CURRICULUM VITA

Ian Savage

Department of Economics, Northwestern University 2211 Campus Drive, Evanston IL 60208, USA Phone: 847-491-8241 **Fax:** 847-491-7001

e-mail: ipsavage@northwestern.edu ■ web: www.economics.northwestern.edu

Education

PhD, Economics, University of Leeds, 1984 BA (Honours), Economics, University of Sheffield, 1981

Appointments

Professor of Instruction, Department of Economics and the Transportation Center, Northwestern University, 1989 – (Senior Lecturer 1989-1998, promoted to College Lecturer when grade was created in 1998, grade was retitled Distinguished Senior Lecturer in 2007 and Associate Professor of Instruction in 2014, promoted to Professor of Instruction 2015)

Associate Chairperson, Department of Economics, Northwestern University, 1989-Director, Minor in Transportation and Logistics, Northwestern University, 2001-

Past Appointments

Acting Associate Director, Transportation Center, Northwestern University, 2000-01 Visiting Assistant Professor, Transportation and Logistics Division, Faculty of Commerce and Business Administration, University of British Columbia, 1988-89

Visiting Assistant Professor, Department of Economics and the Transportation Center, Northwestern University, 1986-88

Associate Economic Consultant, Transportation Consulting Division, Booz.Allen & Hamilton International (UK) Ltd., 1984-86

Areas of Specialization

Economics of safety and safety regulation.

Urban transportation.

Economics of transportation.

Publications

Books

Savage, Ian (ed.) (2013). Research in Transportation Economics: The Economics of Transportation *Safety* 43(1).

Savage, Ian (1998). The Economics of Railroad Safety. Boston: Kluwer Academic Publishers.

Moses, Leon N. & Ian Savage (eds.) (1989). *Transportation Safety in an Age of Deregulation*. New York: Oxford University Press.

Savage, Ian (1985). The Deregulation of Bus Services. Aldershot: Gower.

Journal Articles

Hyman, Max & Ian Savage (2022). <u>The effect of vertical product differentiation on fare and market share: evidence from Delta Air Lines' middle seat policy</u>. *Economics of Transportation* 31, article 100274.

Hyman, Max & Ian Savage (2021). <u>The value of space during a pandemic</u>. *Economics Letters* 207, article 110039.

Klieger, Joshua & Ian Savage (2020). <u>Motor vehicle drivers' behavioral response to increased bicycle traffic</u>. *Journal of Safety Research* 74:97-102.

Hall, Jonathan D. & Ian Savage (2019). <u>Tolling roads to improve reliability</u>. *Journal of Urban Economics* 113: article 103187.

Miller, Caroline & Ian Savage (2017). <u>Does the demand response to transit fare increases vary by income?</u> *Transport Policy* 55:79-86.

Savage, Ian (2016). <u>Analysis of fatal train-pedestrian collisions in metropolitan Chicago 2004-2012</u>. *Accident Analysis and Prevention* 86:217-228.

Nowak, William P. & Ian Savage (2013). The cross-elasticity between gasoline prices and transit use: evidence from Chicago. *Transport Policy* 29:38-45.

Savage, Ian (2013). <u>Reflections on the economics of transportation safety</u>. Research in Transportation Economics: The Economics of Transportation Safety 43(1):1-8.

Savage, Ian (2013). Comparing the fatality risks in United States transportation across modes and over time. Research in Transportation Economics: The Economics of Transportation Safety 43(1):9-22.

Panzar, John C. & Ian Savage (2011). <u>Does a minimum quality standard always reduce the price of high quality products?</u> *Berkeley Electronic Journal of Economic Analysis and Policy (Contributions)* 31(1): article 39.

Savage, Ian (2011). A structural model of safety and safety regulation in the truckload trucking industry. Transportation Research Part E: The Logistics and Transportation Review 47(2): 249-262.

Savage, Ian (2010). The dynamics of fare and frequency choice in urban transit. Transportation Research Part A: Policy and Practice 44(10):815-829.

Savage, Ian & Kenneth A. Small (2010). <u>A comment on "Subsidization of Urban Public Transport and the Mohring Effect."</u> *Journal of Transport Economics and Policy*, 44(3):373-380.

Ashley, Katherine & Ian Savage (2010). <u>Pricing congestion for arriving flights at Chicago O'Hare Airport</u>. *Journal of Air Transport Management* 16(1):36-41.

Savage, Ian (2007). <u>Trespassing on the railroad</u>. *Research in Transportation Economics: Railroad Economics* 20(1):199-224.

Johnson, Tracey & Ian Savage (2006). <u>Departure delays, the pricing of congestion, and expansion proposals at Chicago O'Hare Airport</u>. *Journal of Air Transport Management* 12(4):182-190.

Savage, Ian (2006). <u>Does public education improve rail-highway crossing safety?</u> *Accident Analysis and Prevention* 38(2):310-316.

Mok, Shannon & Ian Savage (2005). Why has safety improved at rail-highway grade crossings? *Risk Analysis* 25(4):867-881.

Savage, Ian (2004). <u>Management objectives and the causes of mass transit deficits</u>. *Transportation Research Part A: Policy and Practice* 38(3):181-199.

Savage, Ian (2004). <u>Trends in transportation employee injuries since economic deregulation</u>. *Research in Transportation Economics: Transportation Labor Issues and Regulatory Reform* 10(1):11-33.

Savage, Ian and Burgess Scott (2004). <u>Deploying regional jets to add new spokes to a hub</u>. *Journal of Air Transport Management* 10(2):147-150.

Savage, Ian (1999). <u>Railroad safety and public policy</u>. *Journal of the Transportation Research Forum* 38(1):56-63.

Savage, Ian (1997). <u>Scale economies in United States rail transit systems</u>. *Transportation Research Part A: Policy and Practice* 31(6):459-473.

Savage, Ian & August Schupp (1997). <u>Evaluating transit subsidies in Chicago</u>. *Journal of Public Transportation* 1(2):93-117.

Moses, Leon N. & Ian Savage (1997). A cost-benefit analysis of United States motor carrier safety programs. Journal of Transport Economics and Policy 31(1):51-67. Reprinted in Button, Kenneth (ed.) (2003) Recent Developments in Transport Economics. Cheltenham, U.K.: Edward Elgar Publishing.

Moses, Leon N. & Ian Savage (1996). <u>Identifying dangerous trucking firms</u>. *Risk Analysis* 16(3):351-358.

Brown, R. Scott & Ian Savage (1996). <u>The economics of double-hulled tankers</u>. *Maritime Policy and Management* 23(2):167-175.

Savage, Ian (1995). <u>Panzar and Rosse style tests of market structure in the U.S. motor carrier industry</u>. *Logistics and Transportation Review* 31(2):135-144.

Moses, Leon N. & Ian Savage (1994). <u>The effect of firm characteristics on truck accidents</u>. *Accident Analysis and Prevention* 26(2):173-179.

Savage, Ian (1993). Demographic influences on risk perceptions. Risk Analysis 13(4):413-420.

Savage, Ian (1993). <u>Deregulation and privatization of Britain's local bus industry</u>. *Journal of Regulatory Economics* 5(2):143-158.

Savage, Ian (1993). An empirical investigation into the effect of psychological perceptions on the willingness-to-pay to reduce risk. *Journal of Risk and Uncertainty* 6(1):75-90.

Moses, Leon N. & Ian Savage (1992). <u>The effectiveness of motor carrier safety audits</u>. *Accident Analysis and Prevention* 24(5):479-496.

Bylow, Lance F. & Ian Savage (1991). <u>The effect of airline deregulation on automobile fatalities</u>. *Accident Analysis and Prevention* 23(5):443-452.

Savage, Ian (1991). <u>Psychological features affecting valuation of life</u>. *Economics Letters* 35(4):379-383.

Moses, Leon N. & Ian Savage (1990). <u>Aviation deregulation and safety: theory and evidence</u>. *Journal of Transport Economics and Policy* 24(2):171-188.

Moses, Leon N. & Ian Savage (1989). <u>The effect of airline pilot characteristics on perceptions of job safety risks</u>. *Journal of Risk and Uncertainty* 2(4):335-351.

Savage, Ian (1988/9). The analysis of bus costs and revenues by time period. *Transport Reviews* 8(4):283-299 and 9(1):1-17.

Moses, Leon N. & Ian Savage (1988). <u>Air safety in the age of deregulation</u>. *Issues in Science and Technology* 4(3):31-36.

Savage, Ian, Graham P. Scholefield & Peter R. White (1986). <u>An evaluation of 'revenue at risk' from urban bus service changes</u>. *Traffic Engineering and Control* 27(7/8):398-401.

Savage, Ian (1986). <u>Evaluation of competition in the British local bus industry</u>. *Transportation Research Record* 1064:1-10.

Savage, Ian (1985). <u>Allocation of bus costs by time of day: a re-evaluation</u>. *Traffic Engineering and Control* 26(12):591-593.

Savage, Ian (1984). <u>Safety in the deregulated bus industry</u>. *Traffic Engineering and Control* 25(11):564-565.

Savage, Ian (1984). A note on 'unnecessary and wasteful' competition in bus transport. *Journal of Transport Economics and Policy* 18(3):303-309.

Savage, Ian (1983). <u>A probabilistic method for bus revenue estimation</u>. *Traffic Engineering and Control* 24(1):32-33.

Book Chapters

Savage, Ian (2021). <u>Economics of transportation safety</u>. In Roger W. Vickerman (ed) *International Encyclopedia of Transportation*. Elsevier.

Savage, Ian (2019). <u>Microeconomic perspectives on US transportation infrastructure: challenges and directions for the 21st Century</u>. In Aman Khan and Klaus Becker (eds.) *US Infrastructure: Challenges and Directions for the 21st Century*. New York: Routledge.

Savage, Ian (2012). <u>Competition on the basis of safety?</u> In James Peoples (ed.) *Pricing Behavior and Non-Price Characteristics in the Airline Industry.* (*Advances in Airline Economics*, Volume 3). Bingley, UK: Emerald Books.

Savage, Ian (2010). <u>Safety in transport</u>. In Kenneth Button, Henry Vega and Peter Nijkamp (eds.) *A Dictionary of Transport Analysis*. Cheltenham, UK: Edward Elgar.

Savage, Ian (2006). <u>Biography of Leon N. Moses</u>. In Ross B. Emmett (ed.) *Biographical Dictionary of American Economists*. London: Thoemmes Continuum.

Savage, Ian (2006). <u>Economic regulation of transport: Principles and experience</u>. In Michael Crew and David Parker (eds.) *International Handbook on Economic Regulation*. Cheltenham, UK: Edward Elgar.

Savage, Ian (2003). <u>Safety</u>. In David A. Hensher and Kenneth J. Button (eds.) *Handbook of Transport and the Environment*. Amsterdam: Elsevier Science.

Savage, Ian (2003). <u>Public Utilities: Mass Transit</u>. In Joel Mokyr (ed.) *The Oxford Encyclopedia of Economic History*, Volume 4, pp. 312-315. New York: Oxford University Press.

Savage, Ian (2001). <u>Transport Safety</u>. In David A. Hensher and Kenneth J. Button (eds.) *Handbook of Transport Systems and Traffic Control*. Amsterdam: Elsevier Science.

Savage, Ian (1999). The economics of commercial transportation safety. In José A. Gómez-Ibáñez, William B. Tye and Clifford Winston (eds.) *Essays in Transportation Economics and Policy: A Handbook in Honor of John R. Meyer*. Washington D.C.: Brookings Institution.

Savage, Ian (1999). <u>Aviation deregulation and safety in the United States: evidence after twenty years.</u> In Marc Gaudry and Robert Mayes (eds.) *Taking Stock of Air Liberalization*. Boston: Kluwer Academic Publishers.

Savage, Ian (1995-2007). Annual reviews of Aviation (1996-2007) and Transportation (1995-2007) in the *World Book Year Book*. Chicago: World Book

Moses, Leon N. & Ian Savage (1993). <u>Characteristics of motor carriers of hazardous materials</u>. In Frank F. Saccomanno and Keith Cassidy (eds.) *Transportation of Dangerous Goods: Assessing the Risks*. Waterloo, Ontario: University of Waterloo, Institute for Risk Research.

Moses, Leon N. & Ian Savage (1993). <u>Annual license fees and other charges for road transportation of hazardous materials</u>. In Leon N. Moses and Dan Lindstrom (eds.) *Transportation of Hazardous Materials: Issues in Law, Social Science, and Engineering*. Boston: Kluwer Academic Publishers.

Panzar, John C. & Ian Savage (1989). Regulation, deregulation and safety: an economic analysis. In Leon N. Moses and Ian Savage (eds.), *Transportation Safety in an Age of Deregulation*. New York: Oxford University Press.

Selected Reports

National Academies of Sciences, Engineering, and Medicine, Transportation Research Board (2024). <u>Ensuring Timely Pipeline Shutdowns in Emergencies: When to Install Rupture Mitigation Valves</u>. Transportation Research Board Special Report 349, Washington, DC: The National Academies Press. (Chair of the Committee on Criteria for Installing Automatic and Remote-Controlled Shutoff Valves on Existing Gas and Hazardous Liquid Transmission Pipelines.)

National Academies of Sciences, Engineering, and Medicine, Transportation Research Board (2017). <u>Safely Transporting Hazardous Liquids and Gases in a Changing U.S. Energy Landscape</u>. Transportation Research Board Special Report 325. Washington, DC: The National Academies Press. (Member of the Committee for a Study of Domestic Transportation of Petroleum, Natural Gas, and Ethanol).

Honors and Awards

Distinguished Transportation Researcher award from the Transportation Research Forum, April 2023.

Best paper award at the Transportation Research Forum annual meetings in 1995, 2000, 2004, 2006 and 2016.

Victor Olivera Educator Award for outstanding effort to help promote railroad safety awarded by the DuPage Railroad Safety Council, October 2012.

Best academic paper award at the 2014 Global Level Crossing and Trespass Prevention Symposium.

Herbert O. Whitten Service Award for contributions and having played an important role in the history of the Transportation Research Forum, March 2015.

Grants

Infrastructure Vision 2050 Research and Perspectives, Association of Equipment Manufacturers, 2015 (Senior Personnel)

The economics of traffic congestion, Searle Foundation, 2012-14 (faculty host of post-doctoral fellow Jonathan Hall)

The economics of safety regulation, U.S. Department of Transportation, 1997-99

Cost-benefit analysis of transit subsidies, U.S. Department of Transportation. 1996-98

Scale economies in rail transit systems, U.S. Department of Transportation, 1994-97

Economics of motor carrier safety, U.S. Department of Transportation, 1989-95

Economics of non-destructive testing of airframes, U.S. Federal Aviation Administration, 1991-93

Psychological features affecting valuation of life, Northwestern University, 1991

Attitude of commercial airline pilots to safety related job risks, Air Line Pilots Association, 1987-88

Transportation deregulation and safety conference, U.S. Department of Transportation and industry sources, 1986-88

Teaching and Advising

Graduate transportation project evaluation and transportation policy.

Undergraduate statistics, intermediate microeconomics, industrial organization, transportation economics, transportation project evaluation, and urban transportation.

Executive education courses in transportation economics.

Thesis advisor for Robert Dannatt *Role and effectiveness of government regulation of air transport regulation* (DBA, University of Western Australia, 2002).

Thesis committee member for Hooram Halat *Integrating Activity Scheduling and Travel Choices in a Dynamic Network Equilibrium Framework: Concepts, Algorithms and Application* (PhD, Northwestern University, 2016).

Thesis committee member for Samantha Chadwick *Quantitative Analyses Of Train Derailments due to Highway-Rail Grade Crossing Incidents* (PhD, University of Illinois at Urbana-Champaign, 2017).

Thesis committee member for Lama Bou Mjahed *Toward Sustainable Travel Behavior and Activity Engagement: Connected Users, Technology Engagement and Cohort Effect* (PhD, Northwestern University, 2017).

Professional Activities - Current

Editorial Board, Journal of Regulatory Economics, 2005-

Editorial Board, Accident Analysis and Prevention, 2013-

Editorial Board, Advances in Airline Economics (Emerald Publishing), 2013-

Professional Society Management, Transportation and Public Utilities Group of the Allied Social Science Associations, Member of the Governing Body, 2021-2025, President 2022, President-elect 2021

Professional Society Management, Transportation Research Forum, President 2017-18, Council member 1996-2007, 2014-19 and 2020-, Vice President – Academic Affairs 2020-, Vice President Programs for 2021 virtual annual conference, Past President 2018-19, Executive Vice President (President-elect) 2016-17, Co-Vice President

- Programs for 2017 annual conference, Secretary 2014-16, member of the strategic planning committee 2015-16, local host for 2004 annual conference
- **Professional Society Management**, Transportation Research Forum Foundation, President 2023-, Secretary 2019- 2023
- **Professional Society Management**, International Transport Economics Association, Chair of the Organizing Committee for the 2013 Summer School and Annual Conference. Member of the Summer School Committee 2014-15, Member of the Executive Committee 2014-18, Member of the Scientific Committee, 2015-19, Member of the Nominating Committee, 2023
- Committee Chair, National Research Council Committee on Criteria for Installing Automatic and Remote-Controlled Shutoff Valves on Existing Gas and Hazardous Liquid Transmission Pipelines, 2021-24
- Committee Membership, Transportation Research Board, Standing Committee on Highway/Rail Grade Crossings (AR080), 2015-24

Professional Activities - Past

- **Professional Society Management**, Econometrics Society, Chair of Local Arrangements Committee, 2012 North American Summer Meeting
- **Professional Society Management**, World Conference on Transport Research, Founder and co-chair of the "Safety Analysis and Policy" Special Interest Group 1989-2013, member of the International Scientific Committee, 1993-2010
- **Professional Society Management**, (Chicago) Metropolitan Conference on Public Transportation Research ("Transport Chicago"), member of the organizing committee 1991-99, Vice-President 1993-94, Treasurer 1994-99
- **Professional Society Management**, UK Transport Economists' Group, member of the organizing committee, 1985-86
- **Committee Membership**, Chicago Metropolitan Agency for Planning Regional Safety Resource Group, 2021-22
- Committee Membership, National Research Council Transit Cooperative Research Program Review Committee on Mitigation Strategies for Deterring Trespassing on Transit Rail Rights of Way (TCRP A-44), 2019-2021
- **Committee Membership**, National Research Council Committee for Review of the Federal Railroad Administration Research and Development Program, 2007-11 and 2019-2020
- **Committee Membership**, National Research Council Committee for Study of Domestic Transportation of Petroleum, Natural Gas, and Ethanol, 2015-17
- Committee Membership, Advisory Panel, U.S. General Accounting Office (Government Accountability Office) report on "Freight Trucking: Promising Approach for Predicting Carriers' Safety Risks," 1989

Consulting Experience

World Bank, Phillips Lytle LLP, Illinois Chamber of Commerce, Transport Canada, Union Pacific Railroad, Panama Canal Authority, Regional Transportation Authority of Northeastern Illinois, U.S. Nuclear Regulatory Commission, Illinois Commerce Commission, U.S. Federal Aviation Administration, Norfolk Southern Corporation/CSX Transportation, Chicago Area Transportation Study (now known as the Chicago

Metropolitan Agency for Planning), U.S. Government Accountability Office, Surrey County Council (U.K.), London Buses Limited, London Underground Limited.