



The Tenure, Ownership, and Transition of Agricultural Land (TOTAL) Survey Conducted by the National Agricultural Statistics Service

H. Hamer, Jr. | National Agricultural Statistics Service United States Department of Agriculture | Washington | USA

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ABSTRACT

In 2015, the National Agricultural Statistics Service (NASS) of the United States Department of Agriculture (USDA) in partnership with USDA's Economic Research Service (ERS) conducted the 2014 Tenure, Ownership, and Transition of Agricultural Land (TOTAL) survey, which collected information about farmers and ranchers who rent agricultural land to other farmers and ranchers, as well as about agricultural landlords who do not farm. The TOTAL survey encompasses land ownership income, expense, debt, asset, demographic, and other landlord characteristics to provide detailed information from all agricultural landowners. As the only source of detailed information on agricultural land ownership characteristics and economic data, TOTAL provides important statistics to government, academia, the farming industry, and others who use agricultural land ownership data for planning, policymaking, research, and market analysis. This paper discusses both the major findings from the survey and some of the challenges and successes using this approach, and will highlight major changes in agricultural land ownership identified in the survey results, and lessons learned for future landlord surveys.

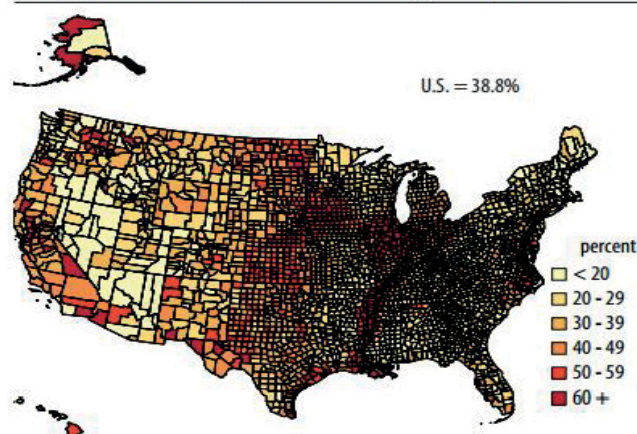
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1. Introduction and Survey Overview

Nearly 40 percent of U.S. farmland is rented or leased from someone else, according to the 2012 United States Census of Agriculture. Moreover, the concentration of rented farmland varies significantly across the country (Figure 1). To learn more about the rented land and who owns it, USDA's National Agricultural Statistics Service (NASS) conducted a special study in cooperation with USDA's Economic Research Service (ERS) as part of the Census of Agriculture program. The 2014 Tenure, Ownership, and Transition of Agricultural Land (TOTAL) survey collected data in the 48 contiguous states about farmers and ranchers who rent agricultural land to others, as well as about agricultural landlords who do not operate a farm or ranch. The survey covers land ownership income, expense, debt, asset, demographic, and other landlord characteristics to provide detailed information from all agricultural landowners. TOTAL was the first landlord study conducted by NASS since 1999.

Figure 1
Percent of U.S. Farmland Rented or Leased, by County, 2012



Source: USDA NASS, 2012 Census of Agriculture.

NASS collected data by mail, personal interviews, and online from over 60,000 landowners across the United States. The agency mailed the forms in December 2014. NASS followed-up by phone with landlord owners who did not respond by mail to maximize response. In some special cases, NASS visited the landowners' operation. Data collection concluded in April 2015, with further analysis and review continuing until the results were published on August 31, 2015.

In order to customize data collection for different types of landlords, NASS used two versions of the TOTAL survey. One version focused on operator landlords (landlords who also farm agricultural land) and the other version focused on the non-operator landlords who are not involved in farming or ranching. The sample was designed to produce national data for the United States, plus state-level data for 25 states with the highest agricultural cash receipts over a three-year period, 2010 through 2012.

2. Landlord Ownership Arrangements

The survey results showed that, in 2014, more than 2 million landowners rented out 353.8 million acres of land for agricultural purposes. This is 39 percent of the 911 million acres of farmland in the surveyed states (and consistent with the 2012 Census findings).

Of these landowners, 13 percent were farmers and ranchers (operator landlords) and 87 percent were landlords who did not operate a farm (non-operator landlords). Non-operator landlords include those who rent out land individually or as participants in a variety of ownership arrangements (such as partnerships, trusts, corporations, municipalities, and limited liability companies or LLCs). A small number rent out land under more than one arrangement.

Table 1

Landlords and Acres Rented Out by Ownership Arrangements, 2014

	Landlord Arrangements ^a		Acres Rented Out	
	(number)	(percent)	(millions)	(percent)
Operator Landlord	280,044	13	70.3	20
Non-operator Landlord	1,851,796	87	283.4	80
Individual	1,092,551	51	138.2	39
Partnership	361,826	17	52.8	15
Trust	249,632	12	50.6	14
Corporation	91,011	4	31.5	9
Other	56,776	3	10.4	3
Total	2,131,840	100.00	353.8	100.0

^aLandlords who rent out land under more than one arrangement are included in all relevant arrangements.

Numbers in this and other tables may not add due to rounding.

Source: USDA NASS, 2014 Tenure, Ownership, and Transition of Agricultural Land Survey.

Of the acres rented out, 20 percent were rented out by operator landlords, and 80 percent by non-operator landlords (Table 1). A similar survey in 1999, the Agricultural Economics and Land Ownership Survey (AELOS), found that 12 percent were operator landlords and 88 percent were non-operator landlords. Different methodologies between AELOS and TOTAL make direct comparisons difficult, but AELOS found that landlords rented out 394.3 million acres in 1999.

As far as income, in 2014, landlords received \$31.2 billion in rent payments. Their expenses were \$9.2 billion, and their debt related to the land they rented out was \$32.8 billion. The value of the land and buildings they held on their rental acres was \$1.1 trillion. Of the acres rented out, 89 percent of acres rented out by operator landlords, and 94 percent of acres rented out by non-operator landlords, were fully paid for.

3. Landlord Demographics

Of the 1.9 million non-operator landlords, 1.4 million can be called "principal landlords." They are either individual owners or the principal in a partnership arrangement.

The average age of principal landlords in 2014 was 66.5 years. Principal landlords are older than principal farm operators, whose average age was 58.3 years in 2012. (The 2012 Census of Agriculture defines a principal operator as the person who makes the day-to-day business decisions for a farming operation.) More than half (57 percent) of principal landlords were 65 years or older in 2014. They account for 67 percent of the rent received, 67 percent of the value of land and buildings, and 32 percent of the debt related to acres rented out. (Table 2)

Most principal landlords have college education; 25 percent have some college, and 38 percent have four or more years.

In terms of race, 97 percent of principal landlords are white. Two percent are Hispanic, regardless of race. Landlords who are white accounted for 98 percent of rent received, expenses, and the value of land and buildings, and 99 percent of debt, in 2014.

Of the principal landlords, 54 percent are not currently in the paid workforce; 41 percent are employed outside of farming. Also, 45 percent have never farmed.

Table 2

Principal Landlords: Income, Expenses, Assets, Debt, by Age
(\$ billions and percent)

	Number of Principal Landlords ^a	Rent Received	Expenses	Value of Land and Buildings	Debt
Total	1,432,065	15.9	4.9	621.8	18.2
	percent	percent			
< 55 years	18	11	14	12	34
55 to 64 years	25	22	22	21	34
65 to 74 years	29	30	29	31	18
75 to 84 years	19	25	24	24	12
85+ years	9	12	11	12	2
All ages	100	100	100	100	100

^aNon-operator landlords who are individuals or the principal partner in a partnership.

Source: USDA NASS, 2014 Tenure, Ownership, and Transition of Agricultural Land Survey.

4. Land Uses and Economics

Of the total land rented out by operator and non-operator landlords, 63 percent was for cropland and 34 percent was for pasture. The remaining 3 percent was for other uses such as forest/woodland not pastured, buildings, ponds, ditches, and wasteland. In addition to renting out the land, landowners also lease or sell various rights, including mineral rights, recreational rights, development rights, and wind rights. Non-operator landlords leased oil and gas rights on 31.9 million acres and sold those rights on 4.1 million acres. Out of total farmland in the United States, oil and gas rights were leased on 61.0 million

Table 3

Agricultural Land: Selected Rights Leased and Sold, 2014
(millions of acres)

	Land Rented Out by Non-operator Landlord	All Farmland
Oil and gas rights leased	31.9	61.0
Other rights leased	14.9	35.6
Of which: wind rights ^a	3.5	
Oil and gas rights sold	4.1	11.3
Other rights sold	1.0	3.4
Of which: development rights ^a	0.7	

^aAvailable for non-operator landlords only.

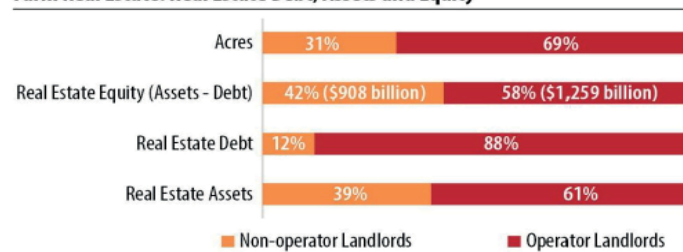
Source: USDA NASS, 2014 Tenure, Ownership, and Transition of Agricultural Land Survey.

acres and sold on 11.3 million acres. (Table 3)

Farm real estate financial statistics varied between non-operator landlords and operator landlords. Operator landlords held 69 percent of the acres, but 88 percent of the farm real estate debt and 61 percent

Figure 2

Farm Real Estate: Real Estate Debt, Assets and Equity



Source: Calculations based on TOTAL and USDA Economic Research Service, Farm Sector Balance Sheets.

of the farm real estate assets (Figure 2). Operator landlords held 58 percent of the farm real estate equity, or \$1.259 trillion; non-operator landlords held 42 percent of the farm real estate equity, or \$908 billion.

5. Land Acquisition and Transition

Operator landlords purchased more than 60 percent of the land they rent out from a non-relative, a relative, or at auction. This is similar to the way all farmers in the United States acquired farmland. Non-operator landlords inherited or received as a gift more than 50 percent of the land they rent out.

The TOTAL survey asked landowners about their plans for transferring ownership in the next five years. Farmers were asked what they plan to do not only with the land they currently rent out for agricultural purposes but with all their land. In the next five years, operator landlords expect to transfer 15 percent, and non-operator landlords 14 percent, of the land they rent out. Operator landlords plan to transfer a larger percentage (70 percent) through trusts than non-operator landlords (40 percent). (Table 4)

In terms of their total land, not just acres rented out, landowners plan to transfer 91.5 million acres or 10 percent of all they own. These data do not include the 57.1 million acres landowners have put or plan to put into wills.

Table 4

Five-year Plan to Transfer Acres Rented Out and All Farmland
(millions of acres and percent)

	Operator Landlord		Non-operator Landlord		All Farmland	
	Acres (mil.)	%	Acres (mil.)	%	Acres (mil.)	%
Put/keep in trust	7.3	70	15.4	40	44.2	48
Sell to non-relative	1.7	17	10.5	27	21.1	23
Gift	0.5	5	8.0	21	12.6	14
Sell to relative	0.9	8	4.2	11	13.2	14
Other	-	-	0.5	1	0.5	1
Total to transfer	10.4	100	38.5	100	91.5	100

Source: USDA NASS, 2014 Tenure, Ownership, and Transition of Agricultural Land Survey.

6. Lessons Learned for Future Landlord Surveys

Conducting a new survey after 15 years presented many challenges. Some challenges were not easy to anticipate. Other challenges such as constructing a quality list of landlords to sample were anticipated challenges we addressed throughout the survey cycle. Some other lessons learned related to defining landlords, data collection for sub-leasing arrangements, and comparisons between the location of landlords and the land they rent. These specific challenges are described below.

One of the most significant lessons learned was that the definition of a landlord needed to be specified in more detail. There was no clear definition of who or what is a landlord. Depending on the goal, a landlord could be defined as the entity that is mailed a questionnaire, or it could be defined as all the individuals associated with all landlord arrangements within each entity. While tenants usually pay rent to one entity for each parcel of land, they don't necessarily know all the owners, especially if the landlord is a corporation. Obviously, counting all people with a connection to a corporate landownership arrangement as a landlord would be problematic. However, some measure of size of corporate landlords will become more important as corporate land ownership grows. As far as data collection, identifying the survey respondent for corporate partnerships will be an issue to further address in future surveys. Also, because the questionnaire contained three sections for the landlord arrangements – individual/partner, corporate/trust, and other, counting the entities with multiple arrangements created an issue when combining acreage data to landlord counts.

Sub-leasing arrangements created special data collection challenges. A small percentage (less than 1 percent) of farm operators rented land from others and also subleased at least a portion of the same land to other farmers. In order to be efficient, the questionnaires were used to collect all information for a farmer who is also a landlord. But with a sub-leasing arrangement an even more complex questionnaire would be needed.

Additional data on the location of the landlords would have been useful to data users. The data were summarized by the location of the land, which is appropriate for assigning expenses and land values to corresponding states and regions. However, summarizing the number of landlords by where they reside might produce results that are also valuable for analysis.

7. Conclusion

The TOTAL Survey provides valuable data that were not available in 15 years, and will be used for many years in the future. The data are a comprehensive view of all land, including agricultural land owned by non-operator landlords, as a follow on component of the United States Census of Agriculture program. NASS conducted the TOTAL survey in collaboration with the USDA Economic Research Service (ERS). Many stakeholders have used these data, and many more will use the data in years to come. As future surveys are planned, the need for landlord data by more and more stakeholders will only continue to grow. There is already a growing list of requests for more detailed data on topics such as future transition to agricultural land, corporate landlord characteristics, and barriers to land ownership by new and beginning farmers. In 2014, the TOTAL survey provided a start into understanding the changes and complexities of land ownership in the United States. More information on the survey, methodology, data collection and results and other products can be found on the USDA NASS website at: www.agcensus.usda.gov/Publications/TOTAL.