The Importance of Off-Farm Income to the Agricultural Economy

Executive Summary

Off-farm jobs and income are critically important to farmers and ranchers, as the rural and agricultural economy has evolved over the past half century to benefit connected and diverse communities. While growing rural and urban economic interdependence can be hard to see at times, an appreciation of this dynamic relationship is vital to informing policies that strengthen the financial health of communities and agricultural producers alike. Misunderstanding of "rural" connectiveness and industry diversity can lead to well-intentioned federal programs that actually hinder policy efforts to support these communities.

KEY FINDINGS

- The **growing rural and urban connection** is often hiding in plain sight
  - Successful "rural" counties often become "urban" because of the interconnected regional relationships between workers and businesses that span multiple counties.
  - 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 have increasingly diverse economies**
  - Fewer 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.
- **Agricultural producers, especially young and beginning farmers, depend on off-farm jobs**
  - Most principal operators (56%) had a main job off the farm in 2017, compared to 37% in 1974. Nearly 2 out of 3 (63%) of younger operators - under age 35 - had primary off-farm jobs in 2017.
  - More reliable income and health care benefits were top reasons for off-farm jobs in a 2018 survey.
  - Half of farm households have negative farm income in a given year, so other income sources are critical for most farmers as they pay down agricultural investment debts.
  - 82% of farm household income comes from off-farm sources, representing stable income to support farming operations.
  - Debt-to-asset ratio analysis and other research show that off-farm jobs reduce financial risks, especially important for younger farmers who face higher debt needs as they grow their business.

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Executive Summary

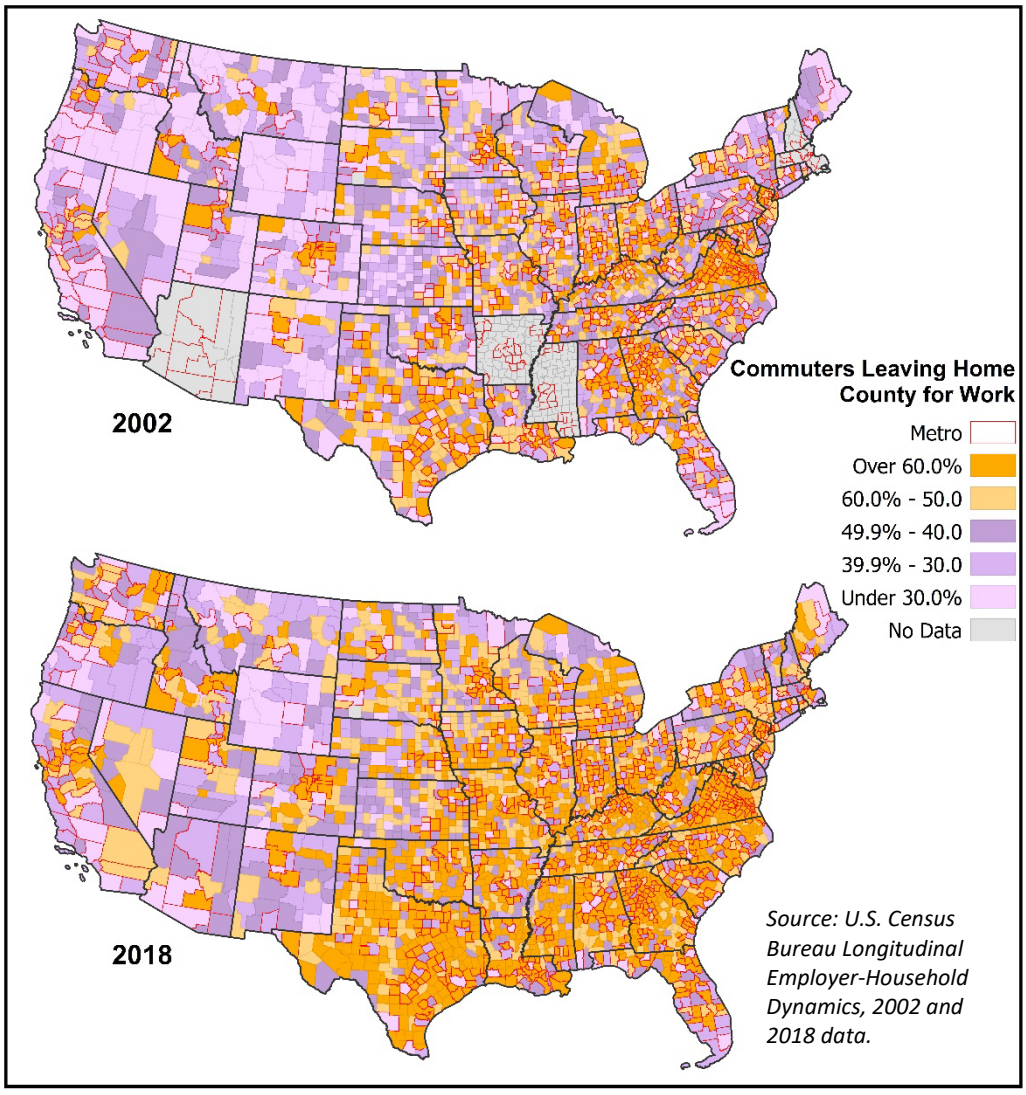
The Growing Rural and Urban Connection

The close ties between nonmetro (rural) and metro (urban) counties tells the story of how the nation's rural and urban communities have grown economically closer over the past 50 years.

- **65% of the rural U.S. population** - 46 million - live in counties adjacent to metro areas.
- **Increased commuting** of nonmetro workers to metro areas is the primary reason for reclassifying "rural" counties as "urban" over the past decades.
- **Farm-dependent counties have especially gained ground** in connecting workers across communities as off-farm jobs have increased in importance:
  - From 1990 to 2010, farm-dependent counties had the largest percentage point increase (14%) in share of high-commuting census tracts, indicating more residents were traveling farther for work.
  - In 2002 over half (52%) of farm-dependent county commuters left their home county for work. In 2018 over 6 in 10 farm-dependent county residents (62%) commuted outside of their county.

The under-appreciated story of America's rural communities is that successful "rural" counties often become "urban" precisely because of the interconnected nature of regional economies – where workers and businesses engage with each other across multiple counties.

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



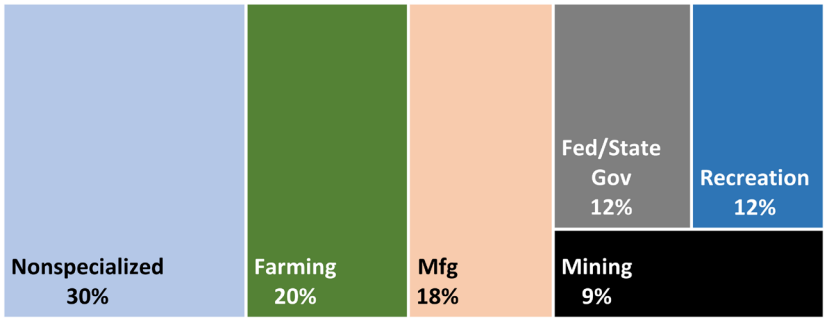
Executive Summary

Rural Communities Have Increasingly Diverse Economies

America's rural areas have complex economies, with neighboring communities increasingly sharing work and business ties that benefit the larger region. Rural and production agriculture are no longer intrinsically linked as most nonmetro communities have diverse business sectors.

- **30% of nonmetro counties have diverse** (nonspecialized) economies, while 20% are farm-dependent, as service jobs continue to replace agriculture and manufacturing employment.
- **Management and professional occupations** are most prevalent off-farm jobs for operators and spouses.

Percent of Nonmetro Counties by Economic Specialization



Top Off-Farm Occupations Account for 2 out of 3 Jobs for Operators & Spouses

Operator Off-Farm Occupation	% of Jobs
Management & Professional	31%
Natural Res., Constr., & Maint.	31%

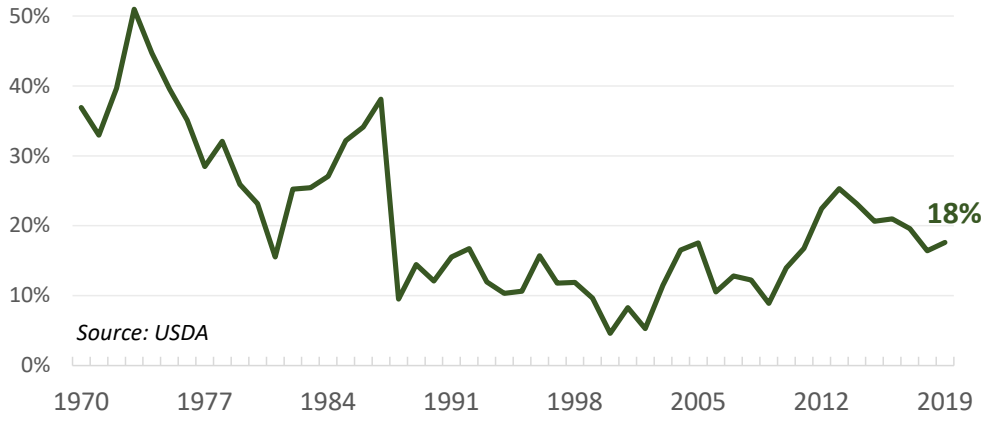
Spouse Off-Farm Occuation	% of Jobs
Management & Professional	38%
Services: *Trade, Healthcare, etc.*	30%

Agricultural Producers are Dependent on Off-Farm Jobs and Income

Jobs in other industries are vital to farm households, as half of these households have negative farm income in a typical year. Most farmers (70%+) cited reliable income as the top reason for off-farm jobs in a 2018 survey. Stable income was especially important for small family farms, the vast majority (92%) of all farms.

- Most principal operators (56%) had a **main job off the farm** in 2017, compared to 37% in 1974.
- **Low debt-to-asset ratios** for a farm household suggest reduced financial risks. From 2011-2019, so-called off-farm occupation farms averaged 6.3% debt-to asset ratios. For midsized-to-larger farms, where operators typically do not work off-farm, the ratio averaged over 13 percent.
- A Kansas City Federal Reserve study suggested that agricultural producers in **rural counties with weak labor markets had higher debt repayment risks**, because of fewer off-farm job opportunities.

Farm Income as Share of Total Farm Household Income



82%

of farm household income comes from off-farm sources, which helps finance farm operations. Without this stable income, debt payment risk would likely be much higher.

Executive Summary

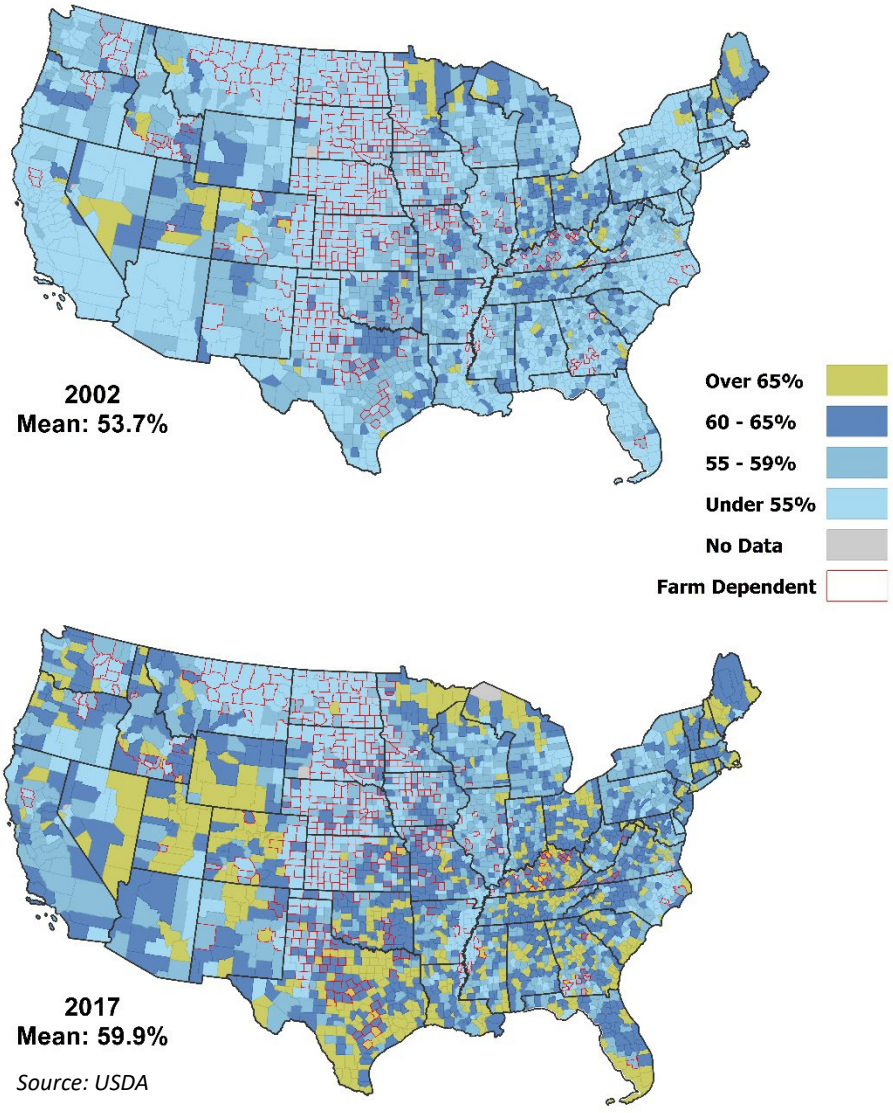
Off-Farm Jobs are Critical to Young and Beginning Farmers

Young and beginning farmers are more likely than other farmers to have a primary job off the farm. Off-farm income is critical for lowering debt risks as these farmers build their businesses.

- **Nearly 2 out of 3 younger operators** (63%) had a primary off-farm job in 2017, compared to 56% of all principal operators.
- Debt-to-asset ratio analysis and other research shows that off-farm jobs reduce financial risks, especially important for **younger farmers who face higher debt** needs as they grow their business.
  - Younger farmers, under age 35, had average debt-to-asset ratios of 21% from 2011-2019. This compares to 6.3% for off-farm occupation farms.
  - The Kansas City Federal Reserve study noted that off-farm income is even more important for young operators in lowering debt repayment risks.

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 was 60%.

Percent of Principal Operators with Full- or Part-Time Employment by County, 2002-17



Source: USDA

Trends in U.S. rural and urban economies over the past decades

What is a "rural" economy?

Rural communities in the United States are often defined by "nonmetropolitan" or "nonmetro" county status. While there are other ways to geographically describe "rural", the lack of consistent economic data often limits the use of other definitions for studying the rural economy over time. [i] [ii]

Nonmetro, referred to hereafter as rural, areas include counties with urban clusters of fewer than 50,000 persons and other counties classified as not having substantial commuting ties to larger metropolitan regions. With each decennial census, counties are evaluated and sometimes reclassified to reflect updated population and commuting changes. Reclassification means that the definition of "rural" evolves, especially as metropolitan areas continue their outward growth to encompass more counties.

Defining rural seemed less difficult half a century ago when the word was more synonymous with agriculture – if you lived and worked in a rural area you were assumed to have ties to production agriculture. America's rural areas have had more complex economies for some time now, however, with neighboring communities increasingly sharing work and business ties that benefit the larger region. Thus, rural and production agriculture are no longer intrinsically linked as most nonmetro communities have diverse business sectors.

The 2019 population of nonmetro counties was 46 million, or 14% of the U.S. population.[iii] Most of that population, 30 million or 65%, lived in counties adjacent to metro areas. The close ties between metro and nonmetro counties tells the central story of how the nation's urban and rural communities have grown economically, and geographically, closer over the past 50 years.

The reclassification of successful rural areas hides evolving economic trends

Describing rural economic trends is complicated by the basic measurement problem of county reclassification.[iv] [v] For example, in 1940 roughly 57% of the U.S. population lived in nonmetro counties, but by 2018 the share of population in those counties was 14 percent. Much of this population loss, however, was due to economically-thriving nonmetro counties being reclassified as "metro" – as larger cities expanded their economic footprint.

Eight out of 10 U.S. counties were nonmetro in 1974 – see Exhibit 1. However, by 2015 the share of nonmetro counties was 63% due to reclassifications over that period. Most reclassifications to metro happened between 1994 and 2015. The reclassification of nonmetro counties to metro counties since 1974 can be visually seen in Exhibit 2. Expanding metro areas that predate 1974 are the primary influence for nonmetro county reclassifications, with some exceptions seen in less populated northeast, upper plains, and northwest states. Over the four decades, 4 out of 5 counties reclassified from nonmetro to metro were adjacent to existing metropolitan areas.

Exhibit 1. Percent of Metro and Nonmetro Counties, 1974 to 2015

Area	1974	1993	2015
Nonmetro Counties	80%	74%	63%
Metro Counties	20%	26%	37%

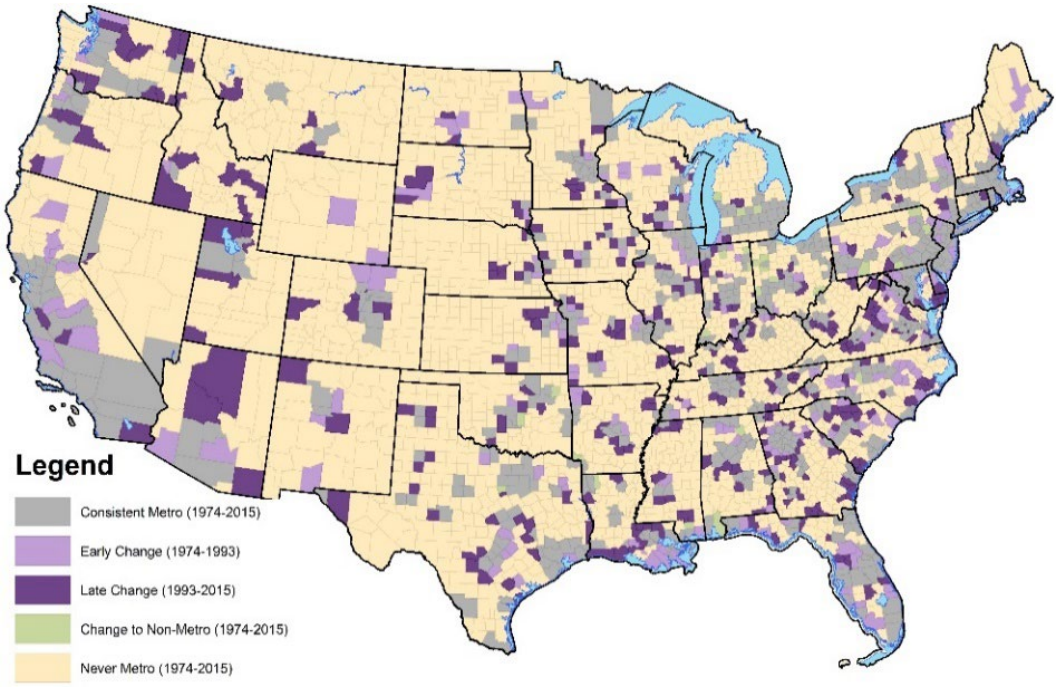
Source: U.S. Department of Agriculture, ERS, County Typology Codes.

Often counties that switch from nonmetro to metro can still feel rural in character and support jobs in agriculture for decades after, but reclassification separates these communities administratively and "rural" becomes everything but these metro counties. For example:

- 20% of the nonmetro counties that later became metro were **farm-dependent** in 1974
- 8% of those reclassified metro counties were still **farm-dependent** in 2015

The under-appreciated story in the reclassification process is that successful "rural" counties often become "urban" precisely because of the interconnected nature of regional economies – where workers and businesses engage with each other across multiple counties. That leaves nonmetro counties, when viewed in a static state, to appear less connected to urban areas than they really are.

Exhibit 2. Counties Classified as Metro and Nonmetro, 1974-2015



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

Nonmetro commuting highlights a growing rural-urban job connection

U.S. Census Bureau data on high-commuting census tracts demonstrate how commuting has increasingly connected communities – see Exhibit 3.[vi] These data, available since 1990, show that farm-dependent counties had the largest percentage point increase in high-commuting census tracts over a twenty-year period. High-commuting census tracts are where 30% or more of employed residents commute to a metropolitan, micropolitan, or small town for work.

Exhibit 3. Percent of High-Commuting Census Tracts by County Type, 1990 to 2006-10

County Type	1990 % High Commuting Census Tracts	2006-10 % High Commuting Census Tracts	% Point Change
Metro county since 1974	8.7%	7.2%	-1.4%
Changed to metro county after 1994	20.8%	31.9%	11.1%
Nonmetro county since 1974	20.8%	26.1%	5.3%
Farm-dependent since 1974	8.5%	22.8%	14.3%

Sources and notes: U.S. Department of Agriculture, ERS, rural-urban commuting area codes based on U.S. Census Bureau, 1990 Census and 2006-2010 ACS commuting data tabulations.

Counties that were continuously metropolitan since 1974 had just over 7% of census tracts as high-commuting by 2010. That was a decline in high-commuting census tracts of 1.4 percentage points from 1990. Employees in these more mature urban counties are closer to their place of work, hence the lower share of high-commuting census tracts.

Counties that were reclassified as metro after 1994 unsurprisingly had a growing share of high-commuting census tracts, from 21% to 32%, over the twenty years. The increased commuting between nonmetro counties that were adjacent to metro areas is a primary reason for their reclassification. Even so, the magnitude of change over the twenty years is telling of how important job commuting has become for previously nonmetro counties.

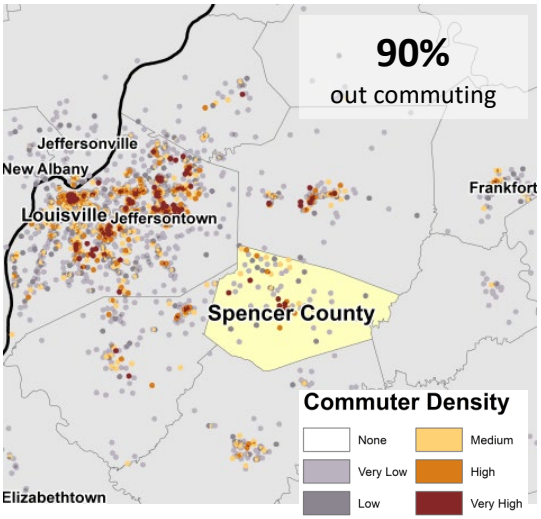
Counties that had remained nonmetro over the past fifty years also showed significant increases in high-commuting census tracts from 1990 to 2006-10. While less of a change than counties reclassified as metro, nonmetro areas still saw the share of high-commuting census tracts increase to over 1 in 4. But in the farm-dependent subset of nonmetro counties, high-commuting tracts increased from nearly 9% in 1990 to 23% by 2010, a 14-percentage point increase, and likely related to the increasing number of agricultural operators that had off-farm employment.

Commuting to other counties for work has continued to grow during the last two decades

Newer U.S. Census data, 2002 to 2018, show that workers are increasingly commuting outside their home county for work – demonstrating the growing importance of regional labor markets in recent years. This is especially true for farm-dependent counties.

An example is farm-dependent Spencer County, Kentucky – see Exhibit 4. This county, within the Louisville metro region, is similar to many communities where workers often travel to other counties for employment. In 2018 the vast majority (90%) of Spencer County residents with payroll jobs commuted out of the county for work.

Exhibit 4. Work Location of Employed Spencer County Residents, 2018



Source: U.S. Census Bureau Longitudinal Employer-Household Dynamics, 2018 data.

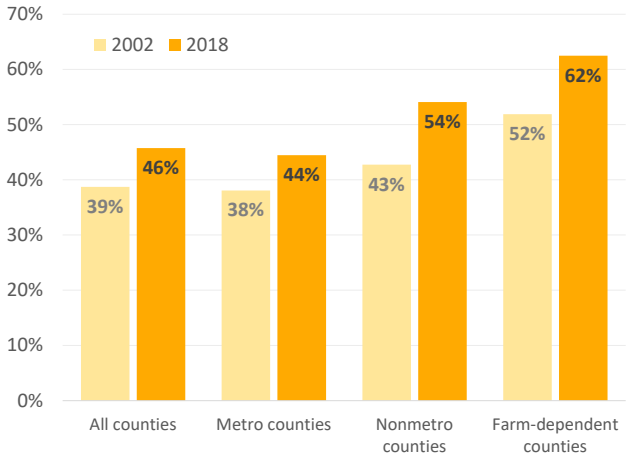
In 2002 nearly 4 in 10 workers commuted outside of their home county for work (Exhibit 5). Nonmetro county residents (43%) were more likely than metro residents (38%) to commute outside of their county. Over half (52%) of farm-dependent residents with payroll jobs commuted outside their home county in 2002.

By 2018 the share of workers commuting outside of their home county had increased to 46%, or 7 percentage points from 2002. But the change was more drastic for nonmetro and farm-dependent counties, both seeing more than 10 percentage point increases during the same period. In 2018 over 6 in 10 farm-dependent county residents commuted outside of their home county for payroll jobs.

The Exhibit 6 map illustrates where commuting increased the most over the 2002-18 time period, and in relation to metro counties.

In 2002 nearly 47% of counties with reported data had more than half of their residents leaving their home community, orange-colored counties on the map, for payroll employment and were often in or near metropolitan

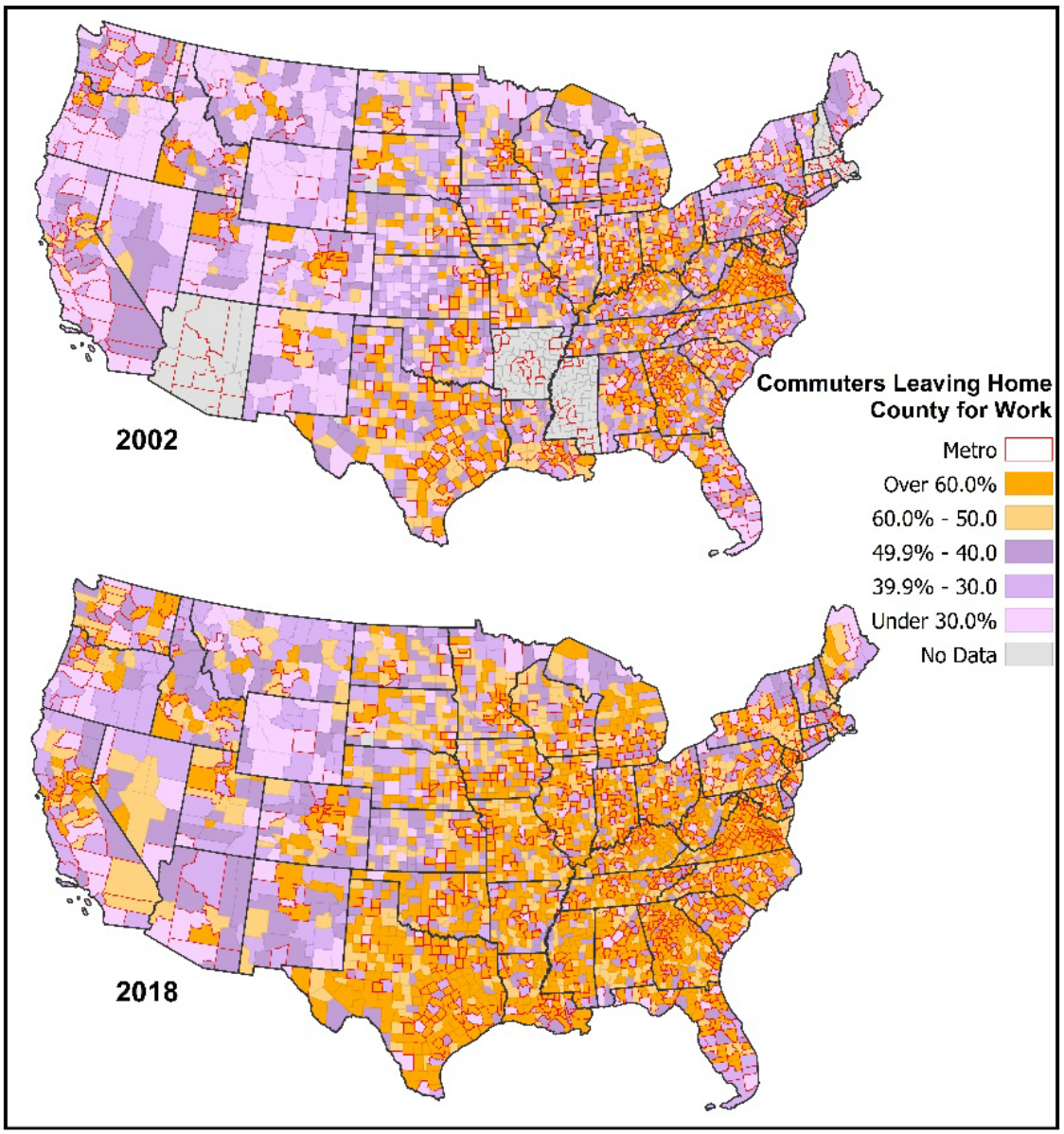
Exhibit 5. Percent of Commuters Leaving Home County for Work by County Type, 2002-2018



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

areas. By 2018, over 7 in 10 counties (70.6%) had at least half of their residents working outside their home county. Those higher commuting counties have spread out to cover much more area in the U.S., apart from very large and sparsely populated counties in some western states.

Exhibit 6. Percent of Commuters Leaving Home County for Work, 2002-2018



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

Rural areas are more economically diverse than in decades past

Changing commuting patterns show how rural and urban areas are growing more economically connected. Rural areas also have increasingly diverse employment opportunities, as commuting expands and industry sectors evolve.

Exhibit 7 shows the change in the share of farm, forestry, and agricultural services employment (henceforth the ag sector) for the U.S., metro, and nonmetro counties since the 1970s. In 1970 farm employment was 15% of nonmetro jobs, but that share dropped substantially by 1990 to just under 10%. By 2010 nonmetro ag sector employment was 6.9% of total employment and has only declined slightly since then.

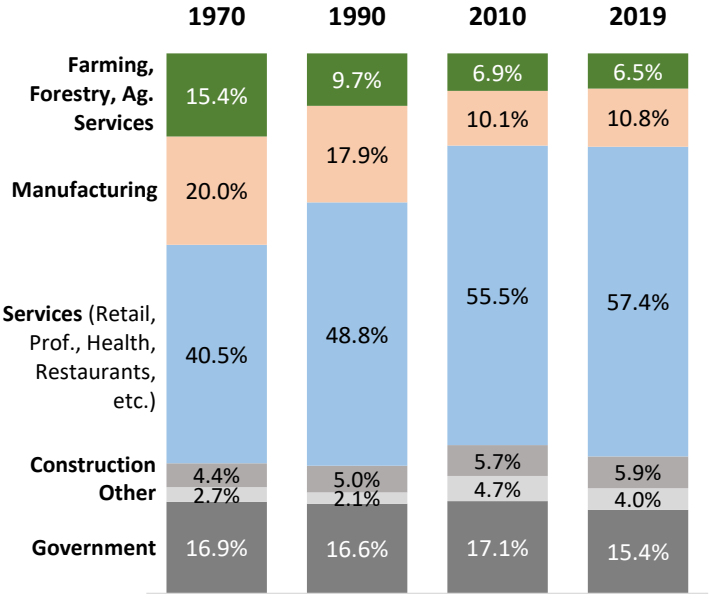
Exhibit 7. Farm, Forestry and Agricultural Services Employment Share of Total Employment from 1970 to 2019

Area	1970	1990	2010	2019
United States	4.9%	3.3%	2.0%	1.8%
Metro Counties	2.9%	2.2%	1.2%	1.0%
Nonmetro Counties	15.4%	9.7%	6.9%	6.5%

Sources and notes: U.S. BEA data reported by the Headwaters Economics. Nonmetro counties as of 2013 for all time periods.

Manufacturing and the ag sector, together, represented 1 in 3 jobs for nonmetro counties in 1970 – see Exhibit 8. These sectors exported their products to towns across the U.S. and to other countries, bringing important revenue to communities and employment opportunities. By 2010, however, continued productivity gains had lowered the share of jobs in these sectors to 1 in 6, where it has largely remained. Both sectors continue as critical engines of economic prosperity in many nonmetro communities but will need less workers as technology replaces labor.

Exhibit 8. Nonmetro Employment Share by Sectors



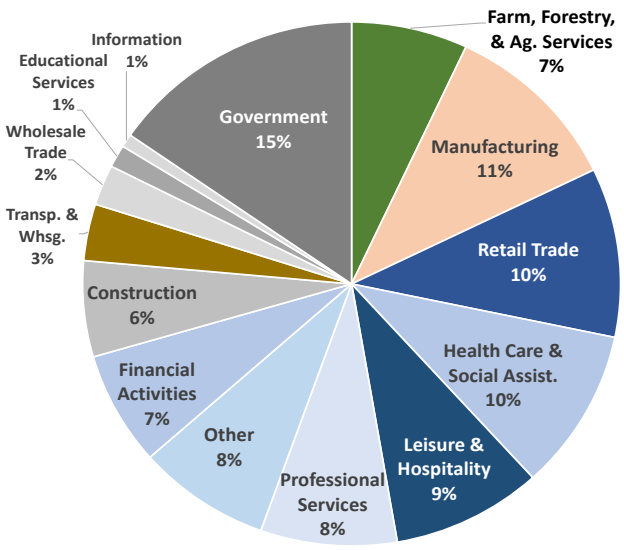
Source and notes: U.S. BEA data reported by the Headwaters Economics. Nonmetro counties as of 2013 for all time periods.

Service jobs, including retail, restaurants, and health care, have risen to fill the nonmetro employment declines of the ag sector and manufacturing. While the share of government, construction and

other smaller sector employment was relatively stable over the half century, service-sector jobs grew by nearly 17 percentage points. This increase in service sector jobs brought employment opportunities for lower-skilled workers, in retail and restaurants for example, but also the need for higher-skilled jobs in health care, business operations, information technology, and finance. Many of these jobs offered higher, stable pay for farmers/ranchers and, in turn, became their primary source of income.

A further breakout of 2019 sector employment for nonmetro counties, seen in Exhibit 9, shows how diverse jobs are in rural areas. *Farm, Forestry, and Agricultural Services* (ag sector) largely employs workers in farming or ranching production. *Agricultural Services*, at 1.5% of employment and nearly 1 in 4 jobs in the larger ag sector, includes farm labor, harvest and management contract services (e.g., livestock breeding, soil preparation services). Over half of nonmetro jobs are found in *Services* that include retail trade, health care, leisure and hospitality, and professional services. *Government* jobs employ 1 in 6 nonmetro workers.

Exhibit 9. Nonmetro Employment Share by Detailed Sectors, 2019



Source: U.S. BEA 2019 data

While nonmetro county job trends show that rural economies are becoming more diversified, geography and natural resources play a role in how nonmetro regions have evolved.

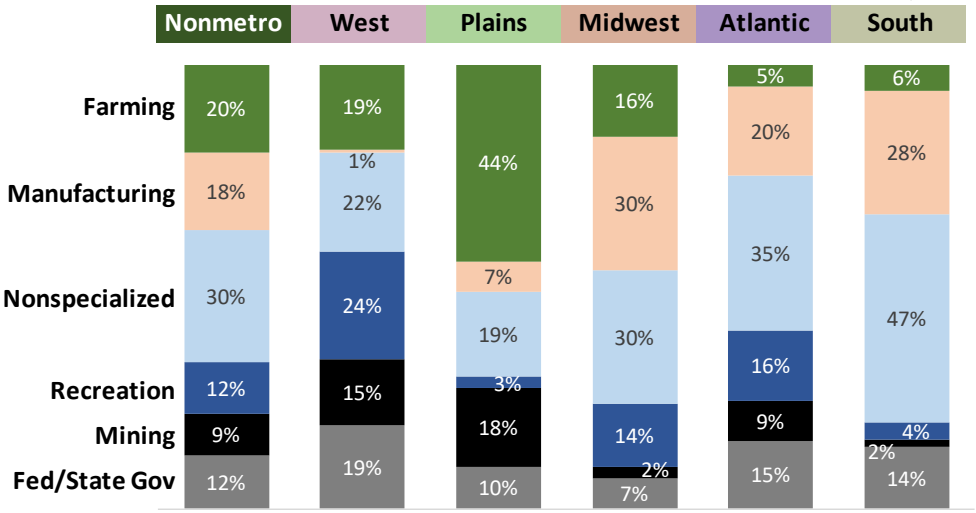
Economic specializations of nonmetro counties

Farm-dependent counties, and other economic specializations, are described by the USDA Economic Research Service in typology codes that are useful in understanding how rural economy jobs have changed in recent times. Typology codes describe the economic drivers of a county at a given time and are available from 1979 onward.[vii] However, county typology assignments prior to 2000 are difficult to compare with later versions as the number and definition of economic specializations changed over that time.[viii] The most recent 2015 farm-dependent definition includes counties with either 25% or more of labor income from farming or 16% or more of jobs were in farming during 2010-12.

In 2015 most counties (63%) were classified as nonmetro and had a diverse range of economic specializations – see Exhibit 10. When grouped by USDA farm production regions, some notable distinctions can be found:

- **Farming:** 20% of all nonmetro counties were farming-dependent, but in the Plains region 44% were dependent on agricultural jobs and income. The Atlantic and South regions had only 5%-6% of counties, respectively, dependent on farming.
- **Manufacturing**: Roughly 3 in 10 counties in the Midwest and South regions were manufacturing-dependent. The West region had only 1% of nonmetro counties dependent on manufacturing, and only 7% in the Plains region.
- **Nonspecialized**: Nonspecialized counties have diversified economies and were the most prevalent nonmetro type at 30%. The South region had the most nonspecialized counties (47%). The West and Plains regions had the lowest shares, but diverse economies were still found in roughly 1 in 5 counties.
- **Recreation**: 12% of nonmetro counties were recreation-dependent, but the West region had twice as many counties in this specialization (24%). The Plains and South regions had very low percentages of recreation-dependent counties.
- **Mining**: Mining-dependent communities, at 9% of nonmetro counties, represented the smallest category but did have larger concentrations in Plains and West regions.
- **Federal/State Government:** 12% of nonmetro counties are dependent on jobs in federal and state government, such as university towns. The West region had the highest share at 19% whereas the Midwest region had the lowest share at 7%.

Exhibit 10. Percent of Nonmetro Counties by Economic Specialization in 2015, by USDA Farm Production Region



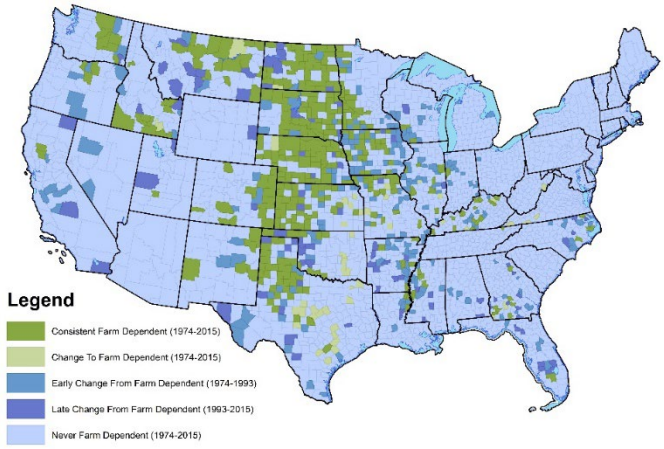
Source: U.S. Department of Agriculture, ERS, County Typology Codes.

Farm-dependent counties have historically been concentrated in the Plains region – see Exhibit 11. From 1974 to 2015 a small number of counties switch to farm-dependency, mostly in the Plains region, but declining farm employment in the U.S. caused more counties to switch from

farm-dependency to other economic specialization. Nearly half (48%) of the counties that switched from farm-dependent, since 1974, became nonspecialized while 20% changed to manufacturing-dependent counties.

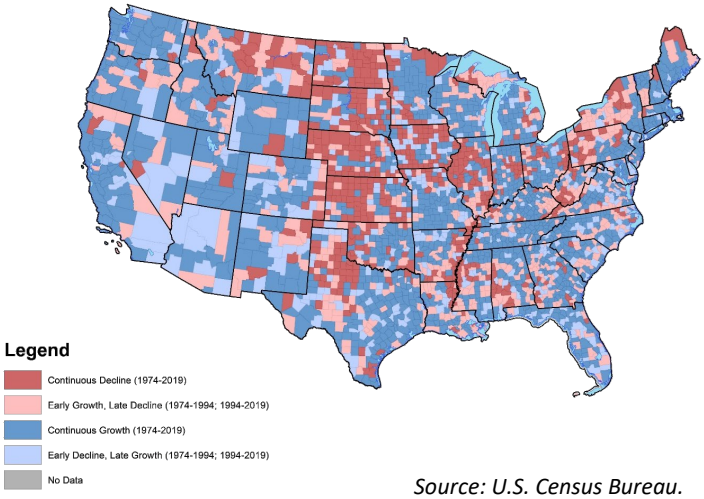
Population loss has been a challenge for counties that have remained farm-dependent and have been less able to diversify their economies. Counties that were farm-dependent in 2015 had seen population, on average, decline by 4.0% from 1974-2019. By contrast, counties that were not farm-dependent in 2015 had grown 55% in population over the same period. Exhibit 12 shows how counties changed in population from 1974 to 2019, illustrating the connection between less economically diverse regions and population decline. Many farm-dependent counties in Midwest and Plains states, for example, have seen continuous population decline since the mid-1970s.

Exhibit 11. Farm-Dependent Counties, 1974-2015



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

Exhibit 12. Population Change by County, 1974-2019



Source: U.S. Census Bureau.

Economically resilient rural communities have regionally connected workforces and diverse industries to support a range of employment opportunities

While “rural” populations can be perceived as being isolated from nearby cities, the reality is that most rural residents with payroll jobs commute to these regional economic hotspots for employment. And these cities, in turn, depend on the broader regional population for business labor and spending. This regional dependency becomes formalized over time when nonmetro counties are reclassified to metro, but that can also hide the dynamic success stories of many rural areas.

“Rural” America does not fit neatly under one umbrella definition but contains a diversity of places with differing economic characteristics. The agricultural sector is still a vital, export-oriented industry for rural regions but continued productivity gains diminish the need for workers. In 1970 the ag sector accounted for 15% of nonmetro employment, but less than 7% by 2019. During that same period, the diverse services sectors (e.g., retail, professional, healthcare, restaurants) grew from 41% of jobs to 57%. While some rural counties continue to have farm-dependent economies, many of the more isolated communities, especially in the Plains states, have suffered from prolonged population declines.

This misunderstanding of “rural” connectiveness and industry diversity leads to a range of federal programs that, while intended to help these communities, can often result in confusing applications and requirements that hinder policy efforts. USDA’s Rural Development mission area, for example, awards funding to rural areas based on different population thresholds. An internal program review found this created arbitrary barriers to regional strategies and perpetuated community isolation that often failed to acknowledge the urban-rural job and market connections (USDA-RD, (2013)). To their credit, USDA-RD recommended simplifying to just one population threshold for its 40-plus programs, although this may not be politically palatable.

Off-farm income stabilizes farming and rural economies

The rural economy has become increasingly diverse as workers commute regionally for employment and service sector businesses continue to grow in importance. Farming and ranching families are critically dependent on these trends continuing, as off-farm jobs offer steady income and other benefits that support the larger rural economy.

Off-farm jobs are increasingly important to agricultural operators

Off-farm jobs have been the primary occupation for the average farmer/rancher since the late 1990s. In 1974, only 37% of U.S. agricultural operators (farmers or ranchers) who ran the business – called principal operators or producers – had a main job outside of farming – see Exhibit 13. By 1997, more than half (53%) of these producers considered off-farm jobs they held as their main occupation. That figured increased to 56% by 2017. Nearly 2 out of 3 (63%) of younger principal producers, under age 35, identified off-farm jobs as their primary occupation in 2017. In that same year 68% of producers not running the business, or non-principal producers, had primary jobs off the farm.[ix]

Exhibit 13. Percent of Principal Operators with Main Off-Farm Jobs

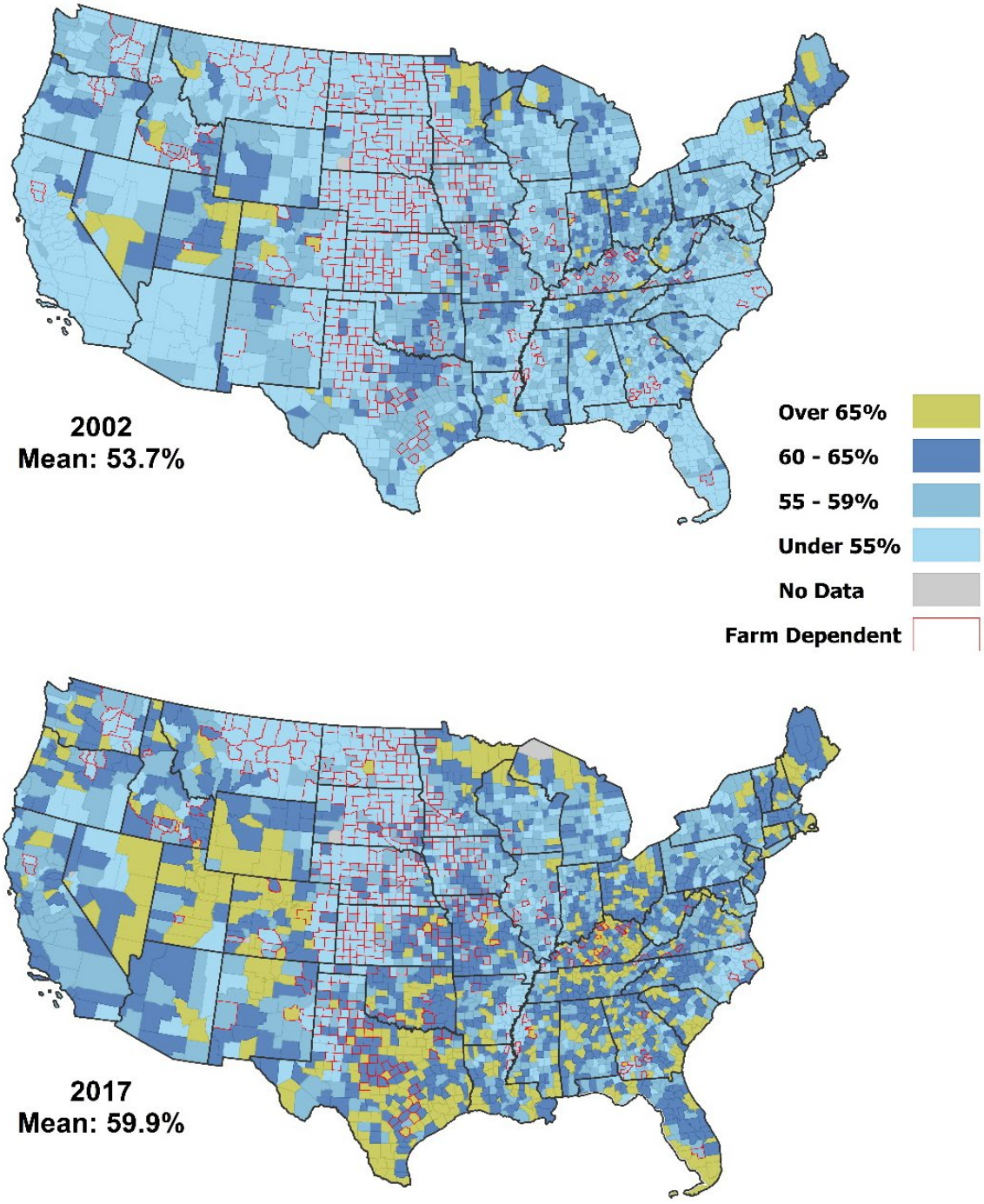
Characteristic	1974	1987	1997	2007	2017*
Off-Farm Occupation is Main Job for Principal Operator	37%	45%	53%	55%	56%

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.

A county map of full- or part-time employment for principal operators (see Exhibit 14) provides another illustration of how important off-farm jobs have become. Full-time, in this analysis, is defined as operators working 200 or more days off the farm. Part-time is any operator working off-farm less than 200 days a year.

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 was 60%. With a few exceptions – such as the upper plains – most areas of the U.S. saw full- or part-time employment increase.

Exhibit 14. Percent of Principal Operators with Full- or Part-Time Employment by County, 2002-17



Source: U.S. Department of Agriculture, 2002 and 2017 Census of Agriculture

The occupations and industries of off-farm employment

In addition to the Census of Agriculture, conducted every five years, the USDA also administers an annual Agricultural Resource Management Survey (ARMS), which is weighted to be nationally representative. The ARMS provides more timely data on off-farm income and focuses on farm household operations of principal operators and their spouses to a greater degree than the Census of Agriculture.

Exhibit 15 shows the 2018 off-farm occupations, or job positions, identified by principal operators and their spouses. The majority of off-farm occupations were in *Management & Professional* or *Natural Resources, Construction & Maintenance* positions. *Management and Professional* occupations may build on the ag producer's skills in business operations, a notion supported by similar findings from analysis of 2010 ARMS data (Brown & Weber (2013)[x]). That analysis also found that *Management & Professional* occupations were widely held by college-educated operators. *Natural resources* (e.g., agriculture), *Construction & Maintenance* occupations also complement the skills of many agricultural producers who have talents in equipment operation, construction, and mechanical repairs that can benefit other businesses or their own entrepreneurial ventures.

Management & Professional positions were also top occupations for spouses in 2018, followed by *Services*-related jobs. Brown & Weber (2013) found, as with operators, that college-educated spouses were more likely to have management and professional occupations. *Services*-related occupations were more likely held by spouses without college degrees.

Exhibit 15. Occupation of Operators and Spouses Employed Off-Farm, 2018

	All Farms
Operator	
Management & professional	31%
Services	13%
Sales & office support	13%
Natural resources, construction, & maintenance	31%
Production, transp., & materials moving	12%
TOTAL	**100%**
Spouse	
Management & professional	38%
Services	30%
Sales & office support	24%
Natural resources, construction, & maintenance	3%
Production, transp., & materials moving	6%
TOTAL	**100%**

Source and notes: U.S. Department of Agriculture-ERS, ARMS, 2018. The sample only includes family farm households with married couples.

Off-farm employment industries indicate the type of businesses that operators and spouses found jobs in. This is different than the occupations they held, which describes what they did, rather than the industry they worked in. For example, a person can have a management occupation in the construction or healthcare industries.

In 2018 most operators with off-farm jobs worked in either the *Construction*, *Manufacturing*, or *Education Services* industries – see Exhibit 16. In 2018, 10% of operators had off-farm jobs in

Agricultural and Related businesses, down from 15% in 2010. As the size of farm increased, though, an operator was more likely to be employed in this same industry possibly managing other farming activities as they have the skills, experience, and equipment to run large-scale operations. Smaller farm operators in 2018 were more likely to be employed in *Construction* or *Manufacturing* industries, a similar trend found in 2010.

Married farm household spouses were most likely to work in service-oriented industries, e.g., *Retail* and *Wholesale Trade*, *Personal Services*, and *Warehousing*, in 2018, regardless of farm size. *Healthcare Services* jobs were also significant at 13% of off-farm industry employment. Compared to 2010, *Education Services* had a smaller share of spouse employment (3%), compared to 22% of spouses' jobs in the earlier survey. It is possible that survey methodology changes may explain some of the differences between the two time periods.

Exhibit 16. Industry of Operators and Spouses Employed Off-Farm, 2018

	Size of farm (annual farm sales)			
	All Farms	< $50,000	$50,000 - $249,999	$250,000 or more
Operator				
Agriculture, forestry, mining or related	10%	9%	16%	29%
Construction	20%	21%	18%	14%
Manufacturing	13%	14%	13%	6%
Wholesale trade, warehousing, util., or transp.	5%	5%	5%	7%
Retail trade or personal services	5%	5%	5%	2%
Finance, insurance, real est., or other prof. services	9%	8%	13%	8%
Education services	11%	11%	9%	9%
Healthcare services	8%	8%	8%	15%
Recreation or tourism	1%	1%	0%	2%
Other nongovernmental services	9%	9%	6%	5%
Government services	8%	8%	8%	3%
TOTAL	**100%**	**100%**	**100%**	**100%**
Spouse				
Agriculture, forestry, mining or related	5%	5%	9%	7%
Construction	3%	4%	3%	1%
Manufacturing	6%	7%	5%	4%
Wholesale trade, warehousing, util., or transp.	21%	20%	22%	28%
Retail trade or personal services	23%	23%	22%	26%
Finance, insurance, real est., or other prof. services	6%	7%	6%	5%
Education services	3%	3%	3%	2%
Healthcare services	13%	12%	13%	13%
Recreation or tourism	1%	1%	1%	2%
Other nongovernmental services	11%	12%	11%	8%
Government services	7%	7%	5%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**

Source and notes: U.S. Department of Agriculture, ERS, ARMS, 2018. The sample only includes family farm households with married couples

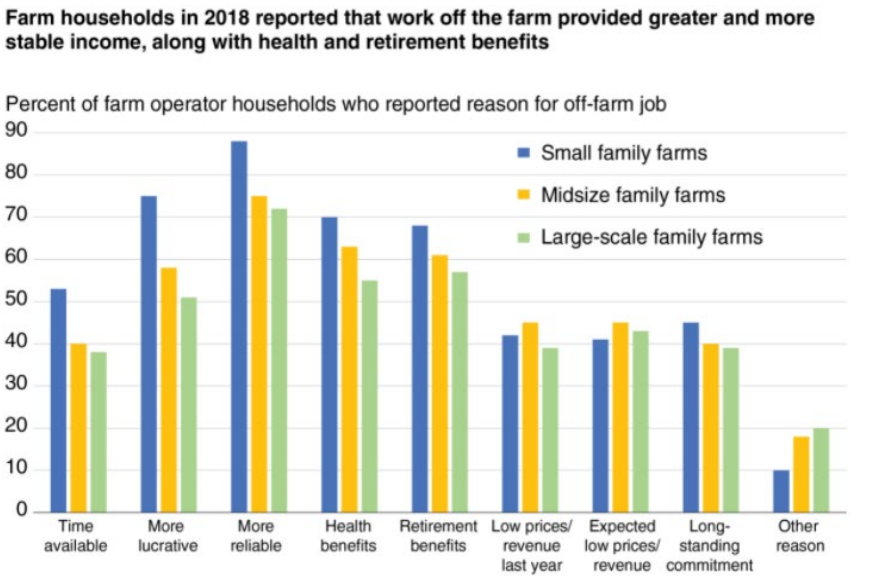
Reasons for working off the farm

In the 2018 ARMS, agricultural operators were asked for the reason they have an off-farm job. The USDA chart – see Exhibit 17 – highlights responses by small, midsize, and large-scale family farms (see definitions of farms by size on page 19).

All households, regardless of farm size, indicated the main reason was that off-farm income was more reliable than farm income (70% or more). 50% or more of all households replied that it was more lucrative. Health and retirement benefits were also a reason for over half of all farm households. Stable income, and related health care and retirement benefits, were especially important for small family farms, the vast majority (92%) of all farms.

Exhibit 17. Reasons for Off-farm Job by Farm Size, 2018

Chart from USDA Amber Waves Article

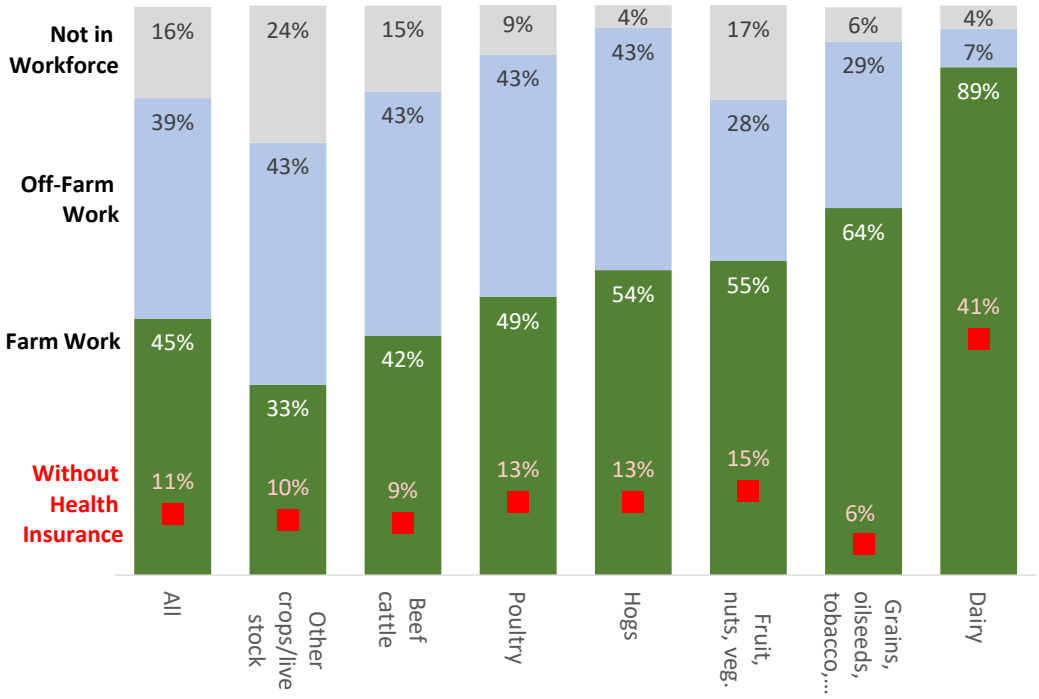


Note: Shares are calculated among those households where the principal operator or the spouse, when present, report working off the farm. Principal operators and spouses can select more than one reason for working off the farm, so numbers will not add to 100 across reasons. Small farms have annual gross cash farm income (GCFI) less than $350,000, midsize farms have GCFI between $350,000 and $999,999, and large-scale farms have GCFI of $1 million or more.
Source: USDA, Economic Research Service and USDA, National Agricultural Statistics Service, 2018 Agricultural Resource Management Survey.

Health insurance benefits are an important consideration for off-farm employment. In 2015 there were 10.7% of farm households without health insurance - only slightly higher than the U.S. population share (9.1%).[xi] This was due to the fact that most farm households received private employment-based health insurance (55.6%), similar to the U.S. population at 55.7%. Farm households also received health insurance by direct purchase for those self-employed (18%) and from public insurance (28%) largely provided to retirees.

Dairy farmers had highest share of households without health insurance, at 41.4%, compared to other commodity specializations (see Exhibit 18). Dairy operators were nearly twice as likely than average to have a primary occupation in farming, so many would not be able to take advantage of employer-sponsored insurance.

Exhibit 18. Principal Operator by Major Occupation and Persons Without Health Insurance by Commodity Specialization, 2015



Source: U.S. Department of Agriculture, ERS, 2015 Agricultural Resource Management Survey

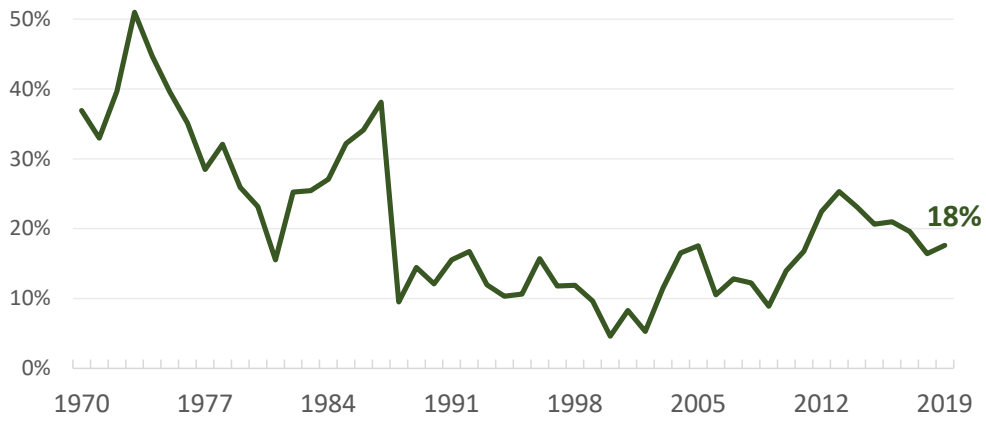
Farm income has declined as a share of total household income

Agricultural producers work off the farm, in a variety of industries, because the wages are more reliable than farm income and often offer healthcare and other benefits. To understand how important these off-farm jobs are, it is helpful to understand how these wages influence total household income.

Farm income has declined over the decades as a share of total household income – see Exhibit 19 – as farmers and ranchers have increasingly relied on off-farm jobs for stable income. In the 1970s, farm income averaged 37% of total farm family household income but by 1990 that share had dropped to around 12%. The farm income share can jump up or down in any year as

commodity prices fluctuate, but the overall trend is clear. More recently the share of farm income to total household income has risen in the last decade but remains below 20%.

Exhibit 19. Farm Income as Share of Total Farm Household Income

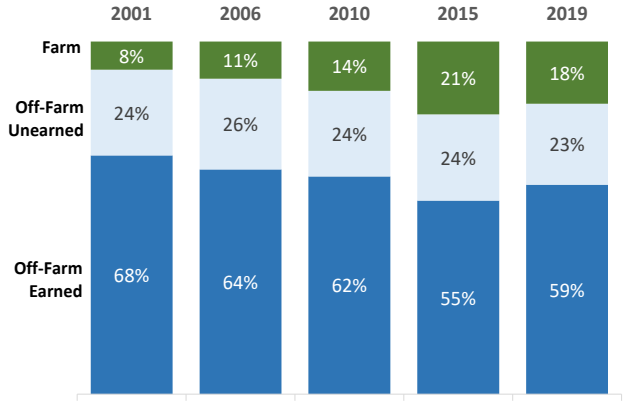


Source: U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey

Farm household income comes mostly from off-farm jobs, especially for younger farmers

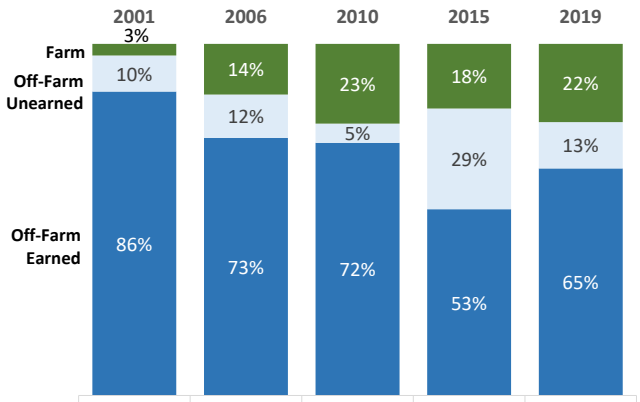
A breakout of farm household income over time shows the importance of off-farm employment to farm households – see Exhibit 20. From 2001 to 2019, off-farm earned income, on average, represented $6 out of every $10 in household income. Exhibit 21 shows that for younger farmers (under age 35), off-farm jobs were even more critical to household income.

Exhibit 20. All Family Farm Household Income by Source



Source: U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey

Exhibit 21. Younger Farm (Under Age 35) Household Income by Source



Source: U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey

Off-farm income by family farm type

82% of average family farm household income came from off-farm sources in 2019 – see Exhibit 22. Off-farm income includes earned pay from wages and self-employment along with unearned income from Social Security, pensions, interest, and other sources. Earned wage or self-employment is the largest share (59%) of household income for all family farms.

Off-farm income was particularly important for off-farm occupation and low-sales (less than $150K GCFI) farms in 2019. Low-sales farms, operated by someone who considers farming their primary occupation, account for 1 in 3 family farms in 2019 yet they still relied on half of their income from off-farm employment. Off-farm earned income offers more reliable, and often more profitable, pay to small family farms.[xii]

Family Farm Types

92% of family farms are small operations, with less than $350,000 in gross cash farm income (GCFI).* The remaining 8% of family farms are mid-to-large scale operations.

Small Family Farms

- **Off-Farm Occupation:** *Principal operator reports primary job other than farming*
- **Retirement:** *Principal operator is retired but continues farming on small scale*
- **Low-Sales:** *Principal operator job is primarily farming and GCFI is less than $150,000*
- **Moderate-Sales:** *Principal operator job is primarily farming and GCFI is between $150,000- $349,999*

Larger Family Farms

- **Midsize:** *GCFI is between $350,000-$999,999*
- **Large:** *GCFI is between $1M-$4.9M*
- **Very Large:** *GCFI of $5M or more*

**2019 USDA-ERS figures. Note that 2% of all farms are commercial, or nonfamily, operations and do not have household income figures.*

Exhibit 22. Average Family Farm Household Income by Farm Type, 2019

Family Farm Type	Farms	Percent of Family Farms	Percent of Farm Acres	Percent of Farm Production	Avg. Total Income per Household	Share of Total Income: Farm Income	Share of Total Income: Off-Farm Earned Income	Share of Total Income: Off-Farm Unearned Income
Small Family Farms (Annual Gross Cash Farm Income - GCFI - less than $350,000)								
Off-farm occupation	833,450	42.4%	16%	6%	$153,185	1%	83%	16%
Retirement	215,959	11.0%	5%	2%	$77,948	15%	42%	43%
Low-sales, farm occup. (GCFI < $150K)	653,716	33.2%	19%	7%	$64,055	-2%	50%	53%
Moderate sales, farm occup. (GCFI $150K-$349K)	103,058	5.2%	13%	11%	$98,305	43%	34%	23%
Larger Family Farms (GCFI greater than $350,000)								
Midsize (GCFI $350K-$999K)	107,316	5.5%	25%	24%	$169,831	65%	23%	12%
Large (GCFI $1M-$4.9M)	48,339	2.5%	18%	29%	$415,525	84%	9%	6%
Very Large (GCFI $5M+)	5,780	0.3%	4%	22%	$1,370,225	93%	5%	2%
All Family Household Farms	**1,967,618**	**100%**	**100%**	**100%**	**$123,368**	**18%**	**59%**	**23%**

Source and notes: U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey, 2019. Earned income from off-farm self-employment or wage/salary jobs. Unearned income from interest, dividends, Social Security, pensions, estate or trusts, annuities, or alimony. Farm types as defined by USDA-ERS (2019), see box for definitions.

The stabilizing nature of off-farm income is evident from the analysis of larger operations – family farms with over $350,000 in gross cash farm income – from 1996 to 2013, conducted by the USDA Economic Research Service.[xiii] The study found that these larger farm households faced substantially more income volatility than smaller farms, a counterintuitive finding when compared to nonfarm households that generally see income volatility decline as income rises. A farm household with more than $3 million in farm assets had a 34% chance of having negative household income at least once every two years, but farm households under $750,000 in farm assets had a 17% chance.

Half of farm households typically have negative farm income in a given year

Farm operator household income is often reported by averages, so that income from different sources can be added to more easily understand the shares of income by different types – as shown in Exhibit 22. An alternative measure, the median, describes the level where half of all farm households have lower incomes and half have higher incomes. It is useful in understanding the financial situation of a typical household.

USDA-ERS data tabulations of median income – see Exhibit 23 – show that, in most years, households have negative farm incomes in regions across the U.S. [xiv] From 2011 to 2019 the median household income from farming was only positive in one year – 2019. The Midwest region did show modestly positive median farm incomes in most years, but off-farm earned income was much greater. The appendix has additional median income tables by farm types, other regions, and product specialties.

Exhibit 23. Median Off-Farm Earned and Farm Income by USDA Farm Production Region, 2011-19

Family Farm Region	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
Atlantic	Median Off-Farm Earned Income	$27,500	$38,750	$38,595	$42,257	$40,758	$37,500	$37,500	$36,680	$50,616
	Median Farm Income	-$3,060	-$1,898	-$898	-$1,620	-$2,364	-$2,848	-$2,475	-$2,610	-$600
South	Median Off-Farm Earned Income	$32,500	$37,700	$40,000	$37,500	$37,500	$40,209	$45,000	$40,000	$32,122
	Median Farm Income	-$2,523	-$1,638	-$1,158	-$218	-$1,575	-$1,406	-$1,146	-$3,105	-$1,390
Midwest	Median Off-Farm Earned Income	$32,500	$37,700	$42,292	$40,000	$37,500	$35,000	$39,790	$37,500	$32,500
	Median Farm Income	-$582	$250	$1,740	$2,285	$1,553	$2,032	$613	$798	$2,641
Plains	Median Off-Farm Earned Income	$33,761	$38,290	$43,382	$45,000	$40,000	$46,250	$46,676	$45,000	$45,000
	Median Farm Income	-$2,505	-$1,741	-$853	-$334	-$558	-$1,534	-$1,456	-$1,527	$155
West	Median Off-Farm Earned Income	$35,433	$43,547	$42,292	$45,000	$41,912	$41,587	$37,500	$37,265	$44,151
	Median Farm Income	-$4,041	-$2,618	-$1,721	-$1,231	-$1,623	-$1,040	-$1,280	-$2,593	-$1,148
All Farms	**Median Off-Farm Earned Income**	**$32,500**	**$38,750**	**$40,737**	**$42,257**	**$38,270**	**$40,000**	**$43,225**	**$37,500**	**$39,574**
	Median Farm Income	**-$2,250**	**-$1,480**	**-$644**	**-$118**	**-$765**	**-$940**	**-$1,035**	**-$1,735**	**$296**

Off-farm income reduces debt risk exposure

Negative farm income is the reality for farmers and ranchers, as most have small operations. Earned off-farm wages reduces household income volatility for agricultural producers who depend on this off-farm income to meet household spending needs. It is precisely because farm income is so volatile that larger operators, who depend on their agricultural output for income rather than an off-farm job, and younger farmers, who need to borrow to finance land and equipment purchases, often face higher debt default risks.[xv] While tax management strategies may reduce volatility in the short term, income losses over multiple years is not uncommon.

A 2011 Kansas City Federal Reserve study analyzed the importance of off-farm income to servicing farm debt, and how dependent farmers were on the regional economy.[xvi] This study, and others cited, found that most farmers would have great difficulties repaying debt without off-farm income. The author noted that off-farm income was even more important for young operators, under age 35, in lowering debt repayment risks. The study also suggested that agricultural producers in rural counties with weak labor markets – indicated by high unemployment rates – had higher debt repayment risks, because of the loss of off-farm job opportunities.

The household farm's debt-to-asset ratio compares outstanding debt in relation to total farm assets and is one way to understand risk exposure by farm type. It is a key measure that indicates the agricultural producers' ability to repay farm financial debt by selling farm assets. A lower ratio suggests that the producer is in better financial shape to weather adverse farm events.

USDA ARMS data from 2011 to 2019 indicate that the average debt-to-asset ratio for all farm households was just over 9.1%. Put another way, lenders had a claim on 9.1% of a farmer's assets to cover debt repayment. For off-farm occupation farms, the debt-to-asset ratio averaged 6.3% whereas midsized-to-larger farms averaged over 13% during the same period. Younger farmers, under age 35, had average debt-to-asset ratios of 21%.

Exhibits 24-26 illustrate the debt-to-asset ratios in comparison to average shares of off-farm income. The grey line and bar represent the average level of off-farm income or debt-to-asset ratio, respectively, for all farm households. Green chart lines indicate that the farm type has either higher off-farm income and/or a lower debt-to-asset ratio, than the national average. Orange chart lines show that the farm type had lower off-farm income and/or higher debt-to-asset ratios than the U.S. average.

It is clear that larger farms, that must rely on farm income to finance large debts, and younger operators, who work more off-farm but have relatively big financing needs, face higher risk exposure than households that have larger off-farm income shares. Additional charts by farm type and operator can be found in the appendix.

Exhibit 24. Off-farm Occupation Farm Debt-to-Asset Ratio and Off-Farm Income Share

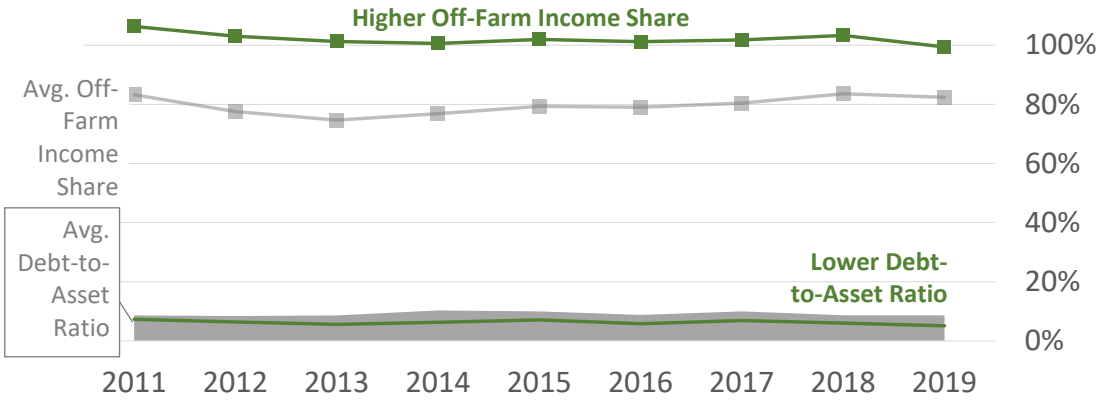


Exhibit 25. Midsize Farm Debt-to-Asset Ratio and Off-Farm Income Share

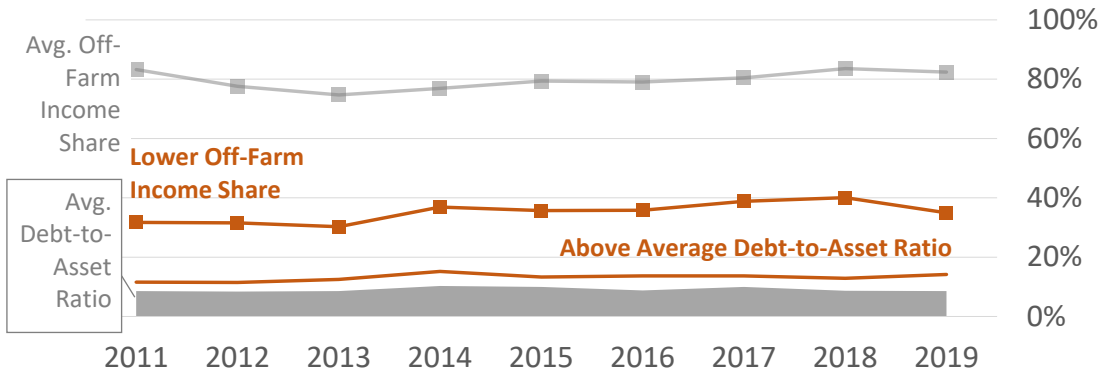
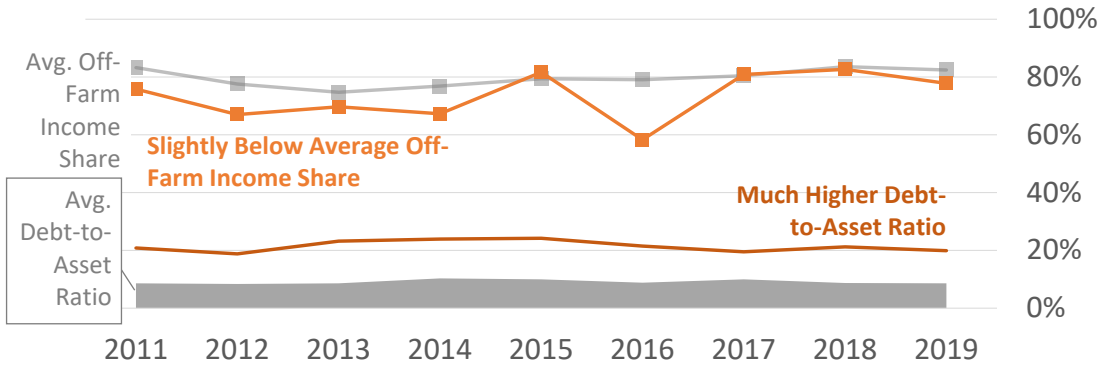


Exhibit 26. Younger Operator (Under 35) Farm Debt-to-Asset Ratio and Off-Farm Income Share



Rural Economic and Farmer Financial Strength is linked with Cooperative System Health

The analysis presented up to this point suggests a symbiotic relationship among and between farmers and agriculture's allied industries. Farmers, even in farm-dependent counties, rely on off-farm income to not only supplement and stabilize their incomes, but also for health and retirement benefits. The evidence suggests that off-farm income is vital in financing agriculture, from inputs to farm equipment to land mortgages, and that without off-farm income, debt repayment risk is higher.

Taken together, the financial health of farmers and, by extension, the communities from which they access off-farm income, is vital to ensuring reliable supply chain dynamics and transactions in farmers' up- and down-stream relationships with cooperatives and agribusinesses. That is, the relationship between producers, their agricultural cooperatives (e.g., marketing, energy, input-supply and processing), and the Farm Credit System – the cooperative lending system obligated to finance them all – is of utmost importance. Financing agricultural production and producers includes operational (short-term) financing and longer-term financing. Many producers utilize the Farm Credit System (FCS) of lenders for one or both. Likewise, agricultural cooperatives that purchase and market farmers' outputs and provide inputs to them rely on FCS financing. In this way, the FCS is financing production but also the inputs to it and the marketing of products into the downstream supply chains.

Agricultural cooperatives provide short-term financing of members' inputs including seed, feed, nutrients, and energy, often serving as a secondary source of capitalization for producers. In doing so, they take on additional price and default risk at the co-op level to benefit members and ensure timeliness of production.[xvii] Investigating the relationship between financially stable farms and rural communities, and how that impacts producer-owned cooperatives, could be a future area of research.

The Importance of Off-Farm Income to the Agricultural Economy

Authors

Alan Spell, Assistant Extension Professor, University of Missouri
Dr. Keri Jacobs, Associate Professor and MFA Chair in Agribusiness, University of Missouri
Dr. Sarah Low, Associate Professor and Heinkel Chair in Agriculture, University of Missouri
Justin Krohn, Research Project Analyst, University of Missouri

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The Importance of Off-Farm Income to the Agricultural Economy

Report Appendix

The appendix provides additional tables, charts, and regional summaries to complement the report. Sections include:

Median Income Tables for Farm Households
Tables of median off-farm earned and farm income by farm type, operator age, regions, and product specialty.

Debt-to-Asset Ratio and Off-Farm Income Share Charts
Charts of farm household debt-to-asset ratios and off-farm income by farm type and operator age are compared to U.S. averages.

USDA Farm Production Regional Summaries
Five USDA production region summaries describe selected farm, income, debt, and commuting characteristic.

USDA Farm Resource Regional Summaries
Nine USDA resource region summaries describe selected farm, income, debt, and commuting characteristic.

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Median Income Tables for Farm Households

The USDA Economic Research Service (USDA-ERS) provided data tabulations of median farm household income by different farm types, operator age, regions, and product specialties. The tables below breakout household income by farm and off-farm earned sources.

Exhibit A1. Median Off-Farm Earned and Farm Income by Farm Type, 2011-19

Family Farm Type	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
Small Family Farms										
Off-farm occupation	Median Off-Farm Earned Income	$70,000	$78,692	$78,618	$76,500	$80,681	$77,500	$75,027	$88,805	$92,567
	Median Farm Income	-$4,475	-$3,638	-$2,310	-$2,698	-$2,692	-$2,666	-$2,702	-$3,010	-$1,638
Retirement	Median Off-Farm Earned Income	$0	$14,358	$19,360	$14,243	$14,218	$16,231	$0	$2,250	$11,960
	Median Farm Income	-$1,570	-$1,748	-$134	$582	-$482	-$759	-$633	-$875	$2,501
Low-sales, farm occup.	Median Off-Farm Earned Income	$20,000	$31,000	$32,500	$27,666	$32,500	$32,500	$19,517	$6,250	$22,500
	Median Farm Income	-$2,576	-$1,539	-$1,284	$104	-$620	-$1,555	-$1,320	-$2,456	-$350
Moderate sales, farm occup.	Median Off-Farm Earned Income	$6,250	$22,500	$27,500	$23,568	$22,138	$22,500	$12,250	$16,140	$12,500
	Median Farm Income	$51,000	$51,171	$53,509	$61,074	$48,372	$54,191	$50,124	$50,000	$46,340
Larger Family Farms										
Midsize	Median Off-Farm Earned Income	$12,500	$27,500	$29,245	$22,500	$22,500	$22,500	$22,500	$21,514	$23,707
	Median Farm Income	$103,947	$129,741	$132,182	$130,638	$115,503	$115,705	$102,827	$119,099	$101,851
Large	Median Off-Farm Earned Income	$4,500	$22,500	$35,072	$22,500	$25,000	$17,500	$15,354	$12,750	$22,500
	Median Farm Income	$309,711	$341,745	$365,632	$307,711	$281,021	$290,917	$269,932	$287,375	$273,217
Very Large	Median Off-Farm Earned Income	$9,849	$12,500	$37,337	$32,500	$2,500	$0	$22,500	$0	$27,500
	Median Farm Income	$1,097,850	$1,265,497	$1,030,145	$1,068,527	$1,057,964	$788,110	$737,310	$702,015	$918,309
All Farms	**Median Off-Farm Earned Income**	**$32,500**	**$38,750**	**$40,737**	**$42,257**	**$38,270**	**$40,000**	**$43,225**	**$37,500**	**$39,574**
	Median Farm Income	**-$2,250**	**-$1,480**	**-$644**	**-$118**	**-$765**	**-$940**	**-$1,035**	**-$1,735**	**$296**

Exhibit A2. Median Off-Farm Earned and Farm Income by Operator Age, 2011-19

Family Farm by Operator Age	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
Below 35	Median Off-Farm Earned Income	$37,500	$45,000	$62,500	$55,000	$50,888	$67,500	$45,000	$46,621	$63,936
	Median Farm Income	-$324	-$1,100	-$3,236	$1,290	-$1,242	-$208	-$49	-$821	$1,933
35 to 44	Median Off-Farm Earned Income	$59,322	$70,000	$82,500	$70,000	$70,000	$70,000	$73,750	$90,000	$92,500
	Median Farm Income	-$2,736	-$2,850	-$2,452	-$670	-$1,602	-$2,670	-$2,592	-$1,150	-$658
45 to 54	Median Off-Farm Earned Income	$60,000	$68,346	$70,000	$72,500	$70,000	$70,000	$67,500	$85,770	$92,500
	Median Farm Income	-$3,490	-$2,819	-$850	-$2,213	-$2,850	-$1,715	-$1,685	-$2,349	-$599
55 to 64	Median Off-Farm Earned Income	$35,433	$42,179	$48,480	$47,500	$45,000	$46,777	$52,843	$46,328	$45,000
	Median Farm Income	-$2,358	-$1,109	$14	$332	$410	-$97	-$807	-$1,735	$871
65 and Older	Median Off-Farm Earned Income	$0	$12,053	$17,472	$6,250	$13,617	$12,500	$0	$0	$12,500
	Median Farm Income	-$1,589	-$1,100	-$684	$127	-$979	-$891	-$690	-$1,477	$250

Exhibit A3. Median Off-Farm Earned and Farm Income by USDA Farm Production Region, 2011-19

Family Farm Region	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
Atlantic	Median Off-Farm Earned Income	$27,500	$38,750	$38,595	$42,257	$40,758	$37,500	$37,500	$36,680	$50,616
	Median Farm Income	-$3,060	-$1,898	-$898	-$1,620	-$2,364	-$2,848	-$2,475	-$2,610	-$600
South	Median Off-Farm Earned Income	$32,500	$37,700	$40,000	$37,500	$37,500	$40,209	$45,000	$40,000	$32,122
	Median Farm Income	-$2,523	-$1,638	-$1,158	-$218	-$1,575	-$1,406	-$1,146	-$3,105	-$1,390
Midwest	Median Off-Farm Earned Income	$32,500	$37,700	$42,292	$40,000	$37,500	$35,000	$39,790	$37,500	$32,500
	Median Farm Income	-$582	$250	$1,740	$2,285	$1,553	$2,032	$613	$798	$2,641
Plains	Median Off-Farm Earned Income	$33,761	$38,290	$43,382	$45,000	$40,000	$46,250	$46,676	$45,000	$45,000
	Median Farm Income	-$2,505	-$1,741	-$853	-$334	-$558	-$1,534	-$1,456	-$1,527	$155
West	Median Off-Farm Earned Income	$35,433	$43,547	$42,292	$45,000	$41,912	$41,587	$37,500	$37,265	$44,151
	Median Farm Income	-$4,041	-$2,618	-$1,721	-$1,231	-$1,623	-$1,040	-$1,280	-$2,593	-$1,148
All Farms	**Median Off-Farm Earned Income**	**$32,500**	**$38,750**	**$40,737**	**$42,257**	**$38,270**	**$40,000**	**$43,225**	**$37,500**	**$39,574**
	Median Farm Income	**-$2,250**	**-$1,480**	**-$644**	**-$118**	**-$765**	**-$940**	**-$1,035**	**-$1,735**	**$296**

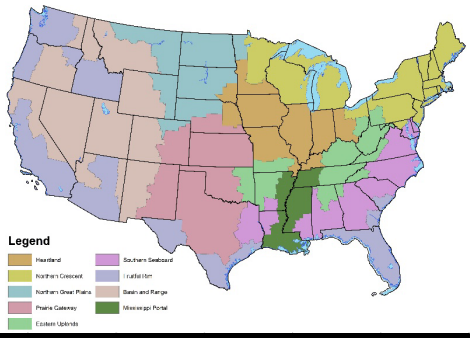


Exhibit A4. Median Off-Farm Earned and Farm Income by USDA Farm Resource Region, 2011-19

Family Farm Region	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
Basin and Range	Median Off-Farm Earned Income	$42,000	$46,357	$40,993	$43,535	$40,000	$37,500	$27,500	$41,250	$32,776
	Median Farm Income	-$3,969	-$2,590	-$1,405	-$430	-$1,895	-$951	-$3,039	-$3,285	-$1,660
Eastern Uplands	Median Off-Farm Earned Income	$32,500	$39,532	$38,595	$37,500	$36,130	$37,500	$45,000	$37,500	$50,616
	Median Farm Income	-$3,088	-$2,219	-$1,293	-$924	-$2,364	-$2,666	-$2,085	-$3,189	-$2,006
Fruitful Rim	Median Off-Farm Earned Income	$35,433	$42,179	$43,382	$45,000	$45,000	$41,587	$46,456	$41,000	$45,000
	Median Farm Income	-$3,655	-$3,027	-$1,454	-$2,533	-$2,641	-$1,329	-$2,262	-$2,375	-$1,859
Heartland	Median Off-Farm Earned Income	$33,086	$37,700	$42,292	$40,954	$37,632	$37,500	$40,675	$36,680	$32,122
	Median Farm Income	$1,187	$2,358	$3,610	$4,110	$3,530	$3,917	$3,126	$2,405	$5,309
Mississippi	Median Off-Farm Earned Income	$32,500	$37,500	$45,000	$41,661	$35,549	$45,000	$41,250	$32,500	$39,574
	Median Farm Income	-$1,800	-$985	-$201	$782	-$325	-$2,101	-$899	-$617	$296
Northern Crescent	Median Off-Farm Earned Income	$25,000	$37,700	$38,595	$42,257	$41,000	$36,264	$40,675	$39,411	$40,000
	Median Farm Income	-$2,715	-$2,995	-$2,358	-$1,684	-$1,974	-$1,830	-$3,208	-$2,585	$325
Northern Great Plains	Median Off-Farm Earned Income	$22,500	$33,721	$38,595	$35,000	$33,624	$32,865	$27,500	$32,500	$32,122
	Median Farm Income	$2,745	$2,540	$2,913	$14,326	$6,719	$9,800	$5,290	$978	$7,694
Prairie Gateway	Median Off-Farm Earned Income	$33,761	$43,750	$42,292	$43,722	$40,000	$55,000	$46,676	$45,000	$50,848
	Median Farm Income	-$2,620	-$1,475	-$1,306	-$854	$507	-$1,128	-$723	-$1,000	$148
Southern Seaboard	Median Off-Farm Earned Income	$32,500	$40,000	$43,750	$42,257	$45,000	$37,500	$37,500	$37,534	$33,611
	Median Farm Income	-$3,159	-$1,900	-$1,284	-$1,380	-$2,403	-$3,250	-$2,221	-$3,200	-$152

Exhibit A5. Median Off-Farm Earned and Farm Income by Product Specialty, 2011-19

Product Specialty	Income Type	2011	2012	2013	2014	2015	2016	2017	2018	2019
General cash grain	Median Off-Farm Earned Income	$27,500	$32,500	$29,850	$32,500	$32,500	$26,250	$30,000	$31,264	$27,500
	Median Farm Income	$26,674	$26,155	$45,441	$35,567	$34,002	$37,095	$30,613	$28,361	$28,450
Wheat	Median Off-Farm Earned Income	$12,500	$33,721	$32,500	$37,412	$27,750	$36,000	$27,272	$47,426	$32,500
	Median Farm Income	$9,810	$19,638	$9,240	$10,310	$2,810	$14,836	$18,766	$787	$12,650
Corn	Median Off-Farm Earned Income	$27,500	$38,810	$40,993	$40,000	$37,382	$38,245	$37,500	$32,500	$32,122
	Median Farm Income	$25,038	$31,500	$26,827	$25,501	$21,055	$32,019	$24,500	$27,518	$27,826
Soybean	Median Off-Farm Earned Income	$27,500	$37,500	$38,595	$42,257	$42,404	$39,165	$37,500	$33,754	$37,500
	Median Farm Income	$3,972	$10,840	$10,468	$7,325	$2,613	$9,906	$7,596	$6,398	$5,732
Grain sorghum	Median Off-Farm Earned Income	$17,500	$68,824	$26,590	$31,130	$46,692	$70,000	$0	$40,620	$37,776
	Median Farm Income	-$973	$45,075	-$2,977	$2,455	$5,207	$2,188	$16,845	$33,044	$32,000
Rice	Median Off-Farm Earned Income	$1,538	$27,500	$29,245	$23,568	$36,250	$32,500	$27,500	$0	$32,500
	Median Farm Income	$28,747	$132,712	$64,040	$64,107	$55,452	$57,756	$82,248	$19,577	$132,703
Tobacco	Median Off-Farm Earned Income	$32,500	$39,532	$22,500	$17,500	$32,500	$0	$0	$27,500	$35,000
	Median Farm Income	$17,005	$4,740	$11,304	$20,932	$27,220	$82,658	$48,004	$10,067	$143,828
Cotton	Median Off-Farm Earned Income	$0	$32,500	$35,112	$8,750	$27,500	$12,707	$17,500	$27,500	$28,100
	Median Farm Income	$34,001	$20,920	$104,187	$28,943	$7,687	$70,473	$43,343	$54,827	$85,298
Peanut	Median Off-Farm Earned Income	$22,500	$32,500	$37,500	$37,500	$18,366	$27,500	$51,821	$0	$9,237
	Median Farm Income	$8,461	$18,785	$12,798	$29,610	-$1,930	$9,072	$50,929	$600	$30,313
General crop	Median Off-Farm Earned Income	$32,500	$37,700	$43,382	$37,500	$36,445	$40,000	$44,310	$36,680	$32,122
	Median Farm Income	-$1,353	-$1,183	$113	$63	-$325	-$650	-$780	-$727	$1,312
Fruits and tree nuts	Median Off-Farm Earned Income	$33,761	$40,127	$44,690	$45,000	$38,270	$34,283	$37,500	$36,680	$51,727
	Median Farm Income	-$2,270	-$600	$103	$733	$943	$2,201	$2,125	-$207	-$500
Vegetables	Median Off-Farm Earned Income	$12,792	$17,500	$32,500	$32,500	$19,000	$8,750	$45,000	$23,250	$42,510
	Median Farm Income	-$2,346	-$536	-$1,631	$4,291	$9,506	-$525	$4,850	-$700	$4,055
Nursery & greenhouse	Median Off-Farm Earned Income	$33,500	$34,854	$38,595	$33,968	$43,967	$35,755	$17,500	$47,426	$28,100
	Median Farm Income	-$622	$1,124	$1,606	$4,474	$2,218	$7,983	$2,569	-$960	$6,395
Beef cattle	Median Off-Farm Earned Income	$35,433	$39,532	$43,382	$45,000	$45,000	$45,170	$45,000	$45,000	$48,498
	Median Farm Income	-$3,161	-$2,494	-$2,126	-$1,018	-$1,895	-$2,507	-$2,332	-$3,112	-$2,398
Hogs	Median Off-Farm Earned Income	$37,500	$45,000	$62,500	$45,000	$55,000	$37,500	$32,500	$70,000	$54,923
	Median Farm Income	-$350	-$1,097	-$3,800	$5,726	-$764	$3,072	-$159	-$1,674	$32,660
Poultry	Median Off-Farm Earned Income	$22,320	$43,384	$44,510	$45,000	$45,000	$37,500	$35,542	$41,000	$32,122
	Median Farm Income	-$2,806	-$520	-$201	-$1,729	-$3,025	-$1,830	-$79	-$877	$5,150
Dairy	Median Off-Farm Earned Income	$0	$6,250	$12,500	$4,500	$13,970	$1,500	$1,000	$0	$6,250
	Median Farm Income	$38,000	$42,765	$50,602	$60,471	$34,634	$36,782	$58,113	$37,176	$46,340
General livestock	Median Off-Farm Earned Income	$41,782	$53,011	$45,000	$55,000	$54,234	$55,000	$52,843	$45,000	$51,727
	Median Farm Income	-$6,464	-$5,983	-$3,945	-$5,118	-$5,540	-$4,489	-$4,015	-$4,877	-$3,879

Debt-to-Asset Ratio and Off-Farm Income Share Charts

The charts of farm household debt-to-asset ratios and off-farm income are from the USDA Agricultural Resource Management Survey (ARMS) and special tabulations from the USDA-ERS. The household farm's debt-to-asset ratio compares outstanding debt in relation to total farm assets. A lower ratio suggests that the producer is in better financial shape to weather adverse farm events. USDA ARMS data from 2011 to 2019 indicate that the average debt-to-asset ratio for all farm households was just over 9.1%.

Exhibits A6-A17 illustrate the debt-to-asset ratios in comparison to average shares of off-farm income. The grey line and bar represent the average level of off-farm income or debt-to-asset ratio, respectively, for all farm households. Green chart lines indicate that the farm type has either higher off-farm income and/or a lower debt-to-asset ratio, than the national average. Orange chart lines show that the farm type had lower off-farm income and/or higher debt-to-asset ratios than the U.S. average.

By Farm Type

Exhibit A6. Off-farm Occupation Farm Debt-to-Asset Ratio and Off-Farm Income Share

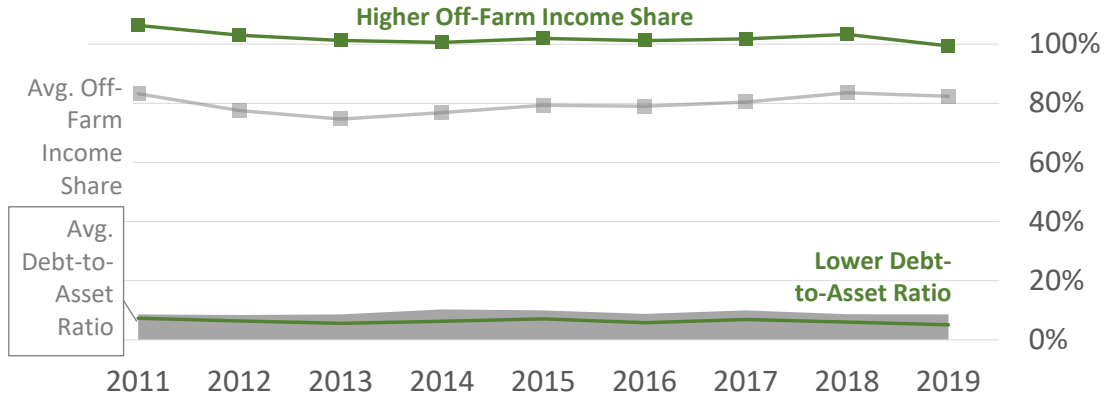


Exhibit A7. Retirement Farm Debt-to-Asset Ratio and Off-Farm Income Share

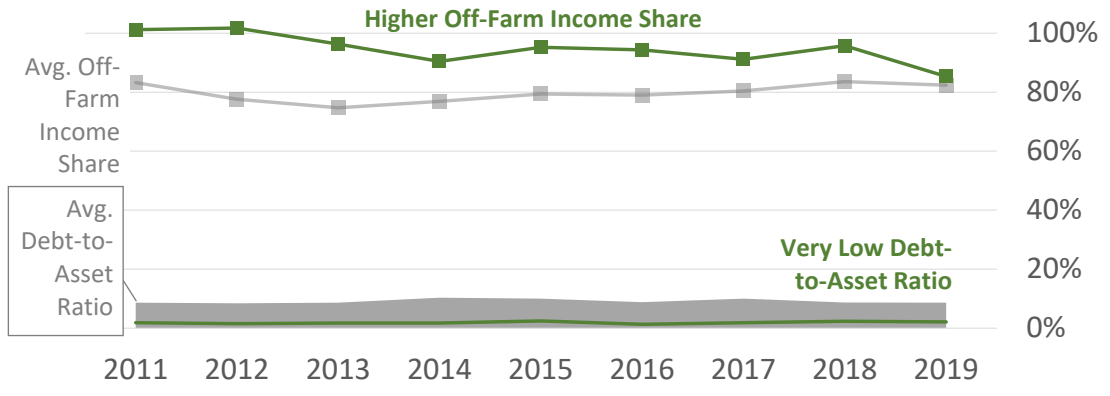


Exhibit A8. Lower Sales Farm Debt-to-Asset Ratio and Off-Farm Income Share

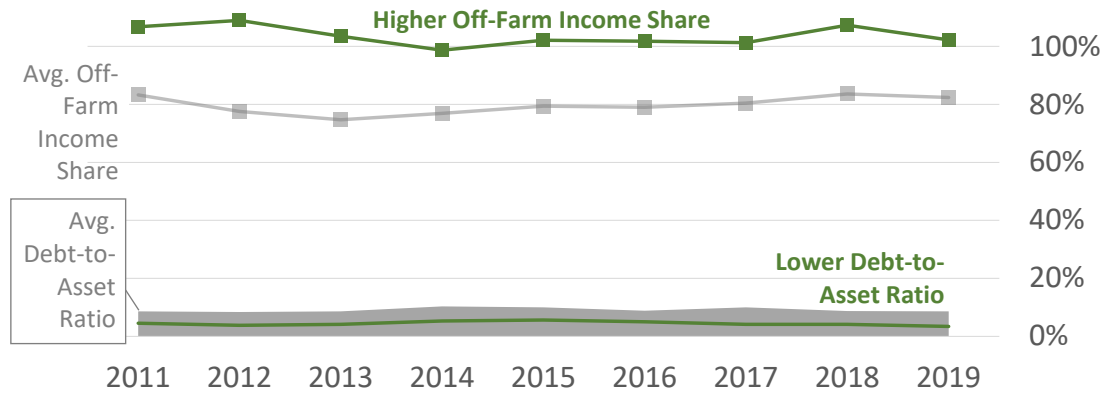


Exhibit A9. Moderate Sales Farm Debt-to-Asset Ratio and Off-Farm Income Share

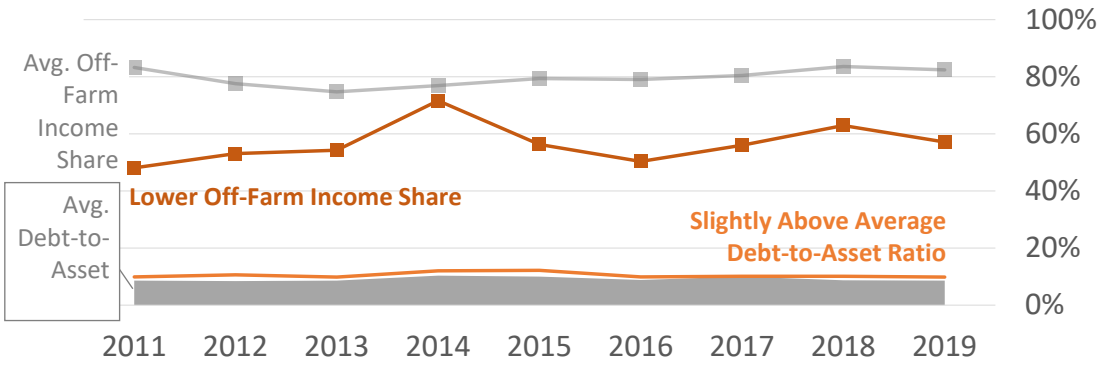


Exhibit A10. Midsize Farm Debt-to-Asset Ratio and Off-Farm Income Share

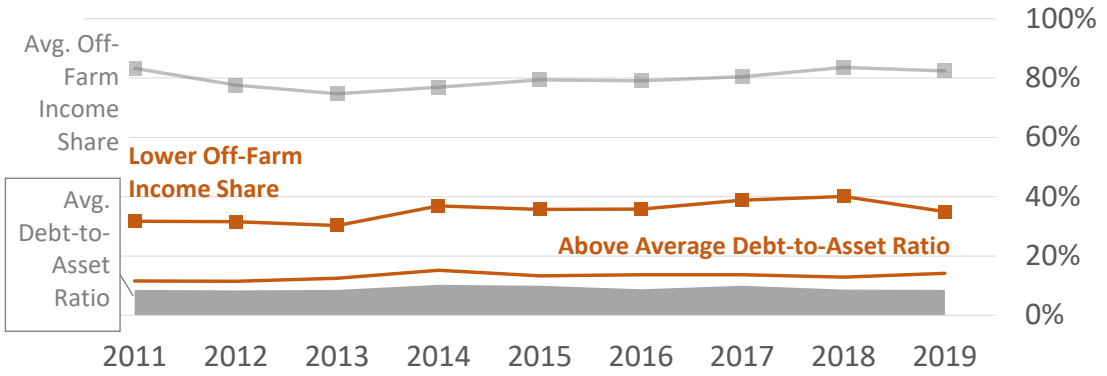


Exhibit A11. Large Farm Debt-to-Asset Ratio and Off-Farm Income Share

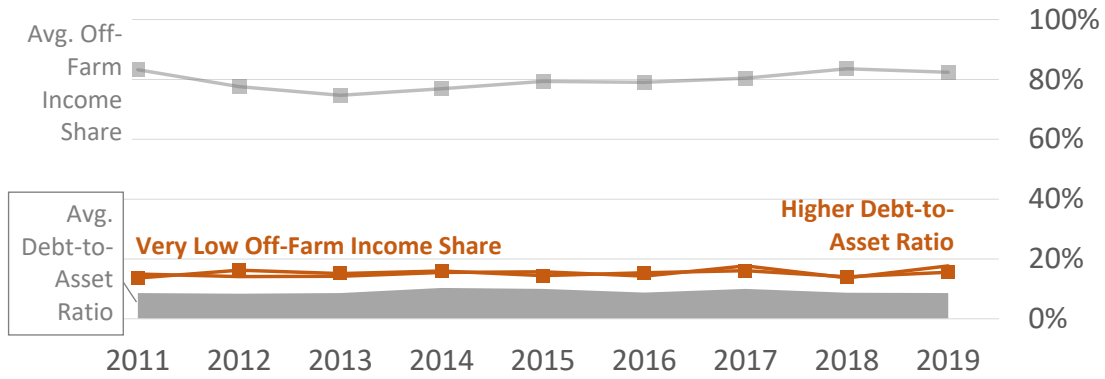
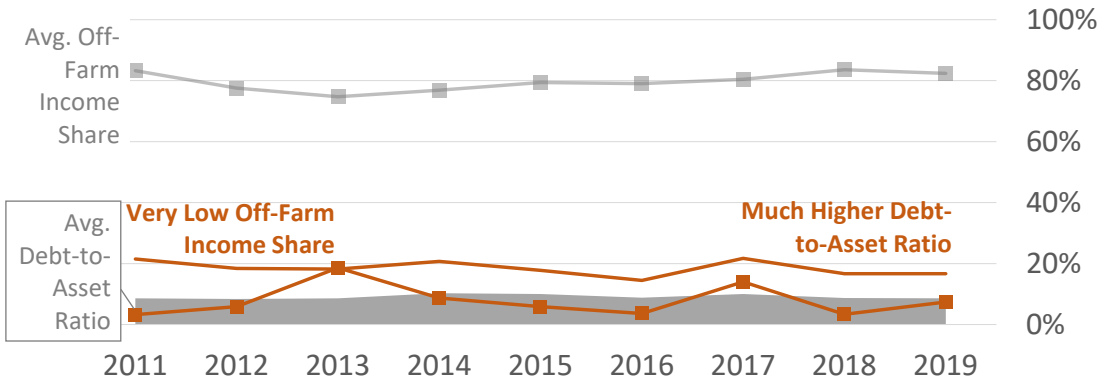


Exhibit A12. Very Large Farm Debt-to-Asset Ratio and Off-Farm Income Share



By Operator Age

Exhibit A13. Younger Operator (Under 35)
Farm Debt-to-Asset Ratio and Off-Farm Income Share

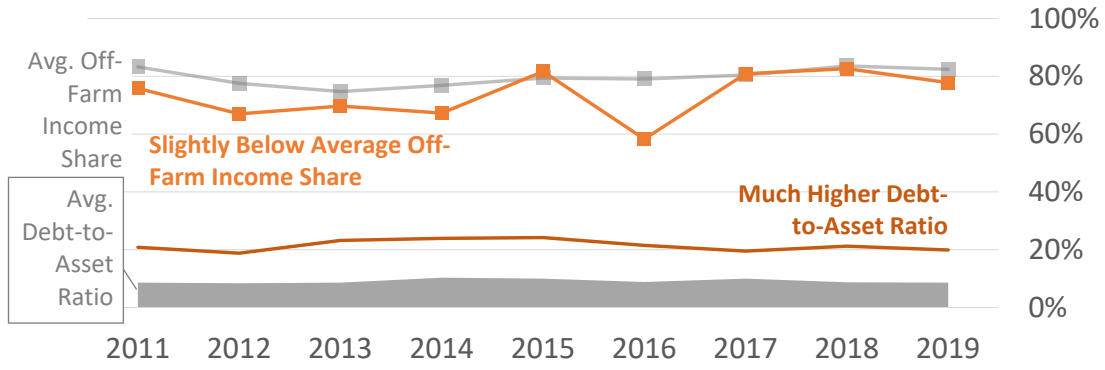


Exhibit A14. Operator Age 35 to 44 Years Old
Farm Debt-to-Asset Ratio and Off-Farm Income Share

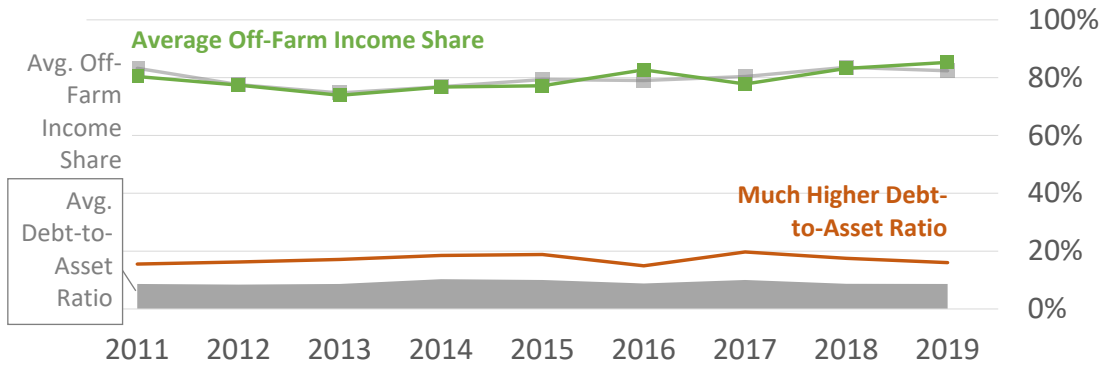


Exhibit A15. Operator Age 45 to 54 Years Old
Farm Debt-to-Asset Ratio and Off-Farm Income Share

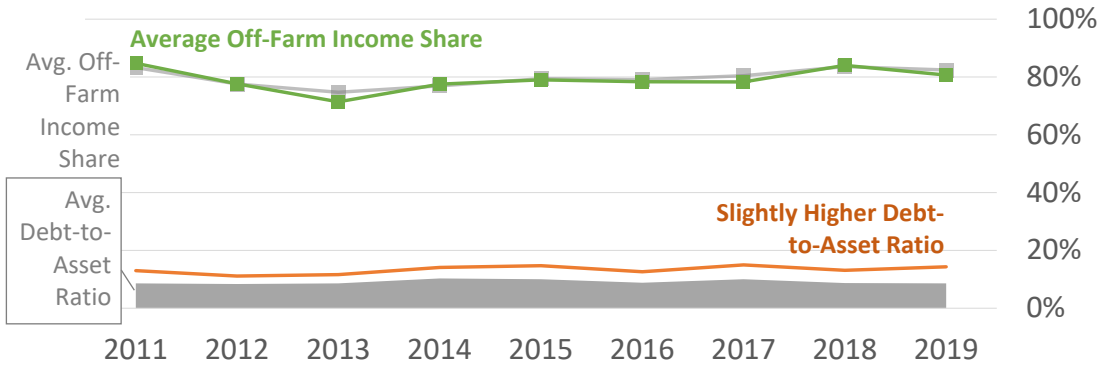


Exhibit A16. Operator Age 55 to 64 Years Old
Farm Debt-to-Asset Ratio and Off-Farm Income Share

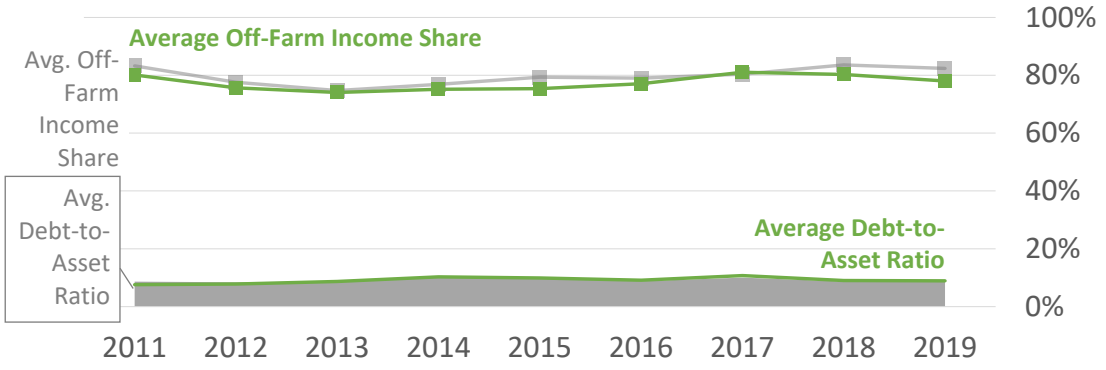
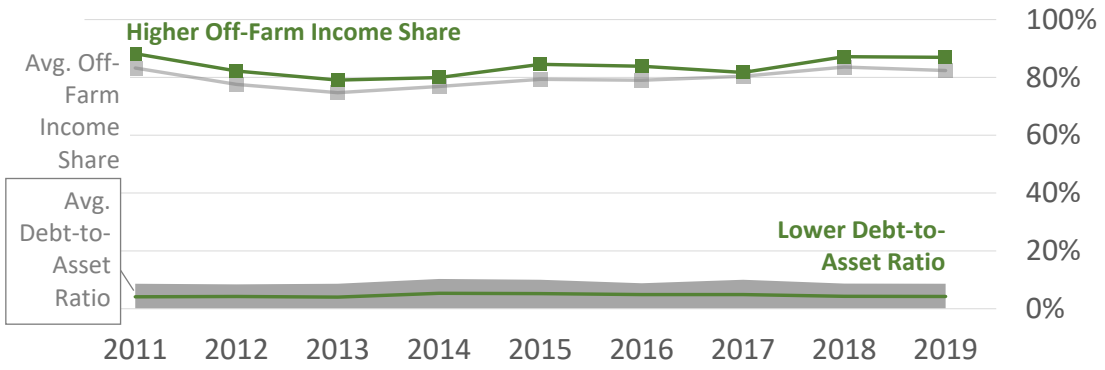


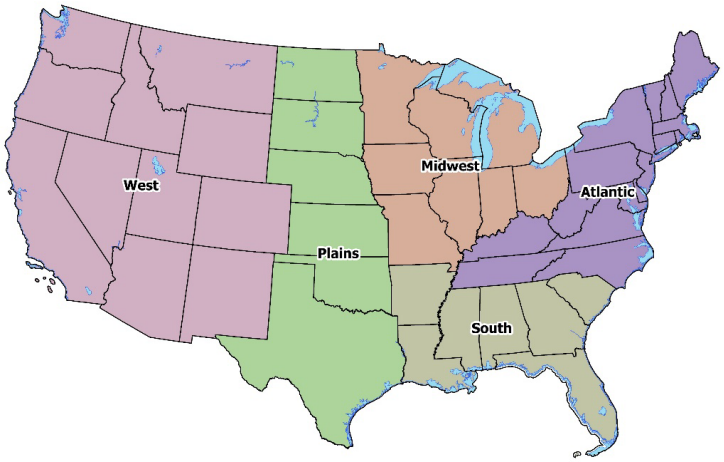
Exhibit A17. Operator Age 65 Years or Older
Farm Debt-to-Asset Ratio and Off-Farm Income Share



Regional Summaries by USDA Farm Production Regions

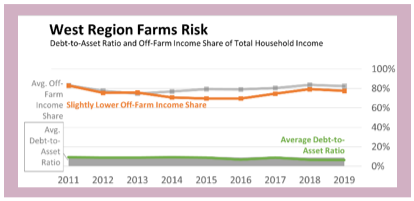
The following pages present USDA production region farm, debt, and commuting summaries to describe general farm characteristics such as number of farms, acres operated and value of production. Other income and debt characteristics are also described. Off-farm employment and commuting maps are provided.

USDA Farm Production Regions



West Region: Farm, Debt, and Commuting Summaries

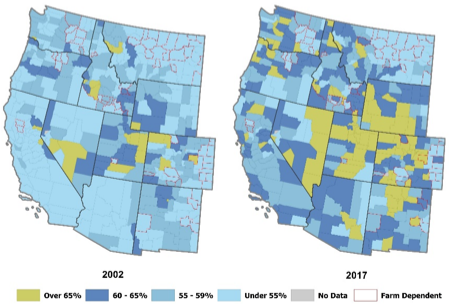
2019 Figures	Unit	All Family Farms	West region
Farms	Number	1,967,617	299,150
Total acres operated	1,000 Acres	733,958	172,008
Total value of production	Billions of Dollars	$293	$60
Acres operated per farm	Acres	373	575
Operator worked full-time on farm	% of farms	25%	24%
Percent of farms with debt	%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

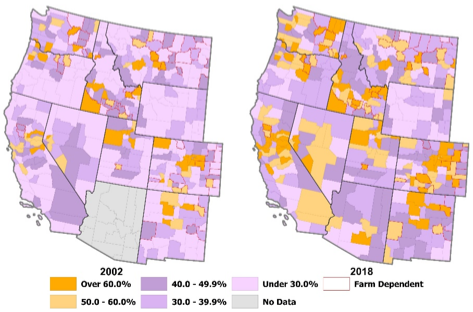
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

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



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

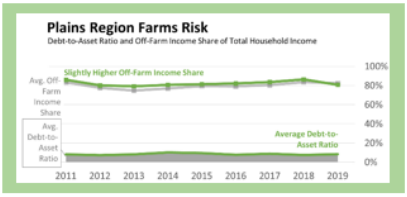
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
West	31%	35%	4%



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

Plains Region: Farm, Debt, and Commuting Summaries

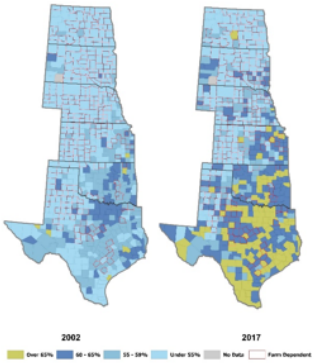
2019 Figures	Unit	All Family Farms	Plains region
Farms	Number	1,967,617	473,721
Total acres operated	1,000 Acres	733,958	293,458
Total value of production	Billions of Dollars	$293	$67
Acres operated per farm	Acres	373	620
Operator worked full-time on farm	% of farms	25%	26%
Percent of farms with debt	% of farms	26%	26%
Share of off-farm earned income	% of HH Income	59%	56%



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

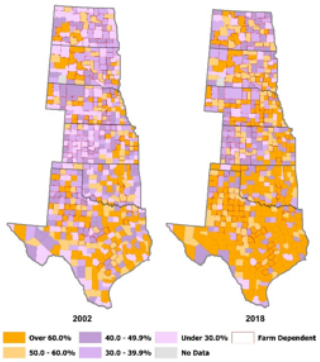
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Plains region	54%	62%	8%



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

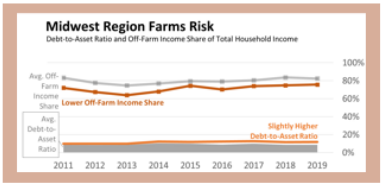
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Plains	33%	43%	10%



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

Midwest Region:
Farm, Debt, and Commuting Summaries

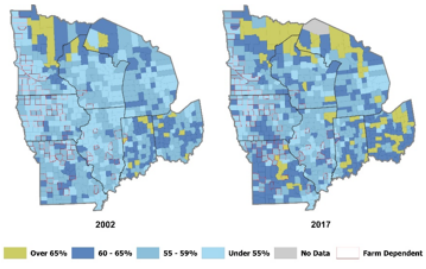
2019 Figures	Unit	All Family Farms	Midwest region
Farms	Number	1,967,617	555,935
Total acres operated	1,000 Acres	733,958	149,594
Total value of production	Billions of Dollars	$293	$96
Acres operated per farm	Acres	373	269
Operator worked full-time on farm	% of farms	25%	30%
Percent of farms with debt	% of farms	26%	31%
Share of off-farm earned income	% of HH Income	59%	53%



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

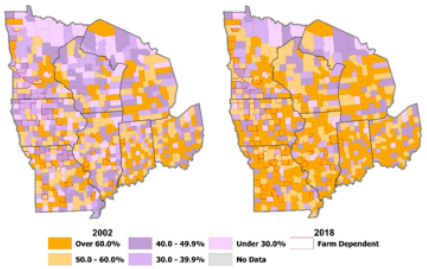
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Midwest region	57%	59%	3%



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

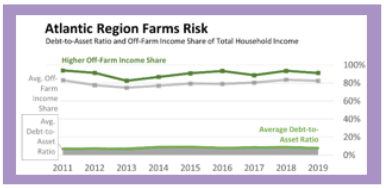
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Midwest	41%	48%	7%



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

Atlantic Region:
Farm, Debt, and Commuting Summaries

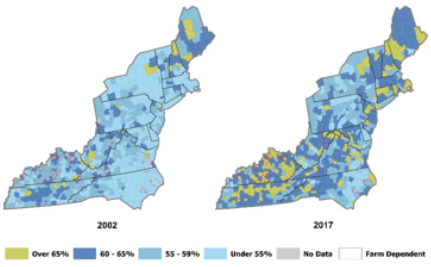
2019 Figures	Unit	All Family Farms	Atlantic region
Farms	Number	1,967,617	390,379
Total acres operated	1,000 Acres	733,958	60,584
Total value of production	Billions of Dollars	$293	$36
Acres operated per farm	Acres	373	155
Operator worked full-time on farm	% of farms	25%	22%
Percent of farms with debt	% of farms	26%	25%
Share of off-farm earned income	% of HH Income	59%	67%



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

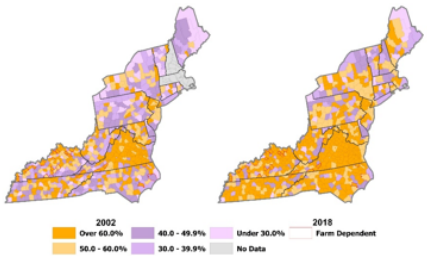
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Atlantic region	55%	61%	6%



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

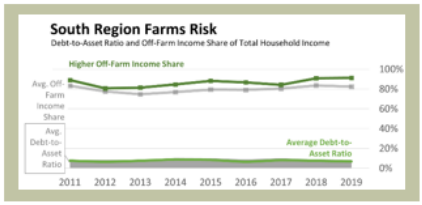
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Atlantic	45%	53%	8%



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

South Region:
Farm, Debt, and Commuting Summaries

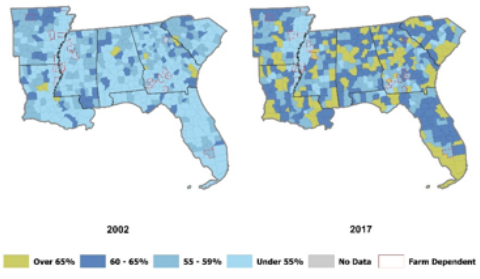
2019 Figures	Unit	All Family Farms	South region
Farms	Number	1,967,617	248,432
Total acres operated	1,000 Acres	733,958	58,315
Total value of production	Billions of Dollars	$293	$33
Acres operated per farm	Acres	373	235
Operator worked full-time on farm	% of farms	25%	21%
Percent of farms with debt	% of farms	26%	22%
Share of off-farm earned income	% of HH Income	59%	71%



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

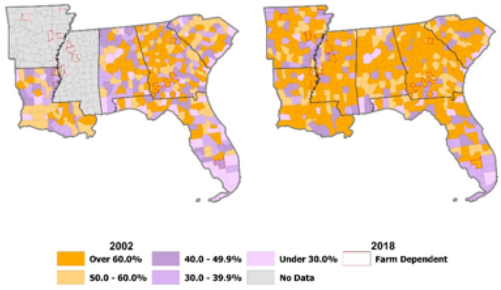
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
South region	54%	61%	8%



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

County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
South	40%	49%	9%

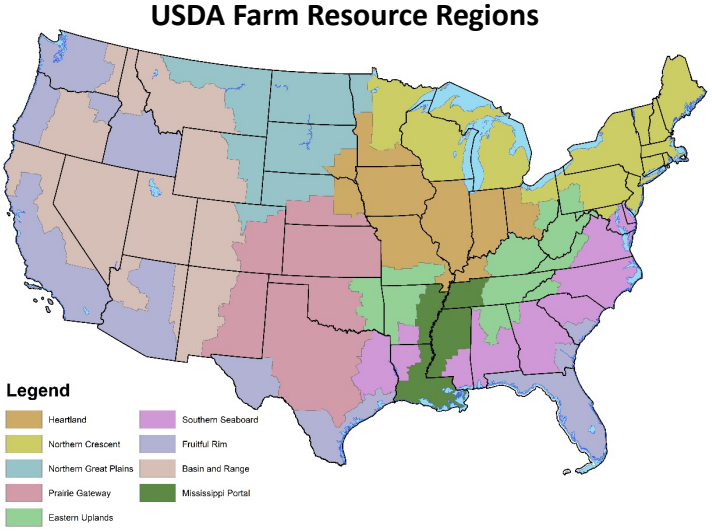


Sources: Farm figures and operator employment from U.S. Department of Agriculture, ERS, Agricultural Resource Management Survey, 2019 and Agriculture Census, 2002 and 2017. Commuting date from the U.S. Census Bureau and Bureau of Labor Statistics

Regional Summaries by USDA Farm Resource Regions

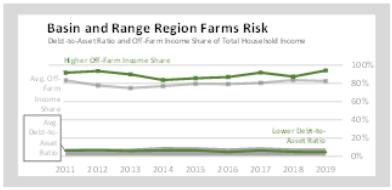
The following pages present USDA resource region farm, debt, and commuting summaries.

USDA Farm Resource Regions



Basin and Range Region:
Farm, Debt, and Commuting Summaries

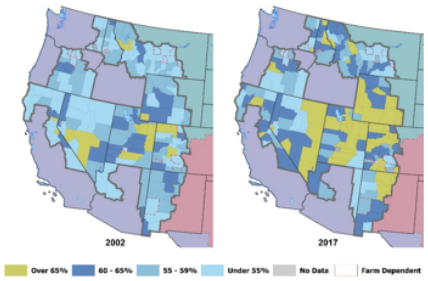
2019 Figures	Unit	All Family Farms	Basin and Range region
Farms	Number	1,967,617	120,560
Total acres operated	1,000 Acres	733,958	54,114
Total value of production	Billions of Dollars	$293	$10
Acres operated per farm	Acres	373	449
Operator worked full-time on farm	% of farms	25%	20%
Percent of farms with debt	% of farms	26%	17%
Share of off-farm earned income	% of HH Income	59%	68%



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

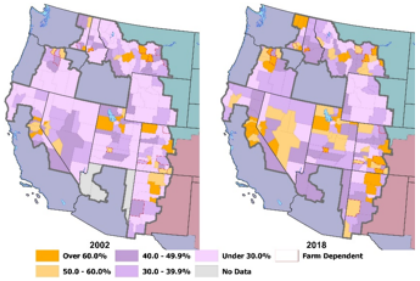
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Basin and Range	56%	61%	5%



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

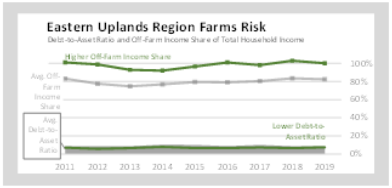
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Basin and Range	22%	30%	8%



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

Eastern Uplands Region:
Farm, Debt, and Commuting Summaries

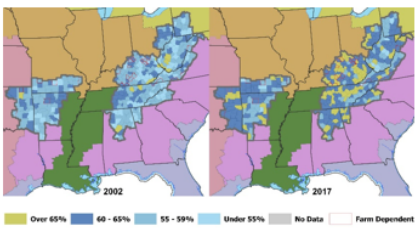
2019 Figures	Unit	All Family Farms	Eastern Uplands region
Farms	Number	1,967,617	289,303
Total acres operated	1,000 Acres	733,958	48,822
Total value of production	Billions of Dollars	$293	$18
Acres operated per farm	Acres	373	169
Operator worked full-time on farm	% of farms	25%	18%
Percent of farms with debt	% of farms	26%	26%
Share of off-farm earned income	% of HH Income	59%	73%



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

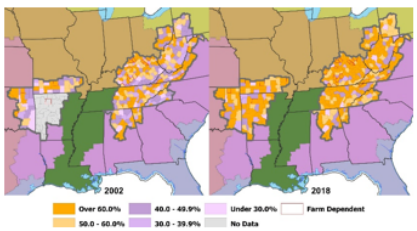
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Eastern Uplands	58%	63%	5%



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

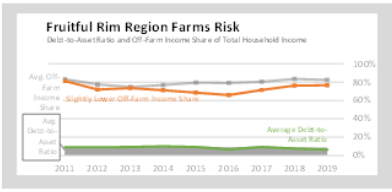
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Eastern Uplands	41%	49%	9%



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

Fruitful Rim Region:
Farm, Debt, and Commuting Summaries

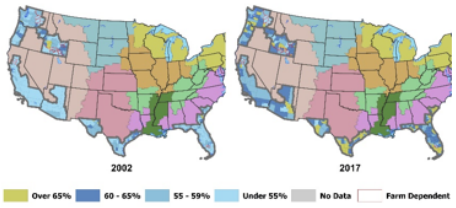
2019 Figures	Unit	All Family Farms	Fruitful Rim region
Farms	Number	1,967,617	216,811
Total acres operated	1,000 Acres	733,958	59,566
Total value of production	Billions of Dollars	$293	$48
Acres operated per farm	Acres	373	275
Operator worked full-time on farm	% of farms	25%	24%
Percent of farms with debt	% of farms	26%	18%
Share of off-farm earned income	% of HH Income	59%	50%



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

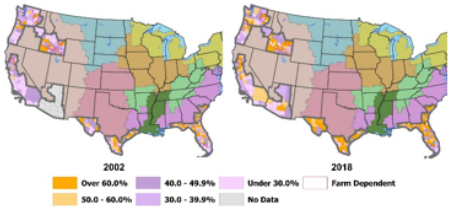
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Fruitful Rim	53%	62%	9%



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

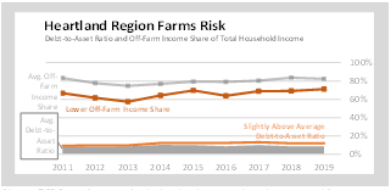
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Fruitful Rim	31%	36%	6%



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

Heartland Region:
Farm, Debt, and Commuting Summaries

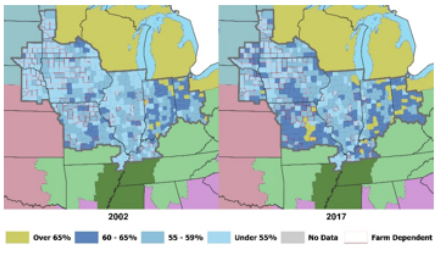
2019 Figures	Unit	All Family Farms	Heartland region
Farms	Number	1,967,617	421,890
Total acres operated	1,000 Acres	733,958	128,574
Total value of production	Billions of Dollars	$293	$84
Acres operated per farm	Acres	373	305
Operator worked full-time on farm	% of farms	25%	31%
Percent of farms with debt	% of farms	26%	30%
Share of off-farm earned income	% of HH Income	59%	50%



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

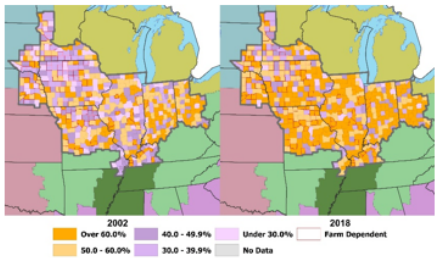
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Heartland	56%	59%	3%



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

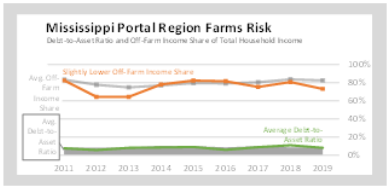
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Heartland	39%	47%	8%



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

Mississippi Portal Region:
Farm, Debt, and Commuting Summaries

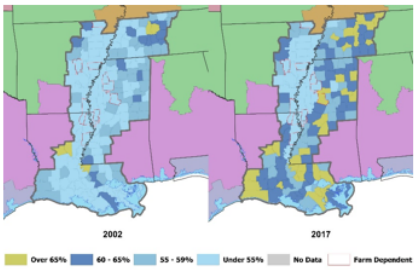
2019 Figures	Unit	All Family Farms	Mississippi Portal region
Farms	Number	1,967,617	59,812
Total acres operated	1,000 Acres	733,958	24,590
Total value of production	Billions of Dollars	$293	$10
Acres operated per farm	Acres	373	411
Operator worked full-time on farm	% of farms	25%	21%
Percent of farms with debt	% of farms	26%	29%
Share of off-farm earned income	% of HH Income	59%	54%



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

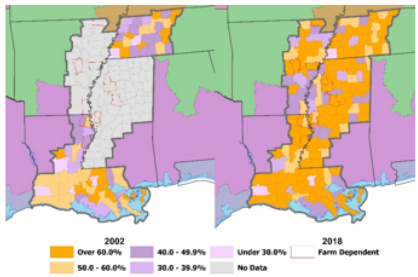
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Mississippi Portal	53%	60%	7%



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

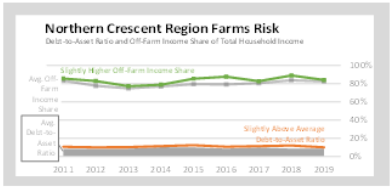
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Mississippi Portal	38%	49%	12%



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

Northern Crescent Region:
Farm, Debt, and Commuting Summaries

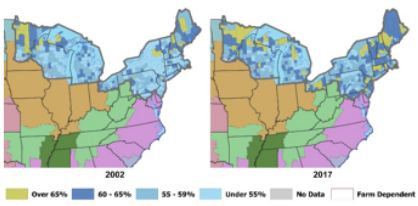
2019 Figures	Unit	All Family Farms	Northern Crescent region
Farms	Number	1,967,617	257,142
Total acres operated	1,000 Acres	733,958	45,918
Total value of production	Billions of Dollars	$293	$33
Acres operated per farm	Acres	373	179
Operator worked full-time on farm	% of farms	25%	31%
Percent of farms with debt	% of farms	26%	33%
Share of off-farm earned income	% of HH Income	59%	58%



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

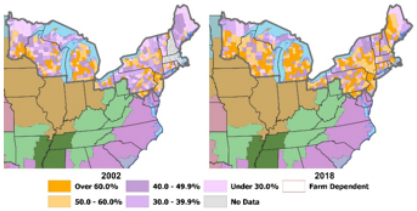
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Northern Crescent	55%	59%	4%



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

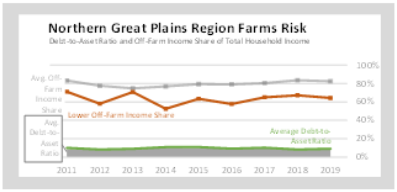
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Northern Crescent	44%	51%	7%



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

Northern Great Plains Region:
Farm, Debt, and Commuting Summaries

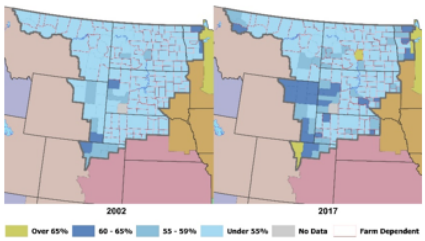
2019 Figures	Unit	All Family Farms	Northern Great Plains region
Farms	Number	1,967,617	85,126
Total acres operated	1,000 Acres	733,958	140,810
Total value of production	Billions of Dollars	$293	$20
Acres operated per farm	Acres	373	1,654
Operator worked full-time on farm	% of farms	25%	38%
Percent of farms with debt	% of farms	26%	36%
Share of off-farm earned income	% of HH Income	59%	45%



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

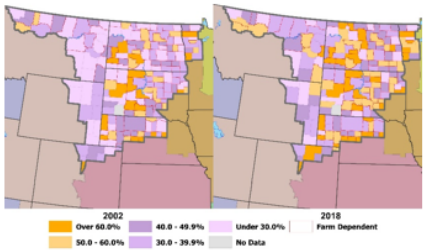
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Northern Great Plains	48%	54%	6%



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

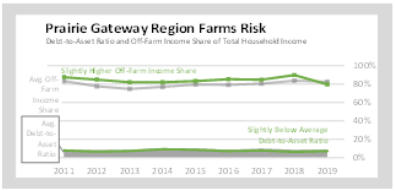
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Northern Great Plains	39%	45%	7%



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

Prairie Gateway Region:
Farm, Debt, and Commuting Summaries

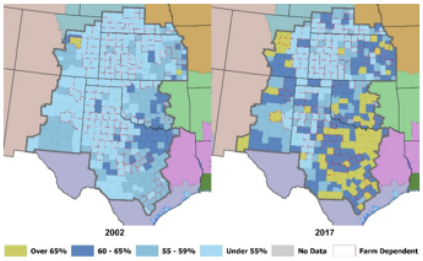
2019 Figures	Unit	All Family Farms	Prairie Gateway region
Farms	Number	1,967,617	292,964
Total acres operated	1,000 Acres	733,958	191,343
Total value of production	Billions of Dollars	$293	$43
Acres operated per farm	Acres	373	653
Operator worked full-time on farm	% of farms	25%	25%
Percent of farms with debt	% of farms	26%	25%
Share of off-farm earned income	% of HH Income	59%	58%



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

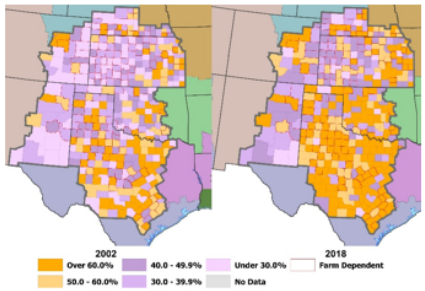
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Prairie Gateway	55%	63%	8%



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

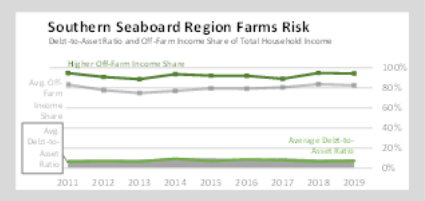
County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Prairie Gateway	38%	47%	9%



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

Southern Seaboard Region:
Farm, Debt, and Commuting Summaries

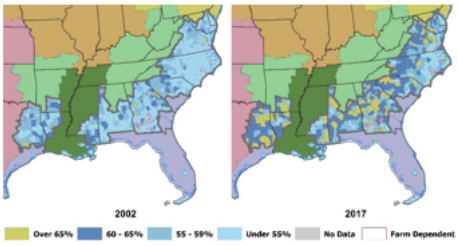
2019 Figures	Unit	All Family Farms	Southern Seaboard region
Farms	Number	1,967,617	224,009
Total acres operated	1,000 Acres	733,958	40,221
Total value of production	Billions of Dollars	$293	$28
Acres operated per farm	Acres	373	180
Operator worked full-time on farm	% of farms	25%	19%
Percent of farms with debt	% of farms	26%	18%
Share of off-farm earned income	% of HH Income	59%	74%



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

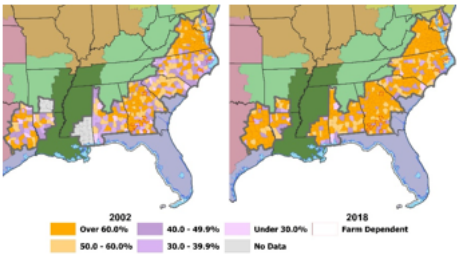
Percent of Principal Operators with Full- or Part-Time Emp., 2002-2017

County Type	2002	2017	% Point Change
All U.S. counties	54%	60%	6%
Southern Seaboard	54%	61%	7%



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

County Type	2002	2018	% Point Change
All U.S. counties	39%	46%	7%
Southern Seaboard	49%	58%	9%



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