# WHAT WE KNOW ABOUT THE DEMOGRAPHICS OF U.S. FARM OPERATORS 

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## Introduction

Every five years when the census of agriculture results are released new alarms are sounded about the advancing ages of farmers and what it will mean for farm structure and farm succession. Unfortunately, census collections through 1997 provided limited information to shed light on those concerns. This was particularly true since demographic data such as gender, age, race, and Hispanic ethnicity were collected only for the "principal" operator of each farm. However, for the 2002 Census of Agriculture information was collected for the first time on the total number of operators on each farm, and demographic information for the first three operators. Another key 2002 addition was asking how many individuals lived in the household of each operator.

This paper is one of the first attempts to glean meaning from the new questions. Most tables in the paper extract information already available in the 2002 Census electronic files. A few data tables were generated by reanalysis of the originally reported data for multiple operators of the same farm. All tables are available on the National Agricultural Statistics Service (NASS) Web site at www.usda.gov/nass/ under Census of Agriculture.

Two caveats are essential. First, the 2002 Census of Agriculture did not collect data specifically on farm operation succession planning. Farm succession surveys require a fairly long series of questions in order to gain a fuller understanding of the considerations which have gone into succession planning-many more questions than could be asked in a general purpose census data collection.

Secondly, since this paper examines interrelationships among the available data items in order to identify operations which appear to have potential succession plans in place, it assumes there is a desire to continue the present operation as an entity. That would ignore operations where there may be succession plans to merge the present operation with operations of other family members. It also provides no information on operations where the present owners/operators plan to maintain land ownership within the family but the succession plan is to select an outside tenant to farm the land.

## Average Ages of Principal Operators

The average age of all U.S. principal farm operators in the 2002 Census was 55.3 years of age. This average has been more than 50 years of age since at least the 1974 Census of Agriculture and has increased in each census since 1978-usually by one year or more from one census to the next. (See Table 1.) In addition, the percentage of principal farm operators 65 or older has risen consistently since 1978 (when it was about 1 in 6 ) and reached 26.2 percent (more than 1 in 4 ) in 2002. At the other end of the spectrum, the percentage of principal operators with average ages of less than 35 years has been declining since 1982, when it was 15.9 percent, and was only 5.8 percent in 2002. (On a relative basis,
the percent of principal operators who are 34 years or younger has dropped about 20 percent in each subsequent census since 1982.)

Map 1, from the NASS on-line Census of Agriculture Agricultural Atlas, displays county level average ages of principal farm operators. Map 2 displays the county percentages of principal farm operators 65 years of age or greater. Both maps indicate, in general, lower average ages in the upper Midwest and along the Mississippi River Delta in Arkansas.

The average age of principal farm operators in all states in 2002 was above 50 years, with 52.9 in Minnesota being the lowest average and 57.2 in Mississippi being the highest. (See Table 2.) One factor that does seem to influence average age by State is climate. The 13 states with average ages of 54.1 years of age or less (1.2 years under the National average) are Idaho, Indiana, Maine, Minnesota, Nebraska, New Hampshire, New York, Ohio, Pennsylvania, South Dakota, Vermont, Wisconsin, and Wyoming-all cool or colder climates. The nine states with average ages of 56.5 years of age or more (1.2 years over the National average) are Alabama, California, Florida, Georgia, Hawaii, Mississippi, South Carolina, Texas, and Virginia-all in warmer parts of the country than those with the lower average ages. It appears these relationships have been there over time. The average age of Alaska, Iowa, Nebraska, North Dakota, and South Dakota farmers was under 50 years of age until 1992 and until 1997 for Minnesota.

Another way of evaluating age relationships is to examine average age by value of sales. There are definite age/income class patterns in the 2002 Census of Agriculture data. (See Table 3.) The average ages of principal farm operators in all market value of sales categories above $\$ 50,000$ were below the National average for all farm operations, with the lowest average of 51.5 years occurring for operations with sales between $\$ 500,000$ and $\$ 1$ million. The same relationships and age of 51.5 also held when sales and reported government payments were combined. In contrast, all but one of the market value of sales classes below $\$ 50,000$ had average ages of principal farm operators above the National average. If market value of sales and reported government payments are combined, both the $\$ 10,000$ to $\$ 24,999$ and $\$ 5,000$ to $\$ 9,999$ income classes had average ages of 57.0 years of age. If government payments are excluded, the highest average age for any category is 56.6 years of age for $\$ 10,000$ to $\$ 24,999$.

Since farms and ranches in the United States vary so greatly in size, we might not expect clear cut relationships of age and farm size. However, for completeness those 2002 results are shown in Table 4. Principal farm operators of farms 49 acres in size or smaller and those with farms of 500 acres or more had average ages less than the 55.3 overall average. The highest average ages ( 57.0 years or higher) were for the 3 size categories between 140 and 259 acres.

One significant way of examining average age is by the type of farming being practiced. There are definite age/type of farm relationships in the 2002 Census of Agriculture data. (See Table 5.) When each farm is classified into the North American Industry Classification System category description which best defines its major agricultural activity, we find that the average ages of farm operators were higher than the National average for only 3 of the 14 categories. However, those 3 categories of beef cattle ranching and farming with an average age of 56.7 years, fruit and tree nut farming with an average age of 57.7 years, and "other crops" farming with an average age of 57.5 years account for 56.5 percent of all U.S. farms. Beef cattle ranching and farming type of farms themselves make up 31.2 percent of all farms. The lowest 3 average ages of principal farm operators by type of farm were 49.2 years of age for hog and pig farming, 50.2 years of age for dairy cattle and milk production, and 51.6 years of age for poultry and egg production. The lowest average age of principal farm operators for any of the crop specializations was 52.4 years of age for cotton farming.

Table 6 presents average age comparisons for a number of other classifications of farms. Principal farm operators who indicated their primary occupation was farming averaged 57.0 years of age, compared to 53.0 for those who indicated an occupation other than farming. Principal farm operators who were full owners of their operations averaged 57.0 years of age, compared to 53.1 years of age for part owners and 47.2 for those who were tenants without owning any land. Principal farm operators who were sole operators averaged 56.2 years of age, compared to 53.8 years of age for those with multiple operators.

Also included in Table 6 is information by type of organizational structure. Principal farm operators of individual or family operations averaged 55.3 years of age, the same as the average age of all U.S. principal operators. Principal farm operators for the 129,593 total partnership operations averaged 56.0 years of age, while the 69,417 principal operators for the partnerships which were registered under state law averaged 55.4 years of age. The lowest average ages for principal operators were for those operating corporate farms, with an overall average of 53.9 years of age. Principal operators of family corporations averaged 54.1 years of age for both all family corporations and those with 10 or fewer stockholders. Principal operators of corporations other than family averaged 51.8 years of age and 52.0 years for those corporations other than family with 10 or fewer stockholders. The highest average age of principal farm operators (57.2 years of age) was reported for those in charge of farms classified as "other," which includes cooperatives, estates, trusts, institutional, etc.

## Multiple Operator—Multiple Household Data

One of the most striking 2002 Census of Agriculture data features is that NASS estimated the number of U.S. farmers for the first time. Past censuses had collected only "principal" operator information, even in cases such as partnerships where shared responsibilities obviously existed. That led to the common misstatement that the U.S. has only 2 million farmers; the statement should have been we have 2 million farms.

The 2002 census form asked how many individuals on each operation qualified as farm operators and how many were women. To avoid adding additional pages, space was provided for detailed demographic information on only the first three operators which may lead to some confusion in reviewing 2002 data tables. Some 62.3 percent of all farms reported only one operator but, in total, $\underline{3,115,172}$ operators were identified on the $2,128,982$ farms. Of the operators, some 847,832 were women.

Table 9 presents a basic state by state summary. It illustrates that the percentages of farms reporting multiple operators vary greatly by state, and without definite regional patterns. Six states, Arizona, Nevada, New Hampshire, Oregon, Vermont, and Wyoming, reported that over half of all farms had multiple farm operators. Ten states, Alabama, Georgia, Illinois, Iowa, Kansas, Louisiana, Mississippi, North Carolina, North Dakota, and South Carolina, reported that less than one third of their farms had multiple operators.

Selected demographic information is provided in Table 7 for the 3,053,801 operators listed as the principal, second, or third operators. This table provides a perspective that some younger individuals are in fact engaged as farm operators. While the average age of principal operators was 55.3 years of age, the average age of second operators was 49.5 years and the average age of third operators was 41.9 years. The age distributions of second and third operators are significantly different than those of principal operators. Instead of the 26.2 percent of principal operators who are 65 years or older, the comparative figures are 12.9 percent of second operators and 11.0 percent of third operators. Instead of
the 5.8 percent of principal operators who are under 35 years of age, 11.8 percent of second operators and 35.7 percent of third operators are in the younger age categories.

The number of women principal operators increased by 13.4 percent from the 1997 Census of Agriculture to 2002, in line with the double digit increases in all recent censuses of agriculture. Women operators are 11.2 percent of principal operators but 27.2 percent of all operators. The average age of women principal operators declined from 57.2 years in 1997 to 56.7 years in 2002. The average ages of women second and third operators in 2002 were 50.3 and 45.2 years, respectively (shown in Table 53 of the 2002 Census of Agriculture Volume I results).

New questions were also added on the number of households sharing in each operation's net farm income and the number of people living in the households of the first three operators. (The income sharing results are summarized in Table 8.) Most $(1,647,030)$ operations reported only one household but 313,574 reported two families, 62,987 reported three families, 28,846 reported four families, and 21,173 reported five or more families. (Note the total does not equal the number of all farms since the question did not apply to hired managers.)

The data on numbers of people living in the households of the first three operators were summarized (by race) in Table 52 of the 2002 Census of Agriculture Volume I results. A total of 5,717,302 people were reported as living in the households of principal operators. In addition, 709,821 live in households of the second operators (if they have a separate household) and 186,540 in households of third operators. NASS was not attempting to create a new "farm population" data series but this information flowed naturally from the new questions.

In addition, the census of agriculture added a new question on the share of the principal operator's income coming from the farm operation (See Table 8.). For all principal operators (excluding hired managers), 63.1 percent reported less than 25 percent of their income coming from the farm operation. Only 16.3 percent reported that 75 percent or more of their income came from the farm operation.

## Analysis of Multiple Operator Data

The relationship data for multiple operators were examined in alternative ways in order to determine what might constitute evidence that farm succession plans are in place. The overall approach was essentially a three dimensional review of age, gender, and household of residence among the principal, second, and third operators. After that review, the conclusion was to define an operation with operators of "different generations" as possibly having a succession plan. For the analyses in this paper, different generation is defined as a difference of more than 20 years between the oldest and at least one of the other operators based on actually reported ages.

Previously published tables showed that the majority of the combined second and third operators are women. Tabulation of the data by operator number, however, shows that women only make up the majority of the second operators. The majority ( 63.5 percent) of the third operators were men (See Table 7). The question then arises as to the relationships between the multiple operators.

One analysis approach was to examine gender relationships between the principal operator and the second and third operators. It appears that the majority of the male-female and female-male relationships may be husband-wife operations. Several data relationships suggest these combinations of operators are spouses. Each operator was asked to report the number of persons living in their household. If the principal operator reported a household total that included other operators, those
operators were to report zero members in their household. Most male/female and female/male combinations of first and second operators report residing in the same household. In addition, most of these combinations (male-female, female-male) of operators report being of similar age, with the women likely to be a few years younger, typical of age relationships between spouses in this country.

The male-male and female-female operator relationships are much more of a mixture and not clearly defined by the data items reported on the census. Some are possibly siblings since they are basically of the same age cohort and not in the same household. Others appear to be father-son or mother-daughter (or equivalent operations) based on the age distributions.

The majority of farms report a male principal operator and a female second operator (65.4 percent). The next most common combination is a male principal operator and a male second operator ( 22.1 percent), followed by a female principal operator and a male second operator ( 10.7 percent). The least common operating relationship was two female operators (1.9 percent). Because of the belief that many of the multiple operators reporting are couples (spouses), we started the generational analysis by separating farms into the gender combinations reported above.

## Analysis of Multiple Generation Operator Data

Of the 803,127 farms that reported multiple operators, 609,496 of them ( 75.9 percent) consist only of operators from the same generation. Thus, only 193,631 of the total $2,128,982$ operations (or 9.1 percent of all farms) indicate that they have operators from different generations working on their farm operations-as operators.

Table 11 provides state by state calculations of the percent of farms with multiple operators and with operators from different generations. The overall U.S. average is 24.1 percent. Illinois, at 30.4 percent, had the highest state level percent. States with less than 20 percent were Idaho, Maine, and Oregon.

By separating out the farms most likely to be operated by spouses and looking at the age of the principal operator, a better picture can be derived of whether the farm operation has different generations of operators involved (the assumption being that spouses belong to the same generation) (See Table 10). When the analysis is limited to farms with a male principal operator and a male second operator, we find that over half ( 52.6 percent) of the operations reporting more than one operator involve operators of a different generation. Farms where the male principal operator is between 35 and 44 years of age are the least likely to report male second operators of different generations ( 34.5 percent). Both older and younger principal operators are much more likely to report having a second operator of a different generation. For principal operators 75 years or more in age, 85.3 percent report farming with a second operator of a younger generation. For operators between 65 and 74, 72.7 percent report farming with a second operator of a younger generation. When a male principal operator and female second operator combination is present, only 5.8 percent are of different generations and only the under 25 years of age and over 75 years of age categories for the principal operator exceed 10.0 percent.

When the principal operator is a female, the overall likelihood of a farm having different generations between the principal and second operator is higher than for male principal operators. However, there are only 100,672 operations with female principal operators in Table 10 compared to the 702,455 with male principal operators. For operations with a female principal operator and a male second operator (most likely spouses) only 21.0 percent of the operations report that the two operators are in different generations. However, 44.5 percent of the operations with a female principal operator and a female second operator were from different generations.

Many farms in the census of agriculture are quite small since the definition of a farm is an operation with $\$ 1,000$ of agricultural production and sales or an operation that normally would have had $\$ 1,000$ of sales. Therefore, many operations would not be expected to be supporting multiple operators. One approach for further examining possible succession planning indications from the standpoint of multiple generational operators was to look at farms by farm sales class. Three values of sales categories were examined: total sales of less than $\$ 100,000, \$ 100,000$ to $\$ 249,999$, and $\$ 250,000$ and over. The $\$ 250,000$ and over category corresponds to those farms not considered as small family farms by the USDA Small Farms Commission. The $\$ 100,000$ to $\$ 249,999$ category was included since it corresponds to the definition of Farming-occupation/high sales that the Economic Research Service of USDA has adopted for their typology of small farms.

Table 11 indicates higher percentages of multiple generation operations as the farm income rises. Under $\$ 100,000$, the percent is 21.4 percent or essentially 1 out every 5 farms with multiple operators. This rises to 34.3 percent for the $\$ 100,000$ to $\$ 249,999$ operations and up to 38.8 percent, or nearly 2 in 5 , for the $\$ 250,000$ and higher category. The states in the middle category with the highest percentages were South Carolina, Tennessee, and Utah, all above 45.0 percent. For the highest sales category farms, New Hampshire, Utah and Nevada had the highest percents of multiple generation operators, all at 50.0 percent or higher.

Another way of examining operations with multiple generations is to cross classify by types of farms and income class. Table 12 presents information for the same North American Industry Classification System categories listed earlier in Table 5. There are some interesting, and perhaps not always intuitively explainable, relationships. Dairy farms had the highest percentage of different generations overall and in the over $\$ 250,000$ sales category. Cotton farms had the second highest percentage of overall percentage and a high percentage of under $\$ 100,000$ of sales farms with multiple generations. Poultry farms had the lowest percentages of multiple generation operators in each sales category but not the lowest when all farms are considered because so many of the poultry farms were in the above $\$ 250,000$ category.

## Summary and Conclusions

This write-up started by commenting that each subsequent census of agriculture has indicated that the average age of U.S. (principal) farm operators is increasing. The 2002 Census of Agriculture once again indicated that the average age of principal operators increased more than one full year from 1997. However, the 2002 data collection provided new information that average ages of second and third operators were lower than for the principal operator average and percentages of operators under 35 years of age were higher.

The detailed analyses in this paper perhaps present mixed signals as far as farm succession. New 2002 Census of Agriculture data indicate that 37.7 percent of all farms reported multiple farm operators-a indication of succession potential. However, further analyses indicate that the majority of the additional operators are most likely spouses.

The simplistic approach in this paper for evidence of a possible succession plan in place was to count multiple operators with at least a 20 year age difference among those operators as having evidence of a possible succession plan. Some operations may have already implemented a succession plan. Note that over 60 percent of the male principal operators under 25 years of age and almost 50 percent of the male principal operators between 25 and 34 years of age with a male second operator have a second or third operator who is at least 20 years older.

In total, only 9.1 percent of the 2,128,982 farm operations qualified as having evidence of possible succession planning under the criteria of having multiple generations presently reported as farm operators. Therefore, there must be many other succession approaches in place-ones that do not require a successor to be presently in place as an operator.

The calculated percents of operations implying a possible succession plan in place do vary considerably by state, income sales classes, and types of farms. Farms with multiple operators and sales of $\$ 250,000$ or more were nearly twice more likely ( 38.8 percent) to have multiple generational operators than those farms with less than $\$ 100,000$ in sales ( 21.4 percent). Dairy, cotton, tobacco, and grain and oilseeds farms were the most likely to have operators from multiple generations, if they had multiple operators.

Map 1: Average Age of Principal Farm Operators: 2002


Map 2: Percent of Principal Farm Operators 65 Years and Over: 2002


Table 1: Comparisons of numbers and percentages of U.S. principal farm operators by age group, U.S. Censuses of Agriculture, 1974 to 2002

| age <br> group | 2002 | $\begin{array}{r} 1997 \\ \text { adj. } \end{array}$ | $\begin{gathered} 1997 \\ \text { not adj } \end{gathered}$ | $\begin{array}{r} 1992 \\ \text { not adj } \end{array}$ | $\begin{gathered} 1987 \\ \text { not adj } \end{gathered}$ | $\begin{array}{r} 1982 \\ \text { not adj } \end{array}$ | $\begin{array}{r} 1978 \\ \text { not adj } \end{array}$ | $\begin{array}{r} 1974 \\ \text { not adj } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <25 | 16,962 | 23,771 | 20,850 | 27,906 | 35,851 | 62,336 | 66,575 | 52,418 |
| 25-34 | 106,097 | 154,839 | 128,455 | 178,826 | 242,688 | 293,810 | 285,420 | 239,674 |
| 35-44 | 366,306 | 444,003 | 371,442 | 381,746 | 411,153 | 443,420 | 433,900 | 400,059 |
| 45-54 | 572,664 | 552,170 | 466,729 | 429,333 | 454,910 | 505,412 | 549,159 | 577,064 |
| 55-64 | 509,123 | 481,220 | 427,354 | 429,839 | 495,816 | 536,402 | 552,175 | 588,584 |
| >65 | 557,830 | 559,873 | 497,029 | 477,650 | 447,341 | 399,596 | 370,546 | 421,471 |
| <35 | 123,059 | 178,610 | 149,305 | 206,732 | 278,539 | 356,146 | 351,995 | 292,092 |
| avg age | 55.3 | 54.0 | 54.3 | 53.3 | 52.0 | 50.5 | 50.3 | 51.7 |
| age | 2002 | 199 | 199 | 1992 | 1987 | 1982 | 1978 | 1974 |
| group |  | adj. | not adj | not adj | not adj | not adj | not adj | not adj |
| <25 | 0.8\% | 1.1\% | 1.1\% | 1.4\% | 1.7\% | 2.8\% | 2.9\% | 2.3\% |
| 25-34 | 5.0\% | 7.0\% | 6.7\% | 9.3\% | 11.6\% | 13.1\% | 12.6\% | 10.5\% |
| 35-54 | 17.2\% | 20.0\% | 19.4\% | 19.8\% | 19.7\% | 19.8\% | 19.2\% | 17.6\% |
| 45-54 | 26.9\% | 24.9\% | 24.4\% | 22.3\% | 21.8\% | 22.6\% | 24.3\% | 25.3\% |
| 55-64 | 23.9\% | 21.7\% | 22.4\% | 22.3\% | 23.7\% | 23.9\% | 24.5\% | 25.8\% |
| >65 | 26.2\% | 25.3\% | 26.0\% | 24.8\% | 21.4\% | 17.8\% | 16.4\% | 18.5\% |
| $<35$ | 5.8\% | 8.1\% | 7.8\% | 10.7\% | 13.3\% | 15.9\% | 15.6\% | 12.8\% |

Table 2: Comparisons of average age of principal farm operators by State, U.S. Censuses of Agriculture, 1974 to 2002

|  | 2002 | 1997 | 1997 | 1992 | 1987 | 1982 | 1978 | 1974 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State |  | adj. | not adj. | not adj. | not adj. | not adj. | not adj. | not adj |
| AL | 56.6 | 54.7 | 54.9 | 54.8 | 53.1 | 51.8 | 51.1 | 52.3 |
| AK | 55.2 | 53.3 | 53.3 | 51.3 | 48.9 | 45.8 | 46.8 | 48.6 |
| AZ | 54.9 | 55.1 | 55.6 | 54.3 | 51.5 | 50.5 | 50 | 51.6 |
| AR | 54.9 | 53.4 | 53.5 | 53 | 51.8 | 50.9 | 50.2 | 51.6 |
| CA | 56.8 | 55.7 | 56.5 | 55.2 | 53.6 | 51.8 | 51.3 | 53.2 |
| CO | 54.5 | 53.5 | 53.8 | 52.9 | 51.8 | 50.4 | 49.9 | 51.2 |
| CT | 55.4 | 55 | 55.5 | 55 | 53.5 | 52.5 | 52.2 | 53.1 |
| DE | 54.8 | 53.4 | 54 | 52.7 | 51.5 | 50.6 | 50.1 | 51.9 |
| FL | 57 | 56.3 | 56.5 | 55.3 | 53.7 | 52.5 | 51.6 | 52.8 |
| GA | 56.5 | 55.6 | 55.9 | 55 | 53.2 | 51.7 | 51.1 | 52.6 |
| HI | 56.5 | 55 | 55 | 53.8 | 53 | 52.7 | 52.7 | 55.4 |
| ID | 54.1 | 52.8 | 53.2 | 52.2 | 51.1 | 49.6 | 49.6 | 50.8 |
| IL | 55.1 | 53.2 | 53.4 | 51.7 | 50.4 | 49.2 | 49.2 | 50.9 |
| IN | 53.7 | 52.3 | 52.8 | 51.6 | 50.5 | 49.1 | 49 | 50.2 |
| IA | 54.3 | 52.3 | 52.4 | 50.3 | 49.3 | 47.6 | 47.5 | 49.3 |
| KS | 56 | 54.3 | 54.4 | 53.2 | 52 | 50.9 | 50.7 | 52.2 |
| KY | 55.2 | 53.7 | 54 | 53.2 | 52.2 | 50.5 | 50.5 | 52.2 |
| LA | 55.1 | 53.5 | 53.7 | 53.5 | 52 | 50.5 | 50.4 | 51.7 |
| ME | 53.7 | 53.8 | 54.4 | 53 | 51.7 | 49.8 | 49.7 | 51.5 |
| MD | 55.9 | 54.9 | 55.2 | 53.9 | 52.7 | 51.5 | 51.3 | 52.3 |
| MA | 54.9 | 54.2 | 54.9 | 53.8 | 52.6 | 51.5 | 52.5 | 54.2 |
| MI | 54.2 | 52.8 | 53.3 | 51.9 | 50.9 | 49.5 | 49.7 | 50.9 |
| MN | 52.9 | 51 | 51.2 | 49.6 | 48.5 | 47.2 | 47.7 | 49.8 |
| MS | 57.2 | 55.3 | 55.6 | 55.3 | 53.8 | 52.5 | 51.8 | 53.6 |
| MO | 56 | 54.4 | 54.7 | 53.8 | 52.9 | 51 | 50.6 | 52.1 |
| MT | 55.4 | 53.7 | 54 | 52.9 | 51.4 | 50.5 | 50 | 51.1 |
| NE | 53.9 | 52.5 | 52.5 | 50.7 | 49.4 | 48.5 | 48.7 | 50.3 |
| NV | 55.9 | 54.9 | 55.4 | 54.2 | 52.3 | 51.5 | 51.2 | 52.1 |
| NH | 54.1 | 53.6 | 54.3 | 53.4 | 51.9 | 50.9 | 50.7 | 52 |
| NJ | 55.1 | 55.2 | 55.4 | 53.9 | 52.9 | 51.9 | 52.2 | 53.8 |
| NM | 56.4 | 55.9 | 56.5 | 55.3 | 53.7 | 51.9 | 51.9 | 52.7 |
| NY | 54.1 | 52.9 | 53.5 | 52.5 | 51.4 | 50 | 50.1 | 51 |
| NC | 56.1 | 54.8 | 55.2 | 54.7 | 53.3 | 51.7 | 51.1 | 52.9 |
| ND | 54.4 | 51.4 | 51.4 | 50 | 48.3 | 47.3 | 47.9 | 49.9 |
| OH | 53.8 | 52.5 | 53.1 | 52 | 51.1 | 49.8 | 49.4 | 50.5 |
| OK | 56 | 54.8 | 55.1 | 55 | 53.6 | 51.9 | 51.4 | 52.6 |
| OR | 54.9 | 54 | 54.5 | 53.4 | 52.7 | 50.4 | 50.7 | 52.4 |
| PA | 53.1 | 52.4 | 52.7 | 52.2 | 51.1 | 50 | 50 | 50.6 |
| RI | 54.3 | 54 | 54.1 | 53.4 | 52.7 | 52.4 | 52.3 | 53.3 |
| SC | 56.9 | 55.9 | 56.3 | 55.5 | 54.5 | 52.6 | 51.9 | 53.4 |
| SD | 53.3 | 51.7 | 51.8 | 51.1 | 49.7 | 48.6 | 48.7 | 50.1 |
| TN | 56 | 54.8 | 55.4 | 54.6 | 53.8 | 52.3 | 52 | 53.3 |
| TX | 56.9 | 56 | 56.6 | 56.1 | 54.4 | 52.9 | 52.4 | 53.7 |
| UT | 55.2 | 55.1 | 55.4 | 54.8 | 53.7 | 52 | 51.9 | 52.6 |
| VT | 53.9 | 52.7 | 53.1 | 51.4 | 50.4 | 49.1 | 49.4 | 50 |
| VA | 56.7 | 55.8 | 56.4 | 55.6 | 54.5 | 53.3 | 52.9 | 54.1 |
| WA | 55.4 | 53.2 | 54.2 | 53.1 | 51.6 | 50.1 | 50.3 | 51.7 |
| WV | 56.3 | 56.2 | 56.7 | 56.4 | 55.6 | 53.8 | 53.2 | 54.3 |
| WI | 53 | 52 | 52.2 | 50.6 | 50.3 | 48.4 | 49 | 50.2 |
| WY | 54.1 | 54.3 | 54.4 | 53.4 | 52 | 50.8 | 50.4 | 51.4 |
| US | 55.3 | 54 | 54.3 | 53.3 | 52 | 50.5 | 50.3 | 51.7 |

Table 3: Average age of U.S. principal farm operators by economic sales class, 2002 Census of Agriculture

| Class | Average age by <br> value of agricultural <br> products sold | Average age by value of <br> agricultural products sold and <br> government payments combined |
| :--- | :--- | :--- |
| $\$ 1,000,000$ or more | 52.2 | 52.2 |
| $\$ 500,000$ to $\$ 999,999$ | 51.5 | 51.5 |
| $\$ 250,000$ to $\$ 499,999$ | 51.6 | 51.6 |
| $\$ 100,000$ to $\$ 249,999$ | 52.1 | 52.3 |
| $\$ 50,000$ to $\$ 99,999$ | 54.2 | 54.4 |
| $\$ 25,000$ to $\$ 49,999$ | 56.0 | 56.3 |
| $\$ 10,000$ to $\$ 24,999$ | 56.6 | 57.0 |
| $\$ 5,000$ to $\$ 9,999$ | 56.5 | 57.0 |
| $\$ 2,500$ to $\$ 4,999$ | 55.8 | 56.4 |
| $\$ 1,000$ to $\$ 2,499$ | 54.8 | 55.5 |
| Less than $\$ 1,000$ | 56.2 | 54.8 |

Table 4: Average age of U.S. principal farm operators by size of farm, 2002 Census of Agriculture

## Size

1 to 9 acres
10 to 49 acres
50 to 69 acres
70 to 99 acres
100 to 139 acres
140 to 179 acres
180 to 219 acres
220 to 259 acres
260 to 499 acres
500 to 999 acres
1,000 to 1,999 acres
2,000 or more acres

Average age
52.4
54.1
55.8
56.3
56.7
57.3
57.0
57.0
56.5
55.2
54.1
54.8

Table 5: Average age of U.S. principal farm operators by type of farming operation, 2002 Census of Agriculture
North American Industrial Classification System farm type Average age
Oilseed and grain farming (1111) ..... 54.6
Vegetable and melon farming (1112) ..... 53.9
Fruit and tree nut farming (1113) ..... 57.7
Greenhouse, nursery, and floriculture production (1114) ..... 53.8
Tobacco farming (11191) ..... 54.7
Cotton farming (11192) ..... 52.4
Sugarcane farming, hay farming, and all other crop farming (11193, 11194 11199) ..... 57.5
Beef cattle ranching and farming (112111) ..... 56.7
Cattle feedlots (112112) ..... 53.3
Dairy cattle and milk production (11212) ..... 50.2
Hog and pig farming (1122) ..... 49.2
Poultry and egg production (1123) ..... 51.6
Sheep and goat farming (1124) ..... 52.9
Animal aquaculture and other animal production $(1125,1129)$ ..... 52.5

Table 6: Average age of U.S. principal farm operators by type of farm organization, type of tenure, number of farm operators, and principal occupation, 2002 Census of Agriculture

|  | Average age |  | Average age |
| :--- | :--- | :--- | :--- |
| Type of Organization |  | Tenure |  |
| Individual or family | 55.3 | Full owners | 57.0 |
| Partnership Total | 56.0 | Part owners | 53.1 |
| Partnership Registered under state law | 55.4 | Tenants | 47.2 |
| Corporation Total | 53.9 |  | Average age |
| Corporation Family held Total | 54.1 |  | 56.2 |
| Corporation Family held 10 or less stockholders | 54.1 | Numbers of operators | 53.8 |
| Corporation Other than family held Total | 51.8 | More than one operator |  |
| Corporation Other than family held 10 or less 52.0  <br> stockholders   <br> Other- cooperative, estate or trust, institutional, etc. 57.2 Principal occupation | Average age |  |  |
|  |  | Farming | 57.0 |
|  |  | Other occupations | 53.0 |

Table 7: Selected characteristics of U.S. principal, second, and third farm operators, 2002 Census of Agriculture

| Characteristics | All operators | Principal operators | Second operators | Third operators |
| :---: | :---: | :---: | :---: | :---: |
| Operators .......................number... | 3,053,801 | 2,128,982 | 803,127 | 121,692 |
| Sex of operator: |  |  |  |  |
| Male................................. | 2,231,418 | 1,891,163 | 263,037 | 77,218 |
| Female................................. | 822,383 | 237,819 | 540,090 | 44,474 |
| Primary occupation: |  |  |  |  |
| Farming ............................... | 1,658,137 | 1,224,246 | 373,166 | 60,725 |
| Other ................................. | 1,395,664 | 904,736 | 429,961 | 60,967 |
| Place of residence: |  |  |  |  |
| On farm operated ....................... | 2,391,339 | 1,680,160 | 634,373 | 76,806 |
| Not on farm operated ................... | 662,462 | 448,822 | 168,754 | 44,886 |
| Days worked off farm: |  |  |  |  |
| None ................................. | 1,353,739 | 962,200 | 335,386 | 56,153 |
| Any .................................. | 1,700,062 | 1,166,782 | 467,741 | 65,539 |
| 1 to 49 days ......................... | 183,454 | 122,248 | 50,448 | 10,758 |
| 50 to 99 days ........................ | 102,234 | 66,306 | 30,201 | 5,727 |
| 100 to 199 days ...................... | 224,309 | 145,880 | 69,489 | 8,940 |
| 200 days or more ........................ | 1,190,065 | 832,348 | 317,603 | 40,114 |
| Years on present farm: |  |  |  |  |
| 2 years or less ........................ | 143,188 | 74,754 | 49,050 | 19,384 |
| 3 or 4 years ........ | 251,131 | 143,599 | 87,083 | 20,449 |
| 5 to 9 years ......................... | 586,723 | 374,756 | 183,357 | 28,610 |
| 10 years or more ....................... | 2,072,759 | 1,535,873 | 483,637 | 53,249 |
| Age group: |  |  |  |  |
| Under 25 years ......................... | 59,886 | 16,962 | 19,874 | 23,050 |
| 25 to 34 years ......................... | 201,358 | 106,097 | 74,874 | 20,387 |
| 35 to 44 years ......................... | 589,847 | 366,306 | 196,690 | 26,851 |
| 45 to 54 years ......................... | 838,026 | 572,664 | 241,468 | 23,894 |
| 55 to 64 years ......................... | 689,716 | 509,123 | 166,495 | 14,098 |
| 65 to 74 years ......................... | 439,448 | 354,430 | 76,353 | 8,665 |
| 75 years and over ...................... | 235,520 | 203,400 | 27,373 | 4,747 |
| Average age | 53.2 | 55.3 | 49.5 | 41.9 |
| Number of persons living in household | 6,613,663 | 5,717,302 | 709,821 | 186,540 |

Table 8: Number of households sharing in farm income for U.S. operations with single and multiple farm operators, 2002 Census of Agriculture

| Number of households sharing farm income | Operators on farm <br> one operator | Operators on farm <br> multiple operators |
| :--- | :---: | :---: |
| 1 household sharing in net income of farm | $86.4 \%$ | $67.9 \%$ |
| 2 households sharing in net income of farm | $10.2 \%$ | $23.4 \%$ |
| 3 households sharing in net income of farm | $1.7 \%$ | $5.2 \%$ |
| 4 households sharing in net income of farm | $1.1 \%$ | $1.9 \%$ |
| 5 households or more sharing in net income of farm | $0.7 \%$ | $1.6 \%$ |
| Total farms | $100.0 \%$ | $100.0 \%$ |
|  | Operators on farm | Operators on farm |
| Percent of operator's total household income from farming | One operator | multiple operators |
| Less than 25 percent | $62.8 \%$ | $63.6 \%$ |
| 25 to 49 percent |  |  |
| 50 to 74 percent | $10.8 \%$ | $9.4 \%$ |
| 75 to 99 percent | $10.6 \%$ | $9.8 \%$ |
| 100 percent | $7.0 \%$ | $7.3 \%$ |
| Total farms | $8.8 \%$ | $9.9 \%$ |

Table 9: Percents of farms with single operators and multiple farm operators by State, 2002 Census of Agriculture

| State | All Farms | Farms with 1 operator | Percent of farms operated by 1 operator | Farms with 2+ Operators | Percent of farms operated by >1 operator |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AL | 45,126 | 30,485 | 67.6\% | 14,641 | 32.4\% |
| AK | 609 | 373 | 61.2\% | 236 | 38.8\% |
| AZ | 7,294 | 3,580 | 49.1\% | 3,714 | 50.9\% |
| AR | 47,483 | 28,926 | 60.9\% | 18,557 | 39.1\% |
| CA | 79,631 | 44,967 | 56.5\% | 34,664 | 43.5\% |
| CO | 31,369 | 16,055 | 51.2\% | 15,314 | 48.8\% |
| CT | 4,191 | 2,278 | 54.4\% | 1,913 | 45.6\% |
| DE | 2,391 | 1,351 | 56.5\% | 1,040 | 43.5\% |
| FL | 44,081 | 27,649 | 62.7\% | 16,432 | 37.3\% |
| GA | 49,311 | 34,598 | 70.2\% | 14,713 | 29.8\% |
| HI | 5,398 | 3,306 | 61.2\% | 2,092 | 38.8\% |
| ID | 25,017 | 13,843 | 55.3\% | 11,174 | 44.7\% |
| IL | 73,027 | 50,203 | 68.7\% | 22,824 | 31.3\% |
| IN | 60,296 | 38,367 | 63.6\% | 21,929 | 36.4\% |
| IA | 90,655 | 60,439 | 66.7\% | 30,216 | 33.3\% |
| KS | 64,414 | 43,156 | 67.0\% | 21,258 | 33.0\% |
| KY | 86,541 | 56,203 | 64.9\% | 30,338 | 35.1\% |
| LA | 27,413 | 18,438 | 67.3\% | 8,975 | 32.7\% |
| ME | 7,196 | 3,726 | 51.8\% | 3,470 | 48.2\% |
| MD | 12,198 | 7,115 | 58.3\% | 5,083 | 41.7\% |
| MA | 6,075 | 3,199 | 52.7\% | 2,876 | 47.3\% |
| MI | 53,315 | 31,833 | 59.7\% | 21,482 | 40.3\% |
| MN | 80,839 | 53,372 | 66.0\% | 27,467 | 34.0\% |
| MS | 42,186 | 29,578 | 70.1\% | 12,608 | 29.9\% |
| M0 | 106,797 | 64,172 | 60.1\% | 42,625 | 39.9\% |
| MT | 27,870 | 15,690 | 56.3\% | 12,180 | 43.7\% |
| NE | 49,355 | 31,951 | 64.7\% | 17,404 | 35.3\% |
| NV | 2,989 | 1,438 | 48.1\% | 1,551 | 51.9\% |
| NH | 3,363 | 1,571 | 46.7\% | 1,792 | 53.3\% |
| NJ | 9,924 | 5,583 | 56.3\% | 4,341 | 43.7\% |
| NM | 15,170 | 9,219 | 60.8\% | 5,951 | 39.2\% |
| NY | 37,255 | 21,006 | 56.4\% | 16,249 | 43.6\% |
| NC | 53,930 | 36,503 | 67.7\% | 17,427 | 32.3\% |
| ND | 30,619 | 21,475 | 70.1\% | 9,144 | 29.9\% |
| OH | 77,797 | 49,102 | 63.1\% | 28,695 | 36.9\% |
| OK | 83,300 | 51,025 | 61.3\% | 32,275 | 38.7\% |
| OR | 40,033 | 18,667 | 46.6\% | 21,366 | 53.4\% |
| PA | 58,105 | 35,431 | 61.0\% | 22,674 | 39.0\% |
| RI | 858 | 505 | 58.9\% | 353 | 41.1\% |
| SC | 24,541 | 17,429 | 71.0\% | 7,112 | 29.0\% |
| SD | 31,736 | 20,505 | 64.6\% | 11,231 | 35.4\% |
| TN | 87,595 | 58,156 | 66.4\% | 29,439 | 33.6\% |
| TX | 228,926 | 140,610 | 61.4\% | 88,316 | 38.6\% |
| UT | 15,282 | 8,720 | 57.1\% | 6,562 | 42.9\% |
| VT | 6,571 | 3,200 | 48.7\% | 3,371 | 51.3\% |
| VA | 47,606 | 29,651 | 62.3\% | 17,955 | 37.7\% |
| WA | 35,939 | 19,531 | 54.3\% | 16,408 | 45.7\% |
| WV | 20,812 | 13,617 | 65.4\% | 7,195 | 34.6\% |
| WI | 77,131 | 43,522 | 56.4\% | 33,609 | 43.6\% |
| WY | 9,422 | 4,536 | 48.1\% | 4,886 | 51.9\% |
| US | 2,128,982 | 1,325,855 | 62.3\% | 803,127 | 37.7\% |

Table 10: Comparisons of the differences between ages of U.S. principal operators and second operators by gender, 2002 Census of Agriculture


Table 11: Number of multiple operator farms with single and multiple generations represented by State and total value of sales, 2002 Census of Agriculture

| State | Farms with 2+ Operators | Same Generation | Different Generation | \% different generations (all farms) | \% different generations (<100K) | \% different generations (100K-<250K) | \% different generations ( $>=250 \mathrm{~K}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AL | 14,641 | 11,227 | 3,414 | 23.3\% | 22.0\% | 32.9\% | 30.7\% |
| AK | 236 | 188 | 48 | 20.3\% | 17.8\% | 35.7\% | 35.0\% |
| AZ | 3,714 | 2,806 | 908 | 24.4\% | 20.7\% | 41.5\% | 41.1\% |
| AR | 18,557 | 14,852 | 3,705 | 20.0\% | 18.1\% | 26.1\% | 26.3\% |
| CA | 34,664 | 25,776 | 8,888 | 25.6\% | 19.6\% | 34.2\% | 44.4\% |
| CO | 15,314 | 12,011 | 3,303 | 21.6\% | 18.6\% | 36.4\% | 43.4\% |
| CT | 1,913 | 1,393 | 520 | 27.2\% | 24.4\% | 38.9\% | 48.2\% |
| DE | 1,040 | 774 | 266 | 25.6\% | 26.5\% | 20.9\% | 25.4\% |
| FL | 16,432 | 12,612 | 3,820 | 23.2\% | 20.9\% | 36.6\% | 39.5\% |
| GA | 14,713 | 11,085 | 3,628 | 24.7\% | 22.8\% | 34.6\% | 34.6\% |
| HI | 2,092 | 1,618 | 474 | 22.7\% | 22.1\% | 23.6\% | 29.6\% |
| ID | 11,174 | 8,948 | 2,226 | 19.9\% | 15.6\% | 38.3\% | 40.5\% |
| IL | 22,824 | 15,889 | 6,935 | 30.4\% | 26.1\% | 37.4\% | 41.8\% |
| IN | 21,929 | 16,102 | 5,827 | 26.6\% | 22.6\% | 38.0\% | 44.0\% |
| IA | 30,216 | 22,492 | 7,724 | 25.6\% | 23.5\% | 27.1\% | 31.6\% |
| KS | 21,258 | 15,895 | 5,363 | 25.2\% | 21.9\% | 36.8\% | 39.6\% |
| KY | 30,338 | 22,339 | 7,999 | 26.4\% | 25.0\% | 44.3\% | 40.4\% |
| LA | 8,975 | 6,865 | 2,110 | 23.5\% | 21.5\% | 33.5\% | 33.5\% |
| ME | 3,470 | 2,796 | 674 | 19.4\% | 16.2\% | 38.6\% | 48.5\% |
| MD | 5,083 | 3,691 | 1,392 | 27.4\% | 25.0\% | 40.0\% | 33.9\% |
| MA | 2,876 | 2,154 | 722 | 25.1\% | 22.1\% | 39.4\% | 44.5\% |
| MI | 21,482 | 16,340 | 5,142 | 23.9\% | 20.4\% | 39.8\% | 44.4\% |
| MN | 27,467 | 21,356 | 6,111 | 22.2\% | 19.0\% | 28.6\% | 32.2\% |
| MS | 12,608 | 9,695 | 2,913 | 23.1\% | 21.3\% | 33.8\% | 33.7\% |
| MO | 42,625 | 33,054 | 9,571 | 22.5\% | 20.5\% | 37.6\% | 40.6\% |
| MT | 12,180 | 9,273 | 2,907 | 23.9\% | 20.0\% | 34.5\% | 41.7\% |
| NE | 17,404 | 12,821 | 4,583 | 26.3\% | 21.8\% | 29.3\% | 38.3\% |
| NV | 1,551 | 1,171 | 380 | 24.5\% | 19.0\% | 43.8\% | 50.0\% |
| NH | 1,792 | 1,394 | 398 | 22.2\% | 19.2\% | 38.4\% | 59.1\% |
| NJ | 4,341 | 3,290 | 1,051 | 24.2\% | 21.0\% | 41.9\% | 45.5\% |
| NM | 5,951 | 4,477 | 1,474 | 24.8\% | 22.0\% | 40.2\% | 48.2\% |
| NY | 16,249 | 11,887 | 4,362 | 26.8\% | 22.0\% | 37.7\% | 49.0\% |
| NC | 17,427 | 12,577 | 4,850 | 27.8\% | 25.1\% | 39.0\% | 38.1\% |
| ND | 9,144 | 6,824 | 2,320 | 25.4\% | 23.7\% | 27.7\% | 28.9\% |
| OH | 28,695 | 20,861 | 7,834 | 27.3\% | 24.7\% | 39.4\% | 46.1\% |
| OK | 32,275 | 25,611 | 6,664 | 20.6\% | 19.5\% | 34.0\% | 33.7\% |
| OR | 21,366 | 17,701 | 3,665 | 17.2\% | 14.5\% | 33.7\% | 40.2\% |
| PA | 22,674 | 16,346 | 6,328 | 27.9\% | 24.8\% | 34.7\% | 45.2\% |
| RI | 353 | 264 | 89 | 25.2\% | 23.7\% | 32.1\% | 32.4\% |
| SC | 7,112 | 5,293 | 1,819 | 25.6\% | 23.6\% | 48.6\% | 39.7\% |
| SD | 11,231 | 8,232 | 2,999 | 26.7\% | 22.2\% | 30.7\% | 39.9\% |
| TN | 29,439 | 21,860 | 7,579 | 25.7\% | 24.7\% | 47.2\% | 42.0\% |
| TX | 88,316 | 68,648 | 19,668 | 22.3\% | 21.2\% | 36.3\% | 37.7\% |
| UT | 6,562 | 4,650 | 1,912 | 29.1\% | 26.1\% | 47.1\% | 50.3\% |
| VT | 3,371 | 2,632 | 739 | 21.9\% | 17.8\% | 34.5\% | 36.1\% |
| VA | 17,955 | 13,094 | 4,861 | 27.1\% | 25.1\% | 44.5\% | 41.9\% |
| WA | 16,408 | 13,085 | 3,323 | 20.3\% | 16.3\% | 32.4\% | 39.7\% |
| WV | 7,195 | 5,316 | 1,879 | 26.1\% | 25.4\% | 35.9\% | 42.3\% |
| WI | 33,609 | 26,533 | 7,076 | 21.1\% | 16.7\% | 30.9\% | 40.6\% |
| WY | 4,886 | 3,698 | 1,188 | 24.3\% | 19.2\% | 39.3\% | 47.8\% |
| Total | 803,127 | 609,496 | 193,631 | 24.1\% | 21.4\% | 34.3\% | 38.8\% |

Table 12: Percent of U.S. multiple operator operations with different generations present by predominant type of farming and economic sales class, 2002 Census of Agriculture

|  |  |  |  |  |  |  | TVP >= \$25 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of farm | Farms with multiple operators | Percent in different generations | Farms with multiple operators | Percent in different generations | Farms with multiple operators | Percent in different generations | Farms with multiple operators | Percent in different generations |
| Grain and Oilseed | 107,463 | 31.3\% | 67,017 | 29.2\% | 20,437 | 32.7\% | 20,009 | 36.8\% |
| Vegetable | 14,888 | 26.8\% | 10,635 | 21.5\% | 1,080 | 36.2\% | 3,173 | 41.6\% |
| Fruit and Nut | 38,503 | 22.9\% | 30,834 | 18.7\% | 3,349 | 35.5\% | 4,320 | 42.8\% |
| Nursery/greenhouse | 29,896 | 22.6\% | 21,570 | 17.7\% | 3,189 | 30.9\% | 5,137 | 37.8\% |
| Tobacco | 11,814 | 33.2\% | 10,645 | 31.7\% | 627 | 48.0\% | 542 | 44.3\% |
| Cotton | 4,515 | 35.9\% | 1,499 | 31.2\% | 916 | 34.6\% | 2,100 | 39.9\% |
| All other crops | 119,927 | 20.4\% | 113,047 | 19.1\% | 2,964 | 36.9\% | 3,916 | 44.1\% |
| Beef cattle | 241,971 | 24.4\% | 224,959 | 23.2\% | 10,454 | 38.2\% | 6,558 | 44.3\% |
| Feedlots | 24,106 | 26.1\% | 19,225 | 22.1\% | 1,811 | 35.1\% | 3,070 | 46.0\% |
| Dairy | 38,863 | 37.1\% | 12,822 | 29.3\% | 14,838 | 35.7\% | 11,203 | 47.7\% |
| Hog | 14,184 | 27.9\% | 8,166 | 23.7\% | 1,539 | 30.1\% | 4,479 | 34.8\% |
| Poultry | 22,007 | 20.0\% | 9,123 | 14.8\% | 2,220 | 18.9\% | 10,664 | 24.7\% |
| Sheep and goat | 21,712 | 17.9\% | 21,418 | 17.5\% | 164 | 39.0\% | 130 | 43.8\% |
| Aquaculture and other animal | 113,278 | 16.4\% | 110,294 | 15.8\% | 1,372 | 33.5\% | 1,612 | 39.5\% |
| All farm types | 803,127 | 24.1\% | 661,254 | 21.4\% | 64,960 | 34.3\% | 76,913 | 38.8\% |

