Jacob L. Manlove, PhD

Assistant Professor, College of Agriculture, Arkansas State University PO Box 1080 State University, AR 72467

Office: 870-972-3942 | Email: jmanlove@astate.edu | Mobile: 918-839-4665

Education

Ph.D. Agricultural Economics, May 2018

Oklahoma State University - Stillwater, OK

Dissertation: Three Essays on Broadband Adoption Committee: Brian Whitacre (advisor), Dave Shideler,

Art Stoecker, Chad Malone

M.S. Agricultural Economics, May 2015

University of Arkansas – Fayetteville, AR

Major Project: Economic Contribution of Agriculture and Food to Arkansas' Gross Domestic Product 1997-2011

Committee: Jenny Popp (Advisor), Lanier Nalley, Bruce Dixon

B.A. Economics, May 2013

University of Arkansas - Fayetteville, AR

Excellence in Research

Advancing research on the economic and socio-demographic impacts of broadband technology as it relates to production agriculture, rural development, and civic engagement.

Experience

8/20 – Present	Assistant Professor, Arkansas State University College of Agriculture
8/18 – 8/20	Assistant Professor, Tarleton State University Department of Agricultural and Consumer Sciences
6/15 – 5/18	Graduate Research/Teaching Assistant, Oklahoma State University Department of Agricultural Economics
6/14 – 5/15	Transportation Planning Analyst, Grain Export Bunge North America
8/13 – 5/14	Graduate Research Assistant, University of Arkansas Department of Agricultural Economics

Current Appointment

Teaching: 75% Research: 25%

Refereed Journal Publications

- 1. Jacob Manlove and Jerica Rich. 2022. ""With Progressively Virtual Classrooms, How Important Are Technical Education Opportunities? Students Answer." *NACTA Journal*. In Press.
- Jacob Manlove, Aaron Shew, and Oladipo Obembe. 2021. "Arkansas producers value upload speed more than download speed for precision agriculture applications." Computers and Electronics in Agriculture 190. Link
- 3. Jacob Manlove and Brian Whitacre. 2019. "An Evaluation of the Connected Nation Broadband Adoption Program." *Telecommunications Policy* 43 (7). Link
- 4. Jacob Manlove and Brian Whitacre. 2019. "Understanding the Trend to Mobile-only for Internet Connections: A Decomposition Analysis." *Telecommunications Policy* 43 (1): 76-87. <u>Link</u>
- 5. Brian Whitacre and Jacob Manlove. 2016. "Broadband and Civic Engagement in Rural Areas: What Matters?" *Community Development* 47 (5): 700-717. Link

Journal Publications Currently Under Review

Working Papers

- 1. Jacob Manlove and Sun Kim. "Economic Impact of Oil and Gas Easements on Rural Arkansas Property Values."
- 2. Jacob Manlove. "Does Media Type Matter for Delivery of Supplemental Materials in the Blended Classroom Environment?"

Technical Reports

1. Jacob Manlove, Leah English, Jennie Popp, and Wayne Miller. "Economic Contribution of Agriculture and Food to Arkansas' Gross Domestic Product 1997-2011." University of Arkansas Research Report 993. May 2014. 23 pp.

Posters Presented at Professional Meetings

- 1. GwanSeon Kim and **Jacob Manlove**. 2022. Does Rice Production Increase Greenhouse Gas Emissions in the U.S.? 2022 Southern Agricultural Economics Association Annual Meeting, New Orleans, February 12-15, 2022.
- 2. **Jacob Manlove.** 2021. Impacts of Broadband Availability in Arkansas Public Schools During the Covid-19 Pandemic on Virtual Learning Decisions. 2021 Telecommunications Policy Research Conference, (Online), September 23-24, 2021.
- 3. Haynes, J.C. (presenter), **Manlove, J.**, Andrew, C., Frazier, D., and Atchley, T.W. 2020. Effectiveness of brainwriting as an alternative to idea generation in agricultural education. 2020 AAAE Annual Conference, (Online), May 19-22, 2020.

- 4. Arthur, M. (presenter), Haynes, J. C., Poe, A. B., **Manlove, J.**, Ford, T. & Stenholm, C. "Experiential learning through an agricultural policy curriculum design. 2020 AAAE Southern Region Research Conference, Louisville, KY, February, 1–4, 2020.
- 5. Haynes, J. C. (presenter), **Manlove, J.**, Andrew, C., Frazier, D. & Atchley, T. W. 2019. Effectiveness of brainwriting as an alternative to idea generation in agricultural education. 2020 AAAE Southern Region Research Conference, Louisville, KY, February, 1 –4, 2020.
- 6. **Jacob Manlove** (presenter). "Does Media Type Matter for Delivery of Supplemental Materials in the Blended Classroom Environment?" The Hawaii International Conference on Education, Honolulu, HI. January 4-7, 2019.
- 7. Gracie Martin (presenter) and **Jacob Manlove**. "Effect of Operation Size on Texas Dairy Production." Texas A&M University System Pathways Symposium, Laredo, TX. November 7-8, 2019.

Invited Presentations

- 1. **Jacob Manlove (invited panelist),** Giula McHenry (invited panelist), Tim Marshall (invited panelist), and Rafi Goldberg (invited panelist). "The Researcher's Guide to the Digital Inclusion Galaxy: Designing and Using Data from the NTIA Internet Use Survey." Invited Panel for the Telecommunications Policy Research Conference, Washington, DC. February 19-20, 2021.
- 2. **Jacob Manlove (invited presenter).** "The Economics of Broadband in Production Agriculture." National Science Foundation Broadband Research Workshop, (online), November 10-19, 2020.
- 3. **Jacob Manlove (invited panelist),** Leah Palmer (panelist), Andrew Stevens (panelist), and Brittany Goodrich (panelist). "The First Year Transition Insight from New Faculty." Invited Panel for the Agricultural and Applied Economics Association Annual Meeting, Atlanta, GA. July 21-23, 2019.
- 4. Brian Whitacre and **Jacob Manlove (invited presenter)**. "Rural Library Hotspot Lending Programs: Current Research and Development of a Pilot Program in Oklahoma." Seminar for Oklahoma Library Association Annual Meeting. April 26, 2017.

Papers Presented at Professional Meetings

- 1. Matthew Blevins (presenter) and **Jacob Manlove**. "Industry Contribution of Arkansas Hemp Production Under Varying Levels of Regulatory Control." Selected paper presented at the Food Distribution Research Society Annual Meeting, Dallas, TX, October 18, 2021.
- 2. **Jacob Manlove** (presenter). "Agriculture Producer's Willingness to Pay for Broadband Upload Speed." Selected paper presented at the Food Distribution Research Society Annual Meeting, Virtual, October 13, 2020.
- 3. **Jacob Manlove** (presenter) and Clint Neill. "Effect of Wage Growth on Rural/Urban Labor Demand." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Louisville, KY. February 1-4, 2020.
- 4. Glenn Conover (presenter), **Jacob Manlove**, and Gracie Martin. "Economic Impact of Agriculture to Texas GDP." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Louisville, KY. February 1-4, 2020.

- 5. Sierra Rash (presenter), **Jacob Manlove**, Chandra Andrew, and Brant Poe. "Impact of Oil and Gas Easements on Erath County Property Values." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Louisville, KY. February 1-4, 2020.
- 6. Jared Netardus (presenter), **Jacob Manlove**, Edward Osei, and Chandra Andrew. "Impact of Climate Change on No-Till Winter Wheat in Texas." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Louisville, KY. February 1-4, 2020.
- 7. **Jacob Manlove** (presenter). "Estimating the Efficiency of Broadband Adoption Using Data Envelopment Analysis: An Application to the State of Texas." Selected paper presented at the Western Agricultural Economics Association Annual Meeting, Coeur d'Alene, ID. June 30 July 2, 2019.
- 8. **Jacob Manlove** (presenter). "Assessing the Need for a Measure of Broadband Adoption." Selected paper presented at the Southern Regional Science Association Annual Meeting, Arlington, VA. April 4-6, 2019.
- 9. **Jacob Manlove** (presenter) and Brian Whitacre. "An Evaluation of the Connected Nation Broadband Adoption Program." Selected paper presented at the Telecommunications Policy Research Conference, Washington DC. September 21-22, 2018.
- 10. **Jacob Manlove** (presenter) and Brian Whitacre. "Understanding the Trend to Mobile-Only for Internet Connections: A Decomposition Analysis." Selected paper presented at the Telecommunications Policy Research Conference, Arlington, VA. September 8-9, 2017.
- 11. **Jacob Manlove** (presenter), Richelle Crotty, Alexis Schrubbe, Brian Whitacre, Sharon Strover, and Colin Rhinesmith. "Rural Library Hotspot Lending Programs." Presentation at the Partnership for Progress on the Digital Divide Conference, San Diego, CA. May 24-25, 2017.
- 12. **Jacob Manlove** (presenter) and Brian Whitacre. "The Short-term Economic Impact of Rural Hospital Closures." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Mobile, AL. February 5-8, 2017.
- 13. **Jacob Manlove**, Jennie Popp (presenter), and Haxhire Myrteza. "The Changing Face of Agriculture: Characteristics and Perceptions of Arkansas Women in Agriculture, a Ten-Year Study." Selected paper presented at the Western Agricultural Economics Association Annual Meeting, Colorado Springs, CO. June 22-24, 2014.

Mass Media

- 1. Jacob Manlove. "<u>Initiative on Closing the Rural Digital Divide.</u>" Nebraska Governance & Technical Center, July 28, 2021.
- 2. Jacob Manlove. "A Million Dollar Burger?". Food Chain Radio, June 9, 2021.
- 3. Jacob Manlove. "Implications of Technology Adoption in the Workplace." iHeart Radio, Sacramento, Ca, June 10, 2019.
- 4. Jacob Manlove, Alexis Schrubbe, Madison Bishop, and Richelle Crotty. "Borrowing the Internet: Library Program Lets Patrons Take Access Home." The Daily Yonder, January 11, 2017.

5. Brian Whitacre and Jacob Manlove. "<u>Use of Broadband Linked to Greater Levels of Civic Engagement</u>." *The Daily Yonder*, September 22, 2016.

Funding

USDA-NIFA, CFDA 10.310 Agriculture and Food Research Initiative – Rural Economic Development. Funding Opportunity: USDA-NIFA-AFRI-007692. "Exploring the Economic Impact and Drivers of Rural Veterinary Businesses throughout the United States" Co-PIs: Jacob Manlove, Clint Neill (Cornell University). \$650,000. Submitted June 2021, Funded September 2021.

2021 Rural Digital Divide Research Proposals Sponsored by the Governance & Technology Center. "Impact of Broadband Availability on Virtual Learning Decisions for Arkansas Public Schools: A Survival Analysis." \$6,000. PI: Jacob L. Manlove, Submitted December 2020, Funded February 2021.

USDA- NIFA, CFDA 10.326 Capacity Building for Non-Land Grant Colleges of Agriculture (NLGCA). Funding Opportunity: USDA-NIFA-NLGCA-007392. "Abattoir Academy: An Extension-Education Program for New Startups in the Meat Industry" PI: Jacob L Manlove, CoPIs: Lea Kinman, Drew Cassens, William Smith, Cheyenne Runyan, Walter Owsley. \$255,735. Submitted November 2020 [not funded]

Tarleton State University Faculty-Student Research and Creative Activity Internal Grant. PI: Jacob L Manlove. \$4,800. Funded August 2019.

Professional Development

Certificate in Effective College Instruction, Association of College and University Educators Endorsed by the American Council on Education, 2019-2020.

Scholarship of Teaching and Learning Cohort IV, Center for Instructional Innovation, Tarleton State University, 2019-2020.

Professional Grant Development Workshop, Grant Training Center, Fort Worth, TX, June 12-13, 2019.

Course and Program Development

Arkansas State University, College of Agriculture

Rural Development, (Summer 2021) – Development of a course in rural development studies

International Agriculture, (Summer 2021,2022) – Development of an international study abroad tour focusing on international agriculture production.

Tarleton State University, Department of Agricultural and Consumer Sciences

Farm Appraisal, AGEC 4335 (Fall 2019) – Introduction of new course: Techniques for evaluating the market value of agricultural real estate using three common approaches: sales comparison, cost, and income. Analyzing effects of different farm characteristics on farm value.

Quantitative Methods for Agribusiness, AGEC 5317 (Spring 2020) – Introduction of new course: financial, mathematical, and statistical techniques required of students in Agricultural Economics or

Agribusiness. In addition, we will use computers to apply these techniques and concepts to real world problems.

Master of Science in Agricultural Economics, (Fall 2020) – Introduction of standalone Masters of Science program in agricultural economics.

Awards

- Charles Benton Junior Scholar (2019). Telecommunications Policy Research Conference
- Graduate Student Research Award (2018). Telecommunications Policy Research Conference
- Graduate Student Research Award (2017). Telecommunications Policy Research Conference
- Second Place, Graduate Student Case Study Competition (2017), AAEA Annual Conference
- First Place, Graduate Student Case Study Competition (2016), AAEA Annual Conference
- Finalist, Graduate Student Extension Competition (2016), AAEA annual Conference
- Harry Mapp Fellowship (2015), Department of Agricultural Economics, Oklahoma State University
- Most Outstanding Graduate Student (2014). Department of Agricultural Economics, University of Arkansas

University and Professional Service

Arkansas State University

- Undergraduate Academic Integrity Committee, 2021 Present
- Search Committee College of Agriculture Advisor, 2021
- Search Committee University Study Abroad Advisor, 2021
- Development, Communications, and Alumni Committee, 2020 Present

College of Agriculture, Arkansas State University

- Strategic Planning Committee, 2021-2022
- Undergraduate and Graduate Assessment Committee Agribusiness, 2020 Present
- Recruiting and Scholarships Committee, 2020 Present (Committee Chair)
- Farms Planning Committee, 2020 Present
- Collegiate Farm Bureau Advisor, 2020 Present

Tarleton State University

- Study Abroad and Global Exchange Advisory Committee, 2019-2020
- Faculty Student Research Advisory Council, 2019-2020
- Reviewer, Faculty Student Internal Grants, 2019
- Academic Advisor, Farm House Fraternity, 2019 2020

College of Agricultural and Consumer Sciences, Tarleton State University

- College Curriculum Committee, 2019 2020
- State Fair of Texas, Agri-Science Fair Judge, 2019
- Faculty Awards Committee, 2018
- Texas A&M System Symposium Judge, 2018
- Undergraduate Research Scholar Committee, 2018-2020

Department of Agricultural and Consumer Sciences, Tarleton State University

• Department Curriculum Committee, 2019 – 2020

- Agribusiness Club Advisor, 2019 2020
- Undergraduate Research Initiative Committee, 2018 2020

Department of Agricultural Economics, Oklahoma State University

- Treasurer (2017-2018), Graduate Student Association
- Department Representative (2015-2016), Graduate and Professional Student Government Association

Food Distribution Research Society

- Director, 2021 Present
- Member 2018 Present

Agricultural and Applied Economics Association

• Member, 2014 – Present

Western Agricultural Economics Association

• Member, 2014 – Present

Southern Agricultural Economics Association

• Member, 2014 – Present

Journal Manuscript/Grant Reviewer (Number of Manuscripts Reviewed in Parentheses)

- Horticulturae (1)
- National Science Foundation Grant Reviewer 2020 (1)
- Telecommunications Policy (4)
- Journal of Social Media in Society (1)
- Texas Journal of Agriculture and Natural Resources (2)
- Community Development (1)

Guided Student Research

Graduate Students

AdithyaSekhar Gummadi (May 2023). Committee Chair. M.S. Thesis. TBD.

Sierra Rash. (May 2020). Committee Chair. M.S. Thesis. Impact of Oil and Gas Pipelines on West Texas Property Value.

Jared Netardus. (May 2020). Committee Chair. M.S. Thesis: Climate Variability on No-Till Profitability; Environmental Impacts.

<u>Undergraduate Students</u>

Matthew Blevins, 2021. Undergraduate Research, Economic Viability of Industrial Hemp in Arkansas. Resulting Presentation – 2021 FDRS Accepted Paper

Cara Shaw, 2021. Undergraduate Pre-Vet Research Opportunity, Economic Impact of Market Concentration on Prices Paid for Veterinarian Services.

Hayden Taylor, 2019. Dean's Undergraduate Research Grant, Factors Influencing Adoption of Precision Agriculture Practices in Texas Cattle Production.

Glenn Conover and Gracie Martin, 2019. Faculty Student Internal Research Grant, The Economic Impact of Agriculture to Texas GDP.

Sara Martin, 2019. First Year Research Experience Grant. Estimating the Efficiency of Texas Dairy County Production Using Data Envelopment Analysis.

Matthew Martin, 2019. First Year Research Experience Grant. Measuring County Economic Efficiency Using Data Envelopment Analysis: An Application to the State of Texas.

Teaching

Arkansas State University, College of Agriculture Rating # of Students AGEC 6043, Advanced Agricultural Business Management, Spring 2022 Scheduled AGEC 4073, Agricultural Business Management, Spring 2022 Scheduled AGEC 3053, Commodity Futures Markets, Spring 2022 Scheduled AGRI 3233, Applied Agricultural Statistics, Winter 2021 Scheduled 20 AGEC 409V, Special Problems-Arkansas Hemp Economics, Fall 2021 5.0/5.01 AGEC 4073, Agricultural Business Management, Fall 2021 4.8/5.0 38 AGEC 3053, Commodity Futures Markets, Fall 2021 4.8/5.035 AGEC 3003, Agricultural Marketing, Fall 2021 4.7/5.0 29 AGEC 409V, Rural Development, Summer 2021 Summer 23 Summer AGRI 3233, Applied Agricultural Statistics, Summer 2021 37 AGEC 4073, Agricultural Business Management, Spring 2021 4.8/5.0 38 AGEC 3053, Commodity Futures Markets, Spring 2021 4.9/5.033 AGEC 4073, Agricultural Business Management, Fall 2020 22 4.8/5.0AGEC 3053, Commodity Futures Markets, Fall 2020 4.6/5.022 AGEC 3003, Agricultural Marketing, Fall 2020 4.7/5.0 40 Tarleton State University, Department of Agricultural and Consumer Rating # of Sciences **Students** Unavailable¹ AGEC 4325, Recreation and Tourism Economics, Summer 2020 29 Unavailable¹ 9 AGEC 4330, Agricultural Finance, Summer 2020 AGEC 5312, Production and Operation Analysis, Summer 2020 Unavailable1 10 AGEC 2317, Introductory Agricultural Economics, Spring 2020 Unavailable¹ 99 AGEC 3314, The Agricultural Marketing System, Spring 2020 Unavailable¹ 45 AGEC 4086, Problems: Agricultural Policy, Spring 2020 Unavailable¹ 1 AGEC 4086, Problems: Texas Land Law, Spring 2020 Unavailable¹ 1 AGEC 4090, Quantitative Methods for Agribusiness, Spring 2020 Unavailable¹ 10 AGEC 4330, Agricultural Finance, Spring 2020 Unavailable¹ 33

¹ Unavailable due to COVID-19 Pandemic

AGEC 1309, Microcomputer Applications in Agriculture, Fall 2019	4.4/5.0	39
AGEC 2317, Introductory Agricultural Economics, Fall 2019	4.2/5.0	121
AGEC 4325, Recreation and Tourism Economics, Fall 2019	4.3/5.0	24
AGEC 4335, Farm Appraisal, Fall 2019	4.6/5.0	22
AGEC 4325, Economics of Agribusiness Management, Summer 2019	4.6/5.0	35
AGEC 4333, Recreation and Tourism Economics, Summer 2019	4.7/5.0	27
AGEC 2317, Introductory Agricultural Economics, Spring 2019	4.8/5.0	27
AGEC 2317, Introductory Agricultural Economics, Spring 2019	4.9/5.0	55
AGEC 3314, The Agricultural Marketing System, Spring 2019	4.6/5.0	46
AGEC 4330, Agricultural Finance, Spring 2019	4.7/5.0	44
AGEC 1309, Microcomputer Applications in Agriculture, Fall 2018	4.8/5.0	27
AGEC 2317, Introductory Agricultural Economics, Fall 2018	4.7/5.0	36
AGEC 4325, Recreation and Tourism Economics, Fall 2018	5.0/5.0	24
Oklahoma State University, Department of Agricultural Economics	<u>Rating</u>	<u># of</u>
ACTION OF THE STATE OF THE STAT	40/50	<u>Students</u>
AGEC 3213, Quantitative Methods for Agricultural Economics, Fall 2017	4.8/5.0	68
AGEC 1113, Introduction to Agricultural Economics, Fall 2015	N/A	118