

CURRICULUM VITAE

SIEW HOON LIM

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ACADEMIC POSITIONS

Professor, Department of Agribusiness and Applied Economics, North Dakota State University (August 2021 – Present)

Associate Professor, Department of Agribusiness and Applied Economics, North Dakota State University (August 2015 – August 2021)

Assistant Professor, Department of Agribusiness and Applied Economics, North Dakota State University (August 2005 – August 2015)

EDUCATION

- 1999-2005 University of Georgia, Athens, Georgia, USA
- Ph.D. in Economics (May 2005)
 - Dissertation: *Productivity and Financial Performance of U.S. Class I Railroads*
 - Major Advisor: Professor C.A. Knox Lovell
- 1996-1999 Bemidji State University, Bemidji, Minnesota, USA
- B.S. in Economics, Magna Cum Laude (December 1998)
 - Graduate Study in Mathematics Education (January – May 1999)

EMPLOYMENT HISTORY

RESEARCH ASSISTANT, Warnell School of Forest Resources, University of Georgia and USDA Forest Service, Athens, Georgia (August 2003 – June 2005)

GRADUATE INSTRUCTOR, Department of Economics, University of Georgia, Taught Principles of Macroeconomics (June 2002 – December 2002)

GRADUATE ASSISTANT, Department of Economics, University of Georgia (August 1999 - May 2003)

GRADUATE INSTRUCTOR, Department of Mathematics, Bemidji State University, Taught College Algebra (January 1999 – May 1999)

RESEARCH INTERESTS

Production Economics, Transportation Economics, Industrial Organization, Regional Economics, Economic Development

TEACHING

NORTH DAKOTA STATE UNIVERSITY

Undergraduate: Elements of Economics, Principles of Microeconomics, Intermediate Microeconomics, Industrial Organization, Econometrics, Senior Seminar

Graduate: Econometrics, Industrial Organization, Transportation Economics

UNIVERSITY OF GEORGIA

Undergraduate: Principles of Macroeconomics

HONORS AND AWARDS

H. Roald and Janet Lund Excellence in Teaching Award. College of Agriculture, Food Systems and Natural Resources, North Dakota State University (2018)

Earl and Dorothy Foster Excellence in Teaching Award, College of Agriculture, Food Systems and Natural Resources, North Dakota State University (2012)

John Godfrey Outstanding Graduate Student Award, Department of Economics, University of Georgia (2002)

Edward T. Comer Fellowship, Terry College of Business, University of Georgia (2000)

Outstanding Economics Graduate, Bemidji State University (1999)

R.D. Decker Award for Outstanding Research Contribution, Bemidji State University (1999)

GRANTS AND CONTRACTS

NDSU RCA Faculty Development Grant. North Dakota State University. Amount: \$1,000. April, 2020.

Co-Principal Investigator. National Aeronautics and Space Administration (NASA). *Satellite Enhanced Snowmelt Flood Predictions in the Red River of the North Basin* (ROSES Project #:13-WATER13-0036, J Jacobs, PI). Amount: ~\$1.5 mil (~\$250,000 subaward). January 1, 2017 – September 31, 2019.

Co-Principal Investigator. National Science Foundation (Proposal No. 1413954, Zhulu Lin, PI). *A Model for Groundwater Allocation and Management at the Bakken Shale in Western North Dakota*. Amount: \$249,423. August 1, 2014 – July 31, 2016.

Co-Principal Investigator. Delta Waterfowl Foundation (Cheryl Wachenheim, PI). *Conservation Decision Making in the Prairie Pothole Region*. Amount: \$20,000. 2014-2016.

Provost Travel and Research Fund, North Dakota State University. Amount: \$400. January, 2013.

Thomas K. Ostenson Faculty Development Fund, North Dakota State University. Amount: \$1,000. March, 2012.

FORWARD Travel Grant, North Dakota State University. Amount: \$1,110. June, 2010.

Principal Investigator. USDA Forest Service. *Modeling of Public Knowledge, Attitudes, and Values Related to Wild Fire, Fire Risk, and Fire Recovery in the Wildland Urban Interface and the Southern United States.* Amount: \$7,500. July, 2007 – May, 2008.

Co-Investigator. Joint Fire Science Program (Grant #01-1-3-30, J.M. Bowker, PI). *A Social Assessment of Public Knowledge, Attitudes, and Values Related to Wildland Fire, Fire Risk, and Fire Recovery.* 2002 – 2004.

REFEREED JOURNAL ARTICLES

*denotes first author an advisee/a student

*Karanki, F, **SH Lim.** 2021. Rate-setting Methods and U.S. Airport Aeronautical Charge differential: An Oaxaca Decomposition. *Research in Transportation Business and Management.* In Press.

*Karanki, F, **SH Lim.** 2021. Airport Use Agreements and Cost Efficiency of U.S. Airports. *Transport Policy* 114, 68-77.

*Malalgoda, N and **SH Lim.** 2021. Productivity Growth of Urban Transit Agencies in the U.S. *International Journal of Public Administration.* DOI: 10.1080/01900692.2021.1956949.

Lim, SH and F Karanki. 2020. Airport Use Agreement Types and Input and Output Slacks: The Case of U.S. Airports. *Research in Transportation Economics* 86 (2020), 100861.

*Karanki, F, **SH Lim** and B-J Choi. 2020. The Determinants of Aeronautical Charges of U.S. Airports: A Spatial Analysis. *Journal of Air Transport Management* 86 (2020). DOI: 10.1016/j.jairtraman.2020.101825.

*Karanki, F and **SH Lim.** 2020. The Effects of Use Agreements on Airport Efficiency. *Journal of Air Transport Management* 84(2020). DOI: 10.1016/j.jairtraman.2020.101767.

Lin, Z, **SH Lim,** T Lin and M Borders. 2020. Using Agent-Based Modeling for Water Resources Management in the Bakken Region. *Journal of Water Resources Planning and Management* 146(1). DOI: 10.1061/(ASCE)WR.19435452.0001147.

*Malalgoda, N and **SH Lim.** 2019. Do Transportation Network Companies Reduce Public Transit Use in the U.S.? *Transportation Research Part A: Policy and Practice* 130(2019): 351-372.

Zhou, D, Z Lin and **SH Lim.** 2019. Spatial Characteristics and Risk Factor Identification for Land Use Spatial Conflicts in a Rapid Urbanization Region in China. *Environmental Monitoring and Assessment,* 191:677.

Wachenheim, CJ, **SH Lim**, DC Roberts and J Devney. 2019. Landowner Valuation of a Working Wetlands Program in the Prairie Pothole Region. *Agricultural Economics* 50(4): 465-478.

Lim, SH. 2018. Does Shale Energy Development Mean More Crime? The Case of The Bakken Oil Boom. *Growth and Change* 49(3): 413-441.

Lin, Z, T. Lin, **SH Lim**, MH Hove and W.M. Schuh. 2017. Impacts of Bakken Shale Oil Development on Regional Water Uses and Supply. *Journal of the American Water Resources Association* 54(1): 225-239.

*Park, YS, **SH Lim**, G Egilmez and J Szmerekovsky. 2016. Environmental Efficiency Assessment of U.S. Transport Sector: A Slack-based Data Envelopment Analysis Approach. *Transportation Research Part D: Transportation and Environment* 61(A): 152-164.

Lim, SH and L Zhang. 2016. Does Casino Development Have a Positive Effect on Economic Growth? *Growth and Change* 48(3): 409-434.

Lim, SH and P Turner. 2016. Airline Fuel Hedging: Do Hedge Horizon and Contract Maturity Matter? *Journal of the Transportation Research Forum* 55(1): 29-49.

Liu, Q and **SH Lim**. 2015. Toxic Air Pollution and Container Port Efficiency in the USA. *Maritime Economics and Logistics*. doi:10.1057/mel.2015.29.

Coon, RC, NM Hodur, DA Bangsund and **SH Lim**. 2015. Contributions of Renewable Energy Industries to the Local Economy in North Dakota. *Great Plains Research* 25(1): 1-12.

*Turner, PA and **SH Lim**. 2015. Hedging Jet Fuel Price Risk: The Case of U.S. Passenger Airlines. *Journal of Air Transport Management* 44-45(2015): 54-64.

Lim, SH. 2014. Accounting for Environmental Pollution in Production Function. *Management of Environmental Quality* 25(6): 679-695.

Lim, SH, C Wachenheim, D Roberts, L Burbidge and J Jackson. 2014. "Gender Differences in Economics" *NACTA Journal* 58: 335-340.

Lim, SH and Y Hong. 2014. Fuel Hedging and Airline Operating Costs. *Journal of Air Transport Management* 36(2014): 33-40.

Lim, SH and J Chi. 2013. Are Cell Phone Laws Effective in Reducing Fatal Crashes Involving Young Drivers? *Transport Policy* 27(2013): 158-163.

Lim, SH and J Chi. 2013. Cell Phone Bans and Fatal Motor Vehicle Crash Rates in the United States. *Journal of Public Health Policy* 34(2): 197-212.

*Heng, Y, **SH Lim** and J Chi. 2012. Toxic Air Pollutants and Trucking Productivity in the U.S. *Transportation Research Part D: Transportation and Environment* 17(4): 309-316.

*Heng, Y and **SH Lim**. 2011. Accounting for Greenhouse Gas Emissions in Trucking Production: A Directional Distance Function Approach. *Journal of Economics* 37(2): 53-76.

*Shi, XF, **SH Lim** and J Chi. 2011. Railroad Productivity: Case of the American Class I Railroads. *International Journal of Productivity and Performance Management* 60(4): 372-386.

Chi, J, WW Koo and **SH Lim**. 2010. Demand Analysis for Air Passenger Service in U.S. City Pair Markets. *Journal of the Transportation Research Forum* 49(1): 81-93.

Chi, J, WW Koo and **SH Lim**. 2009. Price Dispersion in the U.S. Airline Industry. *Journal of the Transportation Research Forum* 48(3): 39-58.

Lim, SH and CAK Lovell. 2009. Profit and Productivity of U.S. Class I Railroads. *Managerial and Decision Economics* 30(7): 423-442.

Lim, SH, JM Bowker, CY Johnson and HK Cordell. 2009. Perspectives on Prescribed Fire in the South: Does Ethnicity Matter? *Southern Journal of Applied Forestry* 33(1): 17-24.

Lim, SH and CAK Lovell. 2008. Short-run Total Cost Change and Productivity of U.S. Class I Railroads. *Journal of Transport Economics and Policy* 42(1): 155-188.

Bowker, JM, **SH Lim**, HK Cordell, GT Green, S Rideout-Hanzak and CY Johnson. 2008. Wildland Fire, Risk, and Recovery: Results of a National Survey with Regional and Racial Perspectives. *Journal of Forestry* 106(5): 268-276.

PEER-REVIEWED BOOK CHAPTER

“Opportunities for Majors in Economics” with W. Nganje. 2015. Chapter 21 in *Economics for the Eager: Why Study Economics*, edited by K. Vaidya. The Curious Academic Publishing, ISBN: 978-1-925128-30-7.

OTHER PUBLICATIONS

Lin, Z., SH Lim., T Lin and M Borders. 2018. A multi-agent system of water allocation and management in the Bakken Region. 9th International Congress on Environmental Modelling and Software Conference Proceedings, Fort Collins, Colorado.

Lin, Z., T. Lin, and SH Lim. 2015. Groundwater Allocation and Management at Bakken in Western North Dakota. *MODFLOW and More 2015 Proceedings*, pp. 130-134.

Lim, SH. 2014. On Student’s Absent Presence: Cellphone Use and Teaching Practices. *National Teaching and Learning Forum* 23(6): 7-9.

Lim, SH. 2008. *Modeling of Public Knowledge, Attitudes, and Values related to Wild fire, Fire Risk, and Fire Recovery in the Wildland Urban Interface and the Southern United States*. USDA Forest Service (Grant Ref #: SRS 07-CA-11330144-057).

Lambert, DK, SH Lim, K Tweeten, FL Leistritz, WW Wilson, GJ McKee, WE Nganje, CS DeVuyst, DM Saxowsky. 2006. *Agricultural Value Added: Prospects for North Dakota*. AAEO6008.

Bowker, JM, SH Lim, HK Cordell, GT Green, CY Johnson, CJ Betz, and S Rideout-Hanzak. 2005. *A Social Assessment of Public Knowledge, Attitudes, and Values Related to Wildland Fire, Fire Risk, and Fire Recovery*. USDA Forest Service Final Report submitted to the Joint Fire Science Program.

Lim, SH and CAK Lovell. 2004. Short-run Profit and Productivity: The Case of U.S. Class I Railroads. In Emrouznejad, Ali, and Victor Podinovski (eds.), *Data Envelopment Analysis and Performance Management*. Proceedings to the 4th International Data Envelopment Analysis Symposium at Aston University in Birmingham, UK.

SELECTED PRESENTATIONS

“Understanding Perceived Economic Value of the Satellite Enhanced Snowmelt Flood Predictions.” with Y. Ge, Y. Martín, S. Iman at the 2020 International Research Committee on Disasters Researchers Meeting (Virtual Conference), July 16, 2020.

“Do Transportation Network Companies Reduce Public Transit Use in the US?” with N. Malalgoda. Poster presentation at the Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting, Seattle, Washington, October 21, 2019.

“Does Uber Reduce Public Transit Use in the US?” with N. Malalgoda. Presentation at the Transportation Research Forum Annual Meeting, Washington, DC, May 2 – 4, 2019.

“The Effects of Airline-Airport Business Relations on Airport Efficiency: A Moral Hazard Problem” with F Karanki. Presentation at the Transportation Research Forum Annual Meeting, Washington, DC, May 2 – 4, 2019.

“Effect of Subsidies on Urban Public Transit Performance and Ridership in the U.S.” with N Malalgoda. Poster presentation at the Transportation Research Board Annual Meeting, Washington, DC, January 15, 2019.

“Does Uber Reduce Public Transit Use in the US?” with N. Malalgoda. Poster Presentation at the American Economic Association Annual Meeting, Atlanta, Georgia, January 4 – 6, 2019.

“Social Impacts of the Satellite Enhanced Snowmelt Flood Predictions in the Red River of the North Basin” with Y. Ge, X. Jia, J. Jacobs and R. Schroeder. Poster Presentation at the American Geophysical Union Fall Meeting, Washington, DC, December 14, 2018.

“An Agent-based Model for Groundwater Allocation and Management at the Bakken Shale in Western North Dakota” with T Lin and Z Lin. Presentation at the American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 11-15, 2017.

“Shale Oil Production Expansion and Water-Energy Nexus in North Dakota: A Decentralized Agent-Based Modeling Approach” with Z Lin, M Borders and T Lin. Poster Presentation at the American Economic Association Annual Meeting, Chicago, Illinois, January 5 – 8, 2017.

“Shale Oil Production Expansion and Water-Energy Nexus in North Dakota: A Decentralized Agent-Based Modeling Approach” with Z Lin, M Borders and T Lin. Presentation at the Agricultural and Applied Economic Association Annual Meeting, Boston, Massachusetts, July 31 – August 2, 2016.

“Developing an Agent-based Model for the Depot-based Water Allocation System in the Bakken field in Western North Dakota,” with T Lin and Z Lin. Poster Presentation at American Geophysical Union Annual Meeting, San Francisco, California, December 14-18, 2015.

“Assessing the Impacts of Hydraulic Fracturing at Bakken on Regional Water Resources,” with Z Lin, T Lin and M. Borders. Oral Presentation at American Geophysical Union Annual Meeting, San Francisco, California, December 14-18, 2015.

“Groundwater Allocation and Management at Bakken in Western North Dakota,” with Z Lin and T Lin. Poster Presentation at MODFLOW and More 2015 Conference: Modeling a Complex World, Colorado School of Mines, Golden, Colorado, May 31 – June 3, 2015.

“Does Casino Development Have a Positive Effect on Local Economy?” with L Zhang. Presentation at the Southern Regional Science Association (SRSA) Meeting, Mobile, Alabama, March 25-28, 2015.

“Gender Differences in Agricultural Economics,” with C Wachenheim, L Burbidge, D Roberts, and J Jackson. Poster Presentation at the Agricultural and Applied Economics Association Annual Meeting, Minneapolis, Minnesota, July 27-29, 2014.

“Do Cell Phone Restrictions Reduce Fatal Crashes Involving Young Drivers?” with J Chi. Paper presentation at the American Economic Association (AEA) Annual Meeting, San Diego, California, January 4-6, 2013.

“Toxic Air Pollutants and Trucking Productivity,” with Y Heng and J Chi. Paper presentation at the 53rd Annual Transportation Research Forum in Tampa, Florida, March 15-17, 2012.

“Toxic Air Pollutants and Trucking Productivity,” with Y Heng and J Chi. Paper presentation at the Missouri Valley Economic Association Annual Meeting in Kansas City, Missouri, October 20-22, 2011.

“Incorporating Single and Multiple Bads in the Hyperbolic Distance Function.” Department of Agribusiness and Applied Economics, North Dakota State University, October, 2010.

“Productivity and Pollution in Trucking.” Paper presentation at the North American Productivity Workshop, Rice University, Houston, Texas, June 3 – 5, 2010.

“Price Recovery, Productivity, and Contributors of Railroad Profitability,” with F Shi and J Chi. Paper Presentation at the 51st Annual Transportation Research Forum, Arlington, Virginia, March 11-13, 2010.

“Price Recovery, Productivity, and Contributors of Railroad Profitability,” with F Shi. Paper presentation at 46th Missouri Valley Economic Association, Kansas City, MO, October 22– 24, 2009.

“Carriers’ Price Dispersion in the U.S. Airline Industry,” with J Chi, W Koo. Paper Presentation at the 50th Annual Transportation Research Forum, Portland, Oregon, March 16-18, 2009.

“An Economic Analysis of Technical and Efficiency Changes of U.S. General Freight Trucking, 1999-2003,” with S Condon. Paper presentation at the 45rd Missouri Valley Economic Association, St. Louis, MO, October 23- 25, 2008.

“Public Opinion on Wildland Fire and Fire Risk: An Examination of Socio-economic Factors,” with JM Bowker, S Rideout-Hanzak, HK Cordell, CY Johnson, and GT Green Poster Presentation at ISSRM 2007, 13th International Symposium on Society & Resource Management, Park City, Utah, June 17 - 21, 2007.

“Profit and Productivity of U.S. Class I Railroads,” with CAK Lovell. Paper presentation at the 43rd Missouri Valley Economic Association, Minneapolis, MN, October 26 - 28, 2006.

“Profit and Productivity of U.S. Class I Railroads,” with CAK Lovell. Paper presentation at the Institute for Operations Research and the Management Sciences (INFORMS), Pittsburgh, PA, 2006.

“Productivity in U.S. Trucking Industry: A Two-Stage, Semi-Parametric Approach.” Paper presentation at the North American Productivity Workshop’s Junior Researcher Session, Stern Business School, New York University, June 26 - 30, 2006.

“A Social Assessment of Public Knowledge, Attitudes, and Values Related to Wildland Fire, Fire Risk and Fire Recovery,” with Bowker, JM., S Rideout-Hanzak, HK Cordell, GT Green, CY Johnson, CJ Betz. Offered Presentation. Joint Fire Sciences Program Annual Principal Investigator Workshop, San Diego, CA, November 1-3, 2005.

“Got Trust? Nationwide Survey Results Concerning Public Trust in Government Fuels and Fire Management and Preferences in Fuel Reduction Methods” with Rideout-Hanzak, S, JM Bowker, HK Cordell, CY Johnson, CJ Betz, and GT Green. Poster Presentation. 23rd Annual Tall Timbers Fire Ecology Conference, Bartlesville, OK, October 17-20, 2005.

“Profit and Productivity of U.S. Class I Railroads,” with CAK Lovell. Paper presentation at the International Data Envelopment Analysis Symposium at Aston University, UK, 2004.

“Short-run Total Cost Change and Productivity of U.S. Class I Railroads,” with C.A.K. Lovell. Paper Presentation at the Mid-Continent Regional Science Association annual conference, Madison, Wisconsin, 2004.

REVIEWER SERVICES

- *American Journal of Preventive Medicine*
- *Applied Economics*
- *Cities*
- *Great Plains Research*
- *Journal of Adolescent Health*
- *Journal of Agricultural and Resource Economics*
- *Journal of Air Transport Management*
- *Journal of Business Economics and Management*

- *Journal of Economics*
- *Journal of Empirical Legal Studies*
- *Journal of Regulatory Economics*
- *Journal of Productivity Analysis*
- *Management of Environmental Quality*
- *Maritime Policy and Management*
- *Review of Industrial Organization*
- *Transport Policy*
- *Transportation Research Part A: Policy and Practice*
- *Transportation Research Part B: Methodological*
- *Transportation Research Part D: Transportation and Environment*
- *Transportation Research Record: Journal of the Transportation Research Board*
- *Transportmetrica A: Transport Science*
- Transportation Research Board
- Upper Great Plains Transportation Institute
- U.S. Surface Transportation Board

GRADUATE STUDENTS SUPERVISED

- **Ph.D. Students in Transportation and Logistics**
 - Fecri Karanki (2020)
 - Narendra Malalgoda (2020)
- **M.S. Students in Agribusiness and Applied Economics**
 - Michael Borders (2016)
 - Narendra Malalgoda (2016)
 - Peter Turner (2014)
 - Yan Heng (2011)
 - Feli Shi (2009)
 - Erica Peterson (2007)
- **M.S. Student in International Agribusiness**
 - Steven Condon (2008)
- **M.S. Student in Statistics**
 - Fecri Karanki (2020), co-advising with BJ Choi

MASTER'S THESIS AND DOCTORAL DISSERTATION COMMITTEES SERVED

- **Ph.D. Students**
 - Babak Mirzazadeh (Civil Engineering, In Progress)
 - Samantha Silbert (Coatings and Polymeric Materials, 2019)
 - Yong Shin Park (Transportation and Logistics; 2018)
 - Jaesung Choi (Transportation & Logistics, 2015)
 - Twyla Nielsen (Gerontology, 2015)

- David Ripplinger (Transportation & Logistics, 2012)
- Xianzhe Chen (Industrial Engineering, 2009)
- Junwook Chi (Transportation & Logistics, 2007)
- **M.S. Students**
 - Kangxin Sun (Agribusiness & Applied Econ., 2021)
 - Haley Coffield (Agribusiness & Applied Econ., 2021)
 - Khadeeja Mahmood (Agribusiness & Applied Econ., In Progress)
 - Nana Addo (Agribusiness & Applied Econ., 2016)
 - Aka Kyaw Min Maw (Agribusiness & Applied Econ., 2015)
 - Resha Dias (Agribusiness & Applied Econ., 2014)
 - Dasul Lee (Agribusiness & Applied Econ., 2014)
 - Laura Laufman (M.S., Agribusiness & Applied Econ., 2013)
 - Ran Shang (Agribusiness & Applied Econ., 2013)
 - Qingqing Yin (Agribusiness & Applied Econ., 2013)
 - Wonjoo Cho (Agribusiness & Applied Econ., 2012)
 - Andrea VanWinkle (Agribusiness & Applied Econ., 2011)
 - Alyssa Tangen (Agribusiness & Applied Econ., 2009)
 - Jason Walter (Agribusiness & Applied Econ., 2009)
 - Sheril Tzul (Agribusiness & Applied Econ., 2008)
 - Jason Middleton (Agribusiness & Applied Econ., 2008)
 - Fengqing Huang (M.S., Agribusiness & Applied Econ., 2006)

PROFESSIONAL AFFILIATIONS

- American Economic Association
- Beta Gamma Sigma, Honorary Business Society
- Transportation Research Board, National Academies of Sciences, Engineering, and Medicine
- Transportation Research Forum

PROFESSIONAL REFERENCES

AVAILABLE UPON REQUEST