**Basic Information**

**Project No. and Title: NE 2249: Sustainable and Inclusive Rural Economic Development to Enhance Housing, Health, Entrepreneurship, and Equity**

**Period Covered: 07/01/2022 to 04/30/2023**

**Date of Report: 06/26/2023**

**Annual Meeting Dates: 03/30/2023 to 03/30/2023**

**Participants**

Yong Chen, Oregon State University; Steven Deller, University of Wisconsin – Madison (McKenzie Boyce (graduate student), University of Wisconsin – Madison); Tom Harris, University of Nevada – Reno; Ayoung Kim, Mississippi State University, President; Dayton Lambert, Oklahoma State University; Nathan Palardy, University of Florida; Austin Sanders, Economic Research Service (USDA); Judy Stallmann, University of Missouri; Heather Stevens, West Virginia University; Dawn Thilmany, Colorado State University; Phil Watson, University of Idaho; Andrew Van Leuven, Oklahoma State University; Anders Van Sandt, University of Wyoming, President-elect/Secretary;

**Brief Summary of Minutes of Annual Meeting**

**Brief Summary of Minutes from Annual Meeting with Information from Non-Attendees**

# **Notes (by attendee)**

**Yong Chen (Oregon State University)**

New hire: Daniel Bigelow. They are focusing on conservation of land and organic food. A recent paper of theirs explores how conservation hampers transitions to organic.

Timber: The timber industry has long struggled in Oregon. Looking at how new information tools may help recruit a new generation into the logging industry.

Land use: Do existing land use regulations have an impact on leapfrogging and its ensuing negative economic implications?

Minimum wage: adopted a tiered minimum wage system. Portland pays a dollar higher than other counties. The hope is that this tiered system will promote rural development. Concerned the NETS (National Establishment Time-Series) data may not be a good type of data for this analysis.

**Steve Deller (University of Wisconsin – Madison)**

The Wisconsin work related to NE2249 leverages resources from three source: (1) Agricultural Experiment Station, (2) Cooperative Extension, and (3) the UW-Madison Economic Development Administration University Center (EDA-UC). This allows for a more complete integration of research and Extension outreach educational programming. The work has proceeded along several fronts, including rural access to broadband, rural labor markets as it pertains to consistent labor shortage, rural housing, rural entrepreneurship, and local government finance.

Entrepreneurship: specifically, women and minorities. This comes out of Extension work in the eastern part of the state. One of the focuses is social capital and networking. Many women and minorities do not feel they are part of local networks and are instead external to these processes. The Extension side is how you network these people. Currently conducting a survey to measure networking and network density.

Broadband: within the context of entrepreneurship, rural development, and health outcomes. Interested in willingness-to-pay for broadband: can you pay for a reasonable speed even if you have it?

Public finance: looking at the fiscal health of U.S. cities. Recently finished paper on local taxation and local growth.

Health: looking at rural pharmacists, their role in rural areas, their impact on the economy, and their role in access to care. Also, have another student looking at topics in public health.

**Tom Harris (University of Nevada – Reno)**

I have initiated two projects under objective 1 (Enhancing Rural Economic Development focusing on Housing and Health).

1. Broadband access and rural health outcomes: Grant proposal submitted to the USDA: "Preferences or Access: The Effects of Broadband Internet on Rural Health Outcomes." looking at the relationship between broadband access and rural health outcomes

Data collection and merging are in progress. Data from different sources is being cleaned and merged at various geographic granularity (census block to county, depending on the variables).

1. Farm worker’s access to health insurance: Access to health insurance and health and economic outcomes of farm workers

University of Nevada, Reno work was under objective 2 (Enhancing Rural Economic Development focusing on Entrepreneurship and Equity): Completed feasibility and economic impact analysis of a proposed Native American Land Grant College on the Yerington Paiute Reservation.

Published a University of Nevada Cooperative Extension fact sheet on the calculation of federal public land Payment in lieu of Taxes and comparison of PILT payments across Western US States.

Completed analysis of conjoining results of a ranch level linear programming model with regional Social Accounting Matrix, Ultimately developing a CGE model analysis of reducing public land AUMs.

Completed trade area analysis of commercial sector activity in Lincoln County, Nevada.

Competed analysis of education to workforce pipeline for Southern Nevada that is applicable to the new economy.

Native Tribes: investigating the feasibility of post-secondary schools for native peoples in native communities.

Public lands: exploring tradeoffs between PILT (payments in lieu of taxes), grazing, and other uses/fees

Tourism: Looking into the effect of the new gaming laws on tourism and economic growth in Nevada. Nevada’s economy was hit hard by COVID-19 but new laws in the gaming industry may be a way to get some growth back, but ultimately, Las Vegas need to diversify like the northern part of the state.

Mining: Investigating the effect of tax breaks on lithium mining and processing in Nevada.

**Ayoung Kim (Mississippi State University)**

Two USDA grants:

Finding a spatial pattern of heirs’ property. Looking at the association of heirs’ property and wealth inequality. It has been difficult to find a measure of wealth inequality instead of income inequality.

Bio-combined heat and power (bCHP) systems. What is the energy burden in the rural area? Does bCHP system help with this issue in rural areas? Finding location determinants for these systems.

Telehealth: using surveys to gather data on health status, number of times using telehealth, and number of times doctors visited in person. How do broadband access, adoption, and speed influence the use of telehealth? Are doctor offices and telehealth complements or substitutes?

Public finance: Mississippi has more alternative funding services (payday lenders, title loans, etc.) than any other state. What regional factors determine their location, and how do the state’s policies affect their locations and frequency?

Broadband: Doing a meta-analysis to try to find the willingness-to-pay of broadband. Currently, collecting papers and compiling datasets. Is there any range of willingness-to-pay, and how does it change depending on income, socioeconomic status, etc. Hope to have a draft next year.

**Dayton Lambert (Oklahoma State University)**

Drought: Obtained seed grant titled, “Quantifying Drought Impacts on Oklahoma Communities.” A key reservoir for a community in OK is now at 18%. Looking for farm-level data using a methodology from the Arkansas basin. In another part of the state, the aquifer is drying up, yet folks are still overgrazing. Want to look at it through a regional impact analysis linked up with a farm sector analysis.

**Nathan Palardy (University of Florida)**

Leadership training: Exploring how government official (e.g., county commissioners) training can increase the resilience of local communities and investments in new technologies like broadband. Does participation in the leadership programs better position counties to take advantage of grant money? Currently doing a needs assessment on the program and focusing on fiscally constrained counties. Do these counties have the same access to leadership development trainings as larger counties? Depending on the findings, there could be potential to develop a scholarship program for fiscally constrained counties. Part of the effort is to make the University of Florida a first stop for understanding public policy rather than other sources from the media or private organizations.

Nathan’s graduate student is looking at how fishing policies affect the local economy, specifically tourism. How do changes in bag limits affect fishing efforts?

**Austin Sanders (Economic Research Service, USDA)**

Works with maintaining persistent poverty codes and producing new codes.

**Heather Stephens (West Virginia University)**

This January (2023), Heather took over as the director of the WVU Regional Research Institute.

Labor: Finishing up analysis looking at labor force participation

Have another project looking at displaced workers in Appalachia

Set up a remote worker program in WV.

Has a project seeking to match the skills of workers who have been displaced with potential new jobs that they may not have thought about. Will launch a survey to identify infrastructure to help these workers transition and assist in determining whether upskilling is needed.

Entrepreneurship: Working on a multistate project to look at entrepreneurship for females and minorities

Telehealth: Used patient data to examine how telehealth has expanded visits and the rate at which patients attend their health appointments. Find much greater access gained from telehealth.

Banking: Have a project looking at the uniqueness of Appalachian banking.

Rural EVs: Have a collaboration thinking about rural electric vehicle (EV) barriers and want to launch a survey to identify barriers.

Energy: Want to do a comprehensive economic analysis of new energy opportunities.

Oher work includes opioids, telehealth, and remote work.

I recently received a NIFA grant for funding to study rural female and minority entrepreneurs.  This is in collaboration with Penn State and University of Maine.  It is an integrated project involving Extension, and involves our Extension at WVU as well. This project will start this year and last three years. The work with Penn State is an ongoing collaboration that has previously led to publications.

I have ongoing work with Steve Deller at University of Wisconsin related to labor force participation. A draft of the paper will be available this summer.

I also have a collaboration with Ohio State and Texas Tech (Mark Partridge and Zachary Keeler) on business startups.

A collaboration with Michigan State (John Mann and Liz Mack) resulted in a publication this past year.

Another collaboration with Texas Tech led to a publication this past year.

**Dawn Thilmany (Colorado State University)**

Civic capacity: Using the resilience index and looking to build in a new civic capacity index.

REDI: Just hired Tim Komarek (Assoc. Professor) using some Extension money to run the Regional Economic Development Institute (REDI).

We have initiated a number of activities that align with our stakeholders' priorities, and we know these are well targeted because they were driven by community-based questions and conversations. With our partners in the Regional Economic Development Institute (https://csuredi.org/), we continue to produce bi-monthly REDI reports on a variety of topics from workforce trends and policy, to public services (education, housing), to economic considerations around specific projects (a new state park). In addition, we host occasional webinars to discuss current issues, including a fall webinar on the changing farm labor policy landscape.

To address the broader set of needs among our communities, we have started to develop some new data metrics that all counties can access to learn about both how their area compares to the state, but also, how those data change across time (perhaps helping them to evaluate progress on targeted economic or community goals). And, to contribute to the broader field and literature, we frame and publish research on challenges we know are present in Colorado but may also be affecting other regions of the country including localized food systems, agritourism and labor markets.

Our work on this topic is being augmented currently by an Economic Development Administration grant, which is allowing us to more and targeted work with three regions of the state. More information at: https://edapartners.colostate.edu/about-the-team/. This is a nice integration of USDA and EDA investments in rural development and the CSU team hopes to compete for an EDA University Center when it is next offered in the region.

Grants: Working on Economic Development Administration (EDA) grant. Put in for a USDA food center grant (about half of the funds are used for projects, and the other half are for technical capacity grants). Had first class of graduates out of a new entrepreneurship program.

**Phil Watson (University of Idaho)**

Entrepreneurship: Investigating the relationship between over- and under-education and entrepreneurship rates. Basically, looking at mismatches between education and occupation. Idaho’s industry mix leads to most people being overeducated.

ASAP: Working on finishing up ASAP (Area Sector Analysis Process) papers. This community business matching program observes how people are goal-setting and how much they think what they do affects their economic outcomes. How cohesive are communities, and how does that variance influence economic outcomes?

Liquor laws: Looking at liquor laws between Washington and Idaho. Idaho is a state-run liquor store state, so all data is available for liquor stores, restaurants, or grocery stores. Washington is a licensed state.

Unsuppressed QCEW: Finishing up a project and working on developing interregional accounts for every county in the U.S. They have finished unsuppressing all QCEW data and are in the process of reconciling it with BEA data. Next have to use the gravity model to determine interregional trade. The data will be available on GitHub, and they would like it to be open access where users can continuously contribute to and improve the data. The data are establishment counts, employment, and wages by 6-digit NAICS and ownership.

**Andrew Van Leuven**

Took over a project in the small business development center as a data concierge.

Cannabis: It is relatively cheap to be a cannabis grower in Oklahoma. What is the economic impact of the legislation that allows this.

Data hub: Wants to build a data hub for state and community data.

Childcare: Just finished a paper looking at how difficult it is to analyze the industry with the way non-employers are masked or reported differently. All measures of the industry are very different from one another, limiting the understanding of the industry.

Online banking: Investigating whether brick-and-mortar banks, credit unions, and other lenders (e.g., farm credit, *not* payday lender types) matter in the online era.

**Anders Van Sandt (Oklahoma State University)**

Economic opportunity maps: Upkeep of this has stalled due to a lack of reliable disaggregated public data. The maps are still up at Texas A&M University, Michigan State University, and University of Wyoming and can be used for economic development planning, but the data is becoming old. Hope to use Phil Watson’s unsuppressed QCEW data once they are finished reconciling it with BEA data.

Data hub: The Wyoming Integrated Statistics Environment (WISE) will be a one-stop-shop for all the state’s data needs. Graduate students were hired to write R code that can automatically pull and update data from government data websites’ API. Have submitted a proposal for funding through the CHIPS Act. After funding, the next phase will be to hold focus groups with WY stakeholders to identify data types, webpage format, and tool features. Next, state organizations and agencies will be approached to add their data to the tool annually with a specific format. In the end, the tool will include data on economics, demographics, tourism, land, health, crime, and other statistics that can be manipulated online or downloaded.

Health Access: Submitted a NIFA grant proposal in September and waiting on notification. The project seeks to identify imperfect substitutes to care in rural communities with poor health outcomes and limited access to care.

Climate change resilience: graduate student looking at how economic impacts from snowmobiling will be affected by climate change. Also, have another project looking at WY communities’ resilience toward water-related natural hazards from climate change.

**Next meeting (2024):**

The next multistate meeting will be held in Washington D.C. for Southern Regional Science Association Meeting.

# **Notes (by Non-attendee)**

**Emma Bojinova (University of Connecticut)**

Grant awards: Awarded a Storrs Agricultural Experimental Station grant to analyze the entrepreneurial networks of small- and medium-sized agribusinesses in the six New England states (Connecticut, Massachusetts, Maine, New Hampshire, Vermont, and Rhode Island) and assess how structures differ by environment (urban, peri-urban, or rural) and socially disadvantaged status. This is the first year of the 3-year grant with collaborators Dr. Cristina Connolly (Co-PI, University of Connecticut) and Dr. Jason Entsminger (Co-PI, University of Maine). Our project has an extension component – developing an Extension curriculum surrounding the importance of networking and successful network attributes. This project contributes to the CAHNR’s strategic priorities of ensuring a vibrant and sustainable agricultural industry and food supply, and promoting diversity, equity and inclusion. It also contributes to the NE2249 Multistate Project’s primary goal of enhancing rural economic development focusing on entrepreneurship and equity.

Ongoing Project: Currently working with Dr. Cristina Connolly (PI, University of Connecticut) and Dr. Rigoberto Lopez (Co-PI, University of Connecticut) on a project sponsored by CAHNR to develop a needs-based assessment of CT farms with a focus on small- and medium-sized farms.

**Diane Charlton (Montana State University)**

Received NIFA Agriculture and Food Research Initiative (AFRI) grant with co-authors Amanda Countryman and Dale Manning to investigate the effects of trade policy on rural employment and wages.

Ongoing Research Projects: Research continues with Genti Kostandini and Tianyuan Luo to measure the effects of 287(g) immigration enforcement policies on contract labor employment, fruit production, and farm worker wages and benefits by immigration status and employer type (grower or contractor)

Research continues with Stephen Devadoss, Karina Gallardo, Jeff Luckstead, and Stavros Vougioukas under funding from NIFA National Robotics Initiative (NRI) to assess the economic viability of robotic apple harvesters with sensitivity analysis for efficiency of different robotic tasks and wage elasticities

Work continues with Marcelo Castillo and Skyler Simnitt with funding from USDA Economic Research Service (ERS) cooperative funding to investigate the effects of COVID-19 incidence within counties on demand for new H-2A requests compared to years prior to 2020

Work continues with Alexandra Hill and J. Edward Taylor to investigate the social impacts of agricultural automation

**Elizabeth Davis (University of Minnesota)**

Three major research activities were undertaken to provide timely information to policymakers and to increase knowledge of the childcare market in different-size communities. First, we updated our measures of childcare accessibility across the dimensions of supply, cost and quality based on the spatial distribution (e.g., travel time) between family locations and childcare providers. Second, we analyzed how public funding for child care and early education has altered the local supply and quality of child care over time in order to identify strategies to increase supply of high quality child care. Third, we analyzed data on licensed family child care providers in Minnesota to understand the factors underlying the long-term decline in their numbers. We compared trends over the period prior to the pandemic and since 2020 in order to identify local areas with childcare shortages. We developed maps and data visualizations to show the variation in childcare access for families in different parts of Minnesota. As part of this study, we also conducted analysis using machine-learning methods to predict access in different communities.

**Stephen Goetz and Claudia Schmidt (Penn State University)**

We have continued our NIFA-funded research on the determinants and impacts of rural innovation using Census Research Data Center restricted files. This includes better understanding the different types of entrepreneurship as well the impacts of such activities on indicators such as job growth and rural exporting activity. This work is joint with Tim Wojan of the NSF and Anil Rupasingha of USDA/ERS. Several related papers were presented at the recent WRSA meeting, and new research findings will be presented at the ERSA Congress in Spain.

We have also continued our research on the impacts of the Covid-19 pandemic, for example on the differential impacts of the pandemic on the household food security of different ethnic groups, and on sectors such as housing and the tourism and hospitality industry. A novel application of artificial intelligence-based language processing examined how the emotions expressed in Tweets could be used to predict state-level food insufficiency during a pandemic.

A study with Mark Skidmore (Michigan) and others examined the stigma associated with and ability to recognize anxiety in rural vs. urban areas.

With Steve Deller (Wisconsin) we are exploring the impacts of female-operated farms on local socioeconomic outcomes.

With Heather Stephens (West Virginia) we are embarking on a project related to female- and minority-owned business owners. Last, in a new cooperative agreement with the ERS (Anil Rupasingha) we are examining the impact of the community reinvestment act (CRA) using both census tract and individual firm level data.

NIFA-funded rural innovation grant, which uses confidential census data (with T. Wojan of NSF and A. Rupasingha of ERS).

We entered into a new cooperative agreement with USDA/ERS to examine the impacts of the Community Reinvestment Act on selected indicators related to minority and female business owners.

Ongoing projects:

Impact of broadband availability on various rural economic development indicators

Impact of Covid on the tourism and hospitality industry: decline, recovery and resilience

Impact of female operated farms on selected rural economic development indicators (C. Schmidt, joint with S. Deller, Wisconsin).

Determinants of residential construction worker supply availability.

**Jason S. Entsminger (University of Maine)**

Dr. Entsminger joined the University of Maine as Assistant Professor of Entrepreneurship and Innovation (Maine Business School) and State Extension Specialist for Small Business in September 2022. Prior to joining UMaine, he was Associate Director of the Northeast Regional Center for Rural Development. Dr. Entsminger’s primary activity supports Objective 2 of the project.

Food system and Entrepreneurship: Work continues on developing an Extension education curriculum on food system collective entrepreneurship and entrepreneurial network building under a NIFA-funded project involving the University of Missouri, University of Maine, and Cal Poly San Luis Obispo.

Under funding from the Storrs Agricultural Experiment Station, a research and Extension integrated project involving the University of Connecticut and University of Maine is beginning that will investigate entrepreneurial networks among small- and medium-scale farms in New England and translate findings into Extension materials for entrepreneurial support organizations. The project includes specific lenses on differences between rural and urban producers and on network structures among historically underserved farmers. The project includes a training element for a doctoral student researcher.

Rural Entrepreneurship: Dr. Entsminger (UMaine) is part of the anticipated new award from USDA NIFA led by Dr. Stephens (WVU), along with Penn State University, on non-farm, rural entrepreneurship among minority populations.

Extension Programs and Publications: The RRDCs, under the leadership of Dr. Entsminger, issued their final report of findings from the Rural Development Listening Session Initiative in March of 2023. In addition to the comprehensive report, the RRDCs issued eight stand-alone reports – one for each region and then one for the national topics of broadband and the digital skills; workforce development, training, and education; rural innovation and entrepreneurship; and community governance, leadership, and planning. The final report was subjected to external review by a panel of peers, which included among invited reviewers some members of NE2249. The Listening Sessions Initiative included research and Extension professionals from 20 land- and sea-grant universities and was funded by USDA NIFA.

A collaboration of research and Extension professionals at Utah State University, George Mason University, Rutgers University, and University of Maine held a workshop on building diversity, equity, and inclusion-focused networks within agritourism during an international conference in Burlington, Vermont. The workshop has led to a conference proceedings publication anticipated for imminent release.

A collaboration of research and Extension professionals at Penn State University, University of Maine, Utah State University, Oklahoma State University, University of Vermont, and private entity Cultivating Tourism held an interactive webinar under as part of the National Extension Tourism Network to convene the agritourism support services community of practice in the U.S. Follow-ups to the webinar have included the contributions to three conference presentations among the collaboration with another under submission and developed an interactive digital resource map.

Under the leadership of Dr. Claudia Schmidt (Penn State University) and in collaboration with colleagues at University of Vermont, Oklahoma State University, Penn State University, University of Maine, and private entity Cultivating Tourism, a NIFA AFRI-funded project has begun publishing a 51-fact sheet series with state and national data on agritourism operations in the U.S.

**Loibl, Cäzilia (Ohio State University)**

Ohio Housing Finance: I would like to highlight the collaboration with the Ohio Housing Finance Agency to provide homebuyer education to low- to moderate-income Ohioans. In 2022, we provided homebuyer education to 530 low-to-moderate income homebuyer in collaboration with the Ohio Housing Finance Agency. The efforts were recognized with a "Top Housing Counseling Award" from the Ohio Housing Finance Agency.

**Lim, Siew (North Dakota State University)**

Ongoing activity: U.S. soybean transportation to international markets

**Mark Skidmore (Michigan State University)**

Grant Awards: Received NIFA Agriculture and Food Research Initiative (AFRI) grant with PI Scott Loveridge on measuring and mapping rural price changes.

Received EDA/Ball State University grant to conduct local government training on public finance and velopment

Received Michigan State University IPSR MAPPR grant To study the effect of blighted property removal in Detroit from the Neighborhood Stabilization Program in Detroit.

Ongoing Research Projects:

Natural Disaster Research: The Impacts of Wildfires and Wildfire-induced Air Pollution on House Prices in the United States (with Zeying Huang)

The Impacts of Wildfires and Wildfire-induced Air Pollution on Mortality in the United States (with Zeying Huang)

Tropical cyclone day-off orders, warnings, and avoidance behavior: Do we need government mandated orders? (with Pei-Jyun Lu)

Public Finance and Development Research:

A Regional Analysis of the Impacts of Changes in Housing Values on Property Tax Assessment During and After the 2008 Financial Crisis (with Yunni Deng)

The Impact of Demolitions on Neighborhood Property Values in Detroit (with Camila Alvayay Torrejon and Dusan Paredes)

Valuing Land in Detroit Using the Option Value Approach (with Camila Alvayay Torrejon and John Anderson)

The Effect of Blighted Property Removal: Evidence from the Neighborhood Stabilization Program in Detroit (with Camila Alvayay Torrejon)

# **Impact and Indicators**

The group has previously identified the following focus areas: (1) rural entrepreneurship; (2) health; and (3) housing. Across these focus areas, the group is interested in sustainable and inclusive/equitable development. In the past year, the group has made substantial contributions in grantsmanship, Extension, and to the academic literature and in disseminating the findings of these studies.

The network built in NE 1749 (predecessor of NE 2249) across the scholars has been further expanded for research and extension activities in the multistate project. We have continued to build stronger synergies across rural development scholars, including new members in NE 2249. As result of collaborative work in the multistate project, the group has published 17 publications (out of 49), awarded 9 grants (out of 31), and organized 4 extension activities (out of 7). 17 universities (out of 25 universities that participated in the multistate project) has been involved in the collaborative work (Colorado State University, Michigan State University, Oklahoma State University, Oregon State University, Penn State University, University of Connecticut, University of Florida, University of Idaho, University of Illinois-Urbana Champaign, University of Main, University of New Hampshire, University of Vermont, University of Wisconsin-Madison, University of Wyoming, Utah State University, West Virginia University). We have synthesized results across states and across objectives and identified policy implications and continued outreach activities. For the next year (FY 2024), the group will continue with these focus areas and expand collaborative work across group members.

# **Accomplishments** (\* Project members in bold text)

## **Grant Awards (project member collaborations)**

**Stephen Goetz and Claudia Schmidt**. Impact of female operated farms on selected rural economic development indicators (joint with **Steve Deller**).

Responding To America’s Rural Health Challenge: Data-Driven Support for a Critical Era. $650,000 proposal under review at *USDA-National Institute of Food and Agriculture*. 2023-2027. Principal Investigator: **Anders Van Sandt** (with **Craig W. Carpenter**, Cris Meier, and Scott Loveridge).

Northwest and Rocky Mountain Regional Food Business Center. $1,365,240 subcontract from Colorado State University. $50M awarded by *USDA Regional Food Business Centers*. 2023-2028. State Lead. **Heather Stephens**. (Co-lead Melissa Hemken at Central Wyoming College, PI **Dawn Thilmany** at Colorado State University).

**Heather Stephens** recently received a NIFA grant for funding to study rural female and minority entrepreneurs.  This is in collaboration with **Penn State and University of Maine**.  It is an integrated project involving Extension, and involves our Extension at WVU as well. This project will start this year and last three years. The work with Penn State is an ongoing collaboration that has previously led to publications.

Northwest Mountain Regional Food Business Center. Regional Food Business Center proposal to the USDA Ag Marketing Service. $50 million. With Oregon State, U of Idaho, Arizona State, Montana State, New Mexico State, Washington State and U of Wyoming. $50,000,000. Proposed for July 2023-2028. **Dawn Thilmany** (with **Anders van Sandt** on committee).

Development and Expansion of a State-Specific Economic Impact Calculator for Nutrition Incentive Projects. Grant with Gretchen Swanson Center for Nutrition Incentives. $82,000. 2021-23. **Dawn Thilmany** with A. Bauman and B. Jablonski, **Phil Watson**.

Assessing Sustainable Development Goals: Six Cross-Nationally Comparable Agri-Food Pilot Studies. $425,000 Cooperative Agreement with USDA Economic Research Service and Cornell University. 2021-24. **Dawn Thilmany. Craig Carpenter and Phil Watson** on the committee received subawards from this project.

Storrs Agricultural Experimental Station grant to analyze the entrepreneurial networks of small- and medium-sized agribusinesses in the six New England states (Connecticut, Massachusetts, Maine, New Hampshire, Vermont, and Rhode Island) and assess how structures differ by environment (urban, peri-urban, or rural) and socially disadvantaged status. 3-year grant. **Emma Bojinova**. with collaborators **Cristina Connolly** (Co-PI) and **Jason Entsminger** (Co-PI). Our project has an extension component – developing an Extension curriculum surrounding the importance of networking and successful network attributes. This project contributes to the CAHNR’s strategic priorities of ensuring a vibrant and sustainable agricultural industry and food supply, and promoting diversity, equity and inclusion.

Under the leadership of **Claudia Schmidt** (Penn State University) and in collaboration with colleagues at University of Vermont, Oklahoma State University, Penn State University, University of Maine (**Jason Entsminger**), and private entity Cultivating Tourism, a NIFA AFRI-funded project has begun publishing a 51-fact sheet series with state and national data on agritourism operations in the U.S.

(submitted)

**Jason S. Entsminger**, the anticipated new award from USDA NIFA led by **Heather Stephens** (WVU), along with Penn State University, on non-farm, rural entrepreneurship among minority populations.

## **Grant Awards (other)**

**Diane Charlton**. NIFA Agriculture and Food Research Initiative (AFRI) grant with co-authors Amanda Countryman and Dale Manning to investigate the effects of trade policy on rural employment and wages.

SSMART Forestry: Paving the way from Forest Restoration to Cross-Laminated Timber ($4.4 million). Funding agency: U.S. Economic Development Administration. Project period: September 2023–September 2026. PI: Chung, Woodam (chungw), Co-PIs: Nathaniel Anderson, Francisca Belart, **Yong Chen**, Raffaele De Amicis, John Hogland, Jesse Johnson, Jay Kim, Kevin Lyons, Lech Muszynski, Nadia Streletskaya.

Anders, John, and **Craig Wesley Carpenter**. 2022-2023. “Can Education Fight Inherited Inequity? Using Administrative Data to Measure the Direct, Intergenerational, and Interactive Impacts of Redlining and Education.” Russell Sage Foundation. $170,881.

**Carpenter, Craig Wesley**, John Anders, Marcus Bernard, Trey Malone, and Charles M. Tolbert. 2022-2025. “Documenting Discrimination and Researching Policy: Racial Inequality and Economic Opportunity in Rural America 1920-2020.” USDA National Institute of Food and Agriculture. $650,000.

**Carpenter, Craig Wesley**, Charles Tolbert, and Rick Peterson. 2018-2023. “Leveraging Big Data to Investigate and Support ‘Vetrepreneurs.’” USDA National Institute of Food and Agriculture. $500,000.

McCarl, Bruce, Chengcheng Fei, **Craig Wesley Carpenter**, and Ronald Sands. 2022-2023. “Impact of Climate Change on Agricultural Processing Facility Movement and Food Dollar.” USDA Economic Research Service. $75,000.

Lotspeich-Yadao, Michael, **Craig Wesley Carpenter**, and Charles Tolbert. 2021-2023. “Data-Driven Extension Programming for Rural Veteran Workforce Reintegration.” USDA National Institute of Food and Agriculture. $125,933, awarded and returned due to postdoctoral fellow (Lotspeich-Yadao) faculty placement.

Economic Development Administration, US Department of Commerce. “University of Wisconsin EDA University Center.” PIs: Tessa Conroy, Matt Kures, Kristen Runge and **Steven Deller*.*** Duration: August 2021 – July 2025. Amount: $750,000.

Economic Development Administration, US Department of Commerce. “University of Wisconsin EDA University Center, COVID-19 Response.” PIs: Tessa Conroy, Matt Kures, Kristen Runge and **Steven Deller*.*** Duration: September 2020 – August 2022. Amount: $300,000.

United States Department of Agriculture, Economic Research Service. “Labor Market Equity and Entrepreneurial Outcomes for Disadvantaged Populations.” PIs: Tessa Conroy and **Steven Deller.** Duration: September 30, 2022 -- September 30, 2024. Amount: $20,000.

Wisconsin Economic Development Corporation. “Community Economic Analysis for Rural Wisconsin Communities (CEA-RWC).” PIs: Brandon Hofstedt and **Steven Deller.** Duration: July 1, 2022 – June 30, 2024. Amount: $150,000.

Wisconsin Economic Development Corporation. “Rural Wisconsin Entrepreneurship.” PIs: Brandon Hofstedt and Tessa Conroy, Co-PIs: **Steven Deller**, Matt Kures and Kristin Runge. Duration: November 1, 2022 – October 31, 2026. Amount: $1,000,000.

**Jason S. Entsminger**. NIFA-funded project involving the University of Missouri, University of Maine, and Cal Poly San Luis Obispo.

Resilient Biomass-Combined Heat and Power Systems for Rural Communities, Co-PI (USDA-NIFA, $1,000,000, 2020-2024) Lead by Mohammad Maruffuzzaman (**Ayoung Kim**, Co-PI)

The Racial Wealth Gap, Persistent Poverty and Heirs’ Property: Analysis, Connections, and Solutions,  
Co-PI (USDA-NIFA, $499,997, 2021-2024) Lead by John Green, (**Ayoung Kim**, Co-PI)

**Cäzilia Loibl,** Ohio Housing Finance Agency, 2021-2023; Huntington National Bank, 2022-2024; Social Security Administration Retirement and Disability Research Consortium at the University of Wisconsin-Madison Center for Financial Security, 2022-2023; Kathleen Kelly Seed Grants program, 2021-2023

Loveridge, Scott, **Mark Skidmore**, et al. 2022-2026. “Measuring and Mapping Rural Inflation.” USDA National Institute of Food and Agriculture. $800,000.

**Low, Sarah** et al. The Growing Rural Health Disadvantage: Causes and Consequences for Rural Labor Markets. 2021-2023. USDA Economic Research Service, non-assistance cooperative agreement. $145,000.

**Low, Sarah** et al. State and Regional Farm Financial Analysis. 2021-2024. USDA Office of the Chief Economist, Agricultural and Food Policy Research Centers. $1,425,000.

Cross-State Heterogeneity of Farm-Scale Hemp Production Costs. Subcontract with University of Kentucky and Cooperative Agreement with the USDA Ag Marketing Service. 2022-2023. $360,000. **Dawn Thilmany** with T. Marks, D. Mooney and R. Hill.

Planning and Technical Support to Diversify Economic Opportunities in Colorado: A Technical Assistance Project. Proposal to the Economic Development Administration. Funded for $575,000. **Dawn Thilmany** with S. Weiler, S. Shrake, A. Sintas, R. Hill and in cooperation with Delta County. Fall 2020-September

**Whitacre, Brian**. 2022-2023 “Library Telehealth Boxes in Persistent Poverty Rural Oklahoma Counties.” Oklahoma State Department of Health. $150,000.

**Whitacre, Brian**. 2022-2023. “Impacts of Broadband Speed on Rural Business Dynamics.” USDA – Economic Research Service. $20,000. Funding Christina Biedny (Ph.D. student).

## **Extension Programs (project member collaborations)**

A collaboration of research and Extension professionals at Penn State University (**Claudia Schmidt**), University of Maine (**Jason S. Entsminger**), Utah State University, Oklahoma State University, University of Vermont, and private entity Cultivating Tourism held an interactive webinar under as part of the National Extension Tourism Network to convene the agritourism support services community of practice in the U.S. Follow-ups to the webinar have included the contributions to three conference presentations among the collaboration with another under submission and developed an interactive digital resource map.

The EOM (Economic Opportunity Maps) tool: **Anderson Van Sandt** created with **Craig Carpenter**, allows users to identify opportunities and barriers to entrepreneurs and businesses within local, specific industries. While the tool is still available, we are working with **Phil Watson** to try to produce unsuppressed establishment counts that can be used to update the tool.

Agritourism Extension in the United States. Agritourism collaborative and summary of working Submitted to the Applied Economics Teaching Resources Special Issue on Extension. (**Dawn Thilmany** with **C. Schmidt**, C. Barbieri, L. Dickes, L. Chase, S. Tomas, D. Singh-Knights, P. Leff, H. George, R. Callahan, E. Rilla-Laherty, D. Lamie and S. Cornelisse)

**Entsminger, Jason**, John Green, Rachel Welborn, Renee Wiatt, Zuzanna Bednarikova, Riana Gayle, Yuxuan Pan, and **Stephan J. Goetz**. (February 2023). “Comprehensive Summary of National Rural Development Stakeholder Listening Sessions.” Regional Rural Development Centers. <https://www.usu.edu/rrdc/listening-sessions>

## **Extension Programs (other)**

Ohio State University Extension Housing Counseling Program (Director: **Loibl, Cäzilia)**: HUD approved housing counseling agency having 14 HUD approved housing counselors serving the State of Ohio.

CSU continues to establish a new Rural Engagement Initiative and **Dawn Thilmany** co-lead the work focused on Thriving Economy / Food and Agriculture. There was 6 new hires made in the past year, and two more starting in summer 2023 to re-establish regional networks for rural, community and economic development throughout Colorado. In addition to continuing to make progress rebuilding community relationships and communicating the increased capacity to work in Economic development alongside our Vibrant Community partners (FLTI, Engaged Centers), we are centering rural initiative work in three areas:

1. Targeted Technical Assistance for food/ag enterprises, sectors and community initiatives
2. Co-Creating Entrepreneurial Programs with Community colleges and producer associations
3. Data platforms and decision tools to guide market strategies and new investments

In addition, we have a couple of other projects at the intersection of food and economic development we continue to partner on.

The Wyoming Integrated Statistics Environment (WISE)**, Anders Van Sandt**

Once completed, WISE will improve local strategic planning, increase decision makers’ capacity, and assist with business births or branch location. WISE is an online interactive map where stakeholders can access timely and nuanced data on their community. The tool includes economic, demographic, health, tourism, financial, land, and many other types of data. WISE automatically updates new data once available, is financially sustainable, and establishes partnerships across state agencies and organizations.

## **Publications**

## **Journal Articles (project member collaborations)**

**Carpenter, C. W.,** **Van Sandt, A.**, and Loveridge, S. (2022). “Food and Agricultural Industry Locational Determinants Research: Aggregation Bias and Size Measurement in the Agricultural Support Industry.” *Agricultural and Resource Economics Review*, 51(3), 558-578. https://doi.org/10.1017/age.2022.21

**Carpenter, C. W.,** **Van Sandt, A.**, Dudensing, R., Loveridge, S., and Niehm, L. (2022). “The Economic Opportunity Mapping (EOM) Tool.” *Journal of Extension*, forthcoming.

**Deller, Steven C.**, **Whitacre, Brian**, and Conroy, Tessa. 2022. “Rural Broadband Speeds and Business Startup Rates.” *American Journal of Agricultural Economics*. 104(3):999-1025.

**Goetz, S. J.**, Heaton, C., Imran, M., Pan, Y., Tian, Z., **Schmidt, C.**, Qazi, U., Olfi, F., and Mitra, P. 2022. Food Insufficiency and Twitter Emotions During a Pandemic. *Applied Economic Perspectives and Policy*. DOI: <https://doi.org/10.1002/aepp.13258>

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***Low, S.A.***, Rahe M. and ***A. Van Leuven****.* 2022. “Has COVID-19 made rural areas more attractive places to live? Survey evidence from northwest Missouri.” *Regional Science, Policy and Practice*. doi:10.1111/rsp3.12543

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**Schmidt, C.**, L. Chase, C. Barbieri, E. Rilla-Laherty, D. Singh-Knights, **D. Thilmany**, S. Tomas, L. Dickes, S. Cornelisse, D. Lamie, R. Callahan, H. George and P. Leff. 2022. Agritourism Extension in the United States. *Applied Economics Teaching Resources*. Special Issue on Extension. Summer 2022. <https://www.aaea.org/UserFiles/file/AETR_2022_005RRProofFinal1_v1.pdf>.

**Schmidt, Claudia**, Zheng Tian, **Stephan J. Goetz**, Chadley R. Hollas, and Lisa Chase. 2023. “Agritourism and Direct Sales Clusters in the United States.” *Agricultural and Resource Economics Review* 52 (1): 168–88. <https://doi.org/10.1017/age.2023.1>.

Tian, Z., **Schmidt, C.**, **Goetz, S. J.**, et al. 2022. The Role of Community Food Services in Reducing U.S. Food Insufficiency in the COVID-19 Pandemic. *Journal of Agricultural and Resource Economics*, 47(3), 18. DOI: 10.22004/ag.econ.313316 (selected as best paper published in 2022)

**Van Leuven, A.**, Hill, E. and **Low, S.A.** 2022. “Which Side of Town? How Proximity to Critical Survival Factors Affects Rural Business Longevity. *Growth & Change*. Online first, pp. 1-34. doi.org/10.1111/grow.12652

**Van Sandt, A.**, **Carpenter, C. W**., Tolbert, C. 2022. “Decomposing local bank impacts with demand thresholds.” *The Annals of Regional Science*, 1-20. doi: https://doi.org/10.1007/s00168-

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## **Journal Articles (other)**

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*Economic Perspectives and Policy.* 44(2):722-741.

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## **Other Publications**

**Claudia Schmidt,** Zheng Tian, **Stephan J. Goetz,** Chadley R. Hollas, and Lisa Chase

Penn State News release was published on April 19: “[Opening farms to visitors boosts nearby farms’ direct sales, and vice versa](https://www.psu.edu/news/research/story/opening-farms-visitors-boosts-nearby-farms-direct-sales-and-vice-versa)” available at: <https://www.psu.edu/news/research/story/opening-farms-visitors-boosts-nearby-farms-direct-sales-and-vice-versa/>

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## **Extension Articles (project member collaborations)**

None

## **Extension Articles (other)**

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**Yong Chen** Draft article on farmland values in Oregon titled “An analysis of recent survey-based farmland values in Oregon” submitted for publication in Digger Magazine, an extension magazine published by the Oregon Association of Nurseries.