

# Matthew D. Baird

## Contact Information

---

Email: mbaird@rand.org

Office Address: RAND Corporation, 4570 Fifth Ave #600, Pittsburgh, PA 15213

Office Phone: (412) 683-2300 ext. 4941

## Professional Experience

---

Co-director, RAND Center for Causal Inference, The RAND Corporation, 2018-present

Professor of Policy Analysis, Pardee RAND Graduate School, 2018-present

Full Economist, The RAND Corporation, 2016-present

Associate Economist, The RAND Corporation, 2013-2016

Part-Time Instructor, Carnegie Mellon University, 2016

Part-Time Instructor, University of Pittsburgh Economics Department 2014, 2015

Part-Time Instructor, University of California, Los Angeles Economics Department, 2012

Part-Time Instructor, Brigham Young University Economics Department, 2010

## Education

---

Ph.D., Economics: University of California, Los Angeles: 2012

Dissertation Title: Topics in Microeconometrics

M.S. Economics: University of California, Los Angeles: 2009

B.S. Economics, B.A. History, Minor Mathematics: Brigham Young University: 2007

Graduated with University Honors

## Research Fields

---

Labor Economics, Economics of Education, Health Economics, Microeconometrics,  
Demographics, Program Evaluation, Survey Sampling and Weighting

## Teaching Experience

---

Pardee RAND Graduate School, Summer 2019: Policy to Improve Labor Markets for  
Disadvantaged Populations (doctoral)

Carnegie Mellon University, Fall 2016: Econometric Theory and Methods II (doctoral)

University of Pittsburgh, Spring 2014, Fall 2015: Labor Market Analysis I (doctoral)

University of California Los Angeles, Fall 2012: Intermediate Macroeconomics  
(undergraduate)

Brigham Young University, Summer 2010: Statistics for Economists (undergraduate)

## Awards & Fellowships

---

Institute of Education Sciences An experimental evidence on the efficacy of Virtual Enterprises Role: Co-Principal Investigator	7/01/21-06/30/26 \$3,799,857
Centers for Medicare & Medicaid Services Subcontract to CNA Criminal background check waivers during COVID and nursing home employment Role: Principal Investigator	3/01/21-09/01/21 \$100,000
Visit California Benchmarking workforce diversity in the travel/tourism industry in CA Role: Principal Investigator	10/01/20-03/31/21 \$56,865
Pennsylvania Association of Nurse Anesthetists Anesthesia workforce analysis in Pennsylvania Role: Co-Principal Investigator	3/29/19-6/30/20 \$191,434
U.S. Department of Labor Subcontract to City of New Orleans Summer career pathways training evaluation Role: Principal Investigator	3/1/15-9/31/19 \$1,599,909
American Association of Nurse Anesthetists Why “opt out” matters: the economic impact nurse anesthetists have on surgical and obstetrical services in rural America Role: Co-Principal Investigator	11/1/17-5/31/19 \$325,871
KnowledgeWorks Foundation Analysis of student outcomes resulting from RSU2's competency-based education program Role: Co-Principal Investigator	3/1/18-1/31/19 \$89,115
American Petroleum Institute STEM workforce trends following postsecondary degree attainment Role: Principal Investigator	1/1/17-8/1/17 \$153,202
Pennsylvania Department of Health Evaluating local dental labor shortages Role: Principal Investigator	1/1/15-12/31/15 \$10,000
National Institute on Aging Pilot Proposal in P30 AG012815-21-25 RAND Center for the Study of Aging Senior wealth effects on expected bequests and inter vivos transfers Role: Principal Investigator on \$50,000 pilot proposal in overall center grant	9/1/14-6/30/17 \$50,000

U.S. Department of Education What Works Clearinghouse certified reviewer  
RAND Medal Award, Key Contributor, for *Principal Pipelines* project  
Dissertation Year Fellowship, University of California Los Angeles, 2011-2012  
Teaching Assistant Fellowship, University of California Los Angeles Economics Department,  
2010-2011  
Research Fellowship, California Center for Population Research, 2009-2010  
Graduate Summer Research Mentorship, University of California Los Angeles, 2009  
National Institute of Child Health and Human Development Traineeship, California Center  
for Population Research, 2008-2009  
Ph.D. Progress Award, University of California Los Angeles Economics Department, 2008  
Gordon B. Hinckley Scholar, Brigham Young University, 2000-2006

## Peer-Reviewed Journal Publications

---

- Sovero, V., M. Buchinsky, and M. Baird (*in press*). "Playing Catch Up: A Term-Level Investigation of the Racial Gap in STEM Retention." *Economics of Education Review*.
- Baird, M. and J. Engberg (*in press*). "Trade-Offs in Selecting the Number of Years for Estimation of Teacher Effectiveness." *Education Economics*.
- Siddiqi, S., J. Cantor, B. Ghosh-Dastidar, R. Beckman, A. Richardson, M. Baird, and T. Dubowitz. (*in press*). "SNAP Participants Face Especially High Food Insecurity During the Early COVID-19 Pandemic." *Public Health Reports*.
- Troxel, W., A. Bogart, S. Holliday, T. Dubowitz, B. Ghosh-Dastidar, M. Baird, and T. Gary-Webb (*in press*). "Mixed effects of neighborhood revitalization on residents' cardiometabolic health." *American Journal of Preventive Medicine*.
- Richardson, A., R. Collins, B. Ghosh-Dastidar, F. Ye, G. Hunter, M. Baird, H. Schwartz, J. Sloan, A. Nuhroho, R. Beckman, W. Troxel, T. Gary-Webb, T. Dubowitz (2021). "Improvements in neighborhood socioeconomic conditions may improve resident diet." *American Journal of Epidemiology*, 190(5), 798-806.
- Dubowitz, T., B. Ghosh-Dastidar, W. Troxel, R. Beckman, A. Nugroho, S. Siddiqi, J. Cantor, M. Baird, A. Richardson, G. Hunter, A. Mendoza-Graf, and R. Collins (2021). "Impact of the COVID-19 Pandemic on Food Insecurity in a Low-Income, Predominantly African American Cohort." *American Journal of Public Health*, 111(3), 494-497.
- Breslau, J., M. Finucane, A. Locker, M. Baird, E. Roth, and R. Collins (2021). "A Longitudinal Study of Psychological Distress in the United States Before and During the COVID-19 Pandemic." *Preventive Medicine*, 143(2021) 106362.
- Cohen, K., M. Baird, N. Koirala, R. Kandrack, and G. Martsolf (2021). "The surgical and anesthesia workforce and provision of surgical services in rural communities: A mixed-methods examination." *Journal of Rural Health*, 37(1), 45-54.
- Holliday, S., W. Troxel, A. Haas, B. Ghosh-Dastidar, T. Gary-Webb, R. Collins, R. Beckman, M. Baird, and T. Dubowitz (2020). "Do investments in low-income neighborhoods produce objective change in health-related neighborhood conditions?" *Health and Place*, 64, 102361.
- Baird, M., H. Schwartz, G. Hunter, T. Gary-Webb, B. Ghosh-Dastidar, T. Dubowitz, W. Troxel (2020). "Does large scale neighborhood reinvestment work? Effects of public-private real estate investment on local sales prices, rental prices, and crime rates." *Housing Policy Debate*, 30(2), 164-190.

- Baird, M., G. Martsolf, and J. O'Donnell (2020). "Effects of opting-out from federal nurse anesthetists' supervision requirements on anesthesiologist work patterns." *Health Services Research*, 55(1), 54-62.
- Baird, M., Pane, J. (2019). "Translating standardized effects of education programs into more interpretable metrics." *Educational Researcher*, 48(4), 217-228.
- Martsolf, G., Baird, M., Cohen, C., and N. Koirala (2019). "Relationship between state policy and anesthesia provider supply in rural communities." *Medical Care*, 57(5), 341-347.
- Martsolf, G., Kandrack, R., Baird, M., and Friedberg, M. (2018). "Estimating associations between medical home adoption, utilization, and quality: A comparison of evaluation approaches." *Medical Care*, 56(1), 25-30.
- Baird, M. (2017). "Labor supply estimation biases from disregarding non-wage benefits." *Economic Inquiry*, 55(2): 1064-1090.
- Baird, M. (2016). "Gains from joint cross validation bandwidth selection for derivatives of conditional multidimensional densities." *Journal of Statistical Computation and Simulation*, 86(4): 807-819.
- Baird, M., Daugherty, L., Kumar, K. B., & Arifkhanova, A. (2015). "Regional and gender differences and trends in the anesthesiologist workforce." *Anesthesiology*, 123(5), 997-1012.

## Peer-Reviewed RAND Reports

---

- Baird, M., M. Zaber, A. Dick, C. Bird, A. Chen, M. Waymouth, G. Gahlon, D. Quigley, H. Al Ibrahim, and L. Frank (2021). "Societal Impact of Research Funding for Women's Health in Alzheimer's Disease and Alzheimer's Disease-Related Dementias." RR-A708-I.
- Huguet, A., D. Holtzman, A. Robyn, E. Steiner, I. Todd, L. Choi, M. Baird, I. Gutierrez, M. Garet, B. Stecher, J. Engberg (2020). "Variation in Improvement Among Schools in the Intensive Partnerships for Effective Teaching." RR-A124-I.
- Baird, M., G. Hunter, N. Edenfield, N. Broten, and G. Gonzalez (2020). "Education, Employment, and Wages in the Appalachia Region: Final Report." RR-3217-CHC.
- Baird, M., J. Engberg, G. Gonzalez, T. Goughnour, I. Gutierrez, and R. Karam (2019). "Effectiveness of Pre-Screened, Demand-Driven Job Training Programs for Disadvantaged Workers: An Evaluation of the New Orleans Career Pathway Training." RR-2980-CNO.
- Culbertson, S., M. Baird, S. Meyers, J. Kaufman (2019). "Raising the Bar for Graduation Pathways to College and Work: Early Signals on How Louisiana's Education Policy Strategies are Affecting College and Career Readiness." RR-2303/4-BRAF.
- Kaufman, J., E. Steiner, M. Baird (2019). "Raising the Bar for K-12 Academics: Early Signals on How Louisiana's Education Policy Are Working for Schools, Teachers, and Students." RR-2303/2-BRAF.
- Gates, S., M. Baird, B. Master, E. Chavez-Herrerias (2019). "Principal Pipelines: A Feasible, Affordable, and Effective Way for Districts to Improve Schools." RR-2666-WF.
- Gates, S., M. Baird, C. Doss, L. Hamilton, I. Opper, B. Master, A. Tuma, M. Vuollo, and M. Zaber (2019). "Preparing School Leaders for Success: Evaluation of New Leaders' Aspiring Principals Program, 2012-2017." RR-2812-NL.

- Stecher, B., D. Holtzman, M. Garet, L. Hamilton, J. Engberg, E. Steiner, A. Robyn, M. Baird, I. Gutierrez, E. Peet, I. Brodziak de los Reyes, K. Fronberg, G. Weinberger, G. Hunter, and J. Chambers (2018). "Improving Teaching Effectiveness: Final Report. The Intensive Partnerships for Effective Teaching Through 2015-2016." RR-2242-BMFG.
- Baird, M., R. Bozick and M. Harris (2017). "Postsecondary Education and STEM Employment in the United States: An Analysis of National Trends with a Focus on the Oil and Natural Gas Industry." RR-2115-AMPI.
- Pollard, M., and M. Baird (2017). "The RAND American Life Panel: Technical Description." RR-1651.
- Pane, J., E. Steiner, M. Baird, L. Hamilton, and J. Pane (2017). "Informing progress: Insights on personalized learning implementation and effects." RR-2042-BMFG.
- Baird, M., E. Keating, O. Bogdan, and A. Resnick (2017). "The Effects of Travel and Tourism on California's Economy: A Labor Market-Focused Analysis." RR-1854-CTTC.
- Wenger, J., T. Miller, M. Baird, P. Buryk, L. Daugherty, M. Graf, S. Hollands, S. Jahedi, and D. Yeung (2017). "Are Current Military Education Benefits Efficient and Effective for the Services?" RR-1766-OSD.
- Baird, M., M. Baird, and J. Vesely (2016). "Access to Dental Providers in Pennsylvania: Exploration of the County-Level Distribution of Dental Providers and Populations in 2013." RR-1351-PDH.
- Baird, M., J. Engberg, G. Hunter, and B. Master (2016). "Improving Teaching Effectiveness: Access to Effective Teaching: The Intensive Partnerships for Effective Teaching Through 2013-2014." RR-1295/4-BMGF.
- Gonzalez, G., K. Siler-Evans, G. Hunter, and M. Baird (2016). "Wages, employment, and STEM education in Ohio, Pennsylvania, and West Virginia" RR-1357-CHC.
- Pane, J., E. Steiner, M. Baird, and L. Hamilton (2015). "Continued Progress: Promising Evidence on Personalized learning." RR-1365-BMGF.
- Baird, M., Daugherty, L., Kumar, K. B., & Arifkhanova, A. (2014). "The Anesthesiologist Workforce in 2013." RR-650-ASAI.
- Gates, S., L. Hamilton, P. Martorell, S. Burkhauser, P. Heaton, A. Pierson, M. Baird, M. Vuollo, J. Li, D. Lavery, M. Harvey, and K. Gu (2014). "Preparing Principals to Raise Student Achievement." RR-507-NL.

## Presentations

---

- 2021 Midwest Economic Association Annual Meetings; National Institutes of Health Coordinating Committee on Research on Women's Health Monthly Meeting
- 2020 Association for Education Finance and Policy Conference; Association for Public Policy Analysis and Management Research Conference; Society for Research on Educational Effectiveness Spring Conference; RAND Center for Causal Inference
- 2019 All-California Labor Economics Conference; Association for Public Policy Analysis and Management Research Conference; How to Build Successful Workforce Development Programs Panel Discussion
- 2018 Association for Public Policy Analysis and Management Research Conference; RAND Education Brownbag; RAND Labor and Population Brownbag; Society for Research

- on Educational Effectiveness Spring Conference; Southern Economic Association Annual Meetings; Western Economic Association International Annual Conference
- 2017 Association for Education Finance and Policy Conference; Association for Public Policy Analysis and Management Research Conference; Center for Causal Inference; Eastern Economic Association Annual Meetings; Essen Health Conference; STEM Education and the Workforce of the Future Panel Discussion; Southern Economic Association Annual Meetings; Western Economic Association Annual Meetings
- 2016 Association for Education Finance and Policy Conference; Center for Causal Inference
- 2015 American Real Estate and Urban Economics Association National Conference; Brigham Young University; Carnegie Mellon University; Pittsburgh Economics Medley; RAND Labor and Population Brownbag; Southern Economic Association Annual Meetings
- 2014 Association for Education Finance and Policy Annual Conference; Federal Reserve Bank of Philadelphia; NBER Summer Institute; Pittsburgh Economics Medley; RAND Labor and Population Brownbag; Southern Economic Association Annual Meetings
- 2013 Bureau of Labor Statistics; RAND Corporation; Syracuse University Economics Department; U.S. Census Bureau

## **Referee and Review Services**

---

BMJ Quality and Safety, Bulletin of Economic Research, Economic Inquiry, Educational Researcher, Economics of Education Review, Educational Evaluation and Policy Analysis, Journal of Econometrics, Journal of Human Capital, Journal of Research on Educational Effectiveness, Journal of Rural Health, Journal of Policy Analysis and Management, Journal of Public Health Dentistry, Journal of Statistical Computation and Simulation, National Science Foundation, Pediatrics, Review of Development Economics, Review of Economics and Statistics, Sleep Health, Smith Richardson Foundation

## **Discussant & Chair Services**

---

Center for Causal Inference Symposium (2021), Association for Public Policy Analysis and Management Research Conference (2020), Association for Education Finance and Policy Conference (2020), Western Economic Association International Annual Meetings (2018), Southern Economic Association Annual Meetings (2017), Association for Public Policy Analysis and Management (2017), Western Economic Association Annual Meetings (2017), Essen Health Conference (2017), Association for Education Finance and Policy Conference (2017), Eastern Economic Association Annual Conference (2017), American Education Finance and Policy (2016), Southern Economic Association Annual Meetings (2015), Western Economic Association Annual Meetings (2014), Southern Economic Association Annual Meetings (2014)

## **Doctoral Student Advising**

---

Annie Chen, Pardee RAND Graduate School (chair, in progress)  
 Claudia Rodriguez, Pardee RAND Graduate School (chair, in progress)

Ian Morrall, University of Pittsburgh (committee member, 2018)

## Working Papers

---

Job Loss and Psychological Distress in Two Predominantly African American Low-Income Neighborhoods During the COVID-19 Pandemic (with J. Cantor, W. Troxel, and T. Dubowitz).

For-Profit Higher Education Responsiveness to Price Shocks: An Investigation of Changes in Post 9-11 GI Bill Allowed Maximum Tuitions. Available at SSRN: <https://ssrn.com/abstract=3174763> (with M. Kofoed, T. Miller, J. Wenger).

Improving Estimation of Labor Market Disequilibrium Using Shortage Indicators, with an Application to the Market for Anesthesiologists. IZA Institute of Labor Economics Discussion Paper No. 12129 (with L. Daugherty and K. Kumar).

Beyond Traditional Academic Degrees: The Labor Market Returns to Occupational Credentials. RAND Working Paper WR-1299 (with R. Bozick and M. Zaber).

Controlling for Changes in Test Conditions when Estimating Education Intervention Effects, RAND Working Paper WR-1245-BMFG (with J. Pane)

Cross validation bandwidth selection for derivatives of multidimensional densities, RAND Working Paper WR-1060.

The Public Sector and the Misallocation of Labor: Evidence from a Policy Experiment in India (*revise and resubmit*, with A. Chari, S. Nataraj, A. Rothenberg, S. Telhaj, and A. Winters)

Medicaid Spend-down: The Importance of Strategic Asset Transfers to Reach Medicaid Eligibility (with M. Hurd and S. Rohwedder).

The Effect of Wealth Shocks on Expected Bequests: Evidence from the Great Recession (with M. Hurd and S. Rohwedder).