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..	10.5	Corn for grain or seed ..... acres..	2.2
Land in farms ..... acres..	5.3	Wheat for grain ..... acres..	2.9
Estimated market value of land and buildings[1] ..... $1,000..	6.8	Livestock and poultry inventory:	
Market value of agricultural products sold ..... $1,000..	2.5	Cattle and calves..... number..	6.0
Harvested cropland..... acres..	4.1	Hogs and pigs ..... number..	7.4
		Layers 20 weeks old and older..... number..	.2

[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	40.2
50	4.0	50	28.0
75	3.0	75	22.5
100	2.4	100	19.2
150	1.5	150	15.2
200	.8	200	12.7
300	.7	300	9.6
500	.5	500	6.1
750	.4	750	3.1
1,000.....	.4	1,000.....	2.7
1,500.....	.3	1,500.....	2.2
2,000.....	.3	2,000.....	1.9

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..	34 030	.4
Land in farms ..... acres..	17 449 293	.4
Average size of farm ..... acres..	513	.6
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD		
Total sales (see text) ..... farms..	34 030	.4
$1,000..	2 969 194	.2
Average per farm ..... dollars..	87 252	.5
Farms by value of sales:		
Less than $1,000 (see text) ..... farms..	5 719	.6
$1,000..	1 617	.8
$1,000 to $2,499 ..... farms..	6 302	.5
$1,000..	10 216	.6
$2,500 to $4,999 ..... farms..	5 027	.6
$1,000..	17 756	.6
$5,000 to $9,999 ..... farms..	3 971	.6
$1,000..	27 798	.6
$10,000 to $19,999 ..... farms..	3 189	.8
$1,000..	44 754	.8
$20,000 to $24,999 ..... farms..	932	1.2
$1,000..	20 636	1.2
$25,000 to $39,999 ..... farms..	1 670	1.1
$1,000..	52 322	1.1
$40,000 to $49,999 ..... farms..	748	1.4
$1,000..	33 023	1.4
$50,000 to $99,999 ..... farms..	1 904	1.1
$1,000..	134 134	1.1
$100,000 to $249,999 ..... farms..	2 192	1.0
$1,000..	352 729	.9
$250,000 to $499,999 ..... farms..	1 184	–
$1,000..	416 836	–
$500,000 or more ..... farms..	1 192	–
$1,000..	1 857 374	–
Sales by commodity or commodity group:		
Crops, including nursery and greenhouse crops ..... farms..	16 822	.5
$1,000..	2 114 196	.2
Grains ..... farms..	3 006	.6
$1,000..	240 290	.3
Corn for grain ..... farms..	199	1.8
$1,000..	14 756	.7
Wheat ..... farms..	2 514	.6
$1,000..	196 483	.3
Soybeans ..... farms..	–	–
$1,000..	–	–
Sorghum for grain ..... farms..	–	–
$1,000..	–	–
Barley ..... farms..	655	1.1
$1,000..	16 377	.6
Oats ..... farms..	470	1.2
$1,000..	5 537	1.2
Other grains ..... farms..	222	1.3
$1,000..	7 137	1.2
Cotton and cottonseed ..... farms..	–	–
$1,000..	–	–
Tobacco ..... farms..	–	–
$1,000..	–	–
Hay, silage, and field seeds ..... farms..	8 396	.5
$1,000..	444 541	.3
Vegetables, sweet corn, and melons ..... farms..	1 432	.7
$1,000..	213 101	.2
Fruits, nuts, and berries ..... farms..	3 764	.6
$1,000..	307 917	.4
Nursery and greenhouse crops ..... farms..	4 195	.7
$1,000..	676 429	.2
Other crops ..... farms..	851	.8
$1,000..	231 918	.2
Livestock, poultry, and their products ..... farms..	20 579	.4
$1,000..	854 998	.2
Poultry and poultry products ..... farms..	1 279	.9
$1,000..	99 215	.2
Dairy products ..... farms..	540	.9
$1,000..	207 871	.2
Cattle and calves ..... farms..	15 980	.4
$1,000..	480 260	.3
Hogs and pigs ..... farms..	1 182	.9
$1,000..	5 544	2.4
Sheep, lambs, and wool ..... farms..	3 022	.7
$1,000..	25 806	.6
Other livestock and livestock products (see text) ..... farms..	3 933	.6
$1,000..	36 303	1.1
Value of agricultural products sold directly to individuals for human consumption (see text) ..... farms..	4 594	.5
$1,000..	14 287	.7

Item	Total	Relative standard error of estimate (percent)
FARM PRODUCTION EXPENSES[1]		
Total farm production expenses ..... farms..	34 035	.4
$1,000..	2 210 747	.4
Average per farm ..... dollars..	64 955	.6
Livestock and poultry purchased ..... farms..	9 806	1.9
$1,000..	144 065	1.6
Feed for livestock and poultry ..... farms..	18 390	1.1
$1,000..	229 748	1.0
Commercially mixed formula feeds ..... farms..	10 104	1.9
$1,000..	107 419	.9
Seeds, bulbs, plants, and trees ..... farms..	9 564	1.7
$1,000..	74 020	1.1
Commercial fertilizer ..... farms..	17 542	1.2
$1,000..	150 171	.9
Agricultural chemicals ..... farms..	16 232	1.3
$1,000..	124 154	.8
Petroleum products ..... farms..	30 564	.6
$1,000..	88 887	.8
Electricity ..... farms..	23 607	.9
$1,000..	47 980	.9
Hired farm labor ..... farms..	12 798	1.5
$1,000..	478 595	.5
Contract labor ..... farms..	5 212	2.7
$1,000..	45 902	1.9
Repair and maintenance ..... farms..	26 900	.8
$1,000..	157 011	.8
Customwork, machine hire, and rental of machinery and equipment ..... farms..	9 343	1.9
$1,000..	56 963	1.5
Interest ..... farms..	11 839	1.6
$1,000..	151 901	1.2
Secured by real estate ..... farms..	8 909	2.0
$1,000..	93 378	1.7
Not secured by real estate ..... farms..	5 849	2.3
$1,000..	58 523	1.1
Cash rent ..... farms..	5 872	2.3
$1,000..	98 115	1.3
Property taxes ..... farms..	31 894	.5
$1,000..	62 214	1.0
All other farm production expenses ..... farms..	30 735	.6
$1,000..	301 022	.6
NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)[1]		
All farms ..... number..	34 036	.4
$1,000..	727 810	.9
Average per farm ..... dollars..	21 384	1.0
Farms with net gains[2] ..... number..	13 946	1.3
$1,000..	882 829	.6
Average net gain ..... dollars..	63 303	1.4
Farms with net losses ..... number..	20 090	.9
$1,000..	155 019	2.0
Average net loss ..... dollars..	7 716	2.2
GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Government payments ..... farms..	4 521	.6
$1,000..	46 160	.8
Other farm-related income[1] ..... farms..	9 234	2.0
$1,000..	74 463	3.2
Customwork and other agricultural services ..... farms..	2 726	4.1
$1,000..	27 307	6.0
Gross cash rent or share payments ..... farms..	3 693	3.6
$1,000..	22 274	5.1
Forest products, excluding Christmas trees and maple products ..... farms..	1 626	5.3
$1,000..	16 984	6.6
Other farm-related income sources ..... farms..	3 183	3.3
$1,000..	7 898	4.8
COMMODITY CREDIT CORPORATION LOANS		
Total ..... farms..	210	1.6
$1,000..	6 417	1.0

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	28 101	.5
	acres	5 285 659	.4
Harvested cropland	farms	22 312	.5
	acres	3 154 523	.3
Farms by acres harvested:			
1 to 9 acres	farms	7 652	.5
	acres	29 819	.6
10 to 19 acres	farms	3 533	.6
	acres	46 401	.7
20 to 29 acres	farms	1 924	.8
	acres	43 848	.8
30 to 49 acres	farms	1 982	.9
	acres	72 740	.9
50 to 99 acres	farms	2 212	.9
	acres	150 568	.9
100 to 199 acres	farms	1 720	1.0
	acres	233 465	1.0
200 to 499 acres	farms	1 706	.9
	acres	532 297	.9
500 to 999 acres	farms	873	.7
	acres	608 648	.7
1,000 acres or more	farms	710	–
	acres	1 436 737	–
Cropland:			
Pasture or grazing only	farms	13 384	.5
	acres	909 186	.8
Other cropland	farms	5 494	.6
	acres	1 221 950	.7
Total woodland	farms	10 616	.5
	acres	1 841 874	.7
Pastureland and rangeland other than cropland and woodland pastured	farms	9 415	.5
	acres	9 663 817	.5
Land in house lots, ponds, roads, wasteland, etc.	farms	21 406	.4
	acres	657 943	.8
Irrigated land	farms	15 348	.5
	acres	1 948 739	.5
Acres irrigated:			
1 to 9 acres	farms	5 554	.6
	acres	21 087	.6
10 to 49 acres	farms	4 564	.6
	acres	103 480	.7
50 to 99 acres	farms	1 659	.9
	acres	114 801	1.0
100 to 199 acres	farms	1 377	1.0
	acres	190 104	1.0
200 to 499 acres	farms	1 312	.9
	acres	403 459	.9
500 to 999 acres	farms	551	.9
	acres	375 260	.9
1,000 acres or more	farms	331	.7
	acres	740 548	.6
Harvested cropland irrigated	farms	11 786	.5
	acres	1 409 654	.4
Pasture and other land irrigated	farms	7 078	.5
	acres	539 085	1.0
Land under Conservation Reserve or Wetlands Reserve Programs	farms	1 512	1.0
	acres	492 735	1.3
VALUE OF LAND AND BUILDINGS[1]			
Estimated market value of land and buildings	farms	34 036	.4
	$1,000	16 316 362	.9
Average per farm	dollars	479 385	1.0
Average per acre	dollars	960	1.7
VALUE OF MACHINERY AND EQUIPMENT[1]			
Estimated market value of all machinery and equipment	farms	34 036	.4
	$1,000	1 885 620	1.0
Average per farm	dollars	55 401	1.1
AGRICULTURAL CHEMICALS[1]			
Commercial fertilizer	farms	17 375	1.2
	acres on which used	2 598 433	.9

Item		Total	Relative standard error of estimate (percent)
TENURE OF OPERATOR			
All operators	farms	34 030	.4
	acres	17 449 293	.4
Full owners	farms	24 508	.4
	acres	7 084 329	.6
Part owners	farms	6 844	.5
	acres	8 260 842	.5
Tenants	farms	2 678	.9
	acres	2 104 122	.7
OWNED AND RENTED LAND			
Land owned	farms	31 441	.4
	acres	12 380 671	.5
Owned land in farms	farms	31 352	.4
	acres	11 328 061	.5
Land rented or leased from others	farms	9 617	.5
	acres	6 255 472	.5
	landlords	25 110	.5
Rented or leased land in farms	farms	9 522	.5
	acres	6 121 232	.5
Land rented or leased to others	farms	4 278	.6
	acres	1 186 850	2.0
OPERATOR CHARACTERISTICS			
Operators by place of residence:			
On farm operated		28 469	.4
Not on farm operated		4 061	.9
Not reported		1 500	.7
Operators by principal occupation:			
Farming		15 648	.5
Other		18 382	.5
Operators by days worked off farm:			
Any		19 934	.5
200 days or more		13 110	.5
Operators by sex:			
Male	farms	29 230	.4
	acres	16 415 151	.4
Female	farms	4 800	.7
	acres	1 034 142	1.4
Average age of operator	years	54.5	.6
FARMS BY TYPE OF ORGANIZATION			
Individual or family (sole proprietorship)	farms	28 965	.4
	acres	9 108 061	.5
Partnership	farms	2 527	1.0
	acres	3 088 660	.7
Corporation:			
Family held	farms	1 990	.9
	acres	3 713 182	.5
More than 10 stockholders	farms	57	3.0
10 or less stockholders	farms	1 933	.9
Other than family held	farms	192	2.2
	acres	240 971	2.0
More than 10 stockholders	farms	29	3.9
10 or less stockholders	farms	163	2.4
Other—cooperative, estate or trust, institutional, etc.	farms	356	1.6
	acres	1 298 419	.6
HIRED FARM LABOR[1]			
Hired workers by days worked:			
150 days or more	farms	5 391	2.2
	workers	23 484	1.1
Less than 150 days	farms	11 853	1.6
	workers	100 936	1.5
INJURIES AND DEATHS			
Farm-related injuries:			
Operator and family members	farms	348	1.6
	number	400	1.6
Hired workers	farms	538	.8
	number	1 042	.5
Farm-related deaths:			
Operator and family members	farms	5	–
	number	5	–
Hired workers	farms	3	–
	number	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)
FARMS BY SIZE			
1 to 9 acres	farms	7 202	.5
	acres	34 812	.6
10 to 49 acres	farms	11 954	.5
	acres	286 496	.5
50 to 69 acres	farms	2 028	.8
	acres	117 792	.8
70 to 99 acres	farms	2 028	.8
	acres	166 161	.8
100 to 139 acres	farms	1 750	.9
	acres	202 186	.9
140 to 179 acres	farms	1 314	1.0
	acres	206 148	1.0
180 to 219 acres	farms	810	1.2
	acres	159 456	1.2
220 to 259 acres	farms	578	1.3
	acres	137 360	1.3
260 to 499 acres	farms	1 981	.8
	acres	711 368	.8
500 to 999 acres	farms	1 601	.8
	acres	1 123 945	.8
1,000 to 1,999 acres	farms	1 035	1.0
	acres	1 431 877	1.0
2,000 acres or more	farms	1 749	.7
	acres	12 871 692	.4
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM			
Oilseed and grain farming (1111)	farms	1 587	.9
	acres	2 672 275	.6
Vegetable and melon farming (1112)	farms	842	1.0
	acres	338 483	.7
Fruit and tree nut farming (1113)	farms	3 336	.7
	acres	228 757	1.1
Greenhouse, nursery, and floriculture production (1114)	farms	3 572	.8
	acres	224 260	.7
Other crop farming (1119)	farms	5 511	.6
	acres	2 257 435	.6
Beef cattle ranching and farming (112111)	farms	12 037	.5
	acres	10 709 595	.5
Cattle feedlots (112112)	farms	1 111	1.0
	acres	397 479	1.5
Dairy cattle and milk production (11212)	farms	469	.9
	acres	112 865	1.4
Hog and pig farming (1122)	farms	415	1.5
	acres	14 553	3.3
Poultry and egg production (1123)	farms	304	1.7
	acres	20 107	4.1
Sheep and goat farming (1124)	farms	1 488	.9
	acres	209 014	1.5
Animal aquaculture and other animal production (1125, 1129)	farms	3 358	.7
	acres	264 470	2.6
LIVESTOCK			
Cattle and calves inventory	farms	17 122	.4
	number	1 559 162	.4
Beef cows	farms	13 393	.4
	number	695 635	.6
Milk cows	farms	1 052	.8
	number	86 747	.3
Cattle and calves sold	farms	15 980	.4
	number	979 199	.4
	$1,000	480 260	.3
Hogs and pigs inventory	farms	1 383	.9
	number	33 152	2.3
Hogs and pigs sold	farms	1 182	.9
	number	54 864	2.3
	$1,000	5 544	2.4
Sheep and lambs of all ages inventory	farms	3 070	.7
	number	282 872	.8
Sheep and lambs sold	farms	2 846	.7
	number	317 872	.5
Horses and ponies inventory	farms	10 688	.5
	number	68 276	.7
Horses and ponies sold	farms	2 579	.7
	number	7 610	1.3
POULTRY			
Layers and pullets 13 weeks old and older inventory (see text)	farms	2 241	.8
	number	3 272 027	.3
Layers 20 weeks old and older	farms	2 199	.8
	number	2 748 184	.1
Broilers and other meat-type chickens sold	farms	156	2.1
	number	18 966 576	.6
SELECTED CROPS HARVESTED			
Corn for grain or seed	farms	244	1.6
	acres	27 029	.9
	bushels	5 132 811	.7
Corn for silage or green chop	farms	360	1.3
	acres	21 592	.8
	tons, green	534 454	.8
Wheat for grain	farms	2 531	.6
	acres	882 862	.3
	bushels	54 694 903	.3
Barley for grain	farms	750	1.0
	acres	109 108	.7
	bushels	7 568 675	.6
Oats for grain	farms	570	1.1
	acres	30 173	1.1
	bushels	2 742 017	1.1
Potatoes, excluding sweetpotatoes	farms	342	1.2
	acres	57 653	.3
	cwt	28 090 477	.2
Sugar beets for sugar	farms	167	1.3
	acres	19 126	.8
	tons	526 585	.7
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms	12 933	.5
	acres	1 066 643	.5
	tons, dry	3 009 247	.5
Vegetables harvested for sale (see text)	farms	1 432	.7
	acres	155 242	.3
Land in orchards	farms	3 869	.6
	acres	96 270	.6

[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..	13 011	.6
Land in farms ..... acres..	15 527 926	.4
Average size of farm ..... acres..	1 193	.7
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD		
Total sales (see text) ..... farms..	13 011	.6
$1,000..	2 911 808	.2
Average per farm ..... dollars..	223 796	.6
Farms by value of sales:		
$10,000 to $19,999 ..... farms..	3 189	.7
$1,000..	44 754	.7
$20,000 to $24,999 ..... farms..	932	1.2
$1,000..	20 636	1.2
$25,000 to $39,999 ..... farms..	1 670	1.1
$1,000..	52 322	1.1
$40,000 to $49,999 ..... farms..	748	1.4
$1,000..	33 023	1.4
$50,000 to $99,999 ..... farms..	1 904	1.1
$1,000..	134 134	1.1
$100,000 to $249,999 ..... farms..	2 192	1.0
$1,000..	352 729	.9
$250,000 to $499,999 ..... farms..	1 184	–
$1,000..	416 836	–
$500,000 or more ..... farms..	1 192	–
$1,000..	1 857 374	–
Sales by commodity or commodity group:		
Crops, including nursery and greenhouse crops ..... farms..	9 264	.6
$1,000..	2 094 316	.2
Grains ..... farms..	2 706	.6
$1,000..	239 367	.3
Corn for grain ..... farms..	191	1.7
$1,000..	14 736	.7
Wheat ..... farms..	2 336	.6
$1,000..	195 899	.3
Soybeans ..... farms..	–	–
$1,000..	–	–
Sorghum for grain ..... farms..	–	–
$1,000..	–	–
Barley ..... farms..	613	1.1
$1,000..	16 259	.6
Oats ..... farms..	388	1.3
$1,000..	5 382	1.3
Other grains ..... farms..	209	1.3
$1,000..	7 091	1.2
Cotton and cottonseed ..... farms..	–	–
$1,000..	–	–
Tobacco ..... farms..	–	–
$1,000..	–	–
Hay, silage, and field seeds ..... farms..	4 227	.7
$1,000..	436 214	.3
Vegetables, sweet corn, and melons ..... farms..	1 055	.7
$1,000..	212 361	.2
Fruits, nuts, and berries ..... farms..	2 168	.7
$1,000..	303 976	.4
Nursery and greenhouse crops ..... farms..	2 393	.8
$1,000..	670 604	.2
Other crops ..... farms..	785	.7
$1,000..	231 795	.1
Livestock, poultry, and their products ..... farms..	7 178	.6
$1,000..	817 491	.2
Poultry and poultry products ..... farms..	222	1.9
$1,000..	98 754	.2
Dairy products ..... farms..	503	.9
$1,000..	207 834	.2
Cattle and calves ..... farms..	6 152	.6
$1,000..	453 049	.3
Hogs and pigs ..... farms..	321	1.6
$1,000..	4 530	2.8
Sheep, lambs, and wool ..... farms..	947	1.0
$1,000..	22 951	.6
Other livestock and livestock products (see text) ..... farms..	1 154	1.0
$1,000..	30 373	1.2
Value of agricultural products sold directly to individuals for human consumption (see text) ..... farms..	1 095	.9
$1,000..	10 064	1.0

Item	Total	Relative standard error of estimate (percent)
FARM PRODUCTION EXPENSES[1]		
Total farm production expenses ..... farms..	12 994	.6
$1,000..	2 085 962	.4
Average per farm ..... dollars..	160 533	.7
Livestock and poultry purchased ..... farms..	3 975	2.7
$1,000..	134 405	1.7
Feed for livestock and poultry ..... farms..	6 065	1.8
$1,000..	214 770	1.0
Commercially mixed formula feeds ..... farms..	3 537	2.9
$1,000..	103 367	1.0
Seeds, bulbs, plants, and trees ..... farms..	6 450	1.8
$1,000..	72 989	1.2
Commercial fertilizer ..... farms..	9 215	1.3
$1,000..	146 175	.9
Agricultural chemicals ..... farms..	8 587	1.3
$1,000..	121 507	.8
Petroleum products ..... farms..	12 670	.7
$1,000..	80 797	.8
Electricity ..... farms..	10 715	1.1
$1,000..	43 842	1.0
Hired farm labor ..... farms..	7 720	1.6
$1,000..	474 935	.5
Contract labor ..... farms..	3 158	3.0
$1,000..	44 025	1.9
Repair and maintenance ..... farms..	11 972	.8
$1,000..	140 250	.8
Customwork, machine hire, and rental of machinery and equipment ..... farms..	5 318	2.2
$1,000..	54 353	1.5
Interest ..... farms..	7 150	1.7
$1,000..	136 056	1.2
Secured by real estate ..... farms..	5 045	2.3
$1,000..	79 023	1.7
Not secured by real estate ..... farms..	4 457	2.3
$1,000..	57 033	1.1
Cash rent ..... farms..	4 416	2.4
$1,000..	96 661	1.3
Property taxes ..... farms..	11 872	.8
$1,000..	38 277	1.3
All other farm production expenses ..... farms..	12 993	.6
$1,000..	286 920	.6
NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)[1]		
All farms ..... number..	12 994	.6
$1,000..	794 726	.8
Average per farm ..... dollars..	61 161	1.0
Farms with net gains[2] ..... number..	9 642	1.2
$1,000..	875 097	.6
Average net gain ..... dollars..	90 759	1.4
Farms with net losses ..... number..	3 352	3.2
$1,000..	80 371	3.1
Average net loss ..... dollars..	23 977	4.4
GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Government payments ..... farms..	3 338	.6
$1,000..	38 128	.6
Other farm-related income[1] ..... farms..	4 681	2.4
$1,000..	57 136	3.5
Customwork and other agricultural services ..... farms..	1 587	5.0
$1,000..	24 951	6.5
Gross cash rent or share payments ..... farms..	1 559	5.2
$1,000..	14 722	4.8
Forest products, excluding Christmas trees and maple products ..... farms..	638	8.0
$1,000..	10 386	7.3
Other farm-related income sources ..... farms..	2 247	3.4
$1,000..	7 077	4.8
COMMODITY CREDIT CORPORATION LOANS		
Total ..... farms..	205	1.6
$1,000..	6 410	1.0

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)
LAND IN FARMS ACCORDING TO USE			
Total cropland	farms	11 958	.6
	acres	4 665 369	.4
Harvested cropland	farms	11 046	.6
	acres	2 993 089	.3
Cropland:			
Pasture or grazing only	farms	4 531	.7
	acres	647 706	.9
Total woodland	farms	3 755	.7
	acres	1 420 034	.8
Pastureland and rangeland other than cropland and woodland pastured	farms	4 027	.7
	acres	8 903 841	.4
Land in house lots, ponds, roads, wasteland, etc.	farms	7 911	.6
	acres	538 682	.7
Irrigated land	farms	7 911	.6
	acres	1 811 155	.4
Harvested cropland irrigated	farms	7 007	.6
	acres	1 355 571	.4
Pasture and other land irrigated	farms	2 955	.7
	acres	455 584	1.0
Land under Conservation Reserve or Wetlands Reserve Programs	farms	922	1.0
	acres	332 436	1.2
VALUE OF LAND AND BUILDINGS[1]			
Estimated market value of land and buildings	farms	12 994	.6
	$1,000	11 396 981	1.0
Average per farm	dollars	877 096	1.2
Average per acre	dollars	755	1.8
VALUE OF MACHINERY AND EQUIPMENT[1]			
Estimated market value of all machinery and equipment	farms	12 994	.6
	$1,000	1 468 684	1.2
Average per farm	dollars	113 028	1.3
AGRICULTURAL CHEMICALS[1]			
Commercial fertilizer	farms	9 149	1.3
	acres on which used	2 490 775	1.0
TENURE OF OPERATOR			
All operators	farms	13 011	.6
	acres	15 527 926	.4
Full owners	farms	6 868	.7
	acres	5 843 995	.6
Part owners	farms	4 482	.5
	acres	7 792 458	.4
Tenants	farms	1 661	1.0
	acres	1 891 473	.8
OWNED AND RENTED LAND			
Land owned	farms	11 400	.6
	acres	10 547 024	.5
Owned land in farms	farms	11 350	.6
	acres	9 890 885	.4
Land rented or leased from others	farms	6 186	.6
	acres	5 749 423	.5
	landlords	19 372	.5
Rented or leased land in farms	farms	6 143	.6
	acres	5 637 041	.5
Land rented or leased to others	farms	1 844	.8
	acres	768 521	2.7
OPERATOR CHARACTERISTICS			
Operators by place of residence:			
On farm operated		10 346	.6
Not on farm operated		2 133	1.1
Not reported		532	1.1
Operators by principal occupation:			
Farming		9 172	.6
Other		3 839	.8
Operators by days worked off farm:			
Any		5 517	.7
200 days or more		2 918	.8
Operators by sex:			
Male		11 830	.6
Female		1 181	1.1
Average age of operator	years	53.7	.8

Item		Total	Relative standard error of estimate (percent)
FARMS BY TYPE OF ORGANIZATION			
Individual or family (sole proprietorship)	farms	9 399	.6
	acres	7 682 157	.5
Partnership	farms	1 665	1.1
	acres	2 917 723	.7
Corporation:			
Family held	farms	1 655	.8
	acres	3 627 533	.5
More than 10 stockholders	farms	37	2.4
10 or less stockholders	farms	1 618	.9
Other than family held	farms	144	2.2
	acres	154 704	2.6
More than 10 stockholders	farms	25	3.6
10 or less stockholders	farms	119	2.5
Other—cooperative, estate or trust, institutional, etc.	farms	148	2.5
	acres	1 145 809	.6
HIRED FARM LABOR[1]			
Hired workers by days worked:			
150 days or more	farms	4 377	2.2
	workers	22 414	1.0
Less than 150 days	farms	6 824	1.7
	workers	88 010	1.5
INJURIES AND DEATHS			
Farm-related injuries:			
Operator and family members	farms	167	2.1
	number	193	2.2
Hired workers	farms	516	.8
	number	1 013	.5
Farm-related deaths:			
Operator and family members	farms	3	–
	number	(D)	(D)
Hired workers	farms	3	–
	number	(D)	(D)
FARMS BY SIZE			
1 to 9 acres		1 102	1.1
10 to 49 acres		2 482	.9
50 to 69 acres		708	1.3
70 to 99 acres		897	1.1
100 to 139 acres		944	1.1
140 to 179 acres		741	1.2
180 to 219 acres		501	1.4
220 to 259 acres		389	1.5
260 to 499 acres		1 455	.9
500 to 999 acres		1 272	.8
1,000 to 1,999 acres		895	.9
2,000 acres or more		1 625	.7
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM			
Oilseed and grain farming (1111)		1 021	.8
Vegetable and melon farming (1112)		628	1.0
Fruit and tree nut farming (1113)		1 713	.9
Greenhouse, nursery, and floriculture production (1114)		1 979	.9
Other crop farming (1119)		2 579	.8
Beef cattle ranching and farming (112111)		3 661	.7
Cattle feedlots (112112)		127	2.4
Dairy cattle and milk production (11212)		459	.9
Hog and pig farming (1122)		61	3.7
Poultry and egg production (1123)		86	2.2
Sheep and goat farming (1124)		200	2.1
Animal aquaculture and other animal production (1125, 1129)		497	1.5
LIVESTOCK			
Cattle and calves inventory	farms	6 204	.6
	number	1 388 317	.4
Beef cows	farms	5 022	.6
	number	614 375	.6
Milk cows	farms	653	.9
	number	85 924	.3
Cattle and calves sold	farms	6 152	.6
	number	908 537	.4
	$1,000	453 049	.3
Hogs and pigs inventory	farms	381	1.6
	number	25 800	2.9
Hogs and pigs sold	farms	321	1.6
	number	45 520	2.7
	$1,000	4 530	2.8
Sheep and lambs of all ages inventory	farms	962	1.0
	number	227 904	.8
Sheep and lambs sold	farms	914	1.0
	number	278 613	.6
Horses and ponies inventory	farms	3 500	.7
	number	28 018	.9
Horses and ponies sold	farms	785	1.2
	number	4 042	2.3

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	357	1.7
	number	3 236 745	.3
Layers 20 weeks old and older	farms	353	1.7
	number	2 717 378	.1
Broilers and other meat-type chickens sold	farms	68	2.5
	number	18 960 076	.6
SELECTED CROPS HARVESTED			
Corn for grain or seed	farms	220	1.6
	acres	26 929	.9
	bushels	5 121 125	.8
Corn for silage or green chop	farms	324	1.3
	acres	21 304	.8
	tons, green	528 794	.8
Wheat for grain	farms	2 342	.6
	acres	878 925	.3
	bushels	54 518 806	.3
SELECTED CROPS HARVESTED—Con.			
Barley for grain	farms	701	1.0
	acres	107 847	.7
	bushels	7 499 107	.6
Oats for grain	farms	472	1.2
	acres	28 907	1.1
	bushels	2 647 931	1.1
Potatoes, excluding sweetpotatoes	farms	296	1.1
	acres	57 533	.3
	cwt	28 084 554	.2
Sugar beets for sugar	farms	167	1.3
	acres	19 126	.8
	tons	526 585	.7
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms	5 558	.6
	acres	932 733	.5
	tons, dry	2 753 432	.5
Vegetables harvested for sale (see text)	farms	1 055	.7
	acres	154 729	.3
Land in orchards	farms	1 671	.8
	acres	85 599	.6

[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	6.7	1.1	7.5	1.2
Land in farms ..... acres	–.9	.5	–.5	.4
Average size of farm ..... acres	–7.1	1.1	–7.4	1.1
Estimated market value of land and buildings[1]:				
Average per farm ..... dollars	29.2	2.3	24.5	2.4
Average per acre ..... dollars	44.8	3.1	39.0	3.2
Estimated market value of all machinery and equipment[1]:				
Average per farm ..... dollars	14.9	2.1	17.0	2.4
Farms by size:				
1 to 9 acres	14.0	1.5	29.5	2.2
10 to 49 acres	6.4	1.3	13.3	1.8
50 to 179 acres	5.5	.9	9.8	1.2
180 to 499 acres	–.6	1.2	–2.7	1.2
500 to 999 acres	6.2	1.6	4.9	1.5
1,000 to 1,999 acres	3.8	1.0	3.9	1.0
2,000 acres or more	3.2	.8	2.9	.7
Total cropland ..... farms	6.0	1.1	8.2	1.2
acres	4.9	.6	5.0	.5
Harvested cropland ..... farms	7.6	1.1	10.9	1.2
acres	11.7	.5	12.4	.5
Irrigated land ..... farms	2.3	1.1	3.5	1.2
acres	20.1	.8	20.8	.8
Market value of agricultural products sold $1,000	29.5	.4	30.0	.4
Average per farm ..... dollars	21.4	1.3	20.9	1.4
Crops, including nursery and greenhouse crops $1,000	45.6	.4	45.9	.4
Livestock, poultry, and their products $1,000	1.7	.4	1.6	.4
Farms by value of sales:				
Less than $2,500	4.6	1.1	(X)	(X)
$2,500 to $4,999	10.0	1.6	(X)	(X)
$5,000 to $9,999	6.3	1.5	(X)	(X)
$10,000 to $24,999	8.4	1.4	8.4	1.4
$25,000 to $49,999	10.8	1.7	10.8	1.7
$50,000 to $99,999	–1.9	1.7	–1.9	1.7
$100,000 to $249,999	1.7	1.2	1.7	1.2
$250,000 to $499,999	5.9	–	5.9	–
$500,000 or more	32.2	–	32.2	–
Total farm production expenses[1] $1,000	17.5	.7	18.5	.9
Average per farm ..... dollars	10.0	1.4	10.5	1.5
Net cash return from agricultural sales for the farm unit (see text)[1] ..... farms	6.8	1.2	7.2	1.4
$1,000	82.4	2.7	70.2	2.1
Average per farm ..... dollars	70.8	3.2	58.7	2.8
Operators by principal occupation:				
Farming	2.2	1.0	.9	1.1
Other	10.8	1.4	27.7	1.8
Operators by days worked off farm:				
Any	8.2	1.3	13.4	1.6
200 days or more	8.4	1.3	21.2	1.8
Livestock and poultry:				
Cattle and calves inventory ..... farms	.2	1.1	1.2	1.1
number	6.4	.7	6.6	.6
Beef cows ..... farms	2.2	1.1	5.4	1.2
number	10.5	.8	10.8	.8
Milk cows ..... farms	–31.7	.9	–33.5	.8
number	–12.4	.4	–12.3	.3
Cattle and calves sold ..... farms	2.4	1.1	.5	1.1
number	8.9	.6	8.7	.6
Hogs and pigs inventory ..... farms	–17.1	1.3	–6.2	2.1
number	–43.1	1.6	–47.1	1.8
Hogs and pigs sold ..... farms	–19.2	1.3	–13.7	2.0
number	–43.7	1.5	–45.9	1.6
Sheep and lambs inventory ..... farms	–15.6	1.1	–11.9	1.5
number	–28.0	.7	–26.0	.8
Layers and pullets 13 weeks old and older inventory (see text) ..... farms	–9.6	1.3	–12.7	2.0
number	10.8	.3	11.4	.3
Broilers and other meat-type chickens sold ..... farms	–25.0	2.2	–23.6	2.4
number	.2	.6	.3	.6
Selected crops harvested:				
Wheat for grain ..... farms	–16.3	.8	–12.3	.8
acres	–4.5	.4	–4.1	.4
bushels	17.6	.5	18.0	.5
Barley for grain ..... farms	–31.6	.9	–29.6	1.0
acres	–14.2	.7	–13.7	.7
bushels	–2.8	.8	–2.5	.8
Oats for grain ..... farms	–29.6	1.1	–23.0	1.3
acres	–21.1	1.2	–16.5	1.3
bushels	–7.1	1.5	–3.9	1.6
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ..... farms	7.2	1.2	9.6	1.3
acres	22.2	1.0	25.7	1.0
tons, dry	32.2	1.1	34.5	1.1
Vegetables harvested for sale (see text) ..... farms	–5.1	1.1	–3.4	1.0
acres	5.2	.4	5.4	.4
Land in orchards ..... farms	–7.9	1.1	2.6	1.4
acres	.1	.9	2.5	.9

[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)
Oregon	**34 030**	**.4**	**17 449 293**	**.4**	**513**	**.6**	**479 385**	**1.0**	**1 885 620**	**1.0**
Baker	704	.6	1 007 737	1.4	1 431	1.5	726 624	4.1	43 716	8.7
Benton	726	.4	130 818	1.0	180	1.1	413 094	5.1	39 939	4.5
Clackamas	3 745	.4	179 650	.8	48	.9	366 977	2.6	137 330	3.2
Clatsop	229	.3	22 783	2.8	99	2.8	372 082	11.9	6 257	10.7
Columbia	686	.3	65 567	1.2	96	1.3	334 587	5.7	17 653	6.3
Coos	675	.6	163 021	2.3	242	2.4	344 882	11.3	20 545	7.0
Crook	521	.5	916 451	1.0	1 759	1.1	607 867	4.2	34 711	12.1
Curry	168	.6	84 781	4.8	505	4.9	753 857	8.4	6 916	5.8
Deschutes	1 235	.5	124 395	1.6	101	1.6	368 394	7.1	45 643	11.3
Douglas	1 908	.4	401 635	1.4	211	1.4	323 720	5.6	50 672	6.5
Gilliam	166	1.2	742 728	1.4	4 474	1.8	1 179 942	2.6	28 863	6.6
Grant	407	.8	1 080 756	1.2	2 655	1.5	938 073	4.6	20 248	13.1
Harney	504	.8	1 358 883	1.0	2 696	1.3	795 492	7.3	29 601	6.9
Hood River	537	.5	28 362	1.3	53	1.4	435 717	4.7	32 014	6.1
Jackson	1 623	.4	246 101	1.7	152	1.8	352 746	4.9	52 654	5.1
Jefferson	399	.6	783 466	.7	1 964	.9	765 509	6.5	42 007	9.5
Josephine	616	.4	34 565	2.8	56	2.8	219 482	7.7	16 339	11.8
Klamath	1 066	.7	713 534	1.3	669	1.5	506 725	3.7	76 828	7.8
Lake	418	.5	736 694	1.2	1 762	1.3	774 536	6.6	30 182	6.4
Lane	2 104	.4	223 720	1.1	106	1.2	335 645	3.2	72 220	3.5
Lincoln	306	.4	31 935	2.4	104	2.4	277 833	8.6	7 390	6.9
Linn	2 009	.3	393 393	.6	196	.7	455 721	2.8	123 788	3.1
Malheur	1 207	.5	1 257 201	1.0	1 042	1.1	655 345	6.8	124 891	3.0
Marion	2 546	.5	306 083	.6	120	.8	499 781	2.3	223 215	3.8
Morrow	420	.6	1 118 226	.6	2 662	.8	909 211	3.1	68 895	5.0
Multnomah	577	.6	34 479	1.3	60	1.4	373 916	5.6	20 744	7.0
Polk	1 147	.4	171 423	.7	149	.8	497 762	4.3	55 138	2.6
Sherman	168	.5	425 036	1.1	2 530	1.2	851 876	4.9	28 292	3.8
Tillamook	313	.3	35 580	.8	114	.9	386 574	5.0	20 658	3.6
Umatilla	1 488	.4	1 345 097	.8	904	.9	611 467	2.8	132 649	3.3
Union	832	.4	531 990	1.0	639	1.1	470 924	5.9	45 800	4.7
Wallowa	459	.5	620 886	1.3	1 353	1.4	625 472	5.7	22 307	7.6
Wasco	470	.5	1 135 198	.7	2 415	.8	825 304	4.1	40 796	4.8
Washington	1 681	.5	130 887	.7	78	.9	457 895	3.0	77 460	2.9
Wheeler	157	.6	679 912	1.0	4 331	1.1	1 246 042	3.4	7 804	5.3
Yamhill	1 813	.4	186 320	1.4	103	1.4	456 510	3.0	81 456	3.1

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)
Oregon	**55 401**	**1.1**	**2 969 194**	**.2**	**87 252**	**.5**	**34 035**	**.4**	**2 210 747**	**.4**
Baker	62 096	8.7	53 876	.8	76 528	1.0	704	.7	38 254	3.2
Benton	54 937	4.6	70 202	.4	96 697	.5	727	.6	45 475	1.1
Clackamas	36 670	3.2	276 251	.2	73 765	.5	3 744	.5	198 946	.9
Clatsop	27 323	10.7	5 325	1.5	23 253	1.5	229	1.1	5 729	4.8
Columbia	25 733	6.3	24 851	.4	36 225	.5	686	.6	15 440	3.5
Coos	30 437	7.0	30 527	1.1	45 225	1.3	675	.7	23 122	5.7
Crook	66 624	12.1	31 436	.9	60 338	1.0	521	.7	26 606	4.2
Curry	41 164	6.0	13 061	1.1	77 743	1.2	168	1.7	8 994	2.2
Deschutes	36 958	11.3	21 495	1.2	17 405	1.3	1 235	.6	21 161	3.7
Douglas	26 571	6.5	35 338	.8	18 521	.9	1 907	.5	28 485	4.4
Gilliam	171 802	6.8	24 526	.8	147 746	1.5	168	1.5	18 334	2.1
Grant	49 749	13.1	17 093	1.6	41 998	1.7	407	.8	17 141	7.1
Harney	58 732	7.0	38 883	1.0	77 150	1.3	504	1.0	33 624	3.9
Hood River	59 615	6.2	63 306	.6	117 888	.8	537	.7	46 384	2.9
Jackson	32 463	5.1	50 957	.6	31 396	.7	1 622	.6	43 939	1.8
Jefferson	105 019	9.5	43 152	.7	108 150	.9	400	.9	35 022	4.2
Josephine	26 567	11.8	16 204	.9	26 305	1.0	615	.7	13 815	5.9
Klamath	72 071	7.9	100 622	.5	94 392	.9	1 066	.7	79 204	2.4
Lake	72 206	6.4	42 759	.7	102 294	.9	418	.7	30 260	4.9
Lane	34 309	3.6	87 170	.4	41 430	.6	2 105	.5	72 083	1.5
Lincoln	24 149	7.0	4 127	2.3	13 488	2.3	306	1.1	3 981	12.7
Linn	61 586	3.1	174 215	.3	86 717	.4	2 010	.4	126 891	1.3
Malheur	103 558	3.0	208 218	.3	172 509	.6	1 206	.6	160 351	1.3
Marion	87 707	3.9	438 369	.2	172 179	.6	2 545	.6	313 438	.6
Morrow	164 036	5.1	141 531	.2	336 979	.6	420	.7	112 702	1.4
Multnomah	35 952	7.1	41 326	.5	71 621	.8	577	.8	26 365	1.9
Polk	48 030	2.7	91 094	.4	79 420	.5	1 148	.6	63 511	1.4
Sherman	168 404	4.1	23 937	.7	142 484	.9	168	1.5	16 811	2.3
Tillamook	66 000	3.6	62 504	.4	199 693	.5	313	.7	47 827	2.4

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	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)
Umatilla	89 026	3.3	249 201	.2	167 474	.5	1 490	.5	176 914	.7
Union	55 048	4.8	47 731	.5	57 369	.6	832	.6	34 606	4.3
Wallowa	48 600	7.6	27 436	1.1	59 774	1.2	459	.7	22 000	4.6
Wasco	86 800	4.9	56 987	.6	121 249	.7	470	.7	42 762	2.2
Washington	46 025	3.0	186 045	.3	110 675	.5	1 683	.6	128 851	1.2
Wheeler	49 708	5.5	6 602	1.5	42 053	1.6	157	1.5	6 039	4.0
Yamhill	44 929	3.1	162 837	.3	89 817	.5	1 813	.5	125 681	1.0

Farm production expenses[1]—Con.

Geographic area	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Oregon	**9 806**	**1.9**	**144 065**	**1.6**	**18 390**	**1.1**	**229 748**	**1.0**	**9 564**	**1.7**	**74 020**	**1.1**
Baker	382	8.1	6 398	7.5	494	5.7	5 599	7.7	228	12.0	738	6.7
Benton	140	17.3	867	27.7	351	8.2	3 280	2.4	234	10.7	1 511	4.9
Clackamas	885	6.3	7 698	7.3	1 774	3.0	19 505	3.9	1 052	5.0	6 900	5.6
Clatsop	77	16.4	225	17.8	179	6.0	1 936	13.0	13	41.4	8	54.1
Columbia	179	15.5	608	27.6	463	5.8	1 680	7.9	114	16.2	124	31.1
Coos	196	13.7	2 391	22.1	449	6.0	3 463	9.6	102	18.7	442	34.0
Crook	177	13.7	1 877	3.0	316	9.0	2 867	4.3	75	15.8	410	11.1
Curry	65	10.6	930	3.8	113	6.3	759	6.4	45	12.9	69	6.4
Deschutes	453	9.0	1 853	21.6	806	5.2	2 929	6.2	139	18.5	324	5.9
Douglas	713	7.0	4 630	6.3	1 356	3.1	4 396	7.4	344	11.1	328	28.0
Gilliam	49	13.8	813	3.4	91	9.0	1 309	7.6	87	7.8	721	3.7
Grant	187	12.6	1 237	15.7	294	7.4	3 396	8.9	101	20.5	89	10.3
Harney	236	9.6	4 686	4.0	351	6.5	4 608	9.1	141	17.3	380	10.0
Hood River	9	54.0	(D)	(D)	119	16.2	(D)	(D)	210	10.5	605	10.6
Jackson	448	9.9	2 114	18.6	946	4.7	2 113	7.5	283	12.2	795	17.7
Jefferson	81	22.5	1 328	34.9	175	13.1	1 682	11.2	168	11.3	1 013	5.0
Josephine	213	12.2	522	21.7	361	7.6	3 723	11.4	176	13.7	444	34.1
Klamath	410	9.6	9 997	3.5	627	6.3	11 325	7.7	280	10.6	2 330	5.8
Lake	145	16.2	3 169	17.1	250	8.4	2 163	15.8	111	19.1	490	12.6
Lane	510	9.0	8 893	4.7	1 167	3.6	10 385	1.5	538	8.1	2 366	8.8
Lincoln	120	13.3	143	17.9	229	6.5	340	11.9	49	23.4	180	73.5
Linn	699	6.8	6 857	13.0	1 274	3.5	13 812	4.7	441	8.1	2 463	10.6
Malheur	442	9.6	23 305	3.0	593	7.1	16 474	3.0	657	5.6	6 592	5.0
Marion	531	8.7	7 919	13.5	1 012	4.4	30 686	.6	912	5.3	10 048	1.6
Morrow	92	18.1	(D)	(D)	174	12.4	(D)	(D)	145	9.8	5 458	2.2
Multnomah	94	17.1	161	32.4	217	10.1	226	15.9	136	11.8	2 385	7.3
Polk	287	11.0	2 129	10.2	627	4.7	7 727	2.6	349	7.8	900	3.9
Sherman	36	15.5	189	6.6	87	8.3	1 611	2.3	114	4.9	881	4.1
Tillamook	146	11.0	2 474	8.4	240	7.2	23 692	3.9	57	18.8	103	39.2
Umatilla	395	9.6	18 104	4.6	711	6.1	11 598	3.0	536	6.5	8 479	1.5
Union	282	11.3	1 051	6.7	482	7.0	2 379	8.0	244	9.5	1 151	5.2
Wallowa	193	11.5	2 597	5.0	311	7.3	2 453	11.3	113	11.4	466	15.1
Wasco	134	13.2	1 454	9.2	209	10.3	1 903	6.6	190	8.8	730	4.5
Washington	292	12.1	1 501	12.0	544	6.9	5 590	1.9	704	5.6	7 958	2.6
Wheeler	64	12.4	678	15.2	106	7.6	1 263	5.9	44	13.4	67	12.7
Yamhill	444	9.4	3 076	7.6	892	4.7	16 135	2.9	432	7.5	6 071	4.1

Farm production expenses[1]—Con.

Geographic area	Commercial fertilizer				Agricultural chemicals				Petroleum products			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Oregon	**17 542**	**1.2**	**150 171**	**.9**	**16 232**	**1.3**	**124 154**	**.8**	**30 564**	**.6**	**88 887**	**.8**
Baker	329	9.2	2 372	11.9	274	11.2	665	5.6	638	2.9	1 854	10.4
Benton	493	6.1	4 735	2.2	395	7.1	4 038	2.5	629	3.4	1 646	2.9
Clackamas	1 863	3.4	5 178	6.6	2 132	3.0	4 840	6.4	3 408	1.2	5 095	2.6
Clatsop	20	34.9	17	38.7	71	17.5	16	26.8	204	3.3	254	10.7
Columbia	145	16.3	431	18.0	251	10.9	238	4.2	598	3.2	485	12.7
Coos	320	9.0	542	10.5	311	8.7	419	11.0	633	2.5	1 095	6.2
Crook	281	10.0	2 110	12.8	143	16.8	3 059	6.1	427	6.1	1 446	6.0
Curry	80	8.2	382	7.1	67	9.0	189	12.6	157	2.7	339	4.1
Deschutes	774	5.2	1 661	6.5	184	15.7	446	7.6	1 011	3.2	1 073	5.9

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.											
	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)
Douglas	793	6.0	1 570	20.2	626	7.4	592	43.2	1 688	1.9	1 650	7.9
Gilliam	102	4.8	1 934	2.1	89	4.7	1 337	4.7	157	3.8	1 348	3.7
Grant	133	16.4	372	8.1	76	21.3	188	19.1	352	4.9	1 040	6.6
Harney	128	15.7	970	18.9	164	14.2	485	25.1	460	3.4	1 959	5.8
Hood River	419	4.4	1 199	4.1	396	4.1	5 280	4.8	475	3.6	1 654	5.9
Jackson	623	7.4	1 574	5.7	464	10.0	3 561	7.0	1 459	2.0	1 919	3.8
Jefferson	222	10.0	4 585	7.5	198	11.2	3 007	6.8	368	4.0	1 574	5.0
Josephine	289	9.7	312	21.2	143	15.9	376	7.8	547	3.3	496	9.3
Klamath	356	9.3	4 618	5.5	415	8.7	3 389	5.9	998	2.1	4 057	4.7
Lake	176	13.0	1 936	10.6	123	16.1	459	7.0	394	3.1	2 033	5.6
Lane	1 186	4.2	4 319	2.6	931	5.8	3 261	3.4	1 829	1.9	2 781	3.1
Lincoln	134	9.9	131	19.3	117	12.9	61	26.3	288	2.3	333	10.4
Linn	1 076	4.4	16 350	1.6	887	5.4	11 913	2.2	1 800	1.8	4 888	2.0
Malheur	706	4.9	13 239	2.5	649	5.3	8 389	4.3	1 135	1.7	7 337	2.9
Marion	1 644	3.3	19 544	2.0	1 703	3.0	17 309	2.1	2 360	1.4	10 622	1.2
Morrow	262	7.7	13 134	1.3	252	7.6	11 631	1.7	333	4.9	4 041	4.7
Multnomah	288	8.9	979	1.7	310	6.8	978	2.8	519	3.3	916	3.1
Polk	653	5.4	6 140	3.2	611	5.1	4 909	2.4	1 031	2.3	2 474	2.9
Sherman	118	4.5	2 159	3.0	111	5.9	1 736	3.6	142	4.6	1 198	3.6
Tillamook	80	13.5	173	4.6	155	10.0	102	10.8	290	3.8	972	6.8
Umatilla	891	4.5	17 227	1.7	858	5.0	14 933	1.5	1 245	2.7	7 438	2.3
Union	392	7.6	4 327	13.9	400	8.1	2 183	10.2	754	2.9	2 052	6.6
Wallowa	210	10.9	1 855	15.5	186	11.7	505	8.9	431	3.2	1 179	5.7
Wasco	269	7.2	2 476	5.8	273	7.6	3 358	3.6	407	3.9	1 697	5.0
Washington	1 055	4.2	5 343	4.9	1 032	4.3	5 114	3.6	1 541	1.7	4 948	1.6
Wheeler	40	13.2	97	11.6	54	11.9	54	17.0	144	3.4	487	4.9
Yamhill	992	4.5	6 178	3.4	1 181	3.6	5 134	3.4	1 712	1.4	4 508	2.9

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)
Oregon	**23 607**	**.9**	**47 980**	**.9**	**12 798**	**1.5**	**478 595**	**.5**	**5 212**	**2.7**	**45 902**	**1.9**
Baker	496	5.9	708	5.3	254	10.4	2 870	11.3	162	13.6	630	18.9
Benton	453	5.9	828	2.2	317	9.0	8 159	2.1	115	15.0	2 392	1.3
Clackamas	2 416	2.7	2 915	3.1	1 517	3.9	66 254	1.2	611	7.6	4 505	6.3
Clatsop	128	9.8	141	13.4	91	13.8	659	8.2	22	33.1	117	14.6
Columbia	447	6.1	201	12.6	261	10.9	3 691	1.8	73	24.6	315	26.1
Coos	487	4.4	732	9.6	261	10.1	3 704	12.7	89	22.9	493	27.7
Crook	397	6.9	935	6.4	157	17.8	2 853	9.9	79	23.8	457	21.9
Curry	130	5.5	213	4.8	85	8.6	1 821	3.5	29	16.7	377	4.6
Deschutes	925	4.2	1 122	6.6	329	10.8	1 973	8.8	145	19.2	428	10.7
Douglas	1 190	4.0	639	8.1	581	7.9	2 009	14.8	273	12.3	546	21.4
Gilliam	126	6.2	399	3.2	89	8.0	2 336	5.8	31	12.5	185	15.7
Grant	294	7.8	461	22.2	144	15.3	1 644	8.6	97	18.3	338	45.1
Harney	376	6.4	1 104	8.0	180	13.0	4 053	11.8	116	19.1	678	13.6
Hood River	414	5.1	992	3.7	357	4.7	19 496	3.7	112	18.1	797	8.0
Jackson	1 023	4.7	848	7.1	520	8.4	14 351	3.2	224	14.7	298	22.9
Jefferson	356	4.5	1 303	7.3	148	14.2	5 581	3.6	47	31.3	219	16.4
Josephine	409	6.5	366	7.3	222	12.4	2 659	6.3	86	24.3	179	34.4
Klamath	795	4.5	1 447	5.2	380	8.3	9 745	4.6	164	15.3	981	12.4
Lake	332	5.3	2 005	11.8	161	14.0	3 503	10.6	79	24.8	1 493	18.7
Lane	1 425	3.6	1 185	4.0	722	6.7	12 455	3.4	226	13.6	1 347	14.3
Lincoln	195	7.9	85	11.5	69	15.0	658	29.2	46	23.1	58	27.5
Linn	1 474	3.1	1 934	3.4	658	6.5	18 880	1.4	184	13.2	1 135	8.5
Malheur	963	3.7	2 671	3.9	556	6.9	19 936	2.4	264	9.2	3 890	4.8
Marion	1 849	2.8	5 011	1.3	1 073	4.8	94 917	1.1	388	9.6	6 035	3.8
Morrow	283	7.1	5 555	1.0	141	12.6	13 084	2.0	72	18.4	2 127	9.6
Multnomah	353	7.1	386	4.0	264	9.6	10 477	2.9	85	21.7	333	9.3
Polk	828	4.2	942	3.1	418	7.8	12 416	5.0	174	12.8	1 668	9.0
Sherman	130	5.5	249	8.2	87	7.7	1 241	4.9	37	15.1	377	4.5
Tillamook	228	6.8	954	5.4	142	9.5	5 163	2.1	34	24.5	166	6.3
Umatilla	1 134	3.3	5 720	2.0	535	6.5	25 508	1.8	269	11.9	3 482	9.7
Union	510	6.2	912	9.4	299	10.3	4 040	5.7	121	17.6	1 003	3.1
Wallowa	318	6.8	552	8.8	153	13.9	1 833	6.1	64	24.1	301	17.1
Wasco	352	5.5	835	7.0	218	7.8	13 588	4.2	62	21.6	644	7.1
Washington	1 164	3.7	1 853	1.8	624	6.5	44 010	1.5	335	9.9	5 527	6.3
Wheeler	106	6.6	152	8.4	71	10.7	652	3.5	12	25.8	33	40.5
Yamhill	1 101	4.4	1 623	4.5	714	6.3	42 378	1.2	285	11.4	2 346	5.0

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.											
	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)
Oregon	**26 900**	**.8**	**157 011**	**.8**	**9 343**	**1.9**	**56 963**	**1.5**	**11 839**	**1.6**	**151 901**	**1.2**
Baker	608	3.2	3 372	6.5	290	8.1	1 531	10.8	291	9.5	3 282	9.1
Benton	587	4.1	3 410	2.1	176	13.7	1 157	7.8	253	10.5	3 263	4.3
Clackamas	2 769	2.2	11 954	2.1	846	6.7	3 850	4.9	1 027	5.5	9 796	4.4
Clatsop	153	8.4	321	11.2	51	21.3	70	22.9	89	12.1	569	17.7
Columbia	493	5.4	1 229	7.9	186	15.2	2 302	2.7	176	13.5	842	15.0
Coos	591	3.7	2 145	7.9	170	14.1	364	15.8	247	10.6	2 147	14.6
Crook	363	7.7	1 962	6.4	123	16.0	970	17.7	197	12.9	2 663	6.5
Curry	137	4.2	701	3.5	48	13.0	493	5.1	42	13.0	603	3.4
Deschutes	884	4.5	1 843	8.7	321	11.6	574	15.8	314	11.9	1 968	11.9
Douglas	1 489	2.8	2 931	9.0	435	9.7	578	26.6	575	7.7	3 023	10.3
Gilliam	137	4.2	1 917	6.9	65	10.9	848	7.9	114	7.2	1 586	5.9
Grant	318	5.9	1 600	7.3	110	16.7	794	42.1	161	11.7	2 025	20.4
Harney	449	3.8	2 810	6.7	148	16.2	1 196	9.3	247	8.9	3 239	8.8
Hood River	441	4.2	2 843	5.3	229	10.6	751	13.0	216	10.7	2 823	11.7
Jackson	1 257	3.5	3 046	4.8	319	12.1	406	9.5	386	10.6	4 718	4.7
Jefferson	340	5.6	2 672	6.6	162	11.7	1 513	22.5	180	10.9	2 527	12.3
Josephine	460	5.2	967	9.8	153	14.7	320	18.6	171	14.9	990	16.0
Klamath	912	3.2	5 765	5.9	335	10.8	1 699	6.1	463	7.9	7 352	9.6
Lake	359	4.2	2 619	12.2	102	22.2	508	7.0	226	9.9	2 904	6.6
Lane	1 632	2.7	5 314	4.8	495	9.0	1 409	5.8	591	8.1	4 947	7.0
Lincoln	250	5.4	497	14.3	67	20.1	25	27.0	80	17.7	336	17.7
Linn	1 554	2.8	8 805	3.1	476	8.3	2 962	5.7	734	6.4	8 002	3.6
Malheur	1 047	2.5	9 045	3.9	545	7.6	4 185	4.1	734	5.5	11 956	4.0
Marion	2 053	2.2	20 123	1.5	802	6.1	8 368	2.7	868	5.4	15 246	2.3
Morrow	329	5.7	8 190	4.6	143	8.3	4 349	1.4	174	9.4	8 369	2.8
Multnomah	438	5.3	1 706	5.3	104	16.7	317	3.3	136	14.2	1 426	7.5
Polk	983	2.8	4 664	3.7	318	9.7	930	4.9	427	8.5	4 780	4.2
Sherman	144	4.5	1 858	4.5	65	9.5	578	12.8	104	6.9	1 094	6.2
Tillamook	286	4.1	2 822	3.6	85	16.5	420	2.4	142	9.9	3 405	3.9
Umatilla	1 209	3.1	13 946	1.3	456	7.4	5 411	4.2	662	6.0	12 079	3.6
Union	621	4.2	3 263	8.4	248	11.8	1 770	9.2	278	10.2	3 689	7.2
Wallowa	350	5.7	1 562	6.7	113	15.1	490	22.4	183	10.2	2 227	8.2
Wasco	399	4.2	3 213	6.2	142	13.4	718	2.9	252	8.9	3 290	7.4
Washington	1 313	2.9	10 003	2.4	490	7.9	2 029	6.9	467	8.2	6 710	3.9
Wheeler	131	4.9	572	6.4	38	19.5	134	23.0	47	13.6	465	10.0
Yamhill	1 414	2.9	7 322	3.2	487	8.2	2 945	6.2	585	7.4	7 559	6.3

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)
Oregon	**5 872**	**2.3**	**98 115**	**1.3**	**31 894**	**.5**	**62 214**	**1.0**	**30 735**	**.6**	**301 022**	**.6**
Baker	183	13.4	1 689	9.7	677	1.7	1 315	7.4	663	2.2	5 230	5.5
Benton	170	13.5	3 811	1.8	663	2.7	1 059	6.1	637	3.3	5 320	1.3
Clackamas	509	7.7	4 537	8.0	3 549	1.0	6 406	2.6	3 234	1.6	39 511	1.1
Clatsop	32	26.1	145	8.4	222	2.1	490	15.8	194	4.3	760	9.0
Columbia	32	37.9	483	11.5	669	1.6	1 265	5.7	576	4.1	1 545	8.7
Coos	125	17.8	957	22.6	613	2.7	1 031	9.4	626	2.6	3 198	6.2
Crook	99	21.9	1 016	14.8	503	1.8	1 118	6.5	476	4.5	2 864	4.8
Curry	25	19.1	204	3.1	157	2.6	280	8.6	165	2.0	1 635	3.1
Deschutes	79	24.5	456	20.4	1 190	1.5	1 693	6.5	1 184	1.7	2 819	4.6
Douglas	189	13.4	691	11.9	1 805	1.3	1 876	4.9	1 708	1.9	3 027	6.3
Gilliam	34	16.1	933	9.0	149	3.4	638	4.2	158	3.2	2 032	4.6
Grant	57	22.0	553	13.3	394	2.3	1 270	8.2	390	2.4	2 135	7.6
Harney	96	18.8	966	16.9	478	2.7	1 087	10.4	475	2.9	5 403	7.3
Hood River	123	16.7	1 536	26.1	504	2.6	1 446	4.4	512	2.0	6 630	4.0
Jackson	206	14.6	802	15.6	1 525	1.6	2 637	8.0	1 488	1.9	4 757	4.1
Jefferson	121	14.6	1 869	10.0	382	1.9	734	8.1	366	4.0	5 416	5.6
Josephine	37	31.0	203	46.5	583	2.4	609	9.2	547	3.3	1 649	4.5
Klamath	223	12.7	3 965	8.3	1 018	1.6	2 007	8.3	1 025	1.7	10 525	5.6
Lake	62	26.4	847	4.5	399	2.7	1 216	4.5	408	2.3	4 916	11.7
Lane	241	12.5	3 116	4.2	2 031	1.0	3 042	3.8	1 862	2.0	7 264	2.4
Lincoln	30	29.6	35	34.4	299	1.7	434	11.5	275	3.8	666	24.0
Linn	431	7.9	9 296	2.3	1 909	1.1	3 356	2.9	1 744	2.1	16 236	1.7
Malheur	397	9.0	8 759	5.2	1 073	2.4	2 395	7.7	1 178	1.1	22 177	2.0
Marion	669	6.3	16 719	2.1	2 245	1.8	4 979	3.2	2 326	1.5	45 912	1.5
Morrow	115	14.0	7 293	4.3	317	6.3	1 462	3.9	381	3.6	9 411	3.7
Multnomah	58	21.5	959	2.3	528	2.3	1 195	5.1	528	3.0	3 921	2.2
Polk	206	12.9	3 540	3.9	1 071	1.7	1 851	5.6	1 059	2.1	8 441	2.5
Sherman	17	23.3	228	15.0	149	3.7	592	5.9	144	3.1	2 818	4.1
Tillamook	85	10.6	653	4.3	286	2.5	715	5.5	288	3.1	6 013	3.1

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.											
	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)
Umatilla	310	8.9	8 325	4.5	1 370	1.7	3 635	3.0	1 394	1.7	21 029	1.8
Union	84	21.5	1 505	16.9	799	1.6	1 294	6.6	716	3.5	3 989	4.9
Wallowa	152	11.9	2 204	21.4	406	3.4	677	5.7	442	2.6	3 097	4.9
Wasco	81	13.4	1 294	3.4	450	1.9	1 512	5.7	432	3.1	6 050	2.9
Washington	298	8.6	4 460	2.9	1 608	1.2	3 590	4.8	1 415	2.6	20 215	1.5
Wheeler	25	19.2	224	11.2	147	3.2	449	4.9	150	2.8	711	10.5
Yamhill	271	9.5	3 844	5.4	1 726	1.3	2 860	4.1	1 569	2.2	13 700	2.5

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)
Oregon	**34 036**	**.4**	**727 810**	**.9**	**28 101**	**.5**	**5 285 659**	**.4**	**22 312**	**.5**	**3 154 523**	**.3**
Baker	704	.7	11 389	11.9	584	.9	160 729	1.6	478	1.1	85 628	1.3
Benton	727	.6	23 221	1.9	610	.6	91 750	.7	498	.9	71 114	.6
Clackamas	3 745	.5	78 021	1.9	3 115	.5	106 907	.7	2 581	.5	76 453	.7
Clatsop	229	1.1	370	67.9	185	.9	12 505	3.9	132	1.5	4 474	3.4
Columbia	686	.6	9 350	3.5	536	.6	23 198	1.5	433	.9	13 518	1.7
Coos	675	.7	8 457	13.5	537	.8	42 678	2.5	407	1.1	13 981	2.3
Crook	521	.7	3 530	18.0	411	.9	76 598	2.0	312	1.3	45 093	1.4
Curry	168	1.7	4 058	7.4	120	1.7	17 121	8.0	84	2.5	2 479	3.6
Deschutes	1 235	.6	85	(H)	944	.7	43 773	1.5	596	1.1	25 930	1.7
Douglas	1 907	.5	5 308	25.4	1 492	.5	118 123	1.4	1 098	.7	41 700	1.3
Gilliam	168	1.5	6 175	9.5	144	1.6	298 020	1.4	109	2.0	117 737	.9
Grant	407	.8	–452	(H)	315	1.2	86 585	2.1	245	1.6	43 037	1.8
Harney	504	1.0	5 776	17.1	425	1.0	214 973	1.5	348	1.3	134 665	1.1
Hood River	537	.7	16 585	7.2	507	.6	20 889	.9	472	.7	17 816	.7
Jackson	1 622	.6	7 021	13.5	1 301	.6	69 637	1.5	913	.8	34 200	1.5
Jefferson	400	.9	10 157	10.2	344	.8	99 546	2.8	273	1.1	51 407	1.0
Josephine	615	.7	2 135	23.6	504	.7	17 217	2.2	387	1.0	9 293	2.4
Klamath	1 066	.7	20 104	7.6	839	.9	234 588	.9	615	1.1	139 459	.8
Lake	418	.7	11 817	9.0	332	.9	187 179	1.0	267	1.2	116 130	.8
Lane	2 105	.5	13 559	7.1	1 752	.5	120 435	.9	1 393	.6	83 275	.8
Lincoln	306	1.1	1 006	45.4	219	1.2	9 909	3.5	144	1.9	3 140	4.4
Linn	2 010	.4	42 154	4.0	1 620	.4	304 964	.4	1 225	.6	262 615	.4
Malheur	1 206	.6	45 741	5.3	1 086	.6	278 780	.7	945	.7	208 244	.6
Marion	2 545	.6	124 966	1.5	2 194	.6	251 315	.5	1 882	.7	215 464	.4
Morrow	420	.7	29 113	2.8	341	.9	485 883	.8	241	1.2	242 840	.5
Multnomah	577	.8	12 857	3.2	498	.8	19 104	1.6	434	1.0	14 972	1.4
Polk	1 148	.6	25 893	3.5	967	.5	128 150	.6	792	.7	104 745	.7
Sherman	168	1.5	6 790	5.2	145	.9	277 550	1.1	118	1.3	122 175	.8
Tillamook	313	.7	13 104	9.9	214	1.0	20 175	1.0	128	1.8	7 605	1.3
Umatilla	1 490	.5	70 121	1.5	1 211	.6	706 872	.6	916	.7	404 545	.4
Union	832	.6	9 677	10.9	698	.6	175 736	.9	572	.8	107 311	.9
Wallowa	459	.7	4 602	18.5	349	1.0	108 608	1.6	268	1.2	55 898	1.5
Wasco	470	.7	13 370	4.9	395	.8	213 623	1.4	311	1.1	85 345	1.1
Washington	1 683	.6	55 151	2.1	1 508	.5	99 959	.7	1 351	.6	83 967	.8
Wheeler	157	1.5	783	27.4	118	1.6	34 728	3.2	96	2.0	13 615	2.7
Yamhill	1 813	.5	35 818	3.9	1 541	.5	127 852	1.7	1 248	.6	94 653	.8

Geographic area	Irrigated land				Livestock and poultry							
					Cattle and calves inventory				Beef cows inventory			
	Farms		Acres		Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Oregon	**15 348**	**.5**	**1 948 739**	**.5**	**17 122**	**.4**	**1 559 162**	**.4**	**13 393**	**.4**	**695 635**	**.6**
Baker	586	.8	143 226	1.4	536	.9	118 687	1.2	439	1.2	58 779	1.4
Benton	243	1.6	20 274	.9	271	1.5	8 764	1.6	200	1.9	2 876	2.9
Clackamas	856	.9	24 248	.6	1 398	.7	29 362	1.1	1 063	.8	11 747	1.4
Clatsop	22	5.3	468	16.1	165	1.1	6 907	2.7	129	1.5	2 770	4.6
Columbia	71	3.0	1 439	3.2	466	.8	12 250	1.5	393	1.0	(D)	(D)
Coos	270	1.6	10 911	2.6	424	1.0	28 338	2.2	337	1.3	11 765	2.9
Crook	409	.9	72 355	1.7	379	1.0	59 624	1.1	311	1.3	32 443	1.3
Curry	68	3.0	3 380	2.8	106	1.9	10 291	3.4	92	2.3	(D)	(D)
Deschutes	1 034	.6	39 682	1.4	653	1.0	22 714	1.8	493	1.2	10 395	1.8
Douglas	581	1.1	16 546	2.3	1 257	.6	58 926	1.0	991	.7	25 734	1.3
Gilliam	29	5.3	3 861	4.4	85	2.5	19 774	2.3	79	2.6	(D)	(D)
Grant	247	1.6	47 939	3.1	326	1.1	57 308	1.6	294	1.3	35 164	1.7
Harney	322	1.4	152 370	1.5	397	1.1	133 865	1.0	363	1.2	81 239	1.0
Hood River	496	.6	18 727	.7	115	2.4	2 232	3.2	93	2.8	(D)	(D)

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	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)
Jackson	1 204	.6	53 416	1.6	924	.8	41 999	1.7	713	.9	20 657	1.9
Jefferson	314	1.0	52 289	1.0	194	1.6	23 210	1.7	161	1.8	(D)	(D)
Josephine	456	.8	12 080	2.6	292	1.3	9 081	1.9	218	1.7	2 787	3.7
Klamath	851	.9	243 205	1.0	695	1.0	119 001	1.1	582	1.1	49 138	1.3
Lake	301	1.1	200 117	1.4	299	1.0	89 855	1.0	262	1.2	50 775	1.0
Lane	667	1.0	23 427	.8	983	.8	30 055	1.3	791	.9	12 973	1.8
Lincoln	61	3.3	534	9.3	192	1.4	5 374	2.4	167	1.6	2 934	2.6
Linn	499	1.1	30 422	.8	1 140	.6	38 124	1.2	838	.8	12 527	1.5
Malheur	1 078	.6	238 546	.9	733	.9	181 478	.8	570	1.1	74 620	1.1
Marion	1 121	.8	92 148	.4	885	.9	41 102	.8	614	1.1	6 538	2.0
Morrow	223	1.4	95 143	.7	220	1.3	50 282	.8	182	1.6	18 540	1.4
Multnomah	183	2.0	7 701	1.8	180	2.0	6 320	2.3	134	2.4	(D)	(D)
Polk	213	1.7	13 717	1.3	507	1.0	18 660	.8	384	1.2	4 056	1.9
Sherman	24	4.4	1 911	3.9	75	2.1	7 355	2.5	71	2.1	(D)	(D)
Tillamook	88	2.1	5 995	.8	257	.8	40 588	.5	101	2.1	1 322	3.7
Umatilla	940	.7	128 658	.5	707	.9	91 540	.8	564	1.0	31 487	1.2
Union	330	1.3	62 231	1.1	474	.9	45 999	1.4	403	1.1	25 124	1.4
Wallowa	290	1.2	49 421	1.9	324	1.1	54 389	1.5	285	1.2	30 064	1.6
Wasco	260	1.3	27 154	2.1	220	1.6	35 009	1.1	200	1.6	(D)	(D)
Washington	551	1.1	25 658	1.0	410	1.3	13 247	1.2	262	1.8	2 556	2.7
Wheeler	79	2.5	8 538	3.3	115	1.6	22 933	1.3	104	1.8	13 176	1.3
Yamhill	381	1.3	21 002	.9	718	.9	24 519	1.0	510	1.1	5 314	2.4

Geographic area	Livestock and poultry—Con.											
	Milk cows inventory				Hogs and pigs inventory				Sheep and lambs inventory			
	Farms		Total		Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Oregon	**1 052**	**.8**	**86 747**	**.3**	**1 383**	**.9**	**33 152**	**2.3**	**3 070**	**.7**	**282 872**	**.8**
Baker	48	4.4	1 435	4.7	23	7.4	119	21.9	69	3.9	5 468	6.9
Benton	14	6.7	2 103	.1	37	4.9	881	18.3	103	2.8	3 378	5.9
Clackamas	57	3.4	2 765	1.8	164	2.2	4 293	2.7	293	1.6	7 373	2.5
Clatsop	14	5.3	898	1.8	21	5.2	250	5.7	27	4.6	687	15.1
Columbia	18	5.9	(D)	(D)	34	4.7	136	6.1	28	5.1	985	9.7
Coos	51	3.6	3 831	1.8	19	6.4	89	8.2	87	3.2	12 467	3.2
Crook	9	10.5	165	10.8	26	6.5	193	16.2	35	5.6	1 540	16.1
Curry	4	15.8	(D)	(D)	9	9.6	57	14.0	45	4.2	21 562	1.8
Deschutes	23	5.6	1 009	3.8	72	3.7	1 004	16.7	99	3.1	2 681	8.1
Douglas	52	4.1	98	5.3	89	3.2	874	6.5	346	1.4	44 728	2.2
Gilliam	1	50.0	(D)	(D)	3	25.8	(D)	(D)	3	21.6	108	23.3
Grant	17	7.2	37	13.1	15	9.0	207	12.8	27	6.6	615	9.8
Harney	27	6.0	87	13.4	25	6.1	83	8.5	58	4.1	9 019	2.4
Hood River	6	12.4	(D)	(D)	9	11.0	89	20.6	13	9.0	110	16.4
Jackson	26	5.4	777	3.2	91	3.2	760	8.5	149	2.4	3 992	8.1
Jefferson	6	9.3	(D)	(D)	18	5.8	292	5.4	20	6.2	6 856	3.4
Josephine	18	6.0	1 992	.3	55	3.8	1 187	15.9	48	4.2	842	12.0
Klamath	29	5.5	4 460	1.0	39	5.7	343	12.6	79	3.8	6 204	6.6
Lake	16	7.7	47	10.7	17	7.2	212	18.9	25	6.2	934	5.0
Lane	40	4.1	2 551	.2	95	2.9	695	5.3	217	1.9	18 620	2.6
Lincoln	10	10.1	21	12.1	6	13.2	26	14.7	40	4.6	1 898	9.0
Linn	58	3.2	5 036	.9	89	2.9	3 298	2.4	292	1.5	63 786	1.1
Malheur	96	2.7	5 389	1.9	45	4.6	333	8.3	86	3.2	10 029	5.0
Marion	63	2.8	12 777	.4	85	3.2	4 932	6.7	232	2.0	8 913	4.8
Morrow	7	12.2	27	31.2	18	6.7	285	6.4	23	5.9	12 460	.6
Multnomah	6	13.2	(D)	(D)	13	8.2	68	9.4	35	5.6	496	6.5
Polk	29	4.4	6 392	.4	42	4.3	218	6.5	125	2.5	9 980	2.7
Sherman	1	–	(D)	(D)	6	10.5	111	2.1	5	12.3	111	11.6
Tillamook	151	1.1	22 696	.5	8	8.1	71	3.2	4	10.5	57	15.4
Umatilla	35	5.3	79	6.4	54	3.9	1 411	14.4	84	3.1	13 643	2.3
Union	21	6.4	310	11.6	22	6.4	438	16.3	52	4.1	2 196	7.8
Wallowa	20	6.8	58	20.7	22	7.2	612	22.6	65	3.5	4 001	6.3
Wasco	1	36.3	(D)	(D)	10	10.5	(D)	(D)	16	7.3	417	6.6
Washington	28	3.5	4 497	1.1	34	5.2	1 824	11.5	77	3.5	1 328	5.8
Wheeler	7	10.3	23	11.5	10	11.3	310	19.8	9	10.6	262	14.8
Yamhill	43	3.7	5 798	.6	58	3.6	6 088	4.8	154	2.3	5 126	3.2

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)
Oregon	**2 199**	**.8**	**2 748 184**	**.1**	**156**	**2.1**	**18 966 576**	**.6**
Baker	35	5.9	590	6.8	–	–	–	–
Benton	56	3.9	2 454	7.5	6	12.3	(D)	(D)
Clackamas	249	1.8	(D)	(D)	41	3.9	3 483 377	(L)
Clatsop	24	4.5	357	4.5	1	34.0	(D)	(D)
Columbia	54	3.7	808	5.6	1	31.5	(D)	(D)
Coos	38	4.9	477	7.0	–	–	–	–
Crook	20	7.3	295	9.5	–	–	–	–
Curry	17	6.9	355	9.3	–	–	–	–
Deschutes	96	3.2	1 174	3.7	2	25.0	(D)	(D)
Douglas	177	2.2	2 717	3.3	9	7.6	888 092	.1
Gilliam	7	12.4	93	18.0	–	–	–	–
Grant	33	5.9	691	17.1	2	17.0	(D)	(D)
Harney	32	5.5	541	5.3	–	–	–	–
Hood River	21	7.2	239	8.4	–	–	–	–
Jackson	137	2.5	2 118	3.4	3	14.8	(D)	(D)
Jefferson	9	8.9	184	11.2	–	–	–	–
Josephine	75	3.4	3 434	20.5	2	22.3	(D)	(D)
Klamath	47	5.3	699	6.2	1	38.4	(D)	(D)
Lake	19	7.1	297	8.5	–	–	–	–
Lane	186	2.1	(D)	(D)	13	4.5	3 829 797	2.4
Lincoln	26	6.2	376	10.7	2	26.4	(D)	(D)
Linn	146	2.4	2 924	4.2	17	5.4	3 417 133	1.4
Malheur	51	4.2	719	5.5	1	–	(D)	(D)
Marion	141	2.5	(D)	(D)	9	10.3	(D)	(D)
Morrow	17	7.3	293	13.9	1	31.7	(D)	(D)
Multnomah	38	5.2	999	9.7	8	11.4	137	12.5
Polk	80	3.2	1 361	6.0	5	6.7	994 051	(L)
Sherman	7	9.2	(D)	(D)	–	–	–	–
Tillamook	12	8.5	192	13.3	1	30.3	(D)	(D)
Umatilla	53	4.3	905	4.8	5	13.9	321	25.9
Union	47	4.5	840	5.2	1	30.3	(D)	(D)
Wallowa	21	6.2	518	10.3	–	–	–	–
Wasco	15	7.6	(D)	(D)	2	25.6	(D)	(D)
Washington	85	3.4	1 196	4.6	8	11.6	(D)	(D)
Wheeler	12	9.6	200	14.4	1	43.3	(D)	(D)
Yamhill	116	2.6	(D)	(D)	14	6.0	4 354 223	1.0

Geographic area	Selected crops harvested											
	Wheat for grain						Barley for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Oregon	**2 531**	**.6**	**882 862**	**.3**	**54 694 903**	**.3**	**750**	**1.0**	**109 108**	**.7**	**7 568 675**	**.6**
Baker	42	4.4	6 294	2.3	469 717	2.2	44	4.6	1 953	4.0	147 275	3.5
Benton	32	3.1	4 338	.8	334 384	.8	2	15.9	(D)	(D)	(D)	(D)
Clackamas	47	3.6	1 783	3.2	142 560	3.3	8	9.2	259	16.1	10 346	16.4
Clatsop	–	–	–	–	–	–	–	–	–	–	–	–
Columbia	4	11.0	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Coos	1	35.4	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Crook	24	4.6	2 362	3.8	213 865	3.9	1	–	(D)	(D)	(D)	(D)
Curry	–	–	–	–	–	–	–	–	–	–	–	–
Deschutes	9	8.3	623	4.8	54 247	4.0	–	–	–	–	–	–
Douglas	6	3.5	123	.3	5 274	.1	1	21.2	(D)	(D)	(D)	(D)
Gilliam	89	2.2	95 584	1.0	4 519 450	1.0	36	3.4	13 175	1.8	700 893	1.6
Grant	6	15.8	579	30.9	23 865	35.1	2	17.0	(D)	(D)	(D)	(D)
Harney	–	–	–	–	–	–	7	10.9	674	21.0	26 997	22.9
Hood River	5	9.9	(D)	(D)	(D)	(D)	–	–	–	–	–	–
Jackson	29	5.3	1 294	5.7	69 722	5.8	16	7.2	548	8.1	33 475	8.2
Jefferson	101	2.2	12 470	1.6	1 280 287	1.3	10	6.9	543	13.5	34 564	8.7
Josephine	3	19.8	18	21.6	645	22.4	2	25.0	(D)	(D)	(D)	(D)
Klamath	62	2.6	5 696	1.9	559 143	1.7	86	2.7	23 789	.7	2 335 279	.6
Lake	7	11.1	452	14.2	19 805	12.0	3	–	1 941	–	97 924	–
Lane	39	2.9	2 651	1.5	212 353	1.3	3	–	147	–	14 596	–
Lincoln	–	–	–	–	–	–	–	–	–	–	–	–
Linn	72	2.8	5 306	2.8	401 143	2.5	–	–	–	–	–	–
Malheur	380	1.2	43 365	.6	4 228 261	.6	127	2.5	4 640	3.7	416 882	3.0
Marion	178	1.9	10 341	1.7	866 326	1.6	6	11.1	134	13.1	5 624	12.7
Morrow	151	1.6	167 070	.7	9 096 202	.7	12	6.6	2 688	7.9	155 234	6.9
Multnomah	14	4.8	1 688	1.6	131 544	1.2	4	14.0	220	15.1	15 820	23.7
Polk	100	2.2	9 741	2.4	708 725	2.2	3	9.3	379	9.5	25 839	5.4
Sherman	109	1.4	99 837	.9	4 801 754	.9	72	2.0	21 402	1.4	1 097 033	1.5
Tillamook	–	–	–	–	–	–	–	–	–	–	–	–

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											
	Wheat for grain						Barley for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Umatilla	343	1.1	263 624	.5	17 475 659	.5	98	2.1	16 354	1.6	1 058 803	1.3
Union	155	1.7	36 394	1.2	2 763 779	1.1	97	2.2	7 617	2.3	529 813	2.2
Wallowa	80	2.8	14 502	2.0	917 359	2.1	62	3.2	8 796	2.6	643 361	2.6
Wasco	103	2.3	63 369	1.4	2 908 912	1.3	19	4.6	2 413	4.3	126 504	3.1
Washington	201	1.6	17 020	1.2	1 337 111	1.1	12	6.7	153	8.5	11 149	9.3
Wheeler	5	6.1	(D)	(D)	(D)	(D)	3	8.6	61	10.6	3 682	11.7
Yamhill	134	2.2	13 989	2.1	1 044 099	2.0	14	7.5	380	11.0	26 653	13.1

Geographic area	Selected crops harvested—Con.											
	Oats for grain						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)
Oregon	**570**	**1.1**	**30 173**	**1.1**	**2 742 017**	**1.1**	**12 933**	**.5**	**1 066 643**	**.5**	**3 009 247**	**.5**
Baker	11	8.7	269	8.7	21 545	14.6	451	1.1	73 694	1.5	205 219	1.6
Benton	21	4.9	1 584	3.0	170 759	2.9	222	1.7	8 157	3.5	18 005	3.1
Clackamas	53	3.8	1 496	6.4	113 508	5.9	1 044	.8	20 756	1.2	49 995	1.4
Clatsop	–	–	–	–	–	–	107	1.8	4 385	3.5	7 845	5.5
Columbia	3	12.1	13	18.4	997	16.9	360	1.0	10 789	1.7	21 489	1.6
Coos	–	–	–	–	–	–	254	1.6	12 498	2.7	24 735	2.7
Crook	1	–	(D)	(D)	(D)	(D)	301	1.3	35 322	1.6	96 854	1.6
Curry	–	–	–	–	–	–	33	5.0	1 637	5.5	4 371	6.4
Deschutes	1	39.2	(D)	(D)	(D)	(D)	556	1.1	23 105	1.9	74 442	1.9
Douglas	7	7.6	64	8.7	5 909	10.4	847	.8	35 989	1.5	65 725	1.5
Gilliam	12	–	4 557	–	311 883	–	28	4.8	3 826	5.6	10 735	5.6
Grant	2	30.2	(D)	(D)	(D)	(D)	236	1.6	41 483	1.8	74 268	2.3
Harney	4	13.1	314	14.9	19 915	7.9	347	1.3	133 916	1.1	277 322	1.3
Hood River	1	–	(D)	(D)	(D)	(D)	120	2.3	1 595	3.3	4 444	3.2
Jackson	3	18.3	9	20.3	399	21.1	665	1.0	21 078	2.5	53 313	2.9
Jefferson	6	10.4	509	12.2	41 259	4.0	215	1.4	17 394	2.1	69 235	2.8
Josephine	5	13.5	78	17.5	5 615	16.9	272	1.4	7 237	2.8	15 091	3.1
Klamath	24	5.2	2 150	4.2	271 283	4.6	561	1.2	97 351	1.1	341 777	1.1
Lake	10	6.4	1 002	3.7	79 893	5.8	264	1.2	111 183	.8	330 866	.9
Lane	15	7.3	372	7.5	28 023	7.3	802	.9	28 728	1.6	56 141	1.3
Lincoln	–	–	–	–	–	–	91	2.7	2 954	4.7	8 959	13.0
Linn	33	4.4	1 428	7.6	121 102	6.5	716	.9	39 364	1.0	108 099	1.0
Malheur	21	5.2	433	4.9	44 128	5.5	709	.9	96 913	1.0	294 816	1.1
Marion	67	3.4	2 582	2.5	253 265	2.6	594	1.1	16 985	1.2	42 563	1.2
Morrow	3	16.8	(D)	(D)	(D)	(D)	109	2.0	25 211	1.0	153 848	.7
Multnomah	5	15.5	60	15.7	3 880	17.6	147	2.2	3 082	4.6	6 541	4.9
Polk	47	3.6	2 273	5.6	232 866	5.5	396	1.2	20 440	1.2	55 541	1.1
Sherman	3	–	165	–	14 866	–	9	6.1	339	5.9	1 304	4.5
Tillamook	–	–	–	–	–	–	101	1.9	7 896	1.8	22 923	2.0
Umatilla	5	8.4	108	18.0	12 417	17.9	422	1.3	33 080	1.2	163 698	1.0
Union	26	4.1	1 220	3.0	91 106	4.5	473	.9	42 236	1.5	104 742	1.5
Wallowa	12	8.0	560	8.4	44 573	7.7	239	1.4	31 646	1.8	103 603	1.6
Wasco	–	–	–	–	–	–	152	2.1	10 684	2.3	32 579	2.7
Washington	107	2.3	5 258	2.2	530 532	2.1	440	1.2	14 539	1.6	35 664	1.7
Wheeler	2	12.9	(D)	(D)	(D)	(D)	92	2.1	12 110	3.0	23 184	2.9
Yamhill	60	3.7	2 525	4.6	238 059	5.0	558	1.1	19 041	1.8	49 311	2.0

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)
Oregon	**1 432**	**.7**	**155 242**	**.3**	**3 869**	**.6**	**96 270**	**.6**
Baker	6	13.1	(D)	(D)	16	9.1	77	21.7
Benton	58	3.0	10 473	.8	120	2.7	891	8.2
Clackamas	98	2.6	4 955	1.3	308	1.6	4 715	2.6
Clatsop	6	9.7	27	25.3	1	11.8	(D)	(D)
Columbia	9	8.3	123	17.9	35	4.6	108	7.2
Coos	4	16.4	3	19.9	30	5.8	70	7.0
Crook	7	5.9	388	1.6	–	–	–	–
Curry	9	11.4	4	19.1	14	9.1	56	15.1
Deschutes	5	14.2	41	33.5	3	19.8	3	24.9
Douglas	43	4.1	647	2.2	192	2.0	1 494	3.4
Gilliam	–	–	–	–	–	–	–	–
Grant	2	23.9	(D)	(D)	6	13.2	(D)	(D)
Harney	–	–	–	–	3	19.9	5	20.2
Hood River	4	17.7	(D)	(D)	347	1.0	15 553	.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.							
	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)
Jackson	61	4.0	606	1.6	157	2.3	10 444	.7
Jefferson	26	3.8	1 192	2.1	4	15.7	4	16.5
Josephine	43	4.5	132	7.8	70	3.4	1 217	3.1
Klamath	5	7.7	279	.1	4	17.6	10	24.5
Lake	2	21.3	(D)	(D)	4	13.2	13	13.7
Lane	103	2.5	5 446	.7	322	1.5	4 996	2.4
Lincoln	12	7.5	13	10.6	18	6.8	26	8.6
Linn	67	2.7	10 021	1.1	150	2.2	2 408	2.0
Malheur	160	1.4	14 131	.4	16	7.9	215	18.0
Marion	292	1.4	37 413	.6	404	1.4	10 640	2.4
Morrow	13	2.4	6 080	(L)	7	12.1	(D)	(D)
Multnomah	40	4.4	4 739	1.2	60	3.9	169	4.1
Polk	37	3.7	2 574	2.9	246	1.7	6 342	1.8
Sherman	1	37.3	(D)	(D)	3	15.1	24	11.3
Tillamook	5	12.5	(D)	(D)	1	35.0	(D)	(D)
Umatilla	119	1.9	39 656	.5	184	2.0	4 840	1.5
Union	12	7.6	(D)	(D)	49	4.2	658	5.5
Wallowa	2	16.1	(D)	(D)	5	11.8	13	15.3
Wasco	6	10.7	(D)	(D)	115	2.4	8 375	.9
Washington	124	2.3	8 167	2.0	455	1.3	8 403	2.1
Wheeler	2	26.5	(D)	(D)	11	8.9	30	9.7
Yamhill	49	3.1	7 148	1.5	509	1.1	13 201	1.4

[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	34 030	5 935	39 965	3.6	14.9
Land in farms ..... acres	17 449 293	325 638	17 774 931	1.4	1.8
Average size of farm ..... acres	513	55	445	(X)	(X)
Farms by size of farm:					
Less than 10 acres	7 202	1 670	8 872	7.5	18.8
10 to 49 acres	11 954	3 238	15 192	6.3	21.3
50 to 179 acres	7 120	836	7 956	4.3	10.5
180 acres or more	7 754	191	7 945	4.0	2.4
Farms by value of sales:					
Less than $2,500	12 021	3 966	15 987	5.5	24.8
$2,500 to $9,999	8 998	1 615	10 613	7.3	15.2
$10,000 or more	13 011	354	13 365	3.1	2.6
Market value of agricultural products sold $1,000	2 969 194	5 664	2 974 858	2.0	.2
Farms by type of organization:					
Individual or family	28 965	6 064	35 029	4.0	17.3
Partnership, corporation, or other	5 065	–129	4 936	4.2	–2.6
Farms by tenure of operator:					
Full owners	24 508	4 547	29 055	4.0	15.6
Part owners	6 844	968	7 812	6.0	12.4
Tenants	2 678	420	3 098	8.2	13.6
Operators by place of residence:					
On farm operated	28 469	5 472	33 941	4.1	16.1
Not on farm operated	4 061	402	4 463	5.8	9.0
Not reported	1 500	61	1 561	3.9	3.9
Operators by principal occupation:					
Farming	15 648	1 184	16 832	4.5	7.0
Other	18 382	4 751	23 133	4.4	20.5
Operators by sex:					
Male	29 230	4 689	33 919	3.5	13.8
Female	4 800	1 246	6 046	7.0	20.6
Operators by race:					
White	33 511	5 707	39 218	3.6	14.6
Black and other races	519	228	747	21.7	30.5
Operators by years on present farm:					
4 years or less	4 587	1 763	6 350	9.3	27.8
5 years or more	25 749	4 371	30 120	3.7	14.5
Not reported	3 694	–199	3 495	17.0	–5.7

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