

Dr. Bryce Ward

Ph.D. Economics, Harvard University
B.A. Economics and History, University of Oregon

Dr. Ward is co-founder of ABMJ Consulting and is also a Research Professor and Associate Director at the Bureau of Business and Economic Research at the University of Montana. Previously, he spent eight years as a Senior Economist at ECONorthwest, a Portland, OR based economics consulting firm.

Dr. Ward's areas of expertise include econometric analysis and applied microeconomics -- including urban and regional economics, labor economics, health economics, public finance, and environmental and natural resource economics. Bryce has applied his expertise to a variety of projects involving litigation support and policy analysis. He has provided oral and written testimony in more than thirty court, legislative, or administrative proceedings. Bryce has taught courses in microeconomic theory, econometrics, labor economics, public finance, environmental and natural resource economics, and social economics at Harvard University, Lewis and Clark College, the University of Oregon, and Portland State University.

Litigation Support Projects

Labor

- Evaluated plaintiff's expert report and helped prepare cross-examination questions in a case involving lost bonus payments and lost profits from the termination and alleged defamation of a financial advisor. *Shepherd Mullin Richter & Hamilton – New York*
- Prepared testimony regarding the comparability of jurisdictions and their compensation schemes in preparation for a public interest arbitration involving sheriff's deputies. *Winterbauer Diamond – Seattle*
- Provided testimony and conducted statistical evaluation of alleged discrimination against African-Americans union workers on a large construction project. *Winterbauer Diamond -- Seattle*
- Provided testimony evaluating plaintiffs' expert report, presenting evidence of failure to mitigate, and calculating damages in a case involving the alleged wrongful termination of 25 Somali immigrants. *K&L Gates -- Seattle*
- Calculated economic damages from lost wages, earnings capacity, lost household production, etc. and testified in wrongful termination, personal injury, and wrongful death trials. *Various clients – Various locations.*
- Organized data and conducted statistical analysis to evaluate claims of discrimination in employer discrimination lawsuits. *Various confidential clients – Various locations.*

- Prepared testimony in preparation for a public interest arbitration regarding a timber-dependent county's ability to pay higher compensation to sheriff's deputies in light of potential loss of federal timber payments. *Confidential Client*
- Provided testimony and conducted statistical analysis to determine if an observed decline in productivity at the Port of Portland's container terminal reflected union slowdown in response to a labor dispute. *Schwabe Wyatt & Williamson – Portland, OR.*
- Developed an analytical framework, gathered data, and conducted analyses of current market conditions for workers in comparable jobs and comparable communities as precursor to public-interest arbitrations involving transit districts. *Bullard Smith Jernstadt Wilson – Portland, OR.*
- Described the potential impact of the financial crisis, recession, potential deflation, and other related uncertainty on labor markets and labor negotiations to public interest arbitration. *Bullard Smith Jernstadt Wilson – Portland, OR.*
- Testified about the reasons and methods for adjusting wages for changes in the cost of living based on the Consumer Price Index (CPI) and the long-term consequences of not adjusting wages during periods of deflation. *Bullard Smith Jernstadt Wilson – Portland, OR.*
- Summarized economic forecasts for the Portland area, identified potential threats that could cause the economy to deviate from the forecasts, and outlined the implications of the forecast for negotiations between the Portland Police Officers' Association and the City of Portland. *Aitchison & Vick – Portland, OR.*
- Analyzed historical wage and benefit growth for sheriff deputies relative to other public and private sector employees in preparation for labor bargaining. *Bullard Smith Jernstadt Wilson – Portland, OR.*
- Provided written testimony on the effects of proposed increases in piloting fees on local ports and the local economy. *Columbia River Bar Pilots and Haglund Kelly Horngren and Jones – Astoria, OR.*
- Analyzed firm losses resulting from former employees' breaches of restrictive employment-contract covenants regarding future employment with a competitor. *Confidential client – Oregon.*

Business Damages

- Provided testimony calculating damages associated with a lost real estate development. *Datsopoulos, MacDonald, Lind – Missoula, MT*
- Provided testimony evaluating plaintiff's damages calculation in a case involving lost profit and lost business value stemming from alleged fraud and breach of a contract. *Garlington Lohn Robinson – Missoula, MT*

- Provided testimony evaluating plaintiff's expert damages calculation in a case involving lost profit and lost tax advantages from a failed real estate transaction. *Peck, Hadfield, Baxter & Moore – Logan, UT*
- Provided testimony evaluating plaintiff's expert damages calculation in a case alleging harm from the improper implementation of Montana's Department of Transportation Disadvantaged Business Entity program. *Montana Department of Transportation, MT*
- Provided testimony about damages from the alleged misappropriation of confidential information, including pricing information. *Wilson Sonsini Goodrich & Rosati – New York, New York*
- Provided written testimony evaluating plaintiff's expert's lost profits analysis in a matter involving alleged substandard performance by a call center. *Arnold Gallagher Percell Roberts & Potter -- Oregon*
- Calculated damages suffered by an auto dealership and service department stemming from the violation of non-solicitation and non-compete clauses in an asset purchase agreement. *Foster Pepper – Oregon.*
- Reviewed plaintiff's expert report and provided questions for deposition and trial for a business damages case involving breeding dogs. *Schedler Bond -- Washington*
- Calculated lost profits to an oyster farm stemming from chemical contamination of their oyster beds. *Confidential client – Pacific Northwest.*

Anti-Trust & Competition

- Testified regarding the economic aspects of alleged anticompetitive behavior in a market for outpatient diagnostic imaging services in several markets. *Various clients – Various locations.*
- Analyzed the economic issues of class certification and damage calculations related to alleged antitrust violations in the market for residential lots. *Hagens Berman Sobol Shapiro, LLP – Boise, ID.*
- Provided written testimony regarding the presence of competition in a market for private prisons and the likelihood of substantial competitive harm to private prison operators from a Freedom of Information Act (FOIA) request. *Stephen Rahe – Portland, OR.*
- Estimated share of LCD TVs, LCD computer monitors, and notebook computer monitors were purchased by Oregon consumers and state and local governments as part of a price fixing lawsuit. *Oregon Department of Justice – Oregon.*

- Conducted economic analysis on economic damages attributed to alleged antitrust actions in the market for concert-promotion services in the Portland area. *McNamer and Company – Portland, OR*

Environment & Natural Resources

- Identified and estimated the value of economic costs imposed by an oil spill from a Chevron pipeline. *SWCA Environmental Consultants – Utah.*
- Described the potential economic damages suffered by municipalities in Alabama as a result of the *Deepwater Horizon / BP* oil spill in the Gulf of Mexico. *Cunningham Bounds – Orange Beach, AL.*
- Conducting a rate analysis of a stormwater utility in a large metropolitan area. *Confidential client – Confidential location.*
- Conducted economic analyses on the economic aspects of a breach of contract claim over a reasonable price to provide water to, and process effluent from, a Georgia-Pacific paper mill. *Schwabe Williamson & Wyatt, PC – Hasley, OR.*
- Calculated natural resource damages associated with a Superfund site using a Habitat Equivalency Analysis (HEA). *Quapaw Tribe of Oklahoma – Oklahoma.*
- Described the impact of a change in recreational harvest allocation rules on the economic health and stability of the small businesses that make up the commercial Dungeness crab industry in Puget Sound. *Puget Sound Crabbers Association – Washington.*
- Evaluated the potential economic effects of the U.S. Department of Agriculture and California Department of Food and Agriculture's proposed eradication of the Light Brown Apple Moth. *Earthjustice – California.*
- Calculated profit disgorgement earned while violating California emissions laws. *California Attorney General – California.*
- Evaluated a contingent valuation study of the proposed development of a wind farm. *Perkins Coie – Nantucket, MA.*
- Evaluated the U.S. Environmental Protection Agency's draft report on groundwater and soil remediation scenarios for a creosote-contaminated Superfund site. *Confidential client – Washington.*
- Assisted in an analysis that compared and contrasted benefits and costs, stemming from the use in California of MTBE-oxygenated gasoline with those stemming from the use of ethanol-oxygenated gasoline to determine if refiners could have used ethanol to meet federal reformulated gasoline mandates instead of MTBE during the 1990s. *Various clients – Various locations.*

- Reviewed and conducted analyses in order to determine specialty forest product harvesters should be considered independent contractors or employees of the “brush picking sheds” that issued their harvester permits. *Talmadge/Fitzpatrick – Washington.*

Right-Of-Way Studies

- Provided written testimony to the Federal Communications Commission (FCC) that described the results of an original evaluation into the effect of municipal right of way fees on broadband deployment and adoption using both economic theory and statistical analysis. *Miller Van Eaton – Nationwide.*
- Provided oral and written testimony regarding economic issues related to municipal right-of-way fees in New Orleans. *Goins Aaron and City of New Orleans – New Orleans, LA.*
- Provided written testimony to the Federal Communications Commission (FCC) regarding the economic aspects of allowing local governments to charge telecommunications providers for access to government-owned or managed property. *Miller Van Eaton – Nationwide.*
- Addressed the economic issues of telecommunications firms' challenge, under the Telecommunications Act of 1996, to the City of Portland's franchise-fee agreements for use of the municipal right-of-way. *Miller Van Eaton and City of Portland – Portland, OR.*

Real Estate

- Calculated economic damages associated with delayed real estate developments. – *Various clients – Various locations.*
- Developed automated valuation models to statistically assess the value several thousand properties in Arizona and Nevada, and provided oral and written testimony on the economic aspects and harm, if any, to plaintiffs, from an alleged scheme that inflated the appraised market value of real estate. *Hagens Berman – Arizona and Nevada.*
- Provided written testimony on the economic aspects and harm, if any, to plaintiffs, from an alleged scheme that inflated mortgage costs without proper disclosure. *Hagens Berman – Arizona.*
- Described the economic costs of a pipeline rupture and related oil spill on residential and public property values. *Salt Lake City – Salt Lake City, UT.*
- Analyzed the impacts of Measure 37 (property rights limitation) on the State of Oregon. *Department of Justice, Office of the Attorney General – Oregon.*
- Prepared testimony regarding the national and Salem, OR real estate markets for a condemnation case. *Garrett, Hemann, and Robertson P.C. – Oregon.*

Personal Injury & Wrongful Death

- Calculated economic damages in wrongful death lawsuits. *Various clients – Various locations.*
- Calculated lost wages and presented expert testimony in personal injury cases. *Various clients – Various locations.*
- Calculated non-economic damages to a father denied access to his child for 17 years based on expenditures by parents on children. *Jamin Law Group – Alaska.*

Other

- Prepared written and oral testimony on the value of a minority share of a closely held private corporation. *Reep, Bell, Laird, & Jasper, Missoula, MT.*
- Prepared a report that described the appropriate discount rate to use to compensate a group of developers owed a lump-sum amount for prior investments in the development of local water infrastructure. *Reep, Bell, Laird, & Jasper, Missoula, MT.*
- Evaluated California's methods for validating ballot initiative petitions. *Bell, McAndrews & Hiltachk, Sacramento, CA.*
- Testified in Oregon tax court regarding the extent to which Serenity Lane (a non-profit drug and alcohol treatment center) gives to charity through care scholarships, pricing its services below market rates, offering an intern education program, and performing community education. *Arnold Gallagher Percell Roberts & Potter -- Oregon*
- Testified before the Oregon legislature regarding proposed legislation before the Oregon House that amends ORCP 32 by repealing subsection K and, therefore allowing recovery of UTPA statutory damages (currently \$200) in class actions. *Confidential client – Oregon.*
- Calculated reimbursements to families who adopted foster children as part of a class action settlement. *Johnson Johnson Larson and Schaller – Oregon.*
- Evaluated statistical evidence of cheating on a test and testified before administrative review board at a university. *Christie White – Oregon*

Representative Projects on Other Topics

Natural Resources

- Examined the economic consequences of the Proposed Water Compact between the Confederated Salish and Kootenai Tribes, the State of Montana, and the United States of America. *Montana Water Stewards, Arlee, MT*
- Examined the impacts of implementing the King County Wastewater Treatment Division's Combined Sewer Overflow Control Plan on ratepayers and assessed their

financial capacity to bear these impacts. *King County Wastewater Treatment Division – King County, WA.*

- Helped develop an analytical approach to describe the short-term and long-term benefits and costs of clean-up and remediation alternatives for the Portland Harbor Superfund Site. *City of Portland – Portland, OR.*
- Analyzed the effect of Seattle’s Natural Drainage (low impact development) Projects on neighboring property values using a hedonic regression analysis and data from county assessors’ records. *Water Environment Foundation – Seattle, WA.*
- Described the growth in the market for third-party certified forest products and discussed the reasons why firms choose to pursue certification.

Education

- Helped design a long-term evaluation strategy, including both quantitative and qualitative methods, for the “Dreamer School,” a program designed to promote college attendance for an entire elementary school. *I Have a Dream Foundation – Oregon.*
- Designed and implemented a randomized evaluation that employed longitudinal student and school data to demonstrate the effects of Safe and Civil Schools’ positive behavior support programs on elementary schools in the Fresno Unified School District. *Randy Sprick’s Safe and Civil Schools – Fresno, CA.*
- Evaluated the effectiveness of the South Shore School, a public-private partnership school in Seattle, using a quasi-experimental regression analysis and longitudinal student data. *Seattle Public Schools – Seattle, WA.*
- Evaluated the effectiveness of ASPIRE, a program to increase college enrollment among Oregon high school students, using a regression analysis and longitudinal student data that matched student K-12 records with college enrollment data. *Oregon Community Foundation – Oregon.*
- Developed a district report card system for several Oregon school districts based on longitudinal student data. *Chalkboard Project – Oregon.*
- Evaluated the effectiveness of Pre-K and K programs in Bremerton, Washington using a regression analysis on longitudinal student data. *Bremerton School District – Bremerton, WA.*
- Testified before Oregon legislature regarding the benefits of using block grants for funding school transportation systems. *Chalkboard Project – Oregon.*
- Developed regression models to calculate funding levels for student transportation in Washington school districts and developed linear programming tools to evaluate the efficiency of district transportation spending. *Washington’s Office of the Superintendent of Public Instruction – Washington.*

- Analyzed and presented results of a survey regarding methods for improving efficiency in Oregon schools. *Chalkboard Project – Oregon.*
- Reviewed literature on motivations for and effects of mergers between institutions of higher education. *Confidential client – Various locations.*
- Developed a method for using longitudinal student data to calculate and report student achievement growth (aka a school value-added-model (VAM)) as part of a school accountability program in Seattle, Washington. *Seattle Public Schools – Seattle, WA.*
- Used longitudinal data to describe the Hispanic-White and Black-White achievement gaps in Oregon schools. *Chalkboard Project – Oregon.*
- Described the potential economic effects of eliminating the achievement gaps in Oregon's schools on the state's economy. *Chalkboard Project – Oregon.*
- Reviewed and evaluated current research on the effectiveness of the Safe and Civil Schools program, and worked with clients to develop and implement additional program evaluation. *Randy Sprick's Safe and Civil Schools – Washington.*

Labor Markets

- Designed survey and prepared article investigating women's low rates of participation in low-stakes "pre-entrepreneurial" activities. *Kauffman Foundation, Kansas City*
- Investigated methods and data for introducing greater flexibility into union contracts. *Association of General Contractors Oregon-Columbia Chapter – Oregon.*
- Described the methods used to calculate hourly billing rates, calculated plausible billing rates for local government employees, and compared these rates to the hourly rates charged by the Lane Council of Governments. *Lane Council of Governments – Eugene, OR.*
- Used IRS tax migration data and the American Community Survey to evaluate the impact of income tax differentials between Oregon and Washington on migration within the Portland-Beaverton-Vancouver, OR-WA MSA. *Association of Oregon Industries – Oregon and Washington.*
- Created a large longitudinal data set of Harvard College students that matched labor market and family outcomes obtained from surveys administered 15-30 years following graduation to undergraduate records. Dr. Ward supervised the creation of the undergraduate database, drafted the survey instrument, managed survey distribution and collection, and conducted preliminary data analysis. *Office of the President, Harvard College – Nationwide.*
- Calculated the potential economic costs associated with proposed change in Oregon's meal and rest break rule by empirically identifying potentially affected

workers and employers, modeling potential employer responses, and identifying values for model parameters. *Michael Lilly Attorney – Oregon.*

Regional Economics

- Analyzed the economic contribution of the Missoula County Fairgrounds to Missoula's economy – *Missoula County Fairgrounds, Missoula, MT*
- Described trends in key economic indicators (e.g., gross metropolitan product, employment, personal income per capita) in the Portland Area and evaluated them relative to other comparison areas. *Portland Business Alliance – Oregon*
- Defined and described Portland's traded sector and explained how it contributes to employment growth, income growth, new business formation, and overall regional economic health. *Portland Business Alliance – Oregon*
- Conducted data analysis to describe the role of Washington County and Portland's Westside in the regional economy. *City of Hillsboro -- Oregon*
- Conducted data analysis and prepared a report that defined and described Portland's manufacturing and explained how it may contribute to the regional economy by paying higher wages, promoting innovation, and boosting the traded sector. *Portland Business Alliance – Oregon*
- Evaluated the effect of enterprise zone tax incentives on employment growth using a regression-discontinuity analysis of longitudinal establishment-level data. *Oregon Economic Development Association -- Oregon*

Healthcare Markets

- Prepared a report that examined the economic impact of Medicaid expansion in Montana – *Montana Healthcare Foundation; Headwaters Foundation*
- Designed evaluation of Montana's Medicaid Expansion Waiver (HELP Program) – *Montana Department of Public Health and Human Services – Helena, MT*
- Evaluated Montana's Patient Centered Medical Home (PCMH) program – *Montana Commissioner for Securities and Insurance – Helena, MT*
- Evaluated effects of pain, fatigue, and depressed mood on individual participation in daily activities. *University of Montana Rural Institute for Inclusive Communities – Missoula, MT*
- Prepared presentation on drivers and potential solutions to rising health care costs and discussed the impact of high health care costs on large employers. *Blue Cross Blue Shield of Montana – Helena, MT.*
- Prepared report describing characteristics of Montanans who would be eligible for Medicaid if Montana accepted the ACA Medicaid Expansion. *Bureau of Business and Economic Research. Missoula, MT.*

- Prepared report and presentation describing Native American health and health insurance coverage in Montana. *Confidential Client.*
- Analyzed the contribution of the health care sector to Billings, MT's economy. *Big Sky Economic Development Agency -- Montana*
- Described the contribution of health care to Billings, MT's economy. *Big Sky Economic Development Agency – Billings, MT*
- Reviewed and evaluated current research on the impact of increased hospital supply on local health care markets. *SEIU Local 49 – Portland, OR.*
- Reviewed the literature on the prevalence, preventability, and expense associated with medical injuries and medical errors and used estimates from this literature to describe the potential economic cost to Oregonians caused by medical errors. *Oregon Trial Lawyers Association – Oregon.*
- Produced a primer on health care cost that addressed nine common questions about health care and health care costs. *Regence Blue Cross-Blue Shield of Oregon – Oregon.*
- As part of on-going labor negotiations, provided an independent analysis of a hospital systems financial health based on common financial indicators and health care spending forecasts. *SEIU Local 49 – Oregon.*

Public Policy

- Estimating the potential economic impact of funding cuts to Oregon's courts. *Oregon Trial Lawyers Association – Oregon.*
- Performed a quantitative and qualitative analysis of the economic contributions of Oregon State University on the regional and state economies. *Oregon State University – Oregon.*
- Performed a quantitative and qualitative analysis of the economic contributions of Oregon State University's College of Engineering to the regional economy. *Oregon State University College of Engineering – Oregon.*
- Performed a quantitative and qualitative analysis of the economic contributions of The Evergreen State College on the regional and state economies. *The Evergreen State University – Washington.*
- Performed a quantitative and qualitative analysis of the economic contributions of Oregon's Cultural Trust to state economies and assessed the effectiveness of the Oregon Cultural Trust Tax Credit. *Oregon Cultural Advocacy Coalition – Oregon.*
- Led a benefit-cost analysis that compared the economic benefits and costs of developing 300 acres of West Hayden Island into a port facility and restoring the remaining 500 acres to leaving all 800 acres in their current state. *City of Portland – Portland, OR.*

- Reviewed the economic literature and described potential impact of proposed income tax increase on taxable income and economic growth. *Oregon Business Council – Oregon.*
- Reviewed the economic literature on the effects of STEM education, conducted data analysis, and produces a simple economic model designed to help educate policy makers about the potential returns to investments in STEM. *Oregon Business Council – Oregon.*
- Developed a model and analyzed data to estimate gross revenues for video, voice, and data services at the city level. *League of Oregon Cities – Oregon.*
- Provided data collection services to determine garbage and yard debris can weights and set-out rates for Eugene residents. *City of Eugene – Eugene, OR.*

Real Estate & Land Use

- Conducted a market analysis for a proposed real estate development in Belgrade, MT - *Confidential Client*
- Estimated the potential economic effects of future residential rural development on real estate values. *San Luis Obispo County – San Luis Obispo County, CA.*
- Analyzed the effect of Portland’s Intertwine (a network of open spaces) on property values in the Portland-Vancouver metropolitan area using a hedonic regression analysis and data from county assessors’ records. *Metro – Portland, OR.*
- With a team of researchers at Harvard University, analyzed the effect of local land-use regulations on housing supply and housing prices for 187 communities in Eastern Massachusetts. *Pioneer Institute for Public Policy Research – Massachusetts.*
- Detailed the sources of housing-price cycles at the neighborhood level. *Pioneer Institute for Public Policy Research – Boston, Massachusetts.*
- Applied the principles of benefit-cost analysis to help Clackamas County understand the full range of economic benefits and costs associated with improving its score on FEMA’s Community Rating System. *University of Oregon – Clackamas County, OR.*
- Worked with emergency managers at the University of Oregon to identify the tradeoffs associated with various hazard mitigation and response plan options, gathered data to evaluate these tradeoffs, and helped calculate the economic benefits and costs associated with different options. *University of Oregon – Eugene, OR.*

Academic Publications

“Life starts at home: bathing, exertion and participation for people with disabilities.”
Archives of Physical Medicine and Rehabilitation Greiman, L., P. Fleming, B.Ward and C. Ravesloot.

“Disability Items From the Current Population Survey (2008-2015) and Permanent Versus Temporary Disability Status” *American Journal of Public Health*. 2017, Ward, B., A. Meyers, J. Wong, and C. Ravesloot.

“Why Stay Home? Ecological Momentary Assessment of a Community-Based Mixed Impairment Sample” *Disability and Health* 9(2), Ravesloot, C, B.Ward, T. Hargrove, J. Wong, N. Livingston, L. Torma, C. Ipsen.

“Scale-up of Safe & Civil Schools’ Model for school-wide positive behavioral interventions and supports.” *Psychology in the Schools* 53(4):339-358. Smolkowski, K., Strycker, L., & Ward, B

“A Randomized Evaluation of the Safe and Civil Schools Model for Positive Behavioral Interventions and Supports at Elementary Schools in a Large Urban School District.” *School Psychology Review* 42(3):317-333, Ward B. and R. Gersten. 2013,

“The Causes and Consequences of Land Use Regulation: Evidence from Greater Boston” *Journal of Urban Economics* 65(3): 265-278 Glaeser, E., and B Ward.

“The Effect of Low Impact Development on Property Values.” *Proceedings of the Water Environment Federation, Sustainability 2008*, pp. 318-323 Ward, B., E. MacMullan, and S. Reich.

“Myths and Realities of American Political Geography.” *Journal of Economic Perspectives*. Glaeser, E., and B. Ward. Spring 2006.

Regulation and the Rise of Housing Prices in Greater Boston. Glaeser, E., J. Schuetz, and B. Ward. Cambridge, MA: Rappaport Institute for Greater Boston, Harvard University, and Pioneer Institute for Public Policy Research. 2006.

“Distance and Social Capital: Can Isolation Be Good?,” in *Social Interactions and Economics*, Ph.D Dissertation, Harvard University, March 2006.

“Does Reunion Attendance Affect Alumni Contributions?: Evidence from the Harvard College Classes of 1990-1999,” in *Social Interactions and Economics*, Ph.D Dissertation, Harvard University, March 2006.

Other Publications

The Economic Impact of Medicaid Expansion in Montana, April 2018.

“Tackling Montana’s Workforce Shortage: If you want answers, talk with workers.” *Montana Business Quarterly*, Spring 2018.

“Poverty With a View” *Montana Business Quarterly*, Winter 2018.

“Affordable Housing in Montana: Are We Pricing Out Our Residents?” *2018 Montana Economic Report*.

“Health Care: Recent Trends in Health Care Spending.” *2018 Montana Economic Report*.

"Barriers to Women's Entrepreneurship" *Montana Business Quarterly*, Summer 2017.

"The High Wage Jobs Puzzle: Finding Montana's Place in the New Geography of Jobs." *2017 Montana Economic Report*.

"Health Care: More Change and Uncertainty" *2017 Montana Economic Report*.

"Building Missoula's Entrepreneurial Ecosystem" *Missoulian* January 29, 2017.

"Picking the Right College" *Montana Business Quarterly*, January 2017.

"The Curse of the College Town" *Montana Business Quarterly*, September 2016.

"Higher Education: Explaining the Outmigration of Montana's College-Educated Workers" *Montana Economic Report 2016*.

"Expanding Medicaid in Montana: What do the experiences of other states tell us?" *Montana Economic Report 2016*.

"Health Care: Spending hits a speed bump" *Montana Economic Report 2016*.

"Who might get Medicaid if Montana expands eligibility." BBER Issue Brief 2015.

"Health Care: A system in transition." BBER 2015 Outlook Briefing Book.

"Future Needs a Sound Foundation." *The Register-Guard*. Ward, B., E. Whitelaw, and P. Taylor. March 17, 2013.

"Bend's True Economic Picture May Surprise You." *The Bulletin*. Ward, B., E. Whitelaw, and P. Taylor. February 21, 2013.

"Oregon education reform: Clues to the success of overachieving schools lie in the data" *Oregonian*. Tapogna, J, A. Dyke, and B. Ward. August 11, 2012.

"Economic Bridges Falling Down." *Eugene Weekly*. Ward, B. and E. Whitelaw. October 8, 2008.

"The Economy: Now What? The Economists: Ward and Whitelaw" *Oregonian*, Ward B. and E. Whitelaw. September 20, 2008.

"Dream On." *Oregon Quarterly*. Ward, B. and E. Whitelaw. Winter 2007.

"Still the Land of Opportunity?" *Oregonian*. Tapogna, T., B. Ward, and E. Whitelaw. March 2006.

"The Price Is (Not) Right." *Commonwealth: Growth and Development Extra*. Glaeser, E., J. Schuetz, and B. Ward. January 2006.

Presentations

“Better off in Billings – Data for talent attraction” Billings’ Workforce Council Annual Meeting, April 2018.

“Healthcare in Montana: Can consumer centrism move us closer to the ideal?” *Healthcare at a Crossroads*, Healthcare policy conference, Montana State University, April 2018.

“An economist’s perspective on pulmonary health.” *Big Sky Pulmonary Conference*, March 2018.

“Is single-payer the solution (or part of the solution) to our healthcare problems?” Missoula League of Women Voters Forum, March 2018.

“The Future of Higher Education” Bureau of Business and Economic Research 2017 Economic Outlook Seminar Tour (Jan-Mar 2018)

“Ugh! This is awful!: The economic consequences of wildfire smoke.” State of Missoula, January 2018.

“The Contribution of Health Care to Montana’s Economy” Montana Tax Payer Association Annual Conference, December 2017.

“Missoula’s economy: What’s going on and how can we do better?” Leadership Missoula, November 2017.

“Understanding and mitigating the economic costs of cancer.” Montana Cancer Action Network Policy Conference, Keynote Address, November 2017.

“Montana’s economy: What’s going on and how can we do better?” Missoula Federal Credit Union Board Retreat, October 2017.

“How to build a regional economy: the role for talent attraction.” Montana Economic Developers Association Fall Conference, October 2017.

“The significance of health care to Western States’ economies” Western States Association of Tax Administrators Conference, October 2017.

“A health economist’s view of the world and Mountain Pacific Quality Health’s role in it.” Mountain Pacific Quality Health Foundation Board Meeting, August 2017.

“Building Montana’s Health Care Workforce: The role of talent attraction.” Innovate Montana Symposium, July 2017.

“Meet Me in Montana: Developing Talent Attraction Tools for Montana” BillingsWorks, April 2017.

"The High Wage Jobs Puzzle: Finding Montana's Place in the New Geography of Jobs" Keynote Address: Bureau of Business and Economic Research 2017 Economic Outlook Seminar Tour; Montana Society of CPAs Industry Conference, Jan - Mar 2017.

"The Contribution of Health Care to Montana's Economy" Bureau of Business and Economic Research 2017 Economic Outlook Seminar Tour (Jan-Mar 2017)

"Life Starts at Home: Linking Home Environment and Quality of Life for People with Disabilities." Affordable and Accessible Housing for Vulnerable Older Adults and People with Disabilities Living in the Community: A Workshop, National Academies of Science, Engineering, and Medicine, 12/2016.

"Missoula's Economy: A Framework" Missoula Economic Partnership, 10/2016; Missoula City Council Committee of the Whole 12/2016.

"The Contribution of Health Care to Flathead County (MT)'s Economy." Kalispell Chamber of Commerce, 8/2016

"Time Use at Home and in the Community." National Association for Rehabilitation Research and Training Centers Annual Conference, 5/2016

"Housing Characteristics, Home Experiences, and Community Engagement of People Who Report Impairment." RTC: Rural State of the Science webinar, 6/2016.

"Finding Missoula's Place in the New Geography of Jobs." Missoula Rotary Club, 6/2016.

"Employment Outcomes for Montana University System Graduation: Evidence from Administrative Data." University of Montana School of Business Administration, 10/2015.

"Moving beyond time and money: The effect of effort scarcity on individual choices." University of Montana, Department of Economics Seminar, 11/2015.

"Understanding and Increasing Women's Participation in Pre-Entrepreneurial Activities" University of Montana School of Business Administration. 4/2016

"Health Care in Montana: The next 10 years" 2016 BBER Economic Outlook.

"Economic Impact of the Western Montana Family Residency" Western Montana Family Medical Residency Board Meeting, 10/2015

"Revisiting the Economic Impacts of Medicaid Expansion" Association of University Business and Economic Research (AUBER) Fall Conference, 10/2015

"The Future of Health Care Costs - Impacts on your business" - Blue Cross Blue Shield of Montana Employer Summit (Keynote) 8/2015.

"Eight Questions about Health Economics" Healthcare Financial Managers Association (Keynote) 4/2015.

"Healthcare Headlines: Changing Access, Managing Costs, Improving Quality." 2015 BBER Economic Outlook.

"Recent trends in the microeconomics of family medicine practices." Didactic presentation to Family Medicine Residency of Western Montana 1/2015.

"The economics of Medicaid Expansion in Montana." Montana Health Care Forum. 12/2014

"A Primer on Health Care Costs: Brief answers to nine important questions." Didactic presentation to Family Medicine Residency of Western Montana 11/2014

"The contribution of health care to Billings' Economy: Final Report." Big Sky Business Healthcare Summit 11/2014

"The Culture of Non-Work?: Quality of Life and the College Educated Workforce in Oregon." Association of University Business and Economic Research (AUBER) Fall Conference, 10/2014.

"Health and Health Care in Montana." Montana Healthcare Foundation Board of Trustees 8/2014

"The economic impact of health care on Billings' economy" Big Sky Business Healthcare Summit 7/2014

"The contribution of health care to Billings' economy." Big Sky Business Healthcare Summit 7/2014

"The contribution of health related industries to Billings' economy." Big Sky Business Healthcare Summit 7/2014

"The future of healthcare in Billings." Big Sky Business Healthcare Summit 7/2014

"Economic Contribution of Health Care to Rural Economies." Northern Rockies Health Care Innovation Summit, Fairmount, MT, June 10, 2014

"Assessing the Health of the Missoula Economy." National Association of Insurance and Financial Advisors, Missoula, 5/2014.

"Your Voice, Your Vote: Debt-ceiling deadline." KATU News. October 2013.

"Jobs and Economy Forum." Oregon Summit. October 2013.

"Oregon's Economy: Mixed Symptoms" Testimony before Oregon House Committee on Transportation and Economic Development. February 2013.

"Polka Dots and Stripes: Mismatch Between Supply and Demand in a Changed Economy." Housing Land Advocates Conference. Portland, Oregon. September 14, 2012.

"Eugene-Springfield's economy" Eugene City Club. Eugene, OR. July 13, 2012.

"Economic Growth, Natural Capital, and Sustainability." CLE presentation. Portland, Oregon. April 11, 2012.

"Benefits and Costs of Seismic Mitigation." January 19, 2011. CREW Benefit-Cost Analysis Forum. Eugene, Oregon.

"Does Low-Impact Development Affect Property Values?: Evidence from Seattle's Natural Drainage System Projects." Water Environment Foundation Sustainability 2008 Conference. June 2008.

"Compensation for ROW Access Under the Telecommunications Act of 1996: Fiscal Issues Related to Communications Services." NATOA 27th Annual Conference. Sponsored by the National Association of Telecommunications Officers and Advisors. Portland, Oregon. October 2007.

"Outside the Light: The real factors driving Eugene/Springfield's Economy." Eugene-Springfield Leadership Program. Sponsored by the Eugene Area Chamber of Commerce. Eugene, Oregon. October 2006.

"Deregulating the Housing Market." Preserving the American Dream Conference. Sponsored by the American Dream Coalition. Atlanta, Georgia. September 2006.

Teaching

Visiting Adjunct Instructor, Portland State University; Courses: Global Environmental Economics, Spring 2010.

Visiting Assistant Professor, Lewis and Clark College; Courses: Intermediate Microeconomic Theory, Econometrics, Public Economics, Environmental and Natural Resource Economics, Spring 2008 & Fall 2009.

Visiting Adjunct Instructor, University of Oregon; Courses: Labor Economics, Spring 2009.

Tutorial Leader, Harvard College; Courses: Everybody's Doin' It: Social Interactions and Economics, 2002-2006, Senior Thesis Tutorial: Labor, 2004-05.

Teaching Fellow, Harvard University; Courses: Intermediate Microeconomic Theory, Intermediate Macroeconomic Theory, Microeconomics: A Policy Tool for Educators, 2001-2003.

Teaching Assistant, University of Oregon; Courses: Principals of Microeconomics, Urban Economics, Economy of the Pacific Northwest, 1998-1999.

Memberships

- Mountain-Pacific Quality Health Foundation, Board of Directors, 2014-Present
- Oregon Seismic Safety Policy Advisory Commission (OSSPAC), 2012-2013.
- National Association of Business Economists