# PETER S. LINDQUIST Department of Geography and Planning University of Toledo Toledo, Ohio 43606-3390 voice: (419) 530-4287 fax: (419) 530-7919 email: peter.lindquist@utoledo.edu

# **EMPLOYMENT HISTORY**

Department of Geography and Planning University of Toledo, Toledo, Ohio

September, 1988-June, 1990; September, 1996-July, 1999, Assistant Professor August, 1999-Present, Associate Professor

September, 2003-July, 2010, **Department Chair** October, 2008-Present, **Director**, *Spatially Integrated Social Science Ph.D. Program*. July, 2010-Present, **Director**, *Center for Geographic Information Science and Applied Geographics* (GISAG)

- <u>Teaching</u>: Geographic Information Science, Computer and Analytical Cartography, Transportation, Location Analysis, Quantitative Methods
- Research: Development of software tools in Computer Cartography, Geographic Information Systems, Location-Allocation Theory, Spatial Interaction and Accessibility; Freight Movements, Freight Modeling, Global Change in Local Places; Accessibility to Health Care
- <u>Service</u>: *M.A. Graduate Advisor*, Department of Geography and Planning, 1997-2003
  Proposed and implemented *GIS Certificate Program*, Department of Geography and Planning
  Authored proposal / chaired implementation committee: *Spatially Integrated Social Science Ph.D.*

## Department of Geography-Geology

Illinois State University, Normal, Illinois

August, 1990-May, 1996, Assistant Professor (awarded tenure, April, 1996)

- <u>Teaching</u>: Digital and Analytical Cartography, Transportation, Economic Geography, Urban Transportation Planning, Location Analysis, Quantitative Methods, Geographic Information Systems, Geographic Techniques.
- <u>Research</u>: Applications of GIS technology to transit operations and planning; development of computer software for location analysis, computer cartography and transportation planning; measurement of accessibility to health care using GIS, Geographic Techniques in the Curriculum
- Service: Upgraded Geography Computing Laboratory Facilities through NSF ILI Grant in 1995.

Center for Urban Transportation Studies College of Engineering and Applied Sciences University of Wisconsin-Milwaukee

June, 1985-July, 1988, Research Assistant

Responsibilities included software development and testing for research in travel demand modeling. Also participated in curriculum development for transit planning workshops. Position funded primarily by Urban Mass Transit Administration, U.S. Department of Transportation.

Department of Geography

University of Wisconsin-Milwaukee

September, 1983-May, 1985, Teaching Assistant

Assignment included responsibility for discussion sections of freshman course; partial teaching responsibility for Geography 200: "Perspectives on Geography"; and full teaching responsibility for Geography 525: Computer Cartography.

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# **EDUCATION**

<u>Doctor of Philosophy</u> (Geography) University of Wisconsin-Milwaukee May, 1988

Bachelor of Science (Magna Cum Laude) University of Wisconsin-Eau Claire Majors: Biology and Geography May, 1978 <u>Master of Science</u>, Landscape Architecture University of Wisconsin-Madison December, 1981

# SELECTED PUBLICATIONS: PAPERS, BOOK CHAPTERS, SOFTWARE AND RESEARCH REPORTS

- Eloff, J.J., O.A. Smirnov, and P.S. Lindquist. 2014. Transportation Infrastructure Usage and Household Welfare, *TRB 93rd Annual Meeting Proceedings*, January, 2014.
- Schafer, S.E., and P.S. Lindquist. 2014. Moving Toward the IT Highway: Linking Public and Private Investments in Intelligent Transportation Systems to Supply Chain Performance and Livability, *TRB 93rd Annual Meeting Proceedings*, January, 2014.
- Nilsson, I., O. Smirnov, and P. Lindquist (2014). Demand for Transportation Infrastructure and Strategic Interactions in Firm Location Choices. *Proceedings of the Center for Logistics, Trade and Transportation Symposium*, Gulfport, MS, February 2014.
- Eloff, J.J., O.A. Smirnov, and P.S. Lindquist. 2013. Transportation Infrastructure, Industrial Productivity and Return on Investment: A Spatial Spillover Approach, *Transportation Research Record* 2345(1):109-116.
- Schafer, S.E., and P.S. Lindquist. 2013. A Decision Support System for Smart Growth Innovation in the Urban Midwest: A GIS Connection between Brownfield Site Redevelopment and Transportation, *TRB 92nd Annual Meeting Proceedings*, January, 2013.
- Wang, Q., J.J. Eloff, and P.S. Lindquist. 2012. "PathWorld"-A new software approach to vehicle routing on large Networks, *TRB 92nd Annual Meeting Proceedings*, January, 2013.
- Dhar, S.K., and P.S. Lindquist. 2012. Data Enhancement and Standardization using AIS and GIS: A Public and Private Effort, *Journal of Map and Geography Libraries* 8(3):1-17.
- Lindquist, P.S., and S.E. Schafer. 2012. *Development of Methodology for Simulating Cargo Movements through Intermodal Connections in the Great Lakes Basin.* Final Report, U.S. Army Corps of Engineers Huntington District Navigation Planning Center
- Alam, B.M., J. Eckert, and P.S. Lindquist. 2012. A Reflection on the PhD Program in Spatially Integrated Social Science at the University of Toledo, *International Journal of Applied Geospatial Research* 3(2):72-77.
- Dhar, S.K., and P.S. Lindquist. 2010. A Dock Information System for the Great Lakes: Part 1, *Port Technology International*, 48:36-41.
- Dhar, S.K., S.E. Schafer, and P.S. Lindquist. 2011. A Dock Information System for the Great Lakes: Part 2, *Port Technology International*, 49:36-41.
- Schafer, S.E., and P.S. Lindquist. 2010. The Great Lakes Maritime Information Delivery System: A Resource for Intermodal Freight Transportation Planning and Analysis in the Upper Midwest, *TRB 89<sup>th</sup> Annual Meeting Proceedings*, January, 2010.
- Lindquist, P.S., S.K. Dhar, and S.E. Schafer. 2009. *Development of a New Process for Collecting Information on Piers, Wharves, Docks and Facilities in the Great Lakes*, Final Report, U.S. Army Corps of Engineers Navigation Data Center Alexandria, Virginia.

## **SELECTED PUBLICATIONS (continued)**

- Lindquist, P.S., and M.A. Vonderembse. 2009. Expanding Regional Freight Information Resources for the Upper Midwest Phase IV: The Great Lakes Maritime Information Delivery System: A Resource for the Regional Analysis of Intermodal Freight Flows in the Great Lakes Region,
- Knotts, F.B., J.H. Price, Q Shao, J.F. Riebe, J.L. Ruma, and P.S. Lindquist. 2008. *Ohio Trauma Patient Transfer* Study, Northwest Ohio Regional Trauma Registry, The Hospital Council of Northwest Ohio, November, 2008.
- Lindquist, P.S. 2008. Expanding Regional Freight Information Resources for the Upper Midwest Phase III: Implementation of The Great Lakes Maritime Information Delivery System, Research Report, Great Lakes Maritime Research Institute, October, 2008.
- Lindquist, P.S., and M.A. Vonderembse. 2007. *Expanding Regional Freight Information Resources for the Upper Midwest Phase II: Implementation of The Great Lakes Maritime Information Delivery System*, Research Report, Great Lakes Maritime Research Institute, October, 2007.
- Adams, TM., S. Van Hecke, E. Wittwer, P.S. Lindquist, and T.D. Szymkowski. 2007. A regional approach to improving freight transportation, *TRB 86<sup>th</sup> Annual Meeting Proceedings*. Washington DC. January, 2007.
- Lindquist, P.S. 2006. *Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes Maritime Information Delivery System*, Research Report, Great Lakes Maritime Research Institute, September, 2006.
- Adams, TM., J. Bittner, T. Gordon, P. Lindquist, J. Gupta, K. Kawamura, S. McNeil, M. Vonderembse, and E. Wittwer. 2006. Why a Regional Freight Study? The Case of the Upper Midwest, *Proceedings, National Urban Freight Conference*, METRANS Transportation Center, Long Beach, CA.
- Reid, N., J. Gattrell, P.S. Lindquist, E. LaFary, and S. Griffey. 2006. "Green(house) industries: Local markets and global competitors". In *Enterprising Worlds: A Geographic Perspective on Economics, Environments, & Ethics.* Gatrell, J and N. Reid (eds.) Dordrecht, Netherlands: Springer.
- Adams, T.M., T.J. Gordon, E.F. Wittwer, J. Gupta, P.S. Lindquist, M.A. Vonderembse, K. Kawamura, and S. McNeil, 2005. *The Upper Midwest Freight Corridor Study*, Research Report, Midwest Regional University Transportation Center, in cooperation with Ohio Dept. of Transportation and Federal Highway Administration.
- Wittwer, E., T. Gordon, TM. Adams, L. Franke, K. Kawamura, P. Lindquist, and S. McNeil. 2004. Improving freight transportation in the Upper Midwest and Great Lakes Region, *Proceedings*, 45<sup>th</sup> Annual Transportation Research Forum, Evanston, IL. Mar. 21-23.
- Lindquist, P.S. 2003. *Sylvania Township Fire Department Location Study*, Research Report, Sylvania (Ohio) Township, November, 2003.
- Aryeetey-Attoh, S.A., P.S. Lindquist, W.A. Muraco, and N. Reid. 2003. Northwestern Ohio: re-industrialization and emission reduction, Chapter 5 in *Global Change in Local Places: Estimating, Understanding and Reducing Greenhouse Gasses*, Cambridge University Press.
- Lindquist, P.S. 2002. *The Location Analyst*, Location-Allocation Spatial Decision Support System for *ArcView GIS* (Software).
- Lindquist, P.S. 2002. Visualizing Alternative Models and their Objective Functions in the Solution of Optimal Location Problems, *Journal of Geography.*, 101:45-60.
- Edwards, M.E., and P.S. Lindquist. 2000. Health Care, in *State of Ohio's Urban Regions*, The Ohio Urban University Program, September, 2000.
- Coss, J.G., and P.S. Lindquist. An Interactive Approach to the Location of Primary Care Clinics for the Medical College of Ohio, *Proceedings of the 1998 Applied Geography Papers and Proceedings*, Vol. 21, October, 1998.
- Lindquist, P.S., and D.J. Hammel. 1998. Applying Descriptive Statistics to the Regional Classification of Climate in the Undergraduate Classroom, *Journal of Geography* 97(2):72-82.

## **SELECTED PUBLICATIONS (continued)**

- *LANet*, GIS-interfaced computer software for unconstrained, capacity-constrained and stochastic location-allocation analysis on networks, Department of Geography-Geology, Illinois State University. Distributed on CD ROM by Assn. Amer. Geographers Microcomputer Specialty Group, I.D. Number G70, 1996.
- Love, D., and P.S. Lindquist. 1995. The Geographical Accessibility of Hospitals to the Aged: A GIS Analysis Within Illinois, *HSR: Health Services Research* 29(6):629-651.
- Lindquist, P.S. 1995. *NEWLAP*, GIS-interfaced computer software and comprehensive manual for unconstrained, capacity- constrained and stochastic location-allocation analysis in continuous space, Distributed on CD ROM by
- Assn. Amer. Geographers Microcomputer Specialty Group, I.D. Number G70, 1996. (*refereed*). 1995 AAG Microcomputer Specialty Group Software Award (Public Domain Category).
- Lindquist, P.S. 1990. A Zone Modification Method for System-Wide Mass Transit Ridership Forecasting, *Transportation Research Record*, No. 1285, pp. 22-29, 1990.
- Beimborn, E.A., H.Z. Rabinowitz, D.M. Opper, and P.S. Lindquist. 1990. A Market Based Approach to Transit Facility Design, *Transportation Research Record*, No. 1266, pp. 163-172, 1990.
- Rabinowitz, H.Z., E.A. Beimborn, D.M. Opper, and P.S. Lindquist. 1989. *Market Based Transit facility Design*, U.S. Department of Transportation Report No. DOT-T-89-12.
- Moon, H.E., and P.S. Lindquist. 1989. *Highway Interchange Development Model*, computer program distributed by the Microcomputer Specialty Group Software Exchange, Association of American Geographers, I.D. Number *G27*.
- Lindquist, P.S. 1988. *Traffic Zones Reconsidered: A Geographic Examination of Zonal Restructuring for System-Wide Mass Transit Forecasting*, Research Report: U.S. Department of Transportation Report No. WI-11-0011-1, NTIS No. PB-89-113682, 1988.
- Lindquist, P.S. 1986. Histospline Interpolation for Data Input into the Transit Ridership Forecasting Model, *ITE Journal* 56(11): 31-36, November, 1986.

## **CONFERENCE PRESENTATIONS, WORKSHOPS, PANEL PRESENTATIONS**

Eloff, J.J., O.A. Smirnov, and P.S. Lindquist. 2014. Transportation Infrastructure Usage and Household Welfare, TRB 93rd Annual Meeting, January, 2014.

Schafer, S.E., and P.S. Lindquist. 2014. Moving Toward the IT Highway: Linking Public and Private Investments in Intelligent Transportation Systems to Supply Chain Performance and Livability, TRB 93rd Annual Meeting, January, 2014.

Dhar, S.K., and P.S. Lindquist. 2013. "Tracking vessels in the great lakes using AIS", Association of American Geographers Annual Meeting, Los Angeles, April, 2013.

Schafer, S.E., and P.S. Lindquist. 2013. "Decision Support System for Smart Growth Innovation in Urban Midwest: GIS Connection Between Brownfield Site Redevelopment and Transportation", Transportation Research Board 92nd Annual Meeting, January, 2013.

Wang, Q., Lindquist, P.S., and J.J. E Eloff. 2013. "PathWorld: New Software Approach to Vehicle Routing on Large Networks", Transportation Research Board 92nd Annual Meeting, January, 2013.

Eloff, J.J., O.A. Smirnov, and P.S. Lindquist. 2013. "Transportation Infrastructure, Industrial Productivity, and Return on Investment: A Spatial Spillover Approach", Transportation Research Board 92nd Annual Meeting, January, 2013.

Lindquist, P.S. 2012. "New Developments in the Great Lakes Information Delivery System", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Duluth, MN, September 28, 2012.

Eloff, J.J., O.A. Smirnov and P.S. Lindquist. 2012. "Transportation Infrastructure, Industrial Productivity, and Return on Investment", Mid Continent Transportation Research Forum, Madison, WI, September 6, 2012.

Wang, Q.F., and P.S. Lindquist. 2012. "Binary Tree Vehicle Routing Algorithm: Method and Applications", Mid Continent Transportation Research Forum, Madison, WI, September 6, 2012.

Dhar, S.K., and P.S. Lindquist. 2012. "Maritime Data Standardization and Enhancement using AIS and GIS", Mid Continent Transportation Research Forum, Madison, WI, September 6, 2012.

Lindquist, P.S., and K. Kantharaj. 2012. "Midwest FreightView: A Data Delivery Resource for Transportation", Association of American Geographers Annual Meeting, New York, February, 2012.

Dhar, S.K., and P.S. Lindquist. 2012. "Maritime Data Enhancement Using AIS & GIS", Association of American Geographers Annual Meeting, New York, February, 2012.

Schafer, S.E., and P.S. Lindquist. 2012. "A GIS Connection Between Brownfield Sites, Transportation and Economic Development in Toledo-Lucas County, Ohio", Association of American Geographers Annual Meeting, New York, February, 2012.

Lindquist, P.S. and S.E. Schafer. 2011. "New Developments in Freight Data Resources for the Great Lakes Region", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Duluth, MN, September 22, 2011.

Lindquist, P.S. 2011. Workshop: *Freight Data Resources for the Great Lakes Region*, Highway H20, Toledo, Ohio, September 19, 2011.

Schafer, S.E. and P.S. Lindquist. 2011. "A GIS Connection between Brownfield Sites, Transportation and Infrastructure: An Economic Redevelopment Tool for Lucas County, Ohio", Association of American Geographers Annual Meeting, Seattle, April, 2011.

Dhar, S.K., and P.S. Lindquist. 2011. "Data Enhancement & Standardization: A Public and Private Effort", Association of American Geographers Annual Meeting, Seattle, April, 2011.

Lindquist, P.S., and X. Li. 2011. "New Developments in Midwest FreightView", Association of American Geographers Annual Meeting, Seattle, April, 2011.

Schafer, S.E. and P.S. Lindquist. 2011. "Promoting Redevelopment of Brownfield Sites using a GIS Information Delivery System", Urban Affairs Association 41<sup>st</sup> Annual Meeting, New Orleans, March, 2011.

Lindquist, P.S. 2010. "Data Expansion Efforts in the Great Lakes Maritime Information Delivery System", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Superior, WI, September 23, 2010.

Lindquist, P.S. 2010. "Measuring Freight Movement in Ohio Urban Areas: Available Data Sources", Ohio Conference on Freight, Toledo, OH, September 14, 2010.

Lin J., K. Kawamura M. Ruan and P.S. Lindquist. 2010. "National County-level Commodity Flow Database", Mid Continent Transportation Research Forum, Madison, WI, August 19, 2010.

Dhar, S.K., and P.S. Lindquist. 2010. "The Development of a New Automated Process for Collecting Information on Piers, Wharves, Docks, and Facilities in the Great Lakes Region: Part I: System Design and Development", Mid Continent Transportation Research Forum, Madison, WI, August 20, 2010.

Schafer, S.E. and P.S. Lindquist. 2010. "The Development of a New Automated Process for Collecting Information on Piers, Wharves, Docks, and Facilities in the Great Lakes Region: Part II: Evaluation, Refinement and Application of the System", Mid Continent Transportation Research Forum, Madison, WI, August 20, 2010. (with Sarah Schafer).

Ruan, M., J. Lin, K. Kawamura, and P.S. Lindquist. 2010. "National County-Level Commodity Flow Database", 2010 Transport Chicago Conference, June, 2010.

Lin, J., K. Kawamura, and P.S. Lindquist. 2010. "Commodity Profiles Workshop", Mississippi Valley Freight Coalition Annual Meeting, Cincinnati, April, 2010.

Lindquist, P.S. 2010. "FreightView Workshop: New Directions", Mississippi Valley Freight Coalition Annual Meeting, Cincinnati, April, 2010.

Lindquist, P.S. 2010. "A Comprehensive Decision Support Data Resource for Intermodal Freight Transportation in the Great Lakes Region", Midwest Decision Science Institute Annual Meeting, Toledo, Ohio, April, 2010

Schafer, S.E. and P.S. Lindquist. 2010. "The Atlas of Great Lakes Maritime Commerce", Association of American Geographers Annual Meeting, Washington, D.C., April, 2010.

Schafer, S.E. and P.S. Lindquist. 2010. "The Great Lakes Maritime Information Delivery System: A Resource for Intermodal Freight Transportation Planning and Analysis in the Upper Midwest", TRB 89<sup>th</sup> Annual Meeting, January 11, 2010.

Lindquist, P.S. 2009. "The Great Lakes Maritime Information Delivery System Progress Report", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Duluth, MN, September 25, 2008.

Lindquist, P.S. 2009. "FreightView Workshops I & II. Mississippi Valley Freight Coalition Annual Meeting", Kansas City, April, 2009.

Hammel, D.J., and P.S. Lindquist. 2009. "The Changing Patterns of Home Mortgage Foreclosures in Lucas County, Ohio, 1998 - 2007", Association of American Geographers Annual Meeting, Las Vegas, Nevada, March, 2009.

Bachelor, L.W., and P.S. Lindquist. 2009. "CommuterLINK Revisited: Impacts of Employment Shifts and Policy Change on the Transportation Needs of Low Income Workers", Urban Affairs Association 39th Annual Meeting, Chicago, Illinois, March, 2009.

Hammel, D.J., and P.S. Lindquist. 2009. "Foreclosures in Neighborhood Context: Lucas County, Ohio, 1998–2007", Urban Affairs Association 39th Annual Meeting, Chicago, Illinois, March, 2009.

Lindquist, P.S. 2008. "The Great Lakes Maritime Information Delivery System Progress Report,", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Superior, WI, September 26, 2008.

Lindquist, P.S. 2008. "Recent Developments The Great Lakes Maritime Information Delivery System", Mid Continent Transportation Research Forum, Madison, Wisconsin, August, 2008.

Lindquist, P.S. 2008. "A comprehensive Intermodal Transportation Network for Great Lakes Commerce", Association of American Geographers Annual Meeting, Boston, Massachusetts, March, 2008.

Lindquist, P.S., M.A. Vonderembse, C.J. Wolosz, and D.J. Singer. 2007. "From Data to Markets to Shipping Opportunities", Great Lakes Maritime Research Institute, University of Toledo Intermodal Transportation Institute, October 26, 2007.

Lindquist, P.S. 2007. "The Great Lakes Maritime Information Delivery System Progress Report", GLMRI Affiliates Meeting, Great Lakes Maritime Research Institute, Duluth, MN, September 28, 2007.

Lindquist, P.S. 2007. "The Great Lakes Maritime Information Delivery System", in **Research on Great Lakes Maritime Commerce Session,** 50th Annual Conference on Great Lakes Research, May 31, 2007, University Park, Pennsylvania.

Lindquist, P.S. 2007. "The Great Lakes Maritime Information Delivery System", Association of American Geographers Annual Meeting, San Francisco, California, April 19, 2007.

Adams, TM., S. Van Hecke, E. Wittwer, P.S. Lindquist, and T.D. Szymkowski. 2007. "Regional Approach to Improving Freight Transportation", Transportation Research Board 86th Annual Meeting, January 23, 2007.

Lindquist, P.S. 2006. "Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes Maritime Information Delivery System", Great Lakes Maritime Research Institute Affiliates Meeting, October 7, 2006, Duluth, MN.

Lindquist, P.S. 2006. "Progress Report: The Great Lakes Maritime Information Delivery System", Joint Conference on the Great Lakes: From Data to Markets to Shipping Opportunities, GLMRI, UT ITI, ICHCA International, Toledo, Ohio November 7, 2006.

Lindquist, P.S. 2006. "Information Resources for Supporting the Upper Midwest Regional Freight Agenda", Upper Midwest Freight Agenda Workshop, Columbus, Ohio, April 26, 2006.

Dhar, S.K., G.M. Schafer, and P.S. Lindquist. 2006. "AirView: An International Air Freight Resource for Economic Development", AAG 2006 Annual Meeting, Chicago, Illinois, March 8, 2006.

Schafer, G.M., S.K. Dhar, and P.S. Lindquist. 2006. "Midwest FreightView: A Distributed GIS for Monitoring Freight Activity in the Upper Midwest", AAG 2006 Annual Meeting, Chicago, Illinois, March 10, 2006.;

Lindquist, P.S. 2005. "Midwest Regional Freight Data Resources: Looking Ahead", Upper Midwest Freight Coalition, Milwaukee, Wisconsin, November 15, 2005.

Reid, N. and P.S. Lindquist 2005. "Canadian Penetration of the U.S. Floriculture Market", International Geographical Union Commission on the Dynamics of Economic Spaces, 2005, August, 2005, Toledo, Ohio.

Reid, N. and P.S. Lindquist 2005. "Northwest Ohio's Greenhouse Industry: Competing with the Canadians." AAG 2005 Annual Meeting, Denver, Colorado, April 6, 2005.

Lindquist, P.S. 2004. "Midwest FreightView: A distributed GIS system for monitoring freight in the Upper Midwest", Ohio Transportation Engineering Conference, Columbus, Ohio, October 28, 2004.

Lindquist, P.S. 2004. "Developing a Regional Database", Upper Midwest Freight Coalition, Chicago, Illinois, August 11, 2004.

Lindquist, P.S. and S.V. Palem. 2004. "A Spatial Decision Support System for Freight Movements in the Upper Midwest", AAG 2004 Annual Meeting, Philadelphia, Pennsylvania, March 17, 2004.

Lindquist, P.S. 2003. "Transportation Planning and GIS in The Geographic Information Science and Applied Geographics Center", 57<sup>th</sup>. Ohio Transportation Engineering Conference, Columbus, Ohio, November 5, 2003

Lindquist, P.S., L.W. Bachelor, and W. Abt. 2002. "Patterns in Commuting Among Welfare-to-Work Recipients in a Mid-Sized Urban Region: The CommuterLINK Program in Toledo, Ohio", AAG 2002 Annual Meeting, Los Angeles, California.

Lindquist, P.S. 2003. "Geographic Accessibility and Hospital Service Delivery Trends in Metropolitan Ohio: 1980-1997", AAG 2001 Annual Meeting, New York, March 2, 2001.

Edwards, M.E. and P.S. Lindquist. 2001. "Health", Ohio's Urban Revitalization Initiatives, Urban University Program Public Policy Forum, Columbus, OH, Februrary 8, 2001.

Lindquist, P.S., M.E. Edwards, and W.A. Muraco. 2000. "Aggregate Patterns of Geographic Accessibility to Hospital Care in Urban Ohio", AAG 2000 Annual Meeting, Pittsburgh, PA, April 6, 2000.

Edwards, M.E. and P.S. Lindquist. 2001. "Spatial Access to Health Care: A tool for health care policy", Society of Behavioral Medicine Annual Meeting, Nashville, TN, April 6, 2000.

Aryeetey-Attoh, S.A., N. Reid, and P.S. Lindquist. 2000. "Trends in Greenhouse Gas Emissions: 1970-1990", AAG 2000 Annual Meeting, Pittsburgh, PA, April 6, 2000.

Lindquist, P.S., and E. Nowaczyk. 1999. "Patterns of Greenhouse Gas Emissions from Private Transportation in the Northwest Ohio Study Region: Global Change in Local Places Project", Association of American Geographers Annual Meeting, Honolulu, Hawaii, March, 1999.

Coss, J.G., and P.S. Lindquist. 1998. "An Interactive Approach to the Location of Primary Care Clinics for the Medical College of Ohio", Applied Geography Conference, Louisville, Kentucky, October, 1998.

Lindquist, P.S., and C. Schlutt. 1998. "Spatial Patterns of Greenhouse Gas Emissions from Agricultural Activity in Northwest Ohio, 1982-1992", Association of American Geographers Annual Meeting, Boston, Massachusetts, March, 1998.

Lindquist, P.S. 1998. "Teaching Geographic Techniques Courses and Their Role in the Undergraduate Curriculum", Panel Chair, Association of American Geographers Annual Meeting, Boston, Massachusetts, March, 1998.

Lindquist, P.S., and C. Schlutt. 1997. "Summary of Agricultural Activity and Greenhouse Gas Emissions in the Northwest Ohio GCLP Study Area", East Lakes Division, Association of American Geographers Annual Meeting, East Lansing, Michigan, October, 1997.

Lindquist, P.S. 1995. "The LOCALLOC Utilities: Location-Allocation Modeling on the pc Within a GIS Environment", Association of Geographer's Annual Meeting, Chicago, Illinois, March, 1995.

Lindquist, P.S. 1995. "Location-Allocation Modeling on the pc Within a GIS Environment", GIS in Illinois '95 Conference, Schaumburg, Illinois, December, 1995

Lindquist, P.S. 1994. "Location-Allocation for Networks Software", Association of American Geographers Annual Meeting, San Francisco, California, April, 1994.

Carter, J.R., and P.S. Lindquist. 1994. "Introducing Geographic Techniques into the Undergraduate Curriculum", 78th Annual Meeting of the National Council for Geographic Education, Lexington, Kentucky, November, 1994.

Lindquist, P.S. 1991. "The Interchange Development Model", Assn. of American Geographers Annual Mtg, Miami, Florida, April, 1991.

Lindquist, P.S. 1989. "GIS on a Shoestring: Innovative Approaches from Smaller Institutions, Panel Presentation, Second Workshop on Geographic Information Systems in Higher Education, Ohio State University, June, 1989.

Horowitz, A.J. and P.S. Lindquist. 1986. "Microcomputer Models for Transportation Planning", Microcomputer Users Conference, 28th Annual Conference of the Association of Collegiate Schools of Planning. Milwaukee, WI. October, 1986.

# **INVITED PRESENTATIONS**

Lindquist, P.S., 2013. "Freight Data Resources for the St. Lawrence / Great Lakes Region, Highway H20 Annual Meeting, November 13, 2013, Toronto, Ontario

Lindquist, P.S. and M.L. Chohaney, 2013. "Toledo CommunityView: An Online Data Resource for Lucas County", Toledo Family Council Advisory Committee, November 15, 2013.

Lindquist, P.S. 2012. "Looking Beyond the Census: Additional Options in Data Delivery", Effectively Utilizing Census Data and other Online Data Sources Workshop, Sponsored by the Data and Evaluation Network Committee of the Lucas County Family and Children First Council, December 13, 2012.

Lindquist, P.S. 2007. "The Great Lakes Maritime Information Delivery System", Great Lakes Martime Community Day Afternoon Plenary Session, Cleveland, Ohio, February 28, 2007.

Lindquist, P.S. 2007. The Great Lakes Maritime Information Delivery System, U.S. Army Corps of Engineers Detroit District, December 18, 2007

Lindquist, P.S. 1996. "The LOCALLOC Utilities", Panel Presentation, AAG Microcomputer Specialty Group Geographic Software Awards Session, Association of American Geographers Annual Meeting, Charlotte, North Carolina, April, 1996.

Lindquist, P.S. 1986. "Histospline Interpolation for Data Input into the Transit Ridership Forecasting Model", Opening Session, Institute of Transportation Engineers National Meeting, Indianapolis, Indiana. September, 1986.

Cannon, R., J. Retzlaff, P.S. Lindquist, and M. Liedtke. 1985. "The North Avenue Viaduct [Milwaukee] Detour Study". Institute of Transportation Engineers, Wisconsin Section, Milwaukee, Wisconsin, February, 1985.

# **GRANTS ACTIVITY**

**Co-Investigator,** Collaborating Toward the IT Highway: Linking Public and Private Investments in Intelligent Transportation Systems to Freight Flows and Supply Chain Performance, National Center for Freight Infrastructure Research and Education UT Portion: \$90,000. 2014-2015. (with R. Martinko and S. Schafer)

**Principal Investigator,** *Development of Methodology for Generating Distance and Commodity Flow Tables into and through the Great Lakes Basin,* **U.S. Army Corps of Engineers (Buffalo District)**, \$120,000. 2012-2014.

# **GRANTS ACTIVITY (continued)**

**Co-Principal Investigator**, *Mining Automatic Identification Systems (AIS) Data for Improved Vessel Trip Analysis Capabilities*, Joint project between the University of Toledo, Vanderbilt University, and the University of Wisconsin-Superior, *National Center for Freight Infrastructure Research and Education* through *US DOT* UT Portion: \$80,000. 2012-2014.

**Co-Principal Investigator**, *Making Freight-Centric Communities more Livable*, Joint project between the University of Toledo, University of Memphis, and the University of Wisconsin-Madison, *National Center for Freight Infrastructure Research and Education* through *US DOT* UT Portion: \$60,000. 2012-2014.

**Co-Principal Investigator**, Academic Partnership Under CFIRE for Transportation Research II (CFIRE 2 Base), *National Center for Freight Infrastructure Research and Education* UT Portion: \$100,000, 2012-2016. (with R. Martinko, PI).

**Co-Investigator**. *Ohio Statewide Freight Plan*, (Contract in partnership with UT ITI & Parsons-Brinckerhoff Consultants), *Ohio Department of Transportation* UT Portion: \$26,000. 2011-2012.

**Co-Investigator**. *Midwest Freight Plan*, (Contract in partnership with CFIRE--National Center for Freight Infrastructure Research and Education, UW-Madison), *Mid America Freight Coalition* UT Portion: \$58,000. 2011-2012.

**Principal Investigator,** *Development of Methodology for Simulating Cargo Movements through Intermodal Connections in the Great Lakes Basin,* **US Army Corps of Engineers—Huntington District** \$40,000. 2011-2012.

**Co-Investigator**, *Great Lakes Shipping Revitalization Study* (Contract in partnership with GLMRI and American Bureau of Shipping), **US Maritime Administration**, **USDOT** \$42,000, 2011.

**Principal Investigator**, Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase VI, Great Lakes Maritime Research Institute \$10,000, 2010-2011.

**Co-Principal Investigator**, *Multimodal Freight Transportation Within the Great Lakes-Saint Lawrence Basin*, *Transportation Research Board NAS\_NRC NCFRP Project 35.* Joint project between CPCS Transcom Limited, Great Lakes Maritime Research Institute, University of Toledo, Economic Development Research Group, Prime Focus LLC, and Sustainable Ports, \$300,000 (UT Portion \$31,000) (with M.A. Roy (PI), R.D. Stewart, G. Weisbrod, L. Ogard), 2010-2011.

**Principal Investigator**, A GIS Connection Between Brownfield Sites, Transportation and Economic Development, University of Toledo University Transportation Center / Intermodal Transportation Institute, \$50,000, 2010-2011.

**Principal Investigator.** *Federal Initiative for Navigation Data Enhancement (FINDE)*, Joint project between the U.S. Army Corps of Engineers Navigation Data Center (USACE NDC), Internal Revenue Service (IRS), Customs and Border Protection (CBP), U.S. Coast Guard (USCG), and the GISAG Center at the University of Toledo, U.S. Army Corps of Engineers Navigation Data Center, \$99,000, 2010

**Principal Investigator**, Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase V, Great Lakes Maritime Research Institute \$59,000, October, 2009.

**Principal Investigator**, A Data Library Management System for Midwest FreightView and its Data Repository, University of Toledo University Transportation Center / Intermodal Transportation Institute, \$46,588, 2009-2010.

**Principal Investigator**, Developing a New Process for Collecting Information on Piers, Wharves, Docks and facilities in the Great Lakes Region: Phase II, U.S. Army Corps of Engineers Navigation Data Center, \$99,000, January, 2009

**Principal Investigator**, *Freight Trends for Toledo Region*, *Intermodal Transportation Institute*, *University of Toledo*, \$50,000, 2008.

**Principal Investigator**, *Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase IV*, *Great Lakes Maritime Research Institute* \$70,000, 2008.

# **GRANTS ACTIVITY (continued)**

**Principal Investigator**, Regional Freight Information Resources in the Great Lakes Maritime Transportation System Phase II, University of Toledo University Transportation Center / Intermodal Transportation Institute, \$50,000, 2008-2009.

**Co-Principal Investigator**, Academic Partnership Under CFIRE for Transportation Research, *National Center for Freight Infrastructure Research and Education* \$500,000, 2007-2012. (with M.A. Vonderembse and O. Smirnov).

**Principal Investigator**, *Developing a New Process for Collecting Information on Piers*, *Wharves, Docks and facilities in the Great Lakes Region: Phase I*, **U.S. Army Corps of Engineers Navigation Data Center**, \$75,000, January, 2008.

**Co-Investigator**, *Ohio Trauma Patient Transfer Study*, with University of Toledo and Hospital Council of Northwest Ohio, funded by *Ohio Department of Public Safety*. 2007. (GISAG Portion: \$15,000).

**Principal Investigator**, *Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase III*, *Great Lakes Maritime Research Institute* \$75,000, October, 2007. (with M. Vonderembse and O. Smirnov).

**Principal Investigator**, Regional Freight Information Resources for Market Opportunities in the Great Lakes Maritime Transportation System, *University of Toledo University Transportation Center (Intermodal Transportation Institute)* \$26,000, May, 2007.

**Principal Investigator**, *Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase II*, *Great Lakes Maritime Research Institute* \$110,000, October, 2006. (with M. Vonderembse)

**Co-Investigator**, *Community Performance Indicators*, *Western Ohio Research Consortium* \$10,000, January, 2006 (with Lynn Bachelor and Daniel Hammel).

**Principal Investigator**, *Expanding Regional Freight Information Resources for Northwest Ohio: An International Freight Resource Delivery System: Phase I*, *University of Toledo Urban Affairs Center* \$5,000, January, 2006.

**Principal Investigator**, Expanding Regional Freight Information Resources for the Upper Midwest: The Great Lakes maritime Information delivery System Phase I, Great Lakes Maritime Research Institute \$49,000, December, 2005.

**Principal Investigator**, Toledo AirView: An International Air Freight Export Resource for the Toledo Express Airport, Lucas County Port Authority \$8,300, May, 2005.

**Co-Investigator**, *Upper Midwest States Freight Corridor Study Phase II*, Joint Study with The University of Wisconsin and University of Illinois-Chicago, research funded by *Midwest Regional University Transportation Center (FHWA), University of Wisconsin-Madison* \$173,000 (with, T. Adams, J. Gupta, K. Kawamura, S. McNeil, M. Vonderembse), 2005.

**Co-PI**, *Spatial Analysis for Community Facilities and GIS*, Outreach Project funded by Sylvania, OH Township, \$15,300, 2003 (With C. Shove)

**Co-Investigator**, *Upper Midwest States Freight Corridor Study--Phase I*, Joint Study with The University of Wisconsin and University of Illinois-Chicago, funded by Midwest Regional University Transportation Center (FHWA), University of Wisconsin-Madison \$162,334 (with M. Vonderembse and J. Gupta), August, 2003.

**Co-Investigator**, *Acquisition of Instrumentation in Support of The Center for Geographic Information Science and Applied Geographics (GISAG)*, funded by National Science Foundation. \$167,00 (With K. Czajkoski, P. Lawrence, S. Attoh, D. Nemeth and N. Reid), 2002.

**Co-Principal Investigator,** *CommuterLINK Needs Assessment and Cost Benefit Analysis*, research funded by Commuter Services Council, Toledo Metropolitan Council of Governments. **\$17,500** (With Lynn Bachelor), June, 2001.

**Co-Investigator**, *Geographic Accessibility to Hospital Care in Ohio*, *State of Ohio's Regions: Health and Human Services Component*, Ohio Urban Universities Program (UUP) (through University of Toledo Urban Affairs Center). \$17,300 (With Mary Ellen Edwards), 1999.

# **GRANTS ACTIVITY (continued)**

#### Co-Investigator, National Aeronautics and Space Administration Grant (\$64,256)

*Global change in local places: adaptation and mitigation strategies to reduce greenhouse gas emissions inNorthwest Ohio*, National Aeronautics and Space Administration, \$131,468, one year, renewal, (with William A. Muraco, Samuel A. Attoh, and Neil Reid), May, 1998 to April, 1999.

### Co-Investigator, National Aeronautics and Space Administration Grant (\$131,468)

Global change in local places: socioeconomic driving forces of greenhouse gas emissions in Northwest Ohio, National Aeronautics and Space Administration, \$131,468, one year, renewal, (with William A. Muraco, Samuel A. Attoh, Neil Reid, and Pamela S. Showalter), May, 1997 to April, 1998. **Co-PI: National Science Foundation** 

**Co-Principal Investigator, NSF Instructional Laboratory Improvement Grant,** Expanding the Presence of Geographic Techniques in the Geography Undergraduate Curriculum at Illinois State University, 1995. \$25,000.00 award from National Science Foundation. (with J.R. Carter and D.J. Hammel)

# PAST AND PRESENT PROFESSIONAL AFFILIATIONS:

Association of American Geographers (AAG) American Society for Photogrammetry and Remote Sensing (ASPRS) Institute of Transportation Engineers (ITE) Transportation Research Board (TRB) Upper Midwest Freight Coalition/Mississippi Valley Freight Coalition/Mid America Freight Coalition Urban and Regional Information Systems Association (URISA)

# CONSULTING AND SERVICE

## **CONSULTING:**

Vehicle Routing, Unit 191 School District, Manito, Illinois. July, 1992. Set up school bus route alignments and scheduling for elementary, middle school and high school levels in the Unit 191 School District (with George Aspbury).

- **Great Lakes Initiative: Digital Data Base**, Illinois Environmental Protection Agency. November, 1992 Served as consultant to project providing computer programming and preparation of digital base maps for toxic waste site database (with George Aspbury and Robert Nelson).
- **Location Analysis:** Country Companies Insurance Group, Bloomington, Illinois. 1993-1994 Provided advice and assistance in implementation of GIS for market and consumer research department; performed agency location analyses and assignment of agent territories for midwest and western metropolitan markets. Instructed market research staff in location analysis techniques and provided training in the use of *NEWLAP* software for use by market research staff. Developed and tested other computer software applications for a variety of functions to support market research activities and digital mapping efforts in other departments of the company.
- **Location Analysis:** Medical College of Ohio, Toledo, Ohio. January, 1998-September, 1998 Assisted the Medical College of Ohio's Administration in locating physician offices in Northwest Ohio and Southeastern Michigan for medical services in general internal medicine, pediatrics, obstetrics/gynacology and geriatric care. Assignment included supervision of undergraduate intern in project and in direct participation in the acquisition of demographic data for the region and input into GIS, projecting populations within the region, mapping population groups identified for specific medical services, and location-allocation study to find centralized facility locations for all populations served. Analysis utilized the *NEWLAP* software.
- **Location Analysis:** Sylvania (Ohio) Township Fire Department. August, 2003-November, 2003; April, 2006. Assisted Sylvania Township Trustees, Township Administrator and Fire department in the identification of optimal locations for the delivery of fire protection and emergency medical services for Sylvania Township and the City of Sylvania, Ohio. Utilized network-based location-allocation and accessibility measurement software that succeeded the *LA Net* Package.
- **Freight Transportation Planning:** NW Wisconsin/Northern Minnesota Freight study, Wilbur Smith and Assoc. February, 2009-June, 2009. Data acquisition and management—economic activity and commodity flows.

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## **CONSULTING AND SERVICE (continued)**

- Freight Transportation: *St. Lawrence Seaway Competitiveness Study* (Contract in partnership with CPCS TransCom Consultants, Ottawa, ON), *St. Lawrence Seaway Management Corporation* (Canada) 2012.
- **Transportation Planning:** *Erie County Freight Study*, contract in partnership with Glaus, Pyle, Schomer, Burns & DeHaven, Inc. (GPD Group) for Erie Regional Planning Commission, 2012.

#### **SERVICE:**

- Association of American Geographers Program Committee, 1995 Annual AAG Meeting Participated in organization of paper sessions for the March, 1995 AAG Annual Meeting in Chicago.
- Chair, Transit Advisory Committee, University of Toledo, 1997-1999, Principal Author, *The University of Toledo Campus Transit Plan 1999-2000*.
- Manuscript Reviewer, Location Science, Environment and Planning A, Journal of Geography, Journal of Geography in Higher Education, Annals of the Association of American Geographers
- **Member, Highway H20 Advisory Council** (Hwy H2O is an alliance of transportation stakeholders in the Great Lakes St. Lawrence Seaway System region, working to develop business and deliver greater awareness about the System locally and internationally)

#### Member, TMACOG Public Transit & Passenger Rail Committee

Member, Review Panel: NCFRP 47: Implementing the Freight Transportation Data Architecture: Data Element Dictionary, Transportation Research Board, National Academy of Sciences (2013)

#### **TEACHING INTERESTS AND EXPERIENCE:**

Geographic Information Systems (ISU; UT) Analytical and Computer Cartography (ISU, UT, UWM) Quantitative Methods (ISU, UT) Transportation (ISU, UT) Urban Transportation Planning (ISU) Geographic Information Science (UT) Geocomputing (UT) Location Analysis (ISU, UT) Economic Geography (ISU) Transportation Modeling (UT)

ISU: Illinois State University UT: The University of Toledo UWM: The University of Wisconsin-Milwaukee

## AWARDS AND ACADEMIC HONORS:

- April, 1996 First Prize: 1995 AAG Microcomputer Specialty Group Software Award (Public Domain) Awarded for *The LOCALLOC Utilities*
- September, 1986-May, 1987 Graduate School Fellowship, University of Wisconsin-Milwaukee
- September, 1986 ITE National Student Paper Award Institute of Transportation Engineers Awarded for Research Paper: "Histospline Interpolation for Data Input into the Transit Ridership Forecasting Model"
- February, 1986 Martin Bruening Award Institute of Transportation Engineers, Wisconsin Section Technical Paper Award: "Histospline Interpolation for Data Input into the Transit Ridership Forecasting Model"
- February, 1985 Martin Bruening Award (co-recipient) Institute of Transportation Engineers, Wisconsin Section Technical Paper Award: "The North Avenue Viaduct [Milwaukee] Detour Study"
- May, 1982 Certificate of Merit, American Society of Landscape Architects