Appendix C.
Statistical Methodology

THE SCREENING PHASE AND THE MAIL LIST MODEL

The 1997 Census of Agriculture featured a pre-census screening phase that surveyed selected records, by mail or telephone, for presence or absence of agricultural activity. Records selected for screening had a low probability of qualifying as farms. All records responding to the screener and reporting no agricultural activity were removed from the census mail list. Eliminating nonfarm records from the mail list reduced respondent burden and data collection costs.

The screening phase included nearly 500,000 records. Records were selected for screening using one of the following criteria:

1) Records on selected agriculture specialty lists that had no other list source,

2) Records identified by a mail list model as having a low probability of being a farm.

A mail list model predicted the probability that an addressee on the 1997 preliminary census mail list operated a farm. The model defined groups based on combinations of characteristics such as source(s) of the mail list record, expected value of agricultural production, and geographic location. Farm proportions were estimated for these groups by calculating the proportion of 1992 census respondent records that were farms which exhibited the characteristics defined by the group. This proportion, also called the in-scope rate, provided an estimate of the probability that an addressee in the group operated a farm.

Each address record on the 1997 preliminary census 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. Records with a farm probability of approximately 30 percent or less were selected for screening, along with records included on selected agriculture specialty lists as noted above.

Before screening, the preliminary census mail list consisted of 3,314,790 records. There were 478,298 records selected for screening. Of these, 125,570 records were determined to be nonfarms as a result of the screening phase and were removed. These records were removed from the final census mail list. The remaining 3,189,220 records received census report forms.

CENSUS SAMPLE DESIGN

All name and address records on the final census mail list were designated to receive a 1997 Census of Agriculture report form. Two different types of census report forms, sample and nonsample, were used to collect data. Sections 1 through 20 and 28 through 32 of the sample form were identical to sections on the nonsample census form. Sample form sections 21 through 27 contained additional questions on usage of fertilizers and chemicals, farm production expenditures, value of machinery and equipment, value of land and buildings, farm-related income, and hired workers. There were 11 regional versions of the nonsample form and 13 regional versions of the sample form with listings of crops varying by region. These 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. Mail list records were selected into the sample with certainty if they (1) were expected to have large total value of agricultural products sold or large acreage, (2) were multi-unit operations (i.e., separate farms producing under one company organization), (3) were in a county with less than 100 farms in 1992, or (4) had other special characteristics. Farms with special characteristics were abnormal farms, such as institutional farms, experimental and research farms, and Indian reservations. Mail list records in counties containing 100 to 199 farms in 1992 were systematically sampled at a rate of 1 in 2; records in counties containing 200 to 299 farms in 1992 were systematically sampled at a rate of 1 in 4; and records in counties containing 300 or more farms in 1992 were systematically sampled at a rate of 1 in 6. The remaining mail list records not chosen to receive the sample form received the nonsample census form. This differential sampling scheme was used to provide reliable data for the sample sections of the report form for all counties.

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

The census of agriculture complex edit and imputation system is an automated computerized system that performed the following functions:

- Ensured reasonable relationships between/among data items, values for various sizes of farms, combinations of commodities, and economic interactions.
- Ensured necessary consistencies were present (there were more than 70 distinct consistency requirements).
- Ensured climatic, geographic, legal, and physical constraints were met.

The system performed these and similar functions for more than 900 data key codes for sample records and approximately 850 data key codes for nonsample records.

For the 1997 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 for that record 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 fixed 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 was 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 Classifications 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 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 the same 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. An edit run usually consisted of 10,000 or more records.

After the initial computer edit, all keyed reports not meeting the census farm definition were reviewed to ensure that the data had been keyed correctly. Edit referrals were generated for 17 percent of the reports included as farms; they were reviewed for keying accuracy and 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 re-edited.

CENSUS ESTIMATION

The 1997 Census of Agriculture used two types of statistical estimation procedures to account for whole farm nonresponse and sample data collection. The procedures were necessary because some farm operators did not respond to the census despite numerous attempts to contact them, and estimates for certain data items were based on a sample of farm operators rather than a full enumeration.

Whole Farm Nonresponse Estimation

Whole farm nonresponse to the census occurred when a response was never received for a record. If the record was a large farm, as defined by value of production or acreage, or a unique farm operation, intensive telephone or personal followup was conducted during census processing to obtain a response. If these attempts failed, either the NASS survey database, the census historic database, or other more current sources were used to impute data for the record.

During mail list development, the State Statistical Offices (SSOs), in an effort to reduce respondent burden, identified records that participated in multiple NASS surveys and/or situations where there were special reporting relationships between an enumerator and a respondent. These records were referred to as tagged records. The SSOs had full responsibility for the data collection for these records, including imputation of data for the record if a response was not obtainable.

Whole farm nonresponse that occurred within the remaining universe of records was accounted for by a statistical weighting procedure. The weights of the responding farms were adjusted to account for farms that did not respond. The information needed for this process was obtained from the 1997 Nonresponse Survey. The SSOs conducted the nonresponse survey using computer-assisted telephone interviewing (Blaise-CATI) or personal enumeration when telephone contact was not possible. Alaska and Rhode

Island were not eligible for the survey because all nonrespondents were subject to extensive followup. In these cases, data were collected by telephone or other methods. The nonresponse survey collected information from a sample of census nonrespondents to determine farm status and estimate the proportion of farms in the nonresponse universe. The information was then used to estimate the number of nonresponding farm operations by State and county.

The 1997 Nonresponse Survey consisted of a stratified systematic sample of the nonresponse records within each State. The sample was selected near the end of the census follow-up operations. Five strata were defined to be homogeneous on probability of farm status and were based on screener status, total value produced, and list source(s) of the mail list record.

Based on survey results, estimates of the proportion of census nonrespondents operating farms were made for each stratum in the State. The estimates were applied to the total number of census nonrespondents in that stratum, providing a State estimate of the number of census nonrespondents that operated farms. The number of census nonrespondents that operated farms was then derived for each county by stratum. This estimation procedure assumed that the distribution of farms in a stratum by county was the same for census nonrespondents as for census respondents.

Within each stratum in a county, a noninteger nonresponse weight was calculated and assigned to each eligible respondent farm record. Census respondent farms that were designated as large farms or tagged records or as farms that exhibited ''rare'' commodities were ineligible to represent nonrespondent farms and were excluded from the nonresponse weighting procedure. These records were assigned nonresponse weights of 1.0.

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, divided by the number of eligible census respondent farms. Stratum controls were established to ensure that this weight never exceeded 2.0. For the published tabulations of the complete count items, the noninteger nonresponse weight was randomly rounded to an integer weight of either 1 or 2 for each record. For the sample count items, the noninteger nonresponse weight was used in the calculation of the final sample weight.

Table A quantifies the effect of the nonresponse estimation procedure on selected census data items. The percentages in this table are 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 this table do not reflect the effect of item nonresponse to individual census data items. The effect of this item nonresponse is discussed in the ''Census Nonsampling Error'' section.

Sample Estimation

Sample data estimation determined the population totals that would have resulted from a complete census for the items in sections 21 through 27 of the sample form. The estimates were obtained from a weighting procedure that assigned 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.

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 were multiplied by 6.

The noninteger sample weight is calculated for each respondent sample farm by multiplying the noninteger nonrespondent weight by the sampling factor. For published tabulations of the sample count items, the noninteger sample weight was randomly rounded to an integer weight for each record. For certainty farms, the sampling factor equals 1 so the sample weight is just equal to the nonresponse weight. Sampling factor calculation for non-certainty farms is described below.

Within a county, the weighting procedure for non-certainty farms was performed in three steps using three variables. The first variable contained eight 1997 total value of agricultural production (TVP) groups. The second and third variables, Standard Industrial Classification (SIC) code and farm acreage, contained two groups. The three sets of groups were:

TVP	SIC	Acres
$1 to $999	01, 08 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 classified the sample records into 32 mutually exclusive initial strata formed by the three variable groups. The total and sample farm counts were expanded to account for nonresponse. Each cell containing sample farm records was assigned an initial sample factor equal to the ratio of the total farm count to the sample farm count. This factor was approximately equal to the inverse of the probability of selecting a farm for the census sample.

The second step in the estimation procedure combined, when necessary, the 32 initial strata to increase the reliability of the weighting procedure. Any stratum that contained less than 10 sample farms or had a factor greater than twice the mail sample rate was collapsed with another stratum. The mail sample rate was either 2, 4, or 6,

depending on whether the county had a 1 in 2, 1 in 4, or 1 in 6 sample selection rate. The collapsing occurred within the 32 initial 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 final strata and used to calculate final sample factors.

The final step calculated the noninteger sample weight as the product of the final sampling factor and the noninteger nonresponse weight. As described previously, the noninteger sample weight for each record is randomly rounded to an integer weight which is used in published tabulations. For example, if the final weight for a farm was 7.2, then the record would be rounded to either 7 or 8.

CENSUS SAMPLING ERROR

The sample for the 1997 Census of Agriculture was only one of a large number of possible samples of the same size that could have been selected using the same sample design. In this context, ''sample'' refers to the sample for both the nonresponse survey and the selection of farms to receive sample forms.

The standard error, or sampling error, of a survey estimate is a measure of the variation among the estimates from all possible samples. It is a measure of precision - that is, how well an estimate from a particular sample approximates the true population parameter. The percent relative standard error of an estimate is defined as the standard error of the estimate divided by the value of the estimate, then multiplied by 100. The true population parameter can be defined or conceptualized several different ways. One way is to think of the true population parameter as the average result of all possible samples (selected using a given sample design). A second way is to think of the true population parameter as the figure obtained from carrying out a complete enumeration of the population.

If all possible samples were selected, each of the samples surveyed under essentially the same conditions, and an estimate and its standard error 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 true population parameter.
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 true population parameter.

The following example illustrates the computations necessary to produce a confidence statement 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 0.1 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 true population parameter. 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. All farm operators were asked the complete count items. 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.

Only a sample of farm operators were asked the sample count items. These items appeared only in sections 21 through 27 of the sample 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, farm-related income, and hired workers.

Variability in the estimates of complete count items was due only to the nonresponse survey estimation procedure. With regard to the estimates of sample count items, variability was due to both the nonresponse survey estimation procedure and the census sample selection and estimation procedure. Therefore, variability in the sample count item estimates tends to be larger than the variability in the complete count item estimates. Percent relative standard error is a common measure of variability.

Table B provides the generalized reliability estimates of the estimated number of farms in a county that reported complete count and sample count items. The top half of the table shows the percent relative standard errors for estimated number of farms in a county that reported a complete count item, and the bottom half relates to sample count items. These reliability estimates are derived from regression equations. Separate regression equations were used to produce each section of table B. 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 the appropriate counties in the State. 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 1992 Census of Agriculture, variability in sample count

item estimates came only from nonresponse survey estimation procedures. The estimated relative standard error for a sample count item in these counties may be obtained using the first part of table B.

Use caution when referring to the ''Sample Count Item'' section of table B to make inferences on counties. Some counties may have been sampled at the rate of 1 in 2 or 1 in 4, but the reliability estimates shown were computed using only data from counties sampled at the rate of 1 in 6. Therefore, the reliability estimates shown would likely be overstated (or conservative) if the county was actually sampled at a higher rate.

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 standard error for percent change in State totals from 1992 to 1997. 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 1997 and the 1992 estimate for that characteristic to the 1992 estimate. This ratio is multiplied by 100 to obtain the percent change. The standard error of a percent change estimate 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 the (1) total number of farms, (2) number of large farms included with certainty, (3) size classifications of the farms sampled, (4) amount of nonresponse, (5) general agricultural characteristics, and (6) specific characteristic being measured.

The farm counts and related estimates displayed in tables A through F relate to unadjusted census totals. These totals are the same as the ''Census total'' displayed in the first column of table G (which will be discussed later in this appendix).

For most of the tables in this appendix, and also many of the tables throughout the publication, there is a footnote that reads ''Data are based on a sample of farms.'' The table entries that this footnote relate to are estimates of totals. To illustrate, suppose that the entry ''other farm-related income'' is shown with this footnote and has some number of farms given. This number given would represent an estimated total number of farms with ''other farm-related income,'' based on the farms that were in the sample. This number should not be interpreted as the number of farms in the sample that have ''other farm-related income.''

CENSUS NONSAMPLING ERROR

The accuracy of the census counts is 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. Nonsampling errors arise from many sources, including respondent or enumerator error or incorrect data keying, editing, or imputing for missing data. These nonsampling errors are further discussed in this section. Nonsampling error due to mail list incompleteness and duplication as well as misclassification of records on the mail list is called coverage error. The section titled ''Coverage Evaluation'' discusses the evaluation studies conducted to measure the extent of this error in the census.

Respondent and Enumerator Error

Incorrect or incomplete responses to the census report form or to the questions posed by an enumerator can introduce error into the census data. To reduce reporting error, detailed instructions for completing the report form were provided to each respondent. Questions were phrased as clearly as possible based on previous tests of the report form. In addition, each respondent's answers were checked for completeness and consistency by the complex edit and imputation system.

Item Nonresponse

As information flowed from data collection to tabulation, various types of item nonresponses were identified on the census report forms. Nonresponse to particular questions on the census report form that logically should have been present created a type of nonsampling error in both complete count and sample count data. In this case, information from a similar farm was used to impute for these missing data items. The resulting data may have been biased if the characteristics of the nonreporting respondents were different from those of reporting respondents for those items.

Processing Error

All phases of processing for each census report form were potential sources for the introduction of nonsampling error. An automated check-in recorded that the report had been returned and excluded from further followup mailings. Approximately one-third of the mail returns were reviewed to resolve questions dealing with multiple reports, respondent remarks, or no reported data. The remaining mail returns (about two-thirds) were batched and sent directly to data keying, along with some of the reviewed cases containing farm data. Keyed records were transmitted, formatted, and run through the complex edit and imputation system. About one-fifth of all forms edited were clerically reviewed for inconsistencies, omissions, or questionable values. While reviewing these forms, the edit review staff determined if the action taken by the computer edit and imputation system was correct. Edited records were tabulated to the county level. Each county was reviewed and, when necessary, individual records were corrected prior to publication.

Developing accurate processing methods is complicated by the complex structure of agriculture. Among the complexities are the many places to be included, the variety of arrangements under which farms are operated, the continuing changes in the relationship of operators to the farm operated, the expiration of leases and the initiation or renewal of leases, the problem of obtaining a complete list of agriculture operations, the difficulty of contacting and identifying some types of contractor/contractee relationships, the operator's absence from the farm during the data collection period, and the operator's opinion that part or all of the operation does not qualify and should not be included in the census. During data collection and processing of the census, all operations underwent a number of quality control checks to ensure as accurate an application as possible.

COVERAGE EVALUATION

Coverage Overview

The primary objectives of the census of agriculture are to accurately count U.S. farms, measure commodity production and sales, and measure demographic characteristics of farm operators. Since 1945, an evaluation of census coverage has been conducted for each census of agriculture to provide estimates of the completeness of census farm counts. These results help to identify problems and focus improvements for future censuses.

According to coverage evaluation results, the past five censuses of agriculture included an average of 92 percent of U.S. farms and 98 percent of agriculture production. Complete enumeration of agricultural operations satisfying the farm definition of $1,000 or more in agricultural sales is complicated by the variety of arrangements under which farms are operated, the multiplicity of names used for an operation, the number of operations in which an operator participates, and the difficulty in classifying those operations just around the $1,000 sales range. In 1997, extensive efforts were made to compile as complete and accurate a mail list as possible, while reducing the duplication and number of nonfarm operations on the list.

The 1997 coverage evaluation program was designed to measure four components of error in the census farm counts. These components include:

1. Undercount due to farms Not on the Mail List (NML)
2. Overcount due to farms Duplicated or enumerated more than once (DUP)
3. Undercount due to farms Incorrectly Classified as nonfarms (ICU)
4. Overcount due to nonfarms Incorrectly Classified as farms (ICO).

The first component, mail list undercount, is by far the largest component of coverage error. Duplication, though occurring far less frequently, can involve larger farms and have a larger impact on acreage and sales estimates. The last two components involve the misclassification of either farms or nonfarms. Misclassification can arise from errors in either reporting or processing the data.

Table G - Coverage Estimates - illustrates the effect of coverage adjustments on census farm counts by demographic characteristics, land in farms, and total value of sales. The coverage total is defined as the net difference between undercounted and overcounted farms. The adjusted census total is the sum of the census total and the net coverage total. The relative standard error is shown for the final census coverage adjusted number. This number will be similar to the relative standard error for the census number, except when the coverage total is negative or close to zero. The coverage adjustment percentage shows the coverage total as a percentage of total census adjusted farms for that characteristic.

The 1997 Census of Agriculture is the first census to include all four components of coverage error in table G. Previous publications only included the coverage error component due to farms not on the mail list (NML). Because of this, caution should be taken when comparing coverage estimates from table G with previous years. In addition, the coverage total is a negative number for some characteristics. This means that the number of farms overcounted for this characteristic was greater than the number of farms undercounted.

Area Frame Surveys to Measure Mail List Undercoverage

Names and addresses collected in the 1997 June Agricultural Survey and 1997 Fall Area Survey were used to estimate the undercount due to farms not on the census mail list (NML). These names were matched to the census mail list, and those that did not match were contacted by telephone or person. The enumerator verified whether the operation had reported in the census, and if not, a census of agriculture report form was completed.

The percentage of farms missed in the census varies considerably by State. In general, farms not on the mail list tended to be small in acreage, production, and sales of agricultural products. Farm operations could be missed for various reasons, including the possibility that the operation started after the mail list was developed, the operation may be so small as not to appear in any agriculture-related source lists, or the operation may have been falsely classified as a nonfarm prior to mailout.

Classification Error Survey to Measure Three Types of Coverage Error

The remaining three types of coverage error were measured by the Classification Error Survey. This survey was used to estimate the number of farms counted more than once (DUP), the number of farms misclassified as nonfarms (ICU), and the number of nonfarms misclassified as farms (ICO). A sample of census of agriculture respondents was selected for reinterview to determine their farm/nonfarm status and collect information to identify

potential duplication. The farm classification from this interview was compared with the classification on the census of agriculture report form. Any differences between these two classifications were reconciled to determine the true farm status. Each operation was reviewed for duplication by matching the additional information received from the reinterview (landlords, tenants, other names, etc.) to the list of census respondents. Potential duplication was reviewed and discrepancies reconciled.

In general, the classification error rate is higher for small farms close to the $1,000 agricultural sales requirement. This rate is also higher for farms with small acreage (less than 49 acres), higher for tenant farms than for full- or part-owner farms, and higher for farms where farming is not the operator's principal occupation.

Coverage Estimation

The adjusted census total, T, is estimated as the census farm count, C, plus undercount and minus overcount adjustments. Undercount includes 1) farms not on the mail list (NML) and 2) farms incorrectly classified as nonfarms (ICU). Overcount includes 3) nonfarms incorrectly classified as farms (ICO) and 4) farms duplicated in the census (DUP). Altogether, the adjusted census total is:

$$T = C + (NML + ICU) - (ICO + DUP).$$

In some States, estimates of misclassification of farms owned by operators having rare demographic characteristics were based on particularly small sample sizes. Where such small sample sizes occurred, a form of small area estimation was used in which data from similar States contributed to that State's estimates. In these cases, the coverage totals are weighted totals of the direct State estimate and the direct estimate from the region. Direct estimates were used to the largest extent possible, based on the amount of survey cases available for the particular item being estimated.

Table A. Percent of State Totals Contributed by Whole Farm Nonresponse Estimation: 1997

Item	Percent of total	Item	Percent of total
Farms ..... number	12.7	Corn for grain or seed ..... acres	3.7
Land in farms ..... acres	6.1	Wheat for grain ..... acres	3.5
Estimated market value of land and buildings[1] $1,000	7.1	Livestock and poultry inventory:	
Market value of agricultural products sold $1,000	1.6	Cattle and calves ..... number	5.5
Harvested cropland ..... acres	4.5	Hogs and pigs ..... number	4.4
		Layers 20 weeks old and older ..... number	.5

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

Table B. Reliability Estimates for Number of Farms in a County Reporting a Complete Count Item or Sample Count Item: 1997

Farms	Relative standard error of estimate (percent)	Farms	Relative standard error of estimate (percent)
COMPLETE COUNT ITEM		SAMPLE COUNT ITEM	
Number of farms reporting:		Number of farms reporting:	
25	6.0	25	41.0
50	3.7	50	28.1
75	2.5	75	22.1
100	1.5	100	18.5
150	1.2	150	13.9
200	1.1	200	10.9
300	.9	300	6.6
500	.7	500	5.1
750	.6	750	4.2
1,000	.5	1,000	3.6
1,500	.4	1,500	3.0
2,000	(X)	2,000	(X)

Table C. **Reliability Estimates of State Totals for All Farms: 1997**

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

Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS		
Farms ..... number..	9 101	.6
Land in farms ..... acres..	832 600	.4
Average size of farm ..... acres..	91	.7
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD		
Total sales (see text) ..... farms..	9 101	.6
$1,000..	697 380	.1
Average per farm ..... dollars..	76 627	.6
Farms by value of sales:		
Less than $1,000 (see text) ..... farms..	1 608	1.0
$1,000..	595	1.3
$1,000 to $2,499 ..... farms..	1 744	1.0
$1,000..	2 705	1.0
$2,500 to $4,999 ..... farms..	1 105	1.3
$1,000..	3 899	1.3
$5,000 to $9,999 ..... farms..	1 097	1.3
$1,000..	7 772	1.3
$10,000 to $19,999 ..... farms..	899	1.3
$1,000..	12 718	1.3
$20,000 to $24,999 ..... farms..	296	2.0
$1,000..	6 553	2.0
$25,000 to $39,999 ..... farms..	505	1.6
$1,000..	16 012	1.6
$40,000 to $49,999 ..... farms..	184	2.3
$1,000..	8 127	2.3
$50,000 to $99,999 ..... farms..	502	1.4
$1,000..	36 402	1.4
$100,000 to $249,999 ..... farms..	571	–
$1,000..	92 723	–
$250,000 to $499,999 ..... farms..	303	–
$1,000..	104 266	–
$500,000 or more ..... farms..	287	–
$1,000..	405 609	–
Sales by commodity or commodity group:		
Crops, including nursery and greenhouse crops ..... farms..	6 745	.6
$1,000..	592 713	.1
Grains ..... farms..	1 598	.8
$1,000..	55 799	.4
Corn for grain ..... farms..	891	1.0
$1,000..	24 340	.5
Wheat ..... farms..	530	1.1
$1,000..	6 829	.5
Soybeans ..... farms..	888	.9
$1,000..	23 303	.5
Sorghum for grain ..... farms..	16	5.5
$1,000..	179	2.5
Barley ..... farms..	77	2.1
$1,000..	527	1.4
Oats ..... farms..	75	3.3
$1,000..	130	2.3
Other grains ..... farms..	141	1.9
$1,000..	490	1.5
Cotton and cottonseed ..... farms..	–	–
$1,000..	–	–
Tobacco ..... farms..	–	–
$1,000..	–	–
Hay, silage, and field seeds ..... farms..	2 117	.9
$1,000..	12 295	1.0
Vegetables, sweet corn, and melons ..... farms..	1 577	.8
$1,000..	150 508	.2
Fruits, nuts, and berries ..... farms..	752	1.1
$1,000..	89 768	.1
Nursery and greenhouse crops ..... farms..	2 826	.7
$1,000..	277 957	.1
Other crops ..... farms..	187	1.9
$1,000..	6 386	.4
Livestock, poultry, and their products ..... farms..	3 228	.8
$1,000..	104 666	.2
Poultry and poultry products ..... farms..	679	1.4
$1,000..	35 519	.2
Dairy products ..... farms..	231	1.1
$1,000..	37 603	.3
Cattle and calves ..... farms..	1 506	.9
$1,000..	8 941	.8
Hogs and pigs ..... farms..	350	1.9
$1,000..	4 223	1.2
Sheep, lambs, and wool ..... farms..	653	1.4
$1,000..	941	2.0
Other livestock and livestock products (see text) ..... farms..	1 025	1.2
$1,000..	17 440	.9
Value of agricultural products sold directly to individuals for human consumption (see text) ..... farms..	1 636	1.0
$1,000..	17 993	.6

Item	Total	Relative standard error of estimate (percent)
FARM PRODUCTION EXPENSES[1]		
Total farm production expenses ..... farms..	9 094	.6
$1,000..	513 326	.4
Average per farm ..... dollars..	56 447	.7
Livestock and poultry purchased ..... farms..	1 671	4.4
$1,000..	10 339	3.1
Feed for livestock and poultry ..... farms..	3 290	2.7
$1,000..	38 309	1.4
Commercially mixed formula feeds ..... farms..	1 944	4.1
$1,000..	30 393	1.7
Seeds, bulbs, plants, and trees ..... farms..	4 633	1.9
$1,000..	37 270	.6
Commercial fertilizer ..... farms..	4 981	1.9
$1,000..	28 256	1.0
Agricultural chemicals ..... farms..	3 632	2.2
$1,000..	20 487	.9
Petroleum products ..... farms..	8 513	.9
$1,000..	25 935	.8
Electricity ..... farms..	5 734	1.7
$1,000..	11 500	1.0
Hired farm labor ..... farms..	2 980	2.7
$1,000..	142 869	.3
Contract labor ..... farms..	787	6.3
$1,000..	12 809	1.8
Repair and maintenance ..... farms..	7 266	1.3
$1,000..	34 489	1.2
Customwork, machine hire, and rental of machinery and equipment ..... farms..	1 594	4.3
$1,000..	5 767	2.0
Interest ..... farms..	1 981	3.3
$1,000..	21 483	1.7
Secured by real estate ..... farms..	1 480	3.9
$1,000..	13 847	2.4
Not secured by real estate ..... farms..	840	5.1
$1,000..	7 636	1.5
Cash rent ..... farms..	1 400	3.7
$1,000..	13 641	1.1
Property taxes ..... farms..	8 460	.8
$1,000..	30 619	2.2
All other farm production expenses ..... farms..	7 929	1.1
$1,000..	79 552	.5
NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)[1]		
All farms ..... number..	9 094	.6
$1,000..	175 896	1.2
Average per farm ..... dollars..	19 342	1.3
Farms with net gains[2] ..... number..	4 099	2.0
$1,000..	222 318	.7
Average net gain ..... dollars..	54 237	2.1
Farms with net losses ..... number..	4 995	1.7
$1,000..	46 421	2.7
Average net loss ..... dollars..	9 294	3.2
GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Government payments ..... farms..	629	1.0
$1,000..	2 942	.5
Other farm-related income[1] ..... farms..	2 178	3.7
$1,000..	6 735	5.0
Customwork and other agricultural services ..... farms..	442	8.9
$1,000..	2 523	8.1
Gross cash rent or share payments ..... farms..	584	8.8
$1,000..	1 612	10.5
Forest products, excluding Christmas trees and maple products ..... farms..	1 009	6.0
$1,000..	1 160	15.2
Other farm-related income sources ..... farms..	435	7.0
$1,000..	1 440	8.3
COMMODITY CREDIT CORPORATION LOANS		
Total ..... farms..	68	2.0
$1,000..	2 603	.4

See footnotes at end of table.

Table C. **Reliability Estimates of State Totals for All Farms: 1997**—Con.

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

Item		Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			
Total cropland	farms	8 322	.6
	acres	594 928	.4
Harvested cropland	farms	7 396	.6
	acres	485 187	.3
Farms by acres harvested:			
1 to 9 acres	farms	3 282	.8
	acres	13 812	.8
10 to 19 acres	farms	1 222	1.1
	acres	16 003	1.1
20 to 29 acres	farms	518	1.6
	acres	12 025	1.6
30 to 49 acres	farms	629	1.4
	acres	23 528	1.4
50 to 99 acres	farms	664	1.2
	acres	45 754	1.2
100 to 199 acres	farms	477	1.2
	acres	65 867	1.2
200 to 499 acres	farms	397	.8
	acres	120 624	.7
500 to 999 acres	farms	140	.3
	acres	93 526	.3
1,000 acres or more	farms	67	–
	acres	94 048	–
Cropland:			
Pasture or grazing only	farms	2 971	.8
	acres	64 364	.9
Other cropland	farms	1 851	.9
	acres	45 377	1.1
Total woodland	farms	3 991	.7
	acres	134 374	.8
Pastureland and rangeland other than cropland and woodland pastured	farms	1 400	1.0
	acres	34 506	1.4
Land in house lots, ponds, roads, wasteland, etc.	farms	6 509	.6
	acres	68 792	.8
Irrigated land	farms	2 089	.7
	acres	92 965	.2
Acres irrigated:			
1 to 9 acres	farms	1 281	1.0
	acres	3 731	1.1
10 to 49 acres	farms	399	1.2
	acres	9 123	1.1
50 to 99 acres	farms	167	.9
	acres	11 462	.8
100 to 199 acres	farms	117	.2
	acres	15 497	.2
200 to 499 acres	farms	101	–
	acres	31 229	–
500 to 999 acres	farms	19	–
	acres	13 071	–
1,000 acres or more	farms	5	–
	acres	8 852	–
Harvested cropland irrigated	farms	2 043	.7
	acres	92 108	.2
Pasture and other land irrigated	farms	96	3.2
	acres	857	3.8
Land under Conservation Reserve or Wetlands Reserve Programs	farms	107	2.8
	acres	2 425	3.9
VALUE OF LAND AND BUILDINGS[1]			
Estimated market value of land and buildings	farms	9 093	.6
	$1,000	5 403 116	1.2
Average per farm	dollars	594 206	1.4
Average per acre	dollars	6 642	1.9
VALUE OF MACHINERY AND EQUIPMENT[1]			
Estimated market value of all machinery and equipment	farms	9 094	.6
	$1,000	436 613	1.2
Average per farm	dollars	48 011	1.4
AGRICULTURAL CHEMICALS[1]			
Commercial fertilizer	farms	4 933	1.9
	acres on which used	373 626	1.5

Item		Total	Relative standard error of estimate (percent)
TENURE OF OPERATOR			
All operators	farms	9 101	.6
	acres	832 600	.4
Full owners	farms	6 857	.7
	acres	331 958	.7
Part owners	farms	1 600	.8
	acres	403 171	.4
Tenants	farms	644	1.3
	acres	97 471	1.0
OWNED AND RENTED LAND			
Land owned	farms	8 467	.6
	acres	522 834	.6
Owned land in farms	farms	8 457	.6
	acres	490 830	.6
Land rented or leased from others	farms	2 257	.7
	acres	346 239	.4
	landlords	7 449	.6
Rented or leased land in farms	farms	2 244	.7
	acres	341 770	.4
Land rented or leased to others	farms	795	1.2
	acres	36 473	1.7
OPERATOR CHARACTERISTICS			
Operators by place of residence:			
On farm operated		7 119	.6
Not on farm operated		1 397	1.0
Not reported		585	1.1
Operators by principal occupation:			
Farming		3 920	.6
Other		5 181	.7
Operators by days worked off farm:			
Any		5 188	.7
200 days or more		3 478	.8
Operators by sex:			
Male	farms	7 745	.6
	acres	770 785	.4
Female	farms	1 356	1.1
	acres	61 815	1.4
Average age of operator	years	55.4	.9
FARMS BY TYPE OF ORGANIZATION			
Individual or family (sole proprietorship)	farms	7 604	.6
	acres	531 363	.6
Partnership	farms	635	1.2
	acres	129 055	.7
Corporation:			
Family held	farms	702	1.0
	acres	133 718	.6
More than 10 stockholders	farms	9	8.0
10 or less stockholders	farms	693	1.0
Other than family held	farms	81	2.9
	acres	15 223	2.6
More than 10 stockholders	farms	8	10.9
10 or less stockholders	farms	73	2.9
Other—cooperative, estate or trust, institutional, etc.	farms	79	3.0
	acres	23 241	2.0
HIRED FARM LABOR[1]			
Hired workers by days worked:			
150 days or more	farms	1 450	2.9
	workers	8 137	.8
Less than 150 days	farms	2 587	3.1
	workers	15 125	1.8
INJURIES AND DEATHS			
Farm-related injuries:			
Operator and family members	farms	82	3.1
	number	97	3.4
Hired workers	farms	100	1.4
	number	206	1.8
Farm-related deaths:			
Operator and family members	farms	3	–
	number	5	–
Hired workers	farms	1	–
	number	(D)	(D)

See footnotes at end of table.

Table C. **Reliability Estimates of State Totals for All Farms: 1997**—Con.

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

Item		Total	Relative standard error of estimate (percent)
FARMS BY SIZE			
1 to 9 acres	farms	2 249	.8
	acres	13 205	.9
10 to 49 acres	farms	3 807	.8
	acres	84 239	.8
50 to 69 acres	farms	589	1.4
	acres	34 243	1.4
70 to 99 acres	farms	606	1.4
	acres	50 325	1.4
100 to 139 acres	farms	446	1.5
	acres	51 354	1.6
140 to 179 acres	farms	286	1.7
	acres	45 223	1.7
180 to 219 acres	farms	194	1.9
	acres	38 413	1.9
220 to 259 acres	farms	172	1.9
	acres	40 844	1.9
260 to 499 acres	farms	402	1.1
	acres	143 401	1.0
500 to 999 acres	farms	238	.8
	acres	159 862	.8
1,000 to 1,999 acres	farms	90	–
	acres	115 819	–
2,000 acres or more	farms	22	–
	acres	55 672	–
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM			
Oilseed and grain farming (1111)	farms	1 002	1.1
	acres	240 413	.6
Vegetable and melon farming (1112)	farms	1 155	1.0
	acres	123 104	.5
Fruit and tree nut farming (1113)	farms	447	1.4
	acres	61 682	.8
Greenhouse, nursery, and floriculture production (1114)	farms	2 331	.8
	acres	93 794	.7
Other crop farming (1119)	farms	1 333	1.1
	acres	109 703	1.3
Beef cattle ranching and farming (112111)	farms	620	1.5
	acres	44 955	2.1
Cattle feedlots (112112)	farms	202	2.5
	acres	10 251	3.7
Dairy cattle and milk production (11212)	farms	207	1.1
	acres	78 232	.5
Hog and pig farming (1122)	farms	118	3.2
	acres	5 744	3.4
Poultry and egg production (1123)	farms	188	2.5
	acres	11 785	4.4
Sheep and goat farming (1124)	farms	318	2.0
	acres	8 007	3.3
Animal aquaculture and other animal production (1125, 1129)	farms	1 180	1.1
	acres	44 930	1.6
LIVESTOCK			
Cattle and calves inventory	farms	1 703	.9
	number	56 643	.6
Beef cows	farms	1 039	1.1
	number	12 192	1.3
Milk cows	farms	296	1.2
	number	18 041	.4
Cattle and calves sold	farms	1 506	.9
	number	23 362	.7
	$1,000	8 941	.8
Hogs and pigs inventory	farms	431	1.7
	number	23 189	2.0
Hogs and pigs sold	farms	350	1.9
	number	40 396	1.5
	$1,000	4 223	1.2
Sheep and lambs of all ages inventory	farms	690	1.4
	number	13 149	2.2
Sheep and lambs sold	farms	584	1.5
	number	11 630	1.7
Horses and ponies inventory	farms	2 305	.9
	number	22 617	1.5
Horses and ponies sold	farms	641	1.4
	number	2 355	1.7
POULTRY			
Layers and pullets 13 weeks old and older inventory (see text)	farms	827	1.3
	number	(D)	(D)
Layers 20 weeks old and older	farms	813	1.3
	number	2 086 908	.1
Broilers and other meat-type chickens sold	farms	79	3.8
	number	40 712	11.7
SELECTED CROPS HARVESTED			
Corn for grain or seed	farms	1 110	.9
	acres	89 252	.5
	bushels	9 572 100	.5
Corn for silage or green chop	farms	367	1.2
	acres	20 564	.7
	tons, green	300 696	.7
Wheat for grain	farms	541	1.1
	acres	38 104	.6
	bushels	2 191 141	.5
Soybeans for beans	farms	914	.9
	acres	116 557	.5
	bushels	3 599 073	.5
Potatoes, excluding sweetpotatoes	farms	89	2.9
	acres	2 506	.7
	cwt	641 612	.4
Sweetpotatoes	farms	76	2.4
	acres	877	.8
	bushels	179 958	.9
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms	3 022	.8
	acres	114 523	.8
	tons, dry	224 259	.7
Alfalfa hay	farms	967	1.1
	acres	24 891	1.0
	tons, dry	66 048	.9
Vegetables harvested for sale (see text)	farms	1 577	.8
	acres	63 414	.2
Land in orchards	farms	577	1.4
	acres	13 459	.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.

Table D. Reliability Estimates of State Totals for Farms With Sales of $10,000 or More: 1997

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

Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS		
Farms ..... number..	3 547	.5
Land in farms ..... acres..	635 584	.3
Average size of farm ..... acres..	179	.6
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD		
Total sales (see text) ..... farms..	3 547	.5
$1,000..	682 409	.1
Average per farm ..... dollars..	192 391	.5
Farms by value of sales:		
$10,000 to $19,999 ..... farms..	899	1.1
$1,000..	12 718	1.1
$20,000 to $24,999 ..... farms..	296	1.8
$1,000..	6 553	1.8
$25,000 to $39,999 ..... farms..	505	1.5
$1,000..	16 012	1.5
$40,000 to $49,999 ..... farms..	184	2.2
$1,000..	8 127	2.2
$50,000 to $99,999 ..... farms..	502	1.3
$1,000..	36 402	1.3
$100,000 to $249,999 ..... farms..	571	–
$1,000..	92 723	–
$250,000 to $499,999 ..... farms..	303	–
$1,000..	104 266	–
$500,000 or more ..... farms..	287	–
$1,000..	405 609	–
Sales by commodity or commodity group:		
Crops, including nursery and greenhouse crops ..... farms..	3 191	.5
$1,000..	582 437	.1
Grains ..... farms..	1 025	.8
$1,000..	54 221	.3
Corn for grain ..... farms..	594	.9
$1,000..	23 674	.4
Wheat ..... farms..	450	1.0
$1,000..	6 673	.5
Soybeans ..... farms..	654	.9
$1,000..	22 608	.4
Sorghum for grain ..... farms..	14	4.4
$1,000..	(D)	(D)
Barley ..... farms..	64	1.9
$1,000..	506	1.3
Oats ..... farms..	58	3.4
$1,000..	(D)	(D)
Other grains ..... farms..	124	1.7
$1,000..	470	1.5
Cotton and cottonseed ..... farms..	–	–
$1,000..	–	–
Tobacco ..... farms..	–	–
$1,000..	–	–
Hay, silage, and field seeds ..... farms..	700	1.1
$1,000..	9 517	1.1
Vegetables, sweet corn, and melons ..... farms..	1 082	.8
$1,000..	148 704	.2
Fruits, nuts, and berries ..... farms..	444	1.1
$1,000..	89 201	.1
Nursery and greenhouse crops ..... farms..	1 431	.7
$1,000..	274 451	.1
Other crops ..... farms..	138	1.9
$1,000..	6 343	.4
Livestock, poultry, and their products ..... farms..	994	.8
$1,000..	99 973	.2
Poultry and poultry products ..... farms..	153	2.2
$1,000..	35 122	.2
Dairy products ..... farms..	224	.9
$1,000..	37 598	.3
Cattle and calves ..... farms..	541	1.0
$1,000..	7 052	.9
Hogs and pigs ..... farms..	122	2.4
$1,000..	3 951	1.1
Sheep, lambs, and wool ..... farms..	122	2.6
$1,000..	439	3.4
Other livestock and livestock products (see text) ..... farms..	307	1.7
$1,000..	15 811	.9
Value of agricultural products sold directly to individuals for human consumption (see text) ..... farms..	710	1.0
$1,000..	16 841	.7

Item	Total	Relative standard error of estimate (percent)
FARM PRODUCTION EXPENSES[1]		
Total farm production expenses ..... farms..	3 546	.6
$1,000..	473 981	.3
Average per farm ..... dollars..	133 666	.7
Livestock and poultry purchased ..... farms..	482	7.0
$1,000..	8 654	2.6
Feed for livestock and poultry ..... farms..	912	4.4
$1,000..	34 981	1.3
Commercially mixed formula feeds ..... farms..	634	5.9
$1,000..	28 847	1.6
Seeds, bulbs, plants, and trees ..... farms..	2 706	1.6
$1,000..	36 609	.6
Commercial fertilizer ..... farms..	2 778	1.7
$1,000..	27 132	1.0
Agricultural chemicals ..... farms..	2 338	2.0
$1,000..	19 985	.8
Petroleum products ..... farms..	3 508	.7
$1,000..	23 604	.8
Electricity ..... farms..	2 839	1.5
$1,000..	10 227	.8
Hired farm labor ..... farms..	1 975	2.4
$1,000..	141 302	.3
Contract labor ..... farms..	374	6.3
$1,000..	12 499	1.8
Repair and maintenance ..... farms..	3 139	1.3
$1,000..	29 154	1.1
Customwork, machine hire, and rental of machinery and equipment ..... farms..	915	4.1
$1,000..	5 387	2.0
Interest ..... farms..	1 383	3.1
$1,000..	19 213	1.2
Secured by real estate ..... farms..	981	3.6
$1,000..	11 776	1.7
Not secured by real estate ..... farms..	696	4.8
$1,000..	7 437	1.3
Cash rent ..... farms..	1 149	3.4
$1,000..	13 464	1.1
Property taxes ..... farms..	3 145	1.2
$1,000..	16 741	2.5
All other farm production expenses ..... farms..	3 546	.6
$1,000..	75 028	.4
NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)[1]		
All farms ..... number..	3 546	.6
$1,000..	199 911	.9
Average per farm ..... dollars..	56 376	1.0
Farms with net gains[2] ..... number..	2 735	1.6
$1,000..	219 421	.7
Average net gain ..... dollars..	80 227	1.8
Farms with net losses ..... number..	811	5.1
$1,000..	19 510	3.3
Average net loss ..... dollars..	24 057	6.1
GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Government payments ..... farms..	490	.8
$1,000..	2 807	.4
Other farm-related income[1] ..... farms..	862	4.8
$1,000..	4 284	5.3
Customwork and other agricultural services ..... farms..	231	10.6
$1,000..	1 998	8.8
Gross cash rent or share payments ..... farms..	190	13.4
$1,000..	660	9.5
Forest products, excluding Christmas trees and maple products ..... farms..	247	11.2
$1,000..	485	29.2
Other farm-related income sources ..... farms..	320	6.0
$1,000..	1 142	5.5
COMMODITY CREDIT CORPORATION LOANS		
Total ..... farms..	66	1.7
$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: 1997—Con.

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

Item		Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			
Total cropland	farms	3 435	.5
	acres	492 356	.3
Harvested cropland	farms	3 331	.5
	acres	426 583	.3
Cropland:			
Pasture or grazing only	farms	833	1.0
	acres	33 209	1.1
Total woodland	farms	1 565	.7
	acres	80 548	.8
Pastureland and rangeland other than cropland and woodland pastured	farms	437	1.2
	acres	17 165	1.2
Land in house lots, ponds, roads, wasteland, etc.	farms	2 453	.6
	acres	45 515	.6
Irrigated land	farms	1 484	.6
	acres	90 176	.1
Harvested cropland irrigated	farms	1 474	.6
	acres	89 659	.1
Pasture and other land irrigated	farms	39	4.1
	acres	517	5.2
Land under Conservation Reserve or Wetlands Reserve Programs	farms	52	3.0
	acres	1 585	3.0
VALUE OF LAND AND BUILDINGS[1]			
Estimated market value of land and buildings	farms	3 545	.6
	$1,000	3 661 054	1.2
Average per farm	dollars	1 032 737	1.4
Average per acre	dollars	5 902	2.0
VALUE OF MACHINERY AND EQUIPMENT[1]			
Estimated market value of all machinery and equipment	farms	3 546	.6
	$1,000	317 786	1.2
Average per farm	dollars	89 618	1.3
AGRICULTURAL CHEMICALS[1]			
Commercial fertilizer	farms	2 769	1.7
	acres on which used	346 984	1.6
TENURE OF OPERATOR			
All operators	farms	3 547	.5
	acres	635 584	.3
Full owners	farms	2 004	.7
	acres	176 011	.7
Part owners	farms	1 147	.7
	acres	373 616	.4
Tenants	farms	396	1.3
	acres	85 957	1.0
OWNED AND RENTED LAND			
Land owned	farms	3 156	.5
	acres	334 767	.5
Owned land in farms	farms	3 151	.5
	acres	320 553	.5
Land rented or leased from others	farms	1 550	.6
	acres	318 280	.4
	landlords	6 187	.5
Rented or leased land in farms	farms	1 543	.6
	acres	315 031	.4
Land rented or leased to others	farms	293	1.5
	acres	17 463	1.4
OPERATOR CHARACTERISTICS			
Operators by place of residence:			
On farm operated		2 567	.6
Not on farm operated		712	1.0
Not reported		268	1.2
Operators by principal occupation:			
Farming		2 342	.6
Other		1 205	.9
Operators by days worked off farm:			
Any		1 404	.8
200 days or more		830	1.1
Operators by sex:			
Male		3 232	.5
Female		315	1.7
Average age of operator	years	54.3	.8

Item		Total	Relative standard error of estimate (percent)
FARMS BY TYPE OF ORGANIZATION			
Individual or family (sole proprietorship)	farms	2 592	.6
	acres	371 672	.5
Partnership	farms	381	1.2
	acres	114 288	.6
Corporation:			
Family held	farms	486	.9
	acres	118 655	.4
More than 10 stockholders	farms	4	–
10 or less stockholders	farms	482	.9
Other than family held	farms	52	2.6
	acres	12 638	1.2
More than 10 stockholders	farms	6	11.2
10 or less stockholders	farms	46	2.6
Other—cooperative, estate or trust, institutional, etc.	farms	36	4.1
	acres	18 331	2.1
HIRED FARM LABOR[1]			
Hired workers by days worked:			
150 days or more	farms	1 305	2.7
	workers	7 972	.8
Less than 150 days	farms	1 595	2.9
	workers	13 183	1.5
INJURIES AND DEATHS			
Farm-related injuries:			
Operator and family members	farms	51	3.1
	number	62	3.7
Hired workers	farms	89	1.1
	number	181	1.1
Farm-related deaths:			
Operator and family members	farms	3	–
	number	(D)	(D)
Hired workers	farms	–	–
	number	–	–
FARMS BY SIZE			
1 to 9 acres		619	1.1
10 to 49 acres		987	1.0
50 to 69 acres		228	1.8
70 to 99 acres		267	1.6
100 to 139 acres		256	1.7
140 to 179 acres		217	1.7
180 to 219 acres		141	1.9
220 to 259 acres		135	1.8
260 to 499 acres		360	.9
500 to 999 acres		227	.6
1,000 to 1,999 acres		88	–
2,000 acres or more		22	–
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM			
Oilseed and grain farming (1111)		520	1.1
Vegetable and melon farming (1112)		793	.9
Fruit and tree nut farming (1113)		223	1.4
Greenhouse, nursery, and floriculture production (1114)		1 184	.8
Other crop farming (1119)		253	1.9
Beef cattle ranching and farming (112111)		49	4.0
Cattle feedlots (112112)		25	6.1
Dairy cattle and milk production (11212)		205	1.0
Hog and pig farming (1122)		33	4.8
Poultry and egg production (1123)		46	3.6
Sheep and goat farming (1124)		9	8.6
Animal aquaculture and other animal production (1125, 1129)		207	2.0
LIVESTOCK			
Cattle and calves inventory	farms	574	1.0
	number	45 034	.5
Beef cows	farms	293	1.5
	number	6 537	1.5
Milk cows	farms	246	1.0
	number	17 920	.4
Cattle and calves sold	farms	541	1.0
	number	18 658	.7
	$1,000	7 052	.9
Hogs and pigs inventory	farms	137	2.2
	number	20 971	2.1
Hogs and pigs sold	farms	122	2.4
	number	37 990	1.3
	$1,000	3 951	1.1
Sheep and lambs of all ages inventory	farms	138	2.5
	number	4 106	5.1
Sheep and lambs sold	farms	109	2.7
	number	4 897	2.5
Horses and ponies inventory	farms	496	1.3
	number	7 378	3.3
Horses and ponies sold	farms	207	2.0
	number	1 514	2.0

See footnotes at end of table.

Table D. **Reliability Estimates of State Totals for Farms With Sales of $10,000 or More: 1997**—Con.

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

Item		Total	Relative standard error of estimate (percent)
POULTRY			
Layers and pullets 13 weeks old and older inventory (see text)	farms	166	2.2
	number	(D)	(D)
Layers 20 weeks old and older	farms	164	2.2
	number	2 062 381	.1
Broilers and other meat-type chickens sold	farms	18	6.6
	number	35 858	12.3
SELECTED CROPS HARVESTED			
Corn for grain or seed	farms	727	.8
	acres	84 836	.5
	bushels	9 259 065	.4
Corn for silage or green chop	farms	287	1.0
	acres	19 225	.5
	tons, green	283 803	.5
SELECTED CROPS HARVESTED—Con.			
Wheat for grain	farms	456	1.0
	acres	36 838	.5
	bushels	2 140 558	.5
Soybeans for beans	farms	663	.9
	acres	111 336	.4
	bushels	3 483 606	.4
Potatoes, excluding sweetpotatoes	farms	68	3.0
	acres	2 492	.8
	cwt	640 330	.4
Sweetpotatoes	farms	67	2.1
	acres	861	.8
	bushels	177 873	.8
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms	1 022	.8
	acres	77 698	.8
	tons, dry	169 712	.7
Alfalfa hay	farms	502	1.0
	acres	19 664	1.0
	tons, dry	55 902	.8
Vegetables harvested for sale (see text)	farms	1 082	.8
	acres	62 113	.2
Land in orchards	farms	232	1.6
	acres	12 017	.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.

Table E. **Reliability Estimates of Percent Change in State Totals: 1992 to 1997**

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

Item	All farms		Farms with sales of $10,000 or more	
	Percent change from 1992 to 1997	Standard error of estimate	Percent change from 1992 to 1997	Standard error of estimate
Farms ..... number	.2	1.1	–2.1	.8
Land in farms ..... acres	–1.8	.6	–2.0	.5
Average size of farm ..... acres	–2.2	1.2	–	1.0
Estimated market value of land and buildings[1]:				
Average per farm ..... dollars	–3.4	2.3	–2.0	2.6
Average per acre ..... dollars	–4.3	2.8	–3.2	3.0
Estimated market value of all machinery and equipment[1]:				
Average per farm ..... dollars	21.2	2.6	18.0	2.5
Farms by size:				
1 to 9 acres	7.1	1.7	19.5	2.0
10 to 49 acres	2.2	1.4	–1.1	1.4
50 to 179 acres	–7.3	1.1	–9.1	1.1
180 to 499 acres	–8.1	1.1	–10.8	.9
500 to 999 acres	–4.8	1.0	–6.2	.9
1,000 to 1,999 acres	21.6	–	20.5	–
2,000 acres or more	46.7	–	46.7	–
Total cropland ..... farms	1.2	1.0	–2.4	.8
acres	–4.6	.5	–4.9	.5
Harvested cropland ..... farms	3.5	1.0	–2.4	.8
acres	–1.3	.5	–1.6	.4
Irrigated land ..... farms	9.3	1.1	7.1	.9
acres	15.6	.3	14.9	.3
Market value of agricultural products sold $1,000	30.8	.2	31.8	.2
Average per farm ..... dollars	30.5	1.4	34.6	1.1
Crops, including nursery and greenhouse crops $1,000	37.5	.3	38.1	.2
Livestock, poultry, and their products $1,000	2.8	.4	3.9	.3
Farms by value of sales:				
Less than $2,500	6.9	1.5	(X)	(X)
$2,500 to $4,999	–6.0	1.8	(X)	(X)
$5,000 to $9,999	–4.1	1.8	(X)	(X)
$10,000 to $24,999	–12.0	1.4	–12.0	1.2
$25,000 to $49,999	1.9	1.9	1.9	1.8
$50,000 to $99,999	–5.3	1.7	–5.3	1.6
$100,000 to $249,999	–2.6	–	–2.6	–
$250,000 to $499,999	7.1	–	7.1	–
$500,000 or more	50.3	–	50.3	–
Total farm production expenses[1] $1,000	19.1	1.0	21.1	.9
Average per farm ..... dollars	19.0	1.6	20.9	1.7
Net cash return from agricultural sales for the farm unit (see text)[1] ..... farms	.1	1.2	.1	1.2
$1,000	83.7	4.5	67.3	2.6
Average per farm ..... dollars	83.4	5.0	67.1	3.3
Operators by principal occupation:				
Farming	–7.1	.9	–5.3	.7
Other	6.6	1.5	4.6	1.5
Operators by days worked off farm:				
Any	1.8	1.3	–2.0	1.3
200 days or more	2.4	1.5	–1.0	1.6
Livestock and poultry:				
Cattle and calves inventory ..... farms	–11.9	1.2	–21.6	1.0
number	–18.1	.6	–21.8	.6
Beef cows ..... farms	–9.8	1.5	–9.8	1.9
number	–.7	1.8	–1.6	2.4
Milk cows ..... farms	–34.2	1.1	–28.3	.9
number	–24.6	.4	–24.4	.4
Cattle and calves sold ..... farms	–9.7	1.3	–18.4	1.1
number	–19.4	.7	–23.5	.7
Hogs and pigs inventory ..... farms	–32.7	1.6	–38.8	1.8
number	–21.8	2.0	–19.7	2.1
Hogs and pigs sold ..... farms	–34.0	1.6	–35.8	2.0
number	–8.9	2.5	–5.5	2.6
Sheep and lambs inventory ..... farms	–.1	2.1	8.7	3.8
number	1.9	3.1	11.3	7.0
Layers and pullets 13 weeks old and older inventory (see text) ..... farms	–9.8	1.8	–14.4	2.6
number	(D)	(D)	(D)	(D)
Broilers and other meat-type chickens sold ..... farms	–15.1	4.4	–14.3	7.5
number	–57.5	5.0	–59.9	4.9
Selected crops harvested:				
Corn for grain or seed ..... farms	–4.1	1.3	–4.8	1.1
acres	6.5	.7	6.7	.7
bushels	.7	.7	1.1	.6
Corn for silage or green chop ..... farms	–21.1	1.3	–19.6	1.1
acres	4.5	1.0	3.3	.7
tons, green	–1.6	.8	–3.5	.7
Soybeans for beans ..... farms	–19.0	1.1	–17.8	1.0
acres	–11.5	.6	–10.3	.6
bushels	–17.8	.6	–16.4	.6
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ..... farms	–1.2	1.2	–4.8	1.1
acres	–3.4	1.0	–3.8	1.1
tons, dry	–6.1	.9	–8.7	.9
Vegetables harvested for sale (see text) ..... farms	–15.3	1.1	–11.7	1.0
acres	–1.9	.4	–.9	.4
Land in orchards ..... farms	–17.7	1.6	–7.9	1.9
acres	–20.2	.5	–19.8	.5

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

Table F. **Reliability Estimates for the State and County Totals: 1997**

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

Geographic area	Farms		Land in farms		Average size of farm		Average market value of land and buildings per farm[1]		Estimated market value of all machinery and equipment[1]	
	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**9 101**	**.6**	**832 600**	**.4**	**91**	**.7**	**594 206**	**1.4**	**436 613**	**1.2**
Atlantic	424	.5	31 050	1.1	73	1.2	362 615	3.5	29 001	2.5
Bergen	121	.8	2 633	5.1	22	5.2	554 263	23.9	3 692	8.6
Burlington	857	.4	103 667	.6	121	.7	614 977	2.8	57 674	3.3
Camden	211	.7	9 007	1.7	43	1.8	359 339	10.0	5 650	5.6
Cape May	149	.8	9 669	2.7	65	2.8	295 784	5.1	5 828	5.1
Cumberland	573	.7	66 288	.8	116	1.0	421 150	2.9	44 067	2.4
Essex	21	.7	(D)	(D)	(D)	(D)	500 251	3.3	1 348	1.7
Gloucester	652	.6	58 373	.7	90	.9	457 100	4.6	32 706	3.4
Hudson	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 313	.7	105 230	.9	80	1.1	581 546	3.6	46 538	4.3
Mercer	285	.6	28 391	1.3	100	1.4	1 359 262	3.4	12 564	5.8
Middlesex	275	.6	28 100	1.3	102	1.5	756 235	3.0	13 665	6.2
Monmouth	874	.6	59 405	.8	68	1.0	675 729	4.3	46 939	5.2
Morris	383	.6	22 351	1.8	58	1.9	710 300	7.0	14 559	5.7
Ocean	235	.7	11 381	1.4	48	1.6	348 713	9.8	4 449	7.2
Passaic	55	.9	2 232	10.6	41	10.6	576 293	6.4	1 331	5.1
Salem	660	.5	92 047	.6	139	.8	536 956	4.2	43 346	3.3
Somerset	437	.7	46 258	1.5	106	1.7	796 314	6.4	21 526	7.5
Sussex	827	.6	73 001	1.1	88	1.3	476 842	5.2	20 591	5.4
Union	19	.3	(D)	(D)	(D)	(D)	1 085 122	2.9	930	.4
Warren	730	.7	82 900	1.0	114	1.2	736 876	3.3	30 210	3.6

Geographic area	Average market value of all machinery and equipment per farm[1]		Market value of agricultural products sold		Average market value of agricultural products sold per farm		Farm production expenses[1]			
							Total farm production expenses			
							Farms		Value	
	Value (dollars)	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**48 011**	**1.4**	**697 380**	**.1**	**76 627**	**.6**	**9 094**	**.6**	**513 326**	**.4**
Atlantic	68 723	2.7	63 469	.2	149 690	.5	422	.9	47 537	.8
Bergen	30 515	8.8	9 008	.7	74 444	1.0	121	1.9	5 718	2.4
Burlington	67 376	3.3	87 535	.2	102 141	.5	856	.7	64 263	1.3
Camden	27 036	5.9	17 473	.5	82 811	.8	209	1.7	9 539	1.2
Cape May	39 113	5.5	6 807	.9	45 685	1.2	149	2.0	4 969	3.2
Cumberland	76 771	2.6	94 152	.1	164 315	.7	574	1.0	62 992	.7
Essex	64 167	3.7	1 223	2.4	58 235	2.5	21	3.2	838	1.1
Gloucester	50 239	3.6	66 972	.2	102 717	.6	651	.9	47 214	.9
Hudson	–	–	–	–	–	–	–	–	–	–
Hunterdon	35 498	4.4	36 057	.5	27 461	.8	1 311	.8	32 252	1.8
Mercer	44 239	5.9	13 255	.8	46 510	1.0	284	1.2	9 492	2.5
Middlesex	49 692	6.3	34 355	.3	124 927	.7	275	1.2	21 919	.9
Monmouth	53 644	5.2	67 973	.3	77 772	.7	875	.8	53 373	1.1
Morris	38 012	5.8	29 956	.3	78 215	.6	383	.9	17 506	2.0
Ocean	18 851	7.4	8 170	1.0	34 767	1.2	236	1.3	5 288	4.7
Passaic	24 200	6.8	3 863	1.4	70 232	1.7	55	4.5	2 582	1.3
Salem	65 676	3.4	67 908	.2	102 892	.6	660	.7	52 930	.8
Somerset	49 259	7.5	14 026	.8	32 096	1.0	437	1.1	12 070	3.2
Sussex	24 898	5.5	19 187	.7	23 201	.9	827	.8	16 086	4.1
Union	48 921	2.7	9 986	.1	525 587	.3	19	2.6	6 360	.1
Warren	41 441	3.7	46 005	.3	63 021	.8	729	1.0	40 398	1.7

Geographic area	Farm production expenses[1]—Con.											
	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**1 671**	**4.4**	**10 339**	**3.1**	**3 290**	**2.7**	**38 309**	**1.4**	**4 633**	**1.9**	**37 270**	**.6**
Atlantic	36	34.8	267	50.5	80	18.5	187	19.7	225	6.2	1 931	4.0
Bergen	18	29.6	76	34.4	27	20.8	51	35.0	50	11.0	921	1.9
Burlington	76	20.8	2 015	4.9	227	12.1	3 741	5.0	478	5.4	3 729	1.7
Camden	33	14.8	85	31.4	69	9.9	97	17.0	104	8.0	677	2.6
Cape May	26	19.8	60	33.4	56	12.2	143	15.9	92	7.0	434	10.7
Cumberland	37	28.1	496	.9	94	14.7	1 336	1.5	410	4.8	5 757	1.0
Essex	2	–	(D)	(D)	5	–	(D)	(D)	14	3.9	200	.6
Gloucester	81	25.3	873	7.6	180	14.6	1 451	5.3	381	6.7	4 478	1.1
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	310	10.6	826	6.8	626	5.3	2 107	7.8	568	5.7	2 421	3.3
Mercer	60	18.3	112	23.0	74	13.8	263	5.7	127	7.9	812	4.8
Middlesex	28	36.4	242	26.0	56	23.8	219	11.7	176	8.6	2 432	1.7
Monmouth	148	17.7	847	9.7	344	8.9	2 366	5.4	411	7.6	3 464	2.5
Morris	75	15.1	178	13.4	121	8.2	574	21.0	173	12.1	1 417	4.0

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1997**—Con.

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

Geographic area	Farm production expenses[1]—Con.											
	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Ocean	53	23.6	152	7.4	97	13.2	673	7.4	95	15.5	346	1.4
Passaic	15	9.4	94	2.4	24	7.3	83	11.3	29	5.8	256	1.1
Salem	109	18.5	1 140	2.8	251	11.2	7 446	.6	386	6.2	2 817	1.4
Somerset	152	13.9	486	11.3	213	9.1	1 190	3.9	177	8.2	752	2.6
Sussex	177	13.2	618	31.2	370	7.8	2 428	9.1	352	8.0	941	5.4
Union	3	–	(D)	(D)	3	11.8	(D)	(D)	13	2.7	2 039	(L)
Warren	232	11.7	1 764	5.3	373	7.7	13 852	2.5	372	6.2	1 447	3.0

Geographic area	Farm production expenses[1]—Con.											
	Commercial fertilizer				Agricultural chemicals				Petroleum products			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**4 981**	**1.9**	**28 256**	**1.0**	**3 632**	**2.2**	**20 487**	**.9**	**8 513**	**.9**	**25 935**	**.8**
Atlantic	306	5.1	2 207	1.0	230	6.2	2 248	1.0	401	2.8	1 951	1.8
Bergen	63	8.8	61	4.2	41	13.0	38	5.2	107	4.8	401	2.6
Burlington	512	4.8	3 629	2.9	434	5.7	3 078	2.6	840	1.1	2 986	2.7
Camden	133	6.1	465	2.1	77	8.1	413	1.1	187	3.0	939	2.6
Cape May	90	7.1	171	6.9	68	7.9	96	8.2	143	2.9	287	4.5
Cumberland	437	4.1	3 913	1.2	313	6.1	2 981	1.4	548	1.9	3 248	1.1
Essex	13	4.2	7	1.2	17	2.3	7	1.1	20	3.4	38	5.3
Gloucester	417	5.6	3 218	3.0	335	7.4	2 858	1.0	621	2.3	2 405	2.3
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	619	5.6	2 031	6.4	459	7.6	991	5.3	1 246	1.6	1 970	3.5
Mercer	146	8.3	732	7.3	112	9.3	574	5.1	265	3.2	488	3.4
Middlesex	158	9.9	1 026	4.5	115	11.9	670	2.5	270	1.2	1 087	1.9
Monmouth	411	7.4	2 550	2.3	252	7.2	1 777	3.3	812	2.6	2 860	3.5
Morris	152	14.1	490	4.1	140	13.3	262	4.8	370	2.0	1 081	2.0
Ocean	113	15.4	220	8.3	40	14.2	79	2.1	203	5.4	291	8.9
Passaic	24	6.2	31	4.4	19	6.5	14	4.0	52	4.6	187	1.1
Salem	395	6.7	3 510	2.3	292	7.4	2 765	3.8	631	2.4	1 984	2.2
Somerset	192	11.4	892	8.7	151	12.3	301	7.4	367	4.6	834	5.3
Sussex	355	8.4	732	2.4	239	9.8	342	3.3	752	2.5	904	3.7
Union	14	2.5	36	1.3	9	–	16	–	19	2.6	250	.1
Warren	431	6.0	2 335	4.3	289	8.2	977	5.9	659	2.8	1 744	3.3

Geographic area	Farm production expenses[1]—Con.											
	Electricity				Hired farm labor				Contract labor			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**5 734**	**1.7**	**11 500**	**1.0**	**2 980**	**2.7**	**142 869**	**.3**	**787**	**6.3**	**12 809**	**1.8**
Atlantic	272	6.8	962	2.7	191	9.4	16 873	.4	78	14.6	3 910	3.5
Bergen	79	7.7	178	4.1	59	8.6	2 311	3.2	12	33.4	(D)	(D)
Burlington	583	4.8	1 160	3.9	356	7.7	17 673	1.3	102	17.2	2 381	.8
Camden	110	7.9	331	5.2	47	8.9	3 569	.4	13	28.9	145	4.8
Cape May	97	6.8	172	4.3	46	11.2	1 645	2.4	17	27.9	81	2.7
Cumberland	374	5.1	1 363	1.7	228	7.2	20 656	.4	59	20.8	959	9.1
Essex	16	4.3	10	5.0	8	4.8	352	2.2	–	–	–	–
Gloucester	396	6.8	997	2.2	214	9.4	14 611	.4	69	24.5	433	3.7
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	839	4.4	805	3.8	414	7.5	5 914	2.0	71	22.5	1 091	1.7
Mercer	161	8.1	155	6.7	81	10.9	2 139	6.2	8	41.9	3	14.6
Middlesex	185	7.6	379	6.2	95	14.8	6 738	.9	37	19.8	191	3.7
Monmouth	536	5.9	1 220	4.4	293	9.8	19 606	1.0	78	19.4	1 844	7.1
Morris	210	10.1	385	4.0	103	15.4	5 273	.6	24	49.7	(D)	(D)
Ocean	122	14.8	132	16.1	57	19.8	1 252	4.1	8	72.9	31	9.3
Passaic	28	5.4	71	2.4	18	6.0	984	.8	1	42.7	(D)	(D)
Salem	466	5.1	1 116	2.4	199	10.3	11 349	1.0	37	28.4	625	12.7
Somerset	270	10.3	306	4.0	147	14.3	2 111	2.3	42	38.8	47	35.9
Sussex	483	6.0	581	8.3	185	12.5	1 798	2.6	86	19.9	88	18.2
Union	13	2.7	83	.3	10	–	1 982	–	3	–	(D)	(D)
Warren	494	5.6	1 094	2.2	229	10.7	6 032	1.3	42	28.5	187	2.5

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1997**—Con.

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

Geographic area	Farm production expenses[1]—Con.											
	Repair and maintenance				Customwork, machine hire, and rental of machinery and equipment				Interest			
	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	**7 266**	**1.3**	**34 489**	**1.2**	**1 594**	**4.3**	**5 767**	**2.0**	**1 981**	**3.3**	**21 483**	**1.7**
Atlantic	365	4.4	2 708	2.5	107	15.6	479	10.0	145	9.9	1 334	7.3
Bergen	93	6.2	355	6.3	14	29.8	11	28.2	20	20.2	143	16.1
Burlington	698	3.4	4 523	3.8	151	11.6	673	3.7	257	9.7	2 810	3.9
Camden	137	5.3	651	4.4	21	18.9	71	11.9	33	17.0	167	9.1
Cape May	127	4.1	396	5.5	20	21.1	50	3.1	28	14.0	169	24.0
Cumberland	471	3.8	3 809	2.1	142	11.1	767	2.8	189	8.9	2 165	2.2
Essex	13	3.0	32	.4	1	–	(D)	(D)	3	–	32	–
Gloucester	528	4.3	2 886	2.9	163	13.3	531	7.0	147	10.7	1 392	9.7
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 036	3.4	2 967	5.2	181	13.2	513	5.2	220	11.1	1 485	8.0
Mercer	227	4.5	842	4.7	32	18.0	96	34.1	47	15.2	270	6.0
Middlesex	212	6.0	1 461	1.5	32	26.2	234	1.0	50	16.6	1 010	.9
Monmouth	737	3.4	3 751	3.8	110	19.2	360	6.7	178	12.6	2 509	5.7
Morris	324	5.0	1 264	6.7	39	33.3	(D)	(D)	80	18.3	825	11.7
Ocean	199	6.7	487	13.4	17	23.5	48	3.1	21	27.3	250	16.0
Passaic	41	5.0	121	3.2	7	13.2	5	18.5	12	6.9	69	3.6
Salem	549	4.3	2 937	2.6	184	11.6	1 221	4.1	178	11.6	3 541	3.4
Somerset	290	7.7	934	6.6	92	23.4	97	10.8	80	19.9	618	20.1
Sussex	639	4.0	1 719	8.0	130	16.8	202	25.4	160	13.1	999	11.3
Union	14	2.5	166	.6	2	–	(D)	(D)	5	–	252	–
Warren	566	4.5	2 480	7.0	149	15.3	264	7.7	128	11.4	1 443	2.8

Geographic area	Farm production expenses[1]—Con.											
	Cash rent				Property taxes paid				All other farm production expenses			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
New Jersey	**1 400**	**3.7**	**13 641**	**1.1**	**8 460**	**.8**	**30 619**	**2.2**	**7 929**	**1.1**	**79 552**	**.5**
Atlantic	66	18.5	627	.8	374	4.0	1 737	4.9	381	3.3	10 118	.7
Bergen	11	16.6	(D)	(D)	109	3.3	300	15.8	115	2.5	748	2.0
Burlington	143	9.6	2 106	3.0	803	1.2	2 843	5.2	741	2.9	10 916	1.8
Camden	29	12.2	146	2.9	199	2.1	647	4.7	171	3.4	1 135	1.7
Cape May	16	28.7	35	23.2	129	4.3	341	6.9	138	3.2	889	4.1
Cumberland	148	10.5	1 585	.9	557	1.5	2 068	3.9	498	3.0	11 889	1.0
Essex	2	–	(D)	(D)	18	3.8	66	(L)	19	3.6	74	.5
Gloucester	114	11.0	1 129	2.3	627	1.7	2 108	6.2	599	2.9	7 843	1.0
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	125	14.2	556	2.7	1 259	1.3	4 287	6.8	1 131	2.4	4 288	2.7
Mercer	54	16.8	496	2.3	264	2.4	891	9.6	232	4.5	1 620	2.7
Middlesex	40	18.4	530	1.5	237	4.3	1 064	6.3	257	3.4	4 635	.7
Monmouth	97	14.7	895	2.3	805	2.4	3 067	7.2	778	3.4	6 257	1.6
Morris	27	22.5	154	9.5	354	2.5	1 914	10.5	329	5.0	3 333	2.3
Ocean	12	44.9	57	14.1	220	3.4	692	12.6	217	4.1	576	9.9
Passaic	2	21.3	(D)	(D)	54	4.5	278	5.7	48	4.7	356	1.1
Salem	189	11.5	3 348	2.5	638	1.6	1 922	6.4	528	4.7	7 209	2.2
Somerset	55	22.9	319	9.6	389	3.6	1 609	18.7	376	4.9	1 574	3.2
Sussex	98	14.5	419	5.1	760	2.2	2 312	7.9	715	2.9	2 001	4.6
Union	1	–	(D)	(D)	18	2.8	70	.4	19	2.6	741	.1
Warren	171	9.9	1 024	8.3	646	2.9	2 404	7.7	637	3.2	3 350	2.4

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	**9 094**	**.6**	**175 896**	**1.2**	**8 322**	**.6**	**594 928**	**.4**	**7 396**	**.6**	**485 187**	**.3**
Atlantic	422	.9	14 856	2.8	399	.7	19 464	.8	362	.8	16 417	.7
Bergen	121	1.9	2 751	3.8	101	1.6	1 379	6.4	95	1.8	1 192	5.8
Burlington	856	.7	23 669	3.5	790	.5	69 549	.6	696	.6	59 736	.5
Camden	209	1.7	7 845	2.5	192	1.1	6 997	1.8	173	1.4	5 221	1.9
Cape May	149	2.0	1 937	7.9	141	1.1	5 755	2.9	122	1.6	4 298	2.2
Cumberland	574	1.0	29 368	1.1	554	.7	50 928	.8	524	.8	44 932	.7
Essex	21	3.2	385	6.2	19	.7	165	.1	18	.8	112	.1
Gloucester	651	.9	20 613	3.8	602	.7	46 095	.7	548	.8	40 692	.6
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	1 311	.8	2 806	20.4	1 199	.7	78 128	.8	1 034	.8	58 456	.8
Mercer	284	1.2	3 242	11.3	263	.8	23 124	1.2	236	1.1	19 543	1.2
Middlesex	275	1.2	11 567	1.5	257	.9	21 956	1.0	237	1.0	20 346	1.0
Monmouth	875	.8	14 723	5.0	749	.8	46 324	.7	624	.9	36 182	.7
Morris	383	.9	11 541	4.4	340	.8	13 547	1.9	287	1.1	10 135	1.8

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1997**—Con.

[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	236	1.3	2 638	11.2	203	1.1	5 692	1.8	167	1.5	4 091	2.1
Passaic	55	4.5	1 281	3.2	48	2.2	359	9.2	38	3.1	248	11.9
Salem	660	.7	13 882	2.6	623	.6	75 066	.5	582	.7	65 803	.5
Somerset	437	1.1	1 322	29.6	394	.9	30 988	1.3	352	1.1	21 283	1.5
Sussex	827	.8	2 646	29.4	762	.7	41 321	1.3	684	.8	29 788	1.4
Union	19	2.6	3 626	.3	16	3.1	148	5.4	16	3.1	120	6.7
Warren	729	1.0	5 200	11.7	670	.8	57 943	.9	601	.9	46 592	.9

Geographic area	Irrigated land				Livestock and poultry							
	Farms		Acres		Cattle and calves inventory				Beef cows inventory			
					Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
New Jersey	**2 089**	**.7**	**92 965**	**.2**	**1 703**	**.9**	**56 643**	**.6**	**1 039**	**1.1**	**12 192**	**1.3**
Atlantic	214	1.5	12 085	.3	13	9.3	62	15.5	6	15.6	29	28.1
Bergen	48	3.5	252	2.9	7	13.6	123	20.2	2	31.7	(D)	(D)
Burlington	225	1.5	11 437	.6	107	2.5	4 720	.7	58	3.7	545	2.7
Camden	73	3.0	3 150	.5	25	7.2	121	11.2	12	10.9	52	14.5
Cape May	49	3.7	1 144	2.0	25	6.2	257	9.3	19	7.4	(D)	(D)
Cumberland	268	1.3	19 477	.3	49	4.2	2 296	1.4	26	6.3	512	2.6
Essex	13	1.1	47	.3	1	–	(D)	(D)	1	–	(D)	(D)
Gloucester	210	1.5	12 532	.2	96	3.1	3 093	2.0	55	4.3	532	5.1
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	105	2.9	1 135	4.1	352	1.6	8 445	1.7	230	2.1	2 488	2.9
Mercer	65	3.0	880	1.6	35	5.1	785	3.6	26	6.2	186	7.7
Middlesex	73	2.8	1 586	1.2	17	7.7	233	5.8	11	9.8	(D)	(D)
Monmouth	220	1.7	6 327	.4	96	3.4	1 507	3.4	58	4.6	482	6.3
Morris	79	2.6	865	1.6	61	3.5	773	3.4	40	4.3	313	4.7
Ocean	64	3.2	883	1.6	26	6.1	553	3.4	14	8.7	(D)	(D)
Passaic	20	5.2	85	3.3	9	10.7	41	11.8	6	14.2	(D)	(D)
Salem	145	1.8	18 227	.2	188	1.8	10 689	1.0	120	2.5	1 725	3.2
Somerset	55	3.8	541	1.9	107	2.9	4 660	2.0	67	3.7	1 812	2.6
Sussex	79	3.2	561	2.8	233	1.8	7 863	1.5	140	2.6	1 831	3.4
Union	8	–	50	–	2	–	(D)	(D)	1	–	(D)	(D)
Warren	76	3.4	1 701	2.1	254	1.8	10 391	1.2	147	2.6	1 307	3.5

Geographic area	Livestock and poultry—Con.											
	Milk cows inventory				Hogs and pigs inventory				Sheep and lambs inventory			
	Farms		Total		Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
New Jersey	**296**	**1.2**	**18 041**	**.4**	**431**	**1.7**	**23 189**	**2.0**	**690**	**1.4**	**13 149**	**2.2**
Atlantic	–	–	–	–	15	9.0	742	24.6	12	10.4	166	12.8
Bergen	–	–	–	–	1	–	(D)	(D)	7	10.1	65	17.4
Burlington	18	3.5	1 909	.4	29	5.5	268	6.1	34	5.3	428	7.5
Camden	–	–	–	–	13	10.3	424	22.7	17	7.8	146	10.9
Cape May	1	–	(D)	(D)	10	9.3	820	3.6	10	9.7	158	13.7
Cumberland	9	7.2	822	.1	20	7.7	2 215	5.9	24	6.9	232	7.9
Essex	–	–	–	–	1	–	(D)	(D)	–	–	–	–
Gloucester	12	7.0	990	2.8	42	5.0	12 952	2.4	39	5.4	1 395	14.9
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	47	3.6	1 665	2.1	68	3.9	1 525	9.6	176	2.4	3 250	3.0
Mercer	4	11.4	266	4.2	6	12.4	(D)	(D)	21	6.8	348	9.6
Middlesex	2	21.2	(D)	(D)	12	8.6	251	12.8	12	8.7	390	8.2
Monmouth	9	8.9	153	4.2	17	8.6	67	12.1	54	4.9	865	6.2
Morris	13	6.8	164	3.5	13	8.8	43	11.4	33	5.3	492	7.5
Ocean	3	13.7	(D)	(D)	23	6.9	653	13.0	13	9.9	95	12.8
Passaic	2	22.1	(D)	(D)	6	16.2	22	21.1	6	14.2	66	13.9
Salem	42	2.2	3 865	.4	40	4.7	1 600	10.4	46	4.5	943	6.6
Somerset	16	7.6	850	.6	23	6.8	268	6.1	43	4.9	1 241	5.8
Sussex	49	2.6	2 657	1.4	46	4.7	409	8.4	80	3.5	1 673	3.0
Union	–	–	–	–	–	–	–	–	–	–	–	–
Warren	69	2.1	4 450	.9	46	5.1	270	6.4	63	4.3	1 196	5.4

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1997**—Con.

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

Geographic area	Livestock and poultry—Con.							
	Layers 20 weeks old and older 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	**813**	**1.3**	**2 086 908**	**.1**	**79**	**3.8**	**40 712**	**11.7**
Atlantic	22	7.5	562	8.7	4	20.9	75	27.1
Bergen	7	13.8	1 800	19.1	1	–	(D)	(D)
Burlington	56	4.0	1 703	6.3	6	11.2	(D)	(D)
Camden	25	6.2	658	10.0	3	17.8	100	18.1
Cape May	20	7.2	647	10.6	–	–	–	–
Cumberland	24	6.4	(D)	(D)	–	–	–	–
Essex	1	–	(D)	(D)	–	–	–	–
Gloucester	33	5.9	686	8.3	2	27.5	(D)	(D)
Hudson	–	–	–	–	–	–	–	–
Hunterdon	118	3.0	4 378	4.5	11	9.6	9 987	4.5
Mercer	23	6.4	641	9.9	–	–	–	–
Middlesex	28	6.2	1 236	9.4	5	14.1	320	8.4
Monmouth	76	4.0	(D)	(D)	10	11.2	177	12.6
Morris	53	4.0	1 670	6.3	–	–	–	–
Ocean	27	6.3	2 898	11.0	2	20.6	(D)	(D)
Passaic	13	8.9	519	13.9	5	15.7	98	19.3
Salem	43	4.8	(D)	(D)	5	16.0	342	19.8
Somerset	52	4.5	8 137	16.0	3	20.6	(D)	(D)
Sussex	100	3.1	3 227	5.5	9	10.6	1 248	26.4
Union	1	–	(D)	(D)	–	–	–	–
Warren	91	3.5	(D)	(D)	13	10.0	1 860	20.7

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	**1 110**	**.9**	**89 252**	**.5**	**9 572 100**	**.5**	**367**	**1.2**	**20 564**	**.7**	**300 696**	**.7**
Atlantic	43	4.6	527	6.0	49 739	7.6	4	13.8	(D)	(D)	(D)	(D)
Bergen	–	–	–	–	–	–	–	–	–	–	–	–
Burlington	103	2.0	11 171	1.0	1 239 432	1.0	23	3.5	1 530	1.3	23 239	1.2
Camden	29	5.4	(D)	(D)	26 438	5.3	–	–	–	–	–	–
Cape May	18	7.1	477	11.7	(D)	(D)	–	–	–	–	–	–
Cumberland	57	3.8	3 799	3.5	352 840	2.5	13	6.1	1 015	.7	16 074	.8
Essex	–	–	–	–	–	–	–	–	–	–	–	–
Gloucester	68	3.4	2 945	2.6	259 050	2.2	13	6.0	1 011	1.5	16 809	1.4
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	193	2.0	12 056	1.4	1 212 575	1.4	51	3.1	1 806	2.4	26 467	1.9
Mercer	40	4.2	5 123	2.4	570 083	1.8	4	8.8	(D)	(D)	(D)	(D)
Middlesex	26	4.3	3 915	.9	504 718	.7	3	–	75	–	1 135	–
Monmouth	57	3.4	6 353	1.1	721 844	.8	6	11.7	135	5.8	2 529	3.7
Morris	20	5.5	2 291	1.1	227 691	1.4	5	11.1	109	2.1	1 547	2.6
Ocean	13	8.7	619	3.3	65 430	4.2	7	11.2	273	1.4	3 606	1.4
Passaic	2	29.9	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Salem	160	1.7	11 791	.8	1 235 948	.6	59	2.2	4 736	.8	68 801	.7
Somerset	42	4.6	3 003	1.9	268 389	1.9	13	5.4	1 279	.6	18 317	1.0
Sussex	59	3.4	3 507	2.3	348 504	2.4	64	2.7	4 475	2.7	56 988	2.6
Union	–	–	–	–	–	–	–	–	–	–	–	–
Warren	180	1.9	21 281	1.2	2 463 248	1.2	102	2.4	3 855	1.6	59 858	1.7

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	**914**	**.9**	**116 557**	**.5**	**3 599 073**	**.5**	**3 022**	**.8**	**114 523**	**.8**	**224 259**	**.7**
Atlantic	11	8.7	313	9.7	8 712	8.2	44	4.9	1 136	6.3	1 778	6.9
Bergen	–	–	–	–	–	–	7	11.8	205	26.2	243	24.3
Burlington	141	1.8	24 088	.7	714 447	.8	195	1.8	7 261	1.7	16 864	1.7
Camden	8	11.9	307	15.1	5 380	17.3	38	5.3	525	6.2	928	5.4
Cape May	3	14.8	(D)	(D)	(D)	(D)	43	4.1	1 336	5.0	1 720	5.1
Cumberland	99	2.8	12 610	1.4	332 557	1.5	132	2.5	3 278	3.7	6 955	3.3
Essex	–	–	–	–	–	–	1	–	(D)	(D)	(D)	(D)
Gloucester	123	2.4	11 960	1.1	322 443	1.1	136	2.6	3 515	2.8	6 636	3.2
Hudson	–	–	–	–	–	–	–	–	–	–	–	–
Hunterdon	86	2.9	8 203	1.8	277 256	1.6	674	1.1	28 417	1.2	52 280	1.2
Mercer	38	3.9	9 334	1.8	315 525	1.7	70	3.4	2 123	3.4	4 083	3.4
Middlesex	42	3.6	9 972	1.0	344 989	1.0	44	4.8	1 472	9.1	1 911	13.8
Monmouth	71	2.8	10 811	1.6	353 584	1.7	172	2.4	4 648	1.9	10 170	1.8
Morris	3	12.4	(D)	(D)	(D)	(D)	119	2.5	4 440	3.7	8 897	2.8

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1997**—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	9	8.4	428	1.9	9 303	1.8	50	4.0	1 064	7.3	1 627	6.1
Passaic	–	–	–	–	–	–	2	30.1	(D)	(D)	(D)	(D)
Salem	217	1.5	21 976	.8	711 083	.8	268	1.5	8 847	2.0	21 255	1.7
Somerset	26	4.9	2 750	2.7	68 088	2.6	211	1.8	11 419	2.5	22 355	2.5
Sussex	–	–	–	–	–	–	460	1.2	19 287	1.9	34 166	2.1
Union	–	–	–	–	–	–	1	–	(D)	(D)	(D)	(D)
Warren	37	3.4	2 885	2.4	112 891	2.5	355	1.5	15 472	1.4	32 344	1.3

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	**1 577**	**.8**	**63 414**	**.2**	**577**	**1.4**	**13 459**	**.5**
Atlantic	107	2.2	5 942	.5	42	4.9	840	2.7
Bergen	25	5.8	222	4.9	12	8.1	95	3.0
Burlington	149	2.0	4 816	1.2	35	4.7	586	2.6
Camden	54	3.7	1 845	.6	29	5.4	1 208	2.7
Cape May	31	4.9	841	4.0	1	37.3	(D)	(D)
Cumberland	165	1.7	15 483	.3	20	5.9	1 655	.4
Essex	8	–	97	–	2	–	(D)	(D)
Gloucester	139	1.9	8 348	.3	47	2.7	5 472	.1
Hudson	–	–	–	–	–	–	–	–
Hunterdon	112	3.0	1 170	2.3	80	3.8	477	4.2
Mercer	55	3.7	1 104	2.7	21	6.7	130	3.4
Middlesex	77	3.1	1 830	1.6	22	6.8	190	7.0
Monmouth	172	2.2	4 345	1.0	41	4.9	679	2.8
Morris	72	3.2	1 491	1.8	40	4.7	237	7.2
Ocean	46	4.3	606	2.0	13	9.7	45	11.0
Passaic	16	8.2	86	6.2	7	14.0	11	14.9
Salem	104	2.3	11 455	.2	12	8.8	(D)	(D)
Somerset	48	4.5	430	4.9	27	6.8	100	11.5
Sussex	96	3.1	1 274	2.2	58	4.0	319	4.1
Union	8	6.3	66	12.6	1	–	(D)	(D)
Warren	93	3.3	1 962	1.5	67	4.0	483	4.8

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

Table G. **Coverage Estimates: 1997**

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

Item	Census total	Coverage total[1]	Adjusted census		Coverage adjustment (percent)
			Total	Relative standard error (percent)	
Farms ..... number	9 101	942	10 043	2.9	9.4
Land in farms ..... acres	832 600	51 852	884 452	1.6	5.9
Average size of farm ..... acres	91	55	88	(X)	(X)
Farms by size of farm:					
Less than 10 acres	2 249	306	2 555	6.0	12.0
10 to 49 acres	3 807	461	4 268	4.2	10.8
50 to 179 acres	1 927	132	2 059	2.3	6.4
180 acres or more	1 118	43	1 161	3.9	3.7
Farms by value of sales:					
Less than $2,500	3 352	595	3 947	5.9	15.1
$2,500 to $9,999	2 202	241	2 443	5.4	9.9
$10,000 or more	3 547	106	3 653	2.9	2.9
Market value of agricultural products sold $1,000	697 380	–2 055	695 325	.8	–.3
Farms by type of organization:					
Individual or family	7 604	917	8 521	2.9	10.8
Partnership, corporation, or other	1 497	25	1 522	6.7	1.6
Farms by tenure of operator:					
Full owners	6 857	639	7 496	3.7	8.5
Part owners	1 600	186	1 786	4.8	10.4
Tenants	644	117	761	6.8	15.4
Operators by place of residence:					
On farm operated	7 119	807	7 926	3.5	10.2
Not on farm operated	1 397	119	1 516	4.9	7.8
Not reported	585	16	601	7.3	2.7
Operators by principal occupation:					
Farming	3 920	317	4 237	3.5	7.5
Other	5 181	625	5 806	4.7	10.8
Operators by sex:					
Male	7 745	604	8 349	3.1	7.2
Female	1 356	338	1 694	7.9	20.0
Operators by race:					
White	8 963	905	9 868	2.9	9.2
Black and other races	138	37	175	16.6	21.1
Operators by years on present farm:					
4 years or less	719	192	911	12.8	21.1
5 years or more	6 873	591	7 464	2.5	7.9
Not reported	1 509	159	1 668	11.5	9.5

[1] See text in Appendix C regarding coverage estimates.