

# **Curriculum Vitae**

**Sue McNeil**

**Professor  
Department of Civil and Environmental Engineering  
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October 31, 2015

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## **Education**

B.Sc. 1975, University of Newcastle, N.S.W., Australia  
B.E. (Honors Class I) 1977, University of Newcastle, N.S.W., Australia  
M.S. 1981, Carnegie Mellon University, Pittsburgh, PA  
Ph.D. 1983, Carnegie Mellon University, Pittsburgh, PA

## **Academic Positions**

University of Delaware  
Department of Civil and Environmental Engineering and  
School of Public Policy and Administration  
Professor – August 2005 – present  
Disaster Science and Management Graduate Program, University of Delaware  
Interim Program Director – April 2009 – August 2011  
Acting Program Director – September 2012 – October 2013  
Program Director – October 2013-present  
Disaster Research Center, University of Delaware  
Director – June 2007 – December 2010  
Core Faculty Member – 2007- present

University of Canterbury  
Erskine Fellow, March-May 2012.

University of Illinois, Chicago  
College of Urban Planning and Public Affairs,  
Professor – August 2000 – August 2005  
Director, Urban Transportation Center – August 2000 – August 2005  
Adjunct Professor, Urban Planning and Policy – 2005 – 2009  
Department of Civil and Materials Engineering, University of Illinois, Chicago  
Professor – August 2000 – August 2005

University of Minnesota  
Department of Civil Engineering,  
Braun Intertec Visiting Professor – August 1999- July 2000

Carnegie Mellon University  
Department of Civil and Environmental Engineering,  
Department of Engineering and Public Policy  
Adjunct Professor – 2000 – 2006  
Professor -July 1993 – July 2000  
Associate Professor - July 1992 – June, 1993  
Department of Civil and Environmental Engineering  
Associate Professor of Civil Engineering – September, 1990 – June, 1992  
Assistant Professor of Civil Engineering – January, 1988 – August, 1990  
The Brownfields Center  
Co-Director – November 1996 – 2002

Massachusetts Institute of Technology  
Department of Civil Engineering,  
Visiting Assistant Professor – January, 1988 – December, 1989

Assistant Professor – July, 1985 – December, 1987

Princeton University of NJ  
Department of Civil Engineering,  
Visiting Lecturer – September, 1984 – June, 1985

### **Industrial Positions**

Garmen Associates, Montville, NJ  
Transportation Engineer – July, 1983 – May, 1984

Department of Main Roads, NSW Australia  
Assistant Works Engineer, Singleton – December 1977 – December 1979

### **Consulting Assignments**

National Academies, National Cooperative Research Program, Support the Development of the AAHSTO SCOM Strategic Plan, May 2015 – August 2015.

Gannett Fleming, June 2012- April 2015, NCHRP 14-27 - A Guide for the Preservation of Highway Tunnel Systems.

Ideation, October –December 2010, January –April, 2012 – Review of FEMA’s Loss Avoidance Methodology.

AECOMM, July – August 2009 – Technical Review of the Highway Economic Requirements System (HERS) and National Bridge Investment Analysis System (NBIAS) Construction Cost Inputs

Transportation Research Board, September 2008-March 2009 – Development of a Research Plan for Adaptation to Climate Change.

Batelle, December 2005- May 2006 – Review of NBIAS for FHWA

Volpe Transportation Systems Center, May 1999- February 2000 – Support for Asset Management Workshop

Transport Association of Canada (Subcontract to Stantech), February 1999-December 1999 – Valuing Assets and Measuring Performance

AASHTO, November, 1997 – 2000 – Transportation Engineers as Stewards of Our Infrastructure Assets support for Asset Management Task Force

Rensselaer Polytechnic Institute, June – October, 1997 – Support for Asset Management Workshop

Federal Highway Administration, January, 1997 – December 1998 – Report on Radar for Pavement Thickness Analysis, Report and Presentation on Failures due to Neglect

Nichols Consulting, January, 1997 – present – Pavement Management Training Course

Baker Engineering, January, 1995 – 1999 – Bridge Management Training Course

Olson Engineering, June, 1996 – December 1998 – Role of Nondestructive Testing in Bridge Management

Federal Highway Administration – October – November 1995 – Evaluation of HERS.

Pittsburgh Corning, January 1994 – December 1995 – Analysis of block dimensions for quality control.

Digital Site Systems, Pittsburgh, June 1991 – December 1993 – Analysis and parameterization of heat signature data, knowledge acquisition and structuring for expert systems for classification of heat signatures.

Burlington Northern Railroad, January 1988 – December 1988 – Through Center for Transportation Studies, Massachusetts Institute of Technology, Knowledge acquisition and structuring for expert system for scheduling rail relays.

Nova Consulting Group, Pittsburgh, September, 1982 – October, 1982 – Analysis of railroad waybill data.

## Teaching and Education

### *Courses*

Semester	Number	Name	Number of Students	Joint Faculty	FCE* Score Instructor	FCE* Score Course
Spring 2015	CIEG166	Freshman Design	66 11 (Hons)	Allan Jayne and Jack Puleo	4.44 4.15	NA
Spring 2015	CIEG351	Transportation Engineering	111		4.15	NA
Spring 2015	CIEG451	Transportation Laboratory	118		4.19	NA
Fall 2014	CIEG655	Civil Infrastructure Systems	16		4.41	NA
Spring 2014	CIEG166	Freshman Design	87 7 (Hons)	Allan Jayne and Jack Puleo	4.18 3.90	NA
Spring 2014	CIEG650	Urban Transportation Systems	14		4.67	NA
Winter 2014	CIEG351	Transportation Engineering	35	(Study abroad)	NA	NA
Fall 2012	CIEG655	Civil Infrastructure Systems	15		4.6	NA
Spring 2013	CIEG351	Transportation Engineering	70		3.6	NA

Spring 2013	CIEG341	Transportation Laboratory	95		3.8	NA
Winter 2013	CIEG351	Transportation Engineering	35	(Study abroad)	NA	NA
Fall 2012	CIEG650	Urban Transportation Systems	16	Earl Lee	4.1	NA
Fall 2012	CIEG655	Civil Infrastructure Systems	8		4.3	NA
Winter 2012	CIEG351	Transportation Engineering	35	(Study abroad)	NA	NA
Winter 2011	CIEG 351	Transportation Engineering	35		NA	NA
Fall 2010	CIEG650	Urban Transportation Systems	26	Earl Lee	4.7	NA
Fall 2010	CIEG655	Civil Infrastructure Systems	16		4.7	NA
Summer 2010	CIEG 867	Advanced Civil Infrastructure Systems	7 (+10 non UD students)	Susan Tighe Gerardo Flintsch David Lee Zhanmin Zhang	4.8	NA
Spring 2010	CIEG351	Transportation Engineering	90		3.8	NA
Winter 10	CIEG351	Transportation Engineering	33	(Study abroad)	NA	NA
Fall 2009	CIEG650	Urban Transportation Systems	7	Earl Lee	4.62	NA
Fall 2009	CIEG655	Civil Infrastructure Systems	12	Nii Attoh-Okine	5.0	NA
Spring 2009	CIEG351	Transportation Engineering	78	Stephen Mensah	3.5	NA
Fall 08	CIEG650	Urban Transportation Systems	28	Earl Lee	4.58	NA
Fall 08	CIEG655	Civil Infrastructure Systems	25	Nii Attoh-Okine	4.1	NA
Spring 08	CIEG351	Transportation Engineering	55	Earl Lee	4.21	NA

Winter 08	CIEG351	Transportation Engineering	33	(Study abroad)	NA	NA
Fall 07	CIEG650	Urban Transportation Systems	18	Earl Lee	4.43	NA
Spring 07	CIEG351	Transportation Engineering	92		3.25	NA
Fall 06	CIEG125	Introduction to Civil Engineering	70		4.00	NA
Fall 06	CIEG667	Civil Infrastructure Systems	13	Simon Lewis	4.75	NA
Spring 06	CIEG351	Transportation Engineering	78		3.53	NA
Spring 06	CIEG467	Disaster Engineering	28	Michael Chajes	2.67	NA
Fall 05	CIEG125	Introduction to Civil Engineering	104		3.85	NA
Spring 05	UPP 503	Data Analysis for Planning and Management I	21		TBA	TBA
Fall 04	CEMM 580/ UPP 569	Infrastructure Management	16		TBA	TBA
Fall 04	UPP 594	Transportation Planning and Land Use	8		TBA	TBA
Fall 03	CEMM 580/ UPP 569	Infrastructure Management	17: 5-UPP 12- CEMM		4.667 (SD = 0.516) 4.9 (SD =0.3)	4.333 (SD = 0.817) 4.7 (SD =0.4)
Spring 03	UPP 565	Transportation Planning and Land Use	7		4.857 (SD = 0.378)	4.429 (SD=0.5 345)
Fall 02	UPP 594/ CEMM 594	Infrastructure Management	15: 11-UPP 4 - CEMM		3.818 (SD=0.98) 4.5 (SD=0.5)	4.0 (SD=1.1 0) 4.5 (SD=0.5 )
Fall 01	UPP 594	Brownfield Development	10	Jon DeVries	4.900 (SD=0.316)	4.800 (SD = 0.422)
Fall 01	UPP 594/ CEMM 594	Infrastructure Management	17		4.765 (SD=0.437)	4.176 (SD = 0.728)
Spring 01	UPP 403	Urban Planning	9		4.439 (SD=0.535)	4.286

						(SD=0.756)
Fall 00	UPP 594	Brownfield Development	11		4.444 (SD=0.726)	4.625 (SD=0.518)
Spring 00	CE 4101 U of Minn	Economics and Project Management	50	Karl Smith	NA	NA
Spring 00	ISE 5102 U of Minn	Infrastructure Systems Management	18	-	*** 6.1 (SD=0.9)	*** 6.1 (SD=1.1)
Spring 99	12-702	Infrastructure Management	14	-	4.79	4.57
Fall 98	12-411	Engineering Economics	32	-	NA	NA
Fall 1998	12-790	Teaching Skills	11	-	NA	NA
Spring 98	12-100	Introduction to Civil and Environmental	50	-	4.15	4.05
Spring 98	12-702	Infrastructure Management	12	-	4.73	4.55
Fall 97	12-641	Engineering Economics	40	-	3.75	4.0
Spring 97	12-702	Infrastructure Management	30	-	4.43	4.29
Fall 96	12-790	Teaching Skills	18	Pantizidou	NA	NA
Fall 96	12-609	Traffic Flow Theory and Operations	6	-	NA	NA
Fall 96	19-451	Project**	20	Fischhoff Rubin	4.11	4.44
Spring 96	12-702	Infrastructure Management	19	-	4.65	4.53
Fall 95	12-790	Teaching Skills	18	-	NA	NA
Fall 95	12-100	Introduction to Civil and Environmental Engineering	60	-	4.62	4.38
Spring 95	12-101	Introduction to Civil and Environmental Engineering	58	-	4.07	3.96
Fall 94	12-702	Infrastructure Management	15	-	4.62	4.38
Spring 94	12-310	Engineering Economics	44	-	4.07	3.96
Spring 94	12-706	Public Investment Planning	20	-	4.11	4.11



Spring 94	12-790	Teaching Skills	18	-	NA	NA
Fall 93	12.101	Innovation in Civil Engineering	59		3.6	3.49
Spring 93	12-310	Engineering Economics	26		3.47	3.58
Spring 93	19-550	Under grad research in EPP (6-9 units)	10		NA	NA
Fall 92	12-790	Seminar for TA's	23		4.19	4.81
Fall 92	12-609	Traffic Flow Theory	32		3.45	3.67
Spring 92	12-706	Public Investment Planning	11		4.55	4.64
Fall 91	12-609	Traffic flow Theory	9		4.57	4.71
Fall 91	12-702	Infrastructure Management	9		4.6	5.0
Spring 91	12-640	Computer-Aided Tools for Civil Engineers	9	Fenves	3.29	4.08
Fall 90	12-800	Careers in Academia	12	Davidson	4.42	4.52
Spring 90	12-702	Infrastructure Management	8	-	4.43	4.57
Spring 90	12-706	Public Investment Planning (9 units)	11		4.70	4.60
Fall 89	12-800	Careers in Academia	12	Davidson	4.63	4.5
Fall 89	12-639	Traffic Flow Theory and Operations (9 units)	9		3.86	4.14
Spring 89	12-706	Public Investment Planning (9 units)	8		4.75	4.75
Spring 89	12-702	Infrastructure Management	8	-	4.57	4.50
Fall 88	12-639	Traffic Flow Theory and Operations (9 units)	9		4.14	4.00
Spring 88	12-706	Public Investment Planning (9 units)	10		4.22	4.22
Fall 87	1.22	Transportation Infrastructure Systems	9		4.68	4.68
Spring 87	1.15	Computer Applications in Statistics	2		NA	NA

Fall 86	1.22	Transportation Infrastructure Systems	15		4.36	4.36
Spring 86	1.15	Computer Applications in Statistics	5		4.5	4.5
Fall 85	1.242	Highway Systems Analysis and Technology	14		3.9	4.6
Spring 85	CE 268	Intro. to Transportation Systems Analysis	8		3.8	4.0
Fall 1984	CE 406	Statistical Modeling Design and Decisions	48		3.8	3.8
Fall 81	12-639	Traffic Flow Theory and Operations (9 units)	34	Hendrickson	4.03	4.33

\* - Scale: 1-5. 5 = outstanding.

\*\* - Project awarded "Best Project" for 1996 - 1997.

\*\*\* - Scale: 1-7, 7 = exceptional

#### *Other Teaching*

Virginia Tech, June 2014 – Advanced Infrastructure Management. Class coordination and guest lectures (team building and research methods)

Georgia Tech, June 2012 – Advanced Infrastructure Management. Class coordination and guest lectures (team building and research methods)

University of Canterbury, February – May, 2012

- ENCN261 Transport and Surveying – Delivered one guest lecture on airports.
- ENCN371 Project and Infrastructure Management – Modules on asset management and information management systems. The modules included 11 lectures, a homework assignment and a test.
- ENCI412 Traffic Planning – Six lectures covering probabilistic traffic modeling, queuing theory and safety. Provided supplementary lecture notes and exercises. Participated in sensors laboratory.

Fundamentals of Engineering Exam review sessions – Transportation and Engineering Economics, University of Delaware, October 2010, October 2011, October 2012, October 2013.

Bridge Management Executive Session – Oklahoma DOT, September 1997, Texas DOT, May 1998.

Pavement Management Course – Kansas DOT, October 1997, Oklahoma DOT, June 1999, Iowa DOT, July 1999, New York State DOT, September 1999.

Lecturer, short course for the Massachusetts Department of Public Works, “Signalized Intersection and Pedestrian Capacity Analysis”, May 19 - 20, 1986.

Training Session for Transportation Systems Center, U.S. Department of Transportation, “Infrastructure Awareness,” September, 1989.

## **Student Projects**

### *Undergraduate Thesis*

- Sarah Doggett, Honors Thesis, Department of Civil and Environmental Engineering, University of Delaware, Expected Completion May, 2016.
- Matthew Hartnett, “A Study of Community Resilience and the Stressors of the Peak Oil, a Globalized Economy, and Climate Change,” Honors Thesis, Department of Civil and Environmental Engineering, University of Delaware, expected completion May, 2014.

### *Undergraduate Projects*

- Paul Moser, “Internship with Bike Delaware,” Fall 2014
- Sarah Doggett, “Characteristics of Transit-Friendly Cities,” Summer Scholar 2014
- Matthew Hartnett, “Exploring Transportation Options for Cape Cod,” Spring 2013.
- Hong Li, “Transportation Performance Data,” Fall 2012
- Ariella Schiff, “Analysis of Hurricane Irene Traffic Data,” Fall 2012.
- Jonathan Calhoun, “Exploring *Mathematica Alpha* for Sharing Infrastructure Data and Knowledge,” Winter 2011
- Glenn Pusey, “History of Transportation in Delaware,” Summer 2009
- Stephen Kelly Marshall, “Computer/GPS Enhanced Inspection for Heavy Construction,” Spring 2008
- Valerie Steenhoek, “ICMPA7 Challenge: Roadway Sign Analysis,” Fall 2007
- Murat Jenidi, “An Analysis of 2004 National Bridge Inventory Data for Maryland and Delaware,” Summer and Fall 2006.
- Andrew Stam, “Exploring the National Bridge Data” NSF REU student, Summer 2006.
- Anthony Manzella “Asset Management,” Winter 2006, Summer 2006, Winter 2007.
- Nia Rodgers, “Hazelwood Case Study,” summer 1999.
- Adrienne Messenger, “Financing Brownfield Development,” Seniors Honors Project, 1998 - 1999
- Vince Giranella, “A Brownfield Case Study: National Robotics Engineering Consortium,” summer, 1998.
- Sarah Strauss, “A Brownfield Case Study: Sandcastle,” summer, 1998.
- Laura Rosensteel, REU Brownfields, Summer, 1998
- Rhonda Forrester, REU Brownfields, Summer, 1998
- Neil McCarthy, “Characteristics of Brownfields Pilots”, “Designing Water Supply Networks for Brownfield Developments,” Independent Study, Spring 1997, 1998.
- Carla Santoro, “Traffic Simulation for Carson Street,” Independent Study, Spring 1997
- Paul James, “Roller Coaster Model,” Independent Study, spring 1997 (awarded SURG.)
- Carla Santoro, REU Brownfields, Summer, 1996
- Adrienne Messenger, REU Brownfields, summer, 1996.
- Paul Jones, “The PHAT ATTACK,” Senior Project, fall 1996.

- Vargas, David, “Financing for International Construction with Emphasis on Latin America,” fall, 1995.
- Jon Lin, “VIBIS Development”, student programmer, 1994 - 1995.
- Soltysik, David, “VIBIS Applications,” Senior Project, fall, 1995.
- Galina Ferrell-Gibbony, “Campus Accessibility for the Disabled,” Senior Project, 1993.
- Alex Brandt, “Effective Residence Halls at Carnegie Mellon University,” Senior Project, Fall, 1995
- Kevin Anderson, “Conceptual Designs for the Mon-Fayette Expressway,” Senior Project, fall, 1995.
- Mark Nicholson, “Optimizing the Compaction of Flue Gas Desulfurization Waste at the General James M. Gavin Power Plant Landfill,” Senior Project, fall 1994.
- Paisit Herabat, Assistant on CAST program “SuperWindows,” summer, 1994.
- Pun Panthwardan, Assistant on CAST program “SuperWindows,” summer, 1994.
- Alex McDiarmid, Assistant on CAST program “SuperWindows,” summer, 1994.
- Cobbey, Brett, “Managing Local Road Networks: A Comparison of Approaches,” CIT Honors Project, 1992 - 1993.
- Steele, Joe, “The Dangerous Squirrel Hill Entrance to Highway 376,” Senior Project, fall, 1993.
- Saks, Brian, “Statistical Incident Detection: Incident Detection Utilizing Statistical Process Control, Senior Project, 1992.
- Zamborsky, Wendy, “The Use of Level of Service in Bridge Management Systems,” Senior Project, 1992.
- Bittman, Arthur J. Jr, “The Impact of the Port Authority Transit Strike on Tripmaking in Pittsburgh,” Independent Study, 1992.
- Cummings, Erin, “A Temporary Park and Ride Lot for PAT Transit,” Senior Project, 1991.
- Cahill, Lori, “Mobility for the Disabled: The history of legislation concerning architectural barriers and an evaluation of the Carnegie Mellon campus,” (Awarded Best Senior Project, 1990).
- Warburton, Joy, “Comparison of Maintenance Costs for Old and New Rapid Transit Systems,” Senior Project, 1989.
- Bauder, Heather, “Alternative Parking Strategies for Oakland,” Senior Project, 1988.
- Gaughan, George, “The Fort Pitt Bridge’s Weaving Traffic,” Senior Project, 1988.
- Luk, Sherman, “Performance of Civil Facilities,” UROP Project, Massachusetts Institute of Technology, Spring 1986.
- Yee, Kheng Ung, “Expert System for Pavement Maintenance and Rehabilitation Decision Making,” UROP Project, Massachusetts Institute of Technology, Fall 1987, Spring 1988.
- Wedderburn, Steven, “Developing Bridge Painting Strategies which Minimize Life Cycle Painting Costs,” unpublished Senior Project, Department of Civil Engineering, Massachusetts Institute of Technology, June, 1987.
- Piech, Michael, “Integrated Software to Identify and Evaluate Congestion,” Spring 1987, “Development of an Expert System for More Effective Railroad Maintenance Scheduling,” UROP Project, Massachusetts Institute of Technology, Summer 1987.
- Huang, James, “Performance of Buildings,” UROP Project, Massachusetts Institute of Technology, Spring 1986.
- Ross, Nina, “Expert System for Identifying Optimal Bridge Painting Strategies,” UROP Project, Massachusetts Institute of Technology, Spring, 1986.
- Finn, Anne Margaret, “Expert System for Bridge Painting,” UROP Project, Massachusetts Institute of Technology, Spring, Summer 1986.

- Andresen, Jensine, “Statistical Tests of Experimental Remote Perception Levels” Independent Project, Princeton University, Department of Civil Engineering, Junior, May 1985.
- Weems, Shannon, “Financial budgeting with Predictive Models,” Princeton University, Department of Civil Engineering, Senior, May 1985.

*Graduate Projects.*

- Kyle Herring, “Fulfilling Public Demands With the Private Sector: Understanding the Public-Private Emergency Response Contract at the Local and National Level” Fall 2014
- Juan Sanchez Gil, “Optimization,” Fall 2012.
- Juan Sanchez Gil, “Disaster Logistics,” Fall 2012.
- James Goetschius, “Hospital Evacuations,” Fall 2012.
- Sekine Rahimian, “Capturing the Demand for Emergency Services Transportation,” Fall 2012
- Andreas Lichliter, “Regional Economic Analysis Software,” Spring 2012.
- Sekine Rahimian, “Modeling the Impact of Earthquakes on Transportation Networks” Spring 2012.
- Kel Hannum and Sekine Rahimian, “Optimization in Civil Infrastructure Systems” Fall 2009
- John Bush, “Maintenance Activity Costs and their Effects on Pavement Life: A Case Study for Delaware County, PA,” Summer, 2008.
- Daisuke Mizusawa, “Barriers in AMS implementation using the Soft Systems Methodology,” Fall 2005.
- Yukun Dong, “Long Range Investments in Existing Highway System in the Northeastern Illinois Region,” Spring 2005
- Daisuke Mizusawa, “Benefits of Asset Management,” Spring 2005
- Stacey Meekins “Bicycle Planning for Chicago,” Fall 2004
- Alexis Billingslea-Brown, “Chicago Metro Area Travel,” Fall 2004
- Daisuke Mizusawa, “Modeling Infrastructure,” Summer 2004
- Dong Zhai, “Uncertainty in Infrastructure Management,” Spring 2004
- Monica Akins, “The Impacts of Closing Ramps on I-55”, Fall 2003.
- Karen Schweiss, “Wetland Banks: The Artificial Kidneys of the Earth,” Fall 2003
- Meghan Hammerle, “Bus Operations”, Summer 2003
- Nandini Swarup, “Comparison of Transit Check Programs”, Summer 2003
- Laurette Brown, “Working Smart Toward Livable Communities: An Approach to Rockford Neighborhood,” Summer 2003
- Norma Pena Rivera, “Project Evaluation”, Spring 2003
- Jon DeVries, “Brownfield Class”, Fall 2002
- Jeff Korte (Architecture), “Urban Planning Applications,” Fall 2002
- Sudeshna Sen, “ITS Applications for Transit,” Fall 2002
- Denise Lea, “Bicycle Planning,” Summer 2000.
- Daisuke Mizasawa, "Deterioration Modeling for Infrastructure," Independent Study, fall, 1999.
- Sawyer, Stephen, “Geographic Information Systems for Infrastructure Management,” Independent Study, Civil and Environmental Engineering, spring, 1999.
- Ak, Akgun, “Cost Estimation Database for Land Reuse,” Independent Study, Civil and Environmental Engineering, fall, 1998.
- Chacon, Silvia, " Determining the Time to Start Construction of a Brownfield Site," Independent Study, Civil and Environmental Engineering, spring, fall, 1998.

- Thomas, Albert, “Project Delivery Mechanisms,” Independent Study, Civil and Environmental Engineering, fall, 1994, spring, 1995.
- Nicole Earle, “The Palm Tree Mentality: The Impact of the Tourism Industry on the Economic Development of Jamaica with a Focus on Infrastructure Constraints,” Independent Study, Heinz School, fall, 1993, spring, 1994.
- Giammo, Lawrence, “Valuing Increased Travel Time Due to Fort Pitt Bridge/Tunnel Renovation: An Implicit Tax,” unpublished Graduate Project, GSIA, January 1992.
- Tomlinson, Richard, “Tackling the Problem of Rural Road Maintenance with Labor Intensive Techniques,” unpublished Graduate Project, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, MA, December 1986.
- Lewis, Simon, “Microcomputer Tools for Analyzing Site Traffic Impacts,” unpublished Graduate Project, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, MA, May, 1986.

## **Masters Students**

### *Current – thesis*

Rachel Chiquoine (Civil Engineering), Expected completion, May 2016.

### *Previous (advisor)*

1. Israt Jahan, “Assessment of Long Term Housing Recovery after Hurricane Sandy,” Master of Science, Disaster Science and Management, May 2015.
2. Hamed Al-Rashed, “How Consistent are Emergency and Disaster Measurements and Scales?” Master of Science, Disaster Science and Management, May 2015.
3. Erik Archibald, “Infrastructure Resilience at the Project Level: Considering Hazard Risk and Uncertainty for Infrastructure Decisions,” Master of Civil Engineering, University of Delaware, December 2013
4. Gillian McCarthy, “Improved Bridge Rating Procedures Integrating Load Path Redundance: A Cost-Effectiveness Simulation,” Master of Civil Engineering, University of Delaware, August, 2012 (co advised with Jennifer McConnell)
5. Mosi London, “Using Data Envelopment Analysis to Explore State-by-State Transportation Performance Indices,” Master of Civil Engineering, University of Delaware, December, 2011
6. Michelle Oswald, “Evaluation of Climate Change Adaptation Tools for Transportation and Land Use Planning,” Analytical Paper, Master of Arts, Urban Affairs and Public Policy, University of Delaware, May, 2010.
7. Black, Laura, “Evacuation of Carless Populations,” Analytical Paper, Master of Arts, Urban Affairs and Public Policy, University of Delaware, May, 2010.
8. Rahamiam, Sekine, “Selecting Asset Protection Strategies: A Comparison of Optimization and Ranking,” Master of Civil Engineering, University of Delaware, May, 2010
9. Hannum, Kelly, “Use of Sustainability Indicators to Improve Maintenance and Repair Project Prioritization for U.S. Air Force Facilities,” Master of Civil Engineering, University of Delaware, May, 2010
10. Michelle Oswald, “Rating the Sustainability of Transportation Investments: Corridors as a Case Study,” Master of Civil Engineering, University of Delaware, December 2008
11. Rachel Nathman, “PaLATE User Guide, Example Exercise, and Contextual Discussion,” Master of Civil Engineering, University of Delaware, May 2008
12. David Adams, “Integrating Travel Time Reliability into Management of Freeways”, Master of Civil Engineering, University of Delaware, December 2007

13. Melissa Williams (co advisor with Michael Chajes), "A Plan for the Long-Range Performance of Bridges," Master of Civil Engineering, University of Delaware, December, 2006.
14. Sonali Tandon (co advisor with Darold Barnum), "Technical Efficiency Analysis Of Public Transit Using Data Envelopment Analysis (DEA) Method- A Case Study Of Chicago Transit Authority Bus Routes," MUPP thesis, August 2006
15. Stacey Meekins (advisor), "Optimizing Transit Service Within the North River Industrial Corridor," MUPP thesis, December 2005
16. Amit Thomas (advisor), "Techniques to Determine the Demand and the Optimal Locations for Park and Ride Lots for Bus Transit," MUPP thesis, December 2005
17. Beth Donahue (advisor), "An Evaluation of Data Visualization in the Planning Process: The Chicago Transit Authority's Rail Infrastructure," MUPP project, May 2005
18. Rachel Scheu (project advisor), "Assessing Residual Building Code Opportunities in Kane County: Increasing Efficiency to Decrease Peak Demand," MUPP project, May 2005
19. Jonathon Hart (advisor) "Strategies for Effective Park and Ride Resource Deployment, Design and Management" MUPP, December 2004
20. Nandini Swarup (advisor) "Cost Benefit Analysis of Alternate Management Mechanisms for RTA's Transit Check Program" MUPP, August 2004.
21. Nidhi Vaid (co-advisor with Laxmi Ramasubramanian), "Using Design Guidelines to Enhance the Quality of User's Experience in Urban Transit Stations", MUPP, August 2004.
22. Roseann O'Laughlin (co-advisor with Janet Smith) Rails, Roads and Community: The Role of Community Organizations in Transportation Projects, MUPP, August, 2004
23. Jeromie Winsor (advisor) "Context Sensitivity for Illinois Transportation Projects: Evaluation and Recommendations" MUPP, August 2004
24. Meghan Hammerle (advisor) "Bus Operations Using Automatic Vehicle Location and Passenger Counter Data, " MUPP, August, 2004
25. Monica Akins (project advisor), "Strategic Methods to Improve the RTA Transit Check" MUPP, May 2004.
26. Geoffrey Fruin, (co-advisor with P.S. Sriraj) "A Methodology to Evaluate the Equitable Distribution of the CTA's Capital Budget "MUPP, May, 2004
27. Dong Zhao (advisor) "Infrastructure Management for the CTA Using Geographical Information Systems and Data Management "MS, May 2004
28. Rapol Laxmana Reddy (advisor), "The Taxicab Industry in Chicago: Past, Present and Future" (thesis advisor), MS, August 2003.
29. Graham Garfield (project advisor), "Elevating Station Design: A Cost/Benefit Analysis of Rehabbing Existing Transit Stations Versus All-New Build-Outs", MUPP, August 2003.
30. Arnab Chakraborty (advisor), "Design Guidelines for Better Median Station Environments," MUPP, August, 2003
31. Shaumik Pal (advisor), "Asset Management and Intelligent Transportation Systems: Interactions and Synergies," MUPP, August 2003.
32. Ying Bao (advisor), "Implementation of the Java-Based Inspection Framework for Bridge Field Inspection," MS, August 2003.
33. David Kralik (advisor), "When Will it Get Here? A Study of Transit Bus Reliability," MUPP, May, 2003
34. Eric Holeman (thesis advisor), "Evaluating Corridors for Bus Rapid Transit Service," MUPP, December, 2002
35. Larry Deeter (project advisor), "An Evaluation of Mass Transit Service to U.S. Airports," MUPP, August 2003.
36. Eve Pytel (advisor), "Policy Implications of Alternative Trip Definitions," MUPP, August 2002

37. Fahim Mohamed (advisor), "Transit Solutions for Low Income in Rural Illinois: A Model Based Approach," MUPP, August 2002
38. Denise Lea (project advisor), "A Campus for the People: Improving Pedestrian Facilities at the university of Illinois at Chicago," MUPP August 2002
39. Daisuke Mizusawa – "An Infrastructure Management System for Highways in Japan: Building on the U.S Experiences," MS May 2000
40. Ipek Erzi, "Financing Brownfield Development" – MS May 2000.
41. Stephen Sawyer – "A Computational Analysis Method to Determine the Thickness Required for Polyurethane/Limestone Mine Seals in Large Openings," MS December 1999.
42. Scott Godsen, "Modeling Wetland Performance Including Environmental Factors," MS April 1999.
43. Adjo Amekudzi, "Traffic Impact Analysis of Clustered Brownfields," MS September, 1997, continuing for Ph.D. (with Haris Koutsopoulos.)
44. Tunde Balvanyos, "Cost Benefit Analysis Tool for Automated Highway," October 1997, continued for Ph.D. (with Haris Koutsopoulos.)
45. Bambang Prihartano, "The Applicability of HDM and HERS Model," September 1996, Ministry of Transport, Indonesia.
46. JP Barton, "Case Study: Redevelopment of a Former Army Ammunition Plant Located in the Hayes Community of Pittsburgh, Pennsylvania," May 1996, PJ Dick Construction, Pittsburgh, PA.
47. Michael Reidy, "Probabilistic Analysis of Structural Stability Using Spreadsheets to Determine the Reliability of Navigation Structure Monoliths," August 1996, Kellogg Construction, Houston, TX.
48. WenBin Wei, "Review and Implementation of Integrated Transportation and Land Use Models," August 1996 (with Haris Koutsopoulos.), Purdue University, graduate program.
49. Pannapa Herabat, "Fracture Critical Bridge Members," May 1995, continued for Ph.D.
50. Albert Thomas, "Negotiated Procurement: A Contracting Method for Public Sector Owners in General Building Construction," August 1995 - continued employment with PJ Dick.
51. Jeannine Hoey, "Lock and Dam 4 Monongahela River Analysis of Float-In Lock Alternative for the River Lock,"- September 1995, returned to Army Corps of Engineers.
52. Kent Weaver, "Risk-Based Cost/Benefit Analysis of Radioactively Contaminated Soil Remediation: A Case Study," September 1994.
53. Sanford, Kristen, "Boids in Traffic," unpublished Master's Thesis, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, PA, 1993, continued for Ph.D.
54. Lavrich, Joann, "The Role of Geographic Information Systems in Infrastructure Management," September 1993, US Army Construction Engineering Research Laboratory, Urban, IL.
55. Humphrey, Richard, "Video Based Inspection of Building Facilities for Use in Engineered Management Systems," unpublished Master's Thesis, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, PA, August 1992.
56. Lamba, Naveen, "Vehicle Occupancy Based on the 1990 Nationwide Personal Transportation Survey," unpublished Master's Thesis, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, PA, May, 1992, Wilbur Smith, Pittsburgh.
57. Subsonpom, Wisanu, "Principal Components Analysis of Variability in Bids for a Bridge Rehabilitation Project," May 1992, continued for Ph.D.
58. Heiler, Michael, "Processing Techniques for Ground Penetrating Radar: Deconvolution and Migration," May 1992, continued for Ph.D.
59. Davis, Bert "Water Pipe Rehabilitation and Design Practices," May 1992.
60. Chen, Chi-Ben, "An Analysis of Non-Vehicular Maintenance Expenditures for Selected Rail Transit Systems," May 1992.



61. Slenska, Michael, "A Facilities Management System Design for Buildings," September 1990, Dames and Moore.
62. McGuiness, Erin, "The Development of the Greyhound Bus Terminal Site, Pittsburgh, PA: concepts and Evaluation of Alternatives," August 1990.
63. Kaimakamidis, Ioanis, "Economic Evaluation of New Technologies for Construction", July 1989.
64. Oh, Sei-Cheng, "Role of Track Condition in the Routing of Hazardous Shipments," unpublished Master's Thesis, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, PA, December, 1988.
65. Sabina, Erik, "Strategies for Private Funding of Public Highways: A Practical Approach," Massachusetts Institute of Technology, Cambridge, MA, May 1988.
66. Alfelor, Roemer, "Optimal Maintenance Frequencies for Unpaved Roads," Massachusetts Institute of Technology, Cambridge, MA, May 1988.
67. Rossi, Thomas F., "Traffic Allocation Methods for Use in Impact Fee Assessment," Massachusetts Institute of Technology, Cambridge, MA, January 1987.

*Previous (reader)*

- Anne Goodman (committee member), "Applying the Individual Understanding and Response Framework to Sea-Level Rise South of Delaware's Indian River Inlet," Disaster Science and Management, August 2014.
- Chunjing Liu (committee member), "Measuring Social Vulnerability of Chinese Coastal Counties to Natural Hazards," Disaster Science and Management, May 2014.
- Michaella Song (reader), "An Analysis of Transit Oriented Development to Support Low Income Communities Vulnerable to Sea Level Rise within the San Francisco Bay Area," Master of Energy and Environmental Policy, University of Delaware, August, 2013.
- Eileen Collins (reader), "The Curbside Bus Industry: a New Era of Bus Travel," Analytical Paper, Master of Arts, Urban Affairs and Public Policy, University of Delaware, May, 2013.
- Weifeng Mao (reader), "The Impacts of Sea-level Rise on the I-95 Corridor in Delaware," Analytical Paper, Master of Arts, Urban Affairs and Public Policy, University of Delaware, May, 2011.
- Anne Lucey (committee member), "Whether an awareness of benefits positively influences public perception of sustainable roadside vegetation strategies.," MS, Plant and Soil Sciences, University of Delaware, August, 2010.
- Dan Yu (reader), "Development of a Computer-Based Air Quality Screening Tool for a Highway Tool Facility," MS, Civil Engineering, University of Illinois, Chicago, December 2005.
- Karen Schweiss (reader), "A Microsimulation Model of the ALINEA On-Ramp Control Algorithm using VISSIM," MS, Civil Engineering, University of Illinois, Chicago, December 2005.
- Yukun Dong (reader), "Urban Regimes and Infrastructure Financing" MUPP thesis, May 2005
- Santosh Mishra (reader), "Air Quality Benefits of Public Transit: A GIS Based Quantifying Approach", MS, Civil Engineering, University of Illinois, Chicago, May 2005.
- Shruti Mahajan, (reader), "Assessing the Relationship between Property Values and Traffic along Arterial Corridors in Chicago", MUPP, February 2004.
- Tanu Sonkhya (reader), "Detailed Solution Properties of a Large Scale Combined Travel Forecasting Model," ME, Civil Engineering, University of Illinois, Chicago, August 2003.
- Arzmella Hammond (reader), "An Empirical Analysis of Transportation and Other Constraints Faced by Welfare-to-Work Clients," MUPP, December 2002.
- Yihua Liao (reader), "Patterns of Household Transportation Expenditures: the Effects of Income and Housing Subsidies," MUPP, May 2003.

- Qian Xiong (reader), “Comparison of User-Optimal and System-Optimal Traffic Assignments for the Chicago Regional Road Network, M.E. , Civil Engineering, University of Illinois, Chicago, August, 2002
- Anusha Seetharaman (reader), “Assessment of the Economic Impact of Freight Policy: A Study of the Chicago Six County Region,” MUPP, May 2002

### **Ph.D. Students**

#### *Current*

- Juan Camilo Sanchez Gil (Disaster Science and Management) (expected completion May 2016)

#### *Previous( advisor)*

1. Ryan Burke, “The Dual Status Commander and Hurricane Sandy: Maturing Military Response with Process Improvement,” Disaster Science and Management, May 2015.
2. Sekine Rahimian, “Transportation System Demand and Performance Immediately after an Earthquake,” December 2014.
3. Mosi London, “Developing a Framework for the Impact Evaluation of Different Types of Transportation Projects,” August 2014.
4. James Goetschius, “Improving Hospital Survivability: Tools to Inform Hospital Planning and Design,” Disaster Science and Management, May 2014.
5. Mohammadsaied Dehghanisanij, (Co-Chair with Gerardo Flintsch) “Characterizing the Dynamics of Vulnerability for Roadway Infrastructure Systems,” Virginia Polytechnic Institute, November 2013.
6. Yvonne Rademacher, “The Political Economy of Community Disaster Assets: A Case Study of the Farm Community in Sussex County, Delaware,” Disaster Science and Management, May 2013.
7. Michelle Oswald, “Development of a Decision Support Tool for Transportation Adaptation Practices in Response to Climate Change,” May 2011.
8. Silvana Croope, Civil and Environmental Engineering, Dissertation Advisor, “Managing Critical Civil Infrastructure Systems: Improving Resilience to Disasters,” May, 2010.
9. Yukun Dong, Civil and Environmental Engineering, Dissertation Advisor, “Assessing Investment Analysis Strategies for Infrastructure Renewal in Regional Transportation Planning” February 2008
10. Daisuke Mizusawa, UPP Student, Dissertation Advisor, “Strategic Directions for Implementing Asset Management: Quantifying the Benefits of Asset Management,” University of Illinois at Chicago, May 2007.
11. Norma Pena Rivera, PPA Student, Dissertation Advisor, “Estimating Transportation Impact Indicators for a Regional Participatory Visioning Process: an Approach,” December 2005, La Fortaleza, Puerto Rico.
12. Stephen Sawyer, chair, “An Exploration of Ramp Metering Effectiveness”, August 2002. Sawyer Engineering.
13. Ipek Erzi-Akcelik, chair, “An Analysis of Uncertainty in Brownfield Redevelopment Using Real Options,” May 2002, Consulting, Turkey.
14. Paisit Herabat, chair, “Analyses of the Impact of the Reduced Vertical Separation Minimum (RVSM) Implementation on Airport System Infrastructures with Basic Runway Configurations,” May 2002, AeroThai
15. Deborah Lange, “Strategies for Brownfield Development Based on Empirical Analyses,” May 2001, Executive Director, The Environmental Institute, Carnegie Mellon University.

16. Adjo Amekudzi, "Evaluating Uncertainty, Analyzing Risk and Managing Information Quality in National Highway Investment and Performance Analysis," July 1999, Assistant Professor, Georgia Institute of Technology.
17. Pannapa Herabat, "A Functional Specification for a Decision Support System to Select Bridge Analysis Tools," December 1997, Assistant Professor, Asian Institute of Technology.
18. Kristen Sanford, "Improving Condition Assessment: Data Requirements for Bridge Management," April 1997, Assistant Professor, University of Missouri, Columbia.
19. Khalid Al-Dughaiter, "International Construction Financing Strategies: Influential Factors and Decision Making," December, 1996, Instructor at IPA, Saudi Arabia
20. Michael Heiler, "Artificial Neural Networks for the Interpretation of Ground Penetrating Radar Data for Infrastructure Condition Assessment," September, 1996, Assistant Professor, Louisiana State University.
21. Said Rabiah, "Rating Intelligent Buildings: Occupants' Assessment of HVAC Control System's Intelligence," August, 1996, Instructor at IPA, Saudi Arabia
22. Wisanu Subsonpom, "Performance Based Specifications for Pavement Overlays," May, 1996, Assistant Professor Chulalongkorn, Thailand
23. Roemer Alfelor, "Analysis of Automatically collected Rail Surface Defect Data for Rail Maintenance Management," August, 1991, Research Associate, The Urban Institute.

*Committee Member*

- University of Delaware
  - Martins, Nuno (Committee Member), "Contextualizing Social Vulnerability from a Historical Perspective: Power, Economy, Culture, Society and Natural Disasters on Madeira Island (Portugal)," expected completion 2016.
  - Ghonima, Omar (Committee Member), "Service-Life of Concrete Bridge Becks: Statistical Analysis and Probabilistic Modeling," Civil Engineering, expected completion summer 2017.
  - Louis-Charles, Hans (Committee Member), "State Sovereignty and Disaster Response: A Study on the Legacy of the United Kingdom's Imperial Practices and Emergency Management Activities in their Island Possessions," Disaster Science and Management, expected completion August 2016.
  - Adarkwa, Offei (Committee Member), "Tensor Factorization in Civil Infrastructure Systems," Civil and Environmental Engineering, August 2015.
  - Greer, Alex (Committee Member), "Resettlement after Disaster: Case Studies Following Hurricane Sandy," Disaster Science and Management, May 2015.
  - Black, Laura (Committee Member), "Collaborative Assessment of Interdependent Infrastructure in Support of Community Resiliency" Civil and Environmental Engineering, December 2013.
  - Brink, Susan (Committee Member) "Framework for a comprehensive assessment of a city's natural disaster risk with a case study for earthquake risk in Padang, Indonesia," Civil and Environmental Engineering, December 2013.
  - Jiazheng Peng (Committee Member), "Modeling Natural Disaster Risk Management: Integrating the Roles of Insurance and Retrofit and Multiple Stakeholder Perspectives," Civil and Environmental Engineering, December 2013.
  - Sara Patterson (Committee Member), "The effects of complete streets on delay and emissions at the network level," Civil and Environmental Engineering, December 2013.
  - Yaw Adu-Gyamfi, "Adaptive Multiscale Data Analysis in Civil Infrastructure Systems: Theory, Formulation and Applications," May 2013.

- Best, Eric (Committee Member) “Incorporating Groups, Collective Behavior, and Information Visualization in Agent-Based Models of Evacuation,” Disaster Science and Management, May 2013.
- Li, Sizheng (Committee Member) “Modeling post-earthquake fire spread and suppression,” Civil and Environmental Engineering, December 2012.
- Mokashi, Amit (Committee Member) “An Analysis of Voluntary Environmental Actions for Marine Highways: A Stakeholder Perspective,” Marine Policy, May 2012.
- Opila, Mary Cate. (Committee Member) “Structural Condition Scoring of Buried Sewer Pipes for Risk Based Decision Making,” Civil and Environmental Engineering, August 2011.
- Aderinlewo, Olufikayo O. (Committee Member) “Assessment of a Transportation Infrastructure System and its Component Interactions” Civil and Environmental Engineering, May 2008
- Ayenu-Prah, Jr, Albert, (Committee Member) “Empirical Mode Decomposition and Civil Infrastructure Systems” Civil and Environmental Engineering, August 2007
- Mensah, Stephen, (Committee Member) “Dempster Shafer and Bayesian Networks in Sensor Fusion” Civil and Environmental Engineering, September, 2006.
- \* Brown, Charlotte, (External Evaluator), “Disaster Waste Management: A Systems Approach,” Department of Civil and Resources Engineering, University of Canterbury, May 2012.
- \* O’Har, J.P., (Committee Member) “Transportation Asset Management and Climate Change: an Adaptive Risk-oriented Approach,” Georgia Institute of Technology, May 2013.
- \* University of Illinois at Chicago
  - \* Zhang, Yong-Ping, Civil Engineering (Committee Member), “Household Travel Data Simulation: Application of Spatial Transferability of Survey Data,” University of Illinois at Chicago, December 2007.
  - \* Long, Liang, Civil Engineering (Committee Member), “Model-Based Synthesis of Geographically Variable Household Travel Data in Small- and Mid-Size Metropolitan Areas,” August 2007.
  - \* Sadyuku Yagi, Civil Engineering (Committee Member), “An Exploratory Analysis of Intra-household Joint Activity-Travel Tours in the Jakarta Metropolitan Area”, September 2006.
  - \* Rebecca Retzlaff, UPP Student (Committee Member), “Planning for Biodiversity Protection: An Assessment of How Biodiversity is Addressed, and How Technical Data and Expertise are Used in Environmental Plans”, May 2006.
  - \* Hyong Shic Shin, PPA Student (Committee Member), “Study on Modeling Truck Trip Generation: Disaggregate Approach Based on the Survey of Industries,” December 2005. Post Doctorate, University of Connecticut.
  - \* Juan Ortega, PPA Student (Committee Member), “Spatial Multimedia Methodology for the Selection of Low-Income and Labor Market Accessibility Projects”, August 2004.
  - \* Sanya Niumpradit PPA Student (Committee Member), “Modeling Relationships between Highway Expenditure and Economic Performance: An International Analysis”, August 2004, Policy Academy, Bangkok.
- See King Ng, “Survival Analysis and Semi-Markov Bridge Deterioration Modeling,” University of Pittsburgh, December, 1996, returned to Ministry of Works, Malaysia.
- Massachusetts Institute of Technology
  - Acharya, Dharma, “Using Expert Systems and Optimization Techniques for Rail Relay Scheduling,” Massachusetts Institute of Technology, Cambridge, MA, January, 1990 (jointly supervised with J. Sussman), Senior Research Engineer, The Association of American Railroads.
  - Humplick, Frannie, “Theory and Methods for Analyzing Inspection Errors: Application to Highway Pavement Distress Evaluation,” Massachusetts Institute of Technology, Cambridge,

MA, 1989 (jointly supervised with M. Ben-Akiva), Infrastructure Economist, The World Bank.

- Ramaswamy, Rohit, “Maintenance and Rehabilitation of Infrastructure Facilities,” Massachusetts Institute of Technology, Cambridge, MA, June, 1989 (jointly supervised with M. Ben-Akiva), Member of the Technical Staff, AT&T Bell Labs.

## **Publications**

### *Books*

*Asset Management Benefit Assessment: Strategic Directions in Transportation*, Daisuke Mizusawa and Sue McNeil, VDM Verlag Dr. Mueller e.K., Saarbrücken Germany, September 10, 2008.

### *Books Edited*

- *Infrastructure Planning and Management*, American Society of Civil Engineers, jointly edited with Jonathan L. Gifford and Donald R. Uzarski, 1993.
- *Imaging Technologies: Techniques and Applications in Civil Engineering*, American Society of Civil Engineers, jointly edited with David Frost, 1998.
- *Infrastructure Reporting and Asset Management: Best Practices and Opportunities*, American Society of Civil Engineers, jointly edited with Adjo Amekudzi, 2008.

### *Monographs*

Burke, Ryan, and Sue McNeil. *Toward a Unified Military Response: Hurricane Sandy and the Dual Status Commander*. Army War College Carlisle Barracks PA, Strategic Studies Institute, 2015.

Burke, Ryan, and Sue McNeil. *Maturing Defense Support of Civil Authorities and the Dual Status Commander Arrangement through the Lens of Process Improvement*. Army War College Carlisle Barracks PA, Strategic Studies Institute, 2015.

### *Chapters in Books*

1. Karen Engel, and Joseph E. Trainor, with John R. Harrald, Sue McNeil, Greg Shaw and Marco Zannoni, “Floods and Disaster Management in the NL: God Created the World, but the Dutch created the NL” Editor David McIntire, *Comparative Emergency Management*, 2010.
2. Sue McNeil, “Pavement and Bridge Management and Maintenance” in Myer Kutz, *Environmentally Conscious Transportation*, Wiley, 2008.
3. Pannapa Herabat, Sue McNeil and Aileen Switzer, “Transportation Asset Management,” in Jeremy F. Plant, Van R. Johnston and Cristina E. Ciocirlan (editors) *Handbook of Transportation Policy and Administration*, CRC Press, 2007.
4. Pannapa Herabat and Sue McNeil, “Asset Management,” in Fwa, Tien (editor) (2005) *Highway Engineering Handbook*. CRC Press, Boca Raton, FL.
5. Sue McNeil, “Urban Transportation and Community,” in Christensen, Karen and David Levinson (General Editors). (2003). *Encyclopedia of Community: From the Village to the Virtual World*. Thousand Oaks, CA: Sage.
6. Sue McNeil, “Project Selection from Alternatives,” *The Engineering Handbook*, A CRC Press Inc. Publication, with Chris Hendrickson. 1995, revised 2003.

7. Chris Hendrickson and Sue McNeil, "Project Selection from Alternatives," *The Technology Handbook*, A CRC Press Inc. Publication, with Chris Hendrickson, 1999.
8. "Engineering Urban Brownfield Development: Examples from Pittsburgh" in *Manufactured Sites: Rethinking the Post-Industrial Landscape*, editor Niall Kirkwood, E&FN Spon/Routledge of New York and London, August 2001, with Deborah Lange.
9. Sue McNeil, "Capital Investment Decisions," *Macmillan Encyclopedia of Energy*, Macmillan Reference, 2001.

*Journal Papers and Reviewed Proceedings*

1. Dehghani, Mohammad Saied; Gerardo Flintsch; and Sue McNeil, "Impact of road condition and disruption uncertainties on network vulnerability," *Journal of Infrastructure Systems*, Volume 20, Number 3, September 2014.
2. Oswald Beiler, Michelle, and Sue McNeil, "Climate Change Adaptation Practices: A Pilot Study Evaluating Transportation Agency Progress," *The International Journal of Climate Change*, Volume 4, Issue 4, 2013.
3. Li, Qiang Joshua , Leslie Mills, Sue McNeil, Nii-Attoh Okine, Integrating Potential Climate Change into the Mechanistic Empirical Based Pavement Design, *Canadian Journal of Civil Engineering*, Published on the web 28 June 2013, 10.1139/cjce-2012-0465
4. Dehghani, M.S., G. W. Flintsch and S. McNeil, Roadway network as a degrading system: vulnerability and system level performance, *Transportation Letters: the International Journal of Transportation Research*, Volume 5 Issue 3 (July 2013), pp. 105-114.
5. Oswald, Michelle, Sue McNeil, David Ames, and Rebekah Gayley, "Identifying Resiliency Performance Measures for Mega-Regional Planning: Case Study of BosWash Transportation Corridor," *Transportation Research Record No. 2397*, pp 153-160, 2013.
6. Oswald, Michelle and Sue McNeil, "Methodology for Integrating Adaptation to Climate Change Into the Transportation Planning Process," *Public Works Management and Policy*, April 2013 vol. 18 no. 2 145-166.
7. Oswald, Michelle and Sue McNeil, "The Climate Change Adaptation Tool for Transportation (CCATT): A Mid-Atlantic Region Case Study" *Journal of Transportation Engineering*, Published online before print November 3, 2012, doi: 10.1061/(ASCE)TE.1943-5436.0000515.
8. Archibald, Erik and Sue McNeil, "Learning from Traffic Data Collected Before, During and After a Hurricane," *IATSS Research* Volume 36, Issue 1, July 2012, Pages 1–10.
9. Mills, Leslie, Nii Attoh-Okine and Sue McNeil, "Development of Pavement Performance Models for Delaware," *Transportation Research Record* 2304, pp97-103, 2012.
10. Mills, L.N.O. , N.O. Attoh Okine, and S.McNeil. 2011. Hierarchical Markov Chain Monte Carlo Simulation for Modeling Transverse Cracks in Highway Pavements, *Journal of Transportation Engineering*, 138(6), 700–705.
11. Oswald, Michelle, Qiang Li, Sue McNeil, and Susanne Trimboth, Measuring Infrastructure Performance: Development of a National Infrastructure Index, *Public Works Management and Policy*, Vol. 16, No. 4, 2011.
12. Croope, Silvana and Sue McNeil, "Improving Resilience of Critical Infrastructure Systems Post-Disaster for Recovery and Mitigation", *Transportation Research Record* No 2234, pp3-13, 2011.
13. Li, Qiang, Sue McNeil, Taggart Foulke, Jonathan Calhoun, Michelle Oswald, Erik Kreh, Michael Gallis and Susanne Trimboth, "Capturing Transportation Infrastructure Performance: Data Availability, Needs and Challenges", *Transportation Research Record* No 2256, pp191-201, 2011.
14. Schofer, Joseph L., Leonard Evans, Michael P. Freeman, Larry L. Galehouse, Samer Madanat, Ali Maher, ,Sue McNeil, John J. Myers, Robert L. Peskin, and Butch Wlaschin,

- “Research Agenda for Transportation Infrastructure Preservation and Renewal: Conference Report,” *Journal Infrastructure Systems*, Volume 16, Issue 4, pp. 228-230 (December 2010)
15. Blake, David, Sue McNeil and Kathryn Zimmerman, “Asset Management at Work: Practical Perspectives on an Evolving Strategy,” *TR News*, Number 270, September-October, 2010.
  16. Oswald, Michelle and Sue McNeil, “Rating Sustainability: Transportation Investments in Urban Corridors as a Case Study,” *Journal of Urban planning and Development*, September 2010.
  17. Nathman, Rachel, Sue McNeil, and Thomas VanDam, “Integrating Environmental Perspectives into Pavement Management: Adding PaLATE to the Decision Making Toolbox,” *Transportation Research Record*, No 2093, 2009.
  18. Mizusawa, Daisuke and Sue McNeil, “A Generic Methodology for Evaluating the Net Benefit of Asset Management System Implementation,” *Journal of Infrastructure Systems*, September, 2009.
  19. Zenk, Shannon N., JoEllen Wilbur, Edward Wang, Judith McDevitt, April Oh, Richard Block, Sue McNeil, and Nina Savar, “Neighborhood Environment and Adherence to a Walking Intervention in African American Women,” *Health Education an Behavior*, Feb 2009; vol. 36: pp. 167 - 181
  20. Sanford Bernhardt, Kristen and Sue McNeil, “Agent-Based Modeling: An Approach for Improving Infrastructure Management,” *Journal of Infrastructure Systems*, Volume 14, Issue 3, pp. 253-261, September 2008.
  21. Barnum, Darold T, Sonali Tandon and Sue McNeil, “Comparing the Performance of Bus Routes After Adjusting for the Environment, Using Data Envelopment Analysis,” *Journal of Transportation Engineering*, Volume 134, Issue 2, pp. 59-109, February 2008
  22. Barnum, Darold, Sue McNeil and Jonathon Hart, “Comparing the Efficiency of Public Transportation Subunits Using Data Envelopment Analysis,” *Journal of Public Transportation*, Volume 10, No 2, 2007.
  23. Mizusawa, Daisuke, and Sue McNeil, “Synthesizing Experiences of Implementing Asset Management in the World: Lessons Learned from Pavement Management Case Studies” "Transport Policy Studies Review" Vol.9 No.34, October 2006.
  24. Pagano, Anthony M., Sue McNeil and Elizabeth Ogard, “Linking Asset Management to Strategic Planning Processes: Best Practices from State DOT’s,” *Transportation Research Record*, No. 1924, pp 184-191, 2005.
  25. Hammerle, Meghan, Michael Haynes and Sue McNeil, “Use of Automatic Vehicle Location and Passenger Count Data to Evaluate Bus Operations for the Chicago Transit Authority,” *Transportation Research Record*, No 1903, pp 27-34, 2005.
  26. Buchheit, Rebecca, James H. Garrett, Jr, Sue McNeil, and Ping Chen, “An Automated Procedure to Assess Civil Infrastructure Data Quality: Method and Validation,” *Journal of Infrastructure Systems*, Vol 11, No 3. September 2005.
  27. Amekudzi, Adjo, Michael Garvin, Pannapa Herabat, Sue McNeil, and Kristen Sanford Bernhardt, “Teaching Civil Infrastructure Systems and Infrastructure Management,” presented at the International Workshop on Integrated Lifecycle of Infrastructures, Hong Kong, December 2004.
  28. McNeil, Sue, “Selecting Condition Data Collection Strategies based on Life Cycle Costs,” presented at the International Workshop on Integrated Lifecycle of Infrastructures, Hong Kong, December 2004.
  29. Chen, Ping, Rebecca Bari Buchheit, James H. Garrett, Jr, Sue McNeil, “WEB VACUUM: A Web-based Environment for Automated Assessment of Civil Infrastructure Data” *Journal of Computing in Civil and Environmental Engineering*, Volume 19, Issue 2, pp 137-147, April 2005.
  30. Winsor, Jeromie, Lou Adams, Laxmi Ramasubramanian, and Sue McNeil "Transportation Asset Management Today: An Application of Community of Practice Collaboration in the

- Transportation Industry" *Transportation Research Record*, Journal of the Transportation Research Board, No. 1885, pp 88-95, 2004.
31. Herabat, Paisit and Sue McNeil, "Impact of RVSM Implementation on the Airport System Infrastructure," *Journal of Transportation Engineering*, Volume 130, Issue 6, pp 716-724, November/December 2004.
  32. Norbert Delatte, Shen-en Chen, Nitin Maini, Neville Parker, Anil Agrawal, George Mylonakis, Kolluru Subramaniam, Akira Kawaguchi, Paul Bosela, Sue McNeil, Richard Miller, "Using NDE to Evaluate the Condition of Subway Tunnel Systems," 3rd ASCE Forensics Congress, October 2003.
  33. Switzer, Aileen and Sue McNeil, "A Road Map for Transportation Asset Management Research," *Public Works Management and Policy*, Volume 8, Number 3, January 2004, pp 162-175.
  34. Sunkpho, Jirapon, James H. Garrett Jr., and Sue McNeil, "XML-Based Inspection Modeling for Developing Field Inspection Support Systems," *Journal of Infrastructure Systems*, Vol 11., No 3., September 2005.
  35. Shiffer, Michael, Arnab Chakraborty, Beth Donahue, Graham Garfield, Ramakrishnan Srinivasan and Sue McNeil, "A Spatial Multimedia Representation of the Chicago Transit Authority's Rail Infrastructure," *Transportation Research Record* 1838, pp 1-10, 2003..
  36. Sriraj, PS, Shaumik Pal, Libby Ogard and Sue McNeil, "Evaluation of Private Sector Asset Management Practices" *Transportation Research Record* 1848, pp 29-36, 2003.
  37. Lange, Deborah, and Sue McNeil, "Clean it and they will come? Defining Successful Brownfield Development," *ASCE Journal of Urban Planning and Development*, Vol 130, No 2, pp. 101-108, June 2004.
  38. Lange, Deborah, and Sue McNeil, "Brownfield Development: Tools for Stewardship," *ASCE Journal of Urban Planning and Development*, Vol 130, No 2, pp. 109-116, June 2004.
  39. Amekudzi, Adjo Sue McNeil, and Haris N. Koutsopoulos, *Assessing Extrajurisdictional and Areawide Impacts of Clustered Brownfield Developments*, Volume 129, Issue 1, Journal of Urban Planning and Development, March 2003, pp. 27-44.
  40. Cowe Falls, Lynne, Ralph Haas, Sue McNeil and Susan Tighe, "Asset Management and Pavement Management: Using Common Elements to Maximize Overall Benefits," *Transportation Research Record* 1769, 2001.
  41. McNeil, Sue and Anthony Kadlec, "Applying the Government Accounting Standards Board Statement 34: Lessons from the Field," *Transportation Research Record* 1747, 2001.
  42. Kristen Sanford and Sue McNeil, "Infrastructure and Public Works Education: One Size Does not Fit All," *Journal of Public Works Management and Policy*, Volume 5, Number 4, 2001, pp 318-328.
  43. Haas, Ralph, Lynne Cowe Falls, Sue McNeil and Susan Tighe, "Fitting Pavement Management into Overall Asset Management," Presented at 20th ARRB Conference, Melbourne, Australia, March, 2001.
  44. Mizusawa, Daisuke and Sue McNeil, "A Conceptual Framework for Asset Management for Japanese Highways," Presented at 20th ARRB Conference, Melbourne, Australia, March, 2001.
  45. McNeil, Sue, Kenneth Shiatte, Allan DeBlasio and Frank Botelho, "Using Past Experiences to Shape Asset Management in U.S. State Departments of Transportation," Presented at 20th ARRB Conference, Melbourne, Australia, March, 2001.
  46. Sanford, Kristen L, Herabat, Pannapa, McNeil, Sue, "Bridge Management and Inspection Data: Leveraging the Data and Identifying the Gaps," *Transportation Research Circular* No: 498, 2000.
  47. C. Mertz, S. McNeil, and C. Thorpe, "Side Collision Warning Systems for Transit Buses" Presented at *IV 2000, IEEE Intelligent Vehicle Symposium*, October, 2000.



48. McNeil, Sue, Mary Lynn Tischer and Allan DeBlasio, "Asset Management: What is the Fuss?" *Transportation Research Record*, No 1729, pp 21-25, 2000.
49. Adjo Amekudzi and Sue McNeil, "Capturing Model and Data Uncertainties in Infrastructure Performance Estimation," Vol. 126, No. 6, November/December 2000, pp. 455-463 *Journal of Transportation Engineering*.
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8. "Asset Management Peer Exchange: Using Past Experiences to Shape Future Practice," American Association of State Highway and Transportation Officials and the Federal Highway Administration, Executive Summary of a Workshop held in Scottsdale, Arizona December 1 - 3, 1999, March 2000
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### *Paper Discussions*

McGuiness, Erin and Sue McNeil, "Statistical Models to Predict Commercial and Parking Space Occupancy," Journal of Urban Planning Development, Vol. 117, No. 4, Dec. 1991, Discussion by J.M. Keneipp and Closure by authors, Vol. 119, No. 1, Mar. 1993.

### **Grants and Contracts**

US Army War College Strategic Studies Institute (SSI) External Research Associates Program (ERAP), "An Investigation of the Benefits and Drawbacks of Realigning the National Guard under the Department of Homeland Security," Sue McNeil, September 30, 2014 – September 29, 2015. \$29,248.

Delaware Department of Transportation, "DelDOT Project Number (1687-G) Topic: Pavement-Inspection," Sue McNeil, September 1, 2014 – August 31, 2015. \$34,992.40.

US Army War College Strategic Studies Institute (SSI) External Research Associates Program (ERAP), "Unity of Effort through Unity of Command: Dual Status Command during Hurricane Sandy DSCA Operations," Sue McNeil, September 30, 2013 – September 29, 2014. \$18,000.

US Army War College Strategic Studies Institute (SSI) External Research Associates Program (ERAP), "Contingency Dual Status Command: Enhancing Missions in the Homeland through the Lens of Process Improvement," Sue McNeil, September 30, 2013 – September 29, 2014. \$18,000.

Rutgers University, CAIT National Transportation Center Consortium, \$235,684 per year, September 2013 – September 2015.

- "Using Information at Different Spatial Scales to Estimate Demand to Support Asset Management Decision Making," Project Director: Dr. Sue McNeil, Period of Performance: 9/1/2014- 8/31/2015. Project cost: \$50,000 (Fed) plus \$50,470 (Non-federal).

US Chamber of Commerce, "Updating the Transportation Performance Index", (Sue McNeil). 2/1/2013 – 9/30/2013. \$147,891

Delaware Department of Transportation, "Abandon, Repair or Improve Road in the Face of Climate Change?" Sue McNeil, 9/1/2012-8/31/2013. \$52,065.

Rutgers University, CAIT Tier I University Transportation Center Consortium, \$300,000, January 1, 2012 – January 31, 2014; \$250,000, January 1, 2013 – January 31, 2016

- “Better State-of-Good-Repair Indicators for the Transportation Performance Index” (Sue McNeil) (2012-2013)
- “Big Data: Opportunities and Challenges in Asset Management” (Jie Gong – Rutgers, Kevin Heaslip – Utah State and Sue McNeil) (2013)
- “Understanding the Relationships between Household Decisions and Infrastructure Investment in Disaster Recovery: Cases from Superstorm Sandy,” (with Joseph Trainor) (2013-2014)
- “Tracking Housing Recovery in Sea Bright, NJ and the Relationship to Infrastructure Renewal,” (with Joseph Trainor) (2015)

Michael Gallis & Associates, “Developing an Infrastructure Index: Phase II” March.30, 2010 – February 1, 2012, \$228, 019.

Michael Gallis & Associates, “Developing an Infrastructure Index: Phase I” October 1, 2009 – January 31, 2010, \$45,844.

Office of Education, Graduate Assistance in Area of National Need (GAANN), (Harry Shenton, PI, McNeil, Co-PI), 2009-2014.

National Science Foundation, “ADVANCE Partnerships for Adaptation, Implementation, and Dissemination (PAID) Award: Resources for Recruitment & Retention (RRR) of Women Faculty in STEM Fields at U. Delaware” (Senior Personnel with Michael Chajes, Principal Investigator; Pamela Cook-Ioannidis, Co-Principal Investigator; Kathryn Scantlebury, Co-Principal Investigator; Tom Apple, Co-Principal Investigator), August 1, 2008 – July 31, 2012, \$307,936.

Deltares on behalf of Ministry of Transport, Public Works and Water Management, Netherlands, “Netherlands-United States Water Crisis Research Network (NUWCREN)”, (Co-principal Investigator, Joseph Trainor Principal Investigator), 4/15/09 – 4/15/2012, \$310,0000.

COT Institute for Safety, Security and Crisis Management, “Learning from a Large Scale Flood Exercise in the Netherlands” (with Joseph Trainor), 8/15/08 -3/31/09, \$25,450.

Delaware Department of Transportation “Infrastructure Security and Emergency Preparedness” (with Tricia Wachtendorf, Earl Lee, Rachel Davidson, Joseph Trainor), 9/1/08-8/31/09, \$50,000

Delaware Department of Transportation, “Advancing Asset Management in DelDOT” 9/1/08-8/31/09, \$50,000

Wisconsin Department of Transportation, Assessing and Interpreting the Benefits Derived from Using Asset Management Systems, 2/5/08-11/30/09, \$69,000.

American Association of State Highway and Transportation Officials, Technology Transfer for Asset Management in Transportation, 9/1/07-8/30/2010, \$95,000.

Research and Innovative Technology Administration, University Transportation Center, University of Delaware, “Resiliency of Transportation Corridors, \$500,000 per year, 2006-2013.

- Learning from Traffic Data: Evacuation Behavior (Sue McNeil) (2012-2013)
- The Implications of Climate Change on Pavement Performance and Design (Qiang Li and Sue McNeil) (2010-2011)
- Understanding the Impacts of Climate Change in the I-95 Corridor in Maryland and Delaware (David Ames and Sue McNeil) (2009-2010)

- Infrastructure Security and Emergency Preparedness (Sue McNeil, Tricia Wachtendorf, Earl Lee, Rachel Davidson, Joseph Trainor) (2008-2009)
- Resiliency of Transportation Corridors before, During, and After Catastrophic Natural Hazards (S. McNeil, J. Nigg, and T. DeLiberty) (2007-2008)
- Evaluating the Current State of the BOSFOLK Transportation Corridor and Indicators of Resiliency (D. Ames and S. McNeil) (2007-2008)

Delaware Department of Transportation, “Pavement Performance Models” with Nii Attoh-Okine, \$50,000, 9/1/07-12/31/09.

Delaware Department of Transportation, “Integrating Travel Time Reliability into Planning and Management: Literature Search,” \$7,300, 9/1/07-8/31/08.

Midwest Regional University Transportation Center and Delaware Department of Transportation, “Asset management and Metropolitan Planning Agencies,” \$40,000, 9/1/06 – 8/31/07. (Subcontract from University of Illinois at Chicago).

Delaware Department of Transportation, “Asset Management as a Strategic Decision Making Tool in DelDOT,” \$50,000, 7/1/06-6/30/08.

Midwest Regional University Transportation Center, “Measuring the Benefits of Implementing Asset Management Systems and Tools,” \$39,290, 6/15/05-12/31/06.

Federal Highway Administration, “Systemwide Information for Transportation Assessment and Research,” \$497,306, July 1, 2004 – June 30, 2007.

Robert Wood Johnson Foundation, Active Living Program, “Environmental Correlates of Adherence to Home-based Walking in African-American Women,” (PI- JoEllen Wilbur, Nursing) \$150,000, 5/1/05-4/31/06.

Midwest Regional University Transportation Center, “Business and Site Specific Trip Generation Methodology for Truck Trips,” (PI – Kazuya Kawamura), \$99,818, June 1, 2004 – May 30, 2005.

Midwest Regional University Transportation Center (pooled fund study), “Upper Midwest Freight Corridor Study,” \$100,000, September 1, 2003 – October 15, 2004.

Metra, “Visualizing Metra,” \$115,000, September 1, 2003 – August 31, 2005.

American Association of State Highway and Transportation Officials, “Technology Transfer for Asset Management in Transportation,” \$85,000, September 1, 2002 – August 31, 2003. Continuation, \$90,000, September 5, 2003 – February 28, 2005.

Batelle National Institute, “Review of HERS”, \$5,000, January 1, 2003 – December 31, 2004.

National Institute for Occupational Safety and Health, “Collisions Warning Systems for Trucks,” \$10,000 (with Vonu Thakuria and Jung Taek Lee) June 30, 2002- September 30, 2002.

Chicago Transit Authority, “Making the Chicago Transit Authority more Competitive in the 21st Century,” \$980,000, January 1, 2001 – April 2005. Subcontract to Massachusetts Institute of Technology, \$270,000 May 1, 2005 0- April 31, 2006. Subcontract to Chicago Transit Partners.



Illinois Transportation Research Center, "Evaluation of Bridge Inspection and Assessment in Illinois," \$180,000, August 15, 2001 – August 14, 2003.

Midwest Regional University Transportation Center, "Best Practices for linking strategic planning to resource allocation and implementation decisions using elements of a transportation asset management program," \$79,069.69, February 1, 2002-December 31, 2002. (Co-principal investigator with Anthony Pagano).

Great Cities University Consortium, "Maintenance and Management of Transit Infrastructure," \$10,000, February 2002-January 2003. Subcontract to University of Alabama, Birmingham.

National Science Foundation, "Workshop to Develop a Basic Research Agenda for Surface Transportation," \$100,000, September 1, 2000 to June 30, 2001.

National Science Foundation, Subcontract to Carnegie Mellon University, "Knowledge Discovery and Data Mining in Civil Infrastructure," \$41,275, February 1, 2001 to January 31, 2004.

Illinois Department of Transportation, "Metropolitan Transportation Support Initiative (METSI)," \$500,000, July 1, 2001 to June 30, 2002.

Midwest Regional University Transportation Center, "Evaluation of Near-Transportation Private Sector Asset Management Practices," \$57,808.97, July 1, 2001 to March 31, 2002

US EPA, "Synergistic Innovations: Job Training for Remediation and Reclamation of Brownfield and Abandoned Mine Land Challenges," October, 2000, 2 years, Principal Investigator, \$100,000.

FTA/ Pennsylvania Department of Transportation, "Development of Performance Specification for Side Collision Warning Systems for Transit Buses," April, 1999, 3 years, Charles E. Thorpe Principal Investigator, funded.

Heinz Endowments, "Workshop for Hazelwood," \$20,000, 12 months, January, 1999.

US TDA, "Training Workshops," 2 years, \$220,000, March, 1999.

Braun Intertec Visiting Professor, University of Minnesota, August 1999-June 2000, \$11,000.

National Institute for Environmental Renewal, "Development of a ROI Tool for Land Reuse" 11 months, \$107,745, August 1998. "Beta Testing - A Framework for an ROI Model for Cooperative Land Reuse," "Principal Investigator: Sue McNeil, 11 months, \$90,000 extension pending.

Environmental Industries Association, "Cost Benefit Analysis of Automation of Waste Hauling Equipment," \$79,187, 8 months, September 1, 1998 - April 30, 1999.

Enterprise Community, "EC-RISES – A Regional Brownfield Portfolio", \$130,000, 18 months, July 1998.

Brownfield Development: The Implications for Urban Infrastructure, National Science Foundation, Co Principal Investigator with Haris Koutsopoulos, James Garrett, Joel Tarr, Mitchell Small, and Paul Fischbeck, \$900,000, January 1, 1996, 3 years.

An International Supplement to NSF Project # 9526029, National Science Foundation, Principal Investigator, \$13,880, 12 months, January 1998.

An REU Supplement to NSF Project # 9526029, National Science Foundation, Principal Investigator, \$9,625, June 1, 1996, 6 months; \$8,806, June 1, 1997, 3 months; \$9,952, May 1, 1998, 8 months.

Integrating Science, Technology and Management in Global Civil Infrastructure Systems: A Proposal Innovative Doctoral Program, Co Principal Investigator with Haris Koutsopoulos and Sunil Saigal, National Science Foundation, \$1,048,960, August 31, 1995, 5 years, funded.

Programs to support women in science and engineering, undergraduate scholarships and a graduate fellowship, Pennsylvania Space Grant Consortium, Penn State, February 1, 1995 - January 31, 1999, \$47,500.

Societal and Institutional Issues for Automated Highways, National Automated Highway System Consortium, Co-Principal Investigator with Haris Koutsopoulos, \$262,854, June 1, 1995, 31 months, funded.

Carnegie Mellon University, "The Brownfields Center," \$50,000, March 1997, 12 months, \$50,000, April 1998, 12 months.

Develop and Conduct a Seminar on Infrastructure Asset Management, Principal Investigator, Federal Highway Administration, \$30,000, May 1, 1995, 27 months, funded. Supplement \$12,127, to December, 1996, funded.

A Methodology for Determining the Reliability of Navigation Structures, Principal Investigator, US Army Corps of Engineers, \$24,999, October 1, 1995, 1 year, funded.

Video Inspection Technology Development, Principal Investigator, US Army Construction Engineering Research Laboratory, \$23,500, April 1994, 10 months (funded.)

Neural Networks for Condition Assessment and Decision Making in Bridge Management Systems, Co-Principal Investigator with James Garrett, Federal Highway Administration, August, 1993, 1 year, 6 months (funded.)

Cost Benefit Analysis of Bridge Degradation, National Park Service, August 1, 1993 - January 31, 1994, \$50,000.

Construction Engineering Research Laboratory, May 1, 1992 - April 30, 1993, \$3,450, May 1, 1993 - April 30, 1994, \$4,140.

Buddy Program, Grant for Pennsylvania Space Grant Consortium, \$3,000.

BUILDER: Automating Condition Assessment Using Video, Construction Engineering Research Laboratory, September 27, 1991 - December 16, 1991, \$9,974.

Exploration of Ground Penetrating Radar and Sonar for Tie Condition Assessment, CSX Transportation, June 1, 1991 - August 31, 1992, \$92,000.

Traffic Mitigation Study for Fort Pitt Bridge and Tunnel Rehabilitation, Pennsylvania Department of Transportation through GAI Consultants, September 1, 1991 - February 28, 1992, \$44,304, co-principal investigator with Chris Hendrickson.

Design of Computer Based Facilities Management System, Duquesne Light Company, November 1, 1990 - October 31, 1991, \$84,000, co-principal investigator with Chris Hendrickson.

Investigation of a Pavement Crack-Filling Robot, Strategic Highway Research Program, Phase I, June 1, 1989 - May 31, 1990, \$79,610, Phase II, June 1, 1990 - September 30, 1991, \$100,000 (including support from Caltrans), co-principal investigator with Chris Hendrickson.

The Development of Analytic Methods and Evaluation of New Technologies for Infrastructure Management, National Science Foundation, Presidential Young Investigator, \$312,500, June 1, 1987 - May 31, 1992, Principal Investigator.

Preliminary Design of a System for Automated Track Inspection, Burlington Northern Railroad, \$30,000, January 1, 1989 - December 31, 1989, Principal Investigator.

The Development of Analytic Techniques for More Effective Rail Scheduling, Burlington Northern Railroad, January 1987 - December 1988, Carl Martland Principal Investigator.

The Role of Uncertainty in the Management of Infrastructure Facilities, Army Research Office, \$68,533, January 1987 - January 1988, Principal Investigator.

Applications of Knowledge based Expert Systems to Transportation, Center for Transportation Studies, January 1987 - January 1988, Co-Principal Investigator with Carl D. Martland.

The Development of Transportation Strategies for High Growth Corridors, Massachusetts Department of Public Works, \$148,073, October 1986 - September 1987, Co-Principal Investigator with Thomas Humphrey and Ralph Gakenheimer.

Management System for Repair, Evaluation, Maintenance and Rehabilitation of Locks on the Inland Waterways, Construction Research Laboratory, US Army Corps of Engineers, June 1986 - September 1986, Michael Markow Principal Investigator.

Implementation of Case Studies and Problem Sets in Statistical Applications to Civil Engineering, Athena DEC Resource Allocation Committee, \$17,232, January 1, 1986 - December 31, 1986, Principal Investigator.

Development of Analytical Methods for Impact Fee Assessment, Sloan Foundation, \$45,000, September 1, 1985 - August 31, 1986, Principal Investigator.

## **Professional Activities**

*Seminars, Talks, and other Presentations*

### Technical

- “Educating Engineers as Stewards of our Physical Infrastructure,” Invited presentation, University of Delaware’s Interdisciplinary Science Learning Laboratories speaker series, Discover Delaware – Roots Rifts Reconciliation, October 2015.

- “Resilience, Performance Measurement and Asset Management: Connecting the Concepts,” Keynote, Australian Transportation Research Forum, Sydney, October, 2015.
- “Using Big Data to Support Asset Management Decision Making,” (presented by Kevin Heaslip, also with Jie Jong), Transportation Research Board 5th International Transportation Systems Performance Measurement and Data Conference, Denver, Colorado, June 2015.
- “Understanding the Relationships between Household Decisions and Infrastructure Investment in Disaster Recovery: Cases from Superstorm Sandy, An Update” (With Alex Greer and Joseph Trainor) CAIT at UD Brown Bag, December 2014.
- “An Outsiders View: Two Decades of Proactive Asset Management in Michigan,” Keynote, Michigan Asset Management Conference, Bay City, MI, May, 2014.
- “Understanding the Relationships between Household Decisions and Infrastructure Investment in Disaster Recovery: Cases from Superstorm Sandy” (With Alex Greer and Joseph Trainor) CAIT at UD Brown Bag, March, 2014.
- “Big Data: Opportunities and Challenges in Asset Management” (With Jie Gong and Farbod Farzan, Rutgers University) CAIT at UD Brown Bag, October 2013.
- “Updating the Transportation Performance Index and Better State-of-Good-Repair Indicators” (With Farzana Atique and Ryan Burke) CAIT at UD Brown Bag, October 2013.
- “Highway and Transportation Resilience,” Infrastructure and Community Resilience Symposium, University of Maryland, April 2013.
- “Demonstrating the Benefits of Asset Management Implementation,” State of Good Repair Summit, Rutgers University, March 2013.
- “Measuring Transportation Infrastructure Performance: Insights and Challenges” University Transportation Research Center, New York, NY, December 2012.
- “Learning from Traffic Data Collected Before, During and After a Hurricane” UD-UTC Brown Bag (with Erik Archibald), October 2012.
- “Why Measure Transportation Infrastructure Performance,” RITA Transportation Innovation Series, Washington DC, October 2012.
- “Why Measure Transportation Infrastructure Performance,” Department of Civil and Natural Resources Engineering, University of Canterbury, May 2012
- “Learning from Real-Time Traffic Data: Before and After Disasters,” Institute of Professional Engineers New Zealand, Christchurch Transportation Group, May 2012
- “Learning from Real-Time Traffic Data: Before and After Disasters,” Department of Civil Engineering, University of Auckland, April 2012
- “Understanding the Impacts of Climate Change on the I-95 Corridor in Maryland and Delaware,” UD-UTC Brown Bag (with David Ames), September 2011.
- “Using Asset Management to Improve Transportation Infrastructure Systems’ Performance,” Invited Plenary Presentation, US-Korea Summit on Science & Engineering, Park City, Utah, June 2011.
- “Why Measure Transportation Infrastructure Performance,” Morgan State University, School of Engineering Lecture Series, February 24, 2011.
- “The State of California’s Infrastructure: the Challenges of Rebuilding America,” Transportation - Land Use - Environment Connection,” Invited Plenary Presentation, UCLA, Lake Arrowhead, October 17-19, 2010,
- “Introducing Asset Management: Experiences at Delaware Department of Transportation,” 8<sup>th</sup> National Conference on Asset Management, Portland, OR, October 2009.
- “Summary of 2006 Asset Management Peer Exchange,” Peer Exchange Asset Management: Laying the Groundwork for Safety Analysis Tools, Portland Oregon, October 2009.
- “Integrating Adaptation to Climate Change with Asset Management,” IBTTA and ITS America Joint Conference on Sustainability, St Louis, IBTTA and ITS America Joint Conference on Sustainability, St Louis, October 2009.

- “Infrastructure Security and Preparedness” UD-UTC Brown Bag, (with Rusty Lee, Joe Trainor, Rachel Davidson, Tricia Wachtendorf, Laura Black, Gabriella Wasileski, Charlie Mitchell, and Sarah Dalton),
- September, 2009.
- “Translating Infrastructure Management Research into Academic Contributions and Practical Solutions” Annual Interuniversity Symposium on Infrastructure Management (AISIM5), Iowa City, IA, June 25, 2009
- “Climate Change Adaptation Research Programs and Funding” Joint Meeting of The World Road Association’s (PIARC) Technical Committee on Preserving the Environment and TRB’s Special Task on Climate Change and Energy, Washington, DC, January 2009.
- “Climate Change Adaptation Research Programs and Funding” Transportation Research Board Executive Committee, Washington, DC, January 2009.
- "Resiliency of Transportation Corridors" UD-UTC Brown Bag, (with Silvana Croope), November 2008.
- “Resiliency of Transportation Corridors: Connecting Transportation Planning, Infrastructure Renewal and Disaster Research” Institute for Transport and Communications (SIKA), Mid Sweden University, November 2008.
- “Past, Present and Future: Building an Interdisciplinary Disaster Research Center on a Half-Century of Social Science Disaster Research” Crisis and Risk in a Heterogeneous Society (KRIHS) , Mid Sweden University, November 2008.
- “DRC – Past, Present and Future: Building an Interdisciplinary Center on a Half-Century of Social Science Disaster Research” Center for Biosecurity of UPMC, (with Joanne Nigg), July 2008.
- “Integrating Mitigation Decisions into Asset Management Systems,” Panel of the Role of Engineering Science in Mitigating Large-Scale Hazards, Hazards Workshop, Boulder, CO, July 2008
- “Overview of Transportation Asset Management Principles and How They Might be Applied to Information Assets,” Aligning Data to Support Transportation Decisions Peer Exchange, Transportation Research Board, May 2008.
- “Agent-Based Models as an Insight into Managing Pavement Assets,” Georgia Institute of Technology, February, 2008.
- “TRB Initiatives in Asset Management and Economic Analysis,” presented at the 7th National Asset Management Conference, New Orleans, LA, November 2007
- “Overview of Transportation Asset Management Principles and How They Might be Applied to Information Assets,” presented at the 7th National Asset Management Conference, New Orleans, LA, November 2007
- "Demonstrating the Benefits of Asset Management Implementation in Vermont," Paper presented at the 7th National Asset Management Conference, New Orleans, LA, November 2007, with Daisuke Mizusawa, Barte Selle and Roger Lyons Sully.
- “Priorities for Transportation Asset Management,” presented at the 7th National Asset Management Conference, New Orleans, LA, November 2007
- “Making the Connections Between Asset Management and Bridge Management”, U.S.-Europe Workshop on Bridge Management Challenges in the United States and Europe, Zurich, Switzerland, September, 2007.
- “Transportation Engineers as Stewards of Our Infrastructure Assets”, International Conference on Transport Engineering, Chengdu, China, Invited keynote, July 2007.
- “Managing the Transportation Systems of the Future”, 70th Birthday Symposium for Buz Paaswell, City College of New York, May, 2007.
- “Asset Management” Louisiana Transportation Engineering Conference, Baton Rouge, LA, February 2007.

- “Transportation Engineers as Stewards of Our Infrastructure Assets” presentation to the MASITE Meeting, University of Delaware, November 2006.
- “Road Management Practice and Issues,” Transport Learning Week, World Bank, Washington DC, April 2006.
- “Using Complex Systems Models to Provide Insights into Infrastructure Management “ City College of New York, March, 2006
- “Modeling Interdependencies in Infrastructure Management Using Complex Systems,” Department of Civil Engineering, University of Vermont, November 2005.
- “Information and Tools to Support Transportation Asset Management” Department of Civil Engineering, Purdue University, September 2004.
- “Infrastructure Management – Supporting the Process with Pictures and Numbers”, presentation to the ASCE Student Chapter, Lafayette College, April, 2004.
- “Information and Tools to Support Transportation Asset Management” Seminar, Department of Civil Engineering, Rensselaer Polytechnic Institute, April, 2004.
- “Transportation Asset Management and Information Technology Over the Last Decade,” Distinguished Lecture Series, Department of Civil Engineering, University of Texas at Austin, March, 2004
- “Brownfields in Chicago,” Presentation to visitors from Trier University, Germany, October, 2002.
- “Brownfields: Asset or Liability,” Department of Civil Engineering Seminar, University of Delaware, April, 2002.
- “Brownfields: Asset or Liability,” ASCE Student Chapter, Lafayette College, Easton PA, February 2002.
- “How Local Governments Are Responding to Government Accounting Standards Board Statement No. 34 (GASB 34),” Panel Discussion, Transportation Research Board Annual Meeting, Washington DC, January 2002.
- “Management System Integration for Asset Management,” Illinois Institute of Technology, November, 2001.
- “Asset Management Workshop,” Infrastructure Assistance Coordinating Council, Wenatchee, Washington, October, 2001.
- “An Interdisciplinary Approach to Exploring Alternatives for Brownfield Development: Three Case Studies,” Geography Colloquium, University of Wisconsin, Milwaukee, October 2001.
- “Setting the Transportation Asset Management Research Agenda,” Facilitator, Asset Management Workshop, Madison, Wisconsin, September 23, 2001
- “Getting Beyond the Buzzword: Closing Session of the Workshop on Asset Management” Panelist, Asset Management Workshop, Madison, Wisconsin, September 25, 2001.
- “Management System Integration for Asset Management, University of California at Berkeley, January, 2001.
- “GASB 34 and Asset Management,” Presentation to the Local Roads Subcommittee of the Pavement Management Committee, Transportation Research Board, Washington DC, January, 2001.
- “Management System Integration for Asset Management, Urban Transportation Center Seminar, University of Illinois at Chicago, December, 2000.
- “Management System Integration for Asset Management, Northwestern University, November, 2000.
- “What is GASB 34? How will it affect us?” Presentation to the Northwest Pavement Management Association Pavement Management Conference, Portland, Oregon, October, 2000.
- “Management Systems Integration,” Presentation to the Northwest Pavement Management Association Pavement Management Conference, Portland, Oregon, October, 2000.
- “Asset Management,” Michigan County Roads Association, Lansing, March, 2000.
- "Brownfield Development: The Implications for Urban Infrastructure," Department of Civil Engineering, University of Minnesota, April, 2000.

- "Asset Management: Technical Issues," Center for Transportation Research and Education, Iowa State University, January, 2000.
- "Report on AASHTO's Peer Exchange Workshop," Presentation at the session on Asset Management, Transportation Research Board Annual Meeting, Washington DC, January, 2000.
- "Asset Management," Presentation to the Pavement Management Committee, Transportation Research Board Annual Meeting, Washington DC, January, 2000.
- "Asset Management: A Tool for Managing Highway Assets," University of Wisconsin, Madison, December, 1999.
- "Asset Management as a Tool for Managing Highway Assets," Theme Lecture, Sixth Cycle Celebration of His Majesty the King of Thailand and 40th Anniversary of the Asian Institute of Technology, November, 1999.
- Brownfields and Urban Infrastructure, Guest Lecture, Asian Institute of Technology, November, 1999.
- "Collection Systems- A US - Australian Perspective," Minnesota SWANA, October, 1999.
- Brownfields and Infrastructure, Guest Lecture, Carnegie Mellon, October, 1999.
- Efficient Transportation Infrastructure Policy, Guest Lecture Transportation Economics, University of Minnesota, October, 1999.
- Engineering Economics, Guest Lectures, Economics and Project Management, University of Minnesota, October, 1999.
- Facilitator, AASHTO Transportation Executive Institute, "Successes and Concerns," University of Virginia, September 29, 1999.
- "What are Brownfields?" Susquehanna County, Department of Economic Development, July 6, 1999.
- "Bridge Management Executive Overview," Louisiana Department of Transportation, April, 1999.
- "Lower Vitkovice: Are There Answers?" Civil and Environmental Engineering Seminar, Carnegie Mellon University, October 8, 1998.
- "Brownfield Development: Lessons from Pittsburgh", Department of Civil and Environmental Engineering, University of Virginia, October, 1998
- Facilitator, AASHTO Transportation Executive Institute, "Successes and Concerns," University of Virginia, September 30, 1998.
- "Civil Infrastructure Systems," Civil and Environmental Engineering State-of-the-Art Workshop for Faculty from Mexico, July 1998.
- "Engineering Brownfield Development: Examples form Pittsburgh," *Manufactured Sites*, Graduate School of Design, Harvard University, Cambridge, April 1998.
- "Living with Development: Maintenance and Replacement," Utah League of Cities and Towns, Spring Meeting, St George, April 1998.
- "Industrial Site Reuse" Duquesne University, January, 1998
- "Automated Highways," Presentation University of Puerto Rico, November, 1997.
- "Parallels Between Public and Private Sectors," Asset Management Workshop, RPI, October, 1997.
- "Defining Asset Management" International Road Federation Executive Conference on Road Asset Management, Washington, DC, October, 1997.
- Poster Presentation, NSF Graduate Research Traineeship Grantees Meeting, Washington DC, October, 1997.
- "Brownfield Development: The Implications for Urban Infrastructure," NSF Grantees Meeting, July/August, 1997
- "Automated Highways," Guest Lecture, 12-100, Carnegie Mellon University, September, 1997.
- Keynote - "Asset Management: Public and Private Perspectives" and "Improving Data Collection for Infrastructure Management," Conference on "Rehabilitation and Development of Civil Engineering Infrastructure Systems Beirut, 1997

- "Interpretation of Ground Penetrating Radar Using Artificial Neural Networks," Second International Conference: Imaging Techniques and Applications in Civil Engineering, Davos, May, 1997
- "Asset Management: Parallels Between Railroad and Highways," TRB, January, 1997
- "Infrastructure Performance: An Engineers Approach with Interdisciplinary Influences," Panel, Association for Public Works Management, November, 1996.
- "Brownfields Development: The Implications for Urban Infrastructure," Presentation University of Puerto Rico, April, 1996.
- Penn DOT District 1 - Design Meeting - "Automated Highways," - June, 1996.
- "Brownfields Development: The Implications for Urban Infrastructure," Presentation to Polish/Estonian Pollution Prevention Study Tour, August, 1996.
- "Brownfields" Presentation to Society of Women Engineers, Region G Conference, Pittsburgh, November, 1996.
- University of Texas at Austin, "Infrastructure Management," November, 1996.
- Neural Network Interpretation of Sensor Data, University of Puerto Rico, April, 1994.
- Infrastructure Management and Technology, Presentation to visiting Russian Scientists, October, 1994.
- "Overview of ASCE Infrastructure Management Conference," Pacific Rim TransTech, Seattle, July, 1993.
- "The Role of Management Systems in Programming and Planning: An Academic Perspective," Pacific Rim TransTech, Seattle, July, 1993.
- "Exploration of Ground Penetrating Radar for Railroad Tie Maintenance Scheduling," Infrastructure Management: New Challenges, New Methods, ASCE, Denver, June 1993.
- "Computer Based Facilities Management Systems for Buildings and Infrastructure," Industrial Affiliates Program, Carnegie Mellon University, May 1993.
- "The Role of Bicycle Commuting," University of Puerto Rico, Center for Infrastructure Research, April, 1993.
- "New Technologies for Rail Condition Assessment," Department of Civil Engineering, Purdue University, March, 1993.
- "Tie Condition Assessment," AREA Committee 2, Jacksonville, Florida, October, 1992.
- "Management Systems," Tri-Regional Engineers Conference, FHWA - Shaping the Future, San Diego, October, 1992.
- "Overview of Infrastructure management Systems," FHWA Transportation Management Systems Conference for Colleges and Universities, Washington DC, August 13 - 14, 1992.
- "New Technologies: Sensors and Robotics for Infrastructure Condition Assessment," University of Puerto Rico, Center for Infrastructure Research, April, 1992.
- "Applications of Advance Technology: Infrastructure Management, Condition Assessment and Image Processing," Transportation Research Board Annual Meeting, Washington DC, January, 1992.
- "Automated Pavement Crack Sealing: Prototype Design and Evaluation," Construction Engineering Research Laboratory, Champaign, IL, November, 1991.
- "Tie Condition Assessment Using Ground Penetrating Radar," Railway Tie Association, Transportation Research Board Workshop, Milwaukee, WI, October, 1991.
- "New Technologies, New Directions," AREA Committee 2, Jacksonville, Florida, October, 1990.
- "Modeling Uncertainty in Infrastructure Management," Brown Bag Seminar Series, Department of City and Regional Planning, Ohio State University, May, 1990.
- "Factor Analysis Methods for Calculating Pavement Condition Indices from Damage Data," ORSA TIMS Meeting, Las Vegas, May, 1990, (with Rohit Ramaswamy).
- "Criteria for Evaluating Pavement Imaging Systems," presented at the Transportation Research Board Annual Meeting, Washington, D.C., January, 1990, (with Carl Haas).



- "Data Acquisition Methodology for infrastructure Condition Assessment," ORSA TIMS Meeting, Vancouver, B.C., May, 1989, (with Rohit Ramaswamy, and Frannie Humplick).
- "Evaluation of Pavement Surface Distress Data Acquisition Using Optical Methods," presented at the First International Conference on the Applications of Advanced Technologies to Transportation Engineering, San Diego, 1989, (with Frannie Humplick).
- "Uncertainty in the Management of Infrastructure," ORSA TIMS Meeting, Washington D.C., April, 1988, (with Rohit Ramaswamy, and Frannie Humplick).
- "The Role of Uncertainty in the Management of Infrastructure," US Army Cold Regions Research Laboratory, Hanover, NH, January, 1988.
- "The Role of Uncertainty in the Management of Infrastructure," US Army Construction Engineering Research Laboratory, Champaign, IL, September, 1987.
- "Applications of Expert Systems in Transportation," Department of Civil Engineering, University of Adelaide, Australia, and Department of Transport Engineering, School of Civil Engineering, University of New South Wales, July, 1987.
- "Pavement Maintenance and Rehabilitation Decisions Using an Expert System," Department of Civil engineering, University of Newcastle, Australia, July, 1987.
- "Traffic Impacts Analysis," Lincoln Institute of Land Policy, Cambridge, MA, April, 1987.
- "Impact Fee Assessment Using Highway Cost Allocation Techniques," Transportation Research Board International Conference of the Role of Public Private Partnerships in the Provision of Transportation, Baltimore, July, 1986, (with Chris Hendrickson and Thomas Rossi).
- "A Review of Tools for Analyzing Site Traffic Impacts," presented at the ITE National Conference on Site Development and Transportation Impacts held in Orlando, March, 1986, (with Simon Lewis, and Gary Davies).
- "Estimation of Matrix Entries with Constrained Least Squares Regression," presented at the 1982 North American Regional Science Association Meeting, Pittsburgh, PA, November, 1982, (with Chris Hendrickson).
- "An Illustration of Equitable Cost Based Turnpike Toll Design," presented at the Transportation Research Board Annual Meeting, Washington, D.C., January, 1982, (with Chris Hendrickson).

#### Outreach and Non-Technical

- "How Other Nations Conduct Their Research," CUTC Summer Meeting, New Brunswick, June 2015.
- "Across the Engineering/Social Science Divide", DRC 50<sup>th</sup> Anniversary, May 2014.
- "Transportation at UD", Contemporary Issues in Urban Affairs and Public Policy, September 2011
- "Transportation Infrastructure: Why you should care!" UD College of Engineering Lunch and Learn, April, 2011.
- "Transportation Performance Index", US Chamber of Commerce, Washington DC, September, 2010
- "Report from 2009 RITA Spotlight Conference: Research Agenda for Transportation Infrastructure Preservation and Renewal," Council of University Transportation Centers, Summer Meeting, College Station, June 2010.
- "2008 Committee Strategic Plan Review," Midyear Committee of the TRB Asset Management Committee, August, 2010.
- "Green Streets and Sustainable Transportation," Panelist, 2010 Critical Issues Seminar, Philadelphia, April 2010. Sponsored by The Engineers Club of Philadelphia, the American Society of Civil Engineers (ASCE) Philadelphia Section, the Younger Members Forum, and the Mid-Atlantic Section of the Institute of Transportation Engineers (MASITE)
- "Time Management," UD Women in Science and Engineering (WISE) Brown Bag Lunch Series, September, 2009.

- “Translating Infrastructure Management Research into Academic Contributions and Practical Solutions: A Dilemma” The Fifth Annual Inter-university Symposium on Infrastructure Management, Iowa City, June 19, 2009.
- “Interdisciplinary Research: Experiences, Pitfalls and Rewards,” UD Women in Science and Engineering (WISE) Brown Bag Lunch Series, October, 2008.
- “Preparing for an Academic Position” Civil Infrastructure Systems and Transportation Engineering Graduate Seminar, University of Delaware, October, 2008.
- “Preparing for an Academic Position” 4th Annual Inter-University Symposium on Infrastructure Management (AISIM) Austin, Texas, August, 2008.
- “Giving Presentations” REU students, Disaster Research Center, University of Delaware, June 2008.
- “Building and Financing Delaware’s Infrastructure,” Panel Presentation *Creating a Liveable Delaware: Pathways for Enhancing Prosperity and Quality of Life* University of Delaware, March, 2008.
- “Faculty Job Search,” Training Series, Disaster Research Center, University of Delaware, October 2007 (with Tricia Wachtendorf).
- “Interdisciplinary Research”, NSF REU Program, Disaster Research Center, University of Delaware, June 2007.
- “A Journey”, Women of Promise Dinner, University of Delaware, November, 2006.
- “Academic Careers,” Graduate Women in Engineering, University of Delaware, March 2006.
- “Interdisciplinary Research: Experiences, Pitfalls and Rewards,” Women and Minorities Engineering and Education (WEE) 06, National Science Foundation, March 2006.
- “Mentors, Mentees And Role Models,” College of Engineering, Undergraduate Women in Engineering and Mentors, Engineers Week, February, 2006.
- “Alternative Leadership Positions,” Women In Engineering Leadership Institute (WELI) Workshop, Cocoa Beach, April 2005
- “Urban Transportation Center”, Institute for Environmental Science and Policy, External Advisory Board Meeting, September 2004.
- “Bridges,” Take Our Daughters to Work Day, April, 1999.
- “Balancing,” Mosaic Women’s Conference, Carnegie Mellon, February, 1999.
- “Bridges,” Program for 3<sup>rd</sup> graders, The Ellis School, Pittsburgh, January, 1999.
- “Children: Sooner, Later, Never,” Graduate Women Gatherings, November 1998.
- “Planning a Course,” Preparing for a Faculty Career, November, 1998.
- “Balancing It All,” Soup and Substance, Carnegie Mellon University, September 1998.
- “Engineering,” Quaker Valley High School, October, 1998
- “Balancing It All,” NSF Engineering Education Scholars Workshop, July, 1996, 1997, 1998.
- “Balancing,” Women in Science, April 1998.
- “Bridges,” Take Our Daughters to Work Day, Carnegie Mellon, April 1998.
- “Bridges,” Workshop – SWE High School Day, October 1997.
- Mosaic, Conference for Women at CMU, January 1997.
- Women in Science and Technology, Winter Orientation - January, 1996
- “Balancing,” Dinner Speaker - Women in Technical Fields - March, 1996.
- Mock Lecture, Freshman Orientation, August 1996.
- Retreat for Women Graduate Students, “Classroom Climate” and Luncheon Speaker, October 1996.
- Bridging the Gender Gap, Lunch discussion facilitator, “Pre-College Programs,” October 1995.
- New Faculty Orientation, August 1995.
- Mock Lecture, Freshman Orientation, August 1995.
- Keynote, SWE High School Day, March 1995.
- “Environmental Engineering Workshop,” Johns Hopkins Center for Talented Youth, November 1994.

- Workshop Leader, “Getting Tenure”, Penn State Retreat for Women Faculty and Graduate Students, Pennsylvania Space Grant Consortium, October 1994.
- "Engineering Your Future - Civil Engineering," Workshop for 8<sup>th</sup> Graders, Carnegie Mellon University, July 1993, July 1994, July 1995, July 1996, July 1998, and July 1999. Workshop for 9<sup>th</sup> - 12<sup>th</sup> Graders, July 1994, July 1995, July 1996, July 1998 and July 1999.
- "Stress, Strain and Fatigue," Expanding Your Horizons, March, 1992, March 1993 and March 1994. Designed and Conducted workshop with Susan Finger for 9<sup>th</sup> - 12<sup>th</sup> graders.
- "Finding your Research Niche: Assuming Intellectual Autonomy," Retreat for Women in Science and Technology, Carnegie Mellon University, October, 1992.
- "Getting Funded," Retreat for Women in Science and Technology, Carnegie Mellon University, October, 1991.
- "Preparing for an Academic Job Search," "Playing the Conference Game," "The Advantages of an Academic Career," Graduate Student Luncheon Series, 1991 - 1992.
- "Four Steps to Avoiding Career Paranoia," Guest Speaker, Dinner for Women in CIT/MCS, Carnegie Mellon University, January, 1991.

#### Posters and Other Conference Presentations

- Lamprinakos, Renee, Rusty Lee and Sue McNeil, “A retrospective assessment of the travel impacts of infrastructure failure,” Poster, Australian Transportation Research Forum, Sydney, Australia, September 30 – October 2, 2015.
- Archibald, Erik and Sue McNeil, Considering Hazard Risk and Uncertainty for Infrastructure Decisions at the Project Level, Transportation Research Board Conference on Resilience, Extreme Events and Climate Change, Washington DC, September 16-18, 2015.
- Sanchez Gil, Juan Camilo and Sue McNeil, (2014). “Food Aid distribution during disaster response and short-term recovery: Enhancing performance of heterogeneous humanitarian structures.” Poster, Health and Humanitarian Logistics, 2014 Conference, Mexico City, June.
- Greer, Alex, Sue McNeil, Joseph Trainor, and Israt Jahan, Understanding the Relationships between Household Decisions and Infrastructure Investment in Disaster Recovery: Cases from Superstorm Sandy, Natural Hazards Workshop, Colorado, June 2014.
- Dehghani, Mohammad Saied and Gerardo W. Flintsch, Virginia Polytechnic Institute and State University; Sue McNeil, University of Delaware, “Impact of Disruption Uncertainty and Network Configuration on Roadway Vulnerability,” Poster presented at the Transportation Research Annual Meeting, Washington DC, January 2014.
- Michelle Oswald and Emily Liggett (Bucknell University); and Sue McNeil, "Climate Change Adaptation Practices to Support Sustainable Energy: Evaluating the Progress of Transportation Planning Agencies," 2012 UTC Spotlight Conference on Sustainable Energy and Transportation: Strategies, Research, Data, Washington DC, November 2012.
- Dehghanisani, Mohammad Saied and Gerardo W. Flintsch, Virginia Polytechnic Institute and State University; and Sue McNeil, University of Delaware, “Condition of Roadways and the Dynamics of Highway System Performance: An Assessment Framework,” 9th National Conference on Transportation Asset Management, San Diego, April, 2012.
- McNeil, Sue, Qiang Li, Michelle Oswald and Susanne Trimbath, “Measuring Transportation Infrastructure Performance for the United States,” 4th International Transportation Systems Performance Measurement Conference, Irvine, CA, May, 2011.
- Oswald, Michelle, and Sue McNeil, Adaptation to Climate Change: Engineering Sustainability into the Transportation Planning Process, Engineering Sustainability 2011: Innovation and the Triple Bottom Line, Pittsburgh, PA, April, 2011.
- Zenk, Shannon, JoEllen Wilbur, Edward Wang, Judith McDevitt, Sue McNeil, Richard Block, April Oh, and Nina Savar, Neighborhood Environment and African-American Women’s Adherence to a

Home-Based Walking Intervention, American Public Health Association Meeting, Washington DC, 2006.

- Zenk, Shannon, JoEllen Wilbur, Edward Wang, Judith McDevitt, Sue McNeil, Richard Block, April Oh, and Nina Savar, Does Neighborhood Crime Affect Adherence to a Walking Intervention in Midlife African-American Women? American Society for Criminology, Atlanta, November 2007.
- Zenk, Shannon, Ph.D., JoEllen Wilbur, Ph.D., Nina Savar, Ph.D., Edward Wang, Ph.D., Judith McDevitt, Ph.D., Sue McNeil, Ph.D., Environmental Correlates of Walking Adherence in African-American Women, 2007 Active Living Research Annual Conference, February 2007.

#### *Workshops and Panels Organized*

9th International Conference on Managing Pavement Assets, Workshop Organizer, Alexandria VA, May 2015.

Big Data for Transportation Infrastructure Management Workshop, CAIT, Rutgers, December 5, 2014

10th National Conference on Transportation Asset Management, “Introduction to Transportation Asset Management (TAM),” Miami, Florida, April 2014.

Planning Committee, UTC Spotlight Conference, Developing a Research Agenda for Infrastructure Preservation and Improvement, Washington DC, November 2009.

Planning Committee, 8<sup>th</sup> National Asset Management Conference, Portland Oregon, October 2009.

Workshop Committee, Board on Infrastructure and the Constructed Environment (BICE) – “Toward Sustainable Critical Infrastructure Systems: Framing the Challenges,” May 2008.

Conference Chair, International Conference on Transport Engineering, Chengdu, China, July 2007.

"Asset Management Peer Exchange" Using Past Practices to Shape the Future," FHWA/AASHTO, Scottsdale Arizona, December 1-3, 1999.

HERS vetting, Carnegie Mellon University, May 1999.L

“Lower Vitkovice: Are there Answers?” Workshop organized in collaboration with the Technical University of Ostrava and the City of Ostrava, June 1998.

“Automated Highways and Land Use,” Expert Panel, NAHSC and Carnegie Mellon University, August 1996.

Careers in Applied Science and Technology (CAST), summer, 1993, 1994.

#### *Government, Professional and Academic Committees*

- Transportation Research Board, NCHRP panel, “NCHRP 12-104 Evaluation of Element-Level Inspection Quality,” August 2014 – present.
- Expert Panel, “Data Driven Bridge Health Index,” FHWA, May 2014 – present.
- Learning Community Advisor, Executive Leadership in Academic Technology and Engineering (ELATE), 2013-2014, 2014-2015 and 2015-2016.
- Delaware Council on Transportation, Appointed by Governor Markell, October 2011 - present

- Connecticut Academy of Science, Study Committee, “*Benchmarking Connecticut’s Transportation Infrastructure Capital Program with Other States*,” July 2010 to June 2012
- Transportation Research Board, Committee on National Research Frameworks: Application to Transportation, (Chair,) November 2010 - present
- Transportation Research Board, NCHRP panel (Chair), “Quantifying the Costs and Risks of Delayed Maintenance,” July 2009 – present.
- Transportation Research Board, NCHRP panel, “Climate Change and the Highway System: Impacts and Adaptation Approaches” January 2010 to February 2014.
- Transportation Research Board, NCHRP panel, “Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure,” May 2009 to present.
- Transportation Research Board, NCHRP panel, “Asset Management Levels of Service for the Interstate,” August 2007 – December 2009
- Transportation Research Board, NCHRP panel, “Asset Management of the Interstate Highway Systems,” August 1, 2006 – July 31, 2008
- Transportation Research Board, SHRP II, Reliability Expert Task Group (Chair): Domestic Scans of Best Practices in Traffic Incident Weather, Work Zone and Special Event Management (FC001), August 23, 2006 – August 22, 2008.
- Connecticut Academy of Science, Study Committee, “Transportation Asset Management and Pavement Life-Cycle Cost Analysis Study,” November 2007 to January 2009.
- Corridors of Opportunity, Expert Panel, Shaler Township, Pittsburgh, PA, May 2007.
- Department of Civil and Environmental Engineering, University of California at Berkeley, Departmental review, October 2005.
- Scientific Advisory Committee, Center for Reducing Risks in Vulnerable Populations, UIC College of Nursing, 2004 - 2007
- Spatial Data and Information Science Planning Meeting, Transportation Research Board, September 2005.
- Peer Exchanges
  - Asset Management, Transportation Research Board, September 2004.
  - Spatial Information Technologies for Asset Management, Transportation Research Board, October 2005.
  - Asset Management, North Carolina DOT and Connecticut DOT, August 2007.
- 15-Year Review, University of California Institute for Transportation Studies, August 2004.
- Peer Review, Connecticut Transportation Institute, Storrs CT, July 2003
- Peer Exchange, District Department of Transportation, Washington DC, July 2003
- External Advisory Board, School of Civil and Environmental Engineering, Georgia Institute of Technology, member, 2002 – 2006.
- Finance Subcommittee Chair, CATS Intermodal Advisory Task Force, 2001 – present.
- Board on Infrastructure and the Constructed Environment, member, 2001- 2007.
- Transportation Research Board, NCHRP panel, “Tools for Asset Management,” August 2001 – December 2005.
- Panelist, White House Office of Science and Technology Policy and National Science Foundation, Critical Infrastructure Workshop, June 2001.
- Transportation Research Board, Committee to Review the National Transportation Science and Technology Strategy, December 1999- 2001.
- Transportation Research Board, NCHRP panel, “Asset Management Guide,” April 1999 – 2003.
- Transportation Research Board, Truck Size and Weight Study Review, Committee Member, September 1998 – 2002.
- Invited Attendee, Urban Forum, National Science Foundation and American University, Washington DC, March 1998.

- Invited Attendee, Conference on Railroad Freight Transportation Research Needs, Transportation Research Board, Washington DC, July 1993.
- Faculty Fellow, Transportation Leadership Development Conference, Eno Foundation, Washington DC, May 1993
- Proposal Reviewer, Western Pennsylvania Advanced Technology Center, 1988 - 1992.
- Proposal Reviewer, National Science Foundation, 1986 - present.
- Panel Reviews, National Science Foundation, 1991 - present
- Southwestern Pennsylvania Regional Planning Commission, Bicycle and Pedestrian Advisory Group, 1995 - 1996.
- External Advisory Committee, Civil Engineering Infrastructure Research Center, University of Puerto Rico, 1992 - 1996.
- Executive Committee, America's Academic Future, National Science Foundation, Supported, 1992 - 1994.
- Attendee, Workshop on Infrastructure, National Science Foundation, Boston, 1985.

*Professional and Honorary Society Activities*

Registered Professional Engineer, New Jersey

*Professional Societies*

- Transportation Research Board
  - "Fourth Conference on Performance Management," Co-Chair, Irvine, CA, May 2011
  - "Developing a Research Agenda for Transportation Infrastructure," Planning Team, Washington DC, November 2009
  - "8th National Conference on Transportation Asset Management Putting the Asset Management Pieces Together" – Program Committee, Portland Oregon, October, 2009.
  - Asset Management Committee – Chair, 2004- 2010; Emeritus Member 2010.
  - Asset Management Task Force – Chair Data Integration Task Force, 2001-2003
  - Executive Committee – Member, 2004-2007
  - Committee on Conduct of Research - Member, Session organizer, Transportation Annual Meeting, 2001.
  - Vehicle Automation Task Committee - Member, Host, Summer Meeting, July 1998.
  - Vehicle Highway Automation Committee– Member, February 1,2001 to March, 2010.
  - Asset Management Task Committee - Member.
  - Railway Maintenance Committee - Session organizer, Transportation Research Board Annual Meeting, Washington DC, January 1993, January, 1996/1997, January 1999.
  - Theme leader, 5<sup>th</sup> International Conference on Managing Pavements, Seattle, 2001.
- INFORMS
- American Society of Civil Engineers
  - Infrastructure Report Card – Delaware Section, Committee member, 2007
  - Conference Chair, "Applications of Advance Technology in Transportation," Chicago, August, 2006
  - Infrastructure Systems Committee – 2003- present
  - Track Chair, "Infrastructure Condition Assessment: Art, Science and Practice", Boston, August, 1997
  - Urban Transportation Division, Facilities Management Technical Committee, Chairman, October 1988 - October 1993, Control Group, 1993 - present.
  - Steering committee and program chair, Infrastructure Management: New Challenges, New Methods, Denver, June 1993.

- Symposium organizer, ASCE National Convention, Orlando, October, 1991
- Session organizer, First International Conference on Applications of Advanced Technology to Transportation, San Diego, February 1989.
- Institute of Transportation Engineers
  - Impact Fee Committee Member, 1987 - 1990
- World Conference on Transportation Research
  - Scientific Committee, 1992 – 2002.
  - Session organizer, World Conference on Transportation Research, Yokohama Japan, July 1989
  - Session organizer, World Conference of Transportation Research, Lyon, France, June, 1992.
  - Prize Committee, Sydney, 1995, Antwerp, 1998
- Other
  - Steering Committee Member – 9<sup>th</sup> International Conference on Managing Pavement Assets, Virginia, 2015.
  - Theme chair – 6<sup>th</sup> International Conference on Managing Pavements, Brisbane Australia, October, 2004.
  - Theme chair – 5<sup>th</sup> International Conference on Managing Pavements, Seattle, August, 2002
  - Organizing Committee – Engineering Foundation Conference “Tackling the Engineering Manpower Shortage,” Mt Tremblant, July 1998.
  - Conference Chair – Engineering Foundation Conference, Applications of Imaging in Civil Engineering, Davos, 1997.
  - Session organizer, Management Systems Track, Pacific Rim, Seattle, July 1993.
  - Track Chair – Engineering Foundation Conference, Digital Imaging, Hawaii, 1992.
  - Council of University Transportation Centers – Student Awards Committee – 2009-2011.

#### *Editorial Roles*

- Journal of Infrastructure Systems, Associate Editor– 1994- present; Editor-in-Chief – 2010-present
- Public Works Management and Policy, Editorial Board (2006-present)
- Past Roles:
  - Editorial Board, Transportation Research C: Emerging Technologies
  - Editorial Advisory Board, Transport Policy
  - Editorial Board, International Journal of Transport Management (2002-2005)

#### *Paper Reviews*

- American Society of Engineering Education
- ASCE Journal of Computing in Civil Engineering
- ASCE Journal of Transportation Engineering
- ASCE Journal of Urban Planning and Development
- Automation in Construction
- Landscape and Urban Planning
- Miscellaneous Conferences (WCTR, AATT, ASCE Convention)
- Public Works Management & Policy
- Tenth International symposium on Transportation and Traffic Flow Theory.
- Transportation Letters
- Transportation Research
- Transportation Research Board
- Transportation Science

### *Books reviews*

- Transportation Science
- Transportation Research

### **Community Service**

- Member, Metropolitan Planning Commission Transportation Committee, 2002-2005
- Board Member, Chicagoland REDI, 2002- 2005
- Board Member, Conservation Consultants Incorporated, 1997 - 1999
- Chair, Ad Hoc Technology Planning Committee, The Ellis School, 1997.
- Girl Scout Cookie Manager, East End, Girl Scouts of Western Southwestern Pennsylvania, 1990 - 1999.
- Chair, Traffic and Transportation Task Force for the City of Pittsburgh for the Mon Valley Expressway, 1996 - 1998.

### **Awards**

- Distinguished Member, American Society of Civil Engineers, 2015.
- E.A. Trabant Award of Women's Equity, University of Delaware, as member of NSF ADVANCE project team, 2012.
- Erskine Fellow, University of Canterbury, 2012
- Harland Bartholomew Award, America Society of Civil Engineers, 2011.
- Carnegie Mellon University, Department of Civil and Environmental Engineering, Distinguished Alumnus Award, 2009
- College of Engineering, University of Delaware, Slocomb Excellence in Teaching Award, 2009
- "Best Presentation Awards" for the 4th Annual Interuniversity Symposium on Infrastructure Management named as "Sue McNeil Best Presentation Awards" 2008.
- University of Newcastle, Convocation Medal for Professional Excellence, 2008
- American Society for Engineering Education, Best PIC-I Paper, "Educating Students to Manage Civil Infrastructure Systems," with Adjo Amekudzi, Pannapa Herabat, and Kristen L. Sanford Bernhardt, 2000.
- Carnegie Mellon University, Benjamin Tear Teaching Award – 1994.
- American Society of Civil Engineers, Pittsburgh Section, Outstanding Civil Engineering Professor - 1992
- National Science Foundation, Presidential Young Investigator - 1987 - 1992
- American Association of University Women, Doctoral Dissertation Fellowship - 1982 - 1983

### **Department and Institute Committees, Other Assigned Duties**

#### *University of Delaware*

#### University Service

- Member, Delaware Environmental Institute (DENIN) Council of Fellows, 2009 – present
- Member, Task Force on Social Science Research Initiatives, 2009 – 2011
- Member, Council of Directors of Social and Policy Science Centers, 2009 -2011
- Member, Research Council, 2008- 2011
- Member, Commission on the Status of Women, 2005- 2010
  - Joint Commission Subcommittee, Fall 2009
- Member, Women in Science and Engineering, 2005-2010



- Chair, Search Committee, Director Disaster Research Center, 2006-2007
- Chair, Committee for Graduate Program in Disaster Studies and Management, 2006-2009

#### College Service

- Member, College Promotion and Tenure Committee, 2015-present
- Member, Common First Year Committee, 2005-2007
- Member, Strategic Planning Committee, 2008

#### Departmental Service

- Faculty Search Committee, 2012-2013, 2015-2016
- Ad Hoc Strategic Planning Committee, 2010-2011
- Undergraduate Committee, 2006-present
- Member, Faculty Search Committee, 2005-2006
- Member, Faculty Search Committee, 2006-2007

### *University of Illinois at Chicago*

#### University Service

- Member, UIC 2010, August 2003-2005
- Member, Campus Research Board – Natural Sciences and Engineering Subcommittee, Spring 2005.
- Member, Internal Steering Committee, Institute for Environmental Science and Policy, May 2002 – August 2005. Conference Planning Subcommittee – 2003.
- Member, Dean’s Search, Nominated, January 2001 to April 2002, selection of dean
- Member, CDC Directors Search, Nominated, October 2000 to April 2001, selection of director
- Member, Civil and Materials Engineering Faculty Search, Nominated, October 2000- May 2003, selection of transportation faculty member
- Member, GCI Institution, January 2001-March 2001, Selection of GCI scholars, 2001, Nominated.

#### College Service

- Member, Tenure and Promotion Committee, CUPPA, September 2001 – May, 2002.
- Executive Committee, elected, 2001-2003, as required by dean
- Policy Committee, appointed, 2001, with other unit heads sets direction

#### Civil and Materials Engineering Service

- Graduate Committee – August 2002 to December 2003.

#### UPP Service

- Chair, Transportation Specialization, Urban Planning and Policy, September 2002 – August 2003.
- Chair, Graduate Admissions, Urban Planning and Policy, September 2001 – May 2004
- Member, PhD Committee, Urban Planning and Policy, September 2001 – August 2005.
- UPP Advisory Committee elected, 2000/2001, duties as required by director.
- Ad Hoc Committee on Peer Evaluation of Teaching, February 2001 to May 2002, draft policy on peer teaching evaluation
- Paper Preparer, 2003/2004, preparation of P&T papers for Janet Smith.
- Paper Preparer, 2002/2003, preparation of P&T papers for Paul Metaxatos
- Paper Preparer, P&T Committee, nominated, 2000/2001, preparation of P&T papers for Vonu Thakuriah

### *Carnegie Mellon University*

- Electrical and Computer Engineering, Head Search Committee, 1999.
- Chair, University Diversity Committee, 1998
- Sexual Harassment Advisor, 1998 - 1999
- SURG Awards Selection Committee, Fall, 1994 - 1999
- Pennsylvania Space Grant Consortium Representative –1991 - 1999

- WISE Advisory Board, 1995 - 1999
- Chair, CIT Dean - Search Committee, Spring 1996.
- Faculty Affairs Committee, Faculty Senate - 1995 - 1997
- Conference Advisory Board for "Bridging the Gender Gaps" held at Carnegie Mellon University, October 1995.
- Department of Civil and Environmental Engineering, Department Head Search Committee, Fall, 1995
- University Committee on Special Faculty Appointments (Faculty Senate Appointment) - 1995 - 1997.
- University Research Council, Spring, 1994.
- CIT Tenure and Promotions Committee, 1994/5.
- Alumni Affairs Presidential Appointee (Institute), 1992 - 1993.
- Carnegie Scholars Selection Committee (Institute), 1992.
- Untenured Faculty Committee for Promotions and Reappointment (Institute), 1991 - 1993.
- Faculty Affairs Council Presidential Appointee - 1989 - 1990, and 1991 - 1992.
- Commencement Marshall CIT Masters (Institute), 1990 - 1999
- Chair, Faculty Search Committee, Computer Aided Engineering and Management (Dept), August, 1992 - April, 1993.
- Member, Faculty Search Committee, Computer Aided Engineering and Management (Dept), September, 1991 - May, 1992.
- Civil Engineering Strategic Planning Committee (Dept), 1991 - 1992.
- Member, Faculty Search Committee, Computer Aided Engineering (Dept), June, 1989 - May, 1991.
- Transportation Research Board Representative (University), January, 1989 - 1999
- Library Coordinator (Dept), September, 1988 - 1999
- Civil Engineering, Engineering Planning and Management, Graduate Student Admissions Coord. (Dept), January, 1988 - August, 1992.
- Civil Engineering Computer Committee (Dept), January, 1988 - October, 1991.
- Member Graduate Curriculum, Review Committee (Dept), January, 1988 - May, 1988.

*Massachusetts Institute of Technology.*

- Baker House, Freshman Advisor (Institute), September, 1987 - December, 1988.
- Engineering Systems and Computation Program Committee (Dept), Spring, 1986 - December, 1988.
- Athena DEC Resource Allocation Committee (Institute), January, 1986 - December, 1988.
- Technology Children's Center MIT Faculty Board Member (Institute), September, 1986 - December, 1988.
- Organized Informal Seminar Highway Related Research (Dept), January, 1986 - December, 1988.