

Appendix C.

Statistical Methodology

MAIL LIST MODEL

Classification analysis was performed to predict the probability that an addressee on the 1992 mail list operated a farm, and thereby separated the preliminary mail list into probable farm and probable nonfarm classes. The analysis was used to reduce the preliminary census mail list of 3.78 million records to a final mail list size of 3.55 million records. All 3.55 million addresses on the final mail list received a census of agriculture report form.

Records from the 1987 final census mail list were used to build a 1992 prediction model for the 1992 analysis. Classification and Regression Trees (CART) software analyzed characteristics of known 1987 farm and nonfarm operations to determine which were most useful in predicting farm and nonfarm classes. Record characteristics such as the source of the mail list record, number of source lists on which the record appeared, expected value of agricultural sales, and geographic location were used to separate mail list records into model groups. (Sources included the previous agriculture census mail list, the Internal Revenue Service administrative records, U.S. Department of Agriculture, and special commodity lists.) The proportion of 1987 census farm records in each model group was calculated to provide an estimate of the probability that an addressee in the group operated a farm.

After the model groups were defined, each address record on the 1992 preliminary mail list was assigned to a model group by matching record characteristics to model group characteristics. Records belonging to the groups with the highest farm probability were those more likely to be farms according to the classification tree methodology. The model, followed by analyst reviews, was used to remove 229,700 records from the preliminary mail list (those in model groups with the lowest farm probability), and thereby designated the 3.55 million records with the highest farm probability to receive the census report form. This procedure was used to obtain a more complete census enumeration of farm operations without excessive respondent burden and data collection cost.

CENSUS SAMPLE DESIGN

Each of the 3.55 million name and address records on the census mail list was designated to receive one of three different types of census report forms. The three forms were the nonsample form, the screener form, and the

sample form. Sections 1 through 20 and 27 through 32 of the sample form are identical to sections on the nonsample form. The sample form, sections 21 through 26, contains additional questions on usage of fertilizers and chemicals, farm production expenditures, value of machinery and equipment, value of land and buildings, and farm-related income. The screener form is identical to the nonsample form with questions added in section 1 to allow quick identification of nonfarm addresses. These three different forms were used to reduce the response burden of the census, while providing reliable information on a large number of data items.

The sample form was mailed to all mail list records in Alaska, Hawaii, and Rhode Island, and to a sample of records in other States selected from the final mail list. Addresses were selected into the sample with certainty (1) if they were expected to have large total value of agricultural products sold or large acreage, (2) if they were multiunit operations (i.e., separate farms in more than one location), (3) if they had other special characteristics, or (4) if they were in a county with less than 100 farms in 1987. Other addresses in counties containing 100 to 199 farms in 1987 were systematically sampled at a rate of 1 in 2, and other addresses in counties containing 200 farms or more in 1987 were systematically sampled at a rate of 1 in 6. This differential sampling scheme was used to provide reliable data for the sample sections of the report form for all counties. When a nonsample large farm was identified during processing, a supplemental form that contained the additional sample data inquiries was mailed.

To determine which mail list records would receive the screener form, all mail list records not designated for the sample were sorted by model group farm probability as specified by the mail list model. The 412,000 mail list records in the model groups with the lowest probability of being farms and with an expected total value of agricultural product sales less than \$25,000 were designated to receive the screener report form. The remaining mail list records received the nonsample report form.

CENSUS ESTIMATION

The 1992 Census of Agriculture used two types of statistical estimation procedures. These estimation procedures accounted for nonresponse to the data collection and for the sample data collection. These procedures are necessary because some farm operators never respond to

the census despite numerous attempts to contact them, and the estimates for the sample data are based on a sample of farm operators rather than a full enumeration.

Whole Farm Nonresponse Estimation

A statistical estimation procedure was used to account for nonrespondent farm operators to the census. We excluded large and unique farm operations that received intensive telephone followup during census processing, assuming complete response from them. A stratified systematic sample of remaining census nonrespondents were contacted by enumerators using a computer-assisted telephone interview system. Five sample strata were defined based on expected value of sales, previous census status, and whether the record was identified by the mail list model to receive the screener report form. The nonresponse survey telephone interview was designed to provide sufficient information to determine the farm status of each record.

In situations where the nonresponse survey case could not be contacted, the contact person refused to cooperate, or when no phone number could be obtained, a screener report form was sent by certified mail.

Estimates of the proportion of census nonrespondents that operated farms were made for each stratum in the State using survey results and applied to the total number of census nonrespondents in that stratum. The number of census nonrespondents that operated farms for each county by stratum was then derived. This estimation procedure is based on the assumption that the distribution of farms in a stratum by county is the same for census nonrespondents as for census respondents.

Certain census respondent farms which exhibited "rare" commodities were designated as "ineligible" to represent census nonrespondent farms and were excluded from the nonresponse weighting operation. The procedure explained below was performed with only the eligible respondent cases: Within each stratum in a county, a noninteger nonresponse weight was calculated and assigned to each eligible respondent farm record. The noninteger nonresponse weight is the ratio of the sum of the estimated number of nonrespondent farms from the nonresponse survey and the number of eligible census respondent farms to the number of eligible census respondent farms. Stratum controls were established to ensure that this weight was never greater than 2.0. The noninteger nonresponse weight was used in the calculation of the final weight for the sample items. The noninteger nonresponse weight was randomly rounded to an integer weight of either 1 or 2 for each record for tabulating the complete count items for publication.

Table A quantifies the effect of the nonresponse estimation procedure on selected census data items. The percentages in these tables are the percents of the census values contributed by nonresponse estimation. These indicate the potential for bias in published figures resulting from nonresponse to the census. The estimates provided

in these tables do not reflect the effect of item nonresponse to individual census data items. The effect of item nonresponse is discussed in the Census Nonsampling Error section.

Table A. **Percent of State Totals Contributed by Whole Farm Nonresponse Estimation: 1992**

Item	Percent of total
Farms	13.7
Land in farms.....	5.9
Estimated market value of land and buildings ¹	1.6
Market value of agricultural products sold	1.0
Harvested cropland	4.6
Corn for grain or seed	4.2
Wheat for grain	3.8
Livestock and poultry inventory:	
Cattle and calves	4.8
Hogs and pigs	1.7
Hens and pullets of laying age.....	.2

¹Data are based on a sample of farms.

Sample Estimation

Sample data estimates the population totals that would have resulted from a complete census for the items in sections 21 through 26 of the sample report form. The estimates were obtained from a ratio estimation procedure that resulted in the assignment of a weight to each respondent record containing sample items. For any given county, a sample item total was estimated by multiplying the data items for each farm in the county by the corresponding sample weight and summing over all sample records in the county.

Each respondent sample farm was assigned a sample weight for use in producing estimates for all sample items. For example, if the weight given to a sample farm had the value 6, all sample data items reported by that farm would be multiplied by 6. The weight assigned to a sample certainty farm was 1.

Other than certainty farms, within a county, the ratio estimation procedure for farms was performed in three steps using three variables. The first variable contained eight 1992 total value of agricultural production (TVP) groups. Both the second and third variables, Standard Industrial Classification (SIC) code and farm acreage, contained two groups. The three sets of groups were as follows:

TVP	SIC	Acres
\$1 to \$999	01 All crops	1 to 69
\$1,000 to \$2,499	02 All livestock	70 or more
\$2,500 to \$4,999		
\$5,000 to \$9,999		
\$10,000 to \$24,999		
\$25,000 to \$49,999		
\$50,000 to \$99,999		
\$100,000 or more		

The first step in the estimation procedure was to classify the sample records into 32 mutually exclusive initial post strata formed by the three sets of groups. The total and sample farm counts were expanded to account for nonresponse. Each cell containing sample farm records was assigned an initial sample weight equal to the ratio of the total farm count to the sample farm count. This weight was approximately equal to the inverse of the probability of selecting a farm for the census sample.

The second step in the estimation procedure was to combine, if necessary, the 32 initial post strata to increase the reliability of the ratio estimation procedure. Any stratum that contained less than 10 sample farms after nonresponse adjustment or had a weight greater than two times the mail sample rate was collapsed with another stratum. The mail sample rate was either 2 or 6, depending on whether the county had a 1 in 2 or 1 in 6 sample selection rate. The collapsing occurred within the initial 32 post strata according to a specified collapsing pattern. After the collapsing process was completed, new total farm counts and sample farm counts were computed from each of the final post strata and were used to calculate final sample weights.

The final step consisted of assigning the noninteger final post stratum weight to the sample farm records in each post stratum. The weight is the ratio of total farm count to sample farm count in each final post stratum. The noninteger sample weight, the product of the noninteger final post stratum weight and the nonresponse weight, was randomly rounded to an integer weight for tabulation. If, for example, the final weight for the farms in a particular post stratum was 7.2, then 0.2 or one-fifth of the sample farms in this post stratum were randomly assigned a weight of 8 and the remaining four-fifths received a weight of 7.

CENSUS SAMPLING ERROR

The sample for the 1992 Census of Agriculture is only one of a large number of possible samples of the same size that could have been selected using the same sample design. Sample refers to the sample for both the nonresponse survey and the selection of farms to receive the sample report forms. Estimates derived from all the possible samples would differ from each other only by random variation.

The standard error or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The percent relative standard error of an estimate is defined as 100 times the standard error of the estimate divided by the value of the estimate.

If all possible samples were selected, each of the samples were surveyed under essentially the same conditions, and an estimate and its standard error were calculated from each sample, then:

1. Approximately 90 percent of the intervals from 1.65 standard errors below the estimate to 1.65 standard errors above the estimate would include the average value of all possible samples.
2. Approximately 95 percent of the intervals from 1.96 standard errors below the estimate to 1.96 standard errors above the estimate would include the average value of all possible samples.

The following example illustrates the computations necessary for producing a confidence interval for an estimate. Assume that the estimate of number of farms for a State is 94,382 and the relative standard error of the estimate is .1 percent (0.001). Multiplying 94,382 by 0.001 yields 94, the standard error; therefore, a 90-percent confidence interval is 94,227 to 94,537 (i.e., 94,382 plus or minus 1.65 x 94). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 90 percent of these intervals would contain the figure obtained from a complete enumeration. Similarly, a 95-percent confidence interval is 94,198 to 94,566 (i.e., 94,382 plus or minus 1.96 x 94).

Census items were classified as either complete count or sample count items. Complete count items were asked of all farm operators. Examples of complete count items were land in farms, harvested cropland, livestock inventory and sales, crop acreage, quantities harvested and crop sales, land use, irrigation, government loans and payments, conservation acreage, type of organization, and operator characteristics.

Sample count items were asked only of a sample of farm operators. These items appeared only in sections 21 through 26 of the sample report form. Sample count items were included under the following section headings: commercial fertilizers, chemicals, production expenses, farm machinery and equipment, value of land and buildings, and farm-related income.

Variability, measured as percent relative standard error, in the estimates of complete count items is due only to the nonresponse survey estimation procedure. Variability in the estimates of sample count items is due to both the nonresponse survey estimation procedure and the census sample selection and estimation procedure. Thus, variability in the sample count item estimates tends to be larger than the variability in the complete count item estimates.

Table B provides the generalized reliability estimates of the estimated number of farms in a county reporting complete count and sample count items. The top half of the table shows the percent relative standard error for estimated number of farms in a county reporting a complete count item and the bottom half a sample count item. These are derived from regression equations. Separate regression equations were used for complete count items and sample count items. Each regression equation was fit with the estimated number of farms in a county reporting an item as the independent variable and the relative variance of that estimate as the dependent variable for all counties in the State. For sample count items, only data

from counties sampled at a rate of 1 in 6 are used in the estimation of the regression equation.

Table B. Reliability Estimates for Number of Farms in a County Reporting a Complete Count Item or Sample Count Item: 1992

Farms	Relative standard error of estimate (percent)
COMPLETE COUNT ITEM	
Number of farms reporting:	
25	6.1
50	4.3
75	3.5
100	3.0
150	2.4
200	2.0
300	1.6
500	1.2
750 .....	.9
1,000 .....	.7
1,500 .....	.4
2,000 .....	.3
SAMPLE COUNT ITEM	
Number of farms reporting:	
25	30.9
50	21.5
75	17.2
100	14.6
150	11.4
200	9.4
300	6.9
500	3.8
750	3.1
1,000	2.7
1,500	2.2
2,000	1.9

To illustrate the use of this table, assume that the estimate of the number of farms reporting hogs and pigs for a particular county, as given in county table 15, is 89. Since hogs and pigs is a complete count data item, refer to the first part of table B and use the estimated percent relative standard error of the estimate from the row with farm count equal to or just less than the estimated number of farms, 89. For this example, the percent relative standard error of the estimate comes from the row for 75 farms reporting. For sample count items, follow the same procedure using the second part of table B. For counties with fewer than 100 farms in the 1987 Census of Agriculture, variability in sample count item estimates comes only from nonresponse survey estimation procedures; thus, the estimated relative standard error for a sample count item in these counties may be obtained using the first part of table B.

Table C presents the percent relative standard error of selected State data items for all farms, and table D presents the percent relative standard error of selected State data items for all farms with sales of \$10,000 or more.

Table E presents the percent standard error for percent change in State totals from 1987 to 1992. The general

purpose of the percent change estimate is to provide a relative measure of the difference in a characteristic between censuses. The relative change for a given characteristic is defined as the ratio of the difference of the 1992 and the 1987 estimate for that characteristic to the 1987 estimate. This ratio is multiplied by 100 to obtain the percent change. The percent standard error of a percent change estimate, then, is the standard error of the ratio multiplied by 100.

Table F presents the percent relative standard error for State and county totals for selected data items. The percent relative standard error of the estimate for the same item differs among counties in the State. Reasons for this are differences among counties in (1) the total number of farms, (2) the number of large farms included with certainty, (3) the size classifications of the farms sampled, (4) the amount of nonresponse, (5) the general agricultural characteristics, and (6) the specific characteristic being measured.

CENSUS NONSAMPLING ERROR

The accuracy of the census counts are affected jointly by sampling errors, described in the previous section, and nonsampling errors. Extensive efforts were made to compile a complete and accurate mail list for the census, to design an understandable report form with instructions, and to minimize processing errors through the use of quality control measures on specific operations. Nonsampling errors arise from incompleteness of the census mail list, duplication in the mail list, incorrect data reporting, errors in editing of reported data, and errors in imputation for missing data. These specific nonsampling errors are further discussed in this section. Evaluation studies will be conducted to measure the extent of certain nonsampling errors such as coverage error and classification error.

Census Coverage

The main objective of the census of agriculture is to obtain a complete and accurate enumeration of U.S. farms with accurate data on all aspects of the agricultural operation. However, the high cost and availability of resources for enumeration place restrictions on feasible data collection methodologies. The past six agriculture censuses have been conducted by mail enumeration with telephone contact for selected nonrespondents. The completeness of such an enumeration thus depends to a large extent on the coverage of farm operations by the census mail list.

The past five censuses of agriculture have included approximately 91 percent of farms in the United States and approximately 96 percent of agriculture production. Complete enumeration of agricultural operations satisfying the farm definition of \$1,000 or more in agricultural sales is complicated by fluctuations in agricultural operations qualifying for enumeration, the variety of arrangements under which farms are operated, the multiplicity of names used

by an operation, the number of operations in which an operator participates, the accuracy of data reporting, and other factors. A new mail list is compiled for each census because no current single list of agricultural operations is comprehensive.

An evaluation of census coverage has been conducted for each census of agriculture since 1945. The evaluation provides estimates of the completeness of census farm count and major census data items. In addition, the evaluation helps to identify problems in the census enumeration and provide information that can form the basis for improvements. The results of the 1992 Coverage Evaluation program will be published in volume 2, Subject Series (Part 2): Coverage Evaluation.

The evaluation of coverage for the 1992 census was designed to measure four components of error in the census mail list and in farm classification. Mail list error includes two components of error, a measurement of farms not on the census mail list (undercount) and a measurement of farms enumerated more than once in the census (overcount). Classification error includes two components of error, a measurement of farms classified as nonfarms in the census (undercount) and of nonfarms classified as farms in the census (overcount). Classification error arises from reporting and processing errors. Mail list undercount dominates all coverage errors. Net coverage error is defined as the difference between undercounted and overcounted farms. Measurements of these errors, as well as a description of the complete coverage program, will be available in the Coverage Evaluation report.

Mail List Coverage

A major problem with mail enumeration for the census of agriculture is the difficulty encountered in compiling a complete mail list. The percentage of farms included on the census mail list varies considerably by State. Several reasons have contributed to farm operator names not being included on the census mail list—the operation may have been started after the mail list was developed, the operation may be so small as not to appear in any of the agriculture-related source lists used in compiling the census list, or the operation may have been falsely classified as a nonfarm prior to mailout. A large proportion of the farms not included on the mail list are small in both acres and sales of agricultural products.

The 1992 Census of Agriculture Coverage Evaluation used the area segment sample of the 1992 June Agricultural Survey (JAS) of the National Agricultural Statistical Service (NASS) to estimate farms not on the census mail list. The Census Bureau contracted with NASS to augment the JAS data collection. The survey data collected by NASS will be protected under the confidentiality of title 13, U.S. Code. These JAS survey records were matched to the census mail list. Records that did not match were mailed a census of agriculture report form to estimate mail list

coverage. Estimates of farms not on the census mail list are computed using a capture-recapture dual frame estimator which will be described in the Coverage Evaluation report mentioned earlier.

Table G provides coverage evaluation estimates for one component of coverage error associated with the census of agriculture; that is, the error due to farms not on the census mail list. Also provided are estimates of selected characteristics of farms not on the mail list, estimates of characteristics of farms not on the mail list as a percentage of total farms in the State, and the percent relative standard error associated with each estimate. The estimate of total farms in the State is based on census farm count plus the estimated number of farms not on the census mail list. This estimate of total farms in the State was not adjusted for the components of error associated with classification and list duplication error. Estimates of these errors will be made at the regional, rather than the State level, and will be provided in the Coverage Evaluation report mentioned earlier.

Respondent and Enumerator Error

Incorrect or incomplete responses to the mailed census report form or to the questions posed by a telephone enumerator introduce error into the census data. Such incorrect information can lead, in some cases, to incorrect classification of farms. This type of reporting error is measured by the Classification Error Survey discussed later in this section. To reduce all types of reporting error, detailed instructions for completing the report form were provided to each addressee. Questions were phrased as clearly as possible based on tests of the census report form and each respondent's answers were checked for completeness and consistency.

Item Nonresponse

As information flows from data collection to tabulation, various types of item nonresponses are identified on the report forms. Nonresponse to particular questions on the report form that logically should be present may create a type of nonsampling error in both complete count and sample count data. When information from reporting farms is used to edit or impute for item nonresponse, the data may be biased due to characteristics of the nonreporting respondents differing from those reporting the item. Any attempt to correct the data items may not completely reflect this difference either at the element level (individual farm operation) or on the average.

Processing Error

All phases of processing for each report form are sources for the introduction of nonsampling error. The processing of the report forms includes clerical screening for farm activity, computerized check-in of report forms and follow-up of nonrespondents, keying and transmittal of

completed report forms, computerized editing of inconsistent and missing data, review and correction of individual records referred from the computer edit, review and correction of tabulated data, and electronic data processing. These operations undergo a number of quality control checks to ensure as accurate an application as possible, yet some errors are not detected and corrected.

Classification Error

An evaluation study of classification errors was conducted in the 1992 Census of Agriculture as part of the census coverage evaluation program. A sample of census mail list respondents was selected, and these addresses were reenumerated to determine whether they were a farm or nonfarm. A farm status determination was made based on the evaluation report form and compared with the census farm status which was based on the data reported on the report form. Differences in status were reconciled.

In past censuses, the proportion of farms undercounted due to classification errors was higher for farms with small values of sales. For the 1987 census, the classification error rate was higher for (1) farms with small values of sales, (2) farms with a small number of acres, (3) full-owner farms than part-owner or tenant farms, (4) operators with principal occupation other than farming, and (5) males than females. Results from the 1992 Classification Error Survey will be published in the Coverage Evaluation report.

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

The Census of Agriculture Complex Edit and Imputation System performs the following functions:

- Ensuring reasonable relationships between/among data items, values for various sizes of farms, and combinations of commodities.
- Ensuring necessary consistencies are present. There are more than 70 distinct consistency requirements.
- Ensuring geographic, legal, and physical constraints are met.

The system must perform these and similar functions for 900 data keycodes for sample records and 850 data keycodes for nonsample records.

For the 1992 Census of Agriculture, as in previous censuses, all reported data were keyed and then edited by computer. The edits were used to determine whether the reports met the minimum criteria to be counted as farms in the census. The complex edit and imputation system provided the basis for deciding to accept, impute (supply), delete, or alter the reported value for each data record item.

Whenever possible, edit imputations, deletions, and changes were based on component or related data on the respondent's report form. For some items, such as operator characteristics, data from the previous census were used when available. Values for other missing or unacceptable reported data items were calculated based on reported quantities and known price parameters.

When these and similar methods were not available and values had to be supplied, the imputation process used information reported for another farm operation in a geographically adjacent area with characteristics similar to those of the farm operation with incomplete data. For example, a farm operation that reported acres of corn harvested, but did not report quantity of corn harvested, was assigned the same bushels of corn per acre harvested as that of the last nearby farm with similar characteristics that reported acceptable yields during that particular execution of the computer edit. The imputation for missing items in each section of the report form was conducted separately; thus, assigned values for one operation could come from more than one respondent.

Prior to the imputation operation, a set of default values and relationships were assigned to the possible imputation variables. The relationships and values varied depending on the item being imputed. For example, different default values were assigned for several standard industrial classification and total value of sales categories when imputing hired farm labor expenses. These values and item relationships for the possible imputation variables were stored in the computer in a series of matrices.

Each execution of the computer edit consisted of records from only one State. The computer records were sorted by reported State and county. For a given execution of the edit, the stored entries in the various matrices were retained in memory only until a succeeding record having acceptable characteristics for some sections of the report form was processed by the computer. Then the acceptable responses of the succeeding operation replaced those previously stored. When a record processed through the edit had unreported or unacceptable data, the record was assigned the last acceptable ratio or response from an operation with a similar set of characteristics. Once each execution of the computer edit for a State was completed, the possible imputation variables were reset to the default values and relationships for subsequent executions.

After the initial computer edit, keyed reports not meeting the census farm definition were reviewed to ensure that the data were keyed correctly. Edit referrals were generated for about 25 percent of the reports included as farms; they were reviewed for keying accuracy to ensure that the computer edit actions were correct. If the results of the computer edit were not acceptable, corrections were made and the record was reedited.

Table C. Reliability Estimates of State Totals for All Farms: 1992

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS			FARM PRODUCTION EXPENSES¹		
Farms ----- number ..	2 633	1.4	Total farm production expenses ----- farms ..	2 627	1.5
Land in farms ----- acres ..	589 189	.8	----- \$1,000 ..	448 199	.3
Average size of farm ----- acres ..	224	1.6	Average per farm ----- dollars ..	170 613	1.5
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			Livestock and poultry purchased ----- farms ..		
Total sales (see text) ----- farms ..	2 633	1.4	----- \$1,000 ..	64 080	.6
----- \$1,000 ..	559 766	.1	Feed for livestock and poultry ----- farms ..	1 367	3.1
Average per farm ----- dollars ..	212 596	1.4	----- \$1,000 ..	189 867	4
Farms by value of sales:			Commercially mixed formula feeds ----- farms ..	1 161	2.8
Less than \$1,000 (see text) ----- farms ..	201	3.3	----- \$1,000 ..	180 811	.4
\$1,000 to \$2,499 ----- farms ..	58	4.4	Seeds, bulbs, plants, and trees ----- farms ..	1 745	2.6
\$2,500 to \$4,999 ----- farms ..	191	3.7	----- \$1,000 ..	10 470	1.1
\$5,000 to \$9,999 ----- farms ..	309	3.9	Commercial fertilizer ----- farms ..	1 666	2.9
\$10,000 to \$19,999 ----- farms ..	213	3.3	----- \$1,000 ..	19 838	2.1
\$20,000 to \$24,999 ----- farms ..	773	3.3	Agricultural chemicals ----- farms ..	1 834	2.6
\$25,000 to \$39,999 ----- farms ..	252	3.2	Petroleum products ----- farms ..	15 272	1.2
\$40,000 to \$49,999 ----- farms ..	1 760	3.3	----- \$1,000 ..	2 380	1.8
\$50,000 to \$99,999 ----- farms ..	234	3.7	Electricity ----- farms ..	10 367	1.3
\$100,000 to \$249,999 ----- farms ..	3 291	3.8	Hired farm labor ----- farms ..	1 980	2.5
\$250,000 to \$499,999 ----- farms ..	67	5.6	----- \$1,000 ..	6 082	.7
\$500,000 or more ----- farms ..	1 490	5.6	Contract labor ----- farms ..	946	3.9
			----- \$1,000 ..	23 911	.7
			Repair and maintenance ----- farms ..	3 674	.8
			----- \$1,000 ..	2 280	2.1
			Customwork, machine hire, and rental of machinery and equipment ----- farms ..	16 222	1.2
			----- \$1,000 ..	1 134	4.3
			Interest expense ----- farms ..	2 849	4.3
			----- \$1,000 ..	1 270	3.2
			Secured by real estate ----- farms ..	16 664	1.5
			----- \$1,000 ..	978	3.5
			Not secured by real estate ----- farms ..	13 084	1.7
			----- \$1,000 ..	622	4.8
			Cash rent ----- farms ..	3 580	3.1
			----- \$1,000 ..	785	4.7
			Property taxes ----- farms ..	13 804	1.4
			----- \$1,000 ..	2 491	1.7
			All other farm production expenses ----- farms ..	3 176	2.9
			----- \$1,000 ..	2 409	1.9
				51 925	.5
			NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)¹		
			All farms ----- number ..	2 627	1.5
			----- \$1,000 ..	108 998	1.1
			Average per farm ----- dollars ..	41 491	1.8
			Farms with net gains ² ----- number ..	1 774	2.5
			----- \$1,000 ..	117 486	.7
			Average net gain ----- dollars ..	66 227	2.6
			Farms with net losses ----- number ..	853	5.1
			----- \$1,000 ..	8 488	8.8
			Average net loss ----- dollars ..	9 951	10.1
			GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
			Government payments ----- farms ..	268	1.8
			----- \$1,000 ..	1 962	.8
			Other farm-related income ¹ ----- farms ..	658	5.7
			----- \$1,000 ..	3 734	5.5
			Customwork and other agricultural services ----- farms ..	215	11.1
			----- \$1,000 ..	2 213	7.7
			Gross cash rent or share payments ----- farms ..	260	9.8
			----- \$1,000 ..	893	13.2
			Forest products and Christmas trees ----- farms ..	66	19.2
			----- \$1,000 ..	324	21.8
			Other farm-related income sources ----- farms ..	218	10.4
			----- \$1,000 ..	304	22.9
			COMMODITY CREDIT CORPORATION LOANS		
			Total ----- farms ..	47	2.6
			----- \$1,000 ..	1 406	.5
Value of agricultural products sold directly to individuals for human consumption (see text) ----- farms ..	144	3.1			
----- \$1,000 ..	1 906	1.6			

See footnotes at end of table.

Table C. Reliability Estimates of State Totals for All Farms: 1992 — Con.

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			TENURE OF OPERATOR		
Total cropland ----- farms ..	2 162	1.6	All operators ----- farms ..	2 633	1.4
----- acres ..	495 156	.7	----- acres ..	589 189	.8
Harvested cropland ----- farms ..	1 956	1.6	Full owners ----- farms ..	1 607	1.4
----- acres ..	470 348	.7	----- acres ..	121 114	2.1
Farms by acres harvested:			Part owners ----- farms ..	788	1.5
1 to 9 acres ----- farms ..	292	2.4	----- acres ..	403 884	.5
----- acres ..	1 280	2.8	Tenants ----- farms ..	238	2.6
10 to 19 acres ----- farms ..	226	3.0	----- acres ..	64 191	1.3
----- acres ..	3 043	3.0			
20 to 29 acres ----- farms ..	150	3.3	OWNED AND RENTED LAND		
----- acres ..	3 440	3.3	Land owned ----- farms ..	2 402	1.3
30 to 49 acres ----- farms ..	210	3.1	----- acres ..	321 877	1.1
----- acres ..	7 980	3.1	Owned land in farms ----- farms ..	2 395	1.3
50 to 99 acres ----- farms ..	300	2.9	----- acres ..	293 927	1.1
----- acres ..	20 668	2.9	Land rented or leased from others ----- farms ..	1 038	1.5
100 to 199 acres ----- farms ..	261	3.2	----- acres ..	298 523	.6
----- acres ..	36 119	3.2	----- landlords ..	3 894	1.2
200 to 499 acres ----- farms ..	274	2.1	Rented or leased land in farms ----- farms ..	1 026	1.5
----- acres ..	87 681	1.9	----- acres ..	295 262	.6
500 to 999 acres ----- farms ..	133	.5	Land rented or leased to others ----- farms ..	446	1.7
----- acres ..	93 227	.4	----- acres ..	31 211	2.4
1,000 acres or more ----- farms ..	110	—			
----- acres ..	216 910	—			
Cropland:			OPERATOR CHARACTERISTICS		
Pasture or grazing only ----- farms ..	500	2.0	Operators by place of residence:		
----- acres ..	9 630	2.3	On farm operated ----- farms ..	1 956	1.4
Other cropland ----- farms ..	508	1.6	Not on farm operated ----- farms ..	436	2.0
----- acres ..	15 178	1.6	Not reported ----- farms ..	241	2.0
Total woodland ----- farms ..	1 252	1.6	Operators by principal occupation:		
----- acres ..	66 217	1.5	Farming ----- farms ..	1 578	1.3
Pastureland and rangeland other than cropland and ----- farms ..	194	2.6	Other ----- farms ..	1 055	1.9
woodland pastured ----- acres ..	5 510	1.7	Operators by days worked off farm:		
Land in house lots, ponds, roads, wasteland, etc. ----- farms ..	1 645	1.3	Any ----- farms ..	1 287	1.7
----- acres ..	22 306	2.1	200 days or more ----- farms ..	849	1.8
Irrigated land ----- farms ..	352	1.6			
----- acres ..	61 774	.4	Operators by sex:		
Acres irrigated:			Male ----- farms ..	2 346	1.4
1 to 9 acres ----- farms ..	114	3.1	----- acres ..	565 832	.8
----- acres ..	359	3.8	Female ----- farms ..	287	1.6
10 to 49 acres ----- farms ..	51	4.6	----- acres ..	23 357	2.1
----- acres ..	1 283	4.1	Average age of operator ----- years ..	52.7	2.0
50 to 99 acres ----- farms ..	49	3.5			
----- acres ..	3 409	3.4	FARMS BY TYPE OF ORGANIZATION		
100 to 199 acres ----- farms ..	48	2.6	Individual or family (sole proprietorship) ----- farms ..	2 226	1.5
----- acres ..	6 390	2.4	----- acres ..	379 091	1.1
200 to 499 acres ----- farms ..	55	—	Partnership ----- farms ..	213	2.2
----- acres ..	15 953	—	----- acres ..	66 523	1.3
500 to 999 acres ----- farms ..	25	—	Corporation:		
----- acres ..	17 383	—	Family held ----- farms ..	172	1.3
1,000 acres or more ----- farms ..	10	—	----- acres ..	138 660	.2
----- acres ..	16 997	—	More than 10 stockholders ----- farms ..	8	—
Harvested cropland irrigated ----- farms ..	342	1.6	10 or less stockholders ----- farms ..	164	1.4
----- acres ..	61 594	.4	Other than family held ----- farms ..	9	9.2
Pasture and other land irrigated ----- farms ..	14	7.7	----- acres ..	2 184	8.0
----- acres ..	180	14.0	More than 10 stockholders ----- farms ..	—	—
Land under federal acreage reduction programs:			10 or less stockholders ----- farms ..	9	9.2
Diverted under annual commodity programs ----- farms ..	176	1.8	Other—cooperative, estate or trust, institutional, etc. ----- farms ..	13	8.3
----- acres ..	3 673	.5	----- acres ..	2 731	.8
Conservation Reserve or Wetlands Reserve ----- farms ..	37	5.1			
Programs ----- acres ..	860	5.5			
VALUE OF LAND AND BUILDINGS ¹			HIRED FARM LABOR		
Estimated market value of land and buildings ----- farms ..	2 627	1.5	Hired workers by days worked:		
----- \$1,000 ..	1 350 689	1.6	150 days or more ----- farms ..	494	4.7
Average per farm ----- dollars ..	514 156	2.2	----- workers ..	1 504	1.7
Average per acre ----- dollars ..	2 246	2.2	Less than 150 days ----- farms ..	788	4.9
			----- workers ..	3 226	3.1
VALUE OF MACHINERY AND EQUIPMENT ¹			INJURIES AND DEATHS		
Estimated market value of all machinery and ----- farms ..	2 611	1.5	Farm-related injuries:		
----- \$1,000 ..	177 139	2.2	Operator and family members ----- farms ..	20	6.4
Average per farm ----- dollars ..	67 843	2.7	----- number ..	21	6.1
			Hired workers ----- farms ..	19	3.6
			----- number ..	33	2.1
AGRICULTURAL CHEMICALS ¹			Farm-related deaths:		
Commercial fertilizer ----- farms ..	1 644	3.0	Operator and family members ----- farms ..	4	16.8
----- acres on which used ..	392 152	1.5	----- number ..	4	16.8
			Hired workers ----- farms ..	—	—
			----- number ..	—	—

See footnotes at end of table.

Table C. Reliability Estimates of State Totals for All Farms: 1992 — Con.

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS BY SIZE			LIVESTOCK		
1 to 9 acres ----- farms ..	421	1.4	Cattle and calves inventory ----- farms ..	411	2.0
10 to 49 acres ----- farms ..	1 944	1.7	Beef cows ----- farms ..	28 838	.8
50 to 69 acres ----- farms ..	19 217	1.6	Milk cows ----- farms ..	2 856	2.8
70 to 99 acres ----- farms ..	11 246	1.8	----- farms ..	137	2.6
100 to 139 acres ----- farms ..	186	2.9	----- farms ..	8 659	.5
140 to 179 acres ----- farms ..	22 493	3.4	Cattle and calves sold ----- farms ..	337	2.1
180 to 219 acres ----- farms ..	93	4.2	----- farms ..	22 655	.4
220 to 259 acres ----- farms ..	18 280	4.2	----- farms ..	15 016	.3
260 to 499 acres ----- farms ..	14 442	4.5	Hogs and pigs inventory ----- farms ..	205	2.4
500 to 999 acres ----- farms ..	244	2.3	Hogs and pigs sold ----- farms ..	58 913	.7
1,000 to 1,999 acres ----- farms ..	87 607	2.2	----- farms ..	118 100	2.3
2,000 acres or more ----- farms ..	161	1.1	----- farms ..	10 460	.7
----- farms ..	111 244	1.0	Sheep and lambs of all ages inventory ----- farms ..	72	4.2
			----- farms ..	1 856	6.6
			Sheep and lambs sold ----- farms ..	48	5.1
			----- farms ..	1 534	14.7
			Horses and ponies inventory ----- farms ..	374	2.5
			----- farms ..	2 672	3.1
			Horses and ponies sold ----- farms ..	113	3.9
			----- farms ..	332	4.2
			POULTRY		
1,000 to 1,999 acres ----- farms ..	89	—	Chickens 3 months old or older inventory ----- farms ..	117	3.4
2,000 acres or more ----- farms ..	117 283	—	Hens and pullets of laying age ----- farms ..	739 248	1.1
----- farms ..	42	—	----- farms ..	112	3.4
----- farms ..	146 800	—	----- farms ..	510 718	.7
			Broilers and other meat-type chickens sold ----- farms ..	870	.3
			----- farms ..	223 328 864	.1
FARMS BY STANDARD INDUSTRIAL CLASSIFICATION			CROPS HARVESTED		
Cash grains (011) ----- farms ..	1 019	2.3	Corn for grain or seed ----- farms ..	1 029	1.7
Field crops, except cash grains (013) ----- farms ..	311 370	1.3	----- farms ..	154 240	.7
Vegetables and melons (016) ----- farms ..	82	3.9	----- farms ..	18 142 044	.6
Fruits and tree nuts (017) ----- farms ..	44 598	.7	----- farms ..	115	2.6
Horticultural specialties (018) ----- farms ..	16	7.8	----- farms ..	9 446	.4
General farms, primarily crop (019) ----- farms ..	4 153	1.3	----- farms ..	141 023	.4
Livestock, except dairy, poultry, and animal specialties (021) ----- farms ..	90	2.8	Wheat for grain ----- farms ..	599	1.7
Dairy farms (024) ----- farms ..	4 715	2.9	----- farms ..	61 754	.8
Poultry and eggs (025) ----- farms ..	42	4.7	Barley for grain ----- farms ..	3 324 145	.7
Animal specialties (027) ----- farms ..	15 845	2.4	----- farms ..	323	1.8
General farms, primarily livestock and animal specialties (029) ----- farms ..	186	3.2	Soybeans for beans ----- farms ..	37 520	.6
----- farms ..	26 272	1.5	----- farms ..	2 605 621	.5
----- farms ..	83	2.8	----- farms ..	1 324	1.7
----- farms ..	36 239	.7	----- farms ..	231 872	.8
----- farms ..	878	.4	----- farms ..	6 948 357	.8
----- farms ..	111 769	.1	Irish potatoes ----- farms ..	24	4.1
----- farms ..	126	3.9	----- farms ..	5 191	(L)
----- farms ..	4 734	6.6	----- farms ..	1 175 090	(L)
			Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ----- farms ..	428	2.1
			----- farms ..	11 947	2.0
			----- farms ..	30 451	1.9
			Alfalfa hay ----- farms ..	283	2.3
			----- farms ..	4 991	1.9
			----- farms ..	15 316	1.9
			Vegetables harvested for sale (see text) ----- farms ..	271	1.9
			----- farms ..	42 380	.3
			----- farms ..	25	5.7
			Land in orchards ----- farms ..	1 260	.2
			----- farms ..		

¹Data are based on a sample of farms.

²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than \$1,000.

Table D. Reliability Estimates of State Totals for Farms With Sales of \$10,000 or More:
1992

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS			FARM PRODUCTION EXPENSES¹		
Farms number ..	1 776	1.2	Total farm production expenses farms ..	1 768	1.2
Land in farms acres ..	548 485	.7	Average per farm \$1,000 ..	441 772	.3
Average size of farm acres ..	309	1.4	..... dollars ..	249 871	1.2
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			FARM PRODUCTION EXPENSES¹		
Total sales (see text) farms ..	1 776	1.2	Livestock and poultry purchased farms ..	1 060	2.4
Average per farm \$1,000 ..	556 866	.1	..... \$1,000 ..	63 235	.4
..... dollars ..	313 551	1.2	Feed for livestock and poultry farms ..	1 146	2.5
Farms by value of sales:			..... \$1,000 ..	189 394	.4
\$10,000 to \$19,999 farms ..	234	3.7	Commercially mixed formula feeds farms ..	1 049	2.1
..... \$1,000 ..	3 291	3.8	..... \$1,000 ..	180 735	.4
\$20,000 to \$24,999 farms ..	67	5.6	Seeds, bulbs, plants, and trees farms ..	1 152	2.2
..... \$1,000 ..	1 490	5.6	..... \$1,000 ..	10 181	1.0
\$25,000 to \$39,999 farms ..	147	4.4	Commercial fertilizer farms ..	1 086	2.2
..... \$1,000 ..	4 638	4.5	..... \$1,000 ..	19 201	2.1
\$40,000 to \$49,999 farms ..	55	5.4	Agricultural chemicals farms ..	1 296	2.0
..... \$1,000 ..	2 452	5.4	..... \$1,000 ..	14 837	1.2
\$50,000 to \$99,999 farms ..	182	3.2	Petroleum products farms ..	1 596	1.4
..... \$1,000 ..	13 425	3.1	..... \$1,000 ..	9 780	1.0
\$100,000 to \$249,999 farms ..	381	—	Electricity farms ..	1 545	2.0
..... \$1,000 ..	65 099	—	..... \$1,000 ..	5 912	.6
\$250,000 to \$499,999 farms ..	437	—	Hired farm labor farms ..	831	3.2
..... \$1,000 ..	158 306	—	..... \$1,000 ..	23 737	.6
\$500,000 or more farms ..	273	—	Contract labor farms ..	265	4.2
..... \$1,000 ..	308 166	—	..... \$1,000 ..	3 664	.8
Sales by commodity or commodity group:			Repair and maintenance farms ..	1 659	1.5
Crops, including nursery and greenhouse crops farms ..	1 206	1.6	..... \$1,000 ..	15 414	1.0
..... \$1,000 ..	140 611	.4	Customwork, machine hire, and rental of machinery and equipment farms ..	832	3.8
Grains farms ..	1 099	1.6	..... \$1,000 ..	2 611	4.2
..... \$1,000 ..	83 963	.6	Interest expense farms ..	1 077	2.6
Corn for grain farms ..	760	1.6	..... \$1,000 ..	16 083	1.1
..... \$1,000 ..	33 432	.6	Secured by real estate farms ..	871	2.9
Wheat farms ..	512	1.6	..... \$1,000 ..	12 675	1.3
..... \$1,000 ..	10 027	.7	Not secured by real estate farms ..	514	3.6
Soybeans farms ..	965	1.6	..... \$1,000 ..	3 408	2.9
..... \$1,000 ..	34 935	.7	Cash rent farms ..	705	4.1
Sorghum for grain farms ..	119	2.0	..... \$1,000 ..	13 717	1.4
..... \$1,000 ..	1 193	1.4	Property taxes farms ..	1 674	1.5
Barley farms ..	272	1.7	..... \$1,000 ..	2 662	2.9
..... \$1,000 ..	4 129	.5	All other farm production expenses farms ..	1 768	1.2
Oats farms ..	12	8.2	..... \$1,000 ..	51 342	.4
..... \$1,000 ..	38	8.5	NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)¹		
Other grains farms ..	39	3.9	All farms number ..	1 768	1.2
..... \$1,000 ..	209	1.7	..... \$1,000 ..	112 273	.9
Cotton and cottonseed farms ..	—	—	Average per farm dollars ..	63 503	1.5
..... \$1,000 ..	—	—	Farms with net gains ² number ..	1 518	1.9
Tobacco farms ..	—	—	..... \$1,000 ..	116 940	.7
..... \$1,000 ..	—	—	Average net gain dollars ..	77 035	2.0
Hay, silage, and field seeds farms ..	121	2.7	Farms with net losses number ..	250	9.4
..... \$1,000 ..	1 083	4.0	..... \$1,000 ..	4 667	7.5
Vegetables, sweet corn, and melons farms ..	211	1.8	Average net loss dollars ..	18 668	12.0
..... \$1,000 ..	22 459	.3	GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Fruits, nuts, and berries farms ..	33	4.2	Government payments farms ..	238	1.8
..... \$1,000 ..	3 194	.2	..... \$1,000 ..	1 909	.6
Nursery and greenhouse crops farms ..	82	2.9	Other farm-related income ¹ farms ..	467	4.7
..... \$1,000 ..	21 188	.3	..... \$1,000 ..	3 087	4.5
Other crops farms ..	21	2.3	Customwork and other agricultural services farms ..	167	8.7
..... \$1,000 ..	8 723	(L)	..... \$1,000 ..	1 991	6.4
Livestock, poultry, and their products farms ..	1 158	.7	Gross cash rent or share payments farms ..	171	7.0
..... \$1,000 ..	416 256	.1	..... \$1,000 ..	703	7.9
Poultry and poultry products farms ..	918	.4	Forest products and Christmas trees farms ..	25	18.1
..... \$1,000 ..	372 732	.1	..... \$1,000 ..	181	10.0
Dairy products farms ..	105	2.5	Other farm-related income sources farms ..	188	9.7
..... \$1,000 ..	17 643	.4	..... \$1,000 ..	211	3.0
Cattle and calves farms ..	229	2.0	COMMODITY CREDIT CORPORATION LOANS		
..... \$1,000 ..	14 781	.2	Total farms ..	45	2.3
Hogs and pigs farms ..	151	2.3	..... \$1,000 ..	(D)	(D)
..... \$1,000 ..	10 362	.7			
Sheep, lambs, and wool farms ..	30	5.6			
..... \$1,000 ..	67	24.0			
Other livestock and livestock products (see text) farms ..	71	4.4			
..... \$1,000 ..	671	6.4			
Value of agricultural products sold directly to individuals for human consumption (see text) farms ..	88	3.2			
..... \$1,000 ..	1 833	1.6			

See footnotes at end of table.

Table D. **Reliability Estimates of State Totals for Farms With Sales of \$10,000 or More: 1992—Con.**

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			FARMS BY TYPE OF ORGANIZATION		
Total cropland ----- farms ..	1 369	1.5	Individual or family (sole proprietorship) ----- farms ..	1 446	1.3
Harvested cropland ----- acres..	473 063	.7	Partnership ----- acres..	341 887	1.0
Cropland:			Corporation:		
Pasture or grazing only ----- farms ..	1 257	1.6	Family held ----- farms ..	156	1.1
----- acres..	453 687	.6	More than 10 stockholders ----- farms ..	138 042	.2
----- acres..			10 or less stockholders ----- farms ..	8	1.2
Total woodland ----- farms ..	843	1.5	Other than family held ----- farms ..	8	8.3
----- acres..	53 542	1.4	----- acres..	(D)	(D)
Pastureland and rangeland other than cropland and woodland pastured ----- farms ..	104	2.7	More than 10 stockholders ----- farms ..	8	8.3
----- acres..	4 519	1.3	10 or less stockholders ----- farms ..	9	7.8
Land in house lots, ponds, roads, wasteland, etc. ----- farms ..	1 152	1.1	----- acres..	(D)	(D)
----- acres..	17 361	1.9	Other—cooperative, estate or trust, institutional, etc. ----- farms ..	9	7.8
Irrigated land ----- farms ..	309	1.5	----- acres..	(D)	(D)
Harvested cropland irrigated ----- farms ..	61 564	.4			
Pasture and other land irrigated ----- farms ..	307	1.5	HIRED FARM LABOR		
----- acres..	61 434	.4	Hired workers by days worked:		
----- acres..	6	8.3	150 days or more ----- farms ..	451	3.2
----- acres..	130	18.0	----- workers..	1 461	1.2
Land under federal acreage reduction programs:			Less than 150 days ----- farms ..	684	4.0
Diverted under annual commodity programs ----- farms ..	169	1.7	----- workers..	3 045	2.8
----- acres..	3 661	.5			
Conservation Reserve or Wetlands Reserve Programs ----- farms ..	27	5.7	INJURIES AND DEATHS		
----- acres..	754	5.3	Farm-related injuries:		
			Operator and family members ----- farms ..	14	6.1
			----- number..	15	5.7
			Hired workers ----- farms ..	19	3.6
			----- number..	33	2.1
VALUE OF LAND AND BUILDINGS ¹			Farm-related deaths:		
Estimated market value of land and buildings ----- farms ..	1 768	1.2	Operator and family members ----- farms ..	2	24.8
----- \$1,000..	1 184 416	1.1	----- number..	(D)	(D)
Average per farm ----- dollars	669 918	1.6	Hired workers ----- farms ..	—	—
Average per acre ----- dollars	2 154	1.7	----- number..	—	—
VALUE OF MACHINERY AND EQUIPMENT ¹			FARMS BY SIZE		
Estimated market value of all machinery and equipment ----- farms ..	1 768	1.2	1 to 9 acres -----	305	.9
----- \$1,000..	159 278	2.0	10 to 49 acres -----	330	.9
Average per farm ----- dollars	90 089	2.4	50 to 69 acres -----	88	2.8
			70 to 99 acres -----	129	2.8
AGRICULTURAL CHEMICALS¹			100 to 139 acres -----	137	3.6
Commercial fertilizer ----- farms ..	1 084	2.2	140 to 179 acres -----	122	3.4
----- acres on which used ..	375 959	1.5	180 to 219 acres -----	82	4.2
			220 to 259 acres -----	56	4.6
TENURE OF OPERATOR			260 to 499 acres -----	237	2.2
All operators ----- farms ..	1 776	1.2	500 to 999 acres -----	159	1.1
----- acres..	548 485	.7	1,000 to 1,999 acres -----	89	—
Full owners ----- farms ..	976	1.2	2,000 acres or more -----	42	—
----- acres..	90 004	2.1			
Part owners ----- farms ..	652	1.4	FARMS BY STANDARD INDUSTRIAL CLASSIFICATION		
----- acres..	397 313	.5	Cash grains (011) -----	576	2.7
Tenants ----- farms ..	148	2.7	Field crops, except cash grains (013) -----	21	5.9
----- acres..	61 168	1.3	Vegetables and melons (016) -----	52	4.3
			Fruits and tree nuts (017) -----	6	7.5
OWNED AND RENTED LAND			Horticultural specialties (018) -----	59	3.1
Land owned ----- farms ..	1 634	1.2	General farms, primarily crop (019) -----	18	4.8
----- acres..	280 745	1.0	Livestock, except dairy, poultry, and animal specialties (021) -----	62	4.0
Owned land in farms ----- farms ..	1 628	1.2	Dairy farms (024) -----	80	2.7
----- acres..	259 385	1.0	Poultry and eggs (025) -----	868	.3
Land rented or leased from others ----- farms ..	807	1.5	Animal specialties (027) -----	21	7.3
----- acres..	291 272	.6	General farms, primarily livestock and animal specialties (029) -----	13	7.6
----- landlords..	3 518	1.2			
Rented or leased land in farms ----- farms ..	800	1.5	LIVESTOCK		
----- acres..	289 100	.6	Cattle and calves inventory ----- farms ..	245	1.9
Land rented or leased to others ----- farms ..	312	1.4	----- number..	26 918	.7
----- acres..	23 532	1.8	Beef cows ----- farms ..	103	2.8
			----- number..	2 106	3.6
OPERATOR CHARACTERISTICS			Milk cows ----- farms ..	109	2.5
Operators by place of residence:			----- number..	8 617	.5
On farm operated -----	1 324	1.2	Cattle and calves sold ----- farms ..	229	2.0
Not on farm operated -----	269	2.0	----- number..	22 155	.3
Not reported -----	183	1.7	----- \$1,000..	14 781	.2
Operators by principal occupation:			Hogs and pigs inventory ----- farms ..	154	2.3
Farming -----	1 287	1.1	----- number..	57 775	.7
Other -----	489	1.8	Hogs and pigs sold ----- farms ..	151	2.3
Operators by days worked off farm:			----- number..	116 838	.7
Any -----	733	1.6	----- \$1,000..	10 362	.7
200 days or more -----	421	1.6	Sheep and lambs of all ages inventory ----- farms ..	37	4.9
Operators by sex:			----- number..	1 390	7.8
Male -----	1 578	1.3	Sheep and lambs sold ----- farms ..	25	6.0
Female -----	198	1.0	----- number..	1 191	18.4
Average age of operator ----- years ..	51.4	1.8	Horses and ponies inventory ----- farms ..	153	3.1
			----- number..	1 124	3.4
			Horses and ponies sold ----- farms ..	53	4.7
			----- number..	213	5.0

See footnotes at end of table.

Table D. **Reliability Estimates of State Totals for Farms With Sales of \$10,000 or More: 1992—Con.**

[For meaning of abbreviations and symbols, see introductory text]

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
POULTRY			CROPS HARVESTED—Con.		
Chickens 3 months old or older inventory ----- farms ..	70	3.8	Barley for grain ----- farms ..	297	1.8
----- number..	732 382	1.1	----- acres..	37 100	.6
Hens and pullets of laying age ----- farms ..	68	3.8	----- bushels..	2 581 141	.5
----- number..	509 169	.7	Soybeans for beans ----- farms ..	971	1.6
Broilers and other meat-type chickens sold ----- farms ..	864	.3	----- acres..	222 266	.8
----- number..	223 328 135	.1	----- bushels..	6 718 529	.7
CROPS HARVESTED			Irish potatoes ----- farms ..	20	3.5
Corn for grain or seed ----- farms ..	827	1.6	----- acres..	5 190	(L)
----- acres..	151 009	.6	----- cwt..	1 174 950	(L)
----- bushels..	17 847 100	.6	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ----- farms ..	248	2.2
Corn for silage or green chop ----- farms ..	104	2.4	----- acres..	9 891	2.1
----- acres..	9 364	.4	----- tons, dry..	26 426	2.0
----- tons, green..	139 909	.4	Alfalfa hay ----- farms ..	180	2.3
Wheat for grain ----- farms ..	521	1.6	----- acres..	4 014	2.0
----- acres..	60 080	.7	----- tons, dry..	12 928	2.0
----- bushels..	3 258 933	.7	Vegetables harvested for sale (see text) ----- farms ..	211	1.8
			----- acres..	42 215	.3
			Land in orchards ----- farms ..	15	6.3
			----- acres..	1 246	.1

¹Data are based on a sample of farms.

²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than \$1,000.

Table E. Reliability Estimates of Percent Change in State Totals: 1987 to 1992

[For meaning of abbreviations and symbols, see introductory text]

Item	All farms		Farms with sales of \$10,000 or more	
	Percent change from 1987 to 1992	Standard error of estimate	Percent change from 1987 to 1992	Standard error of estimate
Farms..... number..	-11.2	1.4	-4.5	1.3
Land in farms..... acres..	-3.1	.9	1.5	.9
Average size of farm..... acres..	9.3	2.0	6.2	1.7
Estimated market value of land and buildings ¹ :				
Average per farm.....dollars..	39.1	3.8	34.2	2.9
Average per acre.....dollars..	27.3	3.9	26.0	3.3
Estimated market value of all machinery and equipment ¹ :				
Average per farm.....dollars..	26.9	4.4	22.5	4.0
Farms by size:				
1 to 9 acres.....	-18.1	1.5	-19.3	1.0
10 to 49 acres.....	-8.1	1.9	-10.1	1.1
50 to 179 acres.....	-8.0	2.4	24.3	3.2
180 to 499 acres.....	-17.3	2.3	-9.9	2.4
500 to 999 acres.....	-14.4	1.4	-15.4	1.4
1,000 to 1,999 acres.....	-11.0	-	-10.1	-
2,000 acres or more.....	50.0	-	50.0	-
Total cropland.....farms..	-9.8	1.6	.7	1.6
Harvested cropland.....acres..	-1.2	.9	3.3	.8
Irrigated land.....farms..	-8.3	1.8	-2.2	1.7
.....acres..	1.6	.5	2.1	.5
Market value of agricultural products sold.....\$1,000..	26.2	.2	26.6	.2
Average per farm.....dollars..	42.2	2.2	32.5	1.8
Crops, including nursery and greenhouse crops.....\$1,000..	48.7	.8	50.5	.7
Livestock, poultry, and their products.....\$1,000..	20.0	.1	20.1	.1
Farms by value of sales:				
Less than \$2,500.....	-27.4	2.1	(X)	(X)
\$2,500 to \$4,999.....	-21.1	3.3	(X)	(X)
\$5,000 to \$9,999.....	-15.2	3.3	(X)	(X)
\$10,000 to \$24,999.....	7.5	4.6	7.5	4.4
\$25,000 to \$49,999.....	-5.6	4.4	-5.6	4.3
\$50,000 to \$99,999.....	-29.2	2.7	-29.2	2.7
\$100,000 to \$249,999.....	-30.6	-	-30.6	-
\$250,000 to \$499,999.....	8.4	-	8.4	-
\$500,000 or more.....	75.0	-	75.0	-
Total farm production expenses ¹.....\$1,000..	18.9	1.8	19.2	1.5
Average per farm.....dollars..	34.1	2.3	25.9	1.7
Net cash return from agricultural sales for the farm unit (see text) ¹.....farms..	-11.4	1.5	-5.3	1.2
.....\$1,000..	66.9	3.2	64.3	2.8
Average per farm.....dollars..	88.4	4.8	73.4	3.7
Operators by principal occupation:				
Farming.....	-11.0	1.3	-6.2	1.2
Other.....	-11.5	2.0	.4	2.1
Operators by days worked off farm:				
Any.....	-9.7	4.8	.1	5.2
200 days or more.....	-11.1	4.7	-3.7	5.1
Livestock and poultry:				
Cattle and calves inventory.....farms..	-10.8	2.2	-9.6	2.1
.....number..	-7.5	.9	-8.1	.8
Beef cows.....farms..	-5.6	3.4	-1.0	3.5
.....number..	30.6	5.6	43.2	7.0
Milk cows.....farms..	-18.9	2.7	-17.4	2.5
.....number..	-7.4	.8	-7.0	.7
Cattle and calves sold.....farms..	-10.4	2.4	-2.1	2.4
.....number..	-15.9	.4	-14.5	.4
Hogs and pigs inventory.....farms..	-31.9	2.0	-30.0	1.9
.....number..	18.5	1.2	19.6	1.2
Hogs and pigs sold.....farms..	-37.1	1.8	-33.5	1.8
.....number..	7.8	1.2	9.2	1.2
Sheep and lambs inventory.....farms..	44.0	8.8	94.7	12.6
.....number..	11.3	12.1	35.7	11.5
Chickens 3 months old or older inventory.....farms..	-33.1	2.9	-21.3	3.6
.....number..	-11.4	1.4	-11.3	1.3
Broilers and other meat-type chickens sold.....farms..	-13.1	.5	-13.2	.4
.....number..	6.1	.1	6.1	.1
Selected crops harvested:				
Corn for grain or seed.....farms..	-4.4	1.9	2.1	1.8
.....acres..	18.4	1.0	21.1	1.0
.....bushels..	83.7	1.4	85.4	1.3
Wheat for grain.....farms..	-4.9	2.0	8.1	2.0
.....acres..	41.7	1.6	49.0	1.6
.....bushels..	81.9	2.1	89.6	2.1
Barley for grain.....farms..	-10.3	2.1	-4.2	2.1
.....acres..	14.9	1.1	17.6	1.0
.....bushels..	37.3	1.3	40.3	1.2
Soybeans for beans.....farms..	-12.6	1.7	-5	1.7
.....acres..	5.4	1.1	12.0	1.1
.....bushels..	67.7	1.7	73.9	1.6
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text).....farms..	-20.6	2.0	-12.1	2.2
.....acres..	-34.9	1.5	-32.9	1.6
.....tons, dry..	-29.6	1.6	-29.9	1.6
Vegetables harvested for sale (see text).....farms..	-14.5	2.1	-5.0	2.0
.....acres..	-1.5	.6	-1.2	.6

¹Data are based on a sample of farms.

Table F. Reliability Estimates for the State and County Totals: 1992

[For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms		Land in farms		Average size of farm		Average market value of land and buildings per farm ¹		Estimated market value of all machinery and equipment ¹			
	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)		
Delaware -----	2 633	1.4	589 189	.8	224	1.6	514 156	2.2	177 139	2.2		
Kent -----	782	1.9	197 375	1.1	252	2.2	510 070	3.1	55 198	4.2		
New Castle -----	336	1.3	87 134	.9	259	1.6	853 261	4.6	24 893	5.1		
Sussex -----	1 515	1.2	304 680	.8	201	1.4	441 133	2.4	97 048	2.6		
Geographic area	Average market value of all machinery and equipment per farm ¹		Market value of agricultural products sold		Average market value of agricultural products sold per farm		Farm production expenses ¹					
							Total farm production expenses					
							Farms		Value			
	Value (dollars)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)		
Delaware -----	67 843	2.7	559 766	.1	212 596	1.4	2 627	1.5	448 199	.3		
Kent -----	70 857	4.8	111 769	.3	142 927	1.9	780	2.2	94 528	.8		
New Castle -----	75 434	5.4	40 289	.3	119 908	1.3	335	1.4	35 642	1.2		
Sussex -----	64 613	3.0	407 707	.1	269 114	1.2	1 512	1.3	318 030	.3		
Geographic area	Farm production expenses ¹ —Con.											
	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
	Delaware -----	1 192	3.1	64 080	.6	1 367	3.1	189 867	.4	1 745	2.6	10 470	1.1
Kent -----	291	8.9	7 858	3.8	366	7.3	27 452	1.1	588	4.1	3 570	2.0
New Castle -----	33	20.9	1 470	7.3	88	15.2	3 206	.9	224	6.4	2 799	1.7
Sussex -----	868	2.8	54 753	.4	913	3.1	159 210	.4	933	2.9	4 101	1.6
Geographic area	Farm production expenses ¹ —Con.											
	Commercial fertilizer				Agricultural chemicals				Petroleum products			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
	Delaware -----	1 666	2.9	19 838	2.1	1 834	2.6	15 272	1.2	2 380	1.8	10 367	1.3
Kent -----	573	4.9	7 439	2.1	567	4.7	5 817	2.1	732	2.7	3 520	2.5
New Castle -----	263	4.2	3 642	4.4	234	5.9	1 720	2.0	307	3.5	1 713	2.9
Sussex -----	830	3.7	8 757	3.9	1 033	2.8	7 735	1.6	1 341	1.9	5 134	1.7
Geographic area	Farm production expenses ¹ —Con.											
	Electricity				Hired farm labor				Contract labor			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
	Delaware -----	1 980	2.5	6 082	.7	946	3.9	23 911	.7	314	6.4	3 674	.8
Kent -----	560	5.5	1 396	2.1	234	9.2	7 301	1.1	84	14.4	1 368	1.7
New Castle -----	222	6.3	777	2.3	123	11.0	5 872	1.8	43	19.9	1 286	1.3
Sussex -----	1 198	2.7	3 909	.7	589	4.4	10 738	.9	187	7.3	1 020	.3

See footnotes at end of table.

Table F. Reliability Estimates for the State and County Totals: 1992 – Con.

[For meaning of abbreviations and symbols, see introductory text]

Farm production expenses ¹ —Con.												
Repair and maintenance				Customwork, machine hire, and rental of machinery and equipment				Interest expense				
Farms		Value		Farms		Value		Farms		Value		
Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
Delaware -----	2 280	2.1	16 222	1.2	1 134	4.3	2 849	4.3	1 270	3.2	16 664	1.5
Kent -----	703	3.5	5 076	2.2	366	8.4	871	8.0	359	7.5	5 483	3.0
New Castle -----	291	4.0	2 774	2.8	118	11.8	550	6.2	122	11.6	1 656	7.7
Sussex -----	1 286	2.4	8 371	1.4	650	5.1	1 428	6.5	789	3.3	9 525	1.4
Farm production expenses ¹ —Con.												
Cash rent				Property taxes paid				All other farm production expenses				
Farms		Value		Farms		Value		Farms		Value		
Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
Delaware -----	785	4.7	13 804	1.4	2 491	1.7	3 176	2.9	2 409	1.9	51 925	.5
Kent -----	261	10.0	5 854	2.0	732	2.9	1 025	4.6	750	2.8	10 499	1.0
New Castle -----	71	12.3	2 359	2.4	308	2.6	489	15.2	292	2.2	5 332	1.9
Sussex -----	453	5.2	5 592	2.5	1 451	1.6	1 662	1.3	1 367	2.2	36 094	.5
Net cash return from agricultural sales for the farm unit (see text) ¹				Total cropland				Harvested cropland				
Farms		Value		Farms		Acres		Farms		Acres		
Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	
Delaware -----	2 627	1.5	108 998	1.1	2 162	1.6	495 156	.7	1 956	1.6	470 348	.7
Kent -----	780	2.2	17 430	3.6	713	2.0	166 177	.9	656	2.1	156 962	.9
New Castle -----	335	1.4	5 178	11.9	315	1.4	73 436	.6	277	1.5	67 852	.7
Sussex -----	1 512	1.3	86 390	.9	1 134	1.4	255 543	.7	1 023	1.5	245 534	.7
Irrigated land				Livestock and poultry								
Farms		Acres		Cattle and calves inventory				Beef cows inventory				
Farms		Total		Farms		Total		Farms		Total		
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	
Delaware -----	352	1.6	61 774	.4	411	2.0	28 838	.8	204	2.8	2 856	3.3
Kent -----	99	2.8	20 283	.6	217	2.6	13 097	1.4	91	4.0	1 283	5.2
New Castle -----	40	3.4	2 033	1.3	63	3.9	3 446	2.0	34	5.8	500	7.6
Sussex -----	213	1.8	39 458	.4	131	2.5	12 295	.6	79	3.6	1 073	3.9
Livestock and poultry —Con.												
Milk cows inventory				Hogs and pigs inventory				Sheep and lambs inventory				
Farms		Total		Farms		Total		Farms		Total		
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	
Delaware -----	137	2.6	8 659	.5	205	2.4	58 913	.7	72	4.2	1 856	6.6
Kent -----	104	3.4	4 628	1.0	72	4.8	5 880	3.7	30	6.5	823	4.9
New Castle -----	12	5.0	1 371	.3	11	9.6	630	3.6	11	10.1	238	9.2
Sussex -----	21	—	2 660	—	122	2.0	52 403	.7	31	5.7	795	14.1

See footnotes at end of table.

Table F. Reliability Estimates for the State and County Totals: 1992 — Con.

[For meaning of abbreviations and symbols, see introductory text]

Livestock and poultry —Con.														
Hens and pullets of laying age inventory						Broilers and other meat-type chickens sold								
Farms			Total			Farms			Total					
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)			
Delaware -----	112	3.4	510 718	.7	870	.3	223 328 864	.1						
Kent -----	76	4.5	66 857	5.3	115	6	(D)	(D)						
New Castle -----	16	6.2	209 195	(L)	8	9.2	(D)	(D)						
Sussex -----	20	5.4	234 666	(L)	747	.3	194 185 730	.1						
Selected crops harvested														
Corn for grain or seed						Wheat for grain								
Farms		Acres		Quantity		Farms		Acres		Quantity				
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)			
Delaware -----	1 029	1.7	154 240	.7	18 142 044	.6	599	1.7	61 754	.8	3 324 145	.7		
Kent -----	315	2.4	43 191	1.1	4 884 247	1.0	261	2.4	26 850	1.2	1 487 791	1.2		
New Castle -----	144	2.0	32 048	.7	3 975 268	.7	78	2.6	9 643	.8	568 531	.9		
Sussex -----	570	1.7	79 001	.7	9 282 529	.6	260	1.7	25 261	.8	1 267 823	.8		
Selected crops harvested —Con.														
Barley for grain						Soybeans for beans								
Farms		Acres		Quantity		Farms		Acres		Quantity				
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)			
Delaware -----	323	1.8	37 520	.6	2 605 621	.5	1 324	1.7	231 872	.8	6 948 357	.8		
Kent -----	138	2.5	20 020	.7	1 499 384	.5	433	2.2	81 650	1.1	2 486 618	1.0		
New Castle -----	22	4.4	1 481	3.2	102 759	2.2	126	2.1	25 591	.9	921 300	.9		
Sussex -----	163	2.1	16 019	.7	1 003 478	.6	765	1.6	124 631	.9	3 540 439	.8		
Selected crops harvested —Con.														
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)						Vegetables harvested for sale (see text)								
Farms			Acres			Quantity			Farms			Acres		
Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, dry	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)			
Delaware -----	428	2.1	11 947	2.0	30 451	1.9	271	1.9	42 380	.3				
Kent -----	220	2.7	4 724	2.4	11 344	2.3	82	3.2	16 744	.6				
New Castle -----	88	3.0	3 283	5.0	9 663	4.2	32	5.3	1 069	1.6				
Sussex -----	120	3.1	3 940	2.1	9 444	2.4	157	2.1	24 566	.4				

¹Data are based on a sample of farms.

Table G. State Estimates of the Not on the Mail List Component of Farm Coverage Error: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Census published farms		Not on mail list ¹		Percent not on mail list ¹	
	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (percent)	Standard error of percent
Farms ----- number--	2 633	1.4	360	41.3	12.0	4.4
Land in farms ----- acres --	589 189	.8	24 390	43.0	4.0	1.6
Average size of farm ----- acres --	223.8	.7	67.8	59.6	(X)	(X)
Farms by size:						
Less than 10 acres -----	421	1.4	96	69.3	18.6	10.5
10 to 49 acres -----	797	1.6	142	63.3	15.1	8.1
Less than 50 acres -----	1 218	1.4	237	56.1	16.3	7.7
50 acres or more -----	1 415	1.7	122	55.1	8.0	4.0
50 to 99 acres -----	380	2.4	29	100.0	7.0	6.5
100 to 179 acres -----	345	2.8	37	71.3	9.6	6.2
180 acres or more -----	690	1.5	57	62.1	7.6	4.4
Harvested cropland ----- farms --	1 956	1.6	256	38.2	11.6	3.9
----- acres--	470 348	.7	14 807	47.7	3.1	1.4
Farms by value of sales:						
Less than \$1,000 -----	201	3.3	66	61.1	24.7	11.4
\$1,000 to \$2,499 -----	191	3.7	111	52.0	36.7	12.1
Less than \$2,500 -----	392	2.9	176	51.4	31.0	11.0
\$2,500 or more -----	2 241	1.3	183	61.2	7.6	4.3
\$2,500 to \$9,999 -----	465	2.7	100	101.8	17.7	14.9
\$10,000 or more -----	1 776	1.2	83	51.5	4.5	2.2
Market value of agricultural products sold -----\$1,000 --	559 766	.1	2 587	41.9	(L)	(L)
Farms by standard industrial classification:						
Crops (01) -----	1 338	2.1	272	38.0	16.9	5.3
Livestock (02) -----	1 295	.9	88	72.0	6.4	4.3
Farms by type of organization:						
Individual or family -----	2 226	1.5	313	43.6	12.3	4.7
Partnership or corporation -----	394	1.4	17	88.7	4.1	3.5
Other -----	13	8.3	30	100.0	69.7	21.2
Farms by tenure of operator:						
Full owners -----	1 607	1.4	261	49.2	14.0	5.9
Part owners and tenants -----	1 026	1.5	97	54.2	8.7	4.3
Part owners -----	788	1.5	97	54.2	11.0	5.3
Tenants -----	238	2.6	--	(X)	--	(X)
Operators by place of residence:						
On farm operated -----	1 956	1.4	314	46.0	13.8	5.5
Not on farm operated -----	436	2.0	--	(X)	--	(X)
Not reported -----	241	2.0	46	92.9	15.9	12.4
Operators by principal occupation:						
Farming -----	1 578	1.3	82	52.5	4.9	2.5
Other -----	1 055	1.9	226	45.9	17.6	6.7
Operators by sex:						
Male -----	2 346	1.4	308	38.3	11.6	3.9
Female -----	287	1.6	51	101.8	15.2	13.1
Operators by race:						
White -----	2 587	1.4	319	42.6	11.0	4.2
Black and other races -----	46	5.5	39	99.1	46.0	24.6
Operators by years on present farm:						
4 years or less -----	236	2.5	52	100.1	18.1	14.9
5 years or more -----	1 912	1.4	225	48.2	10.5	4.5
Average years on present farm -----	19.8	2.1	16.2	69.8	(X)	(X)
Not reported -----	485	1.8	82	59.2	14.5	7.3
Average age of operator -----	52.7	.2	57.3	58.3	(X)	(X)

NOTE: These estimates do not account for incorrectly classified farms or farms appearing more than once in the census and are subject to change in the 1992 Coverage Evaluation publication. See appendix C text for further explanation.

¹Estimates are based on a sample survey conducted independently of census data collection.