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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 go vernment 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 <u>overall average</u> 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. <u>farmers</u> for the first time. Past censuses had collected only Aprincipal@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, 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 <u>number of households</u> sharing in each operations 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 Afarm 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 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 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	2002	1997	1997	1992	1987	1982	1978	1974
group		adj.	not adj					
<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	1997	1997	1992	1987	1982	1978	1974
group		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.					
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
СТ	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
ТХ	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 economicsales class, 2002 Census of Agriculture

Average age by value of agricultural products sold	Average age by value of agricultural products sold and government payments combined
52.2	52.2
51.5	51.5
51.6	51.6
52.1	52.3
54.2	54.4
56.0	56.3
56.6	57.0
56.5	57.0
55.8	56.4
54.8	55.5
56.2	54.8
	Average age by value of agricultural products sold 52.2 51.5 51.6 52.1 54.2 56.0 56.6 56.5 55.8 54.8 54.8 56.2

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

Size	Average age
1 to 9 acres	52.4
10 to 49 acres	54.1
50 to 69 acres	55.8
70 to 99 acres	56.3
100 to 139 acres	56.7
140 to 179 acres	57.3
180 to 219 acres	57.0
220 to 259 acres	57.0
260 to 499 acres	56.5
500 to 999 acres	55.2
1,000 to 1,999 acres	54.1
2,000 or more acres	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	0 0	Tenure	0 0
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		
Corporation Family held Total	54.1	Numbers of operators	Average age
Corporation Family held 10 or less stockholders	54.1	One operator	56.2
Corporation Other than family held Total	51.8	More than one operator	53.8
Corporation Other than family held 10 or less stockholders	52.0		
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

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

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

 2002 Census of Agriculture

		F	Percent of farms		Percent of farms
		Farms with	operated by	Farms with 2+	operated by >1
State	All Farms	1 operator	1 operator	Operators	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%
MO	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%
ТХ	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

Male Principal Operator, Male Second Operator							% of	
Age of principal	Age c	lifference b	etween pr	incipal ope	erator and	second op	erator	operators in different
operator	<=-40	-20 to -39	-1 to -19	0 to 19	20 to 39	=40	Total	generations
<25	11.0%	52.4%	19.9%	16.7%	0.0%	0.0%	2,289	63.4%
25-34	5.8%	43.9%	27.2%	23.1%	0.0%	0.0%	10,092	49.8%
35-44	2.1%	27.3%	31.4%	34.1%	5.1%	0.0%	28,904	34.5%
45-54	0.3%	12.2%	21.3%	42.7%	23.6%	0.0%	45,396	36.0%
55-64	0.0%	2.6%	11.5%	35.2%	49.5%	1.1%	40,686	53.3%
65-74	0.0%	0.2%	5.4%	21.9%	67.6%	4.9%	30,327	72.7%
>= 75	0.0%	0.0%	1.8%	12.9%	70.1%	15.2%	19,624	85.3%
Total	0.9%	11.4%	16.2%	31.2%	37.6%	2.8%	177,318	52.6%
	Male Prine	cipal Opera	tor, Femal	e Second	Operator			
<25	4.0%	22.2%	28.5%	45.3%	0.0%	0.0%	2,715	26.2%
25-34	0.9%	6.0%	29.9%	63.3%	0.0%	0.0%	28,202	6.9%
35-44	0.3%	3.2%	27.2%	68.9%	0.4%	0.0%	105,860	3.9%
45-54	0.1%	1.9%	18.9%	77.7%	1.4%	0.0%	157,815	3.4%
55-64	0.0%	0.8%	12.3%	83.3%	3.5%	0.1%	131,238	4.4%
65-74	0.0%	0.2%	8.8%	82.2%	8.2%	0.7%	71,718	9.1%
>= 75	0.0%	0.0%	6.1%	71.9%	17.6%	4.4%	27,589	22.0%
Total	0.2%	1.9%	17.5%	76.7%	3.4%	0.4%	525,137	5.8%
	Male Prine	cipal Opera	tor, Any S	econd Ope	erator			
Total	0.3%	4.3%	17.2%	65.2%	12.0%	1.0%	702,455	17.6%
		Fomolo D	rinainal Or	orotor Mo	la Sacand	Operator		9/ of
Ago of	A a a	Female F	nncipai Op	incinal one	rator and	Operator	orator	% UI
principal	Ayet		erween pi	incipal ope		second op		different
operator	<=-40	-20 to -39	-1 to -19	0 to 19	20 to 39	>=40	Total	generations
<25	5.5%	39.0%	34.8%	20.8%	0.0%	0.0%	587	44.5%
25-34	0.9%	10.4%	67.8%	20.9%	0.00/	0.00/		
35-44	0.00/			20.0/0	0.0%	0.0%	4.594	11.3%
	0.2%	4.9%	64.7%	28.8%	0.0% 1.4%	0.0%	4,594 18,417	11.3% 6.5%
43-34	0.2% 0.1%	4.9% 2.8%	64.7% 55.8%	28.8% 36.0%	0.0% 1.4% 5.3%	0.0% 0.0% 0.0%	4,594 18,417 26,225	11.3% 6.5% 8.2%
45-54 55-64	0.2% 0.1% 0.0%	4.9% 2.8% 0.9%	64.7% 55.8% 46.8%	28.8% 36.0% 36.3%	0.0% 1.4% 5.3% 15.7%	0.0% 0.0% 0.3%	4,594 18,417 26,225 18,149	11.3% 6.5% 8.2% 16.9%
45-54 55-64 65-74	0.2% 0.1% 0.0% 0.0%	4.9% 2.8% 0.9% 0.3%	64.7% 55.8% 46.8% 25.3%	28.8% 36.0% 36.3% 28.3%	0.0% 1.4% 5.3% 15.7% 43.5%	0.0% 0.0% 0.3% 2.7%	4,594 18,417 26,225 18,149 10,002	11.3% 6.5% 8.2% 16.9% 46.4%
45-54 55-64 65-74 >= 75	0.2% 0.1% 0.0% 0.0% 0.0%	4.9% 2.8% 0.9% 0.3% 0.0%	64.7% 55.8% 46.8% 25.3% 5.4%	28.8% 36.0% 36.3% 28.3% 15.4%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5%	0.0% 0.0% 0.3% 2.7% 11.7%	4,594 18,417 26,225 18,149 10,002 7,745	11.3% 6.5% 8.2% 16.9% 46.4% 79.2%
45-54 55-64 65-74 >= 75 Total	0.2% 0.1% 0.0% 0.0% 0.0% 0.2%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4%	4,594 18,417 26,225 18,149 10,002 7,745 85,719	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0%
45-54 55-64 65-74 >= 75 Total	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% male Secon	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% d Operato	0.0% 0.0% 0.3% 2.7% 11.7% 1.4%	4,594 18,417 26,225 18,149 10,002 7,745 85,719	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0%
40-54 55-64 65-74 >= 75 Total <25	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% incipal Op 67.8%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% d Operato 0.0%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3%
40-54 55-64 65-74 >= 75 Total <25 25-34	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% male Secon 13.6% 30.0%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0 Operato 0.0% 0.0%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% r 0.0% 0.0%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4%
40-34 55-64 65-74 >= 75 Total <25 25-34 35-44	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% fincipal Op 67.8% 39.0% 16.4%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% male Secon 13.6% 30.0% 35.5%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 0.0% 12.1%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9%
40-54 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% fincipal Op 67.8% 39.0% 16.4% 7.9%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 0.0% 12.1% 26.4%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5%
40-54 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0% 16.4% 7.9% 3.7%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9% 43.2%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 0.0% 12.1% 26.4% 35.3%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% r 0.0% 0.0% 0.0% 0.0% 1.2%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2%
40-54 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.0%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 0.0% 12.1% 26.4% 35.3% 48.2%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0% 1.2% 3.5%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5%
40-54 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74 >= 75	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.0% 0.0%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8% 0.0%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9% 4.1%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6% 16.7%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 0.0% 12.1% 26.4% 35.3% 48.2% 68.3%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0% 1.2% 3.5% 10.8%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050 2,037	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5% 79.2%
40-34 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74 >= 75 Total	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.2% 0.1% 0.0% 0.0% 0.5%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8% 0.0% 8.8%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9% 4.1% 19.9%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% male Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6% 16.7% 35.6%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% d Operato 0.0% 0.0% 12.1% 26.4% 35.3% 48.2% 68.3% 33.0%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 7 0.0% 0.0% 0.0% 0.0% 1.2% 3.5% 10.8% 2.2%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050 2,037 14,953	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5% 79.2% 44.5%
40-34 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74 >= 75 Total	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.2% 0.1% 0.0% 0.5% Female Pr	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% *incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8% 0.0% 8.8% *incipal Op	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9% 4.1% 19.9% erator, Any	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% male Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6% 16.7% 35.6% 7 Second C	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 12.1% 26.4% 35.3% 48.2% 68.3% 33.0% Operator	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0% 1.2% 3.5% 10.8% 2.2%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050 2,037 14,953	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5% 79.2% 44.5%
40-54 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74 >= 75 Total Total	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.0% 0.0% 0.0% 0.5% Female Pr 0.2%	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% *incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8% 0.0% 8.8% *incipal Op 3.8%	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9% 4.1% 19.9% erator, Any 44.0%	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6% 16.7% 35.6% 7 Second C 31.6%	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 12.1% 26.4% 35.3% 48.2% 68.3% 33.0% Derator 18.9%	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0% 0.0% 1.2% 3.5% 10.8% 2.2%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050 2,037 14,953 100,672	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5% 79.2% 44.5% 24.5%
40-34 55-64 65-74 >= 75 Total <25 25-34 35-44 45-54 55-64 65-74 >= 75 Total Total	0.2% 0.1% 0.0% 0.0% 0.2% Female Pr 2.6% 3.4% 1.5% 0.2% 0.1% 0.0% 0.0% 0.0% 0.5% Female Pr 0.2% All princip	4.9% 2.8% 0.9% 0.3% 0.0% 3.0% 'incipal Op 67.8% 39.0% 16.4% 7.9% 3.7% 0.8% 0.0% 8.8% 'incipal Op 3.8% >al operato	64.7% 55.8% 46.8% 25.3% 5.4% 48.2% erator, Fen 16.1% 27.6% 34.6% 24.6% 16.6% 10.9% 4.1% 19.9% erator, Any 44.0% rs, all seco	28.8% 36.0% 36.3% 28.3% 15.4% 30.9% nale Secon 13.6% 30.0% 35.5% 40.9% 43.2% 36.6% 16.7% 35.6% V Second C 31.6% ond operato	0.0% 1.4% 5.3% 15.7% 43.5% 67.5% 16.4% 0.0% 0.0% 12.1% 26.4% 35.3% 48.2% 68.3% 33.0% Operator 18.9% Drs	0.0% 0.0% 0.3% 2.7% 11.7% 1.4% 0.0% 0.0% 0.0% 0.0% 1.2% 3.5% 10.8% 2.2%	4,594 18,417 26,225 18,149 10,002 7,745 85,719 273 613 2,598 4,126 3,256 2,050 2,037 14,953 100,672	11.3% 6.5% 8.2% 16.9% 46.4% 79.2% 21.0% 70.3% 42.4% 29.9% 34.5% 40.2% 52.5% 79.2% 44.5% 24.5%

Table 11: Number of multiple operator farms with single and multiple generations represented

 by State and total value of sales, 2002 Census of Agriculture

				% different	% different	% different	% different
State	Farms with 2+ Operators	Same Generation	Different Generation	generations (all farms)	generations (<100K)	generations (100K-<250K)	generations (>=250K)
AL	14,641	11,958	2,683	18.3%	17.3%	27.7%	23.1%
AK	236	201	35	14.8%	13.4%	14.3%	30.0%
AZ	3,714	3,070	644	17.3%	14.5%	28.9%	30.3%
AR	18,557	15,857	2,700	14.5%	12.9%	21.0%	19.7%
CA	34,664	27,879	6,785	19.6%	14.6%	26.9%	35.0%
0,1	15,314	12,928	2,386	15.6%	13.3%	27.2%	32.2%
CT	1,913	1,555	358	18.7%	16.8%	21.1%	35.7%
DF	1,040	846	194	18.7%	19.1%	16.3%	18.5%
FI	16,432	13,423	3,009	18.3%	16.5%	29.3%	30.3%
GA	14,713	11,866	2,847	19.4%	17.7%	28.3%	27.8%
HI	2,092	1,744	348	16.6%	16.3%	16.4%	21.8%
	11,174	9,603	1,571	14.1%	10.5%	29.4%	31.5%
10	22,824	17,121	5,703	25.0%	21.4%	31.1%	34.5%
IN IN	21,929	17,257	4,672	21.3%	18.1%	31.5%	34.4%
IA	30,216	23,918	6,298	20.8%	19.4%	22.0%	24.8%
ĸs	21,258	16,964	4,294	20.2%	17.4%	29.8%	32.1%
KV	30.338	23.902	6.436	21.2%	20.0%	37.4%	33.7%
	8.975	7.391	1.584	17.6%	15.5%	29.3%	27.8%
	3.470	2.996	474	13.7%	11.6%	26.1%	33.0%
	5.083	4.030	1.053	20.7%	18.8%	30.6%	26.1%
MA	2,876	2,355	521	18.1%	16.0%	27.3%	32.8%
M	21.482	17.712	3.770	17.5%	14.7%	30.4%	34.3%
	27 467	22 727	4 740	17.3%	14.8%	22.3%	24 7%
MS	12 608	10,351	2 257	17.9%	16.3%	26.7%	27.5%
MO	42,625	35,224	7,401	17.4%	15.8%	30.0%	30.9%
	12 180	10.035	2 145	17.6%	15.0%	25.0%	28.8%
	17 404	13 713	3 691	21.2%	17.9%	23.6%	29.8%
	1 551	1 309	242	15.6%	10.3%	37.7%	37.3%
	1,001	1,500	292	16.3%	14.3%	26.7%	41 9%
	4 341	3 590	751	17.3%	14.9%	28.8%	33.9%
	5 951	4 838	1 113	18.7%	16.5%	32.5%	36.2%
	16 249	13 043	3 206	19.7%	15.9%	29.9%	35.1%
	17 427	13,040	3,200	21.9%	19.5%	33.2%	30.0%
	9 144	7 212	1 932	21.3%	19.8%	23.6%	23.0%
	28 695	22 607	5 008	20.9%	18.7%	32.4%	36.0%
OH	20,035	22,037	3,990 1 017	20.3% 15.3%	14.3%	27.0%	26.4%
	21 366	18 847	2 519	11.8%	9.9%	23.0%	20.4%
	22,500	18,047	1 587	20.2%	17.8%	25.3%	33.2%
PA	353	286	4,307	10.2%	18.2%	23.7 %	23.5%
RI	7 112	5 703	1 /09	19.0%	18.2%	21.4 <i>%</i>	20.0%
SC	11 001	9,705	2,403	21.09/	17.5%	-0.7 /0	21 40/
SD	20.420	0,070	5 001	21.0%	10.4%	24.1%	33.0%
	29,439	23,440	15 027	20.4%	19.4%	40.7 %	20.8%
	6 562	5 110	13,037	17.0%	10.0%	30.0 %	29.0%
	0,002	5,110	1,452	22.1% 15.0%	19.2%	42.2%	40.1%
	3,371 17.055	∠,004 1/I 082	3 873	21.6%	10.0%	22.170	20.0%
VA	16 409	14,002	0,010 0,010	21.070	10.5%	JI.470	20.10%
VVA	7 105	14,11/ 5 700	∠,∠91 1.407	14.0%	10.3%	20.0%	30.1% 20.00/
VVV	1,190	0,100 29 E01	1,407 5 109	19.0%	19.0%	29.170	29.0%
VVI	33,009	20,301	0,100	13.2%	12.170	22.470	20.0%
WY	4,886	4,048	030 1 10 000	17.2%	13.4%	21.3%	35.4%
US	803,127	054,791	148,336	18.5%	10.3%	21.2%	30.0%

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

	All farms		TVP <\$100K		\$100K <= TV	′P < \$250K	TVP >= \$25	60K
Type of farm	Farms with	Percent in	Farms with	Percent in	Farms with	Percent in	Farms with	Percent in
	multiple	different	multiple	different	multiple	different	multiple	different
	operators	generations	operators	generations	operators	generations	operators	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%

What we are learning about the demographics of U. S. farm operators



Goals for the session

- Clarify the data available from the 2002 Ag Census
- Examine ages of farmers in light of new multiple operator data
- Develop a definition of possible succession planning evidence
- Summarize findings under the new definition

Key Caveats

- The Ag Census did not ask about farm succession
- The Ag Census focuses on farm operations, not farm owners
- All analyses assume operators want to maintain the present operations as they are

Important considerations

- The Ag Census uses mail-out, mail-back data collection
- Operators are defined as being responsible for day-to-day management decisions
- U.S. farms are extremely heterogeneous

Farm Definition

Any place from which \$1,000 or more of agricultural products were produced during the census year.



Conclusion 1: Average age of principal farm operators has constantly increased since 1982 (Table 1)

	Average age	% of total principal operators	
Year		over 65	Under 35
1974	51.7	18.5	12.8
1982	50.5	17.8	15.9
1992	53.3	24.8	10.7
2002	55.3	26.2	5.8

Conclusion 2: Beware of <u>average</u> age of all principal operators

Age is related to type of farm, size of farm, farm income class, location, type of operating arrangement, and other factors
 However, there are some patterns that may be worthy of note

Conclusion 3: Average age of principal farm operators is related to climate (Table 2)

 State with lower (1.2 years or more) average ages are in cooler climates (ID, IN, ME, MN, NE, NH, NY, OH, PA, SD, VT, WI, WY)

States with higher (1.2 years or more) average ages are in warmer climates (AL, CA, FL, GA, HI, MS, SC, TX, VA)

Map 1: Average Age of Principal Farm Operators: 2002



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



Conclusion 4: Average age of principal farm operators is related to sales (Table 3)

Average ages of operators in sales classes above \$50,000 were below the overall U.S. average age

Average ages of operators in nearly every sales class below \$50,000 were above the overall U. S. average age

Conclusion 5: Average age is related to type of farm (Table 5)

Lowest average ages were for hogs (49.2), dairy (51.6), and poultry (51.6) Highest average ages were for beef cattle (56.7), fruit and tree nut (57.7), and "other crops" (56.5) Average ages for most farm types are below the 55.3 years of age average since beef cattle farms are 31.2 % of all farms

Conclusion 6: Average age is related to tenure and type of occupation (Table 6)

- Full owners averaged 57.0 years
- Part owners averaged 53.1 years
- Tenants averaged 47.2 years
- If principal occupation was farming, average age was 57.0
 - If principal occupation was <u>not</u> farming, average age was 53.0

Census change #1: Data are now provided for all farms (Table 1)

- Past censuses provided detailed information for only farms on the mail list
- Tabulated size distributions of farms were misleading

Census change #2: Data collected for all farm operators (Table 7)

- Past censuses had asked only about the principal operator
- No other data series attempted to count all farmers

Average Age Results, by operator "number" and gender

		Average a	Average age by gender	
	Average age	Men	Women	
Principal operators	55.3	55.1	56.7	
Second operators	49.5	47.9	50.3	
Third operators	41.9	40.0	45.2	
All operators	53.2	53.7	51.9	

Census change #3: Data collected for households of each operator (Table 8)

- People living in the household
- Households sharing in the net farm income
- Percent of the principal operator's household income from the farm

3-Dimensional Data Analysis Approach

- Original data containing actual ages for principal, second, and third operators were used
- Cross tabulation tables of age, gender, and household members were examined
- Table 10 of the reports illustrates some 2-dimensional comparisons

Conclusion 7: Most female second operators were spouses (Table 10)

- Male principal operators and female second operators were mainly of similar ages
- Male principal operators and female second operators were mainly in the same household

Female principal operators and male second operators showed more variation in ages and households

Definition of possible succession plan

A farm operation was considered to demonstrate a possible succession plan if two different generations were present Two generations is defined as one of the three operators is at least 20 years older or younger than one of the other two

Percentage age relationships of male principal operators and male second operators

Principal and 2nd operator age difference

Age of principal operator	Principal operator more than 20 years younger	Age gap less than 20 years	Principal operator more than 20 years older	% in different generations
<25	63.4	36.6	0	63.4
25-34	49.7	50.3	0	49.8
35-44	29.4	65.5	5.1	34.5
45-54	12.5	64.0	23.6	36.0
55-64	2.6	46.7	50.6	53.3
65-74	0.2	27.3	72.5	72.7
>=75	0.0	14.7	85.3	85.3
Total	12.3	47.4	40.4	52.6

Examples of operations which <u>may have</u> a succession plan in place

Principal and 2nd operator age difference

Principal operator more than 20 years younger	Age gap less than 20 years	Principal operator more than 20 years older	% in different generations
63.4	36.6	0	63.4
49.7	50.3	0	49.8
29.4	65.5	5.1	34.5
12.5	64.0	23.6	36.0
2.6	46.7	50.6	53.3
0.2	27.3	72.5	72.7
0.0	14.7	85.3	85.3
12.3	47.4	40.4	52.6
	Principal operator more than 20 years younger 63.4 49.7 29.4 12.5 2.6 0.2 0.0 12.3	Principal operator more than 20 years younger Age gap less than 20 years 63.4 36.6 49.7 50.3 29.4 65.5 12.5 64.0 2.6 46.7 0.2 27.3 0.0 14.7 12.3 47.4	Principal operator more than 20 years younger Age gap less than 20 years older Principal operator more than 20 years older 63.4 36.6 0 49.7 50.3 0 29.4 65.5 5.1 12.5 64.0 23.6 2.6 46.7 50.6 0.2 27.3 72.5 0.0 14.7 85.3 12.3 47.4 40.4

Examples of operations which <u>may have</u> implemented a succession plan

Principal and 2nd operator age difference

Age of principal operator	Principal operator more than 20 years younger	Age gap less than 20 years	Principal operator more than 20 years older	% in different generations
<25	63.4	36.6	0	63.4
25-34	49.7	50.3	0	49.8
35-44	29.4	65.5	5.1	34.5
45-54	12.5	64.0	23.6	36.0
55-64	2.6	46.7	50.6	53.3
65-74	0.2	27.3	72.5	72.7
>=75	0.0	14.7	85.3	85.3
Total	12.3	47.4	40.4	52.6

Conclusion 8: Most multiple operator farms have only one generation (Table 12)

- There are 803,127 farms with multiple operators
 Only 193,631 farms had two or more different generations
 Thus, only 24.1% of multiple
 - generation farms (or 9.1% of all farms) have succession evidence

Conclusion 9: Succession evidence does vary by income class (Table 12)

- 21.4% of multiple operator farms under \$100,000 in sales had different generations
 - The % was 34.3 for farms with sales between \$100,000 and \$250,000
- The % was 38.8 for farms with sales above \$250,000

Percent of all farms with different generations, by sales class 2002

		% with different generations	
	% with multiple operators	w/multiple operators	All farms
< \$100k	36.6	21.4	7.8
\$100k but < \$250k	39.9	34.3	13.7
\$250 k & over	48.1	38.8	18.7
All farms	37.7	24.1	9.1

Conclusion 10: Succession evidence does vary by type of farm (Table 12)

The highest percents of multiple operator farms with different generations were for dairy (37.1), cotton (35.9), and tobacco (33.2) farms

The lowest percents were for aquaculture and other animal (16.4), sheep and goat (17.9), and poultry (20.0) farms

Summary 1: Age and succession planning is a Good News/Bad News story

Average age of farmers increased again—to 55.3
There are many (803,127) farms with multiple operators
Many 2nd and 3rd operators are spouses or others of similar age as the principal operator

Summary 2: Good News/Bad News, continued

About a quarter (24.1%) of farms with multiple operators have different generations
Nearly 2 in 5 (38.8%) of multiple operator farms with over \$250,000 in sales have different generations