and arterial management effort (FAME Research Plan, Washington State Department of Transportation, January 1988 (with M.E. Hallenbeck).

Freeway and arterial management effort (FAME) research plan, Washington State Department of Transportation, January 1988 (with M.E. Hallenbeck).

Assessment of standard plans for light standards, signal poles and strain poles, Washington State Department of Transportation, March 1988 (with C. Almajose).

Traffic and safety procedure:: project report on the final report safety and accident procedures, Washington State Department of Transportation, April 1988 (with M.E. Hallenbeck and E.D. McCormack).

Washington State Department of Transportation technology transfer pilot project, Washington State Department of Transportation, June 1988 (with R.L. Brooks).

An assessment of client comments on the Bellevue report, Washington State Department of Transportation, July 1988.

Ferry diesel bottoming, Washington State Energy Office, 1989.

Private development of park-and-ride lots: a summary of literature and experiences, Urban Mass Transportation Administration, January 1989 (with R.F. Malm).

Evaluation of TRAF family models, Washington State Department of Transportation, March 1989 (with T.D. Rickman, L.N. Jacobson, and M.E. Hallenbeck).

HOV compliance monitoring and the evaluation of the HERO hotline program, Washington State Department of Transportation, February 1990 (with R.K. Kinchen, L.N. Jacobson, M.E. Hallenbeck, and A.J. O'Brien).

Evaluation of the Bellevue UTCS 1.5 signal control system, Washington State Department of Transportation, February 1990 (with M. Schroeder, L.N. Jacobson, and M.E. Hallenbeck).

Arterial control and integration, Washington State Department of Transportation, March 1990 (with M. Schroeder, L.N. Jacobson, and M.E. Hallenbeck).

Transportation research guide, Washington State Department of Transportation, April 1990 with M. Seferian and J.M. Ishimaru).

Development of private services at park-and-ride lots in central Puget Sound, Urban Mass Transportation Administration, May 1990 (with L.D. Frank and A. Tull).

Agency practice for monitoring violations of high occupancy vehicle facilities, Washington State Department of Transportation, July 1990 (with R.K. Kinchen and L.N. Jacobson).

Public attitude toward the Seattle area HOV system and effectiveness of the HERO hotline program, Washington State Department of Transportation, March 1991 (with L.N. Jacobson and R.K. Kinchen).

Land use — transportation linkage, Washington State Transportation Commission, April 1992 (with J.F. Kestle and J.M. Ishimaru).

Land use — transportation linkage: literature review and analysis, Washington State Department of Transportation, June 1992 (with J.F. Kestle and J.M. Ishimaru).

Land use — transportation linkage: background research findings, Washington State Transportation Commission, June 1992 (with J.F. Kestle and J.M. Ishimaru).

Ferry systems data, scheduling and billing final report on automated vehicle toll collection, Washington State Department of Transportation, July 1992 (with M.E. Hallenbeck).

Transportation demand management: concept overview, Washington State Transportation Commission, October 1992 (with S. Badgett and J.M. Ishimaru).

Evaluation of TRAF family of models testing of the CORFLO and FRESIM models, (Washington State Department of Transportation, December 1992 with E.L. Jacobson, M.E. Hallenbeck, T. Rickman, and J.B. Chang).

UTPS microcomputer case study and training aids — instructions to lecturers, Federal Highway Administration, December 1992 (with M.E. Hallenbeck and E.D. McCormack).

Corridor preservation: issues and opportunities, Washington State Transportation Commission, December 1992 (with V. Sommers, G.S. Rutherford, and J.M. Ishimaru).

Prioritization of capacity improvements, Washington State Department of Transportation, January 1993 (with D.A. Niemeier).

Transportation research guide, Washington State Transportation Commission, April 1993 (M. Seferian and J.M. Ishimaru).

Transportation demand management: case studies of medium-sized employers, Washington State Transportation Commission, May 1993 (with S. Badgett, and J.M. Ishimaru).

Demographic, technological, and legislative changes: their implications for state DOTs, Washington State Transportation Commission, September 1993 (with E. Koltonowski, S. MacLachlan, and J.M. Ishimaru).

Advanced bus technologies: current practice and future projections, Washington State Transportation Commission, September 1993 (with G. Brockman and J.M. Ishimaru).

Congestion on SR 520: a study of comprehensive ramp metering alternatives, Washington State Transportation Commission, September 1993 (with J. Chang, E. McCormack, and J.M. Ishimaru).

Travel patterns in mixed use neighborhoods: phase 1, Washington State Transportation Commission, November 1993 (with L. Zemotel, K. Nielsen, and J.M. Ishimaru).

Transit system performance evaluation methodology for Washington State, Washington State Department of Transportation, December 1993

Corridor preservation: issues and opportunities, Washington State Transportation Commission, December 1993 (with V.M. Sommers and J.M. Ishimaru).

Transportation demand management: case studies of medium-sized employers, Washington State Transportation Commission, January 1994 (with S.I. Badgett, J.M. Ishimaru, and S. MacLachlan).

Multimodal Evaluation of Passenger Transportation, National Academy Press, 1994.

Non-Motorized Transportation, in Travel Mode Special Reports –1990 NPTS, 1994 (with Debbie Niemeier).

Congestion pricing: a transportation demand management strategy, Washington State Transportation Commission, March 1994 (with V.M. Sommers and J.M. Ishimaru).

Affirmative action process and programs at the WSDOT, Washington State Transportation Commission, June 1995 (with Stephanie MacLachlan and John Ishimaru).

Analysis of bicyclist counts in the Puget Sound and Spokane areas, Washington State Transportation Commission, June 1995 (with Debbie Niemeier and John Ishimaru).

An analysis of bicyclist survey responses from the Puget Sound area and Spokane, Washington State Transportation Commission, June 1995 (with Debbie Niemeier and John Ishimaru).

Joint development at park-and-ride lots: an assessment of services and amenities, Washington State Transportation Commission, June 1995 (with Rune Hoel, Mary Catherine Snyder, and John Ishimaru).

An exploration of bicycle use in the U.S.: national findings and local implications, Washington State Transportation Commission, June 1995 (with Stephanie MacLachlan, Shauna Badgett, and John Ishimaru).

The transportation impacts of mixed land-use neighborhoods, Washington State Transportation Commission, June 1995 (with Ed McCormack, Jau-Ben Chang, and John Ishimaru).

Capacity improvements extension task report, Washington State Department of Transportation, July 1995 (with Tracy Reed and Jennifer Barnes).

Prioritization of capacity improvements, Washington State Department of Transportation, July 1995. (with Jennifer Barnes)

A Sensitivity Analysis and Implementation Review of the Mobility Improvements Prioritization Method, Washington State Department of Transportation, May, 1997, (with Tracy Reed)

Transit implication of HOV facility design, Federal Transit Administration, USDOT, January 1997 (with Stephanie MacLachlan and Kathleen Semple).

Analysis of the initial application of the State of Washington highway mobility project ranking procedure and recommended revisions, Washington State Department of Transportation, February 1997 (with Jennifer Barnes).

Mobility Programming Criteria and Evaluation Procedures, Washington State Department of Transportation, June 1998 (with Kimberly Morley)

Documentation of the Design and Construction of the New Tacoma Narrows Project, Washington State Department of Transportation, December 2000 (with Melissa McCrumb and Joe P. Mahoney)

Introduction to Urban Travel Demand Forecasting: Class Notes, Final Technical Report TNW2001-01, Transportation Northwest & Washington State Department of Transportation, January 2001 (with Jessica Schickman and Jennifer Barnes) 2001

Stated Preference Design and Analysis for Demand-Oriented Transportation Solutions: Phase One-Underlying Research and Proposed Methodology, Final Technical Report TNW2001-02, Transportation Northwest, February 2001, (with Jennifer A. Barnes)

Rhonda Young, Jennifer Barnes, G. Scott Rutherford, Multimodal Investment Choice Analysis: Volume 1 Phase 1, Final Technical Report T1803, Task 36, Washington State Department of Transportation, June 2002.

Rhonda Young, Jennifer Barnes, G. Scott Rutherford, Multimodal Investment Choice Analysis: Volume II, Final Technical Report, Washington State Department of Transportation. 2002

Bus Rapid Transit Volume I: Case Studies in Bus Rapid Transit, TCRP Report No. 90, Transportation Research Board, (with H. Levinson, S. Zimmerman, J. Clinger, R L Smith, J. Cracknell and R. Soberman. 2003

Bus Rapid Transit Volume II: Implementation, TCRP Report No. 90, Transportation Research Board, (with H. Levinson, S. Zimmerman, J. Clinger, J. Gast, E. Bruhn 2003

Development of a Multimedia Web-Based Transit Database, TransNow Regional Transportation Center, (with G. Turkiyyah, and G. White) 2004

Assessing the Benefits of Traveler and Transportation Information Systems, Washington State Department of Transportation, TransNow, (with T. Kristof and M. Lowry) 2005.

#### **Invited Lectures and Seminars**

Rutherford, G. Scott, Operation of TRAC, Institute for Transportation Studies, University of California — Irvine, CA, 1986.

Rutherford, G. Scott, Park-and-ride in Seattle area, Puget Sound Council of Governments, Seattle, WA, 1986.

Rutherford, G. Scott, TRAC research program, Joint meeting of ASCE and ITE, Seattle sections, Seattle, WA, 1986.

Rutherford, G. Scott, WSDOT city/county research, Washington State County Engineers' Meeting, Bellevue, WA, 1986.

Rutherford, G. Scott, WSDOT's university-based research program, Joint meeting of FHWA and Iowa, Illinois, Ohio, Michigan Wisconsin, Minnesota departments of transportation, Ames, IA, 1986.

Rutherford, G. Scott, Highway research in Washington State, Legislative Transportation Committee, Olympia, WA, 1987.

Rutherford, G. Scott, HOV research results, Legislative Transportation Committee, Olympia, WA, 1987.

Rutherford, G. Scott, TRAC research review, ASCE Section, Olympia/Tacoma, WA, 1987.

Rutherford, G. Scott, FAME research program, Legislative Transportation Committee Staff, Olympia, WA, 1988.

Rutherford, G. Scott, Freeway and arterial management in Puget Sound, Governor's Joint Economic Development Commission, Seattle, WA, 1988.

Rutherford, G. Scott, HOV research, Metro Council, Seattle, WA, 1988.

Rutherford, G. Scott, Ground transportation demand management in Puget Sound, Society of Logistics Engineers, Seattle, WA, 1988.

Rutherford, G. Scott, Suburban mobility conference summary, UMTA/METRO, Bellevue, WA, 1988.

Rutherford, G. Scott, Washington State transportation center at the UW, UW Regents, Capital Facilities Subcommittee, Seattle, WA, 1988.

Rutherford, G. Scott, HOV enforcement, TransNow board of directors meeting, Seattle, WA, 1989.

Rutherford, G. Scott, Mobility in the 1990's, Bellevue Chamber of Commerce, Bellevue, WA, 1989.

Rutherford, G. Scott, Prospects for passenger rail in Seattle, University Unitarian Church, Seattle, WA, 1989.

Rutherford, G. Scott, So you got here: when will you get home?, University of Washington Saturday Husky Football Lecture, Seattle, WA, 1989.

Rutherford, G. Scott, Transportation engineering issues in Puget Sound, Seattle University Seminar, Seattle, WA, 1989.

Rutherford, G. Scott, Transportation trends in Washington State, State Plan Steering Committee, Olympia, WA, 1989.

Rutherford, G. Scott, Trends and urban mobility, Washington State Legislature — Joint Transportation Committee, Olympia, WA, 1989.

Rutherford, G. Scott, University/State research programs, University of Nevada, Las Vegas, Las Vegas, NV, 1989.

Rutherford, G. Scott, Urban mobility: trends and challenges, UW College of Engineering Alumni Dinner, Seattle, WA, 1989.

Rutherford, G. Scott, Mobility needs for Puget Sound, Medina Foundation, Seattle, WA, 1990.

Rutherford, G. Scott, Freeway and arterial management in Washington State, Future Road Transportation Systems, Chiba, Japan, 1991.

Rutherford, G. Scott, IVHS — information technology, TransNow Meetings, Seattle, WA, 1991.

Rutherford, G. Scott, Travel demand management, Eastside Chamber of Commerce, Redmond, WA, 1991

Rutherford, G. Scott, Travel demand management, King County Council, Seattle, WA, 1991.

Rutherford, G. Scott, Travel demand management, King County Public Works, Seattle, WA, 1991.

Rutherford, G. Scott, Travel demand management, Municipality of Metropolitan Seattle, Seattle, WA, 1991.

Rutherford, G. Scott, Travel demand management, Washington Association of Counties, Wenatchee, WA, 1991.

Rutherford, G. Scott, Travel demand management, Washington State Transportation Commission, Olympia, WA, 1991.

Rutherford, G. Scott, Travel demand management, Washington State Legislature, Olympia, 1991.

Rutherford, G. Scott, Travel demand management, Washington State Department of Transportation, Olympia, WA, 1991.

Rutherford, G. Scott, TDM concepts, Washington State Legislature, Olympia, WA, 1993.

Rutherford, G. Scott, TDM policies, Washington State Transportation Commission, Olympia, WA, 1993.

Rutherford, G. Scott, Regional transportation options, Issaquah Community, Issaquah WA, 1994.

Rutherford, G. Scott, Analysis of neighborhood travel data, UC, Davis, Davis, CA, 1995.

Rutherford, G. Scott, Challenges facing the transportation profession, National Chiao Tung University, Republic of China, 1995.

Rutherford, G. Scott, Sustainable transportation and mixed land use, National Taiwan University, Republic of China, 1995.

Rutherford, G. Scott, A TDM strategy that works, University of British Columbia, Vancouver, BC, 1996.

Rutherford, G. Scott, Economics of truck license fees, Legislative Transportation Commission, Bellingham, WA, 1996.

Rutherford, G. Scott, Land use and the automated highway, Carnegie Mellon University, Pittsburgh, PA, 1996.

Rutherford, G. Scott, Making TDM more effective, Legislative Transportation Commission, Bellevue, WA, 1996.

Rutherford, G. Scott, History of transportation planning in Puget Sound, WSDOT/PSRC, Seattle, WA, 1997.

Rutherford, G. Scott, TRANSIMS Software Development, Bellevue Transportation Department, Bellevue, WA, 2000

Rutherford, G. Scott, I-745 Discussion Panel, Evan School of Public Administration, UW, Seattle, WA 2000

Rutherford, G. Scott, Overview of Transportation Planning, UW Geography Class 490, Seattle, WA, 2000.

Rutherford, G. Scott, Transportation Planning in the Seattle Area, King County Actuarial Club, Seattle, WA, 2000

Rutherford, G. Scott, Overview of Bus Rapid Transit, BRT Workshop, Sound Transit, Seattle, WA, 20001

Rutherford, G. Scott, Bus Rapid Transit as a Regional Alternative, Bellevue Downtown Association, Bellevue, WA, 2001

Rutherford, G. Scott, Overview of High-Capacity Transit Systems, Pima Association of Governments, High-Capacity Transit Forum, Tucson, Arizona, June 17, 2003.

Rutherford, G. Scott, Bus Rapid Transit, 90 minute Session, 2003 Public Transportation & Commute Options Conference, Spokane, Aug 25-27, 2003.

Rutherford, G. Scott, Overview of Key Aspects or Bus Rapid Transit, ASCE Workshop on BRT, Los Angeles, California, March 2005.

Rutherford, G. Scott, An Overview of Transportation Options for Reducing Congestion, Symposium in Iceland 2005.

Rutherford, G. Scott, Transportation Planning in the US: Are There Lessons for Japan?, Lecture at Kobe University Nov 2005.

Rutherford, G. Scott, BRT Applications for the Trans-Columbia Crossing, David Evans Workshop, Portland, Oregon, December 2005.

Rutherford, G. Scott, Guest Lecture in Public Transportation Class, An Overview of Bus Rapid Transit, Royal Institute of Technology, Stockholm, November 2006.

Rutherford, G. Scott, Presentation of Two Sessions at a Symposium on Bus Rapid Transit, Royal Institute of Technology, Stockholm, Sweden, December 2006.

Rutherford, G. Scott, Presentation at Symposium on Bus Rapid Transit at Scania Corporation, Stockholm, Sweden, December 2006.

Rutherford, G. Scott, "Real Time Transit Information Systems", 31<sup>st</sup> Annual Public Transportation Conference, August 2007.

Rutherford, G. Scott, "Transportation Demand Management's Role in Sustainable Transportation", Advanced Transportation and Roadway Technology Symposium, Harbin Technical Institute, May 25, 2010

Rutherford, G. Scott, "Overview of Bus Rapid Transit", Accelerating Bus Rapid Transit, Climate Leadership Academy, Institute for Sustainable Communities, Cleveland, March 2011.

Rutherford, G. Scott, "Accelerating Bus Rapid Transit", Cleveland, March 2012, Rockefeller Foundation.

#### **Presentations Given at Conferences**

Rutherford, G. (with R.H. Watkins), A survey of urban transportation control strategies for reducing energy consumption, presented at the Third Inter-Society Conference on Transportation, Atlanta, GA, 1975.

Rutherford, G. (with C. Scardino), The energy crisis — observed gasoline price elasticities in three American cities, presented by G. Scott Rutherford at the 68th Annual Meeting of Air Pollution Control Association, Boston, MA, 1975.

Rutherford, G. Scott (with J.P. Currey, W.E. Piske and C. Scardino), Travel impacts of fuel shortages and price increases, presented by G. Scott Rutherford at the 45th Annual Meeting, Institute of Transportation Engineers, Seattle, WA, 1975.

Rutherford, G. Scott (with J. L. Schofer), Analysis of pedestrian travel characteristics, presented by G. Scott Rutherford at 55th Annual Meeting of Transportation Board, Washington, DC, 1976.

Rutherford, G. Scott, Evaluation methods, discussion leader at U.S. Department of Transportation's Seminar on Emerging Transportation Planning Methods, Daytona Beach, FL, 1976.

Rutherford, G. Scott, Use of logit analysis for developing consumer choice models, presented at ORSA/TIMS Conference, San Francisco, CA, 1977.

Rutherford, G. Scott (with R.U. Fuller, C.C. Schimpeler, and V.J. Unger), Methodology for financial analysis of regional rapid transit systems, presented by G. Scott Rutherford at 57th Annual Meeting of Transportation Research Board Washington, DC, 1978.

Rutherford, G. Scott, Mathematical models of pedestrian distribution, presented at 58th Annual Meeting of Transportation Research Board, Washington, DC, 1979.

Rutherford, G. Scott (with R.B. Dial and D.M. Levinsohn), INET: integrated transit network model — a new UTPS program presented by G. Scott Rutherford at the 59th Annual Meeting of the Transportation Research Board Washington, DC, 1980.

Rutherford, G. (with R.S. Nielsen), Restructuring the Department of Transportation research organization: Washington State case study Presented by G. Scott Rutherford at the 63rd Annual Meeting of the Transportation Research Board Washington, DC, 1984.

Rutherford, G. Scott, Technology transfer techniques, Northwest Roads and Streets Conference, Corvallis, OR, 1986.

Rutherford, G. Scott, Does transit make a difference? (Debate), Association of Commuter Transportation — Annual Meeting, Seattle, WA, 1987.

Rutherford, G. Scott, Park-and-ride research in Washington State, Association of Commuter Transportation — Annual Meeting, Seattle, WA, 1987.

Rutherford, G. Scott, Travel forecasting models in Puget Sound, PSCOG Regional Transportation Conference, Tacoma, WA, 1987.

Rutherford, G. Scott, Weigh-in-motion research, Society of Automotive Engineers — Annual Meeting, Seattle, WA, 1987.

Rutherford, G. Scott, Highway operations research in Washington State, Colorado State Transportation Conference, Denver, CO, 1988.

Rutherford, G. Scott, Land use and transportation-demand issues, 4th Annual Washington State MPO Conference, Yakima, WA, 1988.

Rutherford, G. Scott, Congestion in rapidly developing cities, American Planning Association, NW Annual Conference, Coeur d'Alene, ID, 1989.

Rutherford, G. Scott, Freeway and arterial management, Washington State Legislature — Joint Transportation Committee, Olympia, WA, 1989.

Rutherford, G. Scott, Future highway design considerations due to automated vehicles, Society of Automotive Engineers Truck and Bus Conference, Charlotte, NC, 1989.

Rutherford, G. Scott, Overview of joint development, PSCOG Joint Development Conference, Bellevue, WA, 1989.

Rutherford, G. Scott, Technology transfer: a strategy for innovation adoption at the Washington State Department of Transportation, Transportation Research Board Annual Meeting Washington, DC, 1989.

Rutherford, G. Scott, Traffic and safety research, ASCE Highway Division Conference, San Francisco, CA, 1989.

Rutherford, G. Scott, Agency practice for monitoring violations of high occupancy vehicle facilities, Transportation Research Board Annual Meeting, Washington, DC, 1990.

Rutherford, G. Scott, Transportation research, Joint ASCE/ITE Meeting, Seattle, WA, 1990.

Rutherford, G. Scott, Use of research tools to meet riders needs, American Public Transit Association, Western Regional Training and Development Conference, Seattle, WA, 1990.

Rutherford, G. Scott, Ethics in travel forecasting, Women's Transportation Seminar National Meeting, Seattle, WA, 1991.

Rutherford, G. Scott, Travel forecasting techniques, Washington State Transportation Conference, Spokane, WA, 1991.

Rutherford, G. Scott, Analysis of non-motorized travel from the NPTS, Federal Highway Administration, Washington, DC, 1994.

Rutherford, G. Scott, Bicycle commuting deterrents and incentives, Transportation Research Board, Washington, DC, 1994.

Rutherford, G. Scott, Daily travel patterns and electric vehicles, Transportation Research Board, Washington, DC, 1994.

Rutherford, G. Scott, TDM: Case studies of medium sized cities, Transportation Research Board, Washington, DC, 1994.

Rutherford, G. Scott, Forecasting bicycle travel demand, Panel Presentation, TRB, Washington, DC, 1995.

Rutherford, G. Scott, Panel presentation: expanding metro highways: implications, travel model improvement program, USDOT, Daytona Beach, FL 1995.

Rutherford, G. Scott, Use of internet at universities, Panel Presentation, APWA, Seattle, WA, 1995.

Niemeier, Debbie, G. Scott Rutherford, Statewide transportation improvement programming, Transportation Research Board, Washington, DC, 1996.

Rutherford, G. S., E. McCormack and M. Wilkinson, (1997), Analysis of Two Seattle Area Travel Diaries, TRB Conference on Urban Design, Telecommuting and Travel Forecasting Conference, Transportation Research Board.

Rutherford, G. Scott, Development of an Effective University Transportation Program, University Transportation, Colorado State University, 1998.

Wallace, Brett, Fred L. Mannering and G. Scott Rutherford, Evaluating the Effects of TDM Strategies on Trip Generation by Using Poisson and Negative Binomial Regression, Transportation Research Board, 1999.

Rutherford, G. Scott, UPASS Case Study, Finding a New Way: Campus Transportation for the 21<sup>st</sup> Century, University of Colorado, 1999.

Rutherford, G. Scott, Where does the Money Come From?, Finding a New Way: Campus Transportation for the 21<sup>st</sup> Century, University of Colorado, 1999.

Wallace, Brett, Jennifer A. Barnes, (2000) Evaluating the Effects of Traveler and Trip Characteristics on Trip Chaining, with Some Implications for TDM Strategies, Transportation Research Board Annual Meeting

Peter Dewey, G. Scott Rutherford, The Evolution of a Successful Travel Demand Management Program, *Proceedings* Annual Meeting of the Institute of Transportation Engineers, Nashville, TN 2000

Jennifer A. Barnes, G. Scott Rutherford (2001) Stated–Preference Survey Design and Analysis for Pre-implementation of Evaluation of the Seattle Car Share Program, Transportation Research Board Annual Meeting.

Ed McCormack, G. Scott Rutherford, Martina G. Wilkinson (2001) The Travel Impacts of Mixed Land Use Neighborhoods in Seattle, Transportation Research Board Annual Meeting

Rhonda Young, Jennifer Barnes, G. Scott Rutherford (2002) Multimodal Investment Choice Analysis for Washington State Transportation Projects: Phase 1 Results, Transportation Research Record Annual Meeting

G. Scott Rutherford, (2003) Lessons Learned in Development of BRT Planning and Implementation Guidelines, 11<sup>th</sup> International HOV Conference, Transportation Research Board.

Sam Zimmerman & G. Scott Rutherford, (2003) Implementation Guidelines for BRT, ITE 2003 Annual Meeting and Exhibit, August 24-27, Seattle.

"Framework and Experience with Implementing Sustainable Transportation." UBC Summer Institute in Sustainability, July 23, 2009

Schramm\*, LisaRene, Kari Watkins\*, and G. Scott Rutherford. "Amenities That Effect Variability of Travel Time on BRT Systems." (*Presented at Transportation Research Board 2010 Annual Meeting*)

Bradbury, Kate, Jaidi Stevens, Linda Ng Boyle, Scott Rutherford, "To go or not to go: Pedestrian behavior at intersections with standard pedestrian call buttons", (Presented at the Transportation Research Board Annual Meeting 2011)

# **Professional Licenses**

P.E. Civil Engineering, Washington D.C. #PE7570

# **Professional Society Memberships**

American Society of Civil Engineers	74 - Present
Institute of Transportation Engineers	86 – Present
American Society for Engineering Education	03 – 05
American Public Works Association	03 - 04
High Speed Rail Association	90 - 93
Woman's Transportation Seminar	93 - 95, 99 - 11
Transportation Research Board	83 - 12
Society of Automotive Engineers	89 - 90

#### **Professional Society and Other Service**

#### **Professional Committees:**

**Program Committee,** 10<sup>th</sup> International IEEE Conference on Intelligent Transportation Systems, Seattle, 07

Associate Editor, IEEE Intelligent Transportation Systems Conference, Seattle 2007

Institute of Transportation Engineers Transit Council, - 98 Transportation Planning Council, - 98

**Transportation Research Board Committees** 

Public Transportation 1994 – present Project Panel on Incorporating ITS into Transportation Planning, 1998-02 Project Panel on Updating the Pratt Handbook, 1988-present Chair, Project Panel on Incorporating Environmental Considerations into UTP, NCHRP Report 541 2000-04
Chair, Project Panel on Cost Estimating for Planning, Programming & Design, 04-10
Member, Panel to evaluate the Bureau of Transportation Statistics' Surveys, TRB Special Report 277, 2003

# Past Committees:

Transportation Research Board

Transportation Demand Management 1996-1998 Passenger Travel Demand Forecasting 1992-1998 Task Force on Transportation Planning Applications 1990-1998 Transportation Education and Training Committee 1988-1994

Mobility 2000 IVHS (Intelligent Vehicle Highway Systems), 1988-1992.

# ASCE

Highway Division Research Committee, 1989 - 1990. Urban Transportation Division, Traffic Operations Committee, 1986 - 1989. Research Committee 2000 – Present

Institute of Transportation Engineers, Committee 2-27, Technology Transfer (Chair), 1985 - 1988.

#### **Reviews Made**

Transportation Research Board	89	
Transportation Research Part D	1	
University Transportation Centers		
Berkeley		8
MIT		13

#### Awards and Honors

2013 Academic Engineer of the Year, Puget Sound Engineering Council

2009 Life Member Status ASCE

2007 Lifetime Achievement Award, Women's Transportation Seminar Puget Sound Branch

Member, The International Water Academy, Oslo, Norway 2005

Outstanding Service Award, Institute of Transportation Engineers, Washington Section, 2003

Achievement Award for Outstanding Service in Public Transportation in Washington State, 1992

# Teaching

Course	Quarter	No. of	Course Title	Instructor's Avg
CIN / 5 2 2 0	6.01	Students		of Items 1-4
CIVE 320	Sp81	28	Transportation Engineering	2.81
CETC 512	Sp81	9	Urban Traffic Planning	
CIVE 320	Su81	16	Transportation Engineering	
CIVE 320	Au81	43	Transportation Engineering	3.69
CETC 599	Au81	6	Land Use and Transportation	
CIVE 320	W82	59	Transportation Engineering	2.98
CETC 412	Sp82	10	Urban Transportation Planning	3.96
CETC 512	Sp82	14	Urban Traffic Systems	3.80
CIVE 320	Su82	18	Transportation Engineering	
CIVE 412	Sp83	22	Urban Transportation Planning	3.67
CIVE 320	Au83	27	Transportation Engineering	
CETS 541	Au87	16	Transit Systems Planning	4.16
CETS 471	W88	12	Travel Demand Forecasting	
CETS 470	Au88	26	Urban Transportation Planning	3.51
CETS 471	W89	10	Travel Demand Forecasting	4.39
CETS 541	W89	13	Transit Systems Planning	3.92
CIVE 320	Au90	61	Transportation Engineering	
CETS 541	Sp91	24	Transit System Planning	3.51
CIVE 320	Au91	59	Transportation Engineering	3.18
CETS 470	Au91	47	Urban Transportation Planning	3.24
CETS 541	Sp91	16	Transit Systems Planning	
CETS 599	Sp91	10	Urban Transportation Studio	
CETS 470	Au91	47	Urban Transportation Planning	3.24
CETS 541	Sp92	18	Transit Systems Planning	3.73
CETS 599	Sp92	8	Urban Transportation Studio	
CIVE 416	Au92	65	Urban Transportation Planning	2.68
CIVE 320	Au92	72	Transportation Engineering	3.55
CETS 541	Sp93	15	Transit Systems Planning	3.82
CETS 599	Sp93	6	Urban Transportation Studio	3.90
CIVE 320	Au93	61	Transportation Engineering	3.88
CIVE 320	Au94	70	Transportation Engineering	3.43
CETS 541	Sp94	18	Transit Systems Planning	4.08
CETS 599	Sp94	7	Urban Transportation Studio	3.90
CETS 541	W95	18	Transit Systems Planning	4.19
CIVE 320		60	Transportation Engineering	
CIVE 320 CETS 599	Au95		· · · ·	3.70
	Sp95	20	Urban Transportation Studio	4.42
CETS 599	Sp96	10	Urban Transportation Studio	3.70
CETS 541	W96	16	Transit Systems Planning	4.00
CIVE 416	Au97	36	Urban Transportation Planning	3.86
CETS 599	Au97	11	Urban Transportation Planning	4.43

CETS 599	Au98	16	Urban Transportation Planning	4.16
CIVE 416	Au98	27	Urban Transportation Planning	4.13
CETS 599	Sp98	11	Travel Demand Forecasting	4.06
CETS 541	W98	16	Transit Systems Planning	4.09
CETS 599	W99	17	Travel Demand Forecasting	3.89
CETS 541	S99	10	Transit Systems Planning	3.84
CETS 599B	F99	30	Urban Transportation Planning	4.48
CETS 599B	W00	13	Travel Demand Forecasting	3.86
CETS 541	S00	13	Transit Systems Planning	4.44
CEE 416	Au00	18	Urban Transportation Planning	4.51
CETS 599D	Au00	9	Urban Transportation Planning	3.91
CEE 581	W01	19	Travel Demand Forecasting	3.50
CEE 589	S01	8	Transit Systems Planning	3.5
CEE 581	W02	10	Travel Demand Forecasting	4.12
CEE 589	S02	12	Transit Systems Planning	4.5
CEE 580/416	Au02	25	Urban Transportation Planning	3.8
CEE 589	S03	14	Transit Systems Planning	4.0
CEE 589	S04	13	Transit Systems Planning	3.6
CEE 440	A05	109	CEE Design Studio	3.3
CEE 589	S05	19	Transit Systems Planning	4.6
CEE 589	S06	12	Transit Systems Planning	4.2
CEE 440	A07	116	CEE Design Studio	3.3
CEE 589	S08	20	Transit Systems Planning	3.0
CEE 441	S08	44	CEE Capstone Design T&C	2.4
CEE 441	S09	37	CEE Capstone Design T&C	3.2
CEE 589	W09	23	Transit Systems Planning	4.1
		No Classes	09-10 Academic Year	
CEE 100	W11	116	21 <sup>st</sup> Century Engineering	4.1
CEE 589	S11	15	Transit Systems Planning	4.0
CEE 100	W12	157	21 <sup>st</sup> Century Engineering	4.1
100		107		

# Short Courses, Workshops, and Other Educational Programs

Rutherford, G. Scott, Travel Demand Forecasting, WSDOT Short Course, Kent, WA, 1993.

Rutherford, G. Scott, Travel Demand Forecasting, WSDOT Short Course, SeaTac Airport, March 1999.

Rutherford, G. Scott, CEE Teaching Workshop, Waterfront Activity Center, March 2001

Rutherford, G. Scott and Sam Zimmerman, National Transit Institute Short Course, "Implementing Bus Rapid Transit",

June 2003, New Jersey Oct 2003, Boston Nov 2003, Seattle Mar 2004, Dallas

Oct 2004, Atlanta Oct 2004, Baltimore Mar 2004, Cleveland Nov 2004, LA Nov 2004, Boston Feb 2005, Salt Lake City Mar 2005, Orange County Sept 2006, Baltimore June 2007, New Brunswick Nov 2007, Sacramento Feb 2008, San Antonio (2) Mar 2008, Louisville Apr 2008, Los Angeles Apr 2008, Milwaukee May 2009, Atlanta May2010,SaltLakeCity

**Chair,** Workshop on Transportation Sustainability with Swiss Consulat, University of Washington, May, 2010

# **Chaired Doctoral Degrees**

Niemeier, Debbie,	August 1994 Professor & Past Chair, Civil Engineering, University of California, Davis.
Young, Rhonda,	August 2002 Associate Professor, Civil Engineering, University of Wyoming.
Shafizadeh, Kevan	July 2002 (With Fred Mannering Co-advisor) Associate Professor, Sacramento State University
Lowry, Mike	May 2008 Assistant Professor, University of Idaho
Watkins, Kari	May 2011 Assistant Professor, Georgia Tech

# **Chaired Master Degrees**

Olszewski, Paul, August 1983 "A Review of Case Law on Local Improvement Districts in Washington"

McLaughlin, Roberta, June 1984

"Traffic Circles for Neighborhood Traffic Control: A Comparison with Stop Signs and Yield Signs Based on Seattle's Experience" Pennock, Norma, June 1984

"Travel Demand Forecasting with the Quick-Response Microcomputer System: Application and Evaluation"

Smith, Peter, June 1985 "Park and Ride System Energy Intensity in the Seattle Metropolitan Area"

Wellander, Chris, June 1985 "Cost Effectiveness of Park-and-Ride Lots in the Seattle Metropolitan Area"

Godley, George, August 1985 "Examination of Route-Level Performance Monitoring for Small Transit Operations"

Malm, Richard F., December 1986 "Transit Planning in Metropolitan Seattle: An Historical Perspective"

Lagergren, Edwin A., March 1987 "Traffic Sign Retroreflectivity Measurement Using Human Observers"

Blau, Margaret E., June 1988

"A Personnel Scheduling Management System for Washington State Department of Transportation Construction Field Offices: An Investigation of Current Practices, Needs and Design Specifications"

- Ng, Chi-Kin (Kent), December 1988 "Study of A Statewide Safety Record Keeping System"
- Rickman, Toby D., March 1989 "An Application and Evaluation of the CORFLO Model"

Kinchen, Ruth, August 1989 "HOV Compliance Monitoring and Evaluation of the HERO Hotline Program"

Blain, Lawrence W., December 1989 "The Application of TIGER Files for State Highway Freight Forecasting"

Spillar, Robert, December 1989

"The Effects of Population Density, Income and Transit Coverage on Per Capita Transit Ridership in Western American Cities"

- Frank, Lawrence D., June 1990 "Development of Private Services at Park-and-Ride Lots in Central Puget Sound"
- Schroeder, Margaret, August 1990 "Evaluation of the Bellevue Traffic Control System"
- Mar, Ronald W., December 1990 "The Application of Neighborhood Based Transit Information Systems"
- Morris-Lent, Willis M., June 1991 "A Review of Parking Use In and For Parking Policy for Seattle's University District"
- Nelson, Donald K., December 1991 "Institutional Linkages between Planning and Programming: Achieving Implementation"
- Jacobson, Eldon L., March 1992 "An Evaluation of the HOV Enforcement Emphasis Program on I-405, I-5 to South Renton"
- Boyle, Timothy F., June 1992 "Automatic Vehicle Identification for Traffic Monitoring"
- Farnsworth, Gary, August 1992 "Evolution of Seattle's I-5 South Interim HOV Lanes"
- Nisbet, John C., December 1992 "Traffic Signal Control System Integration"
- Mitchell, Mark, December 1992 "Corridor Preservation: A Framework Policy for Washington State Department of Transportation"
- Washington, Thomas, December 1992 "Comparative Valuation of Environmental Impacts Due to Proposed Category C Transportation Projects in Washington State"

Davis, John, March 1993 "Characteristics of Pedestrians in Mixed Use Neighborhoods"

Musso-Escude, Laura, March 1993 "Options to Monitor Traffic Congestion in Washington's Urban Area"

Sienkiewich-Callanan, Pamela, March 1993 "Using WIM to Measure Truck Division for Static Weight Scales"

Strauss, Jessie B., March 1993 "Proposed Changes in Transportation and Parking Policies for Federal Employees"

Bombardier, Brian W., June 1993 "Stopping Sight Distance Design and Safety for Median Barrier Glare Shields"

Cutting, April N., June 1993 "Prototype Database for the Use of Washington State Department of Transportation Incident Response Teams"

Brockman, George E., August 1993 "An Identification and Assessment of Advanced Bus Technology"

Dye, David L., August 1993 "The Effects of Organizational Relationships on Employer-Based Transportation Demand Management Programs: A Case Study of One Large Employer"

Koltonowski, Edward, August 1993 "The Organization of State Departments of Transportation in the 21st Century"

Ollivier, Janette D., August 1993 "An Evaluation of Transportation Demand Management Strategies Implemented at the University of Washington"

Sommers, Veronica, December 1993 "An Analysis of Congestion Pricing Options"

Badgett, Shauna L., March 1994 "Bicycle Safety and Funding Issues"

Kristin Nielsen, March 1994 "Analysis of Some Travel; Characteristics in the Queen Anne Neighborhood"

Do, Duke H., August 1994

"Statistical and Econometric Analysis of Commercial Vehicle Operator Requirements for Advanced Traveler Information Systems"

Fordyce, Philip A., August 1994 "A Decision-Based Approach to Analyzing the Location of Concurrent-Flow HOW Lanes -Phase I Development" Hoel, Rune, August 1994 "An Assessment of Services and Amenities at Park-and-Ride Lots"

- Mahugh, James I., August 1994 "Buses on Ramp Meter Bypasses and Exclusive-Use Ramps"
- Seferian, Marc, August 1995 "Implementation of SMARTTRAV: An HOV Service to Asssit WSF Customers"
- Mike Neatherly, June 1995 Non-thesis Paper "Conflicts on Urban Trails: Pedestrians and Bicycles"
- Semple, Kathleen, August 1995 "Bus Priority Treatments and Other Methods to Improve Bus Operations on Arterials"
- Slind, George, August 1995
- Gygi, Susan, March 1996 "Freeway HOV Lane Improvements"
- Hohmann, Jodi, March 1996 "Developing Transit Performance Indicators at the Local Level"
- Wilkinson, Martina, August 1996 "Weekend Travel Characteristics of Households in a Mixed Use Neighborhood"
- Mazurek, Peter, August 1996 "Station Choice Model Estimation and Testing"
- Barnes, Jennifer, December 1996 "Analysis of the Initial Application of the State of Washington Highway Mobility Ranking Procedure and Recommended Revisions"
- Billen, Donald, June 1997 "One Ticket Ride: Transit Fare Integration for Central Puget Sound"

MacLachlan, Stephanie, June 1997 Non-thesis

- Reed, Tracy, March 1997 "Priority Programming Under Financial Constraints"
- Young, Elizabeth, March 1997 "An Examination and Comparison of Non-Work Travel in Mixed Use and Typical Urbanized Neighborhoods"

Wallace, Brett, August 1997

"Evaluation of Travel Demand Management Strategies in the Trip Generation Phase of Modeling"

Fitzpatrick, Janine, December 1997

"The Effect of Public Art on the Occurrence of Vandalism and Graffiti in Subway Stations"

McCulloch, James M., November 1997 "Essential Elements of an Efficient On-Dock Rail System"

Shickman, Jessica, August 1998 "A Comparative Analysis of Gravity and Logit-Based Trip Distribution Models"

Morley, Kimberly Ann, August 1998 "Econometric Estimation of Peak Spreading in the Seattle Area"

Prescott, Stephanie, August 1998 Non-thesis

Eric Shimizu June 1999 Non-thesis

Kathleen Wilson, June 1999 Non-thesis

Mahan Larson, June 1999 Non-thesis

Casey Liles, June 1999 Non-thesis

Hien Trinh, June 1999 Non-thesis

Catherine H.M. Kuo, June 1999 "Transportation Along the Superhighway: The General Effects of Electronic Commerece Upon Consumer and Freight Transportation"

Horn, David Matthew, August 1999 "Examining the Incorporation of TDM Strategies into Mode Choice Models With a

# Specific

Emphasis on the Modeling of Vanpool Mode Choice"

Sielen Namdar, August 1999 Non-thesis

Mary Catherine Synder, December 1999 Non-thesis Christine Taylor Warren, June 2000 Non-thesis

Jessica Wyatt, June 2000 Non-thesis

Sara Kavage December 2000 Non-thesis

Witten, Timothy, 2000 Urban Design and Planning "Investigation of Developing a Bicycle Version of ADA"

Rhonda Young, June 2000

Anji Bhagat, June 2000 Non-thesis

Carrie Falkenrath, June 2000 Non-thesis

Nicola Longo, June 2000 Non-thesis

Kevin Krizek, June 2000 Non-thesis

Megan Hoyt, Winter 2001 Non-thesis

Mika Miyasato, June 2001 "Welfare to Work Transportation Systems Planning: Pierce County Concept Plan"

Pamela Zilius, June 2001 Non-thesis

Shannon Paterson, June 2001 Non-thesis

John Pascal, June 2002 (check advisor) Non-thesis

Kristin Pedersen, June 2002 Non-thesis

Monica Reyes, June 2002 Non-thesis Mark Voth, June 2002 Non-thesis

Nicole Conrad, June 2002 Non-thesis

Andrew Barash, June 2002 Non-thesis

Howard Wu, June 2002 Non-thesis

Christopher Thomas, June 2003 Non-thesis

Yee-Fan Huang, June 2003 Non-thesis

Karen Hill, June 2003 Non-thesis

Janice Hamil, June 2003 Non-thesis

Yee-Fan Huang Summer 2003 Non-thesis

Ryan Avery, 2004 Thesis

Robert Nichols, 2004 Non-thesis

Richard Eacker, Thesis 2005 "Survey and Evaluation of Monorail Systems" ?

Owen Kehoe Thesis 2004 "Effects of Bus Stop Consolidation on Transit Speed and Reliability: a Test Case"

Edward Rockwell 2004 Thesis "Transit Oriented Development and Mode Choice Behavior"

Robert Vance, 2004 Thesis "An Evaluation of the First Two Years of Flexcar Operation"

Erick Forsyth 2005 Non-thesis

Ben Dowling, 2005 Non-thesis Brian Harr, 2005 Non-thesis Roger Baugh 2005 Non-thesis Anna St Martin 2005 Thesis "Evaluation of Median Barrier Treatment on Washington Highways" ? Karl Otterstrom, 2005 Thesis: Urban Design and Planning "Public Transit for an Emerging Interstate Region: Spokane Region/Northern Idaho Case Study" Katherine Howe, 2005 Thesis: Urban Design and Planning "Copenhagen's Water City Strategy: The Creation of the Oresund Region and Its Effects on Urban Waterfront Redevelopment" Johanna Weinstock, 2005, Non-thesis James Slavicek, 2005 Non-thesis Jeremy Fichter, 2006 Professional Project Urban Design and Planning Randy Boshart, 2006 Non-thesis Atli Levi 2006 Non-thesis Kristina Evanoff, Spring 2006 Non-thesis Jeremy Fichter 2007 Urban Design and Planning Parking Management Strategies for the U of W Jennifer Kipp 2007 Professional Project Urban Design and Planning Doug Cox 2007 Urban Design and Planning Increasing Bicycle Trips to the U of W Using the Four E's

Alexander Lazar MUP Professional Project 7/2009 Oran Viriyincy MSCE Paper 4/2011 Casey Hildreth MUP Thesis 7/2009 Anna Lee MS Paper 6/2009 Minh Huynh MSE Paper 5/2009 Lisa Rene Schramm MSCE Paper 6/2009 Jeff Pierson MSE Paper 3/13 Sherry Kim MSCE Paper 6/13 Mallory Wilde MSCE Paper 6/13 Mary Anderson MST Paper 6/14 Lars Christian MST Paper 6/14 Paul Hempstead MST Paper 6/14 Matthew Herman MST Paper 6/14 Corey Holder MST Paper 6/14 Mohamed Kaddoumi MST Paper 6/14 Jason McCoy MST Paper 6/14 Thomas Mendenhall MST Paper 6/14 Murat Omay MST Paper 6/14 Betta Orshansky MST Paper 6/14 Sidra Rahimzada MST Paper 6/14 Stuart Samberg MST Paper 6/14 Caryn Walline MST Paper 6/14

#### **Departmental Service**

Member, Department Promotion and Tenure Committee 2009 – 2011 (Chair 2010-11)

Member, Department Merit Review Committee 2010-11

Member, Departmental ABET Committee, 2007

Chair, Civil and Environmental Engineering, Sept 2002-2006

Director, Valle Scholarship and Scandinavian Exchange Program, 2002- Present

Director, Engineering Professional Programs, Professional & Continuing Education, 2006-Present

Assoc. Director TransNow, Operations and Professional Development/Interns, 2009-Present

Acting Chair, Civil and Environmental Engineering, June 2001 - 2002

Chair, Transportation Search Committee, 1983 & 1986

Member, Department of Civil Engineering Budget Review Committee, 1994 - 1995.

Member, Department of Civil Engineering Executive Committee, 1988 - 1989, 1991 - 1993.

**Chair**, Hydraulics and Hydrology Program Review, University of Washington, Department of Civil Engineering, 1990 - 1991.

**Vice Chair**, TransNow (Transportation Northwest US Department of Transportation Region Ten) Board of Directors, 1990 - 1991.

Member, GAP Committee for reorganizing the graduate admissions process, 1998 – 1999

Member, Transportation & Environmental Search Committees, 1998 – 1999

Member, CEE Strategic Planning Committee, 1998 – 2001.

Director of Graduate Studies, Department of Civil & Environmental Engineering, 1998 – 2002

Area Head, Transportation Group, CEE, 2000 - 2002

#### **College Service**

Member, College of Engineering Five-Year Program Review, 1993 - 1994.

Chair, College of Engineering Research Policy Committee, 1987 - 1988.

Chair, ENGR 315 Committee, 1995 – 2000

Chair, Keck Teaching Award Committee, 1995

Member, COE Tiger Team for the Dean's office, 1998

Member, Search committee for Student Services Director for COE, 2005

Chair, Chair Review Committee for Aeronautics and Astronautics Department, 2003

Chair, Search committee for Chair of EE Department, 2004-05

Member, Center for Work Force Development Mentor 2004-06

#### Council on Promotion and Tenure, Autumn 2007-09

#### **University Service**

Chair, TRAC Steering Committee, 1983 - 1991.

Member, University Transportation Committee, 1988 - 1997 Chair, 1997 - 2008

Chair, Review of Urban Planning Chairman, 1991 - 1992.

Member, University/Metro U-Pass Task Force, 1991 - 1992.

Chair, U-Pass Evaluation Committee, 1991 -1998.

Member, University Parking Study, 1993.

Member, UPASS Bus Impacts Committee, 1994

Member, COE Five-Year Review Committee, 1994

Chair, Faculty Council on Facilities and Services Maintenance Committee, 1993 - 1994.

Chair, Faculty Council on Facilities and Services Committee, 1994 – 1995, 2001-2002

Member, College of Engineering Five-Year Program Review, 1993 - 1994.

Member, Faculty Senate, 1994-1995

Member, Faculty Senate Executive Committee, 1994 – 1995

Member, TransLake Transportation Study Committee, 1998 - 1999

Member, University Master Plan Advisory Committee, 1999 – 2002

Member, UPASS Contract Negotiation team, 1999

Member, Urban Design & Planning Search Committee, 2000-01

Member, UIF MyGradProgram Review, 2000-01

Member, Search committee for the Dean of the College of Architecture and Urban Planning 2005

Member, Steering Committee, Interdisciplinary Program in Urban Design and Planning 2004-2009

Member, Global Support Project 2007 – 2009

**Chair,** Five-Year Chair Review Committee, Construction Management, College of Architecture & Urban Planning

#### **Student Service**

Advisor, Institute of Transportation Engineers Student Chapter, 1993 - 2001.

**Coordinator**, Department of Civil Engineering Graduate Program, 1991 - 1993.

Member, Valle Scholarship Committee, 1993 – present

Member, CEE Undergraduate Admissions Committee, 1995- present

Member, Interdisciplinary PhD program in planning, Graduate School, 1995 – present

Chair, Coral Sales Scholarship Award Committee, 1997 - 2008

Member, Global Trade Transportation and Logistics program faculty, 1997 – present

Coordinator, Transportation Northwest Advanced Institute, 1998 – present

Mentor, Women in Engineering Initiative, WEPAN Western Regional Center, 1999–2008

Chair, Award Committee for CH2M-Hill Award, 2000 - present

Member, WSDOT Fellowship Award Committee, 1990 – 2005

Chair, Award Committee for Institute of Transportation Engineers, 1995 – 02

Member, CH2M Hill Management Team Judge, 2005 - 2009

#### **Community Service**

**Commissioner**, Washington State Rail Development Commission, 1987-89. The commission reviewed passenger and freight rail policies and recommended legislation that became law and is the basis for high capacity transit activities currently underway in Seattle and Vancouver. Professor Rutherford co-authored the interim report and was chair of the committee that drafted the final report. Appointed by the Legislature.

**Commissioner**, *Seattle Design Commission*, *1983-1987*. This commission reviews all capital projects for the city. (Some activities for the Seattle Design Commission received compensation.) Appointed by the Mayor.

**Member**, *Seattle University Civil Engineering Advisory Committee*, 1988 - 89. Advised Seattle University of program development issues.

**Chair**, Washington State Transportation Plan Steering Committee, 1988 - 1991; Member, 1991 - 1996. This committee provides policy guidance for the development of an innovative new policy plan which guides transportation actions in the state. As chair, Professor Rutherford guided the development of the first phase. Appointed by DOT Secretary.

**Member**, Regional Plan Technical Committee, Puget Sound Council of Governments, 1989 - 1991. This committee reviewed materials developed for the Puget Sound Council of Government's VISION 2020 transportation and development plan. Appointed by Executive Director of PSCOG.

**Member**, *Transportation Demand Management Committee, Greater Seattle Chamber of Commerce, 1990.* Advised Chamber staff on issues related to travel demand management. Appointed by Chamber staff.

**Member**, *High Capacity Transportation Advisory Committee*, 1990 - 1991. This committee advised the DOT on expenditures from the high capacity transit account. Appointed by the Legislature.

**Member**, *City of Seattle Comprehensive Plan Advisory Committee*, 1990 - 1994. The committee was charged with developing a policy framework to guide the new comprehensive plan activities. Appointed by the Mayor and City Council.

Acting Chair 1996, Vice-Chair 1990 - 1996, Expert Review Panel, Puget Sound Transit Project. This panel provided detailed technical reviews of proposals for high capacity transit for the Puget Sound area. Alternatives under consideration range up to a \$13 billion investment. The panel ended when Puget Sound voters approved a \$4.7 Billion dollar system in the Fall of 1196. Appointed by the Governor, Legislature and DOT Secretary.

**Chair**, *Transportation Task Force for Seattle's Comprehensive Plan, City of Seattle, 1991 - 1994.* Provided comments on transportation issues for the Comprehensive Plan. Appointed by the Mayor and City Council. **Member**, City Comprehensive Plan Implementation Task Force, City of Seattle, 1992 - 1994. Assist in implementation of city Comprehensive Plan. Appointed by the Mayor.

**Chair**, *Model Development and Refinement Committee*, *Puget Sound Regional Council 1992 - 1996*, *Member* 1997 – *present*. The committee is providing oversight on the travel model development process. Appointed by PSRC Director of Technical Services.

Member, Consultant selection panel for modeling projects, Puget Sound Regional Council, 1995.

**Member,** *Model Development Proposal Review, Puget Sound Regional Council, 1996.* Consultant proposals were reviewed to update the regional transportation demand models. Appointed by the Regional Council.

**Member,** Modeling Advisory Committee, Washington State Ferries, 1996. This effort advised the ferry system on the development of new models to predict ferry ridership. Appointed by Washington State Ferries.

**Member,** Vision 2020 Awards Committee, Puget Sound Regional Council 1996,1997, This committee of mostly local elected officials selects regional projects for awards of excellence that are being presented annually. Appointed by the Regional Council.

**Member,** *Transportation Pricing Committee, Puget Sound Regional Council 1996 -2000t,* Providing guidance on issues regarding transportation pricing for the Puget Sound region. Appointed by the Regional Council.

Moderator, PSRC/WSDOT Travel Demand Forum, 1997.

Member, Travel Demand Management Advisory Group, Washington State DOT, 1997.

Member, WSDOT Carpool/Vanpool Committee, Washington State DOT, 1996

Member, Mayor Schell's Transportation Kitchen Cabinet, 1998 – 99.

**Member,** Seattle Car-Share Implementation Committee, KC Metro & City of Seattle, 1998 – 2001.

Chair, Puget Sound Region Vanpool Market Committee, Washington State DOT, 99-00

Board Member & Executive Committee, Transportation Choice Coalition, 2000 – 2002

Member, Translake Advisory Committee, 1999 – 2001

**Volunteer,** Puget Sound FLEXCAR Program, 2000 – 04

**Reviewer**, Participated as an expert reviewer for a peer review of Sound Transit's Rail Corridors 2005

Member, Columbia River Crossing Cost Benefit Analysis Review, WSDOT, 2008

Member, Pricing Task Force, Puget Sound Regional Council, 2007 – 2009

Member, Market Segmentation Expert Panel, WSDOT, 2007

Member, Expert Advisory Panel, Washington State Ferries project on Asset Management, 2007 – 2009

Member, Association of Pedestrian and Bicycle Professionals, 2013 - present

#### **National Service**

Secretary, Council of University Transportation Centers, Board of Directors, 1990 - 1991.

Reviewer, Oregon State University's Transportation Center, 1991.

Member, Peer Review of the Following Transit Systems:

Cincinnati - 1994 Appointed by Regional Council. Honolulu -1) 1993: Appointed by Federal Transit Administration; 2) 1992: Appointed by Governor. Salt Lake City - 1993 Appointed by Regional Council. San Diego - 1991 Appointed by Federal Transit Administration.

Reviewer, University of California at Irvine's Institute of Transportation Studies 1994

Member, National Science Foundation Career Award Panel, NSF, 1998.

Panel Member, Review of the Los Angles County Long Range Transportation Plan, 2000

**Reviewer,** National Academies Reviewer for report "Assessing and Managing Ecological Impacts of Roads" 2004

**Associate Editor,** *Journal of Transportation of ITE,* 4/2012 – present **Reviewer,** *Review of the Federal Transit Administration's Transit Economic Requirements Model,* 4/2013

**Member,** The BRT Standard 2013 Committee, Institute for Transportation and Development Policy, 2/2013 – present

TCRP Project Panel B-12/A/B/C, *Traveler Response to Transportation System Changes*, 3/1996-3/2013

NSF CyberSEES Panel, Cyber-Enabled Sustainability Science and Engineering Panel, 5/2013

#### **Consulting Experience**

Prepare scope of work, transit project, Seattle METRO (1982) Documentation, transit schedule software, Dade Co. Florida (1982) Travel forecasting procedures report, Puget Sound COG (1983) Paper on transit fare elasticity values, ATE Management (1983) Statistical and research design assistance, Raven Systems & Research (1983) Design review of capital projects, City of Seattle (83/85) Research design, Hanford Waste Project, Impact Assessment Inc./USDOE (1987) Review of travel forecasting manual, Federal Highway Administration (1989) Review of the development of HOV lanes, Texas Transportation Institute (1990) Review of travel forecasting procedures, University of Hawaii (1990) Review mid-coast LRT line proposal, KPMG Peat Marwick/FTA (1991) Review patronage and alternatives in Honolulu, S. G. Associates/FTA (1991) Prepare synthesis on multimodal evaluation, National Research Council (1992) Prepare market study, transportation equipment, Canadian Consulate General (1993) Developed a report on non-motorized travel, Federal Highway Administration (1994) Review of Dade County Florida travel demand models, Parsons Brinkerhoff, (1994) Moderate an evaluation of least cost planning, Washington State Energy Office (1994) Deliver several lectures on transportation planning issues, Taiwan (1995) Participate in a peer review of least cost planning, Puget Sound Regional Council (1995) Review transportation demand models for Cincinnati Region, OKI Regional Council (1995) Evaluation of One Less Car program, City of Bellevue (1996) Suggestions for a university transportation demand management program, UBC (1996)

Presentation of a paper on the land use impact of automated highways, Parsons (1996)

Review methodology for evaluating toll road proposals, EcoNorthwest (1996) Review of rail alignments for north corridor light rail line, Regional Transit Authority (1997) Assist in the preparation of the project justification report for RTA (1997) Evaluate direct access ramps for Sound Transit (RTA) (1998) Provide technical assistance to Sound Transit for bus and rail projects (1998-1999) Participate in a national study on Bus Rapid Transit DMJM-Harris (2000-2001) Developed Briefing for Professionals and General Public on Transit Technologies, 2003 Expert witness regarding transit stop location for City of Seattle and K.C. Metro 2007 – 2009 Expert witness regarding legal action against King County Metro's 194 bus service 2007 - 2010 Presentation of short courses on Bus Rapid Transit for the National Transit Institute 2003 – 2009 Expert witness regarding bicycle – bus accident resulting in a fatality, C-TRAN Vancouver 2013-14