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 number	11.4
Land in farms acres	8.9
Estimated market value of land and buildings[1] $1,000	8.4
Market value of agricultural products sold $1,000	2.2
Harvested cropland acres	6.1
Corn for grain or seed acres	11.0
Wheat for grain acres	–
Livestock and poultry inventory:	
Cattle and calves number	2.7
Hogs and pigs number	11.5
Hens and pullets of laying age number	5.1

[1]Data 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	5.6
50	3.9
75	3.0
100	2.5
150	1.9
200	1.5
300	.9
500	.7
750	(X)
1,000	(X)
1,500	(X)
2,000	(X)
SAMPLE COUNT ITEM	
Number of farms reporting:	
25	26.5
50	21.2
75	19.2
100	18.0
150	16.8
200	16.2
300	15.5
500	15.0
750	(X)
1,000	(X)
1,500	(X)
2,000	(X)

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.

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS			**FARM PRODUCTION EXPENSES**[1]		
Farms ___number__	2 445	.7	Total farm production expenses ___farms__	2 440	.8
Land in farms ___acres__	385 832	.7	$1,000__	95 755	.7
Average size of farm ___acres__	158	1.0	Average per farm ___dollars__	39 244	1.1
			Livestock and poultry purchased ___farms__	732	6.0
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			$1,000__	2 968	2.9
			Feed for livestock and poultry ___farms__	1 265	3.5
			$1,000__	18 649	.8
			Commercially mixed formula feeds ___farms__	820	4.9
Total sales (see text) ___farms__	2 445	.7	$1,000__	13 610	.8
$1,000__	114 070	.2			
Average per farm ___dollars__	46 654	.7	Seeds, bulbs, plants, and trees ___farms__	831	4.4
			$1,000__	3 271	5.6
Farms by value of sales:			Commercial fertilizer ___farms__	1 287	3.6
Less than $1,000 (see text) ___farms__	526	1.7	$1,000__	2 868	2.2
$1,000__	111	2.6	Agricultural chemicals ___farms__	811	5.0
$1,000 to $2,499 ___farms__	402	1.8	$1,000__	1 528	1.7
$1,000__	656	1.8	Petroleum products ___farms__	2 271	1.4
$2,500 to $4,999 ___farms__	343	1.8	$1,000__	4 171	2.4
$1,000__	1 215	1.8			
$5,000 to $9,999 ___farms__	325	1.7	Electricity ___farms__	1 614	2.7
$1,000__	2 246	1.7	$1,000__	3 249	1.1
$10,000 to $19,999 ___farms__	217	2.1	Hired farm labor ___farms__	885	4.5
$1,000__	3 001	2.1	$1,000__	21 601	.6
$20,000 to $24,999 ___farms__	71	3.5	Contract labor ___farms__	281	10.2
$1,000__	1 558	3.5	$1,000__	1 140	5.1
			Repair and maintenance ___farms__	2 068	2.0
$25,000 to $39,999 ___farms__	111	2.8	$1,000__	6 969	1.6
$1,000__	3 510	2.7	Customwork, machine hire, and rental of machinery and equipment ___farms__	428	7.4
$40,000 to $49,999 ___farms__	41	4.8	$1,000__	698	6.3
$1,000__	1 841	4.8	Interest expense ___farms__	813	4.8
$50,000 to $99,999 ___farms__	143	1.9	$1,000__	5 177	3.7
$1,000__	10 140	1.9	Secured by real estate ___farms__	571	5.8
$100,000 to $249,999 ___farms__	170	–	$1,000__	3 986	4.7
$1,000__	25 928	–	Not secured by real estate ___farms__	424	7.4
$250,000 to $499,999 ___farms__	64	–	$1,000__	1 191	3.1
$1,000__	21 810	–			
$500,000 or more ___farms__	32	–	Cash rent ___farms__	308	4.8
$1,000__	42 054	–	$1,000__	1 077	2.0
Sales by commodity or commodity group:			Property taxes ___farms__	2 330	1.1
Crops, including nursery and greenhouse crops ___farms__	1 414	.8	$1,000__	8 521	3.1
$1,000__	45 724	.4	All other farm production expenses ___farms__	2 124	1.9
Grains ___farms__	16	7.1	$1,000__	13 871	1.3
$1,000__	(D)	(D)			
Corn for grain ___farms__	13	7.0			
$1,000__	204	10.9	**NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)** [1]		
Wheat ___farms__	–	–			
$1,000__	–	–			
Soybeans ___farms__	–	–	All farms ___number__	2 440	.8
$1,000__	–	–	$1,000__	15 953	4.0
Sorghum for grain ___farms__	–	–	Average per farm ___dollars__	6 538	4.1
$1,000__	–	–			
Barley ___farms__	–	–	Farms with net gains [2] ___number__	879	4.3
$1,000__	–	–	$1,000__	26 269	1.4
Oats ___farms__	2	28.3	Average net gain ___dollars__	29 886	4.5
$1,000__	(D)	(D)			
Other grains ___farms__	3	24.0	Farms with net losses ___number__	1 561	2.6
$1,000__	(D)	(D)	$1,000__	10 317	4.4
			Average net loss ___dollars__	6 609	5.1
Cotton and cottonseed ___farms__	–	–			
$1,000__	–	–			
Tobacco ___farms__	–	–	**GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME**		
$1,000__	–	–			
Hay, silage, and field seeds ___farms__	841	1.1			
$1,000__	5 591	1.2	Government payments ___farms__	271	1.5
			$1,000__	738	1.6
Vegetables, sweet corn, and melons ___farms__	327	1.6	Other farm-related income [1] ___farms__	768	5.4
$1,000__	5 249	1.2	$1,000__	3 990	6.7
Fruits, nuts, and berries ___farms__	294	1.7	Customwork and other agricultural services ___farms__	206	12.9
$1,000__	10 399	.8	$1,000__	593	16.9
			Gross cash rent or share payments ___farms__	105	17.8
Nursery and greenhouse crops ___farms__	322	1.6	$1,000__	159	11.9
$1,000__	24 069	.6	Forest products and Christmas trees ___farms__	508	7.2
Other crops ___farms__	55	3.6	$1,000__	2 787	8.0
$1,000__	(D)	(D)	Other farm-related income sources ___farms__	170	14.3
			$1,000__	450	27.4
Livestock, poultry, and their products ___farms__	1 281	.8			
$1,000__	68 346	.2			
Poultry and poultry products ___farms__	225	2.1			
$1,000__	12 309	.2			
Dairy products ___farms__	314	.9	**COMMODITY CREDIT CORPORATION LOANS**		
$1,000__	46 861	.3			
Cattle and calves ___farms__	766	1.0			
$1,000__	6 324	.7			
Hogs and pigs ___farms__	173	2.3			
$1,000__	819	3.3			
Sheep, lambs, and wool ___farms__	297	1.8			
$1,000__	502	4.2			
Other livestock and livestock products (see text) ___farms__	247	2.0			
$1,000__	1 531	2.8			
Value of agricultural products sold directly to individuals for human consumption (see text) ___farms__	511	1.3	Total ___farms__	1	–
$1,000__	4 174	1.2	$1,000__	(D)	(D)

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	2 242	.7	All operators — farms	2 445	.7
acres	135 437	.5	acres	385 832	.7
Harvested cropland — farms	2 039	.7	Full owners — farms	1 642	.9
acres	100 746	.5	acres	203 005	1.0
Farms by acres harvested:			Part owners — farms	664	1.0
1 to 9 acres — farms	610	1.4	acres	168 783	.8
acres	2 242	1.6	Tenants — farms	139	2.5
10 to 19 acres — farms	346	1.7	acres	14 044	2.2
acres	4 662	1.8			
20 to 29 acres — farms	241	2.1	**OWNED AND RENTED LAND**		
acres	5 435	2.1			
30 to 49 acres — farms	283	1.8	Land owned — farms	2 308	.7
acres	10 291	1.8	acres	324 598	.7
50 to 99 acres — farms	266	1.7	Owned land in farms — farms	2 306	.7
acres	17 884	1.6	acres	317 915	.7
100 to 199 acres — farms	178	1.4	Land rented or leased from others — farms	808	.9
acres	23 238	1.3	acres	68 329	.9
200 to 499 acres — farms	100	1.0	landlords	2 538	1.1
acres	27 327	.9	Rented or leased land in farms — farms	803	.9
500 to 999 acres — farms	13	—	acres	67 917	.9
acres	(D)	(D)	Land rented or leased to others — farms	159	2.2
1,000 acres or more — farms	2	—	acres	7 095	2.9
acres	(D)	(D)			
			OPERATOR CHARACTERISTICS		
Cropland:					
Pasture or grazing only — farms	1 045	1.0	Operators by place of residence:		
acres	26 409	1.1	On farm operated	2 095	.7
Other cropland — farms	466	1.3	Not on farm operated	236	1.9
acres	8 282	1.7	Not reported	114	2.7
			Operators by principal occupation:		
Total woodland — farms	1 815	.8	Farming	1 204	.8
acres	218 912	.9	Other	1 241	1.1
Pastureland and rangeland other than cropland and woodland pastured — farms	450	1.4	Operators by days worked off farm:		
acres	9 756	1.6	Any	1 420	1.0
Land in house lots, ponds, roads, wasteland, etc. — farms	1 525	.9	200 days or more	848	1.2
acres	21 727	1.8	Operators by sex:		
Irrigated land — farms	308	1.6	Male — farms	2 043	.7
acres	1 746	1.1	acres	348 106	.7
			Female — farms	402	1.7
Acres irrigated:			acres	37 726	2.6
1 to 9 acres — farms	277	1.7			
acres	628	1.9	Average age of operator — years	53.4	1.0
10 to 49 acres — farms	24	4.7			
acres	405	3.8	**FARMS BY TYPE OF ORGANIZATION**		
50 to 99 acres — farms	4	—			
acres	307	—	Individual or family (sole proprietorship) — farms	2 136	.8
100 to 199 acres — farms	3	—	acres	299 670	.8
acres	406	—	Partnership — farms	147	2.3
200 to 499 acres — farms	—	—	acres	39 224	1.8
acres	—	—	Corporation:		
500 to 999 acres — farms	—	—	Family held — farms	120	2.0
acres	—	—	acres	30 962	1.5
1,000 acres or more — farms	—	—	More than 10 stockholders — farms	1	—
acres	—	—	10 or less stockholders — farms	119	2.0
			Other than family held — farms	13	6.7
Harvested cropland irrigated — farms	305	1.6	acres	3 243	2.6
acres	1 736	1.1	More than 10 stockholders — farms	1	—
Pasture and other land irrigated — farms	5	10.3	10 or less stockholders — farms	12	7.2
acres	10	8.0	Other—cooperative, estate or trust, institutional, etc. — farms	29	3.4
			acres	12 733	2.4
Land under federal acreage reduction programs:					
Diverted under annual commodity programs — farms	21	2.2	**HIRED FARM LABOR**		
acres	203	1.6			
Conservation Reserve or Wetlands Reserve Programs — farms	23	5.9	Hired workers by days worked:		
acres	891	8.1	150 days or more — farms	436	5.5
			workers	1 351	2.2
VALUE OF LAND AND BUILDINGS [1]			Less than 150 days — farms	777	5.2
			workers	3 183	3.7
Estimated market value of land and buildings — farms	2 440	.8			
$1,000	835 961	2.8	**INJURIES AND DEATHS**		
Average per farm — dollars	342 607	2.9			
Average per acre — dollars	2 256	3.9	Farm-related injuries:		
			Operator and family members — farms	27	5.4
VALUE OF MACHINERY AND EQUIPMENT [1]			number	33	5.1
			Hired workers — farms	44	2.1
Estimated market value of all machinery and equipment — farms	2 429	.9	number	79	1.5
$1,000	83 960	2.5	Farm-related deaths:		
Average per farm — dollars	34 566	2.7	Operator and family members — farms	—	—
			number	—	—
AGRICULTURAL CHEMICALS[1]			Hired workers — farms	—	—
			number	—	—
Commercial fertilizer — farms	1 259	3.7			
acres on which used	65 110	3.0			

See footnotes at end of table.

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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 __	308	1.9	Cattle and calves inventory _____ farms __	956	.9
acres __	1 309	2.2	number __	48 419	.4
10 to 49 acres _____ farms __	619	1.4	Beef cows _____ farms __	494	1.4
acres __	16 691	1.5	number __	3 727	1.8
50 to 69 acres _____ farms __	191	2.4	Milk cows _____ farms __	389	1.1
acres __	11 230	2.4	number __	21 659	.4
70 to 99 acres _____ farms __	221	2.2	Cattle and calves sold _____ farms __	766	1.0
acres __	18 318	2.2	number __	20 138	1.1
100 to 139 acres _____ farms __	271	1.8	$1,000 __	6 324	.7
acres __	31 569	1.8	Hogs and pigs inventory _____ farms __	289	1.8
140 to 179 acres _____ farms __	161	2.4	number __	4 458	3.6
acres __	25 212	2.4	Hogs and pigs sold _____ farms __	173	2.3
180 to 219 acres _____ farms __	123	2.5	number __	9 063	3.7
acres __	24 295	2.6	$1,000 __	819	3.3
220 to 259 acres _____ farms __	89	2.8			
acres __	21 240	2.8	Sheep and lambs of all ages inventory _____ farms __	311	1.8
260 to 499 acres _____ farms __	299	1.4	number __	8 052	2.8
acres __	107 199	1.4	Sheep and lambs sold _____ farms __	257	1.9
500 to 999 acres _____ farms __	133	1.8	number __	7 463	4.1
acres __	86 750	1.8			
1,000 to 1,999 acres _____ farms __	27	–	Horses and ponies inventory _____ farms __	668	1.3
acres __	35 161	–	number __	4 243	2.1
2,000 acres or more _____ farms __	3	–	Horses and ponies sold _____ farms __	125	2.9
acres __	6 858	–	number __	357	5.1
FARMS BY STANDARD INDUSTRIAL CLASSIFICATION			**POULTRY**		
Cash grains (011) _____ farms __	7	12.6	Chickens 3 months old or older inventory _____ farms __	337	1.7
acres __	869	15.2	number __	212 748	1.2
Field crops, except cash grains (013) _____ farms __	557	1.4	Hens and pullets of laying age _____ farms __	327	1.8
acres __	102 642	1.5	number __	171 109	1.4
Vegetables and melons (016) _____ farms __	136	2.7	Broilers and other meat-type chickens sold _____ farms __	25	5.9
acres __	12 614	3.7	number __	(D)	(D)
Fruits and tree nuts (017) _____ farms __	224	2.0			
acres __	27 446	2.6	**CROPS HARVESTED**		
Horticultural specialties (018) _____ farms __	235	1.9			
acres __	16 026	2.9	Corn for silage or green chop _____ farms __	258	1.1
General farms, primarily crop (019) _____ farms __	150	2.7	acres __	16 577	.4
acres __	18 062	3.5	tons, green __	311 941	.4
Livestock, except dairy, poultry, and animal specialties (021) _____ farms __	538	1.5	Irish potatoes _____ farms __	63	3.4
acres __	71 289	1.9	acres __	168	5.5
Dairy farms (024) _____ farms __	291	.9	cwt __	31 978	6.4
acres __	115 944	.6	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) _____ farms __	1 492	.8
Poultry and eggs (025) _____ farms __	53	3.8	acres __	77 605	.7
acres __	3 462	4.8	tons, dry __	136 963	.7
Animal specialties (027) _____ farms __	216	2.3	Vegetables harvested for sale (see text) _____ farms __	327	1.6
acres __	11 456	3.5	acres __	3 324	1.5
General farms, primarily livestock and animal specialties (029) _____ farms __	38	5.4	Land in orchards _____ farms __	242	2.0
acres __	6 022	4.8	acres __	3 877	1.1

[1]Data are based on a sample of farms.
[2]Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than $1,000.

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[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 EXPENSES**[1]		
			Total farm production expenses ____ farms __	807	2.5
Farms ____ number __	849	.8	$1,000 __	84 201	.7
Land in farms ____ acres __	218 570	.7	Average per farm ____ dollars __	104 338	2.6
Average size of farm ____ acres __	257	1.0			
			Livestock and poultry purchased ____ farms __	267	5.5
			$1,000 __	2 604	2.7
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			Feed for livestock and poultry ____ farms __	434	3.2
			$1,000 __	17 432	.5
			Commercially mixed formula feeds ____ farms __	345	3.6
			$1,000 __	13 076	.7
Total sales (see text) ____ farms __	849	.8			
$1,000 __	109 842	.2	Seeds, bulbs, plants, and trees ____ farms __	523	3.3
Average per farm ____ dollars __	129 378	.8	$1,000 __	3 203	5.7
			Commercial fertilizer ____ farms __	617	2.9
Farms by value of sales:			$1,000 __	2 483	1.8
$10,000 to $19,999 ____ farms __	217	2.1	Agricultural chemicals ____ farms __	465	4.0
$1,000 __	3 001	2.1	$1,000 __	1 439	1.4
$20,000 to $24,999 ____ farms __	71	3.5	Petroleum products ____ farms __	794	2.6
$1,000 __	1 558	3.5	$1,000 __	3 489	2.6
$25,000 to $39,999 ____ farms __	111	2.8	Electricity ____ farms __	717	2.7
$1,000 __	3 510	2.7	$1,000 __	2 965	1.1
$40,000 to $49,999 ____ farms __	41	4.8			
$1,000 __	1 841	4.8	Hired farm labor ____ farms __	548	3.4
			$1,000 __	21 224	.6
$50,000 to $99,999 ____ farms __	143	1.9	Contract labor ____ farms __	161	9.7
$1,000 __	10 140	1.9	$1,000 __	1 008	4.3
$100,000 to $249,999 ____ farms __	170	–	Repair and maintenance ____ farms __	770	2.6
$1,000 __	25 928	–	$1,000 __	5 566	1.3
$250,000 to $499,999 ____ farms __	64	–	Customwork, machine hire, and rental of machinery and equipment ____ farms __	230	7.1
$1,000 __	21 810	–	$1,000 __	583	5.7
$500,000 or more ____ farms __	32	–	Interest expense ____ farms __	506	4.2
$1,000 __	42 054	–	$1,000 __	4 285	3.1
Sales by commodity or commodity group:			Secured by real estate ____ farms __	384	5.4
Crops, including nursery and greenhouse crops ____ farms __	573	1.0	$1,000 __	3 219	3.9
$1,000 __	43 225	.4	Not secured by real estate ____ farms __	258	5.5
Grains ____ farms __	9	6.7	$1,000 __	1 066	2.7
$1,000 __	(D)	(D)			
Corn for grain ____ farms __	8	5.7	Cash rent ____ farms __	247	3.2
$1,000 __	(D)	(D)	$1,000 __	1 031	1.8
Wheat ____ farms __	–	–	Property taxes ____ farms __	762	2.8
$1,000 __	–	–	$1,000 __	4 077	3.3
Soybeans ____ farms __	–	–	All other farm production expenses ____ farms __	806	2.5
$1,000 __	–	–	$1,000 __	12 810	1.3
Sorghum for grain ____ farms __	–	–			
$1,000 __	–	–	**NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)** [1]		
Barley ____ farms __	–	–			
$1,000 __	–	–			
Oats ____ farms __	1	40.0			
$1,000 __	(D)	(D)	All farms ____ number __	807	2.5
Other grains ____ farms __	–	–	$1,000 __	23 299	2.0
$1,000 __	–	–	Average per farm ____ dollars __	28 871	3.2
Cotton and cottonseed ____ farms __	–	–	Farms with net gains [2] ____ number __	614	3.7
$1,000 __	–	–	$1,000 __	25 780	1.3
Tobacco ____ farms __	–	–	Average net gain ____ dollars __	41 988	4.0
$1,000 __	–	–			
Hay, silage, and field seeds ____ farms __	278	1.5	Farms with net losses ____ number __	193	7.9
$1,000 __	4 144	1.6	$1,000 __	2 481	8.1
			Average net loss ____ dollars __	12 857	11.3
Vegetables, sweet corn, and melons ____ farms __	178	1.8			
$1,000 __	4 926	1.3			
Fruits, nuts, and berries ____ farms __	151	2.0	**GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME**		
$1,000 __	10 078	.8			
Nursery and greenhouse crops ____ farms __	203	1.8			
$1,000 __	23 691	.6	Government payments ____ farms __	174	1.5
Other crops ____ farms __	39	3.9	$1,000 __	636	1.7
$1,000 __	(D)	(D)	Other farm-related income [1] ____ farms __	278	6.7
			$1,000 __	2 372	9.0
Livestock, poultry, and their products ____ farms __	526	.9	Customwork and other agricultural services ____ farms __	87	14.4
$1,000 __	66 617	.2	$1,000 __	436	20.6
Poultry and poultry products ____ farms __	68	3.2	Gross cash rent or share payments ____ farms __	33	20.3
$1,000 __	12 222	.2	$1,000 __	93	11.3
Dairy products ____ farms __	295	.9	Forest products and Christmas trees ____ farms __	164	8.7
$1,000 __	46 796	.3	$1,000 __	1 616	11.2
Cattle and calves ____ farms __	409	.9	Other farm-related income sources ____ farms __	80	12.3
$1,000 __	5 514	.8	$1,000 __	226	23.2
Hogs and pigs ____ farms __	65	3.2			
$1,000 __	649	3.9			
Sheep, lambs, and wool ____ farms __	70	3.0	**COMMODITY CREDIT CORPORATION LOANS**		
$1,000 __	285	7.0			
Other livestock and livestock products (see text) ____ farms __	69	3.5			
$1,000 __	1 151	3.6			
			Total ____ farms __	1	–
Value of agricultural products sold directly to individuals for human consumption (see text) ____ farms __	188	1.8	$1,000 __	(D)	(D)
$1,000 __	3 700	1.3			

See footnotes at end of table.

[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 __	815	.8	Individual or family (sole proprietorship) _____ farms __	670	.9
acres__	93 629	.6	acres__	150 533	.9
Harvested cropland _____ farms __	787	.8	Partnership _____ farms __	72	2.4
acres__	73 058	.6	acres__	29 324	1.5
Cropland:			Corporation:		
Pasture or grazing only _____ farms __	374	1.1	Family held _____ farms __	83	1.9
acres__	15 537	1.1	acres__	27 493	1.0
			More than 10 stockholders _____ farms __	1	–
Total woodland _____ farms __	631	.9	10 or less stockholders _____ farms __	82	1.9
acres__	108 895	1.0			
Pastureland and rangeland other than cropland and woodland pastured _____ farms __	136	2.0	Other than family held _____ farms __	7	7.4
acres__	5 455	1.3	acres__	(D)	(D)
Land in house lots, ponds, roads, wasteland, etc. _____ farms __	505	1.0	More than 10 stockholders _____ farms __	1	–
acres__	10 591	2.5	10 or less stockholders _____ farms __	6	8.6
Irrigated land _____ farms __	205	1.7	Other—cooperative, estate or trust, institutional, etc. _____ farms __	17	3.1
acres__	1 527	1.0	acres__	(D)	(D)
Harvested cropland irrigated _____ farms __	204	1.7			
acres__	(D)	(D)	**HIRED FARM LABOR**		
Pasture and other land irrigated _____ farms __	3	12.3	Hired workers by days worked:		
acres__	(D)	(D)	150 days or more _____ farms __	336	3.7
Land under federal acreage reduction programs:			workers__	1 237	1.3
Diverted under annual commodity programs _____ farms __	21	2.2	Less than 150 days _____ farms __	450	4.5
acres__	203	1.6	workers__	2 557	3.4
Conservation Reserve or Wetlands Reserve Programs _____ farms __	10	5.2	**INJURIES AND DEATHS**		
acres__	627	10.1	Farm-related injuries:		
			Operator and family members _____ farms __	16	5.3
VALUE OF LAND AND BUILDINGS [1]			number__	20	4.3
Estimated market value of land and buildings _____ farms __	807	2.5	Hired workers _____ farms __	36	1.6
$1,000__	417 672	3.4	number__	71	1.3
Average per farm _____ dollars __	517 561	4.2	Farm-related deaths:		
Average per acre _____ dollars __	2 037	4.7	Operator and family members _____ farms __	–	–
			number__	–	–
VALUE OF MACHINERY AND EQUIPMENT [1]			Hired workers _____ farms __	–	–
Estimated market value of all machinery and equipment _____ farms __	807	2.5	number__	–	–
$1,000__	54 785	2.3	**FARMS BY SIZE**		
Average per farm _____ dollars __	67 887	3.3	1 to 9 acres _____	91	3.0
			10 to 49 acres _____	126	2.6
AGRICULTURAL CHEMICALS [1]			50 to 69 acres _____	36	4.4
			70 to 99 acres _____	44	4.6
Commercial fertilizer _____ farms __	606	3.1	100 to 139 acres _____	84	2.8
acres on which used __	53 292	2.2	140 to 179 acres _____	53	3.6
			180 to 219 acres _____	59	2.9
TENURE OF OPERATOR			220 to 259 acres _____	46	3.1
All operators _____ farms __	849	.8	260 to 499 acres _____	185	1.4
acres__	218 570	.7	500 to 999 acres _____	101	1.5
Full owners _____ farms __	402	1.3	1,000 to 1,999 acres _____	22	–
acres__	74 772	1.5	2,000 acres or more _____	2	–
Part owners _____ farms __	366	1.0			
acres__	132 533	.7	**FARMS BY STANDARD INDUSTRIAL CLASSIFICATION**		
Tenants _____ farms __	81	2.8			
acres__	11 265	1.5	Cash grains (011) _____	2	22.8
			Field crops, except cash grains (013) _____	117	2.6
OWNED AND RENTED LAND			Vegetables and melons (016) _____	56	3.8
			Fruits and tree nuts (017) _____	91	2.7
Land owned _____ farms __	769	.8	Horticultural specialties (018) _____	151	2.1
acres__	168 986	.8	General farms, primarily crop (019) _____	20	5.3
Owned land in farms _____ farms __	768	.8	Livestock, except dairy, poultry, and animal specialties (021) _____	79	3.2
acres__	166 757	.8	Dairy farms (024) _____	281	.8
Land rented or leased from others _____ farms __	448	1.0	Poultry and eggs (025) _____	18	4.4
acres__	51 986	.8	Animal specialties (027) _____	26	6.0
landlords__	1 710	1.2	General farms, primarily livestock and animal specialties (029) _____	8	9.5
Rented or leased land in farms _____ farms __	447	1.0			
acres__	51 813	.8	**LIVESTOCK**		
Land rented or leased to others _____ farms __	46	3.2	Cattle and calves inventory _____ farms __	426	.9
acres__	2 402	3.1	number__	42 487	.4
			Beef cows _____ farms __	131	2.2
OPERATOR CHARACTERISTICS			number__	1 321	2.9
			Milk cows _____ farms __	307	.9
Operators by place of residence:			number__	21 466	.4
On farm operated _____	702	.9	Cattle and calves sold _____ farms __	409	.9
Not on farm operated _____	106	2.3	number__	18 020	1.1
Not reported _____	41	3.6	$1,000__	5 514	.8
Operators by principal occupation:			Hogs and pigs inventory _____ farms __	97	2.5
Farming _____	648	.8	number__	2 672	5.0
Other _____	201	2.0	Hogs and pigs sold _____ farms __	65	3.2
Operators by days worked off farm:			number__	6 963	4.6
Any _____	328	1.5	$1,000__	649	3.9
200 days or more _____	142	2.4	Sheep and lambs of all ages inventory _____ farms __	76	2.9
Operators by sex:			number__	3 217	5.4
Male _____	761	.8	Sheep and lambs sold _____ farms __	64	3.2
Female _____	88	3.1	number__	3 877	7.3
Average age of operator _____ years __	51.8	1.1	Horses and ponies inventory _____ farms __	121	2.3
			number__	892	5.3
			Horses and ponies sold _____ farms __	32	5.6
			number__	185	9.0

See footnotes at end of table.

[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 __	89	2.7			
number__	205 938	1.2	Irish potatoes _____ farms __	41	3.7
Hens and pullets of laying age _____farms __	83	2.8	acres__	144	6.1
number__	165 054	1.4	cwt__	29 119	6.9
Broilers and other meat-type chickens sold _____farms __	9	7.4	Hay—alfalfa, other tame, small grain, wild, grass		
number__	(D)	(D)	silage, green chop, etc. (see text) _____farms __	523	.9
			acres__	51 404	.7
CROPS HARVESTED			tons, dry__	102 279	.8
Corn for silage or green chop _____farms __	221	1.0	Vegetables harvested for sale (see text) _____farms __	178	1.8
acres__	16 116	.4	acres__	2 945	1.6
tons, green__	304 941	.4	Land in orchards _____ farms __	91	2.6
			acres__	3 298	1.1

[1]Data are based on a sample of farms.
[2]Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than $1,000.

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TSF:TIPS92-08292403.DAT;1 5/ 9/94 08:29:33 UTF:TIPS93-08292403.DAT;1 5/ 9/94 08:29:33 META:VOL1_TIPS96_APX_12.DAT;7 5/ 9/94 08:30:28

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__	−2.8	1.4	5.6	1.1
Land in farms _____acres__	−9.5	1.1	−3.9	.9
Average size of farm _____acres__	−6.5	1.7	−9.2	1.3
Estimated market value of land and buildings [1]:				
Average per farm _____dollars__	−4.4	4.5	−5.4	4.4
Average per acre _____dollars__	6.8	6.3	8.1	5.8
Estimated market value of all machinery and equipment [1]:				
Average per farm _____dollars__	1.9	4.1	−11.0	4.0
Farms by size:				
1 to 9 acres _____	20.8	3.3	30.0	4.3
10 to 49 acres _____	9.2	2.5	40.0	4.5
50 to 179 acres _____	−8.2	1.8	10.2	2.7
180 to 499 acres _____	−12.3	1.7	−5.5	1.7
500 to 999 acres _____	−16.9	2.1	−13.7	1.9
1,000 to 1,999 acres _____	−6.9	−	4.8	−
2,000 acres or more _____	50.0	−	−	−
Total cropland _____farms__	−.6	1.4	7.5	1.1
acres__	−8.3	1.0	−5.1	.8
Harvested cropland _____farms__	−.2	1.4	6.9	1.1
acres__	−5.5	1.0	−3.2	.8
Irrigated land _____farms__	21.7	2.5	28.9	2.6
acres__	−40.8	1.0	−43.4	.8
Market value of agricultural products sold _____$1,000 __	6.5	.5	7.1	.4
Average per farm _____dollars__	9.6	1.6	1.4	1.1
Crops, including nursery and greenhouse crops _____$1,000 __	29.4	.7	31.1	.7
Livestock, poultry, and their products _____$1,000 __	−4.8	.5	−4.3	.4
Farms by value of sales:				
Less than $2,500 _____	−9.0	1.5	(X)	(X)
$2,500 to $4,999 _____	−7.5	2.5	(X)	(X)
$5,000 to $9,999 _____	1.6	2.8	(X)	(X)
$10,000 to $24,999 _____	23.1	3.4	23.1	3.4
$25,000 to $49,999 _____	16.0	4.2	16.0	4.2
$50,000 to $99,999 _____	−18.3	2.4	−18.3	2.4
$100,000 to $249,999 _____	−7.6	−	−7.6	−
$250,000 to $499,999 _____	18.5	−	18.5	−
$500,000 or more _____	23.1	−	23.1	−
Total farm production expenses [1]_____$1,000__	4.1	1.5	5.3	2.7
Average per farm _____dollars__	7.2	2.4	.7	3.0
Net cash return from agricultural sales for the farm unit (see text) [1]_____farms__	−2.9	1.7	4.5	2.9
$1,000__	14.3	7.2	8.4	2.8
Average per farm _____dollars__	17.7	7.7	3.7	3.9
Operators by principal occupation:				
Farming _____	4.4	1.5	2.7	1.1
Other _____	−8.9	1.7	16.2	3.1
Operators by days worked off farm:				
Any_____	−7.7	4.7	9.0	5.7
200 days or more _____	−11.6	4.5	11.8	6.2
Livestock and poultry:				
Cattle and calves inventory _____farms __	−16.7	1.3	−4.9	1.3
number__	−10.4	.7	−8.4	.6
Beef cows _____farms__	−15.8	1.9	28.4	4.1
number__	−11.9	2.4	2.5	4.0
Milk cows _____farms__	−24.9	1.3	−12.8	1.2
number__	−13.7	.7	−12.9	.6
Cattle and calves sold _____farms __	−20.9	1.3	−8.7	1.2
number__	−18.2	1.1	−16.9	1.1
Hogs and pigs inventory _____farms __	9.5	3.2	24.4	4.2
number__	−11.5	4.3	−19.1	5.4
Hogs and pigs sold _____farms __	−3.9	3.4	51.2	6.6
number__	37.1	7.4	109.4	15.7
Sheep and lambs inventory _____farms __	−14.8	2.3	−2.6	3.8
number__	−12.3	3.8	−6.6	6.2
Chickens 3 months old or older inventory _____farms __	−16.6	2.1	−10.1	3.0
number__	−53.7	.6	−54.3	.6
Broilers and other meat-type chickens sold _____farms __	13.6	10.3	28.6	16.8
number__	(D)	(D)	(D)	(D)
Selected crops harvested:				
Corn for grain or seed _____farms __	6.3	6.7	−10.5	4.6
acres__	55.5	6.8	52.8	6.9
bushels__	80.0	9.3	78.4	9.4
Corn for silage or green chop _____farms __	−16.2	1.4	−12.0	1.2
acres__	−2.4	.7	−1.0	.6
tons, green__	.7	.7	1.9	.6
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop,				
etc. (see text) _____farms __	−5.9	1.4	.6	1.3
acres__	−8.3	1.1	−6.7	1.0
tons, dry__	−16.9	1.0	−16.5	.9
Vegetables harvested for sale (see text) _____farms __	15.5	2.7	29.0	3.0
acres__	9.1	2.6	11.8	2.6
Land in orchards _____farms __	10.5	3.3	9.6	3.7
acres__	.3	1.6	.6	1.4

[1]Data 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 Total (number)	Farms Relative standard error of estimate (percent)	Land in farms Total (acres)	Land in farms Relative standard error of estimate (percent)	Average size of farm Total (acres)	Average size of farm Relative standard error of estimate (percent)	Average market value of land and buildings per farm [1] Value (dollars)	Average market value of land and buildings per farm [1] Relative standard error of estimate (percent)	Estimated market value of all machinery and equipment [1] Total ($1,000)	Estimated market value of all machinery and equipment [1] Relative standard error of estimate (percent)
New Hampshire	**2 445**	**.7**	**385 832**	**.7**	**158**	**1.0**	**342 607**	**2.9**	**83 960**	**2.5**
Belknap	147	.9	20 910	2.3	142	2.5	350 633	7.0	3 632	6.6
Carroll	155	.9	25 439	2.5	164	2.7	297 178	6.1	5 215	4.7
Cheshire	219	.8	33 935	2.0	155	2.2	459 296	11.7	8 942	7.2
Coos	173	1.0	46 056	1.4	266	1.8	227 954	6.4	6 003	4.7
Grafton	348	.6	75 733	1.2	218	1.3	306 564	7.2	13 854	4.4
Hillsborough	328	.7	39 844	1.4	121	1.6	482 025	9.3	10 290	5.4
Merrimack	346	.6	46 610	1.6	135	1.7	271 694	4.6	13 191	11.2
Rockingham	339	.8	34 292	1.6	101	1.8	344 059	5.7	8 992	9.0
Strafford	202	.6	24 716	1.8	122	1.9	266 195	5.1	6 008	4.8
Sullivan	188	.5	38 297	1.0	204	1.1	375 603	5.1	7 833	5.4

Geographic area	Average market value of all machinery and equipment per farm [1] Value (dollars)	Average market value of all machinery and equipment per farm [1] Relative standard error of estimate (percent)	Market value of agricultural products sold Total ($1,000)	Market value of agricultural products sold Relative standard error of estimate (percent)	Average market value of agricultural products sold per farm Value (dollars)	Average market value of agricultural products sold per farm Relative standard error of estimate (percent)	Total farm production expenses — Farms Number	Total farm production expenses — Farms Relative standard error of estimate (percent)	Total farm production expenses — Value Total ($1,000)	Total farm production expenses — Value Relative standard error of estimate (percent)
New Hampshire	**34 566**	**2.7**	**114 070**	**.2**	**46 654**	**.7**	**2 440**	**.8**	**95 755**	**.7**
Belknap	24 875	6.9	2 970	1.9	20 207	2.1	146	2.1	2 902	3.9
Carroll	33 645	5.0	3 494	1.6	22 542	1.9	155	1.7	3 398	2.2
Cheshire	42 581	8.3	18 431	.4	84 158	.9	219	1.2	12 289	1.6
Coos	35 107	5.0	7 695	.4	44 477	1.1	171	1.9	6 393	1.3
Grafton	39 811	4.5	16 667	.6	47 894	.9	348	.9	13 931	1.2
Hillsborough	31 467	5.5	15 133	.5	46 137	.8	327	1.0	13 648	1.2
Merrimack	38 234	11.2	17 650	.5	51 013	.8	345	1.0	13 795	1.7
Rockingham	26 605	9.1	11 575	.7	34 144	1.0	340	1.1	10 352	3.9
Strafford	29 889	5.1	7 709	.7	38 163	.9	201	1.8	7 161	2.0
Sullivan	41 667	5.4	12 746	.3	67 800	.5	188	.8	11 887	2.4

Farm production expenses [1] —Con.

Geographic area	Livestock and poultry purchased — Farms Number	Livestock and poultry purchased — Farms Relative standard error of estimate (percent)	Livestock and poultry purchased — Value Total ($1,000)	Livestock and poultry purchased — Value Relative standard error of estimate (percent)	Feed for livestock and poultry — Farms Number	Feed for livestock and poultry — Farms Relative standard error of estimate (percent)	Feed for livestock and poultry — Value Total ($1,000)	Feed for livestock and poultry — Value Relative standard error of estimate (percent)	Seeds, bulbs, plants, and trees — Farms Number	Seeds, bulbs, plants, and trees — Farms Relative standard error of estimate (percent)	Seeds, bulbs, plants, and trees — Value Total ($1,000)	Seeds, bulbs, plants, and trees — Value Relative standard error of estimate (percent)
New Hampshire	**732**	**6.0**	**2 968**	**2.9**	**1 265**	**3.5**	**18 649**	**.8**	**831**	**4.4**	**3 271**	**5.6**
Belknap	52	10.2	122	8.7	78	7.0	481	6.2	44	9.1	56	8.7
Carroll	43	12.7	133	11.4	90	6.3	488	3.8	42	12.0	79	2.7
Cheshire	73	19.0	650	5.0	111	12.6	3 125	.7	50	15.9	91	1.9
Coos	65	9.1	315	10.6	109	5.9	1 973	1.6	64	9.1	69	7.6
Grafton	101	18.2	576	3.8	187	8.7	4 458	1.5	124	12.3	191	3.6
Hillsborough	104	22.0	258	5.5	122	18.4	1 638	1.5	146	13.7	344	5.6
Merrimack	111	16.8	315	19.6	184	9.8	2 412	2.6	127	12.2	615	2.1
Rockingham	70	22.0	290	1.0	147	12.4	1 414	5.9	122	12.6	506	35.8
Strafford	43	14.6	111	10.3	93	7.6	876	5.6	71	9.5	87	3.1
Sullivan	70	16.9	197	4.1	144	6.9	1 785	2.7	41	14.4	1 233	1.3

Farm production expenses [1] —Con.

Geographic area	Commercial fertilizer — Farms Number	Commercial fertilizer — Farms Relative standard error of estimate (percent)	Commercial fertilizer — Value Total ($1,000)	Commercial fertilizer — Value Relative standard error of estimate (percent)	Agricultural chemicals — Farms Number	Agricultural chemicals — Farms Relative standard error of estimate (percent)	Agricultural chemicals — Value Total ($1,000)	Agricultural chemicals — Value Relative standard error of estimate (percent)	Petroleum products — Farms Number	Petroleum products — Farms Relative standard error of estimate (percent)	Petroleum products — Value Total ($1,000)	Petroleum products — Value Relative standard error of estimate (percent)
New Hampshire	**1 287**	**3.6**	**2 868**	**2.2**	**811**	**5.0**	**1 528**	**1.7**	**2 271**	**1.4**	**4 171**	**2.4**
Belknap	69	7.9	95	5.8	51	9.7	48	22.4	126	3.7	152	4.0
Carroll	76	7.5	105	4.2	51	9.9	50	9.6	135	3.2	208	4.0
Cheshire	104	14.3	260	9.7	69	21.7	70	6.0	210	4.0	489	2.7
Coos	87	7.5	219	3.5	36	14.3	42	3.8	165	2.6	288	3.5
Grafton	199	11.0	501	5.2	119	15.6	112	6.2	329	2.8	489	4.8
Hillsborough	201	10.7	414	6.5	133	16.0	484	2.6	316	2.4	495	4.0
Merrimack	195	9.1	532	6.8	98	13.7	192	6.4	312	4.7	730	4.1
Rockingham	156	11.3	199	10.3	130	12.7	299	.9	314	4.1	590	14.8
Strafford	117	6.0	201	3.5	84	9.0	83	5.0	199	1.9	311	1.8
Sullivan	83	14.0	342	2.8	40	14.8	147	7.5	165	5.0	419	3.6

See footnotes at end of table.

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

Farm production expenses [1] —Con.

Geographic area	Electricity — Farms Number	Electricity — Farms Relative standard error of estimate (percent)	Electricity — Value Total ($1,000)	Electricity — Value Relative standard error of estimate (percent)	Hired farm labor — Farms Number	Hired farm labor — Farms Relative standard error of estimate (percent)	Hired farm labor — Value Total ($1,000)	Hired farm labor — Value Relative standard error of estimate (percent)	Contract labor — Farms Number	Contract labor — Farms Relative standard error of estimate (percent)	Contract labor — Value Total ($1,000)	Contract labor — Value Relative standard error of estimate (percent)
New Hampshire	**1 614**	**2.7**	**3 249**	**1.1**	**885**	**4.5**	**21 601**	**.6**	**281**	**10.2**	**1 140**	**5.1**
Belknap	101	5.1	108	9.2	50	8.2	483	7.9	7	17.7	49	17.6
Carroll	89	6.0	82	2.9	59	6.4	560	2.7	18	20.0	135	24.7
Cheshire	129	12.1	429	4.3	96	17.3	3 553	.7	19	38.8	36	10.5
Coos	133	4.1	217	1.8	58	9.0	782	2.6	13	23.2	20	6.1
Grafton	244	7.6	447	3.7	134	12.5	1 726	2.2	36	28.0	68	25.5
Hillsborough	199	9.8	501	1.0	105	14.5	4 323	.8	32	26.2	138	7.9
Merrimack	192	9.0	357	2.9	114	13.6	2 815	1.3	32	35.8	282	2.3
Rockingham	239	8.0	335	5.3	113	14.9	1 939	1.4	73	25.7	208	16.6
Strafford	143	5.1	311	2.1	66	8.3	2 574	.8	25	19.0	79	13.3
Sullivan	145	6.6	462	2.5	90	13.8	2 846	3.3	26	31.1	124	17.1

Farm production expenses [1] —Con.

Geographic area	Repair and maintenance — Farms Number	Repair and maintenance — Farms Relative standard error of estimate (percent)	Repair and maintenance — Value Total ($1,000)	Repair and maintenance — Value Relative standard error of estimate (percent)	Customwork, machine hire, and rental of machinery and equipment — Farms Number	Customwork... — Farms Relative standard error of estimate (percent)	Customwork... — Value Total ($1,000)	Customwork... — Value Relative standard error of estimate (percent)	Interest expense — Farms Number	Interest expense — Farms Relative standard error of estimate (percent)	Interest expense — Value Total ($1,000)	Interest expense — Value Relative standard error of estimate (percent)
New Hampshire	**2 068**	**2.0**	**6 969**	**1.6**	**428**	**7.4**	**698**	**6.3**	**813**	**4.8**	**5 177**	**3.7**
Belknap	120	3.9	267	7.5	15	17.3	9	19.4	59	9.0	194	14.4
Carroll	120	4.4	331	7.1	35	14.0	38	8.5	36	11.3	222	5.1
Cheshire	154	11.2	844	4.0	51	25.6	55	10.0	74	18.9	343	16.4
Coos	150	3.2	432	5.4	45	12.1	106	26.4	68	7.8	488	2.2
Grafton	305	5.3	1 070	3.2	59	19.7	151	8.0	116	13.0	722	6.1
Hillsborough	316	2.4	1 020	5.6	45	27.7	67	12.5	94	18.4	636	10.7
Merrimack	307	5.1	952	3.0	50	25.9	79	33.4	100	12.6	729	7.2
Rockingham	263	7.8	818	6.4	43	30.2	53	8.7	149	14.4	890	14.6
Strafford	174	3.5	437	4.7	31	18.0	63	13.0	48	11.9	241	12.9
Sullivan	159	5.9	799	3.1	54	17.9	76	13.6	69	11.9	712	10.8

Farm production expenses [1] —Con.

Geographic area	Cash rent — Farms Number	Cash rent — Farms Relative standard error of estimate (percent)	Cash rent — Value Total ($1,000)	Cash rent — Value Relative standard error of estimate (percent)	Property taxes paid — Farms Number	Property taxes paid — Farms Relative standard error of estimate (percent)	Property taxes paid — Value Total ($1,000)	Property taxes paid — Value Relative standard error of estimate (percent)	All other farm production expenses — Farms Number	All other... — Farms Relative standard error of estimate (percent)	All other... — Value Total ($1,000)	All other... — Value Relative standard error of estimate (percent)
New Hampshire	**308**	**4.8**	**1 077**	**2.0**	**2 330**	**1.1**	**8 521**	**3.1**	**2 124**	**1.9**	**13 871**	**1.3**
Belknap	14	16.7	41	12.6	138	2.4	419	6.1	115	4.4	376	7.4
Carroll	14	14.8	40	31.2	146	2.1	390	8.4	138	3.1	538	2.5
Cheshire	17	–	50	–	211	1.3	1 079	13.5	189	6.8	1 213	2.4
Coos	44	11.2	136	10.4	157	3.5	452	5.0	160	2.5	854	1.3
Grafton	79	10.3	197	2.5	341	1.5	1 202	6.8	297	5.8	2 021	1.5
Hillsborough	31	14.2	140	1.6	307	3.6	1 167	10.0	288	5.8	2 022	1.1
Merrimack	48	18.7	173	3.9	323	3.5	1 118	7.5	265	7.2	2 497	1.3
Rockingham	19	1.9	39	.1	338	1.1	1 033	8.5	323	3.5	1 740	8.5
Strafford	20	19.7	165	.6	182	2.5	656	6.4	178	2.9	965	3.0
Sullivan	22	1.2	96	.2	187	.8	1 003	9.3	171	5.2	1 645	3.7

Geographic area	Net cash return from agricultural sales for the farm unit (see text)[1] — Farms Number	Net cash return... — Farms Relative standard error of estimate (percent)	Net cash return... — Value Total ($1,000)	Net cash return... — Value Relative standard error of estimate (percent)	Total cropland — Farms Number	Total cropland — Farms Relative standard error of estimate (percent)	Total cropland — Acres Number	Total cropland — Acres Relative standard error of estimate (percent)	Harvested cropland — Farms Number	Harvested cropland — Farms Relative standard error of estimate (percent)	Harvested cropland — Acres Number	Harvested cropland — Acres Relative standard error of estimate (percent)
New Hampshire	**2 440**	**.8**	**15 953**	**4.0**	**2 242**	**.7**	**135 437**	**.5**	**2 039**	**.7**	**100 746**	**.5**
Belknap	146	2.1	248	27.9	140	1.1	6 232	2.2	130	1.3	4 145	2.6
Carroll	155	1.7	(D)	(D)	141	1.3	6 233	2.9	130	1.5	4 349	2.7
Cheshire	219	1.2	(D)	(D)	195	1.1	11 868	1.6	178	1.4	9 235	1.7
Coos	171	1.9	1 194	7.2	163	1.2	16 885	1.1	148	1.4	12 611	1.1
Grafton	348	.9	2 324	7.1	325	.7	27 071	1.0	312	.8	19 701	.9
Hillsborough	327	1.0	1 124	17.4	296	.9	15 936	1.3	260	1.1	12 004	1.4
Merrimack	345	1.0	3 219	10.1	326	.8	16 677	1.1	283	1.0	12 742	1.1
Rockingham	340	1.1	1 170	29.1	287	1.1	14 010	1.8	262	1.2	10 832	1.7
Strafford	201	1.8	542	19.8	191	.8	8 394	1.8	179	1.0	6 418	2.2
Sullivan	188	.8	806	25.7	178	.6	12 131	.8	157	1.0	8 709	.7

See footnotes at end of table.

1992 CENSUS OF AGRICULTURE

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

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

Geographic area	Irrigated land				Livestock and poultry							
	Farms		Acres		Cattle and calves inventory				Beef cows inventory			
					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)
New Hampshire___	**308**	**1.6**	**1 746**	**1.1**	**956**	**.9**	**48 419**	**.4**	**494**	**1.4**	**3 727**	**1.8**
Belknap_____	16	6.4	98	7.3	61	3.2	1 594	3.0	34	4.9	255	7.4
Carroll_____	23	5.1	63	4.2	57	3.6	1 684	2.7	40	4.8	325	8.8
Cheshire_____	24	6.1	85	5.3	85	2.7	5 522	1.3	44	4.5	263	5.2
Coos_____	16	6.5	33	5.4	88	2.3	6 312	.7	33	5.1	310	6.2
Grafton_____	22	6.5	80	6.8	190	1.4	11 171	.8	76	3.1	570	4.7
Hillsborough_____	48	3.9	497	1.0	92	2.6	4 636	1.1	52	3.9	387	4.9
Merrimack_____	52	3.5	282	2.1	143	2.0	6 512	1.0	86	2.9	472	4.1
Rockingham_____	61	3.2	309	4.1	98	2.7	3 513	2.0	59	3.9	472	4.3
Strafford_____	27	4.6	142	3.6	55	3.3	2 284	2.5	27	5.1	299	5.7
Sullivan_____	19	4.8	157	1.0	87	1.9	5 191	.7	43	3.5	374	4.4

Geographic area	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)
New Hampshire___	**389**	**1.1**	**21 659**	**.4**	**289**	**1.8**	**4 458**	**3.6**	**311**	**1.8**	**8 052**	**2.8**
Belknap_____	18	6.6	540	3.1	27	5.6	437	16.0	15	7.7	852	10.1
Carroll_____	12	8.8	402	.8	20	7.5	167	9.7	18	6.7	321	7.6
Cheshire_____	32	3.4	2 509	.6	25	5.9	408	12.5	37	5.0	1 520	6.7
Coos_____	43	2.2	2 944	.4	21	6.4	112	7.4	22	5.9	534	8.8
Grafton_____	106	1.8	5 559	.9	52	3.8	361	7.7	38	4.4	1 152	9.5
Hillsborough_____	37	3.5	1 977	1.1	39	4.6	1 591	6.9	38	4.9	942	8.3
Merrimack_____	53	2.9	3 025	1.0	33	5.0	531	10.4	47	4.3	933	7.8
Rockingham_____	31	4.1	1 372	2.1	32	5.2	469	4.2	41	4.9	603	6.5
Strafford_____	21	5.0	876	1.5	18	7.4	169	17.6	21	6.8	307	9.5
Sullivan_____	36	2.5	2 455	.3	22	5.3	213	5.2	34	4.2	888	5.8

Geographic area	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)
New Hampshire___	**327**	**1.8**	**171 109**	**1.4**	**25**	**5.9**	**(D)**	**(D)**
Belknap_____	26	5.9	1 152	16.5	3	16.1	76	16.4
Carroll_____	25	6.3	(D)	(D)	4	18.1	374	22.8
Cheshire_____	26	5.6	60 062	1.9	3	18.1	(D)	(D)
Coos_____	28	5.3	600	7.3	–	–	–	–
Grafton_____	41	4.3	(D)	(D)	2	21.4	(D)	(D)
Hillsborough_____	48	4.2	6 453	2.7	2	24.5	(D)	(D)
Merrimack_____	43	4.6	4 651	4.3	5	13.4	(D)	(D)
Rockingham_____	38	5.2	10 758	18.9	3	17.8	395	16.0
Strafford_____	23	6.6	1 601	2.7	2	18.3	(D)	(D)
Sullivan_____	29	4.3	1 015	4.9	1	26.0	(D)	(D)

Geographic area	Selected crops harvested											
	Corn for grain or seed						Corn for silage or green chop					
	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)	Tons, green	Relative standard error of estimate (percent)
New Hampshire___	**34**	**4.4**	**1 620**	**4.3**	**184 250**	**5.1**	**258**	**1.1**	**16 577**	**.4**	**311 941**	**.4**
Belknap_____	5	14.5	17	14.8	670	14.9	14	6.7	475	3.4	9 291	2.8
Carroll_____	2	25.5	(D)	(D)	(D)	(D)	7	7.8	397	.5	6 558	.6
Cheshire_____	4	11.4	600	11.4	66 600	14.1	28	3.9	1 939	1.6	37 455	1.6
Coos_____	3	15.8	190	5.0	(D)	(D)	16	1.1	1 579	.2	28 580	.1
Grafton_____	5	–	285	–	34 160	–	54	1.9	3 511	1.2	66 429	1.4
Hillsborough_____	3	18.6	4	19.0	285	20.1	25	3.4	1 416	1.6	26 853	1.6
Merrimack_____	4	7.6	214	5.7	24 505	4.2	52	2.5	2 944	.7	55 324	.7
Rockingham_____	3	20.1	4	18.5	(D)	(D)	28	3.9	881	1.9	14 006	1.6
Strafford_____	1	–	(D)	(D)	(D)	(D)	12	4.7	950	.9	15 369	.5
Sullivan_____	4	13.0	(D)	(D)	(D)	(D)	22	1.8	2 485	.2	52 076	.2

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]

	Selected crops harvested —Con.									
	Hay—alfalfa, other tame, small grain, wild, grass silage, green, chop, etc. (see text)						Vegetables harvested for sale (see text)			
Geographic area	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)
New Hampshire	**1 492**	**.8**	**77 605**	**.7**	**136 963**	**.7**	**327**	**1.6**	**3 324**	**1.5**
Belknap	94	2.2	3 395	3.4	6 272	4.7	19	6.8	180	4.5
Carroll	89	2.4	3 800	3.2	6 900	3.6	27	5.3	144	2.7
Cheshire	132	2.0	6 321	2.0	12 364	2.1	29	5.5	249	7.2
Coos	126	1.7	10 830	1.3	18 869	1.0	18	6.4	114	7.9
Grafton	257	1.1	16 092	1.1	26 030	1.1	26	5.0	133	5.3
Hillsborough	168	1.7	7 988	2.0	13 972	2.6	45	4.1	1 078	1.7
Merrimack	215	1.4	9 541	1.5	16 711	1.6	56	3.5	241	2.7
Rockingham	164	1.9	8 515	2.1	15 479	2.0	63	3.4	895	3.7
Strafford	123	1.8	5 224	2.7	8 727	2.3	29	4.5	193	6.9
Sullivan	124	1.4	5 899	1.1	11 639	.9	15	5.6	99	7.3

	Selected crops harvested–Con.			
	Land in orchards			
Geographic area	Farms		Acres	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
New Hampshire	**242**	**2.0**	**3 877**	**1.1**
Belknap	19	7.2	131	10.3
Carroll	15	7.8	98	15.4
Cheshire	19	7.2	143	2.9
Coos	13	9.4	45	10.2
Grafton	22	6.4	165	3.5
Hillsborough	51	3.8	1 790	1.4
Merrimack	22	5.9	361	4.1
Rockingham	31	4.9	892	1.1
Strafford	31	4.9	144	5.5
Sullivan	19	5.4	107	9.6

[1]Data are based on a sample of farms.

Table G. New England States' 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 — Total (number)	Census published farms — Relative standard error of estimate (percent)	Not on mail list [1] — Total (number)	Not on mail list [1] — Relative standard error of estimate (percent)	Percent not on mail list [1] — Total (percent)	Percent not on mail list [1] — Standard error of percent
Farms _____ number __	22 991	.4	5 422	12.5	19.1	2.0
Land in farms _____ acres __	3 857 438	.3	314 720	21.7	7.5	1.4
Average size of farm _____ acres __	167.8	.5	58.0	16.8	(X)	(X)
Farms by size:						
Less than 10 acres _____	2 843	.8	1 229	29.5	30.2	6.6
10 to 49 acres _____	5 597	.6	2 491	18.7	30.8	4.0
Less than 50 acres _____	8 440	.6	3 720	15.3	30.6	3.3
50 acres or more _____	14 551	.4	1 702	22.2	10.5	2.1
50 to 99 acres _____	3 800	.6	688	37.4	15.3	5.1
100 to 179 acres _____	3 874	.6	674	32.6	14.8	4.2
180 acres or more _____	6 877	.4	339	48.6	4.7	2.1
Harvested cropland _____ farms __	19 644	.4	3 927	14.9	16.7	2.1
acres __	1 312 694	.2	63 683	19.9	4.6	.9
Farms by value of sales:						
Less than $1,000 _____	3 770	.8	2 192	20.0	36.8	4.7
$1,000 to $2,499 _____	3 041	.8	1 238	29.1	28.9	5.8
Less than $2,500 _____	6 811	.7	3 431	16.0	33.5	3.6
$2,500 or more _____	16 180	.4	1 991	19.8	11.0	1.9
$2,500 to $9,999 _____	5 776	.6	1 218	25.8	17.4	3.7
$10,000 or more _____	10 404	.3	773	34.7	6.9	2.3
Market value of agricultural products sold ____ $1,000 __	1 686 781	.1	27 166	30.0	1.6	.5
Farms by standard industrial classification:						
Crops (01) _____	12 093	.5	2 221	19.3	15.5	2.5
Livestock (02) _____	10 898	.4	3 201	17.2	22.7	3.1
Farms by type of organization:						
Individual or family _____	19 403	.4	4 857	13.0	20.0	2.1
Partnership or corporation _____	3 368	.5	460	50.0	12.0	5.0
Other _____	220	1.8	–	(X)	–	(X)
Farms by tenure of operator:						
Full owners _____	14 362	.5	3 963	15.0	21.6	2.6
Part owners and tenants _____	8 629	.4	1 457	23.3	14.4	2.8
Part owners _____	7 037	.4	1 148	25.8	14.0	3.0
Tenants _____	1 592	.8	309	48.2	16.2	6.7
Operators by place of residence:						
On farm operated _____	18 979	.4	4 837	13.2	20.3	2.2
Not on farm operated _____	2 824	.6	281	45.6	9.1	3.8
Not reported _____	1 188	.9	303	61.6	20.3	9.5
Operators by principal occupation:						
Farming _____	12 774	.4	1 971	23.6	13.4	2.8
Other _____	10 217	.6	2 925	17.3	22.3	3.0
Operators by sex:						
Male _____	19 820	.4	4 825	13.1	19.6	2.1
Female _____	3 171	.7	597	34.5	15.9	4.6
Operators by race:						
White _____	22 909	.4	4 895	13.3	17.6	1.9
Black and other races _____	82	3.6	–	(X)	–	(X)
Operators by years on present farm:						
4 years or less _____	2 150	.9	1 129	29.7	34.4	6.7
5 years or more _____	17 693	.4	3 339	15.7	15.9	2.2
Average years on present farm _____	19.6	.6	16.0	13.3	(X)	(X)
Not reported _____	3 148	.6	954	29.7	23.3	5.3
Average age of operator _____	53.2	.6	53.4	4.3	(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.
Note: New England States include Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

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

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