The Importance of Off-Farm Income to the Agricultural Economy

Presenter: Justin Krohn

Center for Applied Research and Engagement Systems (CARES)

University of Missouri - Extension

Key Trends Findings:

Economically successful communities are regionally connected

- Successful "rural" counties often become "urban" because of the interconnected regional relationships between workers and businesses. **Four out of every 5** U.S. counties reclassified from nonmetro to metro over four decades, from 1974 to 2015, were adjacent to existing metropolitan areas.
- By 2018, over half of nonmetro (54%) and farm-dependent (62%) county residents **commuted outside of their county for work** up more than 10 percentage points from two decades ago.

Rural communities are increasingly diverse economies

- Less workers are needed as agriculture becomes more productive; 15% of nonmetro county employment was in the agricultural sector in 1970, by 2019 it was 6.5%.
- **Services jobs** such as retail, professional services, healthcare and restaurants have been replacing agriculture and manufacturing jobs in rural counties for decades, growing from 40% of nonmetro jobs in 1970 to 57% by 2019.
- Only 20% of nonmetro counties are economically specialized in farming, whereas 30% have diverse economies, based on 2015 USDA analysis.

Trends: Commuting Gains Speed, Especially in Rural Counties

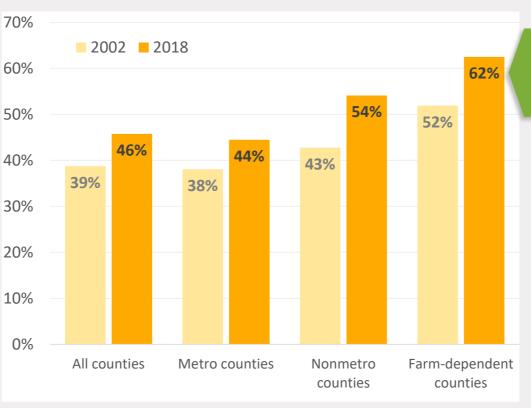
Increasingly workers commute to other counties for employment, especially **nonmetro** and **farm-dependent** residents

Percent of Commuters Leaving Home County for Work by County Type

Nonmetro and farm-dependent

counties see over 10% points

growth from 2002 to 2018



Sources and notes: U.S. Census Bureau Longitudinal Employer-Household Dynamics, 2002 and 2018 data.
U.S. Department of Agriculture, ERS, County typology designations.

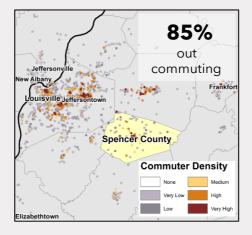
Trends: More Connected Regions

In 2002, 47% of counties had at least half of their residents outcommuting for a job. **By 2018, 71% of counties** had over half of their workforce commuting outside their home county for a job.

Farm-Dependent Spencer County, KY Example

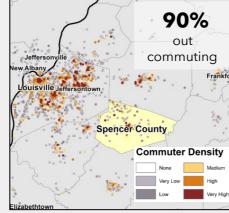
2002

Work Commuting Destinations



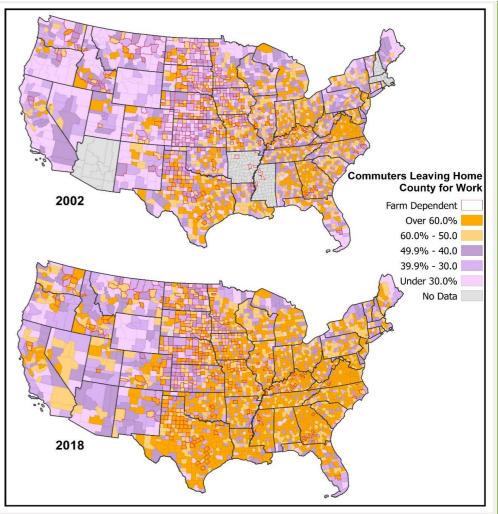
2018

Work Commuting Destinations



Sources and notes: U.S. Census Bureau LEHD, 2002 and 2018 data. U.S. Department of Agriculture, ERS, County typology designations.

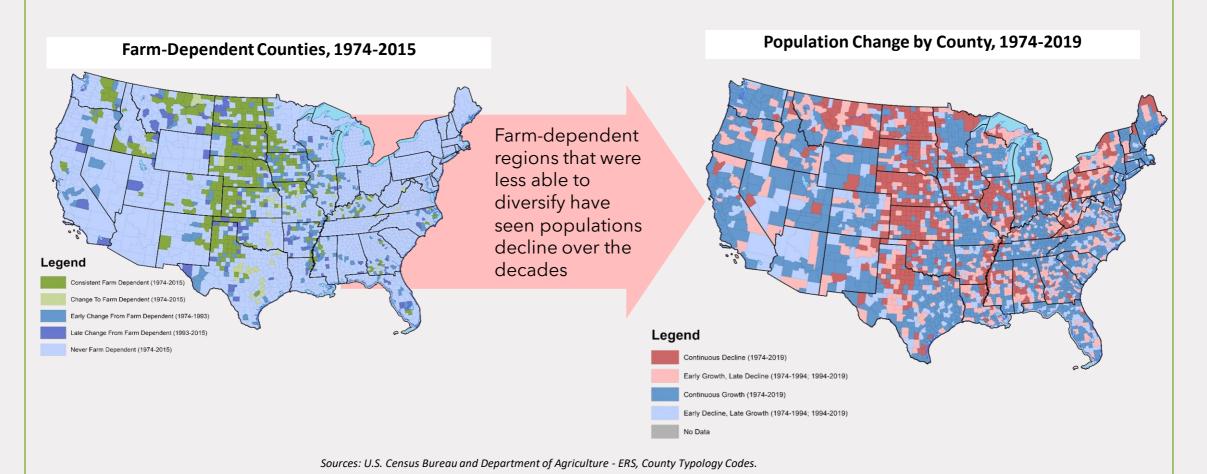
Percent of Commuters Leaving Home County for Work, 2002-2018



Note: 71% of counties in 2018 had at least half of residents out-commuting compared to 47% in 2002. Since population is highly concentrated in urban counties, however, the actual population out-commuting in 2018 is 46%, versus 39% in 2002.

Trends: Less Economically Diverse Farm Regions are Losing Population

Population decline has been an issue for many rural areas were farming productivity has reduced the need for direct employment in agricultural production. If a community is unable to diversify economically, or is not within commuting distance of an urban area, then populations decline.



Off-Farm Income:

Jobs off the farm gain importance

For over 20 years off-farm occupations have been the **main job** for principal operators

Percent of Principal Operators with Main Off-Farm Jobs

Characteristic	1974	1987	1997	2007	2017*
Off-Farm Occupation is Main Job for Principal Operator	37%	45%	53%	55%	56%

Source and notes: U.S. Census of Agriculture. Principal operators are in charge of farm operations. In 2017 the principle operators can include up to 4 individuals.

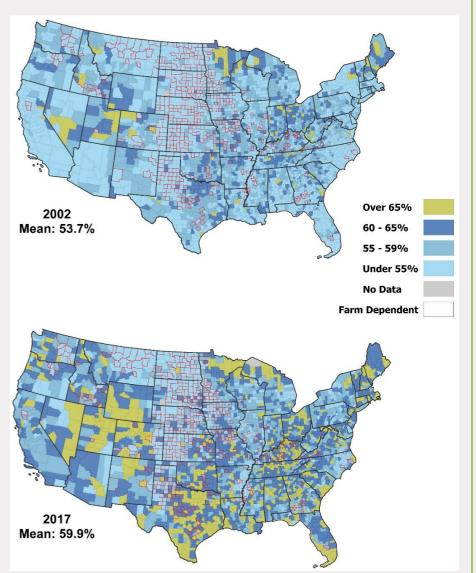
<u>Full- or Part-Time Employment off the Farm</u>

In 2002 the average county had 54% of principal operators working some days off the farm either with full-time or part-time employment.

By 2017 the average increased to 60%.

Source: U.S. Department of Agriculture, Census of Agriculture

Percent of Principal Operators with Full- or Part-Time Employment by County, 2002 and 2017



Off-Farm Income: Stabilizes Farms and Rural Economies

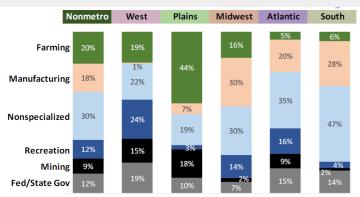
- **Rural economies have become more diverse** over the past few decades as agricultural production has continued to grow in productivity to favor very large farming and ranching operations resulting in fewer direct jobs in the sector:
 - The agricultural sector accounted for 15% of nonmetro county jobs in 1970, but less than 7% by 2019
 - Diverse service sectors have grown from 41% to 57% of nonmetro county jobs during that same time period
- **Most operators work off the farm** since 92% of farm households are small. These jobs stabilize income and provide labor to other sectors such as construction, manufacturing, and service sectors:
 - Most principle operators (56%) consider an off-farm occupation as their main job
 - Smaller farms have higher share of off-farm income and lower debt-to-asset ratios due to less farm debt; this reduces financial stress for the majority of agricultural producers (Key et al., 2019)
 - Even larger agricultural operations value off-farm jobs for reliable income, along with the healthcare and retirement benefits
- **Younger operators** (under age 35) are especially dependent on income outside of farming, with 63% identifying off-farm jobs as their primary occupation. While acquiring land and equipment increases debt for these operators, off-farm jobs provides more reliable income to manage household finances
 - Younger operators depend on earned off-farm income for over 2/3^{rds} of their household income
 - Off-farm jobs are critical as half of younger operators have a negative median farm income most years
 - Higher debt-to-asset ratios for younger operators also adds to their financial stress; they are expanding operations but have not had time to build up long-term equity (Key et al., 2019)

Reference notes: A 2019 USDA report provides a good overview of how off-farm income has historically stabilized the finances of smaller farms while larger operations face relatively more stress due to their dependence on farm income.

Key, N., Burns, C., and Lyons, G. (2019). Financial Conditions in the U.S. Agricultural Sector: Historical Comparisons, EIB-211. U.S. Department of Agriculture, Economic Research Service.

USDA Farm Production Regions

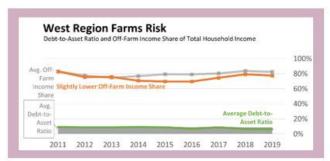




Source: U.S. Department of Agriculture, ERS, County Typology Codes.

West Region: Farm, Debt, and Commuting Summaries

2019 Figures	Unit	All Family Farms	West region
Farms	Number	1,967,617	299,150
Total acres operated	1,000 Acres	733,958	172,008
Total value of production	Billions of Dollars	\$293	\$60
Acres operated per farm	Acres	373	575
Operator worked full-time on farm	% of farms	25%	24%
Percent of farms with debt	% of farms	26%	20%
Share of off-farm earned income	% of HH Income	59%	54%



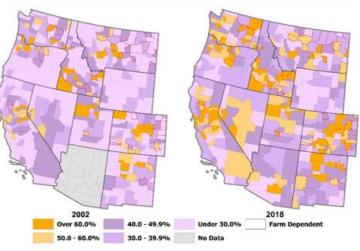
Note: Off-farm income includes both earned and unearned income

Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

2010202020			% Point
County Type	2002	2017	Change
All U.S. counties	54%	60%	6%
West region	54%	61%	7%
		22.2	
2002		2017	

Percent of Commuters Leaving Home County for Work, 2002-2018

			% Point	
County Type	2002	2018	Change	
All U.S. counties	39%	46%	7%	
West	31%	35%	4%	



Sources: Farm figures and operator employment from U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey, 2019 and Agriculture Census, 2002 and 2017. Commuting date from the U.S. Census Bureau and Bureau of Labor Statistics

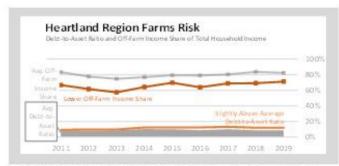
USDA Farm Resource Regions



Heartland Region:

Farm, Debt, and Commuting Summaries

771		
Unit	All Family Farms	Heartland region
Number	1,967,617	421,890
1,000 Acres	733,958	128,574
Billions of Dollars	\$293	\$84
Acres	373	305
% of farms	25%	31%
% of farms	26%	30%
% of HH Income	59%	50%
	Number 1,000 Acres Billions of Dollars Acres % of farms % of farms	Unit Farms Number 1,967,617 1,000 Acres 733,958 Billions of Dollars \$293 Acres 373 % of farms 25% % of farms 26%

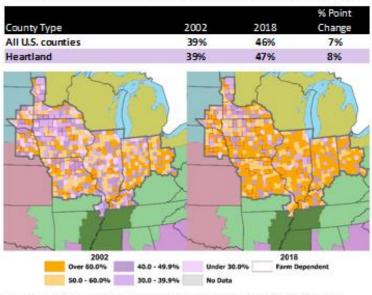


Note: Off-farm income includes both earned and unearned income

Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Heartland	56%	59%	3%
2002	May what	2017	
Over 65% 60 - 65%	55 - 59% Under 55	% No Data	Farm Dependen

Percent of Commuters Leaving Home County for Work, 2002-2018



Sources: Farm figures and operator employment from U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey, 2019 and Agriculture Census, 2002 and 2017. Commuting date from the U.S. Census Bureau and Bureau of Labor Statistics

Explore these data

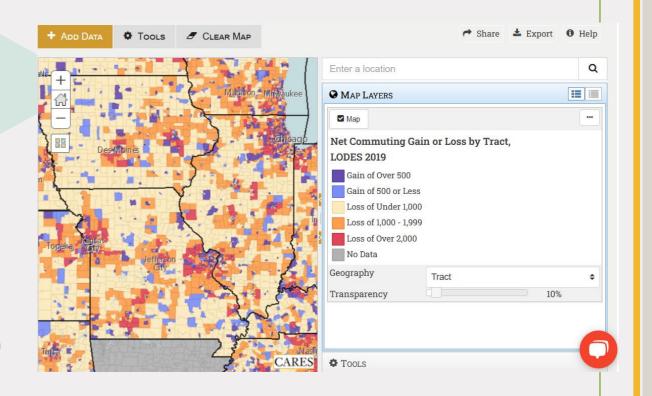
Explore more:

MU Extension CARES provides 2019 commuting data by county and census tract at: https://cares.page.link/Pkaz

Share this information with local stakeholders or use in a presentation

Combine with other data layers:

- CARES has over 28,000 data layers from over 100 different providers you can load in the map room
- Overlay, swipe, query, export, and more!



Thank You!

Questions?

Contact Info: Justin Krohn – <u>jlkvmn@missouri.edu</u> Alan Spell – <u>alan.spell@missouri.edu</u>

Read the report! https://www.cobank.com/documents/7714906/7715332/The-Importance-of-Off-Farm-Income-to-the-Agricultural-Economy.pdf