# ANDREW T. BALTHROP

321 Stokely Management Center 916 Volunteer Boulevard Knoxville, TN 37916 balthrop@utk.edu

### **EDUCATION**

# Ph.D. in Economics, 2012, Georgia State University, Atlanta, GA.

Fields: Environmental and Natural Resource Economics, Applied Econometrics Dissertation: Oil and Gas Production: An Empirical Investigation of the Common Pool

Chair: Kurt E. Schnier

Committee: H. Spencer Banzhaf, James C. Cox, Timothy W. Fitzgerald

**B.A.**, International Studies and Economics, 2005, University of Mississippi, Oxford, MS.

Sally McDonnell Barksdale Honors College Croft Institute for International Studies *Phi Beta Kappa* 

#### PROFESSIONAL EXPERIENCE

## **Assistant Professor** (2024-present)

Department of Supply Chain Management Haslam College of Business University of Tennessee Knoxville, TN

Center for Energy, Transportation, and Environmental Policy Baker School of Public Policy and Public Affairs University of Tennessee Knoxville, TN

# Research Associate (2020-2024)

Supply Chain Management Research Center Department of Supply Chain Management University of Arkansas Fayetteville, AR

# **Visiting Assistant Professor** (2017-2020)

Department of Economics University of Arkansas Fayetteville, AR

## **Visiting Assistant Professor** (2016-2017)

Department of Economics Tulane University New Orleans, LA

## **Assistant Professor** (2012-2015)

Department of Economics American University of Sharjah Sharjah, United Arab Emirates

### **Research Intern** (2008-2011)

Research Department, Applied Microeconomics Federal Reserve Bank of Atlanta Atlanta, GA

#### PEER REVIEWED PUBLICATIONS

**Balthrop, A.,** Gordon, R., Phares, J., & Scott, A. Marijuana legalization and truck safety. (forthcoming at *Journal of Business Logistics*.)

**Balthrop, A.,** Scott, A., & Miller, J. (2023). How Do Trucking Companies Respond to Announced versus Unannounced Safety Crackdowns? The Case of Government Inspection Blitzes. *Journal of Business Logistics*, 44(4), 641-665.

Phares, J., & **Balthrop**, **A.** (2022). Investigating the role of competing wage opportunities in truck driver occupational choice. *Journal of Business Logistics*, 43(2), 265-289.

Scott, A., & **Balthrop**, **A. T.** (2021). The consequences of self-reporting biases: Evidence from the Crash Preventability Program. *Journal of Operations Management*, 67(5), 588-609.

Scott, A., **Balthrop, A.,** & Miller, J. W. (2021). Unintended responses to IT-enabled monitoring: The case of the electronic logging device mandate. *Journal of Operations Management*, 67(2), 152-181.

Balthrop, A. T. (2021). Gibrat's law in the trucking industry. *Empirical Economics*, 61, 339-354.

**Balthrop, A.,** & Quan, S. (2019). The power-law distribution of cumulative coal production. *Physica A: Statistical Mechanics and its Applications*, 530, 121573.

Arzaghi, M., & **Balthrop**, **A**. (2018). No taxation, no representation: An investigation of the relationship between natural resources and fiscal decentralization. *Environment and Planning C: Politics and Space*, 36(7), 1234-1255.

**Balthrop, A. T.,** & Hawley, Z. (2017). I can hear my neighbors' fracking: The effect of natural gas production on housing values in Tarrant County, TX. *Energy Economics*, 61, 351-362.

**Balthrop, A.** (2016). Power laws in oil and natural gas production. *Empirical Economics*, 51(4), 1521-1539.

**Balthrop, A. T.,** & Schnier, K. E. (2016). A regression discontinuity approach to measuring the effectiveness of oil and natural gas regulation to address the common-pool externality. *Resource and Energy Economics*, 44, 118-138.

## **WORKING PAPERS**

**Balthrop, A.** & Jung, H. (2024). Shared hardships strengthen bonds: Negative shocks, embeddedness, and employee retention.

**Balthrop, A.**, Bolumole, Y., & Scott, A. (2023). Carbon pricing and the truckload spot market.

Kulpa, T., **Balthrop A.**, Darby, J.L., Miller, J.W., Thomas, R., & Waller, M. (2023). Same time, same place, different results: Hurricanes and trucking spot prices.

Wilkin, K.W. & **Balthrop A.** (2023). The labor market effects of electronic logging devices in long-haul trucking.

## OTHER PUBLICATIONS, BLOGPOSTS AND MEDIA APPEARANCES

### **Academic Editorials**

Miller, J., **Balthrop, A.**, Davis-Sramek, B., & Richey Jr, R. G. (2023). Unobserved variables in archival research: Achieving both theoretical and statistical identification. *Journal of Business Logistics*, 44(3), 292-299.

### **Non-academic Publications**

- "Top Summer Reads: 6 Unconventional Books with Supply Chain Lessons" (Supply Chain Management Review, 6/13/2024)
- "Problematic Perspectives on EPA's Latest Greenhouse Gas Standards" (Supply Chain Management Review, 5/31/2024)
- "Supply Chain Set to Deliver this Christmas" (Supply Chain Management Review, 12/14/2023)
- "Safer Transportation: Linking Personality Traits to Distracted Driving" (Supply Chain Management Review, 12/8/2023)
- "The Polluters in the Mirror: Will Reporting Scope 3 Emissions Save the World?" (Supply Chain Management Review, 11/1/2023)
- "How Natural Gas Can Help Reduce the Environmental Impact of Energy Supply Chains" (Arkansas Money and Politics, 10/13/2023)
- "Market or roadway mayhem? A fundamental supply chain dilemma" (Supply Chain Management Review, 8/22/2023)
- "Crash diets don't work: Supply chain lessons for transitioning from fossil fuels" (Arkansas Money & Politics, 5/4/2023)
- "Why ocean shipping is less anti-competitive than lawmakers think" (Supply Chain Dive, 3/17/2023)
- "Robots Can Improve the Pharmacy Business and Patient Safety" (Arkansas Money & Politics, 3/9/2023)
- "Managing 5 unintended consequences of autonomous trucks" (Supply Chain Management Review, 3/6/2023)
- "It's time to move beyond just-in-time and just-in-case" (Supply Chain Management Review, 1/3/2023)

"Entrepreneurs Must Lead the Charge in Carbon Reduction" (Entrepreneur and Innovation Exchange, 11/9/2022)

"Course correction needed in wake of OSRA-22" (Journal of Commerce, 10/22/2022)

"Inflation is a lot worse than it seems as companies do not always pass on the costs" (Supply Chain Dive, 9/12/2022)

"Ocean shipping reform: A quick 'fix" hides unintended consequences" (Journal of Commerce, 5/24/2022)

"Gun Owners Need to Think Like Supply Chain Managers Before the Next Ammo Shortage" (The Truth About Guns, 5/15/2022)

"Overtime pay for employee drivers: Market benefits and drawbacks" (Overdrive, 5/2/2022)

"How would overtime pay affect trucking safety?" (Overdrive, 4/25/2022)

"Are ESG Ratings Actually Measuring How Responsible a Company Is?" (Fast Company, 12/6/2021)

"Did the ELD Mandate Reduce Accidents?" (Material Handling and Logistics, 4/22/2019)

# **White Papers**

White Paper: Inflation and Healthcare Supply Chains (Supply Chain Management Research Center Website, 11/14/2022)

White paper: Drug Testing Procedures in Trucking: An Overview, (Supply Chain Management Research Center Website, 1/11/2022)

### Website and Blogposts

<u>Intermodal Provides a Greener Option for Freight, but Barriers Remain</u> (Supply Chain Management Research Center Website, 6/29/2023)

<u>Does Banking Contagion Threaten Supply Chains?</u> (Supply Chain Management Research Center Website, 5/11/2023)

Why Inflation is Bad for your Health (Walton Insights, 12/1/2023)

Low Interest Rates, Price Controls, and Home Gardens: A Cautionary Tale of Inflation Psychology (Supply Chain Management Research Center Website, 7/27/2022)

Single-Sourcing, Market Concentration, and an Overkill Recall: A Losing Formula for Infant Milk (Supply Chain Management Research Center Website, 6/14/2022)

Closing the Loop on a Cracking Whip: Viewing Port Congestion Through the Lens of System Dynamics, (Walton Insights/ Supply Chain Management Research Center Website, 2/23/2022)

What Does Wall Street Volatility Mean for Freight Markets? (Supply Chain Management Research Center Website, 1/26/2022)

Why Are Supermarket Shelves Empty? (Supply Chain Management Research Center Website, 1/18/2022)

"Women, Supply Chain, and Governor Hutchinson's Task Force for Economic Recovery", (Supply Chain Management Research Center Website 8/15/2021)

- "Cutting Government Waste: The 250 Page White House Report in Under 700 Words" (LinkedIn, 7/6/2021)
- "Supply Chain Stress Testing: To Mandate, or Not to Mandate?" (Walton Insights/ Supply Chain Management Research Center Website, 6/28/2021)
- "Supply Chain Professors on Policy: Uncertainty, Buffers, and Trade-offs" (Walton Insights/ Supply Chain Management Research Center Website, 8/27/2021)

### **Selected Media Mentions and Appearances**

- "Walmart Insulated from Strikes: In-house or Contracted Services Mitigate Reliance on UPS" (Arkansas Democrat Gazette, 7/27/2023)
- "Healthcare Supply Chain Grapples with Wide Range of Shortages" (Modern Healthcare, 11/10/2022)
- "Inflating the Issue: Managing Rising Costs in Healthcare" (Power Supply: The Supply Chain Podcast, 9/2022)
- <u>"Episode #65: Does the Truck ELD Mandate Actually Make the Roads Safer"</u> Eyes on the Road (Podcast), (*PrePass*, 5/9/2022)
- "Are ELDs Raising Crash Rates?" Talks Trucking: The Voice of the Industry Podcast, (*Heavy Duty Trucking*, 2/28/2022)
- "State of the State 2022: Trucking industry demand to persist amid labor, equipment shortages" (Arkansas Talk Business & Politics, 1/26/2022)

### FreightWavesNOW TV Appearances

- "Are we in a growth spurt in manufacturing and distribution?" (1/26/2023)
- "How should you manage your supply chain in tougher economic times?" (9/29/2022)
- "Risks of Globalization" (6/2/2022, begins 27:50)

## **Selected Media Coverage of Research**

- "Federal law designed to make trucking safer may have aggravated worst issues" (FreightWaves, 3/27/2023)
- "3 Concerns Grappling the U.S. Commercial Trucking Industry in 2023" (Agency Height, 2/10/2023)
- "Marijuana legalization not linked to traffic accidents, study shows" (Overdrive, 7/28/2022)
- "Study Shows That Cannabis Legalization May Reduce Heavy Truck Crash Rates, Here's Why" (Benzinga, 7/11/2022)
- "Study Shows Decrease in Heavy Truck Crash Rates Since Cannabis Legalization" (High Times, 7/11/2022)
- "Legal Marijuana Lowers Risk of Truck Accidents: New Study" (Leaf Magazine, 7/11/2022)
- "Legal marijuana may lower rate of truck accidents, new research says" (FreightWaves, 7/7/2022)

- "Study disputes trucker shortage; drivers leaving job for better wages, says UA researcher" (Arkansas Democrat Gazette, 6/5/2022)
- "The 'ingenious strategy' behind most truckers' least favorite week of the year: International Roadcheck" (FreightWaves, 5/17/2022)
- "Opinion: Crash data defies logic of speed-limiter mandate" (FleetOwner, 5/11/2022)
- "ELD mandate: FMCSA and the law of unintended consequences" (*Teamsters National Pipeline*, 3/30/2022)
- "ELD mandate: FMCSA and the law of unintended consequences" (Heavy Duty Trucking, 3/28/2022)
- "Study questions whether FMCSA's ELD mandate for truckers 'has improved safety" (Safety+Health, 1/21/2022)
- "Study: Trucking accidents increased after ELD mandate" (Overdrive, 1/6/2022)
- "Roadcheck Inspections: To avoid or not to avoid, or both?" (Overdrive, 4/8/2021)
- "BCTA Recommends Simultaneous Mandates for ELDs & Speed Limiters" (BC Trucking Association, 10/21/2029)
- "Recent study finds ELD mandate had no significant impact on crash rates" (FreightWaves, 3/24/2019)
- "An alternative take on speeding violation rates under the ELD mandate" (Commercial Carrier Journal, 2/11/2019)
- "Study: ELD mandate may lead to unsafe driving behavior" (Supply Chain Dive, 2/7/2019)
- "ELD mandate hasn't reduced crashes, study reveals" (Land Line, 2/5/2019)
- "Crash rates unchanged by ELDs despite increased HOS compliance, study concludes" (Commercial Carrier Journal, 2/4/2019)
- "Research Reveals Mixed ELD Safety Effects" (Freight Waves, 2/1/2019)

## **GRANTS, HONORS, AWARDS**

Evaluating and Developing Economic Metrics and Models for Strategic Planning at J.B. Hunt Transport Services, Inc. (\$109,754, FY2021)

*Description:* Team developed out-of-sample prediction models correlating business performance in each of JB Hunt's major business divisions with macroeconomic aggregates. *Research Team:* Mervin Jebaraj (PI), **Andrew Balthrop** (Co-PI), David Sorto

Winner of *E. Grosvenor Plowman Award* (2019)

Academic Research Symposium, CSCMP Edge Conference 2019, Anaheim CA *Description:* Award presented annually for best paper submitted to the conference. *Paper Title:* "Unintended Responses to IT-Enabled Monitoring: The Case of the Electronic Logging Device Mandate" (now published in the *Journal of Operations Management*) *Research Team:* Alex Scott (lead author), **Andrew Balthrop**, Jason Miller

Nominee for E. Grosvenor Plowman Award (2022)

Academic Research Symposium, CSCMP Edge Conference 2022, Nashville, TN *Description:* Award presented annually for best paper submitted to the conference. *Paper Title:* "Does the Pineapple Express Result in More Damaged Pineapples? An Investigation into Cannabis Legalization and Trucking Safety" (under review) *Research Team:* **Andrew Balthrop** (lead author), Jonathan Phares, Ron Gordon, Alex Scott

Summer Research Grant (2014), School of Business Administration, American University of Sharjah Description: Competitive grant for summer funding awarded within each department. Paper Title: "No taxation, no representation: An investigation of the relationship between natural resources and fiscal decentralization" (now published in Environment and Planning C: Politics and Space)

Research Team: Mohammad Arzaghi (PI), Andrew Balthrop

Graduate Fellow (2011) Property and Environment Research Center (PERC), Bozeman, MT *Description:* Summer fellowship to conduct research with scholars at PERC.

#### SELECTED PRESENTATIONS

"Contagious crises: Asymmetric responses to demand shocks in hospital supply chains," 2023 Decision Sciences Institute Annual Conference, Atlanta, GA

"Carbon pricing and the truckload spot market," 2023 Decision Sciences Institute Annual Conference, Atlanta, GA

"Carbon pricing and the truckload spot market," 2023 Industry Studies Association Conference, Columbus, OH

"Marijuana legalization and truck safety: does the pineapple express damage more pineapples?" 2022 Decision Sciences Institute Annual Conference, Houston, TX

"Marijuana legalization and truck safety: does the pineapple express damage more pineapples?" 2022 Academic Research Symposium, CSCMP Edge Conference, Nashville, TN

"Marijuana legalization and truck safety: does the pineapple express damage more pineapples?" 2022, Supply Chain Management Department, University of Tennessee, Knoxville, TN

"Causal graphs as a tool in empirical logistics and supply chain management research" Academic Research Symposium, CSCMP Edge Conference, 2020, virtual

"Organizational Responses to Announced and Unannounced Inspection Events," Academic Research Symposium, CSCMP Edge Conference, 2019, Anaheim, CA.

The Labor Market Effects of Electronic Logging Devices in Long-haul Trucking," Southern Economic Association Annual Conference, November 2018, Washington, DC.

"Granular Supply Shocks as an Explanation for Supercycles in the Prices of Fossil Fuels," Southern Economic Association Annual Conference, November 2018, Washington, DC.

"The Labor Market Effects of Electronic Logging Devices in Long-haul Trucking," CSCMP Edge Academic Research Symposium, October 2018, Nashville, TN.

"Gibrat's Law in the Trucking Industry," Department of Economics Seminar Series, University of Arkansas, April 2018, Fayetteville, AR.

"Super-cycles in Commodities Prices," Department of Economics, Texas Christian University, November 2016, Fort Worth, TX.

"Measuring the Scarcity of Shrimp and Oil Using Empirical Mode Decomposition," Center for Natural Resource Economics and Policy 2016 Conference, March 2016, New Orleans, LA.

"I can hear my neighbors' fracking: The effect of natural gas production on housing values in Tarrant County, TX," Allied Social Science Associations Conference, January 2016, San Francisco, CA.

"I can hear my neighbors' fracking: The effect of natural gas production on housing values in Tarrant County, TX," Seventh Annual Research Symposium in Business and Economics, May 2015, Sharjah, UAE.

"I can hear my neighbors' fracking: The effect of natural gas production on housing values in Tarrant County, TX," 1st Annual International Conference on Social Studies, April 2015, Istanbul, Turkey.

"No Taxation, No Representation: An Investigation of the Relationship between Natural Resources and Decentralization," Inaugural Quantitative Research Symposium, Zayed University, February 2015, Abu Dhabi, UAE.

"I can hear my neighbors' fracking: The effect of natural gas production on housing values in Tarrant County, TX," Economics Seminar, United Arab Emirates University, February 2015, Al Ain, UAE.

"Power Laws in Texas Oil and Natural Gas Production," Western Economic Association International, Annual Conference, July 2014, Denver, CO

"Power Laws in Texas Oil and Natural Gas Production," Eastern Economic Association, Annual Conference, March 2014, Boston, MA.

### **RECENT CONFERENCES**

Decision Sciences Institute Annual Conference, Atlanta, GA (2023); CSCMP Edge Academic Research Symposium, Orlando FL (2023); Industry Studies Association Conference, Columbus, OH (2023); TCU Global Energy Symposium: The Road to Resilience, Fort Worth, TX (2023); Decision Sciences Institute Annual Conference, Houston, TX (2022); CSCMP Edge Academic Research Symposium, Nashville, TN (2022); The Future of Supply Chain, FreightWaves, Rogers, AR, (2022); 17<sup>th</sup> Annual Logistics Doctoral Symposium, Ames, IA (2022); CSCMP Edge Academic Research Symposium, virtual (2020); CSCMP Edge Academic Research Symposium, Anaheim, CA (2019); Allied Social Science Associations Annual Meeting, Atlanta (2019); Southern Economic Association Annual Conference, Washington (2018); MarketWaves 2018, Dallas (2018); CSCMP Edge Academic Research Symposium, Nashville (2018); Doctoral Research Symposium, Texas Christian University (2018) Allied Social Science Associations Annual Meeting, Chicago (2017); Center for Natural Resource Economics and Policy Conference, New Orleans (2016); Allied Social Science Associations Annual Meeting, San Francisco (2016); Seventh Annual Research Symposium in Business and Economics, American University of Sharjah (2015); 1st Annual International Conference on Social

Studies, Yildiz Technical University (2015); Inaugural Quantitative Research Symposium, Zayed University (2015); Western Economic Association International Annual Conference (2014); Eastern Economic Association Annual Conference (2014).

#### **TEACHING**

#### **Graduate Courses**

Sustainable Logistics and Supply Chain Management, SCMT-5123 (Last taught: 2023) Special Topics in Logistics-Causal Analysis in Supply Chain Research, SCMT-560V (2022)

#### Ph.D. Dissertation Committees

Travis Kulpa (2024). How Supply Chains Respond to Disruptions: Three Essays on Responses to Operational, Geopolitical and Natural Disaster Disruption. Dissertation Chair: Rodney Thomas.

## **Undergraduate Courses**

Environmental, Social and Governance Strategies and Operations in Supply Chains, SCMT-4123 (2024)

Principles of Macroeconomics, ECON-2103 (2022)

Cross-sector Collaboration for Sustainability, SCMT-4853 (2021)

Economics of the Developing World, ECON-3843 (2021)

Environmental and Natural Resource Economics (2017)

Intermediate Microeconomics (2017)

Public Economics (2015)

Principles of Microeconomics (2015)

# **Undergraduate Honors Theses**

Michael Johnson (2019). Gasoline stations in spatial competition.

## **SERVICE**

Session Chair

17<sup>th</sup> Annual Logistics Doctoral Symposium, 2022, Ames, IA. Southern Economic Association Meeting, 2018, 2011, Washington, DC.

Ad-hoc Senior Editor: Journal of Business Logistics

Reviewer: Journal of Business Logistics; CSCMP Academic Research Symposium; Energy Economics; Journal of Housing Economics; Empirical Economics; Business, Peace and Sustainable Development; Physica A; Journal of Conservation Biology; Sustainability; The International Trade Journal.

Member, Accreditation Committee, Department of Economics, American University of Sharjah, 2012-2015