

Northeast Regional Center for Rural Development



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The misson of the Northeast Regional Center is to enhance the capacity of Land Grant Universities to foster regional prosperity and rural development.

Table of Contents

Overview	1
Major Center Activities	. 2
New Grants at a Glance	7
Progress on External Grants	11
Staff Announcements	17
Center Publications and Presentations	. 18
Other Services Provided by the Director	22
Perspectives on NERCRD Funding	23



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United States Department of Agriculture National Institute of Food and Agriculture



Northeastern Regional Association of State Agricultural Experiment Station Directors

Overview 2015

Local and regional food systems — while growing in popularity and support across the nation — are especially relevant in the Northeast, where farmers and producers have access to several large population centers that serve as lucrative markets for direct sales. In fact, our research has demonstrated that the positive economic effects of local food sales are especially strong in the Northeast when compared to other regions. In the last year we have been able to expand our work in the area of local and regional food systems development, further consolidating the Northeast Regional Center's position as a leader in this rapidly growing field.

This food systems work not only bridges our priority areas (jobs and entrepreneurship, regional foods, natural resources, and capacity building), but it also represents new multidisciplinary collaborations and builds significantly on past investments. For example, the Agricultural Marketing Service grant-writing workshops that took place in all 50 states plus the territories have supported on-the-ground Farmers Markets and Local Foods grants projects that have the potential to increase entrepreneurship and related employment nationally, in addition to strengthening local linkages between farmers and consumers.

The groundbreaking research on Enhancing Food Security in the Northeast through Regional Food Systems, our signature project that grew in part out of a 2008 land use conference we organized in Kerhonkson, NY, also considers various land use scenarios under climate change and other simulations. Related work includes a special issue sponsored by the Center through our policy-research center, NARDeP, in the *Journal of the Food Distribution Society* as well as numerous presentations made across the nation by the Center director and staff.

The Center launched two exciting new initiatives this year that serve our central mission of enhancing the capacity of Land Grant Universities (LGU) to foster regional prosperity and rural development. A small-grants program, skillfully led



by NERCRD Special Project Advisor George Morse, is designed to facilitate interstate collaboration between Northeast Extension and LGU researchers. We are very excited about the progress already made by the two funded teams, and look forward to learning from their interstate collaborations. Morse is also leading an effort to understand how we can best measure and communicate the impacts of community, regional, and economic development programs in the region — no small undertaking, but immensely important to our stakeholders.

As in the past, we are deeply grateful to our growing network of collaborators in the region, nationally, and in Washington, DC for making this work possible, as we are to our sponsors for entrusting us with this important work. In addition, we rely heavily on our Technical Advisory Committee and Board of Directors Chairs — especially Tim Phipps, Charlie French, and Paul Gottlieb, who participate in monthly conference calls — in making this work possible.

Stephan J. Goetz, PhD Director and Professor University Park, PA

Major Center Activities

This year, we launched a new small grants program, established a working group to assess the impact of regional community and economic development efforts, and formed new research partnerships. We conducted social-network research on several regional collaborations and kept our own network of stakeholders apprised of news and opportunities in the region, while managing several new and existing large, collaborative grants.

New Small Grants Program Supports Interstate Extension Collaboration

On the advice of our Technical Advisory Committee (TAC) and with approval from our Board of Directors, the Center launched a competitive small grants program, the Regional Delivery of Successful Extension Program Planning Grant. These grants were designed to support Northeast state Extension Services and Land Grand University (LGU) researchers pursuing engaged scholarship to expand the breadth and depth of their rural development outreach programming/engaged scholarship by facilitating collaboration between Northeast states. An RFP was issued in February, and two proposals were selected to receive funding.

TAC member George Morse served as our special project advisor for the RFP. Whether identifying relevant programs, making personal contacts with program leaders, or answering applicants' questions, Morse's assistance was invaluable to both the Center and the applicants.

The Center also had an outstanding review committee, and we are deeply grateful for the careful work they did in evaluating the proposals. The review committee included:

- Dr. Lionel J. Beaulieu, Purdue University
- Dr. Cornelia Flora, Kansas State University
- Dr. Paul Gottlieb, Rutgers University
- Ms. Erica Hildabridle, NERCRD and Penn State
- Dr. Timothy Phipps, West Virginia University
- Dr. Timothy Wojan, USDA Economic Research Service
- Dr. George Morse, NERCRD and University of Maine

46 I really appreciate your support with this grant. This has been a great experience allowing us to share and improve our program and establish relationships with colleagues in other states whose knowledge and expertise is undoubtedly going to help us with the First Impressions program as well as other programs. It is very exciting to see not only NE and NC states working together but now also being able to share with colleagues from across the country. ??

Doug Arbogast, Rural Tourism Specialist, West Virginia University Extension Service,
 and one of the planning grant recipients

Center-Funded Grants Program: Sharing Scholarship and Innovations in the First Impressions Program

The West Virginia University (WVU) Extension Service views the Community First Impressions Program as an important tool in the community development process. Their team, which includes several partner institutions, received funding to expand this programming into other states.

With a formal start date of July 1, 2015, the group already has held four webinars. The first provided an introduction to the First Impressions program; the second and third focused on expanding the program to tourism assessment and to unique geographies and populations; the fourth described previous evaluation attempts and how the program can be evaluated across states going forward. The webinars brought together state and county faculty from four Northeast states (CT, NH, VT, WV) and four Northcentral states (MI, MN, OH, WI), plus several community representatives from the Northeast who were interested in the program.

The team also met in Brattleboro, VT in September to walk through a complete implementation of the First Impressions program. They engaged a community stakeholder team, conducted both

the community and tourism assessments, and wrapped up by summarizing their findings for the stakeholder group. The community will receive a formal report, as well.

Team members also have made or are planning presentations at the Southern New England American Planning Association annual conference and at the National Extension Tourism conference in Galveston, TX.

Members of this five-state collaboration include:

- Doug Arbogast, West Virginia University
- Laura Brown, University of Connecticut
- Lisa Chase, University of Vermont
- Daniel Eades, West Virginia University
- Robin Frost, West Virginia University
- C. Andrew Northrop, Michigan State University
- Geoffrey Sewake, University of New Hampshire

Center Evaluation Fellow Report

In 2015, the Center continued to support the work of Center Evaluation Fellow, Heidi Mouillesseaux-Kunzman, senior extension associate at Cornell Cooperative Extension and Community and Regional Development Institute (CaRDI). The Center Evaluation Fellow concept follows in character with the Center Scholar concept, which was conceived in 2013, but is focused more on providing practical tools and resources that add value to the

work of community, regional, and economic development (CRED) practitioners from Land Grant institutions (LGUs) across the Northeast, with a particular focus on helping LGUs to document, aggregate, and share impacts with stakeholders and decision-makers.

During her fellowship, Mouillesseaux-Kunzman identified tools, resources, and examples of CRED evaluation efforts at several institutions

Center-Funded Grants Program: Train-the-Trainer—Futures Workshops and Emergency Economic Impact Analysis

Communities often need economic data for decision-making. Communities looking to attract or retain a business may want information on how that business affects their local economy. Communities facing the sudden loss of a key employer may find information on the ripple effects of the loss helpful in decision-making and in seeking additional assistance. Seven Northeast Extension/research faculty from five Northeast states asked to learn about University of Minnesota Extension's two successful programs to address these needs:

- A Futures Workshop facilitates in-depth exploring into how industries in a given economy interact and the implications for other industries and households.
- An Emergency Economic Impact Analysis explores how a sudden economic change — like a business closing or a natural disaster — will affect an economy and its industries and households.

The grant started on July 1, 2015 and continues for one year. After several conference calls, the team held its first in-person meeting in Minnesota in October, during which the Minnesota team members provided training to Northeast team members, and together they participated in a Futures Workshop in McLeod County, MN.

Members of this six-state collaboration include:

- Florence Becot, University of Vermont
- Laura Brown, University of Connecticut
- Daniel Eades, West Virginia University
- Jane Kolodinsky, University of Vermont
- Neil Linscheid, University of Minnesota
- Geoffrey Sewake, University of New Hampshire
- Bill Shuffstall, Penn State
- Elizabeth Templin, University of Minnesota
- Brigid Tuck, University of Minnesota
- Walt Whitmer, Penn State

within the NERCRD region, as well as some key resources from outside of the region; analyzed dozens of work plans and annual reports from a number of LGUs in the Northeast, with an eye toward the types of information reported on within these CRED programs; and identified CRED professionals at all Northeast institutions and their programming areas in order to establish common indicators that could be reported upon in the region.

Although her fellowship concluded in May, Mouillesseaux-Kunzman will continue building upon these efforts as a member of the Learning Circle for the Northeast CRED Impact Indicators (described on the next page).

Learning Community Continues To Explore Impacts of Northeast Community Development Programs

The Center's efforts to evaluate the community, regional, and economic development (CRED) programs in the region continued this year, with the formation of a Learning Circle for the Northeast CRED Impact Indicators. Under the leadership of Special Projects Advisor George Morse, the group is exploring the practical ways in which they can collect credible data to evaluate the impact of regional CRED programs, and will share what they learn with regional and national colleagues.

Building on the work of the Center's 2013-2014 Evaluation Fellow Heidi Mouillesseaux-Kunzman, the Learning Circle members selected five indicators to focus on during their initial pilot program, which will examine a small number of CRED programs in two to six Northeast states:

- · Number of businesses created/expanded/retained
- · Number of jobs created
- · Number of jobs expanded/retained
- Number of participants who reported new leadership roles or activities in their communities and organizations
- Dollar value of grants or resources generated, saved, or leveraged by organizations or communities

The group includes colleagues in other regions who have experience collecting data and reporting on the impacts of CRED programs. Acting as Master Learners in the Learning Circle, these individuals function as members of the team and also answer questions, provide feedback, and review drafts of the team's documents. A limited number of leaders from the Western region also have been invited to participate in our Learning Circle as guests.

Members of the Learning Circle:

- Laura Brown, University of Connecticut Extension
- · Kristen Devlin, NERCRD
- Charlie French, University of New Hampshire Extension
- · Stephan Goetz, NERCRD
- Jane Haskell, University of Maine Extension
- · James McConnon, University of Maine
- George Morse, NERCRD and University of Maine
- Heidi Mouillesseaux-Kunzman, Cornell University
- Allison Nichols, West Virginia University
- · Mary Peabody, University of Vermont
- · Walt Whitmer, Penn State Extension

Master Learners:

- · Tim Borich, Iowa State University
- Scott Chazdon, University of Minnesota Extension
- Mary Leuci, University of Missouri
- Scott Loveridge, NCRCRD
- · Rachel Welborn, SRDC

Guests of Learning Circle:

- · Don Albrecht, WRDC
- Paul Lachapelle, Montana State University
- Rebecca Sero, Washington State University Extension

Each Learning Circle team member has identified a program in which they are collecting indicator data as part of a pilot/demonstration project. Through this, they will develop an educational program to assist other Extension educators and specialists in collecting these data. Leaders from the North Central and Southern regions have reported that NIFA values the concise format of these data.

Communicating with Our Stakeholders

Our communication efforts are a way to keep our regional stakeholders apprised of new research, resources, funding opportunities, and professional development events, to introduce new people and programs in the region's CRED community, and to celebrate the successes of our partners.

To that end, we've continued to create and curate content on our website and in our bimonthly newsletter that we hope is timely and useful to our stakeholders. This year we

11,000 visits from 7,200 new and 1,800 returning web visitors in 2015 embarked on a marketresearch project that will
help us better understand
who our subscribers
are and the types of
content that would be
most valuable to them.
That work is still under
way, and we hope to
have it wrapped up in the
coming year. In the meantime,
we always welcome feedback
and content suggestions and
submissions.

With the help of Center Emerging Scholar Erica Hildabridle, we also dipped our toes into the world of social media this year, opening Facebook and Twitter accounts in February 2015.



As we continue to learn how best to utilize these tools, we look forward to growing and strengthening our social networks, reaching new audiences, and listening to the regional conversation around community and regional economic development issues through these new channels.





Connect with us on Facebook at facebook.com/nercrd and on Twitter @NERCRD



The University of the District of Columbia hosted the Center's 2015 Board of Directors and Technical Advisory Committee meeting in October.

From left: Timothy Phipps, Timothy Wojan, Sarah Halstead, Paul Gottlieb, George Morse, James McConnon, Charlie French, Stephan Goetz, Sabine O'Hara, Gary Thompson, Andy Wetherill, and Brent Elrod.

In attandance but not pictured: Steve Bonanno, Dyremple Marsh.

New Grants at a Glance

The Northeast Center was awarded several new grants in 2015.

Local Food Resource Mapping Project

This project is designed to improve the understanding of state food system barriers and opportunities in the selected states, drawing on a wealth of existing data sources.

USDA Agricultural Marketing Service (AMS) | \$800,000 | September 1, 2015 – August 31, 2016 | Initial Partners: NC, MS, AZ, AR, KY and AK



Drivers of Rural Innovation and Implications for Community and Regional Economic Development

This project will use unique data from USDA's Rural Establishment Innovation Survey (REIS) combined with other currently available data to develop a community of scholars engaged in high-priority research on the factors associated with innovation among rural business establishments and the impact on community and regional growth and development. The research will be conducted over a one-year period and presented at a workshop, critiques



will be conducted over a one-year period and presented at a workshop, critiqued by peers, revised, and published in scholarly journals and an edited volume.

USDA Economic Research Service (ERS) | \$130,000 | funded through September 30, 2017 A competitive grants program | Partners: USDA ERS and three competitively selected grantees

Assessing the Supplier Role of Selected Fresh Produce Value Chains in the United States

This research will develop a spatial equilibrium model for highly perishable fresh market fruits and vegetables to assess the seasonal production, distribution, and price impacts of dietary change that represent a transition to eating patterns that comply with the nutritional recommendations from the Dietary Guidelines for Americans.



USDA ERS | \$44,788 | September 1, 2015 - August 31, 2016 | In partnership with the USDA ERS

An Analysis of Entrepreneur Networks Using Twitter Connections

We analyze the characteristics of Twitter followers of 392 entrepreneur-related programs and the preferred programs of specific follower groups, to generate program networks using individuals' properties and knowledge of the programs they follow, and to identify important programs and detect clusters within the program network. We will better understand the role



of each program in supporting entrepreneurs. Based on the understanding about consumers of programs and preferred programs of consumers, the programs may be able to better target their content.

E.W. Kauffman Foundation, Kansas City | \$31,186 | July 1, 2015 – December 31, 2015 Partners/Pls: Stephan Goetz and Yicheol Han, Penn State

Impact of Health Care Reform on U.S. Farm and Ranch Population (Led by University of Vermont)

The goals of the project include understanding how health care insurance policy influences farmers' decisions to invest, expand and grow their enterprises, and how these decisions contribute to workforce vitality, development and security in the food and agricultural sector state by state.

USDA Rural Communities and Regional Development grant \$6,866 (sub-contract award), total funding: \$500,000+
September 1, 2015 – 2018 | Partners: UVM is leading the team.
Project partners include the Northeastern, North Central, Southern and Western Regional Rural Development Centers (RRDCs);
University of Vermont Center for Rural Studies; University of Vermont Extension; Center for Rural Affairs; University of Maryland Extension; and Farm Foundation.



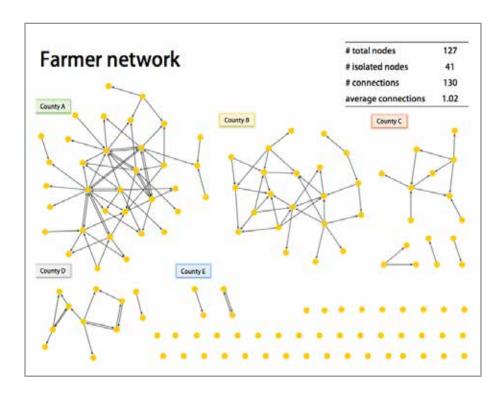


Network Analysis: Using Science to Improve Collaborations **Among Stakeholders**

Networks are a common theme that run through much of the Northeast Center's work, whether we're building new networks as part of our own research collaborations or facilitating connections between our regional partners. We also have been developing our in-house expertise in network analysis — the scientific technique that helps us understand the nature and strength of various social structures — and Center Director Stephan Goetz and Postdoctoral Scholar Yicheol Han have lent their expertise to a number of projects.

Enhancing the Viability of Underserved Small Farms and Rural Communities Using **Emerging Network Science**

Economic and social networks organized around local and regional food systems or value chains have the potential to increase traditionally underserved farmers' access to the resources, skills and scale of logistical or distribution assets that are prerequisites for profitable expansion into urban markets.



The Northeast Center provided key support to partners at Delaware State University, University of Maryland Eastern Shore, and Tennessee State University for a competitive, USDA-funded capacity-building project to provide traditionally underserved farmers in Tennessee, Maryland, and Delaware an opportunity to expand their networks. The team is developing a curriculum on network analysis for Extension educators, and is using network analysis to document the farmers' networks.

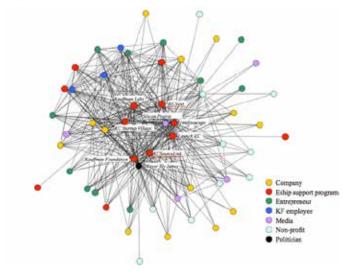






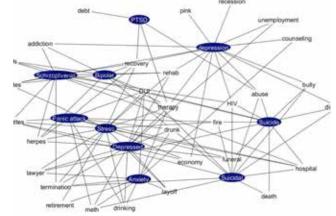
An Analysis of Entrepreneur Networks Using Twitter Connections

This project, described on page 8, is using data from Twitter to study the networks that result from a selection of programs designed to support entrepreneurs. The analysis will help the managers of such programs better target their content and also will allow entrepreneurs to make more effective use of these programs.



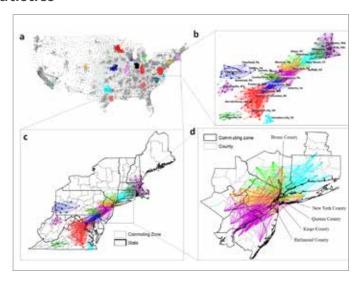
Community Assessment and Education to Promote Behavioral Health Planning and Education (CAPE)

In this project, we are using social media to explore possible early warning signs of behavioral health issues as they emerge in communities. At right is an example of network analysis applied to keywords that appear on Twitter and how the use of those words relate to other words.



National Academies Committee on National Statistics

In a paper commissioned by the National Academies of Sciences, Center post-doc Y. Han and S. Goetz co-authored a paper that takes a new approach to defining labor market areas that is grounded in network science. This paper proposes a new method for identifying overlapping labor market areas, which in turn allows us to define metropolitan megaregions in new ways and to find new approaches to understanding rural-urban interactions through commuting. This work was also presented at the 2015 Applied and Agricultural Economics Association annual meeting in San Francisco, CA.



Progress on External Grants

The Northeast Center currently leads three major collaborative projects: Enhancing Food Security in the Northeast (EFSNE); the Agricultural Marketing Service Technical Assistance (AMSTA) Project; and the National Agricultural and Rural Development Policy (NARDeP) Center.

Food Systems Project Awarded a One-Year Extension; End-of-Project Conference Held in December



Close to 90 individuals are currently active in various components of the Northeast Center's signature food systems project, Enhancing Food Security in the Northeast (EFSNE), which is in its fifth year. Even as the team looks to exceed its initial project goals in some areas, team members are now facing the challenge of bringing this complex and dynamic project to an orderly and impactful conclusion. A sixth-year no-cost extension, awarded in September, puts the project in an excellent position to more fully and accessibly "tell the story" and communicate to a broader audience what we have learned.

One way we have already "told the story" is through an end-of-project conference that took place in December. Team members, cooperating community members and store owners, researchers from our sister AFRI projects, and other food systems stakeholders engaged in a two-day dialogue around regional food systems and what has been learned from the EFSNE project.

Some recent highlights from the project include:

- Building on their earlier work that showed that roughly half of the region's land in farms is devoted to the production of livestock feed, the Production Team took their analysis one step further, estimating how many animals this acreage can support, and whether it's enough to satisfy the region's demand for animal-based foods like meat, dairy, and eggs.
- Members of the Distribution Team are conducting several supply chain case studies to understand some of the factors affecting the ability of stores to serve their consumers in low-income neighborhoods. The first of these case studies has been written up; several others are in production.
- The eXtension Community of Practice around Community, Local, and Regional Food Systems, which the Outreach Team was instrumental in establishing, has garnered more than 400 members, and is one of the largest communities of practice in the eXtension network.

Recent publications from the project include:

- Nicholson, C.F., He, X., Gómez, M.I., Gao, H.O. and E. Hill. Environmental and Economic Impacts of Localizing Food Systems: The Case of Dairy Supply Chains in the Northeastern United States. *Environmental Science and Technology*. Published online September 24, 2015.
- Eshleman, J. and K. Clancy. EFSNE context narratives: "The Northeast Food System: Context for Innovative Research" and "Food Security in the Northeast US." Published on the EFSNE website, February 9, 2015.

Regional Project, National Reach

One of the outputs of the EFSNE project is the formation of a national learning community of more than a dozen scientists who use modeling techniques in their food systems research. Launched by the EFSNE Outreach Team in 2014, the virtual "Food System Modeling Learning Community" has since held seven interactive learning sessions during which members exchange information about how they use modeling in their own research

programs. The sessions are recorded and made available publicly on the EFSNE website. Future plans for the group include extending their outreach efforts to other researchers, initially, and then to non-academics — such as community, industry and organization leaders — to foster learning and communication between researchers and the practitioners who use (or may want to use) modeling techniques.

Training the Next Generation of Food Systems Scientists

From undergraduate interns conducting intercept surveys to graduate students analyzing land-use data to postdoctoral scholars performing spatial analyses with crop models, the EFSNE project has engaged with dozens of students and trainees. Members of the Education Team have been working to document some of this student engagement by administering a survey to all of the students who have been involved with the project to date.

"We're genuinely interested in finding out what the student experience has been, because of the transdisciplinary nature of the project and the variety of students and trainees involved," said Christian Peters of Tufts University, who co-leads the Education Team. Identifying all of these students and trainees was the team's first task. Given the geographically dispersed nature of the EFSNE team, this involved working with team members at several of the project's partner institutions — an exercise that resulted in a list of 45 students who have engaged with the project since it began in 2011.

The team then worked together to develop a survey, which 45 students were invited to complete online. The survey period closed in August, which allowed team members to share some of the insights gained with a broader audience at the project's final conference in December.

If I hadn't had access to the EFSNE team for the three years before getting my job, I'm not sure I would have been as prepared to communicate with people who are outside of my discipline. ?

 Elaine Hill, EFSNE alumna and an assistant professor of public health sciences and a health economist at the University of Rochester Medical Center

More on EFSNE at www.agsci.psu.edu/research/food-security.

Center-Led Grant-Writing Workshops Served 3,000+ People in 2015

In an unprecedented collaboration with the national Extension Services in every single state, USDA Agricultural Marketing Service, NIFA, and the three other Regional Rural Development Centers, the Northeast Center planned, organized, and implemented in a very short amount of time a national program designed to help potential grant applicants understand, develop, and submit their Federal grant applications for the Farmers Market and Local Food Promotion Programs (FMLFPP).

Beginning with a meeting late in 2014, the AMSTA team created a new comprehensive national curriculum in support of FMLFPP grant applicants. The

project unfolded in early 2015 with four "Train-the-Trainer" sessions held in Nevada. Tennessee, Illinois, and Pennsylvania, where trainers from all 50 U.S. states were prepared to deliver the curriculum in their own states. In addition, the curriculum was tested during two pilot sessions held in Grand Rapids, MI and Pittsburgh, PA.

During the months that followed, **137 state** trainings were held in all 50 states, plus **Puerto Rico and the** U.S. Virgin Islands, reaching more than 3,000 participants.

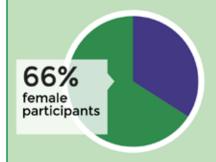
With \$30 million authorized annually by the Agricultural Act of 2014 (Farm Bill) through fiscal year 2018, AMS's Farmers



Market and Local Food **Promotion Programs** award competitive grants to develop new market opportunities for farm and ranch operations serving local and regional markets. The Farmers Market Promotion **Program supports** farmers markets and other direct producerto-consumer activities. while the Local Food

Promotion Program supports enterprises that aggregate, store, distribute and process local and regional food.

We are deeply grateful to our regional coordinators and Extension collaborators for making this program possible and putting it together in such a short amount of time.



Two-thirds of the participants who reported their gender are female. In comparison, just under one-half of U.S. firms are owned or co-owned by women.



Almost one-third of the participants who reported their race are minorities. *In comparison, less than one-quarter of* U.S. firms are owned by minorities.



"This was the first grant I ever applied for and got it. I could never have done it without the training and materials —workshop participant to refer to."

Engaging a National Network of Experts Around Agricultural and Rural Development Policy Issues

Led by Stephan J. Goetz and in collaboration with the other Regional Rural Development Center (RRDC) leaders, the NARDeP Center was formed in 2012 to provide information about



One recent NARDeP output is a special issue of the *Journal* of Food Distribution Research, which dedicated its November 2014 issue to exploring how food entrepreneurs are affecting

the increasingly contentious and complex rural policy issues facing the U.S. Since its inception, the NARDeP Center has engaged dozens of experts at Land Grant Universities, national organizations and agencies to develop and deliver timely policy-relevant information for national leaders in the public and private sectors, via policy briefs, data briefs, webinars, working papers, and a book.

featured was prepared for the National Agricultural and Rural Development Policy Center themed collection on local food systems and interactions with entrepreneurship.

their local food systems. The set of six case studies

Selected Recent Policy & Data Briefs:

Titles in the special journal issue include:

- What Factors Drive Local Regulation of Fracking? (Walsh, Bird, and Heintzelman, August 2015)
- Editor's Introduction: Local Food Systems and Interactions with Entrepreneurship
 by Dawn Thilmany McFadden and Maria Marshall
- How Large is the Rural Cost Advantage? A Big Mac Index for the United States (Paredes and Loveridge, December 2014)
- Two Rivers Winery and Event Center: A Key Driver for the Growing Colorado Wine Industry by Dawn Thilmany McFadden
- Not Enough Work: Access to Full-Time Jobs with Decent Pay and Benefits Varies by Race/Ethnicity and Place of Residence (Mattingly and Young, December 2014)
- Zia Taqueria: Building a Local Supply Chain in Southwestern Colorado
 by Martha Sullins

- These and more resources are available online at:
- Sandhills Farm to Table
 by James Matson and Jessica Shaw

www.nardep.info

- 'Better Butter' Opportunities for Local Food and Entrepreneurship
 by Becca B.R. Jablonski
- Revitalizing Rural Indiana: Lone Pine Farms Moody Meats Inc.

by Jodee Ellett, Frances Einterz and Michael D. Wilcox Jr.

 Limehouse Produce: A Unique Wholesaler of Locally Sourced Produce

by David W. Hughes, Harry Crissy, and Kathryn Boys

NARDeP Policy Review Council:

- Carolyn Brooks, 1890's Executive Director
- Dina Chacon-Reitzel, Commodity Groups
- Sheldon Jones, Farm Foundation
- Benita Litson, Navajo Nation

NARDeP Research Advisory Council:

- Richard Krannich, Utah State University
- Maria Marshall, Purdue University
- · Mark Partridge, Ohio State University
- Dawn Thilmany, Colorado State University

Designing and Testing New Ways of Detecting Emerging Behavioral Health Issues

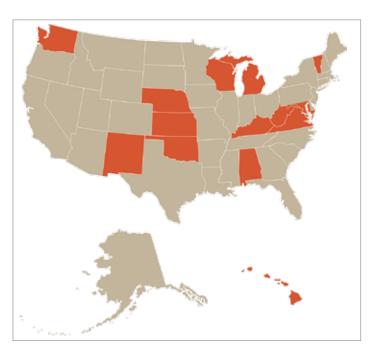
Community Assessment and Education to Promote Behavioral Health Planning and Education (CAPE) Phase II is Under Way

Launched in 2014 to provide resources for local decision makers to better understand the behavioral health issues facing their regions, the CAPE project is a collaboration of the four Regional Rural Development Centers and is led by Michigan State University Professor Scott Loveridge.

With funding from the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA) and facilitated by the USDA National Institute of Food and Agriculture, CAPE formally entered into its second phase of operations in 2015.

This phase is marked by an effort to engage communities to develop and test innovative, low-cost, replicable community-level early warning systems for mental health and substance abuse issues.

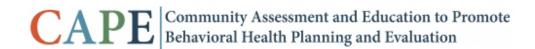
Two Northeast communities — Cabell County, West Virginia and Chittenden County, Vermont — were selected to collaborate with the CAPE project as "innovation communities." Partners from each of these innovation communities recently presented at a CAPE Technical Committee meeting on their progress towards developing and testing early warning protocols unique to their communities. The goal of these early warning systems — many of



The CAPE Pilot Communities are located in the states shown in red on the map.

which include the use of regularly updated police, hospital, or other administrative data — is to detect spikes in high-risk behaviors and to develop appropriate interventions.

In support of this project, Northeast Center staff published a paper entitled "County-Level Determinants of Mental Health, 2002-2008," in Social Indicators Research. (See page 18.)



Active Awards, 2015

Award Name and Sponsor	Amount (\$)	Start Date	End Date
National Agricultural and Rural Development Policy Center (USDA/NIFA)	768,000	4/15/2012	4/14/2016
Bringing Research and Communities Together to Advance A Regional Food Systems Project (USDA/NIFA)	43,606	8/1/2014	7/31/2016
Linking Health Care Reform and Economic Development in the Agriculture Sector (University of Vermont)	6,866	1/15/2015	1/14/2019
The Northeast Regional Center for Rural Development - 2014 (USDA/NIFA)	237,284	8/15/2014	8/14/2016
AMS Grant Writing Workshops and Technical Assistance (USDA AMS and NIFA)	900,000	9/1/2014	8/31/2016
Enhancing the Viability of Underserved Small Farms and Rural Communities using Insights from Emerging Network Science: A Multi-Dimensional, Integrated Approach (Tennessee State University)	52,623	10/1/2014	8/31/2016
Enhancing Food Security of Underserved Populations in the Northeast through Sustainable Regional Food Systems (USDA NIFA)	4,999,985	3/1/2011	2/28/2017
The Northeast Regional Center for Rural Development - 2015 (USDA/NIFA)	237,680	8/15/2015	8/14/2016
Assessing the Supplier Role of Selected Fresh Produce Value Chains in the United States (USDA ARS)	44,788	8/24/2015	9/30/2016
AMS Local Food Resource Mapping Project (USDA AMS and NIFA)	800,000	9/1/2015	8/31/2016
Drivers of Rural Innovation and Implications for Community and Regional Economic Development (USDA)	130,000	9/25/2015	9/30/2017
An Analysis of Entrepreneur Networks Using Twitter Connections (Ewing Marion Kauffman Foundation)	31,186	7/1/2015	12/31/2015
Total	8,252,018		

Staff Announcements

Goetz Recognized for Outstanding Public Service through Economics

Stephan Goetz, professor of agricultural and regional economics in Penn State's College of Agricultural Sciences and director of the Northeast Center, has received the 2015 Outstanding Public Service through Economics Award from the Northeast Agricultural and Resource Economics Association. Goetz accepted the award at the association's recent annual meeting in Newport, Rhode Island.

The award honors economists who have applied agricultural, environmental, consumer, resource or community development economics in a unique way that has contributed toward solving important problems and improving the welfare of society. Goetz was recognized for his research, leadership and longtime service as director of the Northeast Regional Center for Rural Development.

"Under Professor Goetz's leadership, the Center has helped coordinate important multi-state projects with policy-relevant research and outreach components," said Todd Gabe, of the University of Maine, in nominating Goetz for the award. "These efforts — which have involved numerous students, faculty, staff members and stakeholder groups — focus on key policy issues such as land use, local foods and community economic development."

Goetz's research examines the determinants of economic growth and development, and poverty reduction across the United States. His current research interests include regional food systems development, employment creation and network analysis.



Left to right: University of Maine Professor and Director of Economics **Mario Teisl**, Northeast Center Director **Stephan Goetz**, and NAREA President and Penn State Associate Professor of Agricultural Economics **Edward Jaenicke**

Goetz also directs the National Agricultural and Rural Development Policy Center and serves on the board of directors for the Center for Rural Pennsylvania and the Council on Food, Agriculture and Resource Economics. He is a member of the Committee on National Statistics of the National Academies of Sciences, Division of Behavioral and Social Sciences and Education.

Note: This story was originally published on the Penn State News website on July 30, 2015.

Publications & Presentations

The Northeast Center is dedicated to providing research-based information that helps create regional prosperity. In addition to disseminating this information to our stakeholders via our website, newsletter, and webinars, the Center shares the discoveries of its staff and partners via publications and presentations.

Center-Related Publications

Etemadnia, H., S.J. Goetz, P. Canning, and M. Sadegh Tavallali. **Optimal wholesale facilities location within the fruit and vegetables supply chain with bimodal transportation options: An LP-MIP heuristic approach**. *European Journal of Operational Research*, 2015, vol. 244, issue 2, pages 648-661.

Abstract: Population growth creates a challenge to food availability and access. To balance supply with growing demand, more food has to move from production to consumption sites. Moreover, demand for locally-grown food is increasing and the U.S. Department of Agriculture (USDA) seeks to develop and strengthen regional and local food systems. This article examines wholesale facility (hub) locations in food supply chain systems on a national scale to facilitate the efficient transfer of food from production regions to consumption locations. It designs an optimal national wholesale or hub location network to serve food consumption markets through efficient connections with production sites. The mathematical formulation is a mixed integer linear programming (MILP) problem that minimizes total network costs which include costs of transporting goods and locating facilities. A scenario study is used to examine the model's sensitivity to parameter changes, including travel distance, hub capacity, transportation cost, etc. An application is made to the U.S. fruit and vegetable industry. We demonstrate how parameter changes affect the optimal locations and number of wholesale facilities.

Goetz, SJ., M. Davlasheridze, and Y. Han. **County-Level Determinants of Mental Health, 2002-2008**. *Social Indicators Research*, 2015, vol. 124, issue 2, pages 657-670.

Abstract: Poor mental health is a concern in the US and world-wide. In this study we examine the effects of socioeconomic and environmental variables on the number of days of poor mental health reported across US counties. The results suggest that educational attainment, employment opportunities including self-employment, and social capital have important benefits in terms of community mental health. Other socio-demographic variables also tend to have predicted effects, as does the amount of sunshine in January, which is our control for Seasonal Affective Disorder. The general conclusion of the study is that living in a non-metro county and adjacent to a metro core, is associated with greater happiness. Poor mental health days also increase considerably due to natural disasters and they are affected by regional climate variability. For policymakers concerned about reducing the average number of poor mental health days across the nation, our results suggest that reducing poverty is a more powerful strategy than reducing income inequality.

Han, Y. and S.J. Goetz. The Economic Resilience of US Counties During the Great Recession. *The Review of Regional Studies*, 2015, vol. 45, issue 2, pages 131-152.

Abstract: A regional economy perturbed by a shock may move onto a new growth path by reestablishing economic linkages both internally and with other regions. This dynamic property of regions has recently been explained in terms of regional economic resilience. In this paper, we introduce a more refined measure of economic resilience and then apply it to monthly employment data for US counties in the 2007-2009 downturn. We suggest that describing and analyzing the distinct response patterns during this downturn are important starting points for policy makers to understand the spatial resilience of the US economy.

Liang, J. and S.J. Goetz. **Self-Employment and Trade Shock Mitigation**. *Small Business Economics*. Published online September 19, 2015.

Abstract: This paper investigates the moderating effects of entrepreneurial activity on the impact of trade penetration. Entrepreneurs may help to mitigate adverse trade shocks through several mechanisms, i.e., more flexible output structure, diversified economic portfolio, and higher knowledge spillovers from trade-induced R&D activities. Our empirical work embeds the analysis of entrepreneurship, measured using self-employment rates, into a framework of international trade and local labor markets. The empirical results show that the marginal impacts of Chinese import penetration on job losses are dampened in localities with higher self-employment rates, which suggests self-employment or entrepreneurial activities can mitigate the adverse impacts of trade penetration from low-income countries. Our study provides a novel perspective on entrepreneurs' benefits on economic well-being: Besides their direct contribution to economic growth documented in earlier research, they can also enhance the resilience of a local economy in the face of external shocks.

Li, M., Goetz, S.J., Partridge, M., and D.A. Fleming. **Location Determinants of High-Growth Firms**. *Entrepreneurship and Regional Development*, 2016, 28, issue 1-2, pages 97-125.

Abstract: County-level location patterns of INC 5000 companies provide one map of American entrepreneurship and innovativeness, and understanding the local factors associated with these firms' emergence is important for stimulating regional economic growth and innovation. We draw on the knowledge spillover theory of entrepreneurship to motivate our regression model, and augment this theory with additional regional features that have been found to be important in the firm-location literature. Zero-inflated negative binomial regressions indicate that these firms exist in counties with larger average establishment size, higher educational attainment, and more natural amenities. Income growth, a mix of higher-paying industries, and more banks per capita are associated with a smaller presence of these types of firms, all else equal. We conclude that the local conditions favoring high growth firms are likely to be different from those favoring new firms in general, and that these conditions differ significantly in urban and rural areas and by industrial sectors. (See next page for a news story about this research.)

Education and Industrial Variety Power High-Growth Companies Nationwide, Center Study Finds

High-growth companies are not just found in California's techrich Silicon Valley. According to economists at the Northeast Center, these fast-growing firms are found across the U.S. and in a variety of industries.

In a study of Inc. Magazine's list of 5,000 high-growth companies, the researchers suggest that access to college-educated employees and the presence of industrial diversity, more than geographic proximity and technology, helped boost a community's ability to host highgrowth firms.

"We were aware of the Inc. 5,000 database and we thought it would be interesting to determine, if we could, what do communities — or counties or cities, for that matter — offer that makes them more attractive places to these firms, which are the fastest growing companies by revenue in the country," said Stephan Goetz, director of the Northeast Center. "From that, the two things that stand out for us are that these firms are found in many different sectors, not just in the high tech space, and that these companies are found across the United States."

The researchers, who report their findings in *Entrepreneurship and Regional*

Development, said that while many of the companies on the list are from the high tech sector, a majority comes from other industries, including healthcare and manufacturing.

"The results also seem to be saying that these high-growth firms are more likely to be in places that have a variety of industries rather than just one or two specialized industries," said Minghao Li, a doctoral candidate in agricultural, environmental and regional economics.

The researchers also found that communities with more highly educated residents have a better chance of attracting high-growth companies.

Access to capital is another factor for creating a business environment for high-growth firms, according to the researchers. However, the advantage of having more banks is not felt initially, but becomes an advantage to a community once it already hosts several of these businesses.

"Once a non-metro county is home to one or more of these Inc. 5,000 firms, there will be more Inc. 5,000 if you have more banks," said Goetz. "It may be that the more banks you have, the more they will be competing with each other on loans, which should help these businesses." The researchers suggest raising awareness about and promoting entrepreneurship may be a way for communities to increase the likelihood of hosting highgrowth firms.

"More generally, talking about entrepreneurship and creating a culture of entrepreneurship in communities are very helpful," Goetz said. "We are not measuring that directly in the study, but we feel this may help create the general conditions that are favorable for entrepreneurship."

Mark Partridge, professor in agricultural, environmental and development economics, and Swank Chair in Rural-Urban Policy, Ohio State University and David A. Fleming, research scientist, CSIRO Black Mountain Laboratories, Australia, worked with Goetz and Li on the study.

The U.S. Department of Agriculture's National Institute of Food and Agriculture and Penn State College of Agricultural Sciences supported this work.

Note: A longer version of this story, written by Matt Swayne, originally appeared on Penn State News on January 14, 2016.

Invited Presentations (Selected):

Ge, Houtian. Assessing the Supplier Role of Selected Optimal Locations of Fresh Produce Assembly Hubs in the United States. Presented at the 2015 Agricultural and Applied Economics Association and Western Agricultural Economics Association Annual Meeting, San Francisco, CA, July 26-28, 2015.

Goetz, S.J. Food Systems-Related Research at the Northeast Regional Center for Rural Development: Applications to Maine. Presented to the Agricultural Council of Maine, February 24, 2015.

Goetz, S.J. An Overview of Food Systems Research at the NERCRD. Presented to the Southern Region Development Center Local and Regional Foods Workshop, Crystal City, VA, August 11-13, 2015.

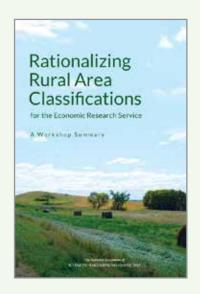
Goetz, S.J. and Y. Han. Evaluation of Rural Area Classifications Using Statistical Modeling. Presented at the Workshop on Rationalizing Rural Area Classifications, National Academies of Sciences and Economic Research Service, US Department of Agriculture, Washington, DC, May 9, 2015. (See below.)

Han, Yicheol. Workplace-anchored migration in US Counties. Presented at the 2015 Agricultural and Applied Economics Association and Western Agricultural Economics Association Annual Meeting, San Francisco, CA, July 26-28, 2015.

Li, M., S.J. Goetz, and B. Weber. County-Level Determinants of Intergenerational Economic Mobility. Presented at the 2015 Federal Research Community Development Conference, Washington, DC, April 2-3, 2015

National Academies Workshop Convened to Examine How the U.S. Classifies Rural Areas

The USDA Economic Research Service (ERS) maintains four highly related but distinct geographic classification systems to determine the degree to which a given U.S. location is rural. This year, ERS engaged the National Academies Committee on National Statistics to organize and convene a two-day workshop where experts and stakeholders would examine the data, estimation, and policy issues that underly these classification systems mainained by ERS. Northeast Center Director Stephan Goetz served on the committee, and he and Center Postdoctoral Scholar Yicheol Han were commissioned to examine the use of statistical modeling to evaluate rural area classifications. Their resulting research paper is archived on the National Academies website: http://goo.gl/61Guis. A report (pictured at right) summarizing all of the presentations and discussions from the workshop is available at: http://goo.gl/A0rLb0.



Other Services Provided by the Director

- Member, Board of Directors, The Center for Rural Pennsylvania (A Legislative Agency of the Pennsylvania General Assembly).
- Member, Social Sciences Sub-Committee, Agricultural Experiment Station Committee on Organization and Policy (ESCOP).
- Member, C-FARE Blue Ribbon Panel, Council on Food, Agricultural and Resource Economics; Vice-Chair of the Rural Economic Development sub-committee.
- Board of Directors, Council on Agricultural and Resource Economics (C-FARE), appointed in 2014 for a three-year term.
- RRDC Liaison to NACDEP Board of Directors; participant in monthly phone calls.
- Provided peer reviews of more than a dozen papers for scientific journals.

The Regional Rural Development Centers: Connecting the Nationwide Network of Land-Grant Colleges and Universities

The Northeast Regional Center for Rural Development is one of four USDA-funded Regional Development Centers (RRDCs). The RRDCs are a trusted source of economic and community development data, decision tools, education, and guidance in our nation's rural communities.

In addition to working within their respective regions, the Centers also work collectively on national projects, including the AMSTA, CAPE, and NARDeP projects described in these pages.

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North Central Regional Center for Rural Development

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Southern Rural Development Center

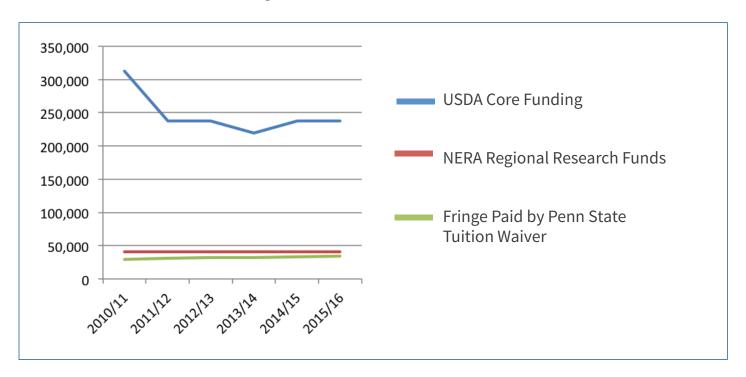
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Western Rural Development Center

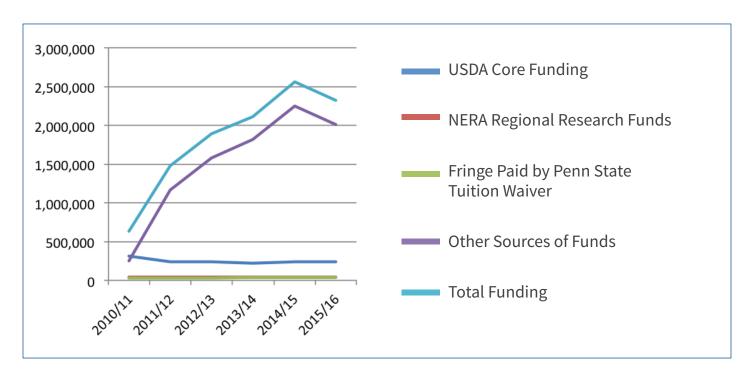
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NERCRD Funding

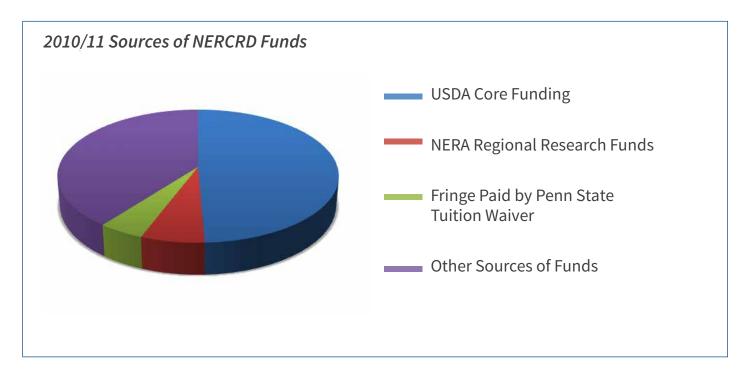
Evolution of Center Core Funding

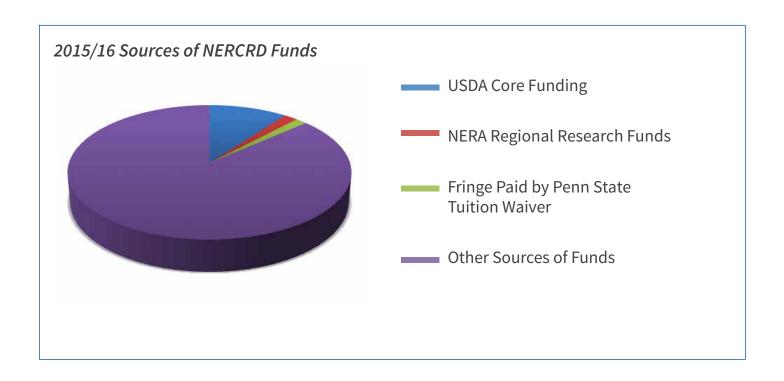


Evolution of External vs. Core Funding



Sources of NERCRD Funding, 2010/11 vs. 2015/16





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