

Kevin D. Dayaratna, Ph.D.

The Heritage Foundation, Center for Data Analysis
214 Massachusetts Ave, NE, Washington DC 20002

Education:

University of Maryland, College Park

Ph.D. in Mathematical Statistics (2014)

- Dissertation title: “Contributions to Bayesian Statistical Modeling in Public Policy Research”
- Adviser: Professor Benjamin Kedem
- Specialty in Bayesian modeling, statistical computing, and economic modeling
- Passed doctoral qualifying exams in Mathematical Statistics, Applied Statistics, and Probability Theory

University of Maryland, College Park

M.A. in Mathematical Statistics (2011)

- Specialty in statistical modeling of real-world phenomena including economics, business, medical outcomes, and professional sports

University of Maryland, College Park

M.S. in Business and Management (2008)

- Specialty in statistical modeling in business and economics
- Winner, Dean’s Summer Fellowship

University of California, Berkeley

B.A. in Applied Mathematics (2005)

- Specialty in mathematical physics
- Significant coursework in Political Science

Experience:

The Heritage Foundation, Washington D.C.

- Acting Director, Chief Statistician, Senior Research Fellow, Center for Data Analysis (December 2024 - present)
- Chief Statistician, Data Scientist, and Senior Research Fellow, Center for Data Analysis (April 2022 – December 2024)
- Principal Statistician, Data Scientist, and Research Fellow, Center for Data Analysis (March 2020-March 2022)
- Senior Statistician and Research Programmer, Center for Data Analysis (June 2014-March 2020)
- Research Programmer and Policy Analyst, Center for Data Analysis (January 2013-June 2014)
- Research Associate, Center for Data Analysis (September 2012-December 2012)
- Graduate Fellow in Health Policy, Center for Health Policy Studies (May 2012-August 2012)

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- Intern, Center for Health Policy Studies (January-May 2012)

Georgetown University, Washington D.C.

- Adjunct Professor of Mathematics and Statistics (2023-2024)

The Heartland Institute, Arlington Heights, Illinois

- Policy Adviser (2017-present)

Expert Statistical Consultant

- Provided statistical consulting for a variety of organizations in fields ranging from finance to marketing to medicine (2014-present)

Charles Koch Institute, Arlington, VA

- Adjunct Faculty (2016-2018)

The George Washington University, Washington D.C.

- Adjunct Professor of Mathematics and Data Science (2016-2018)
- Adjunct Professor of Mathematics (2015-2016)

University of Maryland, College Park, MD

- Lecturer, Department of Economics (2011-2016)
- Teaching Assistant, Department of Mathematics (2009-2011)

Awards/Accolades:

- Winner, 2024 Glen and Ricardo Campbell Award for Outstanding Analysis for the Promotion of a Free Society, The Heritage Foundation, 2024
- Winner, 2019 Keith Wold Award for Excellence in Empirical Research, The Heritage Foundation, 2018

Modeling Skills:

- Statistical Modeling
- Bayesian Statistics
- Parametric/Non-Parametric Modeling
- Probability Theory
- Data Mining
- Machine Learning
- Statistical Computing
- Time Series Analysis
- Optimization
- Monte Carlo Analysis applied to varieties of real-world phenomena

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Programming Skills:

Highly proficient in Matlab, R, WinBUGS, Python, Mathematica, and Excel VBA.
Experienced with many other programming languages as well.

Research Interests:

Statistical modeling applied to:

- Public policy
- Medicine
- Engineering
- Professional sports

Selected Publications:

- **Policy Publications:**

"Calculating the "Social Cost of Carbon" with the GIVE Model: An EPA Model Not Ready for Prime Time," (with Alex Frei and Austin Gae) Heritage Foundation Special Report, January 24, 2025,

<https://www.heritage.org/climate/report/calculating-the-social-cost-carbon-the-give-model-epa-model-not-ready-prime-time>

"Time for U.S. Energy Dominance: Unlocking America's Oil and Gas Potential through Innovation and Policy," (with Mario Loyola and Austin Gae) Heritage Foundation Backgrounder, January 20, 2025,

<https://www.heritage.org/energy/report/time-us-energy-dominance-unlocking-americas-oil-and-gas-potential-through-innovation>

"Keeping an Eye on the Storms: An Analysis of Trends in Hurricanes Over Time," (with Joe D'Aleo) Heritage Foundation Special Report, December 2, 2024,

<https://www.heritage.org/energy/report/keeping-eye-the-storms-analysis-trends-hurricanes-over-time>

"Beyond the Ballot: A Survey of Statistical Methods for Uncovering Election Anomalies," Heritage Foundation Issue Brief, November 8, 2024,

<https://www.heritage.org/election-integrity/report/beyond-the-ballot-survey-statistical-methods-uncovering-election>

"Why Electricity Prices Are Soaring in Blue States," Heritage Foundation Backgrounder, October 23, 2024 (with Mario Loyola and Andrew Weiss)

<https://www.heritage.org/environment/report/why-electricity-prices-are-soaring-blue-states>

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"Powering Human Advancement: Why the World Needs Affordable and Reliable Energy," (with Diana Furchtgott-Roth, Miles Pollard, and Richard Stern)
Heritage Foundation Special Report, December 14, 2023
<https://www.heritage.org/energy/report/powering-human-advancement-why-the-world-needs-affordable-and-reliable-energy>

"Using Unmatched Medical Graduates to Improve Access to Care in Texas,"
Texas Public Policy Foundation, January 5, 2023
<https://www.texaspolicy.com/wp-content/uploads/2023/01/2023-01-RoH-Unmatched-Medical-Graduates-DayaratnaOSheaBalat.pdf>

"The Blue City Murder Problem," (with Charles Stimson and Zack Smith)
Heritage Foundation Legal Memo. November 4, 2022.
<https://www.heritage.org/crime-and-justice/report/the-blue-city-murder-problem>

"The Unsustainable Costs of President Biden's Climate Agendas" (with Katie Tubb and David Kreutzer). Heritage Foundation Backgrounder. June 16, 2022.
<https://www.heritage.org/energy-economics/report/the-unsustainable-costs-president-bidens-climate-agenda>

"Trading an Energy-Scarcity Agenda for Energy Abundance Pays Dividends" (with Katie Tubb and David Kreutzer). Heritage Foundation Backgrounder. July 29, 2022. <https://www.heritage.org/energy-economics/report/trading-energy-scarcity-agenda-energy-abundance-pays-dividends>

"COVID-19: A Statistical Analysis of Data from Throughout the Pandemic and Recommendations for Moving On" (with Doug Badger) Heritage Foundation Special Report. February 24, 2022. <https://www.heritage.org/public-health/report/covid-19-statistical-analysis-data-throughout-the-pandemic-and-recommendations>

"A Statistical Analysis of COVID-19 Breakthrough Infections and Deaths" (with Norbert Michel). Heritage Foundation Backgrounder. August 12, 2021.
<https://www.heritage.org/public-health/report/statistical-analysis-covid-19-breakthrough-infections-and-deaths>

"A Statistical Analysis of COVID-19 and Government Protection Measures in the U.S." (with Andy Vanderplas). Heritage Foundation Special Report. March 18, 2021. <https://www.heritage.org/public-health/report/statistical-analysis-covid-19-and-government-protection-measures-the-us>

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"Green New Deals: Bad for Americans and Bad for Europeans" (with Jim Roberts and Nick Loris). Heritage Foundation Issue Brief. August 7, 2020.

<https://www.heritage.org/energy-economics/report/green-new-deals-bad-americans-and-bad-europeans>

"A Comparative Analysis of Policy Approaches to COVID-19 Around the World, with Recommendations for U.S. Lawmakers" (with Patrick Tyrrell and Andy Vanderplas) Heritage Foundation Special Report, July 20, 2020.

<https://www.heritage.org/public-health/report/comparative-analysis-policy-approaches-covid-19-around-the-world>

"The Scientific Case for Vacating the EPA's Carbon Dioxide Endangerment Finding: The Hazard of Unreliable Models Guiding Policy" Competitive Enterprise Institute Issue Analysis, April 2020.

<https://cei.org/sites/default/files/Endangerment-Paper.pdf>

"The Challenges of Forecasting the Spread and Mortality of COVID-19" (with Norbert Michel) Heritage Foundation Backgrounder, April 15, 2020.

<https://www.heritage.org/public-health/report/the-challenges-forecasting-the-spread-and-mortality-covid-19>

"Assessing the Costs and Benefits of the Green New Deal" (with Nick Loris) Heritage Foundation Backgrounder, July 24, 2019.

<https://www.heritage.org/energy-economics/report/assessing-the-costs-and-benefits-the-green-new-deals-energy-policies>

"Paying for Surface Transportation Infrastructure: Four Wrong Routes, Four Good Paths" (with David Ditch, Nick Loris, and Adam Michel). July 17, 2019.

<https://www.heritage.org/budget-and-spending/report/paying-surface-transportation-infrastructure-four-wrong-routes-four-good>

"Taxes Will Go Up in Every Congressional District if the TCJA Is Repealed" (with Parker Sheppard and Adam Michel) Heritage Foundation Backgrounder, October 7, 2018. <https://www.heritage.org/taxes/report/tax-cuts-every-congressional-district-every-state>

<https://www.heritage.org/taxes/report/tax-cuts-every-congressional-district-every-state>

"Tax Cuts in Every Congressional District and Every State" (with Parker Sheppard and Adam Michel) Heritage Foundation Backgrounder, July 23, 2018.

<https://www.heritage.org/taxes/report/tax-cuts-every-congressional-district-every-state>

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“Is Social Security Worth the Cost?” (with Rachel Greszler and Patrick Tyrrell)
Heritage Foundation Backgrounder, July 10, 2018.

<https://www.heritage.org/budget-and-spending/report/social-security-worth-its-cost>

“Turning America’s Energy Abundance into Energy Dominance” (with Nick Loris)
Heritage Foundation Backgrounder, December 14, 2017

<http://www.heritage.org/energy-economics/report/turning-americas-energy-abundance-energy-dominance>

“Why Tax Reform Should Eliminate State and Local Tax Deductions” (with Rachel Greszler and Michael Sargent)
Heritage Foundation Backgrounder, October 17, 2017

<http://www.heritage.org/taxes/report/why-tax-reform-should-eliminate-state-and-local-tax-deductions>

“Addressing the Physician Shortage by Taking Advantage of an Untapped Medical Resource” (with John O’Shea)
Heritage Foundation Backgrounder, May 31, 2017

<http://www.heritage.org/public-health/report/addressing-the-physician-shortage-taking-advantage-untapped-medical-resource>

“Rolling the DICE on Environmental Regulations (with Nick Loris)
Heritage Foundation Backgrounder, February 10, 2017

<http://www.heritage.org/energy-economics/report/rolling-the-dice-environmental-regulations-close-look-the-social-cost>

“Time to Unlock America’s Vast Oil and Gas Resources” (with Nick Loris and David W. Kreutzer)
Heritage Foundation Backgrounder, September 1, 2016

<http://www.heritage.org/environment/report/time-unlock-americas-vast-oil-and-gas-resources>

“The State of Climate Science: No Justification for Extreme Policies” (with David W. Kreutzer, Nicolas Loris, Katie Tubb)
Heritage Foundation Backgrounder, April 22, 2016

<http://www.heritage.org/environment/report/the-state-climate-science-no-justification-extreme-policies>

“Consequences of Paris Protocol: Devastating Economic Costs, Essentially Zero Environmental Benefits” (with Nicolas Loris and David W. Kreutzer)
Heritage Foundation Backgrounder, April 13, 2016.

<http://www.heritage.org/environment/report/consequences-paris-protocol-devastating-economic-costs-essentially-zero>

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“How Government Unions Affect State and Local Finances: An Empirical 50-State Review.” (with Geoffrey Lawrence, James Sherk, and Cameron Belt) Heritage Foundation Special Report, April 11, 2016. <http://www.heritage.org/jobs-and-labor/report/how-government-unions-affect-state-and-local-finances-empirical-50-state>

“Maine Food Stamp Work Requirement Cuts Non-Parent Caseload by 80 Percent” (with Robert Rector and Rachel Sheffield). Heritage Foundation Backgrounder, February 8, 2016, <http://www.heritage.org/welfare/report/maine-food-stamp-work-requirement-cuts-non-parent-caseload-80-percent>

“Time to End the Federal Subsidy for High Tax States” (with Rachel Greszler) Heritage Foundation Backgrounder, March 26, 2015. <http://www.heritage.org/taxes/report/time-end-the-federal-subsidy-high-tax-states>

“The Obama Administration’s Climate Agenda Will Hit Manufacturing Hard: A State-by-State Analysis” (with Nick Loris and David Kreutzer) Heritage Foundation Backgrounder, February 17, 2015. <http://www.heritage.org/environment/report/the-obama-administrations-climate-agenda-will-hit-manufacturing-hard-state-state>

“The Obama Administration’s Climate Agenda Will Hit Manufacturing Hard: A State-by-State Analysis” (with Nick Loris and David Kreutzer) Heritage Foundation Backgrounder, November 13, 2014. <http://www.heritage.org/environment/report/the-obama-administrations-climate-agenda-underestimated-costs-and-exaggerated>

“Unfounded Fund: Yet Another EPA Model Not Ready for the Big Game” (with David Kreutzer) Heritage Foundation Backgrounder, May 16, 2014. <http://www.heritage.org/environment/report/unfounded-fund-yet-another-epa-model-not-ready-the-big-game>

“Compelling Evidence Makes the Case for a Market-Driven Health Care System” (with Jim Capretta) Heritage Foundation Backgrounder, December 20, 2013. <http://www.heritage.org/health-care-reform/report/compelling-evidence-makes-the-case-market-driven-health-care-system>

“EPA Power Plant Regulations: A Backdoor Energy Tax” (with Nick Loris and David Kreutzer). Heritage Foundation Backgrounder, December 5, 2013.

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<http://www.heritage.org/environment/report/epa-power-plant-regulations-backdoor-energy-tax>

“Loaded DICE: An EPA Model Not Ready for the Big Game” (with David Kreutzer) Heritage Foundation Backgrounder, November 21, 2013.
<https://www.heritage.org/environment/report/loaded-dice-epa-model-not-ready-the-big-game>

“Competitive Markets in Health Care: The Next Revolution” Heritage Foundation Backgrounder, August 19, 2013. <http://www.heritage.org/health-care-reform/report/competitive-markets-health-care-the-next-revolution>

“Cost of a Climate Policy: The Economic Impact of Obama’s Climate Action Plan” (with David Kreutzer and Nick Loris) Heritage Foundation Backgrounder, June 27, 2013. <http://www.heritage.org/environment/report/cost-climate-policy-the-economic-impact-obamas-climate-action-plan>

“Boxer–Sanders Carbon Tax: Economic Impact.” Heritage Foundation Issue Brief, (with David Kreutzer) April 11, 2013.
<http://www.heritage.org/taxes/report/boxer-sanders-carbon-tax-economic-impact>

“Studies Show: Medicaid Patients Have Worse Access and Outcomes than the Privately Insured.” Heritage Foundation Backgrounder, November 7, 2012
<http://www.heritage.org/health-care-reform/report/studies-show-medicaid-patients-have-worse-access-and-outcomes-the>

- **Peer-Reviewed Publications**

"A Novel Adaptation of Naive Bayes Methods for Improving Semiconductor Fab Yield," (with Michael C. McFarlane) *International Journal of Data Science and Analytics*. 2024, 1-14 <https://doi.org/10.1007/s41060-024-00560-7>

"Reply to comment on 'Climate sensitivity, Agricultural Productivity and the Social Cost of Carbon in FUND' by Philip Meyer" (with Ross McKittrick) *Environmental Economics and Policy Studies*, 2023, 25, 291–298

“Bayesian Inferences for Counterterrorism Policy: A Retrospective Case Study of the US War in Afghanistan,” (with Chandler Hubbard and Mary Catherine Legreid) *Terrorism and Political Violence*, 2023: 1-17;
<https://doi.org/10.1080/09546553.2022.2156044>

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"Closed Form Bayesian Inferences for Binary Logistic Regression with Applications to American Voter Turnout," (with Jesse Crosson and Chandler Hubbard) *Stats* 2022, 5(4), 1174-1194; <https://doi.org/10.3390/stats5040070>

"A New Benford Test for Clustered Data with Applications to American Elections" with (with Katherine Anderson, Drew Gonshorowski, and Steven J. Miller) *Stats* 2022, 5(3), 841-855; <https://doi.org/10.3390/stats5030049>

"Hierarchical Bayesian Spatio-Temporal Modeling for COVID-19 in the United States" (with Drew Gonshorowski and Mary Kolesar) *Journal of Applied Statistics* (2022): 1-18. <https://doi.org/10.1080/02664763.2022.2069232>

"Climate sensitivity, agricultural productivity and the social cost of carbon in FUND" (with Ross McKittrick and Patrick J. Michaels) *Environmental Economics and Policy Studies* (2020). 22(3), 433-448.
<https://link.springer.com/content/pdf/10.1007/s10018-020-00263-w.pdf>

"Reforming American Medical Licensure" (with Paul Larkin and John O'Shea) *Harvard Journal of Law and Public Policy* (2019) 42 (1), 253-278.

"Bayesian Semiparametric Density Ratio Modelling with Applications to Medical Malpractice Reform." (with Benjamin Kedem) *Statistical Modelling* (2016) 16(4), 261-278.

"A Mathematical Reformulation of the Reference Price." (with P.K. Kannan) *Marketing Letters*. (2012) 23(3), 839-849

"Closed Form Bayesian Inferences for the Logit Model Via Polynomial Expansions." (with Steven J. Miller and Eric Bradlow) *Quantitative Marketing and Economics* (2006) 4(2), 173-206

- **Other Publications**

"A Probabilistic Examination of the Efficacy of Tort Reform via Semiparametric Density Ratio Modelling" Proceedings of the 30th International Workshop on Statistical Modelling. (2015) Volume 2. 75-78

"Multiple Regression Analysis: Understanding the Impact of Offensive and Defensive Contributions to Team Performance." (with Steven J. Miller) *The Hockey Research Journal: A Publication of the Society of International Hockey Research*. 2014/15. 41-43

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“Social Cost of Carbon Statistical Modeling is Smoke and Mirrors” (with David Kreutzer) *Natural Gas and Electricity*. July 2014. 7-11.

“Linear Predictors of NHL Team Performance.” (with Max Multz) *The Hockey Research Journal: A Publication of the Society of International Hockey Research*. 2013/14. 95-101

“The Pythagorean Won Loss Formula and Hockey.” (with Steven J. Miller) *The Hockey Research Journal: A Publication of the Society of International Hockey Research*. 2012/13. 193-209.

“First Order Approximations of the Pythagorean Won-Loss Formula for Predicting MLB Teams Winning Percentages.” (with Steven J. Miller) *By the Numbers of the Society for American Baseball Research Statistical Committee*. May 2012

Book Chapters:

“Applications of Improvements to the Pythagorean Won-Lost Expectation in Optimizing Rosters” in *Artificial Intelligence, Optimization, and Data Sciences in Sports* (with Alex Almeida, Steven J. Miller, and Andrew Yang). Springer, October 2024
https://link.springer.com/chapter/10.1007/978-3-031-76047-1_13

“Cost/Benefit Analysis” in *Climate Change Reconsidered II: Fossil Fuels*, Heartland Institute (with Roger Bezdeck, Christopher Monckton, Joseph Bast, Barry Brill, and Bryan Leyland).

Selected Work Under Review/in Progress:

“Analyzing Election Data with Final Two Digits of Vote Counts: A New Approach Based on Benford's Law,” (with Philip Eigen and Steven J. Miller) under review at Political Science Research and Methods,

“Bayesian Inferences of Welfare Reform” (with Ross McKittrick) preparing for submission to *Statistics, Politics, and Policy*

Selected Columns/Commentaries

“No, the Summer Weather Data Doesn't Amount to Climate Catastrophe,” (with Roy Spencer), Newsweek, October 4, 2023, <https://www.newsweek.com/summer-weather-data-dont-amount-climate-catastrophe-opinion-1829952>

“New Jersey’s \$8,000-per-resident Wind Energy Scheme Won’t Reduce Climate Change,” The Daily Signal, March 22, 2023,

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<https://www.dailysignal.com/2023/03/21/new-jerseys-unpopular-wind-energy-scheme-wont-reduce-global-temperatures/>

"COVID-19 Data Shows It's Time for America to Return to Normal," (with Doug Badger), Daily Signal, February 28, 2022

<https://www.dailysignal.com/2022/02/28/covid-19-data-shows-its-time-for-america-to-return-to-normal/>

"There Are Better Ways to Fight COVID-19 Than Mask Mandates," Daily Signal, August 29, 2021 <https://www.dailysignal.com/2021/08/29/there-are-better-ways-to-fight-covid-19-than-mask-mandates/>

"Why 'Social Cost of Carbon' Is Most Useless Number You've Never Heard Of" Daily Signal, March 2, 2021 <https://www.dailysignal.com/2021/03/02/why-social-cost-of-carbon-is-most-useless-number-youve-never-heard-of/>

"What's in a COVID-19 model?" The Washington Times, June 3, 2020 <https://www.washingtontimes.com/news/2020/jun/3/whats-covid-19-model/>

"Are Lockdowns Necessary? What Data From 10 Countries Show" (with Andy Vanderplas) The Daily Signal. July 28, 2020 <https://www.dailysignal.com/2020/07/28/we-looked-at-10-countries-covid-19-approaches-heres-what-the-data-shows-about-lockdowns/>

"Failures of an Influential COVID-19 Model Used to Justify Lockdowns" Daily Signal, May 18, 2020 <https://www.dailysignal.com/2020/05/16/the-failures-of-an-influential-covid-19-model-used-to-justify-lockdowns/>

"Faulty Assumptions Lead to Fake News About Climate Change" (with Nick Loris). Daily Signal. January 25, 2020. <https://www.dailysignal.com/2020/01/28/faulty-assumptions-lead-to-fake-news-about-climate-change/>

"The Green New Deal: Less About Climate, More About Control" (with Nick Loris). Business Insider. August 16, 2019. <https://www.heritage.org/government-regulation/commentary/the-green-new-deal-less-about-climate-more-about-control>

"For a Huge Peace Dividend, End the War on Fossil Fuels" November 29, 2017. The Washington Times. <https://www.washingtontimes.com/news/2017/nov/27/war-on-fossil-fuels-needs-to-be-ended/>

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“Some Say the GOP Tax Plan would raise taxes. Here’s what they are missing” (with Rachel Greszler and Adam Michel). The Daily Signal. October 10, 2017.

<http://www.heritage.org/taxes/commentary/some-say-gop-tax-plan-would-raise-taxes-heres-what-theyre-missing>

“A conundrum — an impending shortage of care and a surplus of talent” (with John O'Shea) July 3, 2017. The Washington Times.

<http://www.washingtontimes.com/news/2017/jul/3/impending-shortage-of-doctors-and-a-surplus-of-tal/>

“Solving the Physician Shortage Crisis” (with Sarina Singh) The Daily Signal. May 31, 2017. <http://dailysignal.com/2017/05/31/solving-the-crisis-of-physician-shortages/>

“The Flimsy Statistical Models Obama Administration Used to Justify Environmental Agenda” The Daily Signal. March 29, 2017. <http://dailysignal.com/2017/03/29/the-flimsy-statistical-models-obama-administration-used-to-justify-environmental-agenda/>

“Unlocking Our Immense Oil and Gas Supply Can Make America Great Again” (with Richard Sigman) The Daily Signal. March 27, 2017.

<http://dailysignal.com/2017/03/27/unlocking-our-immense-oil-and-gas-supply-can-make-america-great-again/>

“EPA’s Top Priority Should Be to Eliminate Bogus Global Warming Models” (with Nick Loris) The Daily Signal. January 8, 2017. <http://dailysignal.com/2017/01/18/epas-top-priority-should-be-to-eliminate-bogus-global-warming-models/>

“Heritage Contributes to the Reopening of the White House's Social Cost of Carbon Discussion” (with David Kreutzer) The Daily Signal. November 6, 2013.

<http://blog.heritage.org/2013/11/06/white-house-reopens-the-scc/>

“Scrutinizing the Social Cost of Carbon: Comment to the Energy Department” (with David Kreutzer) The Daily Signal, September 16, 2013.

<http://blog.heritage.org/2013/09/16/scrutinizing-the-social-cost-of-carbon-comment-to-the-energy-department/>

“Obama Climate Change Plan: War on Coal Would Hike Natural Gas Prices 42 Percent” (with David Kreutzer and Nick Loris) The Daily Signal, June 25, 2013.

<http://blog.heritage.org/2013/06/25/obama-climate-change-plan-war-on-coal-would-hike-natural-gas-prices-42-percent/>

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“Obama’s ‘War on Coal’ Hits American Families Hard” (with David Kreutzer and Nick Loris) The Daily Signal, June 24, 2013. <http://blog.heritage.org/2013/06/24/obamas-war-on-coal-hits-american-families-hard/>

“Medicare Reform Debate: What Really Works in Health Care Competition.” The Daily Signal. September 13, 2012. <http://blog.heritage.org/2012/09/13/medicare-reform-debate-what-really-works-in-health-care-competition/>

“Side Effects: Obamacare Encourages Employers to Drop Coverage for Sick Workers.” The Daily Signal, February 8, 2012. (with Kathryn Nix)
<http://blog.heritage.org/2012/02/08/obamacare-encourages-employers-to-drop-coverage-for-sick-workers/>

Selected Invited Talks and Conference Presentations:

“Energy and Human Flourishing,” Parliamentary Intelligence Security Forum; Manila Philippines, February 4, 2025

“The Importance of Access to Affordable and Reliable Energy,” Town Hall Event; Erie, PA, August 29, 2024.

“Science and Public Choice in Climate Policy, Florida International University Environment Forum - Climate Tech and Coastal Resilience,” February 22, 2024.

“Cost/Benefit Analysis of American Energy Policy with Implications for Europe,” International Security Forum Bonn 2023, Bonn, Germany, October 19, 2023

"Closed Form Bayesian Inferences for Binary Logistic Regression with Applications to American Voter Turnout," 6th International Conference on Econometrics and Statistics, Waseda University, Tokyo, Japan, August 3, 2023.

"A New Benford Test for Clustered Data with Applications to American Elections," Election Science Reform and Administration Conference, University of Georgia, Athens, GA, June 1, 2023.

“Advancing Reliable Energy: Cost/Benefit Analysis,” Heartland Institute’s 15th International Conference on Climate Change, Orlando, FL, February 25, 2023

“Unworkable Climate “Solutions” – Carbon-Based Regulation,” Heartland Institute’s 15th International Conference on Climate Change, Orlando, FL, February 24, 2023

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“A Novel Adaptation of Naive Bayes Methods for Improving Semiconductor Yield with Implications for Public Policy,” American Statistical Association’s Conference on Statistical Practice, San Francisco, CA, February 2, 2023

“Energy Policy and Climate Change for Brown University students,” National Press Club - Washington, DC, November 16, 2022

“Modeling Energy Policy and Climate Change,” Corona Chamber of Commerce, Washington DC. September 19, 2022.

“The Social Benefits of Lukewarming” Heartland Institute’s 14th International Conference on Climate Change, Las Vegas, NV. October 16, 2021.

“Economic and Climate Modeling of Energy Policies,” Western Energy Alliance Annual Meeting, Tabernash, CO July 30, 2021.

“Cost/Benefit Analysis of the Green New Deal and Related Policies”
46th Annual American Legislative Exchange Council Meeting, Austin, TX. August 16, 2019.

“Cost/Benefit Analysis of the Green New Deal” Heartland Institute’s 13th International Conference on Climate Change, Washington DC. July 25, 2019

“Economic Harms of the Carbon Tax” 45th Annual American Legislative Exchange Council Meeting, New Orleans, LA. August 9, 2018.

“What is the Social Cost of Carbon?” 45th Annual American Legislative Exchange Council Meeting, New Orleans, LA. August 9, 2018.

“A Cost Benefit Analysis of Ending the War on Fossil Fuels” At the Crossroads IV: Energy and Climate Summit. Washington DC. November 30, 2017.

“The Peace Dividend: A Cost Benefit Analysis of Ending the War on Fossil Fuels” America First Energy Conference, Houston, TX. November 8, 2017.

“Addressing the Physician Shortage by Use of an Untapped Medical Resource”
44th Annual American Legislative Exchange Council Meeting, Denver, CO. July 19, 2017

“Cost/Benefit Analysis and The Social Cost of Carbon”

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Heartland Institute's 12th International Conference on Climate Change, Washington DC.
March 22, 2017

"The Smoke and Mirrors Behind Climate Modeling: Advice to Policymakers"
The Heritage Foundation, Washington DC. February 16, 2017

"Guidance for Federal Statistical Agencies in the Trump Administration," Council of
Professional Associations on Federal Statistics, Washington DC. December 6, 2017

"Potential Energy: Taking Advantage of America's Great Oil and Gas Resources," The
Heritage Foundation, Washington DC. October 25, 2016.

"Closed Form Bayesian Inference for Binary Logistic Regression via Polynomial
Expansions" 4th Institute of Mathematical Statistics, Asia Pacific Rim Conference, Hong
Kong. June 30, 2016.

"The Impact of Removing State and Local Deductions from the Federal Tax Code" Tax
Economist Forum, Washington DC. July 1, 2015

"A Probabilistic Examination of the Efficacy of Tort Reform" 30th International
Workshop on Statistical Modelling. Linz, Austria. July 8, 2015

"Social Cost of Carbon: A Controversial Tool for Misguided Policy," The Heritage
Foundation, Washington DC. June 23, 2015.

"The Social Cost of Carbon" Senate EPW, ENR and HSGAC Regulatory Affairs and
Federal Management Subcommittee," United States House of Representatives. June 6,
2015

"Measuring the Social Cost of Carbon: The Promise and Pitfalls of Using the SCC to
Justify Regulation" Air Quality Committee of the D.C. Bar Environment, Energy and
Natural Resources Section, Washington DC. March 31, 2015.

Congressional/State Level Testimony:

"Addressing the Physician Shortage in Texas via an Untapped Resource," Texas State
Legislature, March 23, 2022.

"Fossil Fuels: Driving Americas Economy and Quality of Life," Pennsylvania State
Legislature, October 24, 2022

"Joint Ad Hoc Committee on Legislative Oversight of Emergency Executive Powers,"
Arizona State Legislature, December 2, 2020

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“Climate Change, Part IV: Moving Toward a Sustainable Future” House Oversight Committee: Subcommittee on Environment, United States House of Representatives. October 1, 2020.

“Carbon Emissions and the Climate” Environmental Resources and Energy Committee, Pennsylvania State Legislature. October 28, 2019.

“Healthy Oceans and Healthy Economies: The State of Our Oceans In the 21st Century” House Natural Resources Committee: Subcommittee on Water, Oceans, and Wildlife, United States House of Representatives. February 7, 2019.

“Carbon Taxes/Regulations: Economic and Climate Impacts” Joint Interim Committee On Carbon Reduction, Oregon State Legislature. September 25, 2018.

“At What Cost? Examining the Social Cost of Carbon” House Committee on Science, Space, and Technology, United States House of Representatives. February 28, 2017

“An Analysis of the Obama Administration’s Social Cost of Carbon,” House Committee on Natural Resources, United States House of Representatives. July 23, 2015

“The Economic Impact of the Clean Power Plan” House Committee on Science, Space, and Technology, United States House of Representatives. June 24, 2015

Media:

Completed numerous interviews, including television, radio, print, and podcasts. Work mentioned frequently in the news, including by the Wall Street Journal as well as on Sunday morning talk shows.

Academic Teaching:

<u>Course</u>	<u>University</u>
Linear Regression Analysis	Georgetown University (Fall 2023, Spring 2024)
Introduction to Mathematical Statistics	Georgetown University (Spring 2023, Spring 2024, Summer 2024, Fall 2024)
Advanced Statistics for Data Science	The George Washington University (Fall 2017)
Bayesian Methods for Data Science	The George Washington University (Spring 2017)
Introduction to Data Mining	The George Washington University (Fall 2016)

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Calculus I	The George Washington University (Fall 2015, Fall 2016, Spring 2017, Fall 2017)
Calculus II	The George Washington University (Spring 2015, Spring 2016, Summer 2016, Summer 2017, Spring 2018)
Calculus for Management and Social Sciences	The George Washington University (Summer 2015)
Economic Statistics	University of Maryland (Fall 2011, Summer 2012, Fall 2012, Summer 2013, Fall 2013)
Computer Methods in Economics	University of Maryland (Fall 2014, Fall 2015, Spring 2016)

Students mentored and coauthored peer-reviewed research with (see above for publications):

- Alexander Almeida, Georgetown University, 2024
- Katie Anderson, BYU Idaho, 2022
- Mary-Catherine Legreid, Texas A&M University, 2021
- Chandler Hubbard, University of Alabama, 2020
- Mary Kolesar, Harvard University, 2020

Interests, Activities, Hobbies:

Avid Tennis Player/Enthusiast, Two Time Port Jefferson Country Club Tennis Champion, Pure Mathematics, Theoretical Physics

Citizenship:

U.S.