RURAL POLICY RESEARCH INSTITUTE

Written Statement for the Record

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The Rural Policy Research Institute provides objective analysis and facilitates public dialogue concerning the impacts of public policy on rural people and places.

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Good morning, Chairman Roberts, Ranking Member Stabenow and other Committee members. My name is Bruce Weber. I am professor emeritus of applied economics at Oregon State University and a senior economist at the Rural Policy Research Institute. I am here today to provide an economic perspective on rural America, informed by recent research.

Rural economics literature offers two important conclusions:

(1) Healthy rural communities are important for both rural and urban people in this nation, and the well-being of farm households is directly affected by the infrastructure and jobs available in their rural communities.

(2) Federal rural development investments of the kind made through the Farm Bill (in utilities, broadband, small businesses, for example) have enhanced employment and reduced poverty in rural communities.

Below are four empirically-based realities which support these conclusions. I hope these provide useful background for this Committee as you develop the Farm Bill. In this discussion, I use the federal metropolitan/ nonmetropolitan classification to define rural counties.

Farm prosperity, rural community vitality and urban prosperity have become tightly linked, as farm households have become more dependent on off-farm income and as rural and urban areas have become more interdependent.

Farm household well-being is very dependent on rural community prosperity. Most farm households earn the majority of their income off the farm. For the 85 percent of U.S. farms that are small family farms, with less than $350,000 in sales, the Economic Research Service/USDA estimates that "Virtually all of these farms' income comes from off-farm wage/salary jobs and unearned income (dividends, interest, rent, Social Security, other public programs, private pensions, etc.) rather than farm or off-farm self-employment."[1] Even the largest farms have substantial off-farm income. Overall, "wages from off-farm jobs accounted for more than half of off-farm income across all farm households. "[2]

Economic and social shocks over the past century have blurred the boundaries and increased the links between urban and rural areas. Lichter and Brown identify technological change, globalization and governmental devolution as drivers of the increased linkages between urban and rural places, and articulate the key role of technology: "Technological advances have brought most aspects of rural life into the

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[1] Economic Research Service, *America's Diverse Family Farms 2016 Edition* EIB-164 December 2016. This 85 percent could include some farms that reported gross cash farm income of more than $350,000 whose operators report being retired or report a major occupation other than farming.
[2] USDA ERS website, Farm Household Income and Characteristics page, updated February 07, 2017; accessed May 19.2017

urban fold and linked rural people and communities directly to the global economy. "[3] Irwin et al., based on their reading of recent research, conclude that "ongoing economic restructuring, caused by falling transportation costs, new communications technologies, and increased global competition, has simultaneously strengthened urbanization and spurred urban decentralization" and that "urban growth has penalized more remote rural areas in terms of lower job and population growth. The exceptions are amenity-rich rural areas, particularly those in the United States that have grown rapidly as a result of rising real incomes and changes in transportation and technology."[4] (p. 453)

Connections between rural and urban places have been strengthened as a result of new technologies that have reduced the cost of moving goods and people and that have allowed new forms of communication that have enhanced connectivity. However, while rural regions are better connected to urban regions than in the past, it is not clear that improved connectivity will lead to better economic outcomes for rural regions.

Rural growth or decline also affects urban communities. Most studies of rural-urban interdependence focus on how changes in the fortunes of urban centers spread out to surrounding rural communities.[5] This literature finds that the effect of urban growth extends far into the hinterland, through trade in goods and services, and through commuting of workers.[6] But other studies have examined the reverse relationship: how rural growth affects urban centers. One study of the region centered on Portland Oregon, for example, found that in 2006 the effect of an increase in rural exports on the urban economy was three times as large as the effect of core region exports on the surrounding rural economy. [7] This same study also found that the share of the Portland economy's output based on the exports of the surrounding rural region was larger than the share of the surrounding region's economy that was based on Portland exports. The health of the regional economy around Portland was more important to the urban economy than vice versa.

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[3] Lichter, Daniel T. and David W. Brown. 2011. Rural America in an Urban Society: Changing Spatial and Social Boundaries. *Annual Review of Sociology*. 37:565-592. p. 567-8.

[4] Irwin, Elena G., Kathleen P. Bell, Nancy E. Bockstael, David A. Newburn, Mark D. Partridge, and JunJie Wu. (2009). "The Economics of Urban-Rural Space." *Annual Review of Resource Economics.* (1): 435-462.

[5] For a recent review of this literature, see Bruce A. Weber and David Freshwater. The Death of Distance? Networks, The Costs of Distance and Urban-Rural Interdependence. Chapter 13 in *International Handbook of Rural Studies.* Mark Shucksmith and David L. Brown, co-editors. New York: Taylor and Francis. 2016.

[6] See Joanna P. Ganning, Kathy Baylis, and Bumsoo Lee. 2013. Spread and Backwash Effects for Nonmetropolitan Communities in the U.S. *Journal of Regional Science.* 53 (3): 464-480. See also Mark D. Partridge, Ray Bollman, M. Rose Olfert, and Alessandro Alasia. 2007. "Riding the Wave of Urban Growth in the Countryside: Spread, Backwash, or Stagnation," *Land Economics,* 83(2):128–152.

[7] Lewin, Paul, David Holland and Bruce Weber. 2013. "Core-periphery dynamics in the Portland Oregon Region: 1982-2006." *Annals of Regional Science.* DOI 10.1007/s00168-013-0552-6.. See also Edward C. Waters, David W. Holland, and Bruce A. Weber. 1994. Interregional Effects of Reduced Timber Harvests: The Impact of the Northern Spotted Owl Listing in Rural and Urban Oregon. *Journal of Agricultural and Resource Economics.* 19(1): 141-160.

America's rural economy is now very diverse and, while agriculture remains important, it is no longer predominant.

Farm income and employment is a primary driver in many rural counties in the U.S. One-fifth (391) of the 1976 nonmetropolitan counties have been identified by ERS as farming-dependent. But farm earnings and employment account for only 4.4 and 5.7 percent, respectively, of all nonmetropolitan earnings and employment[8] and most rural counties in the U.S. are driven primarily by nonfarm sectors. Half of the rural counties in the U.S. are specialized in something other than farming: there are 351 rural counties specialized in manufacturing, 238 whose major employment or income is in federal and state government, 228 specialized in recreation, and 183 mining-dependent. And the remaining 30 percent (585) of the rural counties have a quite diversified economic base (the "nonspecialized" counties in the ERS classification).

Not surprisingly, there are strong regional concentrations of different economic bases. As can be seen in the map below, "farming-dependent counties are concentrated in the Great Plains, the manufacturing-dependent counties are found more often in the Rust Belt and Southern Piedmont, while Federal-State Government-dependent counties are clustered in the West."[9]

Again, these are groupings by primary income and employment, and most rural counties are further diversifying, over time. For example, one innovation worth noting is the growing interest and investment in bio-based manufacturing.

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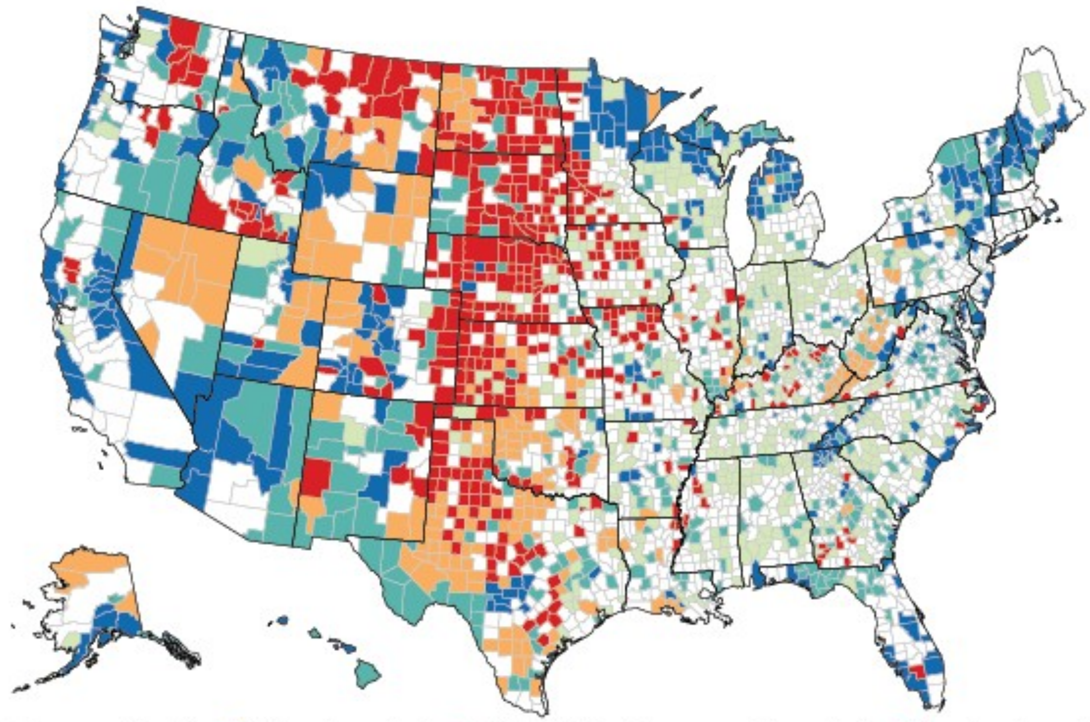
[8] Estimate provided by USDA Economic Research Service based on 2015 data released in 2016 from the US Department of Commerce Bureau of Economic Analysis website.

[9] Timothy Parker. 2015. Updated ERS County Economic Types Show a Changing Rural Landscape. *Amber Waves* Issue 11. https://www.ers.usda.gov/.../updated-ers-county-economic-types-show-a-changing-rural...

Twenty percent of all nonmetropolitan counties are farming-dependent over 2010-12*



- Nonspecialized (1,236 counties)
- Mining-dependent (219 counties)
- Federal-State Government-dependent (405 counties)
- Farming-dependent (444 counties)
- Manufacturing-dependent (506 counties)
- Recreation (332 counties)

*Based on a 3-year weighted average of farm income and employment between 2010 and 2012.
Source: USDA, Economic Research Service.

Rural Communities face unique challenges related to small populations, low-density settlement patterns and remoteness from urban centers

The challenges facing rural areas due to small populations, low-densities and distances to urban centers are well understood. Small and sparsely settled places can't take advantage of economies of scale in production and marketing, leading to higher production costs and smaller retail markets, with fewer choices and higher prices. Nor do they support agglomeration and the resulting innovative, cost-reducing technologies and processes. Remoteness from urban centers increases transportation and communication costs, and the provision of, and access to, government services.

Research on the challenges of small population size suggests that smaller communities are more at risk of population decline than larger ones, with communities with less than 1,250 being most at risk. Other things equal, geographic isolation from large cities and low wage rates provide some protection from net out-migration for the smallest communities, but even for the smallest places, a larger population base lowers the risk of net out-migration.[10]

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[10]Yong Chen, Lena Etuk and Bruce Weber. "Are small communities at risk of population loss?" *Annals of Regional Science*. DOI 10.1007/s00168-012-0541-1 Published online: 17 October 2012.

Research on urban agglomerations has found that employment concentrations do appear to increase productivity, and that these effects attenuate sharply with distance, suggesting that distance to urban centers is a barrier. Partridge, Rickman, Ali, and Olfert have focused on the cumulative effect of distance for successive tiers in the urban hierarchy. They investigated the relationship between distance from the closest urban center in six successive tiers and county job growth using U.S. county data and found that job growth in a county is positively related to proximity to urban centers and that this relationship has become stronger over time.[11]

All this research establishes that smaller populations, sparser settlements and the relative remoteness of some rural places create economic disadvantage.

Place-based Federal investments in rural development enable rural communities to overcome some of these inherent challenges, enhance employment, encourage growth, and reduce poverty in rural areas.

Investments in rural communities create inherent public and private wealth in these communities. This strengthens the farm economy and links rural areas to urban communities. Improvements in transportation infrastructure and the rapid adoption of information and communications technology by businesses have greatly expanded the linkages between urban and rural regions.

However, proximity remains important and remote rural regions remain at a disadvantage. But distance is also not destiny. Public policies can enhance the links between urban and rural places, support the development of remote rural communities and support the evolution of local institutions, drawing on the unique strengths of individual places.

There is clear evidence that place-based public investments can encourage employment growth and reduce poverty in urban and rural areas.

Compelling evidence favoring policies designed to encourage employment growth in targeted "enterprise zones" has recently been provided. (Ham, et al.[12],and Busso, et al.[13]). Incentives that carefully reward firms that hire additional employees from among locals who have been residing in the targeted area do appear to raise local wages, as well as local employment rates. Partridge and Rickman (2008) provide evidence that "Higher rural poverty does not appear to be a simple result of the poor self-selecting to live in remote areas. The results suggest that place-based anti-poverty policies may be

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[11] Mark D. Partridge, Dan S. Rickman, Kamar Ali and M. Rose Olfert. 2008. "Employment Growth in the American Urban Hierarchy: Long Live Distance." *Berkeley Journal of Macroeconomics—Contributions*. 8 (2008, Issue 1)

[12] John Ham, Charles Swenson, Ayse Imrohoroglu and Heonjae Song. Government programs can improve local labor markets: Evidence from State Enterprise Zones, Federal Empowerment Zones and Federal Enterprise Community" *Journal of Public Economics*, 2011, vol. 95, issue 7, pages 779-797

[13] Busso, M., Gregory, J., and Kline, P. (2013) "Assessing the Incidence and Efficiency of a Prominent Place Based Policy" *American Economic Review*, 103(2):897-947.

beneficial." (p. 131)][14] And Pender and Reeder (2011), in their analysis of the impact of rural development projects funded by the Delta Regional Authority (DRA) in distressed Mississippi Delta counties, found that "Per capita income, net earnings, and transfer payments grew more rapidly in DRA counties than in similar non-DRA counties, and those impacts were stronger in counties in which DRA spending was higher.." (p. i)"[15]

Similarly, I am currently collaborating in ongoing research which offers preliminary evidence that the USDA Rural Development grants and loans for business and economic development may have reduced poverty rates in counties in which these investments were made. Over the past four decades, the business and economic development programs of USDA have generated more than $30 billion (in 2009 dollars) in investments in rural communities. In this research, Kathleen Miller and I analyze the relationship between USDA Rural Development business and economic development grants and loans in the early 2000s and 2009 county poverty rates. We find that counties that received more in USDA RD business and economic development loans during 2000-2009 had lower poverty rates in 2009, controlling for initial poverty rates and other economic and demographic factors that affect poverty. Research currently underway with colleagues Stephan Goetz and Meri Daviasheridze also shows a positive effect of the RD program spending on employment growth over time.

In closing, I would suggest four guideposts should frame your considerations, in crafting the Rural Development Title of the next Farm Bill. [16]

(1) Remote rural places may benefit from the protection from competition that distance provides, and remote places may find that place-based policies can create jobs for local unemployed workers and reduce poverty. In many of these regions natural resources are likely to be the main source of economic growth, but must be utilized in new ways that increase local value-added by identifying new uses, new customers and new marketing approaches. The bio-based manufacturing sector is but one example.

(2) Good broadband connections are now essential for rural economic development. The internet provides a way to reduce the costs of distance, allowing rural firms to have a presence in urban markets, either as purchasers or sellers. Policies that support improvements in productivity, marketing and procurement for rural firms can also help them take advantage of niche markets.

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[14] These two studies are reviewed in Bruce Weber and Maureen Kilkenny, "Rural Policy in the United States" Chapter 3 in William Meyers and Thomas Johnson, editors,, Volume I: Policies for Agricultural Markets and Rural Economic Activity in the *International Handbook of Agricultural and Rural Policy.* (forthcoming)

[15] Pender, John, and Richard Reeder. Impacts of Regional Approaches to Rural Development: Initial Evidence on the Delta Regional Authority, ERR-119, U.S. Department of Agriculture, Economic Research Service, June 2011.

[16] These guideposts draw heavily on Bruce A. Weber and David Freshwater. The Death of Distance? Networks, The Costs of Distance and Urban-Rural Interdependence. Chapter 13 in *International Handbook of Rural Studies.* Mark Shucksmith and David L. Brown, co-editors. New York: Taylor and Francis. 2016.

(3) It is useful to think about rural communities as belonging to networks. Individual places are linked to other places through physical connections – roads, rail lines, the Internet and the power grid. Firms in rural regions are linked through supply chains that have a local component but also have external connections. People and firms are linked through a variety of strong and weak ties that provide contacts, information and context for decisions. Policies that target individual firms or individual places without recognizing the interrelated nature of this development process are likely to be less effective than policies that encourage these linkages.

(4) In summary, Federal rural development investments are critical in overcoming the challenges many rural regions face. The Farm Bill Rural Development Title offers some of the most important of these place-based investments, which provide a foundation for rural regional innovation. And access to affordable, high speed, broadband is an essential building block in this foundation.

Thank you Chairman Roberts, Ranking Member Stabenow, and members of this Committee, for the opportunity to testify before you today. I would be pleased to answer any questions you may have.