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__	14.3
Land in farms_____acres__	7.5
Estimated market value of land and buildings[1]_____$1,000__	3.0
Market value of agricultural products sold __$1,000__	2.4
Harvested cropland _____acres__	5.3
Corn for grain or seed _____acres__	3.7
Wheat for grain _____acres__	5.1
Livestock and poultry inventory:	
Cattle and calves _____number__	5.9
Hogs and pigs _____number__	6.6
Hens and pullets of laying age_____number__	.6

[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	5.9
50	3.8
75	2.7
100	2.0
150	.7
200	.6
300	.5
500	.4
750	.3
1,000	.3
1,500	.2
2,000	(X)
SAMPLE COUNT ITEM	
Number of farms reporting:	
25	39.9
50	27.8
75	22.4
100	19.1
150	15.2
200	12.7
300	9.7
500	6.3
750	3.5
1,000	3.0
1,500	2.5
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.

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 EXPENSES**[1]		
Farms _____number__	9 079	.9	Total farm production expenses _____farms __	9 083	1.0
Land in farms _____acres__	847 595	.5	$1,000__	430 843	.6
Average size of farm _____acres __	93	1.0	Average per farm _____dollars __	47 434	1.1
			Livestock and poultry purchased _____farms __	1 910	4.6
			$1,000__	9 487	4.4
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			Feed for livestock and poultry _____farms __	3 427	3.0
			$1,000__	32 427	1.9
			Commercially mixed formula feeds _____farms __	1 729	4.8
Total sales (see text) _____farms __	9 079	.9	$1,000__	21 944	1.1
$1,000__	532 988	.1			
Average per farm _____dollars __	58 706	.9	Seeds, bulbs, plants, and trees _____farms __	4 239	2.2
			$1,000__	29 126	.9
Farms by value of sales:			Commercial fertilizer _____farms __	5 533	1.8
Less than $1,000 (see text) _____farms __	1 597	1.6	$1,000__	25 949	1.1
$1,000__	511	1.9	Agricultural chemicals _____farms __	4 212	2.2
$1,000 to $2,499 _____farms __	1 539	1.5	$1,000__	19 152	1.0
$1,000__	2 446	1.5	Petroleum products _____farms __	8 564	1.1
$2,500 to $4,999 _____farms __	1 175	1.4	$1,000__	22 184	.9
$1,000__	4 225	1.4			
$5,000 to $9,999 _____farms __	1 144	1.3	Electricity _____ farms __	6 029	1.9
$1,000__	7 944	1.3	$1,000__	10 184	1.3
$10,000 to $19,999 _____farms __	1 021	1.3	Hired farm labor _____ farms __	2 659	2.8
$1,000__	14 091	1.3	$1,000__	115 161	.4
$20,000 to $24,999 _____farms __	337	1.8	Contract labor _____ farms __	749	7.2
$1,000__	7 398	1.8	$1,000__	11 665	1.0
			Repair and maintenance _____ farms __	7 501	1.4
$25,000 to $39,999 _____farms __	474	1.4	$1,000__	28 268	1.2
$1,000__	14 816	1.4	Customwork, machine hire, and rental of machinery and equipment _____ farms __	1 650	4.3
$40,000 to $49,999 _____farms __	202	1.9	$1,000__	4 817	3.3
$1,000__	8 875	1.9	Interest expense _____ farms __	2 010	3.5
$50,000 to $99,999 _____farms __	530	1.1	$1,000__	17 122	2.3
$1,000__	37 961	1.1	Secured by real estate _____ farms __	1 288	4.5
$100,000 to $249,999 _____farms __	586	–	$1,000__	12 548	2.8
$1,000__	95 154	–	Not secured by real estate _____farms __	1 040	5.0
$250,000 to $499,999 _____farms __	283	–	$1,000__	4 574	3.6
$1,000__	97 128	–			
$500,000 or more _____farms __	191	–	Cash rent _____ farms __	1 696	3.6
$1,000__	242 440	–	$1,000__	12 365	2.0
Sales by commodity or commodity group:			Property taxes _____ farms __	8 195	1.2
Crops, including nursery and greenhouse crops _____farms __	6 244	.8	$1,000__	25 379	2.3
$1,000__	431 178	.1	All other farm production expenses _____farms __	7 993	1.3
Grains _____farms __	1 808	.9	$1,000__	67 559	.9
$1,000__	45 814	.4			
Corn for grain _____farms __	869	1.0			
$1,000__	16 785	.5	**NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)** [1]		
Wheat _____farms __	560	1.1			
$1,000__	4 521	.6			
Soybeans _____farms __	1 111	.9	All farms _____number __	9 083	1.0
$1,000__	23 064	.5	$1,000__	95 771	2.1
Sorghum for grain _____farms __	16	3.1	Average per farm _____dollars __	10 544	2.4
$1,000__	81	1.2			
Barley _____farms __	108	2.1	Farms with net gains [2] _____number __	4 234	2.2
$1,000__	622	1.6	$1,000__	135 080	1.0
Oats_____farms __	81	2.7	Average net gain _____dollars __	31 904	2.4
$1,000__	140	1.8			
Other grains _____farms __	207	1.7	Farms with net losses _____number __	4 849	2.1
$1,000__	601	3.0	$1,000__	39 309	3.6
			Average net loss _____dollars __	8 107	4.1
Cotton and cottonseed _____farms __	–	–			
$1,000__	–	–			
Tobacco _____farms __	–	–	**GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME**		
$1,000__	–	–			
Hay, silage, and field seeds _____farms __	1 960	1.1			
$1,000__	10 775	1.0	Government payments _____ farms __	641	.9
			$1,000__	3 560	.5
Vegetables, sweet corn, and melons _____farms __	1 858	.9	Other farm-related income [1] _____ farms __	2 477	3.8
$1,000__	122 984	.2	$1,000__	8 856	5.1
Fruits, nuts, and berries _____farms __	867	1.1	Customwork and other agricultural services _____farms __	561	9.2
$1,000__	62 084	.2	$1,000__	2 884	8.1
			Gross cash rent or share payments _____farms __	737	8.4
Nursery and greenhouse crops _____farms __	1 772	.8	$1,000__	2 314	11.1
$1,000__	181 526	.1	Forest products and Christmas trees _____farms __	1 087	6.1
Other crops _____farms __	198	1.7	$1,000__	1 970	9.1
$1,000__	7 994	.2	Other farm-related income sources _____farms __	499	9.0
			$1,000__	1 688	11.5
Livestock, poultry, and their products _____farms __	3 603	1.1			
$1,000__	101 810	.3			
Poultry and poultry products _____farms __	747	1.6	**COMMODITY CREDIT CORPORATION LOANS**		
$1,000__	23 217	.2			
Dairy products _____farms __	332	.8			
$1,000__	47 984	.3	Total _____ farms __	59	1.7
Cattle and calves _____farms __	1 668	1.0	$1,000__	2 216	.6
$1,000__	11 938	.7			
Hogs and pigs _____farms __	530	1.6			
$1,000__	4 228	1.5			
Sheep, lambs, and wool _____farms __	632	1.7			
$1,000__	713	2.3			
Other livestock and livestock products (see text) _____farms __	1 219	1.5			
$1,000__	13 731	.9			
Value of agricultural products sold directly to individuals for human consumption (see text) _____farms __	1 508	1.2			
$1,000__	11 159	.7			

See footnotes at end of table.

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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)
LAND IN FARMS ACCORDING TO USE			**TENURE OF OPERATOR**		
Total cropland _____ farms __	8 221	.8	All operators _____ farms __	9 079	.9
acres __	623 466	.4	acres __	847 595	.5
Harvested cropland _____ farms __	7 149	.8	Full owners _____ farms __	6 541	1.0
acres __	491 518	.4	acres __	328 645	.8
Farms by acres harvested:			Part owners _____ farms __	1 685	.7
1 to 9 acres _____ farms __	2 913	1.1	acres __	403 491	.4
acres __	11 901	1.2	Tenants_____ farms __	853	1.2
10 to 19 acres _____ farms __	1 112	1.3	acres __	115 459	.9
acres __	14 665	1.4			
20 to 29 acres _____ farms __	573	1.6	**OWNED AND RENTED LAND**		
acres __	13 269	1.6			
30 to 49 acres _____ farms __	645	1.4	Land owned _____ farms __	8 246	.9
acres __	24 104	1.4	acres __	540 196	.6
			Owned land in farms _____ farms __	8 226	.9
50 to 99 acres _____ farms __	722	1.1	acres __	492 572	.6
acres __	48 654	1.1	Land rented or leased from others ____ farms __	2 546	.7
100 to 199 acres _____ farms __	554	1.0	acres __	357 356	.4
acres __	76 531	1.0	landlords __	7 479	.7
200 to 499 acres _____ farms __	434	.7	Rented or leased land in farms _____ farms __	2 538	.7
acres __	132 962	.7	acres __	355 023	.4
500 to 999 acres _____ farms __	142	–	Land rented or leased to others _____ farms __	833	1.3
acres __	95 230	–	acres __	49 957	1.4
1,000 acres or more _____ farms __	54	–			
acres __	74 202	–	**OPERATOR CHARACTERISTICS**		
Cropland:			Operators by place of residence:		
Pasture or grazing only _____ farms __	3 160	1.1	On farm operated _____	7 059	.9
acres __	68 563	.9	Not on farm operated _____	1 516	1.1
Other cropland _____ farms __	2 140	.8	Not reported _____	504	1.6
acres __	63 385	.9	Operators by principal occupation:		
			Farming_____	4 218	.7
Total woodland _____ farms __	4 074	.9	Other _____	4 861	1.2
acres __	134 438	.9	Operators by days worked off farm:		
Pastureland and rangeland other than cropland and woodland pastured _____ farms __	1 424	1.2	Any _____	5 094	1.1
acres __	30 838	1.2	200 days or more _____	3 396	1.2
Land in house lots, ponds, roads, wasteland, etc. _____ farms __	6 203	.9	Operators by sex:		
acres __	58 853	.9	Male _____ farms __	7 805	.8
Irrigated land _____ farms __	1 911	.7	acres __	785 597	.4
acres __	80 409	.2	Female _____ farms __	1 274	1.5
			acres __	61 998	1.5
Acres irrigated:					
1 to 9 acres _____ farms __	1 127	1.0	Average age of operator _____ years __	53.9	1.2
acres __	3 180	1.2			
10 to 49 acres _____ farms __	389	1.2	**FARMS BY TYPE OF ORGANIZATION**		
acres __	8 937	1.1			
50 to 99 acres _____ farms __	165	.9	Individual or family (sole proprietorship) _____ farms __	7 553	1.0
acres __	11 292	.9	acres __	565 144	.6
100 to 199 acres _____ farms __	128	.7	Partnership_____ farms __	668	1.2
acres __	17 571	.6	acres __	119 321	.6
200 to 499 acres _____ farms __	87	–	Corporation:		
acres __	25 789	–	Family held _____ farms __	708	1.0
500 to 999 acres _____ farms __	9	–	acres __	138 778	.6
acres __	6 254	–	More than 10 stockholders _____ farms __	12	7.7
1,000 acres or more _____ farms __	6	–	10 or less stockholders _____ farms __	696	1.0
acres __	7 386	–			
			Other than family held _____ farms __	72	3.4
Harvested cropland irrigated _____ farms __	1 870	.7	acres __	9 513	3.3
acres __	79 745	.2	More than 10 stockholders _____ farms __	11	6.3
Pasture and other land irrigated _____ farms __	82	3.4	10 or less stockholders _____ farms __	61	3.8
acres __	664	7.1	Other—cooperative, estate or trust, institutional, etc. _____ farms __	78	3.0
			acres __	14 839	1.5
Land under federal acreage reduction programs:					
Diverted under annual commodity programs _____ farms __	266	1.1	**HIRED FARM LABOR**		
acres __	4 279	.6			
Conservation Reserve or Wetlands Reserve Programs _____ farms __	98	2.7	Hired workers by days worked:		
acres __	3 579	5.3	150 days or more _____ farms __	1 599	3.2
			workers __	8 175	1.2
VALUE OF LAND AND BUILDINGS [1]			Less than 150 days _____ farms __	2 237	3.3
			workers __	14 366	2.1
Estimated market value of land and buildings _____ farms __	9 083	1.0			
$1,000 __	5 589 949	1.6	**INJURIES AND DEATHS**		
Average per farm _____ dollars __	615 430	1.9			
Average per acre _____ dollars __	6 942	2.2	Farm-related injuries:		
			Operator and family members _____ farms __	72	3.1
VALUE OF MACHINERY AND EQUIPMENT [1]			number __	96	2.6
			Hired workers _____ farms __	127	1.4
Estimated market value of all machinery and equipment _____ farms __	9 050	1.0	number __	222	1.2
$1,000 __	358 561	1.3	Farm-related deaths:		
Average per farm _____ dollars __	39 620	1.7	Operator and family members _____ farms __	1	–
			number __	(D)	(D)
AGRICULTURAL CHEMICALS [1]			Hired workers _____ farms __	1	–
			number __	(D)	(D)
Commercial fertilizer _____ farms __	5 483	1.8			
acres on which used __	390 944	1.6			

See footnotes at end of table.

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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 BY SIZE			**LIVESTOCK**		
			Cattle and calves inventory ____farms __	1 934	1.0
			number__	69 134	.5
			Beef cows ____farms __	1 152	1.3
1 to 9 acres ____farms __	2 099	1.3	number__	12 280	1.4
acres__	11 916	1.4	Milk cows ____farms __	450	1.0
10 to 49 acres ____farms __	3 726	1.1	number__	23 926	.3
acres__	83 502	1.1	Cattle and calves sold ____farms __	1 668	1.0
50 to 69 acres ____farms __	614	1.5	number__	28 989	.6
acres__	35 452	1.5	$1,000__	11 938	.7
70 to 99 acres ____farms __	592	1.4	Hogs and pigs inventory ____farms __	640	1.6
acres__	49 050	1.4	number__	29 645	1.5
100 to 139 acres ____farms __	549	1.4	Hogs and pigs sold ____farms __	530	1.6
acres__	63 094	1.4	number__	44 325	2.3
			$1,000__	4 228	1.5
			Sheep and lambs of all ages inventory ____farms __	691	1.6
140 to 179 acres ____farms __	324	1.5	number__	12 902	2.1
acres__	51 114	1.5	Sheep and lambs sold ____farms __	563	1.7
180 to 219 acres ____farms __	194	1.8	number__	10 633	2.1
acres__	38 314	1.7			
220 to 259 acres ____farms __	176	1.7	Horses and ponies inventory ____farms __	2 483	1.3
acres__	42 087	1.7	number__	23 867	1.5
260 to 499 acres ____farms __	466	.9	Horses and ponies sold ____farms __	847	1.6
acres__	164 134	.9	number__	2 946	2.0
500 to 999 acres ____farms __	250	.8			
acres__	173 111	.8	**POULTRY**		
			Chickens 3 months old or older inventory ____farms __	917	1.6
1,000 to 1,999 acres ____farms __	74	–	number__	1 801 049	.1
acres__	97 450	–	Hens and pullets of laying age ____farms __	901	1.6
2,000 acres or more ____farms __	15	–	number__	1 623 478	.1
acres__	38 371	–	Broilers and other meat-type chickens sold ____farms __	93	3.5
			number__	95 794	.9
FARMS BY STANDARD INDUSTRIAL CLASSIFICATION			**CROPS HARVESTED**		
			Corn for grain or seed ____farms __	1 158	.9
			acres__	83 805	.5
			bushels__	9 508 526	.5
Cash grains (011) ____farms __	1 014	1.2	Corn for silage or green chop ____farms __	465	1.1
acres__	218 757	.7	acres__	19 682	.5
Field crops, except cash grains (013) ____farms __	1 152	1.4	tons, green__	305 639	.5
acres__	106 806	1.3	Wheat for grain ____farms __	574	1.1
Vegetables and melons (016) ____farms __	1 393	1.0	acres__	29 415	.7
acres__	121 790	.5	bushels__	1 456 512	.7
Fruits and tree nuts (017) ____farms __	557	1.4	Soybeans for beans ____farms __	1 128	.9
acres__	64 833	.8	acres__	131 768	.6
Horticultural specialties (018) ____farms __	1 488	.9	bushels__	4 378 643	.5
acres__	62 384	.8	Irish potatoes ____farms __	97	2.6
General farms, primarily crop (019) ____farms __	258	2.1	acres__	3 442	.1
acres__	32 350	1.9	cwt__	897 481	.1
Livestock, except dairy, poultry, and animal specialties (021) ____farms __	1 393	1.4	Sweetpotatoes ____farms __	87	2.3
acres__	79 947	1.4	acres__	1 618	.5
Dairy farms (024) ____farms __	299	.8	bushels__	348 332	.5
acres__	102 467	.4	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ____farms __	3 060	1.0
Poultry and eggs (025) ____farms __	214	2.6	acres__	118 536	.7
acres__	8 698	2.6	tons, dry__	238 792	.7
Animal specialties (027) ____farms __	1 247	1.7	Alfalfa hay ____farms __	1 407	1.0
acres__	41 977	2.0	acres__	37 810	.9
General farms, primarily livestock and animal specialties (029) ____farms __	64	4.4	tons, dry__	101 979	.8
acres__	7 586	7.9	Vegetables harvested for sale (see text) ____farms __	1 861	.9
			acres__	64 647	.3
			Land in orchards ____farms __	701	1.4
			acres__	16 871	.5

[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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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 EXPENSES**[1]		
			Total farm production expenses _____farms __	3 542	1.1
Farms _____number__	3 624	.6	$1,000__	391 468	.5
Land in farms _____acres __	648 707	.4	Average per farm _____dollars __	110 522	1.2
Average size of farm _____acres __	179	.7			
			Livestock and poultry purchased _____farms __	519	7.0
			$1,000__	7 160	4.6
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			Feed for livestock and poultry _____farms __	856	4.8
			$1,000__	27 588	1.6
			Commercially mixed formula feeds _____farms __	543	5.8
Total sales (see text) _____farms __	3 624	.6	$1,000__	20 542	.9
$1,000__	517 862	.1			
Average per farm _____dollars __	142 898	.6	Seeds, bulbs, plants, and trees _____farms __	2 605	1.8
			$1,000__	28 614	.9
Farms by value of sales:			Commercial fertilizer _____farms __	3 045	1.6
$10,000 to $19,999 _____farms __	1 021	1.3	$1,000__	24 701	1.1
$1,000__	14 091	1.3	Agricultural chemicals _____farms __	2 682	1.9
$20,000 to $24,999 _____farms __	337	1.8	$1,000__	18 558	1.0
$1,000__	7 398	1.8	Petroleum products _____farms __	3 504	1.1
$25,000 to $39,999 _____farms __	474	1.4	$1,000__	20 034	.8
$1,000__	14 816	1.4	Electricity _____farms __	2 717	2.0
$40,000 to $49,999 _____farms __	202	1.9	$1,000__	8 924	1.3
$1,000__	8 875	1.9			
			Hired farm labor _____farms __	1 770	2.5
$50,000 to $99,999 _____farms __	530	1.1	$1,000__	112 710	.4
$1,000__	37 961	1.1	Contract labor _____farms __	469	7.9
$100,000 to $249,999 _____farms __	586	–	$1,000__	11 323	.9
$1,000__	95 154	–	Repair and maintenance _____farms __	3 266	1.4
$250,000 to $499,999 _____farms __	283	–	$1,000__	23 767	.8
$1,000__	97 128	–	Customwork, machine hire, and rental of machinery and equipment _____farms __	917	4.0
$500,000 or more _____farms __	191	–	$1,000__	4 339	3.4
$1,000__	242 440	–	Interest expense _____farms __	1 352	3.4
Sales by commodity or commodity group:			$1,000__	15 051	1.9
Crops, including nursery and greenhouse crops _____farms __	3 214	.6	Secured by real estate _____farms __	818	3.8
$1,000__	421 642	.1	$1,000__	10 762	2.1
Grains _____farms __	1 148	.8	Not secured by real estate _____farms __	783	4.9
$1,000__	43 954	.4	$1,000__	4 289	3.6
Corn for grain _____farms __	592	1.0			
$1,000__	16 212	.5	Cash rent _____farms __	1 332	3.5
Wheat _____farms __	457	1.0	$1,000__	11 886	1.8
$1,000__	4 340	.6	Property taxes _____farms __	3 037	1.8
Soybeans _____farms __	803	.8	$1,000__	13 785	1.9
$1,000__	22 037	.5	All other farm production expenses _____farms __	3 540	1.1
			$1,000__	63 028	.8
Sorghum for grain _____farms __	16	3.1			
$1,000__	81	1.2	**NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)** [1]		
Barley _____farms __	94	2.0			
$1,000__	606	1.6			
Oats _____farms __	59	2.7			
$1,000__	125	1.7	All farms _____number __	3 542	1.1
Other grains _____farms __	157	1.6	$1,000__	119 502	1.3
$1,000__	553	3.2	Average per farm _____dollars __	33 739	1.7
Cotton and cottonseed _____farms __	–	–	Farms with net gains [2] _____number __	2 778	2.0
$1,000__	–	–	$1,000__	132 037	1.0
Tobacco _____farms __	–	–	Average net gain _____dollars __	47 530	2.2
$1,000__	–	–			
Hay, silage, and field seeds _____farms __	646	1.1	Farms with net losses _____number __	764	6.2
$1,000__	8 116	1.1	$1,000__	12 536	4.9
			Average net loss _____dollars __	16 408	7.9
Vegetables, sweet corn, and melons _____farms __	1 226	.9			
$1,000__	120 707	.2	**GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME**		
Fruits, nuts, and berries _____farms __	459	1.1			
$1,000__	61 389	.2			
Nursery and greenhouse crops _____farms __	1 165	.8	Government payments _____farms __	525	.8
$1,000__	179 531	.1	$1,000__	3 457	.5
Other crops _____farms __	156	1.6	Other farm-related income [1] _____farms __	838	5.8
$1,000__	7 945	.2	$1,000__	5 223	5.1
			Customwork and other agricultural services _____farms __	228	10.4
Livestock, poultry, and their products _____farms __	1 085	.9	$1,000__	2 312	8.9
$1,000__	96 220	.2	Gross cash rent or share payments _____farms __	175	13.8
Poultry and poultry products _____farms __	171	2.2	$1,000__	855	5.7
$1,000__	22 757	.2	Forest products and Christmas trees _____farms __	329	11.0
Dairy products _____farms __	320	.8	$1,000__	1 068	14.2
$1,000__	47 952	.3	Other farm-related income sources _____farms __	268	8.3
Cattle and calves _____farms __	663	.9	$1,000__	988	4.6
$1,000__	9 881	.8			
Hogs and pigs _____farms __	190	2.0	**COMMODITY CREDIT CORPORATION LOANS**		
$1,000__	3 773	1.7			
Sheep, lambs, and wool _____farms __	111	2.6			
$1,000__	277	3.8			
Other livestock and livestock products (see text) _____farms __	277	1.9			
$1,000__	11 580	1.0			
Value of agricultural products sold directly to individuals for human consumption (see text) _____farms __	595	1.2	Total _____farms __	58	1.5
$1,000__	9 971	.7	$1,000__	(D)	(D)

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	3 519	.6	Individual or family (sole proprietorship) ... farms	2 648	.7
acres	517 618	.4	acres	394 765	.5
Harvested cropland ... farms	3 414	.6	Partnership ... farms	413	1.1
acres	433 706	.3	acres	106 429	.6
Cropland:			Corporation:		
Pasture or grazing only ... farms	918	.9	Family held ... farms	480	.7
acres	35 584	1.0	acres	128 136	.5
Total woodland ... farms	1 626	.7	More than 10 stockholders ... farms	6	–
acres	78 746	.9	10 or less stockholders ... farms	474	.8
Pastureland and rangeland other than cropland and woodland pastured ... farms	444	1.2	Other than family held ... farms	46	3.2
acres	16 618	1.2	acres	8 549	3.5
Land in house lots, ponds, roads, wasteland, etc. ... farms	2 354	.7	More than 10 stockholders ... farms	10	5.7
acres	35 725	.8	10 or less stockholders ... farms	36	3.7
Irrigated land ... farms	1 385	.6	Other—cooperative, estate or trust, institutional, etc. ... farms	37	3.5
acres	78 516	.2	acres	10 828	1.6
Harvested cropland irrigated ... farms	1 379	.6	**HIRED FARM LABOR**		
acres	78 039	.2	Hired workers by days worked:		
Pasture and other land irrigated ... farms	34	4.1	150 days or more ... farms	1 223	2.4
acres	477	9.2	workers	7 730	1.1
Land under federal acreage reduction programs:			Less than 150 days ... farms	1 394	3.0
Diverted under annual commodity programs ... farms	251	1.0	workers	12 447	1.4
acres	4 243	.6	**INJURIES AND DEATHS**		
Conservation Reserve or Wetlands Reserve Programs ... farms	64	2.6	Farm-related injuries:		
acres	2 933	5.1	Operator and family members ... farms	39	3.1
VALUE OF LAND AND BUILDINGS [1]			number	59	2.1
Estimated market value of land and buildings ... farms	3 542	1.1	Hired workers ... farms	98	1.3
$1,000	3 733 646	2.0	number	184	.9
Average per farm ... dollars	1 054 107	2.2	Farm-related deaths:		
Average per acre ... dollars	6 097	2.4	Operator and family members ... farms	1	–
VALUE OF MACHINERY AND EQUIPMENT [1]			number	(D)	(D)
Estimated market value of all machinery and equipment ... farms	3 542	1.1	Hired workers ... farms	1	–
$1,000	268 995	1.3	number	(D)	(D)
Average per farm ... dollars	75 944	1.7	**FARMS BY SIZE**		
AGRICULTURAL CHEMICALS[1]			1 to 9 acres	518	1.3
Commercial fertilizer ... farms	3 016	1.6	10 to 49 acres	998	1.1
acres on which used	360 714	1.6	50 to 69 acres	241	1.9
TENURE OF OPERATOR			70 to 99 acres	284	1.5
All operators ... farms	3 624	.6	100 to 139 acres	304	1.6
acres	648 707	.4	140 to 179 acres	236	1.6
Full owners ... farms	1 892	.8	180 to 219 acres	158	1.7
acres	173 962	.8	220 to 259 acres	145	1.6
Part owners ... farms	1 231	.6	260 to 499 acres	410	.8
acres	375 709	.4	500 to 999 acres	242	.7
Tenants ... farms	501	1.3	1,000 to 1,999 acres	73	–
acres	99 036	.8	2,000 acres or more	15	–
OWNED AND RENTED LAND			**FARMS BY STANDARD INDUSTRIAL CLASSIFICATION**		
Land owned ... farms	3 131	.6	Cash grains (011)	511	1.2
acres	349 482	.5	Field crops, except cash grains (013)	200	2.1
Owned land in farms ... farms	3 123	.6	Vegetables and melons (016)	927	1.0
acres	323 866	.5	Fruits and tree nuts (017)	249	1.4
Land rented or leased from others ... farms	1 735	.6	Horticultural specialties (018)	972	.8
acres	326 125	.4	General farms, primarily crop (019)	76	2.8
landlords	6 131	.5	Livestock, except dairy, poultry, and animal specialties (021)	162	2.2
Rented or leased land in farms ... farms	1 732	.6	Dairy farms (024)	293	.8
acres	324 841	.4	Poultry and eggs (025)	48	3.3
Land rented or leased to others ... farms	317	1.5	Animal specialties (027)	176	2.4
acres	26 900	1.4	General farms, primarily livestock and animal specialties (029)	10	6.6
OPERATOR CHARACTERISTICS			**LIVESTOCK**		
Operators by place of residence:			Cattle and calves inventory ... farms	732	.9
On farm operated	2 664	.6	number	57 552	.5
Not on farm operated	776	1.1	Beef cows ... farms	325	1.5
Not reported	184	1.7	number	6 645	1.9
Operators by principal occupation:			Milk cows ... farms	343	.8
Farming	2 472	.6	number	23 719	.3
Other	1 152	1.1	Cattle and calves sold ... farms	663	.9
Operators by days worked off farm:			number	24 397	.5
Any	1 433	1.0	$1,000	9 881	.8
200 days or more	838	1.3	Hogs and pigs inventory ... farms	224	1.9
Operators by sex:			number	26 123	1.6
Male	3 338	.6	Hogs and pigs sold ... farms	190	2.0
Female	286	1.8	number	40 201	2.4
Average age of operator ... years	53.0	.9	$1,000	3 773	1.7
			Sheep and lambs of all ages inventory ... farms	127	2.5
			number	3 688	3.6
			Sheep and lambs sold ... farms	96	2.8
			number	3 969	3.2
			Horses and ponies inventory ... farms	454	1.4
			number	6 600	2.3
			Horses and ponies sold ... farms	190	2.3
			number	1 571	3.2

See footnotes at end of table.

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

[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 __	194	2.1	Soybeans for beans _____ farms __	807	.8
number__	1 770 103	.1	acres__	124 170	.6
Hens and pullets of laying age _____farms __	190	2.2	bushels__	4 166 081	.5
number__	1 597 353	.1	Irish potatoes _____ farms __	67	2.5
Broilers and other meat-type chickens sold _____farms __	21	5.7	acres__	3 420	.1
number__	89 463	.6	cwt__	893 590	.1
			Sweetpotatoes _____ farms __	75	2.2
CROPS HARVESTED			acres__	1 598	.5
			bushels__	346 255	.5
Corn for grain or seed _____farms __	764	.8	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) _____farms __	1 074	.8
acres__	79 512	.5	tons, dry__	185 807	.7
bushels__	9 161 061	.5	Alfalfa hay _____ farms __	679	.9
Corn for silage or green chop _____farms __	357	.9	acres__	27 766	1.0
acres__	18 618	.5	tons, dry__	84 279	.9
tons, green __	294 226	.5	Vegetables harvested for sale (see text) _____farms __	1 226	.9
Wheat for grain _____ farms __	457	1.0	acres__	62 658	.3
acres__	27 724	.7	Land in orchards _____ farms __	252	1.4
bushels__	1 395 443	.7	acres__	14 984	.5

[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:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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__	.5	1.4	3.6	.5
Land in farms_____acres__	−5.2	.8	−3.1	.6
Average size of farm_____acres__	−6.1	1.6	−6.3	2.7
Estimated market value of land and buildings [1]:				
Average per farm_____dollars__	55.3	(L)	55.3	(L)
Average per acre_____dollars__	74.9	(L)	73.6	(L)
Estimated market value of all machinery and equipment [1]:				
Average per farm_____dollars__	4.9	2.6	2.7	2.3
Farms by size:				
1 to 9 acres	12.7	2.3	20.5	.6
10 to 49 acres	5.0	1.9	20.1	.5
50 to 179 acres	−10.2	1.3	−4.0	.7
180 to 499 acres	−11.0	1.1	−8.4	.9
500 to 999 acres	−14.4	1.0	−13.3	1.0
1,000 to 1,999 acres	23.3	−	25.9	−
2,000 acres or more	7.1	−	7.1	−
Total cropland_____farms__	−.6	1.4	4.8	.5
acres__	−3.0	.7	−.5	.6
Harvested cropland_____farms__	−1.9	1.2	5.4	.5
acres__	1.4	.7	4.1	.6
Irrigated land_____farms__	3.5	1.0	3.8	.7
acres__	−11.8	.4	−11.9	.4
Market value of agricultural products sold_____$1,000__	7.5	.3	7.8	.2
Average per farm_____dollars__	6.9	1.6	4.1	3.4
Crops, including nursery and greenhouse crops_____$1,000__	16.4	.3	17.0	.3
Livestock, poultry, and their products_____$1,000__	−18.8	.4	−19.7	.3
Farms by value of sales:				
Less than $2,500	1.5	1.9	(X)	(X)
$2,500 to $4,999	−8.3	2.0	(X)	(X)
$5,000 to $9,999	−1.6	1.9	(X)	(X)
$10,000 to $24,999	13.1	1.9	13.1	1.9
$25,000 to $49,999	7.0	2.0	7.0	2.0
$50,000 to $99,999	−8.3	1.5	−8.3	1.5
$100,000 to $249,999	−12.1	.1	−12.1	.1
$250,000 to $499,999	6.8	−	6.8	−
$500,000 or more	22.4	.3	22.4	.3
Total farm production expenses [1]_____$1,000__	11.1	1.3	10.5	1.3
Average per farm_____dollars__	10.5	1.9	9.0	1.6
Net cash return from agricultural sales for the farm unit (see text) [1]_____farms__	.5	1.5	1.4	1.3
$1,000__	−6.4	2.8	−	2.0
Average per farm_____dollars__	−6.9	3.1	−1.4	2.4
Operators by principal occupation:				
Farming	.9	1.1	−3.0	.6
Other	.2	1.9	21.1	.4
Operators by days worked off farm:				
Any	−5.2	4.9	5.5	5.4
200 days or more	−7.4	6.6	10.6	5.7
Livestock and poultry:				
Cattle and calves inventory_____farms__	−13.3	1.4	−13.1	.5
number__	−10.9	.8	−10.7	.7
Beef cows_____farms__	−2.0	2.0	14.4	.6
number__	8.1	2.6	25.6	1.6
Milk cows_____farms__	−22.9	1.2	−25.6	.8
number__	−25.4	.5	−25.3	.5
Cattle and calves sold_____farms__	−18.6	1.3	−17.4	.5
number__	−33.0	.6	−34.5	.5
Hogs and pigs inventory_____farms__	−5.9	2.2	−9.3	.8
number__	−7.3	2.3	−.8	2.1
Hogs and pigs sold_____farms__	−19.8	1.9	−19.8	.8
number__	−15.3	(L)	−12.6	(L)
Sheep and lambs inventory_____farms__	.9	2.6	7.6	.6
number__	2.2	3.5	6.8	1.3
Chickens 3 months old or older inventory_____farms__	−3.5	2.3	6.0	3.0
number__	−15.5	.2	−15.3	.2
Broilers and other meat-type chickens sold_____farms__	3.3	5.2	16.7	1.6
number__	−78.9	.4	−79.1	.4
Selected crops harvested:				
Corn for grain or seed_____farms__	−17.6	1.2	−11.6	.8
acres__	11.8	.9	(D)	(D)
bushels__	25.6	1.0	(D)	(D)
Corn for silage or green chop_____farms__	−18.1	1.3	−20.0	.9
acres__	−14.8	.8	−14.6	.7
tons, green__	−15.7	.8	−14.3	.8
Soybeans for beans_____farms__	3.4	1.5	12.9	1.0
acres__	24.0	1.3	28.1	1.3
bushels__	38.9	1.4	42.1	1.3
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)_____farms__	−5.1	1.5	−6.5	.5
acres__	−3.2	1.2	−.8	.8
tons, dry__	−9.0	1.0	−6.1	.8
Vegetables harvested for sale (see text)_____farms__	−2.5	1.4	10.3	.9
acres__	−10.9	.5	−10.3	.5
Land in orchards_____farms__	−6.0	2.0	−8.7	.7
acres__	−19.4	.6	−21.5	.5

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

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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 Jersey	**9 079**	**.9**	**847 595**	**.5**	**93**	**1.0**	**615 430**	**1.9**	**358 561**	**1.3**
Atlantic	391	.8	29 606	.9	76	1.2	304 545	5.7	28 376	5.9
Bergen	127	.7	2 636	5.8	21	5.8	680 898	3.4	3 378	2.1
Burlington	816	.8	97 186	.7	119	1.0	573 638	3.3	40 187	2.8
Camden	188	1.3	7 799	1.4	41	1.9	304 940	6.2	5 717	2.5
Cape May	163	1.4	11 644	2.8	71	3.1	259 930	6.6	4 534	4.3
Cumberland	609	.7	68 627	.7	113	1.0	371 699	4.1	35 457	3.9
Essex	22	1.1	613	1.1	28	1.5	832 964	1.2	477	.6
Gloucester	704	.8	61 748	.9	88	1.1	449 234	5.0	30 963	3.8
Hudson	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 299	.9	106 324	.9	82	1.3	707 334	6.2	35 060	4.9
Mercer	296	1.0	35 786	1.5	121	1.8	1 310 693	3.8	10 620	3.7
Middlesex	241	1.2	25 011	.7	104	1.4	992 415	3.1	12 036	9.0
Monmouth	850	1.2	58 758	.8	69	1.5	855 164	4.1	30 291	3.1
Morris	395	1.1	23 915	2.4	61	2.6	729 297	9.1	10 849	7.0
Ocean	233	1.4	10 365	2.0	44	2.5	347 159	5.7	6 262	21.4
Passaic	55	2.0	1 838	4.2	33	4.6	400 811	6.4	1 514	4.9
Salem	752	.9	98 256	.7	131	1.1	384 915	3.6	38 559	4.0
Somerset	435	1.0	43 989	.9	101	1.3	753 472	7.8	11 456	7.6
Sussex	791	.8	75 531	1.2	95	1.4	509 716	6.1	23 776	5.1
Union	28	1.3	325	2.0	12	2.4	654 669	3.8	1 221	1.1
Warren	684	.9	87 638	1.1	128	1.4	805 203	5.3	27 828	4.5

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)	Farm production expenses[1] Total farm production expenses Farms Number	Farm production expenses[1] Total farm production expenses Farms Relative standard error of estimate (percent)	Farm production expenses[1] Total farm production expenses Value Total ($1,000)	Farm production expenses[1] Total farm production expenses Value Relative standard error of estimate (percent)
New Jersey	**39 620**	**1.7**	**532 988**	**.1**	**58 706**	**.9**	**9 083**	**1.0**	**430 843**	**.6**
Atlantic	72 574	6.0	43 444	.2	111 110	.8	391	1.0	33 538	.6
Bergen	26 188	2.6	6 626	.5	52 177	.9	129	1.5	4 770	2.0
Burlington	49 189	3.0	64 563	.2	79 121	.8	817	.9	53 166	1.6
Camden	30 250	3.1	8 180	.8	43 512	1.5	189	2.0	6 337	1.7
Cape May	27 989	4.7	5 614	.9	34 443	1.7	162	1.9	4 320	2.2
Cumberland	58 126	3.9	72 993	.2	119 857	.7	610	.8	56 296	1.3
Essex	21 673	1.2	913	.4	41 486	1.1	22	1.1	486	.6
Gloucester	43 981	3.9	54 575	.2	77 521	.8	705	1.0	43 140	1.2
Hudson	–	–	–	–	–	–	–	–	–	–
Hunterdon	27 348	5.1	26 206	.5	20 174	1.0	1 298	1.0	24 226	4.1
Mercer	36 496	4.3	15 879	.6	53 647	1.1	296	1.4	12 214	3.7
Middlesex	50 148	9.2	23 518	.2	97 585	1.2	240	1.6	19 792	1.9
Monmouth	35 595	3.4	50 945	.3	59 935	1.3	851	1.3	41 803	2.3
Morris	27 535	7.1	17 660	.4	44 709	1.2	395	1.5	13 645	2.8
Ocean	26 992	21.5	5 046	1.2	21 657	1.8	232	1.5	4 861	3.3
Passaic	27 524	6.6	3 420	.9	62 184	2.2	55	4.4	2 553	.7
Salem	51 275	4.1	54 435	.3	72 387	.9	752	1.1	42 135	1.2
Somerset	26 767	8.0	12 644	.6	29 066	1.2	437	1.4	10 166	3.0
Sussex	30 097	5.1	19 763	.6	24 984	1.0	791	.9	16 819	3.2
Union	43 600	3.5	6 636	.1	236 994	1.3	28	3.3	3 818	.1
Warren	40 744	4.7	39 929	.3	58 375	1.0	683	1.1	36 759	2.1

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 Jersey	**1 910**	**4.6**	**9 487**	**4.4**	**3 427**	**3.0**	**32 427**	**1.9**	**4 239**	**2.2**	**29 126**	**.9**
Atlantic	32	35.8	24	60.6	62	30.1	92	55.7	203	10.9	792	.7
Bergen	19	24.0	44	24.0	33	14.7	199	9.9	54	6.2	338	1.2
Burlington	96	22.8	1 200	20.1	256	10.7	3 001	10.3	430	6.3	3 363	.9
Camden	22	20.3	55	64.7	46	12.5	117	40.1	94	7.0	403	5.6
Cape May	36	20.1	88	26.3	54	14.6	122	26.1	86	8.9	296	7.0
Cumberland	52	32.5	543	4.4	108	19.1	1 820	6.6	444	5.3	3 993	1.2
Essex	3	3.9	(D)	(D)	5	4.7	(D)	(D)	15	.8	(D)	(D)
Gloucester	135	14.4	947	10.0	234	9.9	1 129	7.8	360	5.6	3 085	.7
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	359	10.2	987	17.0	663	5.6	2 422	7.8	404	7.6	840	4.6
Mercer	52	30.0	166	19.2	106	12.0	371	12.4	130	10.2	852	27.1
Middlesex	35	32.1	101	9.3	74	20.8	296	9.0	131	10.7	(D)	(D)
Monmouth	153	19.8	1 296	15.6	284	13.0	2 801	12.8	344	8.3	2 161	2.1
Morris	87	24.0	121	44.6	167	14.5	556	13.1	166	14.2	747	1.6

See footnotes at end of table.

C–14 APPENDIX C

TIPS [UPF] BATCH_807 [ACEN,C_ARLEDGE] 6/ 1/94 9:18 AM MACHINE: EPCV24 DATA:VOL1_TIPS_APX_22.TIPS;1 * 5/26/94 12:31:00 TAPE: NOreel FRAME: 8
TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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.

Geographic area	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)
Ocean	57	29.6	232	41.9	103	17.0	433	11.2	95	12.2	233	17.2
Passaic	19	8.6	57	2.3	29	6.4	204	2.9	19	5.1	34	.7
Salem	175	14.7	1 278	7.2	281	10.2	4 160	1.3	489	5.9	2 165	2.9
Somerset	90	21.9	296	8.9	178	14.7	1 042	4.1	182	13.0	503	3.0
Sussex	247	10.7	679	8.7	427	6.2	3 341	5.2	265	7.5	514	4.0
Union	4	9.0	(D)	(D)	5	7.2	(D)	(D)	8	–	895	–
Warren	237	12.2	1 358	7.6	312	9.7	10 196	1.8	320	7.4	907	5.0

Farm production expenses [1]—Con.

Geographic area	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)
New Jersey	**5 533**	**1.8**	**25 949**	**1.1**	**4 212**	**2.2**	**19 152**	**1.0**	**8 564**	**1.1**	**22 184**	**.9**
Atlantic	287	7.2	1 490	1.6	269	6.5	1 796	.6	381	1.9	1 485	3.0
Bergen	87	4.6	72	1.7	68	6.2	62	1.7	123	1.5	431	9.4
Burlington	516	5.3	2 830	2.6	434	5.0	2 636	2.6	805	1.3	2 281	2.3
Camden	128	5.2	343	1.8	96	6.4	394	.8	182	2.3	458	2.2
Cape May	102	7.9	192	9.4	62	12.5	139	4.8	151	3.1	292	6.4
Cumberland	467	4.5	3 842	1.7	392	6.2	3 177	1.9	595	.9	2 919	2.1
Essex	18	.6	9	.7	13	–	9	–	22	1.1	36	.4
Gloucester	470	5.4	2 712	2.1	343	6.3	2 720	1.4	677	1.6	2 153	2.3
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	662	5.3	1 796	4.5	448	8.4	791	9.7	1 199	2.1	1 615	4.4
Mercer	178	5.3	915	9.5	162	9.2	588	4.2	274	5.7	797	5.3
Middlesex	164	8.8	1 335	5.0	132	10.6	875	6.5	221	4.6	823	3.5
Monmouth	409	7.0	1 921	2.2	363	9.9	1 488	.6	769	3.1	1 794	4.3
Morris	217	10.9	330	6.6	111	16.8	178	.7	344	5.0	1 060	2.6
Ocean	127	9.9	175	4.3	90	16.0	148	10.6	230	1.5	331	7.2
Passaic	24	5.0	30	4.8	21	4.8	18	2.0	48	4.5	215	.7
Salem	569	4.4	3 804	1.9	447	5.6	2 425	2.9	715	2.1	2 258	2.3
Somerset	235	10.4	776	8.7	177	14.0	224	12.0	413	3.0	672	3.7
Sussex	399	6.6	993	8.6	262	8.7	514	13.6	745	2.2	960	2.6
Union	20	1.9	18	.2	13	2.8	22	.5	28	3.3	223	.1
Warren	454	5.9	2 368	7.4	309	8.6	947	6.2	642	2.3	1 380	2.4

Farm production expenses [1]—Con.

Geographic area	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)
New Jersey	**6 029**	**1.9**	**10 184**	**1.3**	**2 659**	**2.8**	**115 161**	**.4**	**749**	**7.2**	**11 665**	**1.0**
Atlantic	253	9.1	734	2.6	138	10.7	11 991	.2	65	25.8	2 450	2.1
Bergen	97	4.6	261	9.2	68	6.1	1 630	2.0	1	–	(D)	(D)
Burlington	504	6.1	981	5.5	283	8.2	16 152	.8	96	16.5	1 752	1.8
Camden	125	5.9	248	2.2	44	4.8	1 830	.6	7	4.4	(D)	(D)
Cape May	87	7.8	74	4.8	48	14.2	1 219	1.5	11	47.5	54	53.6
Cumberland	443	5.6	1 119	1.5	266	7.2	17 721	1.7	35	16.2	1 440	2.0
Essex	17	1.4	17	1.9	10	1.2	172	.1	–	–	–	–
Gloucester	469	5.3	855	2.0	173	6.2	14 315	.5	64	24.2	701	3.5
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	840	5.0	739	8.4	341	9.6	3 120	3.8	55	26.7	362	9.1
Mercer	251	6.1	308	3.5	86	16.6	3 304	.8	21	67.0	43	33.0
Middlesex	188	7.0	440	2.2	74	17.4	3 015	.8	24	26.8	253	5.1
Monmouth	570	6.5	764	4.6	285	10.8	15 449	.7	64	24.4	420	3.4
Morris	261	9.7	451	4.5	118	13.4	3 715	.7	23	35.9	305	.8
Ocean	153	12.0	133	16.3	45	19.8	1 044	7.4	30	37.3	120	25.1
Passaic	36	5.0	53	1.9	14	3.5	894	(L)	–	–	–	–
Salem	475	6.4	856	2.4	198	10.2	7 450	2.3	76	25.1	2 818	1.5
Somerset	289	8.4	267	4.6	76	14.6	2 214	(L)	34	37.8	92	33.2
Sussex	485	6.0	581	3.9	174	11.3	2 095	2.4	82	23.2	148	12.9
Union	18	3.4	71	(L)	17	2.9	1 181	.1	2	–	(D)	(D)
Warren	468	5.2	1 232	5.4	201	10.6	6 649	2.8	59	29.0	272	19.1

See footnotes at end of table.

TIPS [UPF] BATCH_807 [ACEN,C_ARLEDGE] 6/ 1/94 9:18 AM MACHINE: EPCV24 DATA:VOL1_TIPS_APX_22.TIPS;1 * 5/26/94 12:31:00 TAPE: NOreel FRAME: 9
TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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.

Geographic area	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)
New Jersey __	7 501	1.4	28 268	1.2	1 650	4.3	4 817	3.3	2 010	3.5	17 122	2.3
Atlantic	359	3.5	1 980	1.9	59	15.7	363	5.9	112	12.2	1 274	3.1
Bergen	105	3.9	397	3.0	9	–	13	–	22	1.5	152	1.1
Burlington	742	2.2	3 366	2.7	188	12.0	876	15.3	200	11.8	1 916	9.4
Camden	139	4.8	436	2.6	10	–	(D)	(D)	35	11.2	240	5.7
Cape May	131	5.2	306	5.6	30	18.2	55	13.9	32	14.6	210	12.0
Cumberland	507	3.6	3 784	2.3	247	9.8	889	4.0	202	7.2	1 840	1.0
Essex	20	1.2	67	1.8	3	3.9	(D)	(D)	6	–	20	–
Gloucester	585	3.6	2 584	5.8	173	11.2	531	6.4	168	10.1	1 481	3.2
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 070	3.2	2 288	5.2	177	16.1	252	12.8	170	13.8	1 384	13.5
Mercer	243	8.6	846	10.8	42	35.8	86	11.2	55	28.4	310	5.5
Middlesex	219	4.7	796	5.4	38	22.2	(D)	(D)	62	21.1	806	2.4
Monmouth	749	3.5	2 279	3.1	106	21.2	212	6.6	163	15.9	1 460	9.6
Morris	333	5.6	940	11.4	63	28.3	97	17.5	70	20.1	879	1.5
Ocean	200	5.8	406	7.0	13	62.7	24	10.4	73	22.6	358	18.6
Passaic	47	4.6	106	3.0	4	15.0	5	23.5	7	6.9	92	.4
Salem	548	4.6	3 290	2.5	214	9.5	785	5.8	203	10.7	1 691	9.0
Somerset	313	8.4	722	9.6	73	25.0	71	9.3	91	14.2	511	15.6
Sussex	629	4.4	1 351	6.1	88	18.8	123	18.1	169	12.0	997	15.6
Union	21	2.4	184	1.0	3	–	(D)	(D)	5	–	161	–
Warren	541	4.3	2 139	2.2	110	16.5	317	3.9	165	13.1	1 340	5.5

Farm production expenses [1]—Con.

Geographic area	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)
New Jersey __	1 696	3.6	12 365	2.0	8 195	1.2	25 379	2.3	7 993	1.3	67 559	.9
Atlantic	78	20.5	296	1.5	337	5.9	1 264	6.3	350	3.9	7 507	.5
Bergen	18	14.2	(D)	(D)	118	1.7	333	7.6	121	1.5	771	1.0
Burlington	143	10.2	2 019	3.6	739	1.9	2 238	5.1	751	2.6	8 554	1.4
Camden	19	8.6	137	.6	178	2.5	458	3.9	155	4.3	1 026	1.5
Cape May	16	20.5	37	13.1	145	4.8	273	8.9	133	4.9	964	3.3
Cumberland	184	9.1	1 831	1.2	525	3.4	1 504	5.3	551	3.6	9 874	1.2
Essex	1	–	(D)	(D)	21	1.1	40	.3	22	1.1	65	.3
Gloucester	192	7.9	1 342	7.0	621	3.0	1 851	3.2	628	2.5	6 733	2.0
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	162	13.8	671	7.7	1 194	2.0	3 735	6.6	1 114	2.8	3 224	9.9
Mercer	80	23.3	790	3.7	249	6.6	936	18.8	269	6.2	1 902	5.0
Middlesex	50	23.4	511	22.5	212	5.4	1 108	15.9	230	3.2	2 368	1.7
Monmouth	75	16.5	635	.3	771	3.0	2 821	7.6	758	4.0	6 302	4.0
Morris	55	22.4	127	31.6	378	2.8	1 314	15.4	349	4.9	2 823	2.5
Ocean	29	29.3	74	11.7	215	2.7	457	11.5	222	3.8	695	5.5
Passaic	8	6.1	43	1.0	47	4.7	139	5.1	44	4.4	663	.5
Salem	228	10.2	1 971	3.3	661	3.5	1 798	4.9	679	3.0	5 387	1.5
Somerset	48	27.0	308	8.3	408	3.2	993	12.4	305	7.4	1 475	7.3
Sussex	119	10.9	388	9.7	731	2.0	1 929	7.6	677	3.5	2 204	5.4
Union	–	–	–	–	26	3.6	124	.8	28	3.3	549	.1
Warren	191	10.6	1 117	12.5	619	2.7	2 064	6.2	607	3.4	4 473	5.7

Geographic area	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)
New Jersey __	9 083	1.0	95 771	2.1	8 221	.8	623 466	.4	7 149	.8	491 518	.4
Atlantic	391	1.0	10 308	4.4	360	1.0	19 372	.6	333	1.1	15 760	.6
Bergen	129	1.5	2 020	2.3	110	1.3	1 097	3.4	94	1.6	606	3.6
Burlington	817	.9	10 531	5.7	740	.8	67 113	.6	628	.9	54 789	.6
Camden	189	2.0	1 910	7.0	179	1.4	6 285	1.2	159	1.6	5 070	1.4
Cape May	162	1.9	976	8.3	151	1.6	7 651	2.1	131	2.0	6 118	2.1
Cumberland	610	.8	17 040	3.2	592	.7	56 407	.6	565	.7	47 948	.6
Essex	22	1.1	427	.2	19	–	187	–	19	–	126	–
Gloucester	705	1.0	10 494	5.0	645	.8	49 420	.8	575	.9	43 125	.8
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 298	1.0	1 925	34.9	1 165	.9	79 570	.9	968	1.0	55 907	.9
Mercer	296	1.4	3 969	15.0	278	1.1	28 787	1.5	243	1.2	23 459	1.5
Middlesex	240	1.6	3 029	14.9	219	1.3	21 515	.6	201	1.4	19 158	.7
Monmouth	851	1.3	7 730	11.0	732	1.2	46 416	.8	589	1.2	35 566	.8
Morris	395	1.5	2 739	20.5	340	1.3	14 843	1.9	283	1.4	10 012	1.4

See footnotes at end of table.

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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

Geographic area	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)
Ocean	232	1.5	756	53.2	194	1.7	5 572	2.3	157	2.0	3 647	3.3
Passaic	55	4.4	867	2.4	42	3.3	430	9.0	31	4.1	147	5.0
Salem	752	1.1	11 138	4.4	711	.9	81 004	.6	665	.9	68 733	.5
Somerset	437	1.4	962	30.7	386	1.1	31 207	.9	325	1.3	21 316	1.0
Sussex	791	.9	2 615	14.8	716	.8	44 114	1.1	615	.9	29 631	1.1
Union	28	3.3	2 818	.2	22	2.4	178	1.2	21	2.5	120	1.6
Warren	683	1.1	3 515	17.1	620	1.0	62 298	.9	547	1.1	50 280	.9

Geographic area	Irrigated land				Livestock and poultry							
					Cattle and calves inventory				Beef cows inventory			
	Farms		Acres		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 Jersey	**1 911**	**.7**	**80 409**	**.2**	**1 934**	**1.0**	**69 134**	**.5**	**1 152**	**1.3**	**12 280**	**1.4**
Atlantic	216	1.6	12 164	.4	22	7.8	169	11.9	16	9.3	58	10.0
Bergen	65	1.9	256	2.6	6	10.8	(D)	(D)	6	10.8	252	12.4
Burlington	185	1.7	8 699	1.1	118	2.4	7 143	.9	71	3.6	820	4.2
Camden	55	3.3	2 477	2.1	21	7.1	112	6.4	13	8.0	76	6.8
Cape May	55	3.5	1 270	2.6	18	8.6	204	9.7	15	9.9	109	12.2
Cumberland	269	1.2	18 150	.3	66	3.6	2 849	4.0	36	5.3	496	13.5
Essex	11	–	62	–	–	–	–	–	–	–	–	–
Gloucester	222	1.3	13 001	.3	103	3.0	2 754	1.6	54	4.3	382	4.2
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	72	2.9	422	1.9	389	1.6	10 687	1.5	251	2.0	2 683	2.6
Mercer	66	2.9	1 226	3.9	47	4.5	1 190	2.5	31	5.9	276	8.0
Middlesex	74	2.5	1 404	.9	20	5.0	437	1.4	12	5.9	105	4.3
Monmouth	180	1.8	4 198	1.3	78	3.7	1 382	2.6	55	4.5	418	7.5
Morris	64	2.6	566	.8	62	3.9	1 171	8.8	44	4.9	293	6.4
Ocean	51	3.9	775	1.2	30	6.3	566	4.0	16	9.5	95	12.9
Passaic	15	4.6	87	7.9	13	8.0	228	11.6	5	13.7	(D)	(D)
Salem	150	1.9	13 954	.5	230	1.7	12 048	.8	129	2.4	1 865	2.1
Somerset	52	2.8	261	5.8	125	2.7	5 198	1.7	78	3.4	1 369	3.7
Sussex	50	3.5	390	3.7	285	1.5	10 183	.9	167	2.2	1 334	2.5
Union	10	5.0	41	1.2	2	–	(D)	(D)	2	–	(D)	(D)
Warren	49	3.9	1 006	.9	299	1.6	12 490	.9	151	2.5	1 549	2.9

Livestock and poultry —Con.

Geographic area	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 Jersey	**450**	**1.0**	**23 926**	**.3**	**640**	**1.6**	**29 645**	**1.5**	**691**	**1.6**	**12 902**	**2.1**
Atlantic	2	22.4	(D)	(D)	21	7.8	484	12.7	8	12.3	127	22.7
Bergen	–	–	–	–	–	–	–	–	8	12.3	33	19.7
Burlington	24	3.7	2 536	(L)	43	4.9	779	8.7	28	6.9	367	8.5
Camden	–	–	–	–	8	15.0	(D)	(D)	6	13.3	161	15.8
Cape May	–	–	–	–	18	8.9	3 295	2.8	8	12.6	(D)	(D)
Cumberland	12	6.3	930	2.7	23	6.3	1 605	1.3	22	6.8	202	9.8
Essex	–	–	–	–	3	–	24	–	2	–	(D)	(D)
Gloucester	20	4.7	1 044	1.0	71	3.7	11 606	2.5	37	5.4	626	8.6
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	72	2.9	2 670	1.2	106	3.1	2 432	3.0	194	2.3	3 621	3.6
Mercer	9	6.7	373	.2	6	8.6	(D)	(D)	21	7.4	518	10.5
Middlesex	5	11.1	116	1.0	11	5.5	738	3.9	11	9.1	829	2.1
Monmouth	11	8.2	322	.6	29	6.6	228	13.4	45	5.2	440	7.8
Morris	11	8.2	143	1.1	28	6.1	617	1.4	47	4.6	563	6.4
Ocean	8	9.5	182	.6	17	8.4	(D)	(D)	9	13.9	149	21.2
Passaic	4	17.1	(D)	(D)	6	15.7	32	17.7	4	17.1	37	18.3
Salem	58	2.1	4 472	.3	60	3.8	3 125	8.3	44	4.6	1 071	6.6
Somerset	28	4.7	992	.3	39	4.7	909	2.6	53	4.5	1 828	6.9
Sussex	87	1.9	4 371	.9	77	3.6	649	12.1	76	3.8	1 268	7.6
Union	1	–	(D)	(D)	–	–	–	–	–	–	–	–
Warren	98	1.7	5 698	.8	74	3.6	569	7.3	68	3.8	928	5.8

See footnotes at end of table.

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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

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 Jersey	**901**	**1.6**	**1 623 478**	**.1**	**93**	**3.5**	**95 794**	**.9**
Atlantic	22	8.1	1 572	8.8	5	16.1	(D)	(D)
Bergen	7	10.8	5 323	4.3	3	16.0	(D)	(D)
Burlington	67	4.0	2 759	7.2	7	12.5	(D)	(D)
Camden	16	8.9	635	6.2	–	–	–	–
Cape May	18	8.3	934	15.3	5	13.5	360	16.0
Cumberland	26	6.3	(D)	(D)	2	26.5	(D)	(D)
Essex	–	–	–	–	–	–	–	–
Gloucester	51	4.4	2 755	9.5	6	12.5	1 126	21.3
Hudson	–	–	–	–	–	–	–	–
Hunterdon	126	3.0	4 911	3.8	21	7.2	5 730	8.4
Mercer	28	6.7	1 582	11.3	2	29.1	(D)	(D)
Middlesex	24	6.5	1 585	9.9	2	22.6	(D)	(D)
Monmouth	73	4.5	(D)	(D)	4	21.6	73	24.5
Morris	63	4.2	3 006	6.6	3	20.1	39	21.8
Ocean	32	6.0	3 766	15.7	2	22.1	(D)	(D)
Passaic	12	9.3	784	6.7	4	12.3	130	12.4
Salem	50	4.4	(D)	(D)	–	–	–	–
Somerset	55	4.3	4 180	7.8	4	7.8	(D)	(D)
Sussex	122	2.8	4 721	4.2	12	9.6	743	24.1
Union	3	4.2	210	1.8	1	–	(D)	(D)
Warren	106	3.1	(D)	(D)	10	10.6	2 285	23.7

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 Jersey	**1 158**	**.9**	**83 805**	**.5**	**9 508 526**	**.5**	**465**	**1.1**	**19 682**	**.5**	**305 639**	**.5**
Atlantic	25	7.1	180	5.8	12 472	7.0	2	17.5	(D)	(D)	(D)	(D)
Bergen	–	–	–	–	–	–	–	–	–	–	–	–
Burlington	111	2.3	10 426	1.3	1 211 398	.9	29	3.7	1 930	.7	34 550	1.0
Camden	9	12.6	273	5.6	(D)	(D)	–	–	–	–	–	–
Cape May	13	8.3	(D)	(D)	14 090	5.8	–	–	–	–	–	–
Cumberland	55	3.4	2 672	2.4	352 083	2.2	11	8.0	733	1.9	12 159	1.7
Essex	1	–	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Gloucester	53	3.8	2 775	1.2	272 642	1.1	14	6.0	954	.9	14 837	.7
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	228	1.9	12 902	1.4	1 374 434	1.5	74	2.8	2 024	2.4	31 134	2.4
Mercer	47	3.6	5 018	1.4	650 948	1.3	4	–	250	–	3 380	–
Middlesex	27	3.6	4 388	1.7	594 091	1.8	5	–	157	–	2 630	–
Monmouth	43	2.9	3 655	.4	426 119	.3	8	5.7	251	2.7	4 675	2.1
Morris	26	5.0	2 240	.8	183 475	.6	9	10.8	193	7.7	(D)	(D)
Ocean	13	7.9	626	2.2	66 480	1.8	7	10.4	(D)	(D)	2 340	2.7
Passaic	1	49.6	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Salem	181	1.7	10 457	1.0	1 249 112	.9	60	2.0	3 497	.6	55 936	.7
Somerset	54	3.2	3 809	1.4	428 897	1.7	29	4.2	1 435	2.0	21 638	1.3
Sussex	66	2.5	4 263	2.2	421 666	2.3	102	2.2	4 142	1.5	56 749	1.6
Union	–	–	–	–	–	–	–	–	–	–	–	–
Warren	205	1.6	19 941	.9	2 223 573	1.0	111	2.1	3 968	1.1	63 487	1.0

Geographic area	Selected crops harvested —Con.											
	Soybeans for beans						Hay —alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)					
	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, dry	Relative standard error of estimate (percent)
New Jersey	**1 128**	**.9**	**131 768**	**.6**	**4 378 643**	**.5**	**3 060**	**1.0**	**118 536**	**.7**	**238 792**	**.7**
Atlantic	9	7.5	327	5.2	12 273	5.7	46	5.0	1 192	7.0	1 261	11.0
Bergen	–	–	–	–	–	–	3	16.0	(D)	(D)	(D)	(D)
Burlington	154	1.9	20 445	1.0	711 355	1.0	208	1.9	7 400	1.8	15 695	2.0
Camden	7	11.7	276	19.4	6 899	21.7	46	4.6	535	6.1	836	6.9
Cape May	13	7.6	286	6.2	6 879	3.3	45	4.7	1 356	9.2	1 827	9.1
Cumberland	135	2.0	17 118	1.1	585 281	1.2	138	2.3	5 738	4.2	10 562	3.9
Essex	–	–	–	–	–	–	–	–	–	–	–	–
Gloucester	151	2.1	15 801	1.6	472 553	1.6	155	2.3	3 669	3.7	7 996	2.9
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	92	2.8	7 446	2.1	232 378	1.8	654	1.2	26 173	1.1	49 948	1.2
Mercer	58	3.1	11 308	2.6	350 129	1.8	85	3.1	3 605	2.8	6 728	3.1
Middlesex	49	2.7	8 593	.9	296 875	.9	46	3.6	2 120	2.5	2 893	2.1
Monmouth	74	2.8	11 988	1.7	374 558	1.4	173	2.4	4 546	2.1	8 542	1.8
Morris	5	9.0	115	5.9	3 450	5.9	133	2.6	4 887	2.7	8 255	2.2

See footnotes at end of table.

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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

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

Geographic area	Selected crops harvested —Con.											
	Soybeans for beans						Hay —alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)					
	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, dry	Relative standard error of estimate (percent)
Ocean	5	8.8	330	.9	8 075	1.4	52	4.2	1 350	9.1	2 464	7.9
Passaic	–	–	–	–	–	–	1	49.6	(D)	(D)	(D)	(D)
Salem	281	1.4	29 388	.8	1 049 148	.8	315	1.5	9 570	1.7	25 747	1.6
Somerset	40	3.7	3 665	1.6	107 354	2.2	159	2.1	10 104	1.7	17 469	1.8
Sussex	–	–	–	–	–	–	438	1.2	20 003	1.3	37 536	1.4
Union	–	–	–	–	–	–	3	4.2	30	5.1	56	5.4
Warren	55	2.5	4 682	2.8	161 436	2.4	360	1.4	16 132	1.4	40 833	1.2

Geographic area	Selected crops harvested —Con.							
	Vegetables harvested for sale (see text)				Land in orchards			
	Farms		Acres		Farms		Acres	
	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 Jersey	**1 861**	**.9**	**64 647**	**.3**	**701**	**1.4**	**16 871**	**.5**
Atlantic	146	2.0	6 057	.7	62	3.4	1 769	1.3
Bergen	28	4.2	245	2.4	9	5.9	129	1.9
Burlington	169	2.1	4 644	1.5	47	3.8	745	2.3
Camden	47	4.1	1 421	.7	35	4.6	1 709	2.1
Cape May	62	3.5	1 179	2.8	7	15.8	30	25.7
Cumberland	204	1.6	15 054	.4	17	6.0	1 385	.3
Essex	9	–	118	–	–	–	–	–
Gloucester	198	1.6	9 298	.5	54	2.2	6 911	.4
Hudson	–	–	–	–	–	–	–	–
Hunterdon	119	2.9	972	4.2	110	3.1	800	3.4
Mercer	46	4.4	1 067	2.8	21	6.4	132	4.0
Middlesex	69	2.9	1 618	1.0	16	5.5	197	1.0
Monmouth	199	2.0	4 467	1.3	55	4.4	668	2.7
Morris	77	3.2	1 388	1.8	51	4.4	247	5.7
Ocean	60	3.9	811	2.0	23	6.9	84	10.9
Passaic	12	8.0	106	6.8	7	13.7	(D)	(D)
Salem	136	2.1	11 456	.4	8	11.4	(D)	(D)
Somerset	67	3.8	609	3.6	41	5.5	224	6.0
Sussex	122	2.6	1 409	3.4	75	3.2	467	4.9
Union	6	1.9	32	2.4	–	–	–	–
Warren	85	3.2	2 694	1.5	63	4.0	464	4.5

1Data are based on a sample of farms.

1992 CENSUS OF AGRICULTURE

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00

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 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 __	9 079	.9	1 366	18.6	13.1	2.2
Land in farms _____ acres __	847 595	.5	49 304	25.5	5.5	1.3
Average size of farm _____ acres __	93.4	1.0	36.1	18.0	(X)	(X)
Farms by size:						
Less than 10 acres _____	2 099	1.3	419	28.9	16.6	4.1
10 to 49 acres _____	3 726	1.1	700	23.8	15.8	3.2
Less than 50 acres _____	5 825	1.1	1 118	20.0	16.1	2.7
50 acres or more _____	3 254	.7	248	48.6	7.1	3.2
50 to 99 acres _____	1 206	1.1	148	77.6	10.9	7.6
100 to 179 acres _____	873	1.1	68	59.3	7.3	4.0
180 acres or more _____	1 175	.6	31	52.7	2.6	1.3
Harvested cropland _____ farms __	7 149	.8	1 111	19.7	13.4	2.3
acres __	491 518	.4	14 999	25.5	3.0	.7
Farms by value of sales:						
Less than $1,000 _____	1 597	1.6	424	37.7	21.0	6.2
$1,000 to $2,499 _____	1 539	1.5	355	33.4	18.8	5.1
Less than $2,500 _____	3 136	1.4	779	27.4	19.9	4.4
$2,500 or more _____	5 943	.7	587	24.5	9.0	2.0
$2,500 to $9,999 _____	2 319	1.2	364	26.1	13.6	3.1
$10,000 or more _____	3 624	.6	223	45.5	5.8	2.5
Market value of agricultural products sold ____$1,000 __	532 988	.1	8 127	36.6	1.5	.6
Farms by standard industrial classification:						
Crops (01) _____	5 862	.8	916	20.5	13.5	2.4
Livestock (02) _____	3 217	1.2	450	34.9	12.3	3.9
Farms by type of organization:						
Individual or family _____	7 553	1.0	1 181	18.7	13.5	2.2
Partnership or corporation _____	1 448	.8	133	84.8	8.4	6.6
Other _____	78	3.0	29	(H)	27.4	20.0
Farms by tenure of operator:						
Full owners _____	6 541	1.0	957	21.4	12.8	2.5
Part owners and tenants _____	2 538	.7	409	31.1	13.9	3.7
Part owners _____	1 685	.7	81	50.3	4.6	2.2
Tenants _____	853	1.2	328	36.2	27.8	7.2
Operators by place of residence:						
On farm operated _____	7 059	.9	1 071	20.6	13.2	2.5
Not on farm operated _____	1 516	1.1	241	42.4	13.7	5.0
Not reported _____	504	1.6	54	67.4	9.6	5.9
Operators by principal occupation:						
Farming _____	4 218	.7	225	33.6	5.1	1.7
Other _____	4 861	1.2	1 000	21.9	17.1	3.1
Operators by sex:						
Male _____	7 805	.8	1 205	19.5	13.4	2.3
Female _____	1 274	1.5	161	41.7	11.2	4.2
Operators by race:						
White _____	8 956	.9	1 212	19.6	11.9	2.1
Black and other races _____	123	3.1	13	(H)	9.8	8.9
Operators by years on present farm:						
4 years or less _____	831	1.7	504	31.4	37.8	7.5
5 years or more _____	6 871	.9	651	24.8	8.7	2.0
Average years on present farm _____	18.6	1.2	8.3	25.5	(X)	(X)
Not reported _____	1 377	1.2	211	35.8	13.3	4.2
Average age of operator _____	53.9	1.2	43.8	17.4	(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.

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

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TSF:TIPS92-12311183.DAT;1 5/26/94 12:31:19 UTF:TIPS93-12311183.DAT;1 5/26/94 12:31:19 META:VOL1_TIPS96_APX_22.DAT;3 5/26/94 12:32:00