CURRICULUM VITAE OF DR. MICHAEL R. CRUM RUAN CHAIR IN SUPPLY CHAIN MANAGEMENT

Mailing Address:

Iowa State University 2340 Gerdin Business Bldg. 2167 Union Drive Ames, IA 50011-2027 Phone (515) 294-8105 email: mcrum@iastate.edu

RESEARCH INTERESTS

Current research interests include motor carrier employee issues, motor carrier safety, strategic supply chain relationships, and supply chain security.

EDUCATION

D.B.A. in Transportation with supportive fields of Economics and Management (1983) and M.B.A. (1978) from Indiana University Graduate School of Business, Bloomington.

B.S. (1975) in Transportation from Indiana University School of Business, Bloomington; graduated with high distinction.

UNIVERSITY EXPERIENCE

Vice President for Economic Development and Business Engagement, Office of the President, Iowa State University, July 1, 2014 – June 30 2018

Led the Office of Economic Development and Industry Relations which includes the following centers and offices that engage directly with established companies and entrepreneurs: America's Small Business Development Centers Iowa, Center for Industrial Research and Services, ISU Research Foundation, ISU Research Park, Office of Intellectual Property and Technology Transfer, Pappajohn Center for Entrepreneurship

Senior Policy Adviser on Economic Development, Office of the President, Iowa State University, August 1, 2013 – June 30, 2014

Iowa State University, College of Business, September 1980 - present. Current rank: Professor

Interim Raisbeck Endowed Dean, March 20, 2012 – July 31, 2013 Associate Dean for Graduate Programs, July 2005 – July 2012 Ruan Chair in Supply Chain Management, July 1, 2011 – present. John D. DeVries Endowed Chair in Business, August 2004 – June 2011. Department Chairman, Department of Logistics, Operations, and Management Information Systems, July 1, 1998 – June 30, 2001. Acting Department Chairman, Department of Transportation and Logistics, August 1986 to May 1987.

Fulbright Scholar in Transportation Economics at Warsaw School of Economics, Warsaw, Poland, September 1988 to June 1989.

Indiana University School of Business, August 1975 to May 1980.

Lecturer in Transportation (August 1979 to May 1980) and Associate Instructor in Transportation, August 1975 to August 1979.

Courses Taught:

Advanced Logistics Management, Business Logistics, Business Logistics Strategies (MBA), Principles of Transportation, Transportation and Logistics Issues, Transportation Management and Policy (MBA), Transportation Carrier Management, Transport Economics, and Strategic Supply Chain Management.

OTHER PROFESSIONAL ACTIVITIES

Consulting, research and seminars for the following organizations: Aeronautics Commission of Indiana, American Society of Transportation and Logistics, American Production and Inventory Control Society, American Trucking Associations Foundation, Barr-Nunn Transportation, Burlington Northern Railroad, COMPAQ Computers, Caterpillar, Inc., C.H. Robinson Worldwide, Inc., CSX Transportation, Deloitte & Touche, Deere & Company, Fisher Controls International, Heatilator, Inc. (division of HON Industries), IBM, Iowa Department of Transportation, Jones Stores, LOT Polish Airlines, Manica Logistics (South Africa and Zimbabwe), Poland Ministry of Transportation and Maritime Economy, Prime, Inc., Ruan Transportation Management Systems, Small Business Development Center at Iowa State University, Union Pacific Railroad, U.S. Department of Transportation, Werner Enterprises, and Worley Enterprises.

PUBLICATIONS

Refereed Journal Articles

Ralston, P., Blackhurst, J., Cantor, D. and Crum, M. "A Structure-Conduct-Performance Perspective of How Strategic Supply Chain Integration Affects Firm Performance," *Journal of Supply Chain Management*, Vol. 50, No. 2, 2015.

Cantor, D., Blackhurst, J., Pan, M. and Crum, M., "Examining the Role of Stakeholder Pressure and Knowledge Management on Supply Chain Risk and Demand Responsiveness," *International Journal of Logistics Management*, Volume 25, Issue 1, 2014, pp. 202-223.

Cantor, D., Macdonald J., and Crum, M., "The Influence of Workplace Justice Perceptions on Commercial Driver Turnover Intentions," *Journal of Business Logistics*, Vol. 32, Issue 3, 2011, pp. 274-286.

Martens, B., Crum, M. and Poist, R., "Examining Antecedents to Supply Chain Security Effectiveness: An Exploratory Study," *Journal of Business Logistics*, Vol. 32, No. 2, 2011, pp. 153-166.

Suzuki, Y., Crum, M. and Pautsch, G., "Predicting Truck Driver Turnover," *Transportation Research Part E: Logistics and Transportation Review*, Volume 45, Issue 4, 2009, pp. 538-550.

Burke, N., Maze, T., Crum, M., Plazak, D. and Smadi, O., "Dedicated Truck Facilities as Solution to Capacity and Safety Issues on Rural Interstate Highway Corridors," *Transportation Research Record: Journal of the Transportation Research Board*, Transportation Research Board of the National Academies, Washington, D.C., Volume 2008, 2007, pp. 84-91.

Morrow, P., Suzuki, Y., Crum, M., Ruben, R. and Pautsch, G., "The role of leader-member exchange in high turnover work environments," *Journal of Managerial Psychology*, Vol. 20, No. 8, 2005, pp. 681-694.

Yoshinori Suzuki, Michael Crum, and Michael Audino, "Airport leakage and airline pricing strategy in singleairport regions," *Transportation Research Part E: Logistics and Transportation Review*, Vol. 40, 2004, pp. 19-37.

Paula C. Morrow and Michael R. Crum, "Antecedents of Fatigue, Close Calls and Crashes Among Commercial Motor Vehicle Drivers," *Journal of Safety Research*, Vol. 35, Issue 1, 2004, pp. 59-69.

Carolyn M. Carr, C. Bradley Shrader, Michael R. Crum, and E. James Flynn, "Predicting Decision-Maker Momentum to Change Offerings in Response to Uncertainty: The Case of the U.S. Customs Mod Act," *Journal of Business Strategies*, Volume 20, Number 2, Fall 2003, pp. 95-117.

Ana Arboleda, Paula C. Morrow, Michael R. Crum, and Mack C. Shelley, II, "Management Practices as Antecedents of Safety Culture within the Trucking Industry: Similarities and Differences by Hierarchical Level," *Journal of Safety Research*, Volume 34, Issue 2, 2003, pp. 189-197.

Yoshinori Suzuki, Michael R. Crum, and Michael J. Audino, "Airport Choice, Leakage, and Experience in Single-Airport Regions," *Journal of Transportation Engineering*, Vol. 129, No. 2, March/April 2003, pp. 212-218.

Michael R. Crum and Paula C. Morrow, "The Influence of Carrier Scheduling Practices on Truck Driver Fatigue," *Transportation Journal*, Vol. 42, No. 1, Fall 2002, pp. 20-41.

Michael R. Crum, Paula C. Morrow, Patricia Olsgard, and Philip J. Roke, 'Truck Driving Environments and Their Influence on Driver Fatigue and Crash Rates," *Transportation Research Record: Journal of the Transportation Research Board*, No. 1779, 2001, pp. 125-133.

Theodore Stank, Michael R. Crum, and Miren Arango, "Benefits of Interfirm Coordination in Food Industry Supply Chains," *Journal of Business Logistics*, Volume 20, Number 2, 1999, pp. 21-41.

K. Ramamurthy, G. Premkumar, and Michael R. Crum, "Organizational and Inter-Organizational Determinants of EDI Diffusion and Organizational Performance: A Causal Model," *Journal of Organizational Computing & Electronic Commerce*, Volume 9, Number 4, 1999, pp. 253-285.

Michael R. Crum, Deborah A. Johnson, and Benjamin J. Allen, "A Longitudinal Assessment of EDI Use in the U.S. Motor Carrier Industry," *Transportation Journal*, Volume 38, No. 1, Fall 1998, pp. 15-28.

Ronald D. Anderson, Michael R. Crum, and Roger E. Jerman, "Quality Management Influences on Logistics Performances," *Transportation Research Part E (Logistics and Transportation Review)*, Volume 34, Number 2, 1998, pp. 137-148.

Paula C. Morrow and Michael R. Crum, The effects of perceived and objective safety risk on employee outcomes," *Journal of Vocational Behavior*, Volume 53, 1998, pp. 300 - 313

Michael R. Crum and Benjamin J. Allen, "A Longitudinal Assessment of Motor Carrier-Shipper Relationship Trends, 1990 vs. 1996," *Transportation Journal*, Volume 37, No. 1, Fall 1997, pp. 5-17.

James C. McElroy, Paula C. Morrow, and Michael R. Crum, "Organizational and Union Commitment Among Railroad Employees," *Transportation Research Part E (Logistics and Transportation Review)*, Volume 33, Number 3, 1997, pp. 211-221.

Ronald D. Anderson, Roger E. Jerman, and Michael R. Crum, "The Impact of Downsizing on Logistics Performance and Employees in Shipper Firms," *Journal of Transportation Management*, Vol. 9, No. 1, Spring 1997, pp. 1 – 10.

G. Premkumar, K. Ramamurthy, and Michael R. Crum, "Determinants of EDI Adoption in the Transpor-tation Industry," *European Journal of Information Systems*, Vol. 6, 1997, pp. 107-121.

Theodore P. Stank and Michael R. Crum, "Just-in-Time Management and Transportation Service Performance in a Cross-Border Setting," *Transportation Journal*, Vol. 36, No. 3, Spring 1997, pp. 31-42.

Paula C. Morrow, Michael R. Crum, and Frank J. Dooley, "Employee Morale in the U.S. Class I Railroad Industry," *Journal of Transportation Law, Logistics and Policy*, Vol. 64, No. 4, Summer 1997, pp. 439-461.

Ronald D. Anderson, Michael R. Crum, and Roger E. Jerman, "Relationships of Work Improvement Experience and Logistics Quality Management Factors," *Transportation Journal*, Vol. 36, No. 1, Fall 1996, pp. 20-34.

Michael R. Crum, G. Premkumar, and K. Ramamurthy, "An Assessment of Motor Carrier Adoption, Use and Satisfaction with EDI," *Transportation Journal*, Vol. 35, No. 4, Summer 1996, pp. 44-57.

Carolyn M. Jones Carr and Michael R. Crum, "The U.S. Customs Modernization and Informed Compliance Act: Implications for the Logistics Pipeline," *International Journal of Logistics Management*, Volume 6, Number 2, 1995, pp. 67-82.

Michael R. Crum, Frank J. Dooley, and Paula C. Morrow, "Employee Attitudes About Railroad Injury Compensation," *Transportation Journal*, Vol. 35, No. 1, Fall 1995, pp. 15-29.

James C. McElroy, Paula C. Morrow, Michael R. Crum, and Frank J. Dooley, "Railroad Employee Commitment and Work-Related Attitudes and Perceptions," *Transportation Journal*, Vol. 34, No. 3, Spring 1995, pp. 13-24.

Charles D. Braunschweig, Michael R. Crum, and Benjamin J. Allen, "Evolution of Motor Carrier Contracting," *Transportation Quarterly*, Vol. 49, No. 2, Spring 1995, pp. 99-115.

Rafael J. Valdes and Michael R. Crum, "U.S. Motor Carrier Perspectives on Trucking to Mexico," *Transportation Journal*, Vol. 33, No. 4, Summer 1994, pp. 5-20.

Benjamin J. Allen, Michael R. Crum and Charles D. Braunschweig, "The Extent and Nature of EDI Use in the U.S. Motor Carrier Industry," *International Journal of Physical Distribution and Logistics Management*, Volume 22, Number 8, 1992, pp. 27-34.

Michael R. Crum, Benjamin J. Allen and Teresa M. Ross, "Motor Freight Transport Third Party Service: Shipper and Carrier Perspectives," *Transportation Practitioners Journal*, Vol. 60, No. 1, Fall 1992, pp. 37-58.

Deborah A. Johnson, Benjamin J. Allen, and Michael R. Crum, "The State of EDI Usage in the Motor Carrier Industry," *Journal of Business Logistics*, Vol. 13, No. 2, 1992, pp. 43-68.

Michael R. Crum and Benjamin J. Allen, "The Changing Nature of the Motor Carrier-Shipper Relationship: Implications for the Trucking Industry," *Transportation Journal*, Vol. 31, No. 2, Winter 1991, pp. 41-54.

Michael R. Crum and Benjamin J. Allen, "Shipper EDI, Carrier Reduction, and Contracting Strategies: Impacts on the Motor Carrier Industry," *Transportation Journal*, Vol. 29, No. 4, Summer 1990, pp. 18-32.

Michael R. Crum, "U.S. Transportation Management Developments Since Deregulation," *International Journal of Transport Economics*, Vol. XVI, No. 3, October 1989, pp. 263-295.

Michael R. Crum and Boguslaw Liberadzki, "The U.S. Railroad Industry Since Economic Regulatory Reform," *Problemy Ekonomiki Transportu*, (Problems in the Economics of Transport), Osrodek Badawczy Ekonomiki Transportu (Research Institute for Transport Economics), Warsaw, Poland.

Michael R. Crum, "The U.S. Railroad and Trucking Industries After Economic Deregulation," *Research Manuscripts*, Central School of Planning and Statistics, Warsaw, Poland, June 1989. (The *Research Manuscripts* is a refereed publication distributed to many universities throughout East and West Europe.)

Ellen Foster Curtis and Michael R. Crum, "Transportation Labor Relations: Contemporary Developments, Challenges and Strategies," *Transportation Quarterly*, Vol. XLII, Number 3, July 1988, pp. 359-375.

Michael R. Crum, Daulatram B. Lund and Howard E. Van Auken, "A Canonical Correlation Analysis of Carrier Financial Strategy: The Case of Airline Deregulation," *Transportation Research*, Vol. 21A, No. 3, May 1987, pp. 179-190.

Michael R. Crum, "Public Interest Measures for Railroad Merger Evaluation," *Transportation Practitioners Journal*, Vol. 54, No.1, Fall 1986, pp. 16-42.

Michael R. Crum, Benjamin J. Allen and Earl Dinkler, "National Defense Considerations in Rail Merger Cases," *Defense Transportation Journal*, June 1986, pp. 12-17.

Michael R. Crum and Benjamin J. Allen, "U.S. Transportation Merger Policy: Evolution, Current Status, and Antitrust Considerations," *International Journal of Transport Economics*, Vol. XIII, No. 1, February 1986, pp. 41-75.

Michael R. Crum, "The Expanded Role of Motor Freight Brokers in the Wake of Regulatory Reform," *Transportation Journal*, Vol. 24, No. 4, Summer 1985, pp. 5-15.

Howard Van Auken and Michael R. Crum, "The Impact of the Motor Carrier Act of 1980 on Motor Carrier Common Stock Returns," *Transportation Research*, Vol. 19A, Number 1, February 1985, pp. 43-49.

Michael R. Crum, "A Critique of and Recommendations for the ICC's Evaluation of Proposed Railroad Mergers," *ICC Practitioners' Journal*, Vol. 51, No. 4, May/June 1984, pp. 368-390.

Refereed Conference Proceedings

Jones-Carr, Flynn, Shrader, and Crum, "Predicting Firm Momentum to Respond to Environmental Change," *Proceedings of the 33rd Annual Meeting of the Decision Sciences Institute*, November 23-26, 2002, San Diego, CA.

Michael R. Crum, Paula C. Morrow, and Carmen Daecher, "The Influence of Carrier Scheduling Practices on Motor Coach Driver Fatigue," *Proceedings of the International Truck & Bus Safety Research & Policy Symposium*, Knoxville, TN, April 3-5, 2002, pp. 327-340.

Michael R. Crum, Paula C. Morrow, Patricia Olsgard, and Philip J. Roke, "Truck Driving Environments and Their Influence on Driver Fatigue and Crash Rates," 2001 Proceedings of the Annual Meeting of the Transportation Research Board, Washington, D.C., January 7-11, 2001.

Michael R. Crum, Paula C. Morrow, Philip Roke, and Joy Miller, "Motor Carrier Scheduling Practices and Their Influence on Driver Fatigue," *Proceedings of the Second International Truck and Bus Safety Symposium*, Knoxville, TN, October 7, 1999, pp. 13-30.

Ronald D. Anderson, Michael R. Crum, and Roger E. Jerman, "The Impact of Empowerment on the Service Value Chain," *1997 Proceedings Decision Sciences Institute*, 1997 Annual Meeting, November 22-25, 1997, San Diego, CA, Volume 3, pp. 1492-1494.

Charles B. Shrader and Michael R. Crum, "Developing a Distance Learning Program for a College of Business: One Task Force's Experience," *Interactive Teaching & Emerging Technologies: Selected Papers*, World Association for Case Method Research and Case Method Application, Thirteenth International Conference, Warsaw, Poland, October 1996, pp. 147 - 151.

Michael Crum and Miren Arango, "The Impact of Supply Chain Management on Logistics Service and Productivity," *1996 Semisesquicentennial Transportation Conference Proceedings*, sponsored by Iowa Department of Transportation and Iowa State University, Ames, Iowa, May 13-14, 1996, pp. 213-217.

Premkumar, G., Crum, M., and Ramamurthy, K., 1995. "Electronic Data Interchange: Adoption and Diffusion in the Trucking Industry in the USA" *Proceedings of the International Conference on Automation*, Indore, India.

Douglas Vorhies, Benjamin J. Allen, and Michael R. Crum, "Motor Carrier Selection Criteria: A Comparison of Shipper and Carrier Perceptions in the Deregulated Environment," *Journal of Transportation Management: 1991 Proceedings Issue*, Fifth Annual Combined Education Conference of Delta Nu Alpha and the American Society of Transportation and Logistics, Snowmass Village, Colorado, October 9-12, 1991, pp. 68-84.

Michael R. Crum and Benjamin J. Allen, "Carrier-Shipper Relationships in the Deregulated Environment: Implications for the Motor Carrier Industry," (abstract), Annual Meeting of the Transportation and Public Utilities Group of the American Economic Association, Washington, D.C., December 28, 1990.

Michael R. Crum and Benjamin J. Allen, "The Organization of the U.S. Trucking Industry," *The Scientific Conference "The Development of Systems and Means inTransport*," Transsystem '89, sponsored by The Committee of Transport of the Polish Academy of Sciences, Warsaw University of Technology-Central Programme of Fundamental Research 02.19, Scientific-Technical Centre of Railway Engineering, Warsaw, Poland, September 21-23, 1989, pp. 129-131.

Ellen Foster Curtis and Michael R. Crum, "Transportation Labor Relations in the Deregulated Environment: Recent Developments and Implications," *Proceedings of the Human Resource Management and Organizational Behavior Conference*, Philadelphia, Pennsylvania, November 1987.

Clyde Kenneth Walter and Michael R. Crum, "Inventory Simulation Model (INVENSIM)," *Logistics Education in an Electronic Age*, Proceedings of the Seventeenth Annual Transportation and Logistics Educators' Conference, 1987, Atlanta, Georgia, pp. 138-146.

John G. Wacker, Michael R. Crum, and Samuel Gardner, "Estimating the Backlog Effect on a Municipal Court System," *Southeast American Institute for Decision Sciences Proceedings*, 1984, Savannah, Georgia, pp. 26-28.

Invited and Editor-Reviewed Articles in Refereed Journals:

Crum, Michael R., "Reflections on the Role of Transportation in the Evolution of Supply Chain Management," *Transportation Journal*, Volume 54, Number 1, 2015, pp. 4-6.

Murphy, P., Poist, R., and Crum, M., "The Changing Nature of Research in the *Transportation Journal*: Some Historical Perspectives," *Transportation Journal*, Volume 50, Number 1, 2011, pp. 23-36.

Crum, M. and Poist, R., "IJPDLM's 40th Anniversary: An Overview and Retrospective Analysis," *International Journal of Physical Distribution & Logistics Management*, Volume 41, No. 1, 2011, pp. 5-15..

Farris, M., Menachof, D., and Crum, M., "Global Opportunities via the Fulbright Scholar Program," *Transportation Journal*, Volume 49, Issue 2, pp. 66-78, 2010.

Non-Refereed Articles:

Crum, Michael R., "Gateway to the Future," *Iowa Economic Development Guide*, 2015-16, SiteSelection.com. Vol. 2, pp. 42-43.

Stank, Goldsby, Crum and Sutherland, "Global Transportation Management Trends," *Industry Week*, March 7, 2007.

Phillip Banks, Amy Zecher, and Michael Crum, "Transportation Security," *Transportation Trends*, Volume 4, Number 2, Spring 2002, pp. 1-3 and 7.

Scott Sopher, Mark Lareau, and Michael Crum, "Third -Party Logistics Outsourcing," *Transportation Trends*, Vol. 4, No. 1, Winter 2002, pp. 1-3, and 7.

Eric Norfleet and Michael R. Crum, "Logistics Mergers and Acquisitions," *Transportation Trends*, Volume 3, Number 3, Summer 2001, pp. 1-3.

Art Kalemba and Michael Crum, "The Evolution of E-Supply Chains," *Transportation Trends*, Volume 3, Number 3, Summer 2001, pp. 6-7.

Michael R. Crum, "Successful E-Commerce: Supply Chain Management is Key," *Transportation Trends*, Volume 2, Number 2, Summer 2000, pp. 1,2,and 7.

Michael R. Crum and Richard McGinley, "Creating Value for Stakeholders," *Transportation Trends*, Volume 1, Number 4, December 1999, pp. 1-3, 4,5,7.

Christina K. Steinman and Michael R. Crum, "Airline Competition and Air Passenger Rights Receive Attention from Congress," *Transportation Trends*, Volume 1, Number 4, December 1999, pp. 6-7.

Christina K. Steinman and Michael R. Crum, "Railroad Competitive Access Issue Heats Up," *Transportation Trends*, Volume 1, Number 3, September 1999, pp. 6-7.

Christina K. Steinman and Michael R. Crum, "Motor Carrier Hours-of-Service Regulations," *Transportation Trends*, Volume 1, Number 2, June 1999, p. 6.

Christina K. Steinman and Michael R. Crum, "The Ocean Shipping Reform Act of 1998," *Transportation Trends*, Volume 1, Number 1, February 1999, pp. 6-7.

Michael R. Crum and Benjamin J. Allen, "Three Logistics Strategies: Their Impacts on Shippers and Carriers," *The Private Carrier*, Vol. 28, No. 2, February 1991, pp. 24-31.

Michael R. Crum, "Development of Airports in Indiana," *Indiana Business Review*, January-February 1979, pp. 5-10.

Invited Conference Proceedings

Michael R. Crum and Benjamin J. Allen, "The U.S. Experience after Economic Deregulation of the Freight Motor Carrier and Railroad Industries," presented at *TRANSLOG 2006 Conference*, Warsaw, Poland, September 27, 2006 and published in *Liberalizacja I Deregulacja Transportu w Unii Europejskiej*, edited by Boguslawa Liberadzkiego, Warzawa-Poznan 2007, pages 135-150..

Michael R. Crum, "The Role of Logistics in State and Regional Transportation Planning," *Proceedings of Transportation Policies: Our Choice for the Future Conference*, Upper Great Plains Transportation Institute and the Hubert H. Humphrey Institute for Public Affairs, Bismarck, ND, November 17, 1992, 30 pages (not numbered in proceedings).

Michael R. Crum, "Dynamic Shipper-Carrier Relationships," *Proceedings of the Transportation Research Forum*, Volume 6, 34th TRF Annual Forum, St. Louis, Missouri, October 21-23, 1992.

Boguslaw Liberadzki and Michael R. Crum, "A Research Agenda for the Development of Transportation Strategy in Poland," *Polish-American Seminar on Mathematical Modeling in Transportation*, Warsaw University of Technology, November 24, 1988, 10 pages (not numbered in proceedings).

Michael R. Crum, "Developments and Trends in Transportation Management in the United States," *International Conference on Transportation Economics*, University of Gdansk, Poland, October 20, 1988, 50 pages (not numbered in proceedings).

Books, Monographs, Chapters in Books, and Technical Reports

Books and Monographs:

Lisa Schweitzer, David J. Forkenbrock, Michael Zhang, and Michael R. Crum, *Highway Performance and Time Sensitive Industries*, University of Iowa Press, 1998 (87 pages).

Mary Kihl, Michael Crum, and Duane Shinn, *Choosing Smart Technologies: A Guide for Rural Paratransit Operators*, Iowa State University, Center for Transportation Research and Education, Ames, Iowa, 1996 (67

pages).

David J. Forkenbrock, Norman S.J. Foster, and Michael R. Crum, *Transportation and Iowa's Economic Future*, Public Policy Center, The University of Iowa, Iowa City, Iowa, 1993 (170 pages).

John F. Due, Benjamin J. Allen, Mary R. Kihl, and Michael R. Crum, *Transportation Service to Small Rural Communities: Effects of Deregulation*, Iowa State University Press, 1990 (223 pages).

Michael R. Crum and Ramesh K. S. Rao, *Airport Management Handbook*, Aeronautics Commission of Indiana, Indianapolis, 1979 (236 pages).

Chapters:

Thomas Goldsby, Michael Crum, and Joel Sutherland, "Transportation Management," *Handbook of Global Logistics and Supply Chain Management*, Editors: Mentzer, Myers, and Stank, Sage Publications, Inc., 2007.

Michael R. Crum and Mary C. Holcomb, "Transportation Outlook and Evaluation," *The Logistics Handbook*, James F. Robeson and William C. Copacino, Editors, The Free Press: New York, 1994, pp. 465-479.

Technical Reports:

Michael R. Crum, Tom Madrecki, and Chris Adderton, U.S. Supply Chain Policy Priorities: The Case for a Federal Office of Supply Chain, The Consumer Brands Association and Council of Supply Chain Management Professionals, February 2021.

Thomas H. Maze, Michael R. Crum, and Garrett Burchett, An Investigation of User Costs and Benefits of Winter Road Closures, Final Report – June 2005, University Transportation Centers Program, U.S. Department of Transportation (MTC Project 2003-01)

Michael Crum, Paula Morrow, and Carmen Daecher, *Motor Carrier Scheduling Practices and Their Influence on Driver Fatigue*, *Final Report*, Federal Motor Carrier Safety Administration, U.S. Department of Transportation, Report No. FMCSA-RT-03-005, October 2002.

Michael Crum and Thomas Goldsby, 2002-2003 Temperature Controlled Logistics Report, C.H. Robinson Worldwide, Inc. and Iowa State University, September 2002.

Michael Crum and Thomas Goldsby, 2001-2002 Temperature Controlled Logistics Report, C.H. Robinson Worldwide, Inc. and Iowa State University, September 2001.

Michael Crum and Thomas Goldsby, 2000-2001 Temperature Controlled Logistics Report, C.H. Robinson Worldwide, Inc. and Iowa State University, January 2001.

Lisa A. Schweitzer, David J. Forkenbrock, H. Michael Zhang, and Michael R. Crum, *Highway Performance and Time-Sensitive Industries*, The University of Iowa Public Policy Center, 1998.

Mary Kihl, Michael Crum, and Duane Shinn, *Linking Real Time and Location in Scheduling Demand-Responsive Transit*, Midwest Transportation Center, Iowa State University.

Michael R. Crum and Frank J. Dooley, *A Critique of the Federal Employers' Liability Act*, Midwest Transportation Center, Iowa State University, 1996.

Paula C. Morrow, Michael R. Crum, and Frank J. Dooley, *Employee Morale and Satisfaction in the Class I Railroad Industry*, Midwest Transportation Center, Iowa State University, 1996.

David J. Forkenbrock, Michael R. Crum, Norman S.J. Foster, Claudia Stevenson-Monroy, and Mark H. Simonson, *Transportation Services in Iowa: Summary and Assessment*, Midwest Transportation Center and

The University of Iowa Public Policy Center, September 1991.

Book Reviews

Review of *Transport Economics* by Gust Blauwens, Peter De Baere, and Eddy Van de Voorde, published in Transportation Journal, Vol. 42, No. 5, Fall 2003, pp. 56-57.

Review of *e-Business: The Strategic Impact on Supply Chain and Logistics* by Michael J. Bauer, Charles C. Poirier, Lawrence Lapide, and John Bermudez, published in *Transportation Journal*, Vol. 41, No. 2 & 3, Winter 2001/Spring 2002, pp. 101-102.

Review of *Transport Carrier Costing* by Wayne K. Talley, published in *Transportation Journal*, Vol. 29, No. 1, Fall 1989, pp. 57-58.

Review of *Introduction to Transportation* by Donald J. Bowersox, Pat J. Calabro and George D. Wagenheim (New York: MacMillan Publishing Co., Inc., 1981), published in *Journal of Business Logistics*, Vol. 4, No. 2, 1983, pp. 102-104.

FUNDED RESEARCH

Lead researcher; Project title: U.S. Supply Chain Policy Priorities: The Case for a Federal Office of Supply Chain; Funding source: Council of Supply Chain Management Professionals, 2021; \$43,000.

Co-Principal Investigator; Project title: Food Supply Chain Security: Managing Risk in Food Supply Chains; Funding source: Cargill, Inc., 2006; \$28,500

Faculty Associate; Project title: An Investigation of User Costs and Benefits of Winter Road Closures; Funding source: U.S. Department of Transportation through the Midwest Transportation Consortium, Project 2003-01; \$58,591.

Co-Principal Investigator; Project title: Temperature-Controlled Logistics; Funding source: C.H. Robinson Worldwide, Inc., 2000-2002; \$140,000.

Project Administrator and Co-Investigator; Project title: Port Des Moines Study; Funding sources: Iowa Department of Transportation, U.S. Department of Transportation, and Greater Des Moines Chamber of Commerce Federation, 1999-2001; \$133,750.

Principal Investigator; Project title: *Transportation Trends* Publication; Funding source: Deloitte & Touche, LLP, 1998-2001; \$99,000.

Co-Principal Investigator; Project title: Motor Carrier Scheduling Practices and Their Influence on Driver Fatigue; Funding sources: Federal Motor Carrier Safety Administration, U.S. Dept. of Transportation, and American Trucking Associations, Inc., 1997-2001; \$306,000.

Faculty Associate; Project title: Linking Real Time and Location in Scheduling Demand-Responsive Transit; Funding sources: U.S. Department of Transportation and Iowa Department of Transportation, 1994-1995; \$114,817.

Principal Investigator; Project title: Analysis of Selected Federal and State Policies Affecting Railroad Labor; Funding sources: U.S. Department of Transportation, Burlington Northern Railroad Co., and Union Pacific Railroad Co., 1990-1992; \$209,000.

Co-investigator; Project title: An Update on the Use of Electronic Data Interchange in the U.S. Motor Carrier Industry; Funding source: American Trucking Associations Foundation, 1996; \$5,000.

Co-investigator; Project title: Transportation and Iowa's Economic Future; Funding sources: U.S. Department

of Transportation, Iowa Department of Transportation, Iowa Business Council, and Northwest Area Foundation; 1990-1992; \$370,000.

PRESENTATIONS (not including those under proceedings)

International Presentations

Michael R. Crum, "An Overview of Key Logistics Challenges," 2nd International and Industrial Systems Engineering Congress Tecnológico de Monterrey – Morelia, Mexico, September 21, 2007. Michael R. Crum, Deborah A. Johnson, and Benjamin J. Allen, "Trends in the Use of EDI by the U.S. Motor Carrier Industry," World Conference on Transportation Research, Antwerp, Belgium, July 17, 1998.

Michael R. Crum, "Logistics Management Developments in the United States," University of Zimbabwe, Harare, Zimbabwe, January 10, 1996.

Michael R. Crum, "Third Party Logistics: Developments, Opportunities and Challenges," Manica Logistics, Johannesburg, South Africa, January 11, 1996.

Michael R. Crum and Benjamin J. Allen, Series of lectures on airline deregulation and global airline developments presented to the management of LOT, the Polish Airline, November 23-25, 1993, Warsaw, Poland.

Michael R. Crum, "U.S. Railroad Marketing Strategy and Financial Performance," Ministry of Transport, Warsaw, Poland, June 22, 1989.

Michael R. Crum, "Transportation Deregulation Policy in the United States: Implications for Managers and Planners," Warsaw University of Technology, Department of Civil Engineering, Institute of Roads and Bridges, Warsaw, Poland, June 20, 1989.

Michael R. Crum, "Railroad and Trucking Management Issues in the United States," Krakow Technical University, Department of Civil Engineering, Institute of Roads, Railways and Bridges, Krakow, Poland, May 31, 1989.

Michael R. Crum, "Logistics Management in the United States," Central School of Planning and Statistics, Foreign Trade Faculty, Institute of Economics and Organizations, Warsaw, Poland, May 19, 1989.

Michael R. Crum, "Economic Deregulation: Revitalization of the U.S. Freight Transport Industry," 30th Anniversary of Nordic Association for American Studies Conference, Tampere University, Tampere, Finland, May 14, 1989.

Michael R. Crum, "The Current State of Transportation Management in the United States," University of Gdansk, Transport Economics Faculty, Gdansk, Poland, March 8, 1989.

Michael R. Crum, "Air Transportation Policy in the United States," University of Gdansk, Transport Economics Faculty, Gdansk, Poland, March 8, 1989.

Michael R. Crum, "Key Developments in U.S. Transportation Economics and Technology," Research Institute for Transport Economics, Szczecin, Poland, November 30, 1988.

Michael R. Crum, "Transportation Deregulation in the U.S.: Successes and Problems," Institute of Transport, University of Szczecin, Szczecin, Poland, November 29, 1988.

Michael R. Crum, "Transportation Developments in the U.S. Since Deregulation," Central School of Planning and Statistics, Warsaw, Poland, November 28, 1988.

National Presentations

Michael Crum, Chris Adderton, and Keith Olscamp, "U.S. Public Policy Priorities: The Case for an Office of Supply Chain," Council of Supply Chain Management Professionals EDGE Conference, September 21, 2021.

Panelist at the 13th Annual Logistics Doctoral Symposium at Texas Christian University, Fort Worth, TX, on February 23, 2018. Panel topic: "The Future of Business Schools and What It Means for SCM Programs."

Michael R. Crum, "Motor Carrier Scheduling Practices and Their Influence on Driver Fatigue," presented to the Motor Carrier Safety Advisory Committee of the Federal Motor Carrier Safety Administration, December 6, 2010, Alexandria, VA.

Michael R. Crum and Richard Poist, "Managing Supply Chain Security," Distribution Business Management Annual Conference, Baltimore, MD, June 7, 2005.

Michael R. Crum, "Hours-of-Service," Moderated and Served as Panelist; Distribution Business Management Annual Conference, Chicago, IL May 19, 2004.

Michael R. Crum, "Challenges in Supply Chain Integration," Distribution Business Management Annual Conference, Las Vegas, NV, June 17, 2003.

Michael R. Crum, "Driver Issues in the U.S. Trucking Industry: A Supply Chain Perspective," WoF 2002 Annual Conference sponsored by DBM Associates, June 26, 2002, Orlando, FL.

Michael R. Crum, "Best Practices in Food Bank and Food Relief Logistics," Annual Operations Conference, America's Second Harvest, Chicago, IL, February 6, 2002.

Michael R. Crum, "Temperature Controlled Logistics Trends," WoF 2001 Annual Conference sponsored by DBM Associates, June 19, 2001, Atlanta, GA.

Michael R. Crum, presentation/workshop session on best practices by shippers/receivers and carriers in food industry, Food Shippers of America Annual Conference, San Diego, CA, February 26, 2001.

Michael R. Crum, "E-Commerce Strategies and Trends in Transportation," WoF 2000 Annual Conference sponsored by DBM Associates, May 16, 2000, Atlanta, GA.

Michael R. Crum, "Preparing Students for Transportation in the New Millenium," Transportation Clubs International, 1998 Transportation Education Congress, Denver, CO, August 30, 1998.

Michael R. Crum, "Motor Carrier Scheduling and Its Influence on Driver Fatigue," National Private Truck Council, Annual Conference, Chicago, IL, April 21, 1998.

Michael R. Crum, "A Longitudinal Assessment of EDI Use in the Motor Carrier Industry," Western Highway Institute, Annual Conference, San Francisco, CA, December 9, 1997.

Michael R. Crum, "Contracting, EDI, and Third-Party Logistics Trends in the Motor Carrier Industry," Transportation Clubs International, Annual Conference, New Orleans, LA, September 21, 1997.

Michael R. Crum, "Motor Carrier Management Trends," American Society of Transportation and Logistics, Annual Conference, Omaha, NE, August 15, 1997.

Theodore Stank and Michael Crum, "Logistics Value Added Chain Simulation," Food Shippers of America, Annual Conference, San Diego, CA, March 10, 1997.

Michael R. Crum, "University Programs in Transportation and Logistics," Panel session at the Transpor-tation

Education Conference, Annual Conference of Delta Nu Alpha Transportation Fraternity, Kansas City, MO, Sept.20, 1996.

Michael R. Crum, "University Transportation and Logistics Education: Staying Ahead of Change?" Transportation Education Symposium, Annual Conference of the American Society of Transportation and Logistics and Transportation Clubs International, Scottsdale, AZ, September 10, 1995.

Michael R. Crum, "Airline Privatization: The Case of LOT Polish Airline," UPS Panel Session at the Annual Meeting of the Transportation Research Forum, Daytona Beach, FL, November 4, 1994.

Frank J. Dooley and Michael R. Crum, "FELA: Rail Employees' Perspective," 36th Annual Meeting of the Transportation Research Forum, UPS Session on Rail Labor Laws, Daytona Beach, FL, November 4, 1994.

Michael R. Crum, "Dynamic Carrier-Shipper Relations," UPS Panel Session at the Annual Meeting of the Transportation Research Forum," St. Louis, MO, October 21, 1992.

Michael R. Crum, "Poland: Logistics Challenges and Opportunities," Second Annual Conference on International Logistics, presented by The World Trade Institute and Council of Logistics Management, New York, New York, April 30, 1990.

Michael R. Crum, "Intermodal Partnerships: Moving Closer in the Next Decade, or Not?", ITOFCA's 25th Annual Transportation Conference, Miami, FL, March 22, 1988.

Michael R. Crum and David B. Vellenga, "An Analysis of Carriers' Labor Strategies in a Deregulated Environment," presented at the 25th Annual Meeting of the Transportation Research Forum, Boston, October 23, 1984.

Michael R. Crum, "Survey of Motor Freight Brokers: Portrait of a Growing and Changing Industry," presented at the 25th Annual Meeting of the Transportation Research Forum, Boston, October 24, 1984.

Regional and State Presentations

Michael R. Crum, "Motor Carrier Scheduling Practices and Their Influence on Driver Fatigue," The Supply Chain Management Executive Development Seminar, Logistics and Distribution Institute, University of Louisville, Louisville, KY, March 23, 2000.

Michael R. Crum, "Factors Influencing Truck Driver Fatigue: Preliminary Results from Focus Group Discussions," 45th Annual L.L. Waters Indiana Transportation Conference, Bloomington, IN, April 16, 1998.

Michael R. Crum, "Developments in Supply Chain Management," American Production And Inventory Control Society (APICS) Chapter #33, Des Moines, IA, March 12, 1998.

Michael R. Crum, "Industry-University Partnerships," Transportation Club of Houston, Houston, TX, February 2, 1998.

Michael R. Crum, "Trends in Selected Aspects of the Motor Carrier-Shipper Relationship," Transportation Club of Houston, Houston, TX, February 2, 1998.

Michael R. Crum, "Motor Carrier Trends: 1990-1996," Northwest Georgia Transportation Club, Dalton, GA, February 6, 1997.

Michael R. Crum and Mary C. Holcomb, "The University Perspective on Transportation and Logistics: How to Tap Into These Valuable Resources," Annual Meeting of the Western Highway Institute, San Francisco, CA, December 8, 1995.

Michael R. Crum, "The Logistics of Manufactured Goods," Iowa Department of Transportation State Plan

Advisory Committee on Creating a Flexible System Which Can Accommodate the Rapid Change in Business and Agriculture, Iowa Department of Transportation, Ames, Iowa, August 24, 1994.

Michael R. Crum, "Compensation Program for Injured Railroad Workers," Iowa Department of Transportation State Plan Advisory Committee on Creating a Level Playing Field Among Modes in Terms of Facilities, Planning, and Finance, Iowa Department of Transportation, Ames, Iowa, August 24, 1994.

Michael R. Crum, "The Importance of Education for Transportation/Logistics Managers," Delta Nu Alpha, Waukesha County Chapter #317, Waukesha, Wisconsin, June 1, 1994.

Michael R. Crum, "The Changing Nature of the Shipper-Motor Carrier Relationship," Omaha Logistics Council, Omaha, Nebraska, January 9, 1992.

Michael R. Crum, "Air Transportation Service to Small Communities Since Deregulation," MidContinent Regional Science Association Annual Meeting, St. Louis, MO, June 3, 1988.

Michael R. Crum, "Significant Transportation Developments in the Lower 48 States Since Deregulation," presented at Alaska Transportation Forum, Anchorage, AK, July 23, 1987.

Michael R. Crum, "The Current Status of Motor Freight Brokerage in the U.S.," presented at Delta Nu Alpha Chapter No. 205, Des Moines, IA, March 7, 1985.

Howard E. Van Auken and Michael Crum, "The Motor Carrier Act of 1980: Stock Market Impact," presented at the 33rd Annual Meeting of the Midwest Finance Association, Chicago, April 5, 1984.

Michael R. Crum, "Airport Development Needs in Indiana," presented at L. L. Waters Transportation Conference, Indiana University, Bloomington, April 13, 1980.

COLLEGE AND UNIVERSITY SERVICE

College of Business:

Chairperson

Ad Hoc Committee on Undergraduate Curriculum Academic Standards Committee Faculty Development Committee

Member

Faculty Development Committee; Undergraduate Core Curriculum Task Force; Dean's Cabinet; Business/Economics Task Force; Distance Learning Task Force; Strategic Planning Committee; Associate Dean Search Committee; Dean Evaluation Committee; College of Business Service Role Focus Group; Search Committee for Assistant Director of Career Development; Promotion and Tenure Committee; Agribusiness Curriculum Committee; Academic Standards Committee; MBA Advisory Committee; Long Range Planning Committee; Computer Advisory Committee; Research Committee; Placement Committee; Curriculum Committee

University, Faculty Senate, and Interdepartmental:

Chairperson

Search Committee for Program Manager, Office of the Provost Department Chairman Review Committee for Industrial and Manufacturing Systems Engineering Dept. University Committee to Review the Academic Progress of Student Athletes Sub-Committee on Resource Allocation (Extended Education Task Force) Faculty Senate Academic Standards and Admissions Committee

Member

President's Cabinet: Provost Council: Council of Deans: Graduate Curriculum and Calendar Committee: Academic Personnel Work Group; Associate Deans for Graduate Programs; Associate Deans for Distance Education; Associate Deans for Research; Improving Industry Relations Task Force; University Industry Management Team (for: Boeing and Caterpillar); Advisory Board for M.S. in Seed Technology and Business; Admissions Committee for M.S. in Seed Technology and Business; Budget Model Development Committee; Graduate Curriculum Committee; Research Council; Economic Development Council; Distance Education Council; Directors of Graduate Education; ISU Research Park Finance Committee; ISU Research Park Tenant Resources Task Force; ISU Research Park Recruiting Existing Companies Task Force; Faculty Senate Faculty Development and Recognition Committee; Search Committee for Dean of College of Engineering; Search Committee for Dean of College of Business; Search Committee for Director of Extended and Continuing Education; Strategic Planning Committee for Extension and Continuing Education; Communications Task Force; Information Technology Task Force; Dept. Executive Officer Cabinet; Search Committee for Academic Services Director for Athletic Department; Faculty Senate Task Force on Communications; Extension and Continuing Education Director Search Committee; Vice Provost for Undergraduate Programs Search Committee; Extended Education Task Force; NCAA Self Study Subcommittee on Academic Integrity (Chaired sub-committee Task Force on Student-Athlete Integration into Student Body); University Committee to Review the Academic Progress of Student Athletes; Iowa State University/Iowa Department of Transportation Research Task Force; Faculty Senate Council on Academic Affairs; University Ad Hoc Committee on Student Outcomes Assessment; Faculty Senate; Faculty Senate Academic Standards and Admissions Committee; Faculty Senate Governance Council; Faculty Senate Committee on Governance Structure and Documents; Ad Hoc Committee on Internationalization (Subcommittee on Curriculum; Subcommittee on Research and Contracts/Grants); Transportation Advisory Council; University Faculty Council (Executive Committee; Faculty and Administration Relations Committee; Internal Affairs Committee); S.H. Ellis Award for Excellence in Teaching Selection Committee; Faculty Improvement Leave Committee; Search Committee for Director of Center for Transportation Research and Education

Board Memberships

Board of Directors, Iowa State University Research Park, 2002 - 2020 (Vice Chairman, 2003; Chairman, 2004 - 2019)

Board of Directors, Iowa State University Research Foundation, 2013 - 2019 Board of Advisors for ISU Center for Transportation Research and Education, 2000 - 2004

PROFESSIONAL ACTIVITIES

Positions Held in National Professional Societies

Board of Directors, Distribution Business Management Association, 2008 – present. Co-Chairman, Education Committee, Transportation Clubs International, 1999-2003. Board of Examiners, American Society of Transportation and Logistics, Professional Certification Program, 1987-1998.

Director of International Education Committee, Delta Nu Alpha Transportation Fraternity, 1991-1994.

Research Activities

Editorships

Co-Editor, International Journal of Physical Distribution & Logistics Management, 2005-2011. Editor, Journal of Transportation Management, 1992-1997. Co-Editor, Journal of Transportation Management: 1992 Proceedings Issue, Delta Nu Alpha Annual Conference, 1992.

Editorial Review Board Memberships

Associate Editor, Journal of Business Logistics, 2011 – present. International Journal of Physical Distribution & Logistics Management, 2011- present. Journal of Humanitarian Logistics and Supply Chain Management, 2011 – present. Transportation Journal, 2003 – present. Distribution Business Management Journal, 2001 - present. Journal of Transportation Management, 1997-present. University of Szczecin Scientific Journal Problems of Transport and Logistics, 2012 – present.

Other

Ad Hoc reviewer for Journal of Business Logistics, Transportation Research Part E: Logistics and Transportation Review, Transportation Research Part A: Practice and Policy, International Journal of Logistics Management, Transportation Quarterly, Council of Logistics Management Educators' Conference.

Member of program committee for the World Congress of Transportation Research held in Istanbul, Turkey, July 2004.

Education Activities

External Reviewer for University of Tennessee Department of Marketing and Logistics, 2008 (and mid-cycle review in 2011)

- External Reviewer for University of Oklahoma Supply Chain Management Program in Price College of Business, 2010.
- External Reviewer for Georgia Southern University Proposal for Ph.D. Program in Logistics, 2009.
- Member of Review Team for Curriculum Development at Higher Institute of Agricultural Cooperation, Cairo, Egypt, 1996 (ISU Center for Agriculture and Rural Development project).
- Member of Task Force on Logistics, Transportation, and Distribution, Center for Transportation Studies, University of Minnesota and Council of Logistics Management, Twin Cities Roundtable, 1994.
- Preparatory course for AST&L Exam No. 4C, IBM, Dayton, New Jersey, January 9-13, 1995.
- Examiner in Charge, Exam No. 4C, Transportation Systems, American Society of Transportation and Logistics, 1993-1998.
- Examiner in Charge, Exam No. 2, Traffic Management and Physical Distribution, American Society of Transportation and Logistics, 1987-1992.
- Associate Examiner for Exam No. 3, General Management Principles, American Society of Transportation and Logistics, Certification Program, 1983-1986.

Faculty advisor for Alpha Kappa Psi Professional Business Fraternity (Delta Omega chapter), 1981-1986.

Professional Memberships

Logistics Council Executive Committee, U.S. Chamber of Commerce, 2000-present. Council of Supply Chain Management Professionals, 1998 – present. (Serve on Board of Central Iowa Roundtable of CSCMP, 1999 – 2007.) Educator Member, American Society of Transportation and Logistics, 1983-present.

Economic Development Professional Activities and Memberships at State and Regional Level

Member, Iowa Innovation Council, 2013 – 2018 (member of Advanced Manufacturing and Biotechnology work groups)

Member, Iowa Innovation Corporation, 2013 – 2018

Member, Greater Des Moines Partnership International Council, 2014-2018

Delegate Council member, Cultivation Corridor Board of Directors, 2014-2020

Deputy member, Iowa Business Council, 2014-2018

Co-Chair, Capital Crossroads Business Capital sector, 2014-2018 Member, Ames Economic Development Commission Board, 2014-2018; Member AEDC Executive Committee, 2015-2018

Other Boards and Commissions

Member, Ames Civil Service Commission, 2005 – present; Chair, 2014 – present Member, Greater Iowa Credit Union Board of Directors, 2022 –

PROFESSIONAL AWARDS AND HONORS

University and College

Research Impact Award, Ivy College of Business, 2021. Interim Raisbeck Endowed Dean, 2012 – 2013. Ruan Chair in Supply Chain Management, 2011 – present. John and Ruth DeVries Endowed Chair in Business, 2004 – 2011. Iowa State University Alumni Association Award for Superior Service to Alumni, 2007. Undergraduate Teaching Award, College of Business, 2003 and 2005. Research Award, College of Business, 1998. Faculty Citation, Iowa State University Alumni Association, 1997. Teaching Effectiveness Award, College of Business, 1996. College of Business Nominee for University Mid-Career Research Achievement Award, 1992 and 1995. Outstanding Faculty Member Award, College of Business Administration, 1988. Yellow Freight Fellow in Transportation, 1986, 1989, 1990, and 1991. Paper of the Year Award, College of Business Administration, 1986. Amoco Foundation Outstanding Teacher Award, Iowa State University, 1985. (One of four university faculty honored that year.)

Professional Societies

Council of Supply Chain Management Professionals, Donald Bowersox Doctoral Student Symposium, Recognized for Career Impact (Learning from the Giants), 2021.

Presidential Citation, Delta Nu Alpha Transportation Fraternity, 1994 and 1993.

President's Award, American Society of Transportation and Logistics, 1994.

Transportation and Logistics Educator of the Year Award, Colorado Transportation Community, Operation Stimulus Transportation Forum, 1994.

International Intermodal Expo Distinguished Professor in Transportation and Logistics (and Faculty Fellowship to attend conference), 1991.

Fulbright Scholar in Transportation Economics, Central School of Planning and Statistics, Warsaw, Poland, 1988-89. (University now known as Warsaw School of Economics)

National Defense Transportation Association's Foundation Memorial Medal for Literary Merit, 1986.

(Awarded for best article published in *Defense Transportation Journal* between August 1985 and June 1986.) Elected to Beta Gamma Sigma, 1975.