# Benjamin P. Leard

#### **Contact Information:**

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#### Academic Positions and Professional Affiliations

Assistant Professor, Department of Agricultural and Resource Economics and The Baker School of Public Policy & Public Affairs, University of Tennessee

University Fellow, Resources for the Future, 2020-present

Faculty Fellow, Howard H. Baker Jr. Center for Public Policy, 2020-2023

Fellow, Resources for the Future, 2014-2020

### Education

Cornell University, Applied Economics and Management, Ph.D. 2014

James Madison University, Economics and Mathematics, B.S. 2008

# Working Papers

New Passenger Vehicle Demand Elasticities: Estimates and Policy Implications (with Yidi Wu), 2023 RFF Working Paper 23-33

Vehicle Attribute Tradeoffs and the Distributional Effects of US Fuel Economy and Greenhouse Gas Emissions Standards (with Joshua Linn and Katalin Springel), 2023 RFF Working Paper 23-04, revisions requested at *Journal of Political Economy: Microeconomics* 

How Much Do Consumers Value Fuel Cost Savings? Evidence from Passenger Vehicle Leasing (with Kevin Ankney), 2023 RFF Working Paper 21-27, revisions requested at *Journal of the Association of Environmental and Resource Economists* 

Should Electric Vehicle Purchase Subsidies be Linked with Scrappage Requirements? (with Kevin Ankney), 2022 RFF Working Paper 22-13, conditionally accepted at *Journal of Policy Analysis and Management* 

### Refereed Publications

Trends in Scrappage and Survival of U.S. Light-duty Vehicles (with David Greene), accepted, *Transportation Research Part A*, 2024, 180: 1-24.

Coordinating the electric vehicle transition and electricity grid decarbonization in the U.S. is not essential to achieving substantial long-term carbon dioxide emissions reductions (with David Greene), *Environmental Research Letters*, 2023, 18: 1-11.

Firms and Collective Reputation: A Study of the Volkswagen Emissions Scandal (with Rudiger Bachmann, Gabriel Ehrlich, Ying Fan, and Dimitrije Ruzic), *Journal of the European Economic Association*, 2023, 21-2.

How Much Do Consumers Value Fuel Economy and Performance? Evidence from Technology Adoption (with Joshua Linn and Christy Zhou), *The Review of Economics and Statistics*, 2023, 105-1.

Estimating Consumer Substitution between New and Used Passenger Vehicles, *Journal of the Association of Environmental and Resource Economists*, 2022, 9-1: 27-49

Interpreting Tradable Credit Prices in Overlapping Vehicle Regulations (with Virginia McConnell), *Journal of Environmental Economics and Management*, 2021, 109: 1-8.

What Does an Electric Vehicle Replace? (with Jianwei Xing and Shanjun Li), *Journal of Environmental Economics and Management*, 2021, 107: 1-33.

Pushing New Technology into the Market: California's Zero Emissions Vehicle Mandate (with Virginia McConnell), *Review of Environmental Economics and Policy*, 2021, 15(1): 169-179.

The Effect of Fuel Price Changes on Fleet Demand for New Vehicle Fuel Economy (with Virginia McConnell and Christy Zhou), *Journal of Industrial Economics*, 2019, 67(1): 127-159.

Explaining the Evolution of Vehicle Miles Traveled in the United States (with Joshua Linn and Clayton Munnings), *Energy Journal*, 2019, 40(1): 25-54.

Voluntary Exposure Benefits and the Costs of Climate Change (with Kevin Roth), *Journal of the Association of Environmental and Resource Economists*, 2019, 6(1): 151-185.

Flawed Analyses of U.S. Auto Fuel Economy Standards (with Antonio M. Bento, Kenneth Gillingham, Mark R. Jacobsen, Christopher R. Knittel, Joshua Linn, Virginia McConnell, David Rapson, James M. Sallee, Arthur A. van Benthem, and Kate S. Whitefoot), *Science*, 2018, 362(6419): 1119-1121.

Consumer Inattention and the Demand for Vehicle Fuel Cost Savings, *Journal of Choice Modeling*, 2018, 29: 1-16.

How Do Low Gas Prices Affect Costs and Benefits of US New Vehicle Fuel Economy Standards? (with Joshua Linn and Virginia McConnell), *Economics of Energy & Environmental Policy*, 2018, 7(2).

New Markets for Credit Trading Under U.S. Automobile Greenhouse Gas and Fuel Economy Standards (with Virginia McConnell), *Review of Environmental Economics and Policy*, 2017, 11(2): 207-226.

Fuel Prices, New Vehicle Fuel Economy, and Implications for Attribute-Based Standards (with Joshua Linn and Virginia McConnell), *Journal of the Association of Environmental and Resource Economists*, 2017, 4(3): 659-700.

Are Consumers Willing to Pay to Let Cars Drive for Them? Analyzing Response to Autonomous Vehicles (with Ricardo Daziano and Mauricio Sarrias), *Transportation Research Part C: Emerging Technologies*, 2017, 78: 150-164.

On the Importance of Baseline Setting in Carbon Offsets Markets (with Antonio Bento and Ravi Kanbur), *Climatic Change*, 2016, 137(3): 625-637.

Designing Efficient Markets for Carbon Offsets with Distributional Constraints (with Antonio Bento and Ravi Kanbur), *Journal of Environmental Economics and Management*, 2015, 70(2): 51-71.

The Welfare Effects of Allowance Banking in Emissions Trading Programs, *Environmental and Resource Economics*, 2013, 55(2): 175-197.

Equivalencies in the Fishery (with Jon Conrad), Natural Resource Modeling, 2013, 26(2): 154-163.

## Earlier Publications in Applied Mathematics and Statistics

Variations in Home Advantage: Evidence from the National Hockey League (with Joanne Doyle), *Journal of Quantitative Analysis in Sports*, 2012, 8(2): 1-27.

The Effect of Home Advantage, Momentum, and Fighting on Winning in the National Hockey League (with Joanne Doyle) *Journal of Sports Economics*, 2011, 12(5): 538-560.

Analysis of Predator–Prey Models with Continuous Threshold Harvesting (with Jorge Rebaza), *Applied Mathematics and Computation*, 2011, 217(12): 5265-5278.

An Optimal Strategy for Energy Allocation in a Multiple Resource Environment (with D. Brian Walton and Anthony Tongen), *Bulletin of Mathematical Biology*, 2010, 72: 1092-1123.

Dynamics of Ratio-Dependent Predator-Prey Models with Nonconstant Harvesting (with Catherine Lewis and Jorge Rebaza) *Discrete and Continuous Dynamical Systems-S*, 2008, 1(2): 303-315.

### Other Publications

Federal Climate Policy 104: The Transportation Sector, 2021 RFF Explainer

Progress and Potential for Electric Vehicles to Reduce Carbon Emissions (with Virginia McConnell), 2020 RFF Report 20-16

Carbon Pricing 202: Pricing Carbon in the Transportation Sector (with Joshua Linn and Kathryne Cleary), 2020 RFF Explainer

What Does Ridesharing Replace? (with Jianwei Xing), 2020 RFF Working Paper 20-03

Targeting Subsidies to Get More Electric Vehicles on the Road. RFF Resources Magazine Issue 202, Fall 2019

What Does an Electric Vehicle Replace? RFF Resources Magazine Issue 201, Summer 2019

California's evolving zero emission vehicle program: Pulling new technology into the market (with Virginia McConnell and Fred Kardos) 2019 RFF Working Paper 19-51

Fuelling Behaviour Change, Nature Energy News & Views, 2018, 3: 541-542.

Comments to NHTSA and US EPA on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026: Passenger Cars and Light Trucks (with Joshua Linn, Alan J. Krupnick, and Virginia McConnell) Public Comments, October 2018

Fleet Vehicles and Fuel Economy: How Do Fuel Prices Affect Vehicle Purchase Decisions for Big Buyers? (with Virginia McConnell and Christy Zhou) RFF Resources Magazine Issue 197, Spring 2018

The Benefits of Flexible Policy Design: US Energy Conservation Standards for Appliances (with Josh Blonz and Karen Palmer) RFF Resources Magazine Issue 197, Spring 2018

Comments on the US Department of Energy's Office of Energy Efficiency and Renewable Energy's Request for Information on Energy Conservation Standards Program Design (with Josh Blonz and Karen Palmer) RFF Report, February 2018

The Effect of Standards for New Vehicle Fuel Economy and GHG Emissions on US Consumers (with Joshua Linn and Christy Zhou) RFF Resources Magazine Issue 195, Fall 2017

The Net Emissions Impact of HFC-23 Offset Projects from the Clean Development Mechanism (with Clayton Munnings and Antonio Bento) 2016 RFF Discussion Paper 16-01

Fuel Prices, Economic Activity, and the Rebound Effect for Heavy-Duty Trucks (with Joshua Linn, Virginia McConnell and William Raich) 2016 RFF Discussion Paper 15-43 REV

How Climate Change Affects Traffic Accidents (with Kevin Roth) RFF Resources Magazine Issue 191, Winter 2016

Comments on Midterm Evaluation Draft Technical Assessment Report for Model Year 2022-2025 Light Duty Vehicle GHG Emissions and CAFE Standards (with Joshua Linn, Virginia McConnell and Kenneth Gillingham) RFF Report, September 2016

Do Low Oil Prices Undermine US Passenger Vehicle Fuel Economy Standards? (with Joshua Linn and Virginia McConnell) RFF Policy Brief, July 2016, No. 16-08

Comment on Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles; Phase 2. NHTSA-2014-0132-0109. The Potential for Improvement in On-road Truck Fuel Economy: Evidence from the VIUS (with Jen He and Virginia McConnell) https://www.regulations.gov/document?D=NHTSA-2014-0132-0109

# Research Funding

Tennessee Valley Authority

Oak Ridge National Laboratory

Sloan Foundation

**Energy Foundation** 

Merck Family Fund

Georgetown Climate Center

United States Climate Alliance

Resources for the Future New Frontiers Competition

# Student Advising

Masters degree advisor for Lauren Pate, University of Tennessee

Masters degree committee member for Hannah Donahue, University of Tennessee

Dissertation committee member for Ryan Swartzentruber, University of Tennessee

Dissertation committee member for Kevin Ankney, Georgetown University

Dissertation committee member for Hiroshi Matsushima, University of Illinois at Urbana-Champaign

Dissertation defense external examiner for Cheng Xu, George Washington University

# Teaching

Research Methodology in Agricultural Economics, University of Tennessee

Climate Change and Renewable Energy Economics, University of Tennessee

Economic Perspectives on Natural Resource and Environmental Issues, University of Tennessee

Research Methodology in Agricultural Economics, University of Tennessee

Policy Analysis for Environmental and Natural Resource Management, University of Tennessee

Environmental Economics, Ithaca College

Math Camp for incoming Masters and Ph.D. students, The Charles H. Dyson School of Applied Economics and Management

### Presentations

2024: Department of Economics, University of Georgia; Institute of Transportation Engineers, University of Tennessee

2023: AERE Annual Summer Conference; Energy and Environment Forum Howard H. Baker Jr. Center for Public Policy, University of Tennessee

2010-2022: Health Effects Institute Annual Conference, ASSA Annual Meeting; Howard H. Baker Jr. Center for Public Policy, University of Tennessee; Ford Motor Company; NBER Economics of Transportation in the 21st Century; Exploring Innovative Transportation Policies, Resources for the Future; Northeast Workshop on Energy Policy and Environmental Economics, Harvard University; TE<sup>3</sup> Conference on Transportation, Economics, Energy, and the Environment, University of Michigan; Howard H. Baker Jr. Center for Public Policy Public Forum on Electric Mass Transit as an Option for Urban Mobility, University of Tennessee; 6th World Congress of Environmental and Resource Economists; 2018 TE<sup>3</sup> Conference on Transportation, Economics, Energy, and the Environment, University of Michigan; 2017 TE<sup>3</sup> Conference on Transportation, Economics, Energy, and the Environment, University of Michigan; AERE 6th Annual Summer Conference; Department of Transportation Workshop; AERE 5th Annual Summer Conference; Transportation Research Board Annual Meeting; The Economics of Low-Carbon Markets, University of de Sao Paulo; MIT CEEPR Workshop; Iowa State University; Wake Forest University; California State - Long Beach; Resources for the Future; AERE 2nd Annual Summer Conference; 2nd Northeast Workshop on Energy Policy and Environmental Economics, Cornell University; EAERE Summer Conference; AERE 1st Annual

Summer Conference; EAERE-FEEM-VIU European Summer School; Eastern Economics Association Meetings; United Nations Conference of Parties Climate Change (COP16) Conference, Agricultural and Rural Development Day, Ideas Marketplace Presentation

# Journal Editorial Appointments

Editorial Council, Journal of the Association of Environmental and Resource Economists, 2024-

### Journal Reviewer Experience

American Journal of Agricultural Economics, Climate Policy, Economic Inquiry, Energy Economics, Energy Journal, Energy Policy, Environmental and Resource Economics, European Economic Review, International Economic Review, Journal of Benefit-Cost Analysis, Journal of Choice Modeling, Journal of Environmental Economics and Management, Journal of Natural Resources Policy Research, Journal of Political Economy: Microeconomics, Journal of Public Economics, Journal of the Association of Environmental and Resource Economists, Journal of the European Economic Association, Journal of Urban Economics: Insight, Nature Climate Change, Nature Energy, Proceedings of the National Academy of Sciences: Nexus, Regional Science and Urban Economics, Research in Transportation Economics, Resource and Energy Economics, Scandinavian Journal of Economics, Transportation Research Part A: Policy and Practice, Transportation Research Part D: Transport and Environment

## Grant Reviewer Experience

National Science Foundation