
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.

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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	7.1	Corn for grain or seed	2.9
Land in farms	5.7	Wheat for grain	2.8
Estimated market value of land and buildings ¹	5.9	Livestock and poultry inventory:	
Market value of agricultural products sold	2.2	Cattle and calves	5.6
Harvested cropland	5.6	Hogs and pigs	3.2
		Layers 20 weeks old and older	5.8

¹Data 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	4.7	25	40.0
50	2.9	50	28.0
75	1.9	75	22.7
100	1.0	100	19.4
150 .....	.8	150	15.5
200 .....	.7	200	13.2
300 .....	.6	300	10.3
500 .....	.5	500	7.1
750 .....	.4	750	4.9
1,000 .....	.3	1,000	3.2
1,500	(X)	1,500	(X)
2,000	(X)	2,000	(X)

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)	Item	Total	Relative standard error of estimate (percent)
FARMS BY SIZE			LIVESTOCK		
1 to 9 acres farms..	727	1.0	Cattle and calves inventory farms..	12 284	.4
10 to 49 acres farms..	2 857	1.2	number..	439 462	.4
50 to 69 acres farms..	3 026	.6	Beef cows farms..	10 367	.4
70 to 99 acres farms..	90 049	.6	number..	202 844	.4
100 to 139 acres farms..	1 650	.7	Milk cows farms..	676	.9
140 to 179 acres farms..	96 075	.7	number..	18 497	.6
180 to 219 acres farms..	2 251	.6	Cattle and calves sold farms..	11 576	.4
220 to 259 acres farms..	188 465	.6	number..	270 361	.4
260 to 499 acres farms..	2 529	.6	\$1,000..	114 726	.3
500 to 999 acres farms..	294 443	.6	Hogs and pigs inventory farms..	645	1.0
1,000 to 1,999 acres farms..	1 734	.7	number..	15 708	1.6
2,000 acres or more farms..	273 065	.7	Hogs and pigs sold farms..	402	1.2
	1 280	.8	number..	24 884	1.8
	253 433	.8	\$1,000..	2 356	2.0
	963	.8	Sheep and lambs of all ages inventory farms..	979	.8
	228 924	.8	number..	40 709	1.0
	2 279	.6	Sheep and lambs sold farms..	927	.8
	802 828	.6	number..	29 803	1.0
	1 012	.8	Horses and ponies inventory farms..	3 654	.5
	679 820	.8	number..	16 787	.8
			Horses and ponies sold farms..	584	1.1
			number..	1 766	1.8
			POULTRY		
			Layers and pullets 13 weeks old and older inventory		
			(see text) farms..	1 122	.8
			number..	1 806 870	1.6
			Layers 20 weeks old and older farms..	1 085	.8
			number..	1 448 777	1.5
			Broilers and other meat-type chickens sold farms..	186	.9
			number..	79 193 428	.1
			SELECTED CROPS HARVESTED		
			Corn for grain or seed farms..	1 150	.7
			acres..	35 499	.8
			bushels..	3 270 197	.7
			Corn for silage or green chop farms..	929	.7
			acres..	27 642	.5
			tons, green..	380 942	.6
			Wheat for grain farms..	191	1.5
			acres..	7 620	1.2
			bushels..	421 453	1.2
			Oats for grain farms..	321	1.3
			acres..	2 720	1.8
			bushels..	132 249	1.9
			Tobacco farms..	744	.9
			acres..	1 630	1.5
			pounds..	2 737 090	1.4
			Potatoes, excluding sweetpotatoes farms..	416	1.3
			acres..	610	4.4
			cwt..	58 593	2.8
			Hay—alfalfa, other tame, small grain, wild, grass		
			silage, green chop, etc. (see text) farms..	13 895	.4
			acres..	525 257	.4
			tons, dry..	886 054	.4
			Alfalfa hay farms..	2 124	.6
			acres..	54 613	.7
			tons, dry..	130 909	.7
			Vegetables harvested for sale (see text) farms..	362	1.3
			acres..	1 588	1.7
			Land in orchards farms..	530	1.2
			acres..	12 446	.9
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM					
Oilseed and grain farming (1111) farms..	327	1.4			
acres..	99 304	1.3			
Vegetable and melon farming (1112) farms..	197	1.9			
acres..	17 067	2.3			
Fruit and tree nut farming (1113) farms..	238	1.7			
acres..	34 592	1.4			
Greenhouse, nursery, and floriculture production (1114) farms..	446	1.3			
acres..	48 403	1.9			
Other crop farming (1119) farms..	3 620	.5			
acres..	561 150	.6			
Beef cattle ranching and farming (112111) farms..	10 276	.4			
acres..	2 197 927	.4			
Cattle feedlots (112112) farms..	467	1.1			
acres..	96 776	1.3			
Dairy cattle and milk production (11212) farms..	249	1.1			
acres..	107 921	.9			
Hog and pig farming (1122) farms..	124	2.4			
acres..	18 689	2.9			
Poultry and egg production (1123) farms..	428	.8			
acres..	127 890	.5			
Sheep and goat farming (1124) farms..	364	1.4			
acres..	45 958	1.9			
Animal aquaculture and other animal production (1125, 1129) farms..	1 036	.9			
acres..	99 855	1.2			

¹Data are based on a sample of farms.

²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains.

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)	Item	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			FARMS BY TYPE OF ORGANIZATION		
Total cropland farms	3 417	.3	Individual or family (sole proprietorship) farms	3 117	.4
Harvested cropland acres	581 960	.4	Partnership farms	1 162 274	.4
. farms	3 495	.4	. . . . . acres	357	1.2
. acres	309 261	.4	. . . . . farms	189 176	.9
Cropland:			Corporation:		
Pasture or grazing only farms	2 032	.5	Family held farms	154	1.3
. acres	256 672	.6	. . . . . acres	99 882	.7
Total woodland farms	2 834	.4	More than 10 stockholders farms	4	7.5
. acres	529 151	.4	10 or less stockholders farms	150	1.3
Pastureland and rangeland other than cropland and woodland pastured farms	1 499	.5	Other than family held farms	22	3.0
. acres	302 309	.5	. . . . . acres	5 753	4.5
Land in house lots, ponds, roads, wasteland, etc. farms	2 396	.4	More than 10 stockholders farms	—	—
. acres	59 496	.8	10 or less stockholders farms	22	3.0
Irrigated land farms	141	1.6	Other—cooperative, estate or trust, institutional, etc. farms	25	3.5
. acres	2 260	4.9	. . . . . acres	15 831	1.6
Harvested cropland irrigated farms	140	1.6	HIRED FARM LABOR¹		
. acres	(D)	(D)	Hired workers by days worked:		
Pasture and other land irrigated farms	2	11.5	150 days or more farms	662	4.8
. acres	(D)	(D)	Less than 150 days farms	1 832	2.4
Land under Conservation Reserve or Wetlands Reserve Programs farms	81	2.4	. . . . . workers	1 531	3.5
. acres	2 870	5.0	. . . . . workers	5 121	4.6
VALUE OF LAND AND BUILDINGS¹			INJURIES AND DEATHS		
Estimated market value of land and buildings farms	3 599	.4	Farm-related injuries:		
Average per farm \$1,000	1 647 870	2.2	Operator and family members farms	46	3.1
Average per acre dollars	457 869	2.2	. . . . . number	51	3.3
. dollars	1 151	2.8	Hired workers farms	40	2.6
VALUE OF MACHINERY AND EQUIPMENT¹			. . . . . number	55	2.2
Estimated market value of all machinery and equipment farms	3 598	.4	Farm-related deaths:		
Average per farm \$1,000	163 435	2.1	Operator and family members farms	2	—
. dollars	45 424	2.1	. . . . . number	(D)	(D)
AGRICULTURAL CHEMICALS¹			Hired workers farms	—	—
Commercial fertilizer farms	2 485	2.0	. . . . . number	—	—
acres on which used	186 928	2.7	FARMS BY SIZE		
TENURE OF OPERATOR			1 to 9 acres	161	1.7
All operators farms	3 675	.3	10 to 49 acres	249	1.4
. acres	1 472 916	.3	50 to 69 acres	98	2.2
Full owners farms	1 840	.5	70 to 99 acres	216	1.7
. acres	508 895	.5	100 to 139 acres	277	1.4
Part owners farms	1 616	.5	140 to 179 acres	290	1.3
. acres	895 400	.4	180 to 219 acres	298	1.3
Tenants farms	219	1.6	220 to 259 acres	241	1.5
. acres	68 621	1.8	260 to 499 acres	936	.7
OWNED AND RENTED LAND			500 to 999 acres	648	.8
Land owned farms	3 459	.3	1,000 to 1,999 acres	194	—
Owned land in farms farms	986 204	.4	2,000 acres or more	67	—
. acres	3 456	.3	FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM		
. acres	950 872	.4	Oilseed and grain farming (1111)	110	2.2
Land rented or leased from others farms	1 843	.5	Vegetable and melon farming (112)	28	4.8
. acres	524 672	.4	Fruit and tree nut farming (113)	63	1.9
landlords	4 527	.5	Greenhouse, nursery, and floriculture production (114)	184	1.6
Rented or leased land in farms farms	1 835	.5	Other crop farming (119)	330	1.2
. acres	522 044	.4	Beef cattle ranching and farming (12111)	2 110	.4
Land rented or leased to others farms	295	1.3	Cattle feedlots (1212)	120	2.0
. acres	37 960	1.8	Dairy cattle and milk production (1212)	237	1.0
OPERATOR CHARACTERISTICS			Hog and pig farming (122)	30	4.8
Operators by place of residence:			Poultry and egg production (123)	363	.6
On farm operated	2 872	.4	Sheep and goat farming (124)	17	4.1
Not on farm operated	653	.8	Animal aquaculture and other animal production (125, 1129)	83	2.9
Not reported	150	1.7	LIVESTOCK		
Operators by principal occupation:			Cattle and calves inventory farms	2 914	.4
Farming	2 320	.4	. . . . . number	263 413	.4
Other	1 355	.6	Beef cows farms	2 306	.4
Operators by days worked off farm:			. . . . . number	106 660	.4
Any	1 844	.5	Milk cows farms	316	.9
200 days or more	1 160	.6	. . . . . number	17 668	.5
Operators by sex:			Cattle and calves sold farms	3 070	.4
Male	3 413	.3	. . . . . number	187 702	.4
Female	262	1.3	Hogs and pigs inventory \$1,000	87 138	.3
Average age of operator years	55.9	.5	. . . . . farms	191	1.4
			. . . . . number	12 980	1.7
			Hogs and pigs sold farms	166	1.6
			. . . . . number	21 645	2.0
			. . . . . \$1,000	2 048	2.3
			Sheep and lambs of all ages inventory farms	312	1.0
			. . . . . number	22 634	1.2
			Sheep and lambs sold farms	312	1.0
			. . . . . number	17 397	1.2
			Horses and ponies inventory farms	625	.9
			. . . . . number	3 757	2.1
			Horses and ponies sold farms	126	2.2
			. . . . . number	781	3.2

See footnotes at end of table.

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	4.4	1.2	-1.9	1.0
Land in farms	5.8	.9	-2	.8
Average size of farm	1.0	1.5	1.8	1.3
Estimated market value of land and buildings ¹ :				
Average per farm	28.9	3.3	32.7	4.6
Average per acre	28.4	3.8	34.8	5.3
Estimated market value of all machinery and equipment ¹ :				
Average per farm	26.3	3.1	6.6	3.7
Farms by size:				
1 to 9 acres	-1.4	2.1	10.3	3.2
10 to 49 acres	4.6	1.8	7.8	2.7
50 to 179 acres	4.8	.9	-9.2	1.1
180 to 499 acres	4.0	.9	-1	1.1
500 to 999 acres	6.8	1.5	-3	1.5
1,000 to 1,999 acres	2.5	-	-8.9	-
2,000 acres or more	15.9	-	11.7	-
Total cropland	3.9	1.2	-3.3	1.0
Harvested cropland	3.3	1.0	-3.6	.8
Irrigated land	3.8	1.2	-4.3	1.0
Market value of agricultural products sold	11.8	1.0	2.5	.8
Average per farm	-14.1	2.1	12.8	3.2
Crops, including nursery and greenhouse crops	18.6	5.6	40.5	7.3
Livestock, poultry, and their products	22.9	.5	25.4	.4
Average per farm	17.7	1.4	27.8	1.3
Farms by value of sales:				
Less than \$2,500	2.9	.7	2.9	.6
\$2,500 to \$4,999	27.0	.4	29.8	.4
\$5,000 to \$9,999	12.9	1.3	(X)	(X)
\$10,000 to \$24,999	-2.4	1.4	(X)	(X)
\$25,000 to \$49,999 .....	.5	1.3	(X)	(X)
\$50,000 to \$99,999	-3.5	1.2	-3.5	1.1
\$100,000 to \$249,999	-1.9	1.6	-1.9	1.5
\$250,000 to \$499,999	-5	1.8	-5	1.8
\$500,000 or more	-10.6	.7	-10.6	.7
Total farm production expenses ¹	-20.6	-	-20.6	-
Average per farm	76.4	-	76.4	-
Net cash return from agricultural sales for the farm unit (see text) ¹	23.3	1.0	25.1	1.1
Average per farm	17.9	1.8	23.8	2.6
Operators by principal occupation:				
Farming	4.6	1.2	1.0	1.8
Other	16.0	5.6	24.2	4.0
Operators by days worked off farm:				
Any	10.9	5.5	22.9	4.5
200 days or more	-3	1.1	1.0	1.0
Livestock and poultry:				
Cattle and calves inventory	7.9	1.4	-6.4	1.3
Beef cows	9.3	1.4	-1	1.2
Milk cows	8.1	1.4	-1.4	1.3
Cattle and calves sold	-1.2	1.1	-5.1	1.0
Hogs and pigs inventory	2.0	.9	.5	.8
Hogs and pigs sold	-1.9	1.1	-	1.1
Sheep and lambs inventory	2.5	1.0	2.5	1.0
Layers and pullets 13 weeks old and older inventory (see text)	-30.5	1.0	-34.4	.9
Broilers and other meat-type chickens sold	-20.8	.6	-21.4	.6
Selected crops harvested:				
Corn for grain or seed	-1	1.1	-3.6	1.0
Corn for silage or green chop	6.3	.9	4.3	.8
Wheat for grain	-23.3	1.3	-33.7	1.4
Oats for grain	-41.3	1.1	-42.3	1.2
Tobacco	-31.5	1.3	-38.5	1.4
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	-50.9	1.0	-52.0	1.1
Land in orchards	-17.6	1.2	-20.4	1.4
...	-28.7	1.1	-25.8	1.5
...	-11.8	1.4	-6.4	1.9
...	19.6	2.5	21.5	2.4
...	36.8	1.6	28.9	1.0
...	56.3	.1	56.3	.1
...	-24.2	1.0	-22.0	1.0
...	-20.3	.9	-19.0	.9
...	-30.0	.7	-28.9	.7
...	-9.5	1.1	-11.6	1.0
...	-1	.8	-1.6	.8
...	-12.2	.7	-13.6	.7
...	-37.8	1.3	-26.7	1.6
...	-15.9	1.3	-9.7	1.4
...	-4.0	1.4	1.9	1.5
...	-20.9	1.6	-24.5	1.7
...	-26.0	1.7	-29.4	1.6
...	-34.3	1.6	-31.9	1.7
...	-25.8	1.4	-17.5	2.0
...	-21.3	1.7	-9.1	2.5
...	-11.7	1.9	-6.8	2.8
...	4.7	1.2	-5.4	1.0
...	16.1	1.1	6.8	1.0
...	17.5	1.1	6.6	1.0
...	-5.0	2.0	-16.7	2.2
...	-17.1	1.0	-20.9	.9

¹Data 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)
West Virginia .	17 772	.4	3 455 532	.3	194	.5	212 832	1.5	432 904	1.6
Barbour	437	.3	86 546	.9	198	.9	168 471	8.6	10 218	7.8
Berkeley	509	.4	72 603	.9	143	.9	384 021	6.9	11 060	6.2
Boone	23	1.2	2 335	5.9	102	6.0	115 860	11.5	432	8.9
Braxton	280	.3	67 081	1.0	240	1.1	177 830	14.8	6 732	8.5
Brooke	95	.6	13 581	3.1	143	3.1	169 746	5.2	2 610	3.4
Cabell	305	.4	31 987	1.3	105	1.3	135 584	17.0	5 798	21.6
Calhoun	171	.4	38 442	1.5	225	1.5	160 327	7.1	2 709	6.0
Clay	100	.6	17 292	1.8	173	1.9	186 472	4.0	2 255	3.9
Doddridge	302	.4	70 555	1.1	234	1.1	142 225	5.7	4 721	8.4
Fayette	205	.4	23 065	1.9	113	2.0	121 807	6.0	3 350	6.6
Gilmer	214	.4	63 317	1.0	296	1.1	165 504	8.8	4 910	15.3
Grant	375	.3	121 961	.8	325	.9	421 949	9.9	10 528	5.7
Greenbrier	727	.5	184 359	.7	254	.9	275 381	5.0	24 619	6.6
Hampshire	547	.4	140 416	.9	257	.9	352 702	12.1	18 395	11.1
Hancock	64	.4	7 140	1.9	112	1.9	137 046	3.9	1 772	3.9
Hardy	467	.3	142 940	.6	306	.7	423 385	4.9	20 277	6.2
Harrison	601	.4	103 181	.9	172	1.0	158 157	8.7	13 145	13.8
Jackson	730	.4	116 677	.8	160	.9	151 767	5.9	14 781	11.8
Jefferson	357	.4	72 978	1.1	204	1.1	715 807	5.9	16 072	7.4
Kanawha	154	.6	19 362	2.0	126	2.1	213 930	10.1	2 478	10.6
Lewis	364	.4	79 427	1.0	218	1.1	207 641	12.7	10 396	13.1
Lincoln	214	.6	27 435	2.2	128	2.3	102 101	12.4	3 200	13.9
Logan	10	-	(D)	(D)	(D)	(D)	243 098	-	112	-
McDowell	7	1.2	488	2.1	70	2.4	97 143	7.9	144	6.7
Marion	317	.3	39 350	1.1	124	1.2	148 037	11.1	5 144	11.1
Marshall	536	.3	78 061	.7	146	.8	115 081	6.0	10 119	8.1
Mason	742	.4	120 561	.8	162	.9	178 881	4.8	21 252	8.4
Mercer	409	.4	53 450	1.3	131	1.4	135 627	9.9	9 137	10.3
Mineral	343	.3	79 655	.9	232	1.0	192 770	4.9	7 439	12.6
Mingo	5	1.7	(D)	(D)	(D)	(D)	22 200	26.3	46	16.6
Monongalia	430	.3	58 074	1.0	135	1.0	176 090	8.9	11 238	12.5
Monroe	617	.4	138 688	.8	225	.9	207 829	6.2	16 055	6.0
Morgan	161	.5	28 180	1.3	175	1.4	284 675	7.6	3 338	5.1
Nicholas	304	.4	39 658	1.3	130	1.3	174 366	18.8	8 840	7.5
Ohio	136	.5	21 113	1.9	155	2.0	139 454	7.4	3 104	8.1
Pendleton	590	.2	175 319	.5	297	.5	356 361	6.8	18 546	8.1
Pleasants	132	.4	21 339	2.1	162	2.1	114 680	14.4	2 452	12.2
Pocahontas	357	.4	128 965	.8	361	.9	288 725	9.0	10 619	10.7
Preston	866	.2	151 697	.6	175	.7	168 577	6.7	19 146	5.9
Putnam	454	.5	57 125	1.1	126	1.2	166 707	9.4	8 867	13.3
Raleigh	260	.4	35 439	1.6	136	1.7	156 380	7.6	6 075	8.5
Randolph	396	.4	104 130	1.0	263	1.1	214 356	10.1	12 301	13.4
Ritchie	352	.4	86 976	.9	247	1.0	152 804	8.7	7 264	12.5
Roane	454	.3	92 766	.8	204	.9	140 647	8.0	8 316	5.8
Summers	316	.4	57 178	1.0	181	1.0	192 150	9.2	7 896	12.2
Taylor	278	.2	43 697	1.1	157	1.1	199 129	14.8	7 029	8.0
Tucker	191	.3	35 097	1.0	184	1.1	192 228	10.4	3 211	4.8
Tyler	234	.5	48 031	1.5	205	1.6	107 256	7.4	3 809	7.4
Upshur	399	.4	64 282	1.1	161	1.2	179 377	11.0	7 659	10.4
Wayne	151	.6	28 622	2.4	190	2.4	184 620	6.1	4 381	7.9
Webster	74	.5	8 043	2.3	109	2.4	93 691	4.8	1 607	4.0
Wetzel	260	.4	47 771	1.2	184	1.3	116 857	8.0	3 977	5.8
Wirt	199	.5	37 071	1.7	186	1.8	154 737	10.4	3 845	5.9
Wood	520	.4	66 569	1.0	128	1.1	142 114	6.5	9 086	7.1
Wyoming	31	.4	3 978	8.0	128	8.1	91 007	7.1	395	3.7
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			
	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)	Total farm production expenses			
							Farms		Value	
						Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
West Virginia .	23 315	1.6	447 428	.1	25 176	.4	17 807	.4	380 631	.6
Barbour	23 436	7.8	3 927	1.6	8 985	1.6	436	.9	3 473	8.4
Berkeley	21 644	6.2	18 171	.5	35 699	.6	511	.6	15 061	2.6
Boone	18 783	11.4	45	20.3	1 944	20.3	23	7.1	46	10.0
Braxton	23 956	8.5	1 731	1.3	6 182	1.3	281	1.2	1 617	7.9
Brooke	27 474	4.6	1 100	5.7	11 583	5.8	95	3.0	1 008	5.5
Cabell	18 948	21.6	2 263	2.1	7 421	2.1	306	1.0	1 959	15.5
Calhoun	15 748	6.3	686	2.7	4 013	2.7	172	1.8	899	5.7
Clay	22 552	4.8	540	4.5	5 397	4.6	100	2.8	595	3.9
Doddridge	15 581	8.5	1 046	1.4	3 465	1.4	303	1.1	1 385	10.0
Fayette	16 261	6.8	1 573	2.4	7 673	2.4	206	1.6	1 388	5.6
Gilmer	22 836	15.3	1 949	1.6	9 110	1.7	215	1.0	1 981	7.4
Grant	27 999	5.8	34 412	.3	91 766	.4	376	.7	29 636	2.0
Greenbrier	33 818	6.6	40 278	.3	55 403	.6	729	.7	23 239	2.5
Hampshire	33 506	11.1	15 709	.6	28 719	.7	549	.7	13 518	4.4

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			
	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)	Total farm production expenses			
							Farms		Value	
							Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Hancock	27 683	4.8	578	3.8	9 038	3.8	64	2.8	461	2.8
Hardy	43 327	6.3	109 461	.1	234 392	.3	468	.6	95 133	.8
Harrison	21 800	13.8	4 756	1.4	7 914	1.4	603	.7	4 532	7.4
Jackson	20 193	11.8	4 362	1.0	5 975	1.0	732	.6	4 514	9.0
Jefferson	44 894	7.5	19 412	.6	54 375	.7	358	.8	16 738	3.2
Kanawha	15 883	10.8	1 419	1.3	9 213	1.5	156	2.1	1 198	5.4
Lewis	28 404	13.1	2 996	1.6	8 230	1.6	366	.8	2 368	8.1
Lincoln	14 813	14.0	1 187	1.9	5 545	2.0	216	1.2	942	7.3
Logan	11 170	—	(D)	(D)	(D)	(D)	10	—	164	—
McDowell	20 543	9.8	(D)	(D)	(D)	(D)	7	7.2	65	1.2
Marion	16 226	11.1	1 629	1.7	5 139	1.8	317	1.0	1 697	13.7
Marshall	18 914	8.1	2 923	.8	5 453	.8	535	.7	2 541	5.5
Mason	28 526	8.4	15 092	.6	20 340	.7	745	.6	11 306	3.7
Mercer	22 231	10.3	2 539	3.2	6 207	3.3	411	.8	2 151	8.2
Mineral	21 625	12.6	8 372	.5	24 408	.6	344	.7	6 772	3.3
Mingo	11 475	24.6	6	10.9	1 211	11.1	5	13.4	11	13.1
Monongalia	26 197	12.5	2 890	1.5	6 721	1.5	429	.8	3 537	17.2
Monroe	25 937	6.0	19 321	.5	31 315	.7	619	.7	15 194	3.9
Morgan	20 604	5.4	1 308	3.8	8 126	3.8	162	2.0	1 610	5.8
Nicholas	28 982	7.6	2 542	2.6	8 363	2.7	305	1.1	2 278	3.8
Ohio	22 825	8.5	1 790	4.5	13 159	4.6	136	2.3	1 444	12.9
Pendleton	31 434	8.1	67 654	.1	114 667	.2	590	.4	61 171	.8
Pleasants	18 715	12.4	766	4.1	5 800	4.1	131	2.1	793	7.7
Pocahontas	29 662	10.7	5 141	1.4	14 401	1.4	358	.8	3 798	14.6
Preston	22 134	6.0	10 597	.9	12 237	.9	865	.6	9 588	5.7
Putnam	19 489	13.3	4 372	1.0	9 629	1.1	455	.9	3 772	11.5
Raleigh	23 275	8.6	2 013	1.9	7 743	1.9	261	1.0	2 072	9.5
Randolph	30 907	13.4	5 646	1.3	14 258	1.4	398	.8	4 505	8.7
Ritchie	20 636	12.5	2 244	1.8	6 376	1.8	352	.9	2 627	6.9
Roane	18 277	5.8	2 626	1.2	5 785	1.2	455	.8	2 566	5.7
Summers	24 988	12.2	3 642	1.2	11 526	1.3	316	.8	3 698	11.4
Taylor	25 285	8.1	3 675	1.5	13 218	1.5	278	1.0	3 204	11.0
Tucker	16 812	5.1	1 138	1.6	5 956	1.6	191	1.7	1 083	6.6
Tyler	16 346	7.5	1 115	2.6	4 764	2.6	233	1.2	1 004	7.8
Upshur	19 099	10.5	2 532	2.1	6 345	2.2	401	.8	2 871	13.1
Wayne	29 014	8.1	1 447	2.4	9 581	2.5	151	1.9	1 125	8.5
Webster	21 711	5.0	194	3.9	2 620	4.0	74	3.0	189	3.5
Wetzel	15 414	6.0	735	1.3	2 826	1.4	259	1.4	836	5.5
Wirt	19 320	6.2	2 633	1.4	13 231	1.5	199	2.0	2 272	5.9
Wood	17 507	7.2	2 836	2.3	5 454	2.4	519	.9	2 908	9.3
Wyoming	12 753	5.3	180	23.0	5 797	23.1	31	3.7	88	6.5

Farm production expenses¹—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)
West Virginia	5 481	2.2	63 068	1.8	10 508	1.3	154 556	.6	4 133	2.6	4 267	3.8
Barbour	124	16.0	723	23.0	275	7.4	422	11.5	56	27.6	14	28.7
Berkeley	139	14.7	507	17.4	269	9.0	1 584	11.6	195	10.7	279	5.9
Boone	8	10.2	4	11.1	12	9.6	11	11.6	8	13.4	2	23.4
Braxton	68	17.0	322	17.8	158	7.7	236	9.0	50	22.5	11	42.1
Brooke	20	6.0	107	10.9	48	3.9	156	6.2	29	4.9	23	8.0
Cabell	60	25.8	242	79.2	147	14.1	157	34.9	116	17.5	132	8.2
Calhoun	53	11.4	138	19.3	113	5.5	134	10.4	18	22.4	4	11.9
Clay	35	4.4	138	9.4	52	3.7	57	3.0	24	5.1	(D)	(D)
Doddridge	76	16.3	223	27.1	159	9.7	172	16.6	12	43.1	2	35.3
Fayette	53	13.0	347	4.0	105	7.7	131	12.0	37	14.7	17	9.2
Gilmer	91	13.1	749	10.0	145	8.0	193	7.7	42	24.7	8	27.9
Grant	135	12.5	3 183	2.0	269	7.6	19 746	2.0	100	17.6	76	12.6
Greenbrier	343	7.7	7 413	5.4	448	6.4	5 416	3.4	168	13.8	110	16.9
Hampshire	150	13.6	1 653	7.7	289	9.1	5 304	2.2	161	13.0	202	13.9
Hancock	17	5.5	26	11.1	31	4.1	20	4.8	27	4.0	27	1.5
Hardy	255	8.8	18 823	1.4	345	5.3	57 671	1.2	133	15.4	318	47.1
Harrison	170	13.6	992	25.4	410	6.2	658	9.1	110	19.5	23	22.0
Jackson	213	12.6	550	15.9	444	6.3	866	25.8	148	16.9	47	23.8
Jefferson	85	19.2	423	5.6	271	6.4	2 612	4.1	180	9.0	761	3.6
Kanawha	46	12.4	87	20.1	95	6.9	121	11.6	35	13.5	18	56.2
Lewis	108	16.9	385	12.8	236	7.7	398	17.3	25	31.6	35	27.3
Lincoln	27	38.4	20	56.0	53	21.0	29	22.8	157	7.7	55	15.9
Logan	3	—	(D)	(D)	6	—	34	—	4	—	5	—
McDowell	1	20.4	(D)	(D)	1	—	(D)	(D)	2	—	(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	Farm production expenses ¹ —Con.											
	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Marion	64	24.0	282	58.4	179	10.3	216	17.9	19	38.7	(D)	(D)
Marshall	142	15.6	215	21.8	337	7.0	445	11.0	96	18.5	26	20.8
Mason	194	13.2	987	12.3	380	6.8	1 599	2.5	261	9.0	488	4.2
Mercer	128	16.9	260	39.4	213	11.9	206	21.9	79	22.6	18	33.9
Mineral	92	17.9	754	10.4	199	9.7	3 451	2.0	64	22.1	47	12.1
Mingo	3	18.2	(D)	(D)	5	13.4	(D)	(D)	1	35.2	(D)	(D)
Monongalia	118	19.3	782	36.9	242	9.4	556	22.3	55	26.1	13	28.9
Monroe	208	11.9	4 989	9.8	386	7.3	2 850	1.7	165	14.6	214	12.8
Morgan	47	13.0	78	20.1	63	10.0	115	9.3	58	9.8	29	15.3
Nicholas	90	16.6	500	6.0	169	9.8	360	9.9	49	26.1	9	19.9
Ohio	50	12.3	65	19.5	96	6.5	391	17.3	52	12.2	30	18.4
Pendleton	246	8.5	8 663	3.3	435	5.4	41 489	1	149	13.3	114	12.2
Pleasants	48	13.4	105	16.9	85	7.8	166	13.5	25	19.3	9	30.6
Pocahontas	127	20.3	1 280	28.4	206	12.4	285	19.7	82	26.0	49	38.1
Preston	276	11.2	953	17.1	471	6.8	1 925	10.4	276	10.5	202	10.6
Putnam	114	20.7	504	43.4	257	10.5	356	28.5	150	16.5	172	19.5
Raleigh	63	21.1	273	28.8	123	11.7	229	14.7	37	26.6	36	14.0
Randolph	147	13.7	1 183	18.8	221	9.8	690	13.8	58	24.9	82	20.1
Ritchie	114	15.2	591	14.9	245	7.9	404	8.7	75	21.2	14	22.1
Roane	176	11.1	661	13.8	250	8.5	322	11.4	82	18.8	12	18.6
Summers	128	16.5	890	27.1	163	12.8	317	17.3	69	22.8	60	12.0
Taylor	80	16.4	578	42.0	192	7.0	542	28.8	38	20.9	94	4.8
Tucker	49	12.5	177	20.5	97	6.7	102	13.0	23	17.5	10	14.4
Tyler	54	19.1	89	27.9	133	9.8	148	12.6	46	19.7	9	22.7
Upshur	122	18.7	346	45.0	265	9.0	356	19.3	57	30.8	19	39.7
Wayne	44	13.9	91	37.3	98	6.9	142	12.6	50	11.7	116	9.7
Webster	15	6.4	7	9.3	33	4.3	29	6.5	14	7.0	2	11.1
Wetzel	58	11.4	68	15.7	140	5.8	117	8.9	46	14.6	11	35.6
Wirt	55	11.9	321	21.8	122	6.1	240	12.6	40	15.2	111	2.2
Wood	144	15.6	299	21.0	303	7.7	365	22.0	73	20.9	74	15.8
Wyoming	5	9.2	6	15.5	19	4.6	10	4.9	7	8.3	1	3.8

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)
West Virginia ..	9 074	1.5	11 710	2.9	3 756	2.8	4 950	2.6	16 807	.5	16 457	1.2
Barbour	196	10.1	155	19.9	70	21.4	37	35.1	419	1.8	313	9.2
Berkeley	258	7.0	455	5.0	189	10.2	1 376	4.2	494	1.9	684	3.6
Boone	12	10.9	3	16.1	3	23.0	(D)	(D)	21	7.3	2	13.7
Braxton	150	9.7	124	15.6	51	19.6	23	33.2	251	3.7	145	9.1
Brooke	31	4.6	27	15.8	22	6.5	(D)	(D)	89	3.1	70	5.7
Cabell	186	10.5	97	25.6	83	21.4	23	10.0	299	2.2	166	15.5
Calhoun	70	9.0	60	12.8	26	18.3	7	34.6	160	2.8	102	7.2
Clay	55	3.6	49	6.6	19	5.1	10	5.2	95	2.8	47	3.4
Doddridge	112	13.1	58	19.7	25	36.9	3	52.3	275	3.1	191	11.4
Fayette	134	5.8	114	8.3	42	13.9	4	15.0	193	2.3	100	8.7
Gilmer	111	11.4	57	12.8	21	35.7	3	25.0	215	1.0	132	13.0
Grant	179	10.4	216	21.2	93	18.4	56	10.2	363	2.0	838	5.0
Greenbrier	354	8.4	831	10.6	173	12.6	167	24.3	698	2.0	982	6.7
Hampshire	340	7.6	533	20.1	147	14.1	277	13.1	533	2.0	696	5.0
Hancock	38	3.4	28	8.7	21	5.0	8	4.3	59	2.9	55	4.9
Hardy	160	13.5	400	6.6	110	16.5	220	5.7	455	2.4	1 847	3.1
Harrison	217	12.2	181	19.4	90	20.2	27	34.5	541	3.3	298	11.4
Jackson	409	7.6	256	13.1	97	20.1	28	34.1	709	1.6	386	11.0
Jefferson	206	7.8	1 626	14.4	158	10.4	1 112	4.7	339	3.1	769	4.9
Kanawha	54	11.4	27	12.8	23	16.2	7	26.3	146	3.2	70	7.5
Lewis	169	12.2	123	14.0	41	27.9	16	19.5	359	2.0	266	10.6
Lincoln	170	6.2	63	13.5	101	14.9	36	36.5	206	2.2	80	12.2
Logan	6	—	4	—	5	—	2	—	9	—	12	—
McDowell	5	6.5	5	4.2	4	8.1	(D)	(D)	7	7.2	2	3.8
Marion	100	16.9	45	19.8	27	37.3	5	43.8	303	3.0	170	15.4
Marshall	217	12.1	98	20.1	109	19.9	27	23.7	503	2.2	228	7.0
Mason	481	5.8	774	4.8	194	12.2	178	10.7	706	2.1	768	4.1
Mercer	286	7.4	216	11.5	107	19.8	31	26.1	377	3.3	178	11.5
Mineral	127	15.6	170	12.1	51	23.9	65	14.2	321	3.5	277	5.8
Mingo	—	—	—	—	—	—	—	—	3	18.2	1	27.0
Monongalia	160	14.7	151	26.6	61	25.4	11	24.7	410	2.0	297	9.9
Monroe	414	5.8	773	9.0	167	13.6	221	8.6	587	2.3	723	5.1
Morgan	104	5.8	119	11.7	52	9.5	98	2.0	146	2.8	137	9.9
Nicholas	201	8.2	144	11.9	50	24.9	9	38.3	293	2.4	146	10.8
Ohio	59	10.3	67	16.9	50	12.7	20	17.3	132	2.5	122	10.1
Pendleton	264	8.2	441	6.9	101	15.7	119	15.1	583	.9	1 553	2.5
Pleasants	60	10.3	42	16.4	29	17.9	8	32.8	123	3.1	43	7.6
Pocahontas	162	15.1	386	14.8	69	29.0	48	16.7	341	2.2	251	10.5
Preston	538	5.8	801	12.3	222	12.5	233	25.4	809	2.1	718	10.5

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	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)
Putnam	320	7.6	256	11.2	133	19.3	69	29.0	421	3.2	259	9.8
Raleigh	170	8.8	173	11.6	62	20.5	59	51.7	254	2.4	151	12.5
Randolph	203	10.8	260	11.6	77	21.7	61	9.8	379	2.4	258	8.0
Ritchie	129	15.6	108	15.6	52	25.1	10	23.5	326	3.6	234	11.3
Roane	170	11.6	148	17.5	71	20.9	21	12.6	416	3.0	196	6.9
Summers	211	9.9	290	19.4	75	23.3	40	12.7	274	6.1	219	13.1
Taylor	105	13.6	89	15.7	34	27.9	26	31.0	257	3.2	203	8.1
Tucker	104	7.0	105	13.6	35	14.8	20	23.5	180	2.6	130	7.7
Tyler	110	12.7	42	17.6	40	25.4	6	29.4	197	5.0	109	13.0
Upshur	187	12.3	168	28.1	88	22.0	37	42.0	387	1.4	207	15.7
Wayne	99	6.8	91	10.9	29	18.3	12	19.1	149	2.1	117	10.7
Webster	34	4.3	16	4.9	11	6.9	2	8.1	67	3.1	26	4.2
Wetzel	96	8.4	33	11.2	40	14.1	7	23.6	242	2.2	88	8.7
Wirt	98	8.1	72	10.4	27	18.7	18	14.1	184	2.8	150	6.6
Wood	225	10.7	134	18.4	73	15.9	22	37.8	474	3.1	230	8.1
Wyoming.....	18	5.3	7	11.2	6	9.6	1	8.2	28	4.0	11	17.2
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)
West Virginia ..	7 454	1.7	5 346	1.7	4 513	2.5	24 160	1.6	1 080	5.7	3 270	4.0
Barbour	200	11.2	54	14.8	161	12.4	258	16.8	27	40.8	8	39.9
Berkeley	312	7.8	270	8.1	122	16.3	3 781	5.4	62	25.0	942	2.4
Boone	4	19.6	(D)	(D)	1	38.5	(D)	(D)	—	—	—	—
Braxton	69	17.3	21	31.4	71	17.9	80	15.2	8	49.2	4	58.8
Brooke.....	43	4.2	35	11.3	16	7.7	144	9.7	2	21.1	(D)	(D)
Cabell	154	13.1	46	22.4	60	27.0	230	3.3	15	62.5	105	63.3
Calhoun	48	13.2	8	12.3	42	12.2	36	7.5	9	24.5	4	26.3
Clay	23	5.6	5	7.1	29	4.7	27	7.9	7	7.6	8	10.8
Doddridge.....	103	14.5	19	21.7	95	13.0	62	27.7	6	57.4	10	13.4
Fayette	78	10.2	19	13.5	56	12.0	156	24.5	27	17.0	23	23.4
Gilmer	74	16.9	16	23.2	61	17.5	56	27.3	16	42.6	23	36.6
Grant	203	9.1	380	7.1	88	17.6	763	1.7	35	29.2	40	29.3
Greenbrier	375	7.7	454	5.2	225	10.8	1 302	8.1	63	21.3	153	7.9
Hampshire	264	8.8	228	13.9	150	14.1	663	5.4	26	39.5	71	21.0
Hancock	30	4.0	12	4.6	15	5.7	61	2.8	7	8.9	(D)	(D)
Hardy	287	7.2	960	2.5	190	9.6	3 369	4.0	41	36.3	166	19.6
Harrison	231	12.4	83	29.5	160	14.2	257	8.9	31	45.4	25	77.1
Jackson	262	10.6	80	20.9	138	16.6	114	18.0	34	37.8	85	55.3
Jefferson	245	7.4	338	3.2	131	12.3	2 336	1.2	38	29.2	406	7.4
Kanawha.....	76	8.9	21	10.4	45	12.4	250	6.1	19	18.9	27	22.0
Lewis	152	12.5	45	27.8	137	14.0	167	22.2	16	42.4	25	59.7
Lincoln	64	19.3	6	19.7	61	24.6	40	32.3	37	33.7	107	41.9
Logan	4	—	2	—	4	—	23	—	3	—	(D)	(D)
McDowell	4	8.1	5	2.1	3	—	(D)	(D)	—	—	—	—
Marion	111	13.3	48	30.0	63	21.7	200	5.3	3	—	(D)	(D)
Marshall	323	7.8	96	10.5	130	15.7	114	19.8	15	55.8	5	63.3
Mason	343	8.7	243	9.4	138	15.1	2 046	2.7	55	24.8	108	28.7
Mercer	60	26.2	10	30.0	84	21.7	80	33.3	42	38.3	47	50.0
Mineral	134	12.7	96	7.7	91	20.0	346	2.7	3	—	28	—
Mingo	2	17.6	(D)	(D)	—	—	—	—	—	—	—	—
Monongalia.....	199	12.2	99	20.3	119	17.4	190	21.3	29	42.4	29	43.2
Monroe	232	11.5	219	7.3	199	13.4	946	9.8	49	29.0	177	21.1
Morgan	66	8.0	31	16.2	26	14.9	196	7.9	7	32.8	(D)	(D)
Nicholas	80	19.0	31	5.0	68	20.7	375	1.3	12	52.3	9	52.5
Ohio	85	7.7	49	17.1	27	18.6	69	10.2	6	42.9	1	42.9
Pendleton	325	6.3	500	1.0	159	10.9	957	2.6	30	14.8	105	8.5
Pleasants	42	15.0	12	10.1	21	25.4	67	10.0	6	51.0	1	70.3
Pocahontas	109	22.6	(D)	(D)	98	24.8	192	12.5	3	—	(D)	(D)
Preston	439	6.7	216	8.3	179	15.3	958	7.3	31	42.3	32	44.9
Putnam	169	14.3	98	19.7	115	20.9	564	15.7	13	62.1	10	59.7
Raleigh	106	14.1	31	10.0	58	20.1	107	4.9	8	53.3	27	59.1
Randolph	156	12.8	75	18.6	113	17.1	497	7.1	12	44.3	50	26.3
Ritchie	113	16.5	23	20.1	91	19.2	50	32.8	27	33.1	25	35.1
Roane	116	15.4	32	21.9	125	14.8	101	24.6	29	31.4	15	35.9
Summers	69	14.8	31	3.7	53	27.5	252	4.8	33	31.1	36	14.1
Taylor	90	13.1	44	19.5	63	19.2	504	7.9	21	37.6	54	10.4
Tucker	68	9.6	21	10.1	42	11.7	50	12.8	2	51.4	(D)	(D)
Tyler	91	12.0	20	33.9	47	20.9	60	39.7	5	62.5	3	55.8
Upshur	184	11.6	61	11.2	130	18.4	391	24.4	51	33.3	87	24.6

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.											
	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)
Wayne	62	10.7	22	14.6	34	15.9	66	16.6	18	21.6	21	22.7
Webster	19	5.2	2	6.6	15	5.9	5	7.6	5	10.7	1	13.3
Wetzel	80	9.5	13	11.7	38	14.6	27	14.7	4	47.3	7	47.0
Wirt	82	8.9	37	12.4	51	13.5	293	2.9	12	27.1	8	22.7
Wood	188	11.8	50	26.0	69	24.8	269	67.7	18	45.5	15	26.2
Wyoming	6	7.7	1	14.4	6	8.7	1	11.1	2	12.4	(D)	(D)
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)
West Virginia	13 407	.9	22 093	1.6	2 186	3.8	4 650	4.1	3 991	2.8	21 169	2.5
Barbour	355	5.1	523	14.2	36	33.6	42	42.4	87	20.8	367	23.0
Berkeley	459	3.4	1 212	6.2	107	16.5	236	14.2	133	14.8	1 006	14.1
Boone	13	9.9	5	12.0	2	27.3	(D)	1	1	38.6	(D)	(D)
Braxton	183	5.9	197	13.0	21	32.4	18	32.3	47	21.9	62	17.3
Brooke	61	3.6	109	6.1	9	8.5	24	16.0	20	6.2	78	7.7
Cabell	185	10.4	171	14.5	28	41.1	16	29.1	22	44.3	238	56.3
Calhoun	120	5.3	158	10.5	5	43.5	1	19.9	30	15.9	89	18.0
Clay	70	3.3	106	4.4	8	10.1	5	10.6	15	6.7	46	7.6
Doddridge	215	6.2	244	12.9	16	38.1	7	14.7	43	24.4	113	27.9
Fayette	141	5.4	161	14.0	18	26.7	13	34.9	24	19.3	69	31.8
Gilmer	166	6.8	257	9.9	11	53.5	17	71.1	42	22.7	151	14.8
Grant	319	4.9	637	7.2	78	14.1	488	6.6	126	12.5	1 238	13.5
Greenbrier	556	4.3	1 286	4.2	149	13.4	202	14.9	237	9.8	1 524	8.6
Hampshire	457	4.4	936	12.2	128	15.6	242	23.0	157	15.0	1 112	18.5
Hancock	51	3.1	93	4.0	10	6.3	5	4.6	18	5.0	35	5.1
Hardy	407	3.8	1 482	5.2	116	15.9	1 074	2.0	220	10.4	3 840	2.2
Harrison	453	5.4	596	10.8	61	30.1	53	40.4	123	18.8	349	21.4
Jackson	543	5.0	689	11.7	50	27.2	19	22.6	106	19.3	405	21.6
Jefferson	315	4.0	1 515	4.6	107	15.1	467	15.8	121	13.7	1 186	6.4
Kanawha	109	5.9	182	12.7	15	26.0	13	40.5	28	16.1	101	14.6
Lewis	250	7.5	256	14.0	35	32.0	10	42.6	75	21.3	165	27.1
Lincoln	127	11.3	96	17.9	10	70.9	17	36.7	28	42.9	130	58.7
Logan	9	—	10	—	—	—	1	—	—	—	(D)	(D)
McDowell	6	8.5	3	2.9	2	16.3	(D)	(D)	—	—	—	—
Marion	234	6.9	199	12.8	19	53.5	13	60.7	52	28.1	105	33.9
Marshall	379	6.1	426	9.2	39	34.0	5	31.9	105	19.7	218	33.4
Mason	509	5.6	1 100	9.2	43	30.2	61	37.4	146	15.5	877	8.2
Mercer	269	8.2	308	20.0	54	29.6	21	37.8	113	18.2	307	25.6
Mineral	234	8.5	394	13.0	50	28.0	67	17.9	62	22.8	311	23.9
Mingo	—	—	—	—	—	—	—	—	—	—	—	—
Monongalia	340	5.6	478	19.4	55	30.1	33	35.8	95	21.1	251	26.9
Monroe	504	4.6	1 018	5.3	116	17.3	165	18.8	173	14.0	905	12.3
Morgan	132	3.9	264	6.5	19	22.4	(D)	(D)	26	19.2	109	26.4
Nicholas	225	6.8	229	15.0	21	27.2	19	13.3	56	23.3	145	22.8
Ohio	111	4.7	192	9.7	19	24.7	8	18.2	29	19.2	109	28.0
Pendleton	461	4.5	1 166	4.4	202	9.8	659	3.7	226	9.1	1 679	4.2
Pleasants	101	4.9	99	15.7	10	34.4	7	41.1	32	16.8	95	21.3
Pocahontas	260	8.0	370	10.9	20	51.1	33	10.8	82	24.8	165	20.5
Preston	679	3.8	982	7.6	135	17.2	252	54.6	276	11.6	775	14.7
Putnam	337	6.7	440	20.4	54	30.7	44	26.7	66	27.5	242	29.6
Raleigh	221	5.7	326	11.8	21	37.3	20	38.9	54	21.1	174	23.0
Randolph	273	7.6	402	10.3	12	44.3	11	1.5	53	24.4	144	18.6
Ritchie	302	4.7	355	15.4	18	38.9	12	54.6	107	16.3	294	18.1
Roane	326	6.2	340	9.6	45	28.4	17	40.2	50	19.3	183	23.2
Summers	195	9.5	309	18.5	16	42.8	83	9.0	66	28.0	327	36.8
Taylor	201	6.7	248	12.8	31	28.1	22	21.0	54	23.1	169	19.6
Tucker	142	4.9	143	7.7	10	19.5	(D)	(D)	33	13.0	79	8.4
Tyler	171	6.7	114	11.6	35	22.7	11	20.6	46	20.5	184	24.0
Upshur	301	7.1	377	17.7	50	35.5	28	43.5	74	25.5	158	34.6
Wayne	124	4.8	122	9.8	15	25.8	15	14.7	27	19.6	48	24.1
Webster	51	3.4	33	5.2	3	13.2	2	15.4	4	11.2	9	11.5
Wetzel	178	4.5	158	9.3	6	39.8	(D)	(D)	29	17.9	72	27.6
Wirt	152	4.4	161	6.9	24	18.1	8	18.0	45	14.3	288	10.7
Wood	404	5.1	398	14.4	19	51.8	24	71.8	103	18.8	433	25.0
Wyoming	21	4.2	19	11.4	3	8.3	(D)	(D)	3	12.9	(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	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)
West Virginia	1 958	4.0	4 316	2.9	17 120	.5	10 201	1.5	14 003	.8	30 419	1.3
Barbour	50	27.0	30	32.2	418	2.4	114	7.6	366	4.2	414	10.0
Berkeley	114	14.5	458	4.6	491	2.1	445	8.4	444	4.1	1 827	2.6
Boone	1	38.6	(D)	(D)	22	7.2	10	9.8	12	10.2	(D)	(D)
Braxton	40	21.8	43	8.9	277	1.8	139	26.6	185	6.4	191	14.7
Brooke	8	9.0	14	16.0	89	3.1	66	5.6	65	3.6	146	4.6
Cabell	9	74.4	10	82.3	291	3.2	161	18.9	218	8.5	166	15.9
Calhoun	18	22.4	15	47.7	164	2.6	65	5.1	123	5.1	79	9.8
Clay	4	10.5	(D)	(D)	97	2.8	37	3.3	69	3.3	52	4.3
Doddridge	16	38.5	7	42.9	298	1.6	128	7.4	243	5.1	147	12.0
Fayette	16	28.5	6	28.1	200	2.0	107	8.2	165	3.9	121	6.9
Gilmer	29	25.8	26	18.1	214	1.0	92	7.5	175	6.5	202	10.6
Grant	78	18.9	216	20.5	356	2.4	289	4.5	339	4.4	1 468	3.8
Greenbrier	126	16.0	378	11.2	701	1.9	600	3.1	592	3.3	2 422	2.4
Hampshire	67	21.8	212	13.5	537	1.4	440	14.6	468	4.2	950	4.3
Hancock	2	14.9	(D)	(D)	63	2.8	38	3.5	55	3.0	51	4.1
Hardy	106	16.1	404	9.1	443	3.1	530	6.2	411	3.7	4 028	5.4
Harrison	40	31.0	44	21.5	596	1.2	342	8.8	482	4.9	604	6.6
Jackson	49	31.3	39	33.6	713	1.6	435	10.7	589	3.7	514	13.2
Jefferson	90	16.3	592	6.9	349	1.7	559	4.7	333	3.3	2 037	3.8
Kanawha	5	39.9	7	49.3	149	2.8	113	7.7	129	4.5	155	6.0
Lewis	49	24.8	47	34.3	351	2.7	162	9.4	290	5.7	266	17.2
Lincoln	32	37.8	29	73.4	178	5.9	66	12.6	187	4.1	167	11.6
Logan	1	—	(D)	(D)	7	—	5	—	7	—	27	—
McDowell	—	—	—	—	7	7.2	5	1.7	6	8.5	12	1.4
Marion	16	39.1	16	38.8	299	3.0	159	17.4	213	8.7	184	13.0
Marshall	31	40.2	29	46.8	526	1.1	228	5.5	398	4.2	381	9.0
Mason	52	23.2	237	6.6	722	1.6	398	5.5	534	4.7	1 442	4.3
Mercer	15	49.5	20	51.7	387	3.0	206	13.5	323	6.3	242	12.2
Mineral	17	38.9	41	32.5	337	2.0	251	11.8	223	9.5	474	5.9
Mingo	1	35.2	(D)	(D)	5	13.4	1	13.4	1	35.2	(D)	(D)
Monongalia	25	46.0	29	56.6	411	2.5	297	10.8	314	6.1	322	18.8
Monroe	66	23.3	275	7.5	594	2.0	273	5.5	509	4.3	1 447	6.5
Morgan	19	20.1	39	20.6	159	2.3	140	5.0	126	4.4	147	8.8
Nicholas	39	29.2	29	33.8	287	3.0	125	10.2	210	6.5	147	13.6
Ohio	21	21.1	12	27.4	130	3.2	72	6.2	117	4.0	236	24.7
Pendleton	97	18.0	255	6.4	564	2.1	356	8.7	503	3.7	3 116	3.2
Pleasants	15	32.3	16	31.9	124	3.2	57	10.9	98	6.3	65	9.0
Pocahontas	24	43.4	77	4.1	336	3.4	165	16.3	313	4.3	479	17.9
Preston	132	17.5	81	17.7	827	1.8	394	6.6	715	3.2	1 065	7.9
Putnam	54	24.8	103	34.1	433	2.9	361	8.8	321	7.4	294	11.3
Raleigh	26	31.1	54	20.3	240	3.9	153	7.1	232	4.7	261	11.2
Randolph	69	23.4	111	17.3	368	3.5	93	6.5	335	4.6	588	5.6
Ritchie	16	41.4	12	27.9	347	1.6	159	12.3	266	6.6	336	14.4
Roane	52	22.4	29	18.6	441	1.9	160	8.2	339	5.5	329	10.3
Summers	48	28.4	107	39.3	306	2.1	114	10.5	220	8.1	622	8.7
Taylor	37	25.9	45	9.7	263	2.9	156	8.6	163	8.0	431	12.8
Tucker	27	18.1	25	16.5	185	2.4	69	4.5	150	4.5	143	11.4
Tyler	3	—	2	—	233	1.2	109	6.6	168	7.6	99	11.2
Upshur	39	39.1	29	48.5	382	3.4	145	11.5	344	5.1	460	16.0
Wayne	22	20.0	19	24.5	149	2.1	81	8.2	123	4.1	161	11.9
Webster	6	8.2	2	7.7	72	3.0	21	3.6	53	3.4	32	5.2
Wetzel	1	32.1	(D)	(D)	257	1.5	106	5.6	178	4.5	124	7.4
Wirt	19	21.2	35	27.8	186	2.8	101	5.7	144	4.9	429	3.5
Wood	16	53.1	4	58.5	512	1.3	293	7.1	397	5.2	299	11.9
Wyoming	3	8.3	(D)	(D)	27	3.9	11	7.9	20	4.5	11	7.4
Geographic area	Net cash return from agricultural sales for the farm unit (see text) ¹				Total cropland				Harvested cropland			
	Farms		Value		Farms		Acres		Farms		Acres	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
West Virginia	17 807	.4	57 522	3.4	16 509	.4	1 336 723	.4	15 086	.4	621 632	.3
Barbour	436	.9	333	97.4	422	.4	38 874	1.1	403	.4	16 788	1.0
Berkeley	511	.6	2 019	17.9	473	.5	46 917	1.0	428	.6	31 819	1.0
Boone	23	7.1	-1	(H)	23	1.2	357	10.3	23	1.2	129	11.0
Braxton	281	1.2	47	(H)	258	.5	24 056	1.5	241	.7	9 517	1.9
Brooke	95	3.0	92	33.6	91	.9	6 758	3.8	88	1.1	3 262	3.7
Cabell	306	1.0	149	(H)	283	.6	10 294	1.8	251	.8	3 920	2.0
Calhoun	172	1.8	-218	16.8	163	.5	11 868	1.8	153	.8	4 581	1.9
Clay	100	2.8	-55	16.6	95	.8	5 362	3.0	84	1.2	2 005	5.9
Doddridge	303	1.1	-338	33.1	287	.5	27 184	1.7	262	.6	8 401	1.7
Fayette	206	1.6	226	35.1	193	.6	9 772	2.2	176	.9	4 639	2.1
Gilmer	215	1.0	-217	41.6	205	.5	24 735	1.4	184	.7	7 588	1.8
Grant	376	.7	5 349	8.1	323	.5	33 574	1.3	300	.7	14 730	1.3
Greenbrier	729	.7	16 510	3.1	664	.6	62 392	1.0	564	.7	26 124	.9
Hampshire	549	.7	1 457	43.3	504	.5	49 803	1.1	459	.6	25 121	1.1

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	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)
Hancock	64	2.8	117	13.9	63	.8	3 446	2.8	56	1.4	1 879	2.8
Hardy	468	.6	12 717	5.7	408	.5	42 564	.8	351	.6	20 889	.7
Harrison	603	.7	-99	(H)	562	.5	48 282	1.2	518	.6	19 215	1.3
Jackson	732	.6	-258	97.8	700	.4	48 010	1.0	643	.5	18 700	1.1
Jefferson	358	.8	2 226	13.7	323	.6	55 634	1.1	274	.9	39 536	1.2
Kanawha	156	2.1	99	76.1	134	1.1	6 300	3.0	111	1.7	2 158	4.1
Lewis	366	.8	602	35.6	339	.5	33 439	1.5	323	.6	12 476	1.2
Lincoln	216	1.2	482	61.2	212	.6	8 501	2.9	195	.9	2 229	3.0
Logan	10	-	-38	-	10	-	(D)	(D)	8	-	103	-
McDowell	7	7.2	39	1.4	7	1.2	250	5.2	6	8.3	153	.3
Marion	317	1.0	-443	52.1	293	.5	18 740	1.1	257	.7	6 967	1.4
Marshall	535	.7	-455	30.2	514	.4	32 158	1.0	487	.4	17 287	1.1
Mason	745	.6	2 942	10.7	699	.5	49 364	1.0	655	.5	26 789	1.0
Mercer	411	.8	-268	59.0	381	.6	18 258	1.6	348	.7	7 862	1.5
Mineral	344	.7	1 449	10.0	314	.5	27 214	1.3	274	.7	13 934	1.4
Mingo	5	13.4	-5	17.3	1	47.1	(D)	(D)	-	-	-	-
Monongalia	429	.8	-364	(H)	403	.4	28 482	1.3	377	.5	12 124	1.2
Monroe	619	.7	2 655	16.5	554	.5	47 626	1.1	503	.7	23 974	1.0
Morgan	162	2.0	-287	20.6	151	.7	10 647	1.6	144	.9	6 087	2.1
Nicholas	305	1.1	445	42.4	285	.5	16 798	1.9	268	.7	8 602	2.2
Ohio	136	2.3	442	45.5	128	.8	12 648	2.6	118	1.1	7 688	2.8
Pendleton	590	.4	6 005	4.8	495	.3	45 150	1.1	440	.5	18 237	.5
Pleasants	131	2.1	-123	50.6	116	.9	6 101	3.4	99	1.3	2 760	2.8
Pocahontas	358	.8	371	70.7	324	.6	38 292	1.2	310	.7	15 931	2.0
Preston	865	.6	812	67.4	824	.3	73 525	.6	770	.4	41 897	.5
Putnam	455	.9	973	31.1	430	.6	21 064	1.4	398	.7	9 977	1.3
Raleigh	261	1.0	-144	92.1	244	.6	13 609	2.0	216	.9	6 542	2.0
Randolph	398	.8	1 444	19.6	370	.5	36 399	1.4	337	.7	16 847	1.4
Ritchie	352	.9	-347	52.3	330	.5	34 512	1.4	308	.6	13 986	1.9
Roane	455	.8	8	(H)	419	.4	41 419	1.1	395	.5	14 349	1.4
Summers	316	.8	93	(H)	296	.5	20 342	1.0	263	.7	8 876	1.3
Taylor	278	1.0	1 169	26.9	259	.4	17 434	1.5	243	.5	8 335	1.3
Tucker	191	1.7	88	60.1	177	.6	11 288	1.7	166	.7	5 801	1.3
Tyler	233	1.2	-163	51.4	225	.7	19 683	1.9	205	.9	8 211	2.0
Upshur	401	.8	-355	57.7	375	.5	28 181	1.6	357	.6	12 122	1.6
Wayne	151	1.9	140	53.6	140	.9	8 090	2.5	116	1.4	3 429	3.1
Webster	74	3.0	5	(H)	74	.5	3 032	2.8	62	1.4	1 376	3.6
Wetzel	259	1.4	-191	26.9	246	.5	12 714	1.3	226	.7	6 452	1.4
Wirt	199	2.0	-308	17.1	190	.7	14 842	2.1	183	.8	6 184	1.6
Wood	519	.9	-13	(H)	479	.5	29 433	1.4	433	.7	12 531	1.5
Wyoming	31	3.7	92	33.9	31	.4	1 153	6.4	27	1.6	513	4.4
Irrigated land				Livestock and poultry								
Farms				Cattle and calves inventory				Beef cows inventory				
Acres				Farms				Total				
Relative standard error of estimate (percent)				Relative standard error of estimate (percent)				Relative standard error of estimate (percent)				
Number				Number				Number				
West Virginia				West Virginia				West Virginia				
Barbour	268	1.4	3 285	4.1	12 284	.4	439 462	.4	10 367	.4	202 844	.4
Berkeley	5	8.3	8	8.9	357	.6	12 037	2.2	304	.7	5 430	1.0
Boone	18	4.7	98	8.9	289	1.0	13 135	1.4	224	1.3	5 601	1.8
Braxton	-	-	-	-	11	8.4	94	15.4	9	9.5	47	20.2
Brooke	-	-	-	-	206	.9	6 267	1.2	181	1.1	3 426	1.4
Brooke	-	-	-	-	58	2.4	1 840	3.6	48	3.0	658	4.6
Cabell	9	8.5	66	2.7	163	1.4	2 243	2.4	141	1.6	(D)	(D)
Calhoun	-	-	-	-	118	1.2	3 483	3.4	106	1.4	1 780	3.1
Clay	1	-	(D)	(D)	73	1.7	1 541	2.8	59	2.4	705	2.5
Doddridge	3	13.1	(D)	(D)	214	.9	4 320	1.4	196	1.0	2 532	1.6
Fayette	3	13.1	5	17.6	142	1.3	3 551	2.9	122	1.6	1 855	3.2
Gilmer	3	10.8	3	10.8	166	1.0	6 244	1.5	138	1.3	2 496	1.7
Grant	10	5.0	99	6.1	292	.7	14 335	.9	253	.8	7 726	1.0
Greenbrier	13	7.8	91	17.4	531	.8	39 450	1.0	389	1.1	14 628	1.2
Hampshire	11	7.7	540	22.3	382	.8	16 435	1.2	336	.9	9 410	1.2
Hancock	4	4.9	(D)	(D)	43	2.1	824	3.2	38	2.5	(D)	(D)
Hardy	8	8.4	240	12.6	325	.7	22 825	.8	286	.8	10 506	.8
Harrison	8	8.4	26	12.6	414	.8	12 221	1.4	349	1.0	5 926	1.5
Jackson	7	9.1	45	5.3	495	.7	12 218	1.2	427	.8	6 629	1.2
Jefferson	14	6.2	470	1.2	217	1.2	16 854	1.5	171	1.5	5 498	2.4
Kanawha	2	16.8	(D)	(D)	82	2.3	1 445	3.5	72	2.5	804	3.4
Lewis	4	11.1	(D)	(D)	271	.8	9 804	1.6	227	1.1	4 950	1.7
Lincoln	5	12.7	11	16.1	91	2.4	1 126	3.0	73	2.9	588	3.6
Logan	1	-	(D)	(D)	3	-	93	-	2	-	(D)	(D)
McDowell	-	-	-	-	2	25.0	(D)	(D)	2	25.0	(D)	(D)
Marion	5	8.4	14	10.2	235	.8	4 610	1.5	211	1.0	2 466	1.8
Marshall	3	9.5	5	11.4	363	.7	7 415	.9	313	.9	3 641	1.2
Mason	10	7.0	70	19.2	453	.9	15 820	1.2	388	1.0	6 567	1.7
Mercer	4	16.6	4	16.6	265	1.0	6 040	1.8	228	1.2	3 102	1.7
Mineral	13	5.2	236	5.7	214	1.0	7 211	1.8	175	1.2	3 668	2.2

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	Irrigated land				Livestock and poultry							
	Farms		Acres		Cattle and calves inventory				Beef cows inventory			
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	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)
Mingo	—	—	—	—	1	47.1	(D)	(D)	1	47.1	(D)	(D)
Monongalia	7	9.7	46	16.1	301	.8	7 120	1.3	258	1.0	(D)	(D)
Monroe	8	8.9	14	15.0	490	.7	27 627	1.0	390	.9	10 886	1.4
Morgan	7	7.7	53	9.6	71	2.2	1 986	2.6	57	2.6	(D)	(D)
Nicholas	2	18.7	(D)	(D)	209	1.0	6 663	2.5	171	1.3	2 886	2.0
Ohio	1	19.2	(D)	(D)	96	1.6	3 167	2.8	71	2.4	995	3.3
Pendleton	10	2.8	448	.1	440	.5	22 781	.5	358	.6	10 389	.7
Pleasants	2	24.8	(D)	(D)	93	1.4	2 182	2.0	81	1.7	1 065	2.6
Pocahontas	3	13.8	8	23.6	258	1.0	15 330	1.1	218	1.2	7 333	1.3
Preston	4	9.2	(D)	(D)	620	.5	22 157	1.1	517	.6	8 846	1.1
Putnam	5	10.0	14	11.9	287	1.1	5 180	1.9	264	1.2	(D)	(D)
Raleigh	6	12.4	(D)	(D)	183	1.2	4 160	2.0	148	1.5	2 188	2.1
Randolph	2	18.5	(D)	(D)	264	1.0	11 424	1.4	210	1.3	4 950	1.5
Ritchie	6	11.4	104	18.3	260	.9	7 876	1.7	235	1.0	3 969	1.7
Roane	4	9.6	4	9.6	337	.7	9 358	1.2	287	.8	4 864	1.7
Summers	11	7.9	134	12.0	242	.8	8 287	1.4	195	1.1	3 420	1.7
Taylor	2	—	(D)	(D)	207	.7	7 149	1.6	179	.8	3 410	1.9
Tucker	2	21.7	(D)	(D)	129	1.3	3 228	1.5	110	1.5	(D)	(D)
Tyler	1	32.1	(D)	(D)	165	1.3	3 829	2.3	147	1.6	2 103	3.2
Upshur	4	10.5	(D)	(D)	277	.9	8 086	1.9	236	1.1	4 372	1.8
Wayne	5	10.5	31	22.5	113	1.4	2 569	2.7	96	1.8	(D)	(D)
Webster	1	20.4	(D)	(D)	55	1.8	570	2.8	46	2.5	322	4.0
Wetzel	2	14.0	(D)	(D)	154	1.3	2 330	1.7	138	1.4	1 238	1.7
Wirt	3	12.4	28	13.3	153	1.2	4 728	2.3	134	1.5	2 577	3.0
Wood	5	9.8	27	15.5	381	.8	7 714	1.5	333	.9	3 947	1.7
Wyoming	1	25.8	(D)	(D)	23	2.6	454	7.3	19	3.6	(D)	(D)
Livestock and poultry—Con.												
Geographic area	Milk cows inventory				Hogs and pigs inventory				Sheep and lambs inventory			
	Farms		Total		Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
West Virginia	676	.9	18 497	.6	645	1.0	15 708	1.6	979	.8	40 709	1.0
Barbour	17	4.8	296	5.4	17	5.5	139	10.8	10	6.4	296	7.7
Berkeley	23	3.3	1 540	1.3	22	4.7	4 493	.3	28	4.3	599	7.4
Boone	3	14.8	6	28.9	2	21.7	(D)	(D)	—	—	—	—
Braxton	11	7.1	21	9.6	12	5.7	92	7.2	12	6.4	376	9.2
Brooke	9	7.4	285	9.1	4	15.2	161	16.0	4	13.9	129	7.7
Cabell	2	19.5	(D)	(D)	8	8.3	62	11.6	5	12.4	(D)	(D)
Calhoun	11	7.6	18	9.7	4	10.1	11	10.9	2	22.6	(D)	(D)
Clay	11	8.4	28	11.8	9	7.5	55	8.6	3	10.6	(D)	(D)
Doddridge	6	12.9	17	12.2	5	12.5	19	13.3	11	7.9	171	9.8
Fayette	7	10.2	21	12.3	14	6.8	86	10.1	5	12.2	148	14.7
Gilmer	8	7.6	59	22.1	7	8.8	67	9.4	10	7.1	254	5.6
Grant	8	6.7	149	5.8	7	8.3	64	10.7	45	3.2	1 722	7.2
Greenbrier	43	3.5	1 776	1.4	30	5.0	561	23.8	65	3.2	2 515	3.1
Hampshire	9	9.9	13	8.5	28	4.8	615	5.3	24	5.1	601	5.7
Hancock	1	30.7	(D)	(D)	4	6.8	28	3.5	3	12.1	(D)	(D)
Hardy	12	7.0	339	6.2	30	3.4	1 073	4.9	43	3.2	2 386	4.0
Harrison	12	6.1	409	2.6	8	9.9	27	12.4	9	10.2	218	12.3
Jackson	19	5.5	198	5.2	27	4.8	225	9.5	30	4.3	684	5.1
Jefferson	28	2.8	3 305	1.0	17	6.2	1 947	6.8	19	5.9	352	7.5
Kanawha	5	12.7	21	12.6	7	12.1	(D)	(D)	7	10.5	145	11.3
Lewis	9	8.3	102	16.3	9	7.2	25	11.1	23	4.3	1 019	3.6
Lincoln	3	12.4	3	12.4	5	13.3	72	21.1	3	15.8	(D)	(D)
Logan	1	—	(D)	(D)	—	—	—	—	—	—	—	—
McDowell	—	—	—	—	—	—	—	—	—	—	—	—
Marion	7	8.6	10	9.9	9	7.2	63	10.3	16	5.4	291	7.1
Marshall	27	3.0	646	2.0	34	3.6	279	6.6	25	4.3	812	4.0
Mason	30	3.6	1 969	1.7	11	7.3	701	2.7	11	8.1	250	16.1
Mercer	10	8.1	36	10.1	13	7.3	92	10.9	8	8.5	217	9.5
Mineral	15	5.4	335	2.3	8	8.7	28	9.2	26	3.4	778	3.6
Mingo	—	—	—	—	—	—	—	—	—	—	—	—
Monongalia	4	10.2	(D)	(D)	12	7.6	214	4.1	29	4.4	1 200	4.1
Monroe	37	3.4	1 713	.6	23	5.1	326	11.4	41	4.0	1 975	8.3
Morgan	2	12.1	(D)	(D)	5	11.8	62	11.6	5	12.5	47	13.3
Nicholas	11	7.4	172	1.2	15	6.5	244	12.3	9	9.7	205	11.7
Ohio	21	5.8	703	6.5	12	8.3	82	9.1	9	9.4	176	12.1
Pendleton	19	4.3	52	5.0	15	4.1	1 249	2.1	149	1.3	8 970	1.2
Pleasants	5	9.8	23	8.4	7	7.2	108	8.7	1	18.9	(D)	(D)
Pocahontas	8	8.5	116	3.9	14	6.2	201	8.7	55	3.1	4 401	3.0
Preston	64	2.2	1 912	1.8	25	3.9	265	6.5	46	2.9	2 871	4.3
Putnam	4	16.3	(D)	(D)	6	10.7	12	13.3	7	11.0	98	14.5
Raleigh	11	7.6	43	18.6	8	9.2	18	8.7	10	8.2	178	10.3
Randolph	20	5.6	564	3.3	12	7.2	262	1.1	47	3.4	2 850	4.8
Ritchie	10	7.8	22	10.5	14	6.8	42	9.6	11	6.9	672	7.0
Roane	16	6.1	37	13.7	21	5.2	152	7.9	16	5.6	509	8.3

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.											
	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)
Summers	20	5.1	345	.8	12	7.9	55	10.6	9	6.4	194	5.6
Taylor	6	8.7	140	14.5	12	6.5	77	17.1	4	11.9	(D)	(D)
Tucker	4	12.1	(D)	(D)	12	5.6	216	13.2	15	5.6	416	5.1
Tyler	5	10.8	143	9.2	9	9.0	(D)	(D)	8	11.7	189	15.2
Upshur	22	5.2	33	5.7	15	6.8	36	8.1	15	5.3	363	5.5
Wayne	7	9.9	(D)	(D)	4	13.8	79	28.8	4	14.4	(D)	(D)
Webster	5	13.4	9	13.7	8	10.4	60	10.9	7	10.1	191	12.5
Wetzel	10	7.1	30	5.9	12	5.9	123	9.4	17	5.8	394	6.5
Wirt	8	9.9	215	9.3	8	10.4	129	10.8	7	9.2	78	12.0
Wood	9	8.4	113	12.3	11	7.9	87	9.6	11	8.4	279	9.4
Wyoming.....	1	25.8	(D)	(D)	2	12.9	(D)	(D)	—	—	—	—

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)
West Virginia .	1 085	.8	1 448 777	1.5	186	.9	79 193 428	.1
Barbour	32	3.8	793	7.1	—	—	—	—
Berkeley	23	5.1	589	5.3	2	16.0	(D)	(D)
Boone	5	16.1	105	18.2	—	—	—	—
Braxton	22	4.8	917	7.2	—	—	—	—
Brooke	5	15.2	129	19.6	—	—	—	—
Cabell	17	6.5	251	8.7	—	—	—	—
Calhoun	16	6.4	200	7.1	—	—	—	—
Clay	8	8.4	208	6.8	—	—	—	—
Doddridge.....	24	4.8	538	5.3	1	40.0	(D)	(D)
Fayette	13	6.8	341	12.9	—	—	—	—
Gilmer	18	5.5	263	7.2	—	—	—	—
Grant	29	3.9	288 524	4.2	39	1.7	15 210 209	.2
Greenbrier	39	4.6	844	7.9	—	—	—	—
Hampshire	35	3.6	126 921	3.5	9	5.4	4 144 861	.4
Hancock	3	10.8	45	11.5	—	—	—	—
Hardy	67	2.0	756 302	1.6	79	.9	38 514 510	.1
Harrison	27	5.2	642	8.2	2	14.3	(D)	(D)
Jackson	37	4.0	539	4.9	—	—	—	—
Jefferson	20	6.3	3 460	22.9	1	27.5	(D)	(D)
Kanawha	4	16.2	44	23.8	—	—	—	—
Lewis	16	5.3	293	7.2	1	27.8	(D)	(D)
Lincoln	11	9.0	179	12.1	—	—	—	—
Logan	—	—	—	—	—	—	—	—
McDowell	—	—	—	—	—	—	—	—
Marion	13	6.6	279	8.7	—	—	—	—
Marshall	30	4.3	631	5.6	1	28.6	(D)	(D)
Mason	31	4.8	502	6.2	—	—	—	—
Mercer	17	6.3	266	7.2	1	26.2	(D)	(D)
Mineral	20	5.1	35 599	7.2	5	—	2 410 000	—
Mingo	1	47.1	(D)	(D)	—	—	—	—
Monongalia.....	18	5.7	(D)	(D)	2	10.0	(D)	(D)
Monroe	23	5.7	404	5.9	—	—	—	—
Morgan	9	7.6	515	6.1	—	—	—	—
Nicholas	26	4.9	552	6.1	—	—	—	—
Ohio	10	9.3	217	9.0	—	—	—	—
Pendleton	32	3.1	215 364	4.9	33	.9	18 863 174	(L)
Pleasants	13	7.1	307	6.7	—	—	—	—
Pocahontas	31	4.6	741	4.7	1	28.9	(D)	(D)
Preston	50	2.9	1 268	5.1	4	9.8	150	13.8
Putnam	17	6.5	564	11.4	—	—	—	—
Raleigh	16	6.1	313	6.6	1	17.3	(D)	(D)
Randolph	30	4.6	606	5.8	—	—	—	—
Ritchie	26	5.0	550	6.7	—	—	—	—
Roane	36	3.9	788	6.8	2	18.4	(D)	(D)
Summers	18	5.2	336	5.8	—	—	—	—
Taylor	15	4.8	374	4.6	—	—	—	—
Tucker	7	8.5	117	7.9	—	—	—	—
Tyler	12	8.4	283	9.7	—	—	—	—
Upshur	29	4.2	498	5.0	—	—	—	—
Wayne	7	10.5	246	10.4	—	—	—	—
Webster	15	5.9	303	8.3	1	29.1	(D)	(D)
Wetzel	26	4.5	684	6.2	1	28.1	(D)	(D)
Wirt	10	9.7	131	11.7	—	—	—	—
Wood	26	5.2	411	6.7	—	—	—	—
Wyoming.....	—	—	—	—	—	—	—	—

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											
	Corn for grain or seed						Corn for silage or green chop					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, green	Relative standard error of estimate (percent)
West Virginia	1 150	.7	35 499	.8	3 270 197	.7	929	.7	27 642	.5	380 942	.6
Barbour	9	5.9	41	9.3	3 402	10.8	13	4.4	164	4.7	2 182	4.8
Berkeley	83	2.3	3 063	2.2	198 047	2.5	49	2.8	2 298	2.1	20 873	2.1
Boone	—	—	—	—	—	—	—	—	—	—	—	—
Braxton	11	6.6	38	5.7	2 651	4.6	9	5.4	230	6.5	2 729	15.9
Brooke	17	5.5	244	13.0	26 087	12.0	6	9.5	174	10.9	2 605	12.5
Cabell	18	5.3	201	5.9	13 526	8.4	1	19.6	(D)	(D)	(D)	(D)
Calhoun	2	17.5	(D)	(D)	(D)	(D)	1	20.0	(D)	(D)	(D)	(D)
Clay	3	14.6	24	14.2	2 400	14.2	—	—	—	—	—	—
Doddridge	8	9.0	20	10.5	1 125	12.3	1	—	(D)	(D)	(D)	(D)
Fayette	13	7.6	46	9.7	3 590	10.1	9	8.8	95	9.6	1 455	9.1
Gilmer	9	6.6	61	5.3	3 423	6.4	4	—	73	—	788	—
Grant	16	5.9	459	18.3	29 401	19.1	30	3.1	759	2.3	8 659	2.1
Greenbrier	30	3.6	357	4.6	40 614	5.1	86	2.0	2 433	1.4	40 994	1.5
Hampshire	36	4.2	937	9.4	70 344	10.7	46	3.3	623	2.7	7 271	3.4
Hancock	13	5.5	77	5.1	7 399	4.9	1	30.7	(D)	(D)	(D)	(D)
Hardy	57	1.8	3 010	.8	282 669	.7	83	1.4	2 638	1.3	44 035	1.1
Harrison	9	8.9	34	7.5	1 973	4.8	18	4.8	286	3.8	4 886	4.1
Jackson	47	3.4	623	5.3	54 790	4.6	9	6.8	114	5.5	2 160	5.8
Jefferson	86	2.2	10 374	1.3	891 305	1.1	54	2.7	5 229	1.0	59 816	1.2
Kanawha	3	18.7	(D)	(D)	(D)	(D)	1	33.6	(D)	(D)	(D)	(D)
Lewis	9	7.1	59	4.8	4 425	4.0	9	6.5	266	7.1	1 899	6.8
Lincoln	22	5.9	115	12.9	6 567	11.6	1	31.1	(D)	(D)	(D)	(D)
Logan	—	—	—	—	—	—	1	—	(D)	(D)	(D)	(D)
McDowell	1	—	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Marion	1	19.6	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Marshall	18	4.2	173	8.8	10 804	10.5	13	4.0	297	1.7	3 321	1.7
Mason	91	2.4	4 531	2.4	496 186	2.0	34	3.1	1 778	1.9	28 963	1.5
Mercer	18	5.7	110	7.6	11 102	8.9	6	9.8	94	8.6	853	7.2
Mineral	27	3.1	560	4.6	49 520	5.9	27	3.1	491	2.5	4 085	2.6
Mingo	—	—	—	—	—	—	—	—	—	—	—	—
Monongalia	12	6.0	150	4.1	13 900	4.6	8	7.5	180	7.7	4 270	14.3
Monroe	67	2.8	2 683	.5	306 902	.4	82	2.3	2 128	2.5	35 033	2.4
Morgan	22	5.1	202	5.3	13 087	5.7	11	6.1	258	7.7	1 858	8.0
Nicholas	15	6.3	84	9.0	6 221	10.5	9	7.7	170	3.8	2 186	5.3
Ohio	26	4.6	863	2.4	114 477	2.2	4	18.0	21	20.3	390	20.6
Pendleton	23	2.5	1 105	.7	97 853	.5	51	1.6	1 698	1.3	23 333	1.2
Pleasants	8	8.7	87	8.4	9 580	10.3	7	7.5	88	8.0	796	4.2
Pocahontas	15	5.7	142	5.7	17 025	6.2	50	2.8	772	2.1	12 946	1.8
Preston	108	1.8	2 147	3.3	191 876	3.0	87	2.0	1 763	2.2	27 719	2.1
Putnam	23	6.2	863	2.4	114 477	2.2	4	18.0	21	20.3	390	20.6
Raleigh	6	9.6	29	11.3	2 860	14.9	9	7.0	169	3.5	2 102	4.7
Randolph	12	6.6	709	1.6	94 528	1.2	11	6.7	476	5.5	5 914	7.8
Ritchie	8	10.8	49	11.0	3 905	11.3	8	9.5	205	8.9	3 039	8.4
Roane	13	6.5	59	6.6	5 215	7.0	—	—	—	—	—	—
Summers	14	6.9	54	8.9	3 531	8.4	13	6.0	574	2.8	9 350	1.5
Taylor	—	—	—	—	—	—	2	17.3	(D)	(D)	(D)	(D)
Tucker	16	5.8	286	8.4	36 225	9.0	10	7.5	54	7.4	556	7.0
Tyler	21	6.0	232	6.3	22 035	6.4	—	—	—	—	—	—
Upshur	8	10.4	13	14.0	1 450	20.1	12	8.2	104	10.0	945	15.7
Wayne	17	6.8	356	9.3	30 695	7.9	2	22.9	(D)	(D)	(D)	(D)
Webster	3	17.2	13	15.3	806	15.3	2	14.1	(D)	(D)	(D)	(D)
Wetzel	8	8.5	109	9.2	8 045	9.7	1	—	(D)	(D)	(D)	(D)
Wirt	2	14.1	(D)	(D)	(D)	(D)	6	11.1	96	10.3	1 390	7.9
Wood	42	3.9	537	11.6	50 006	17.1	16	6.5	209	8.0	2 792	8.4
Wyoming	4	14.7	13	19.4	1 400	21.2	1	25.8	(D)	(D)	(D)	(D)

Geographic area	Selected crops harvested—Con.											
	Wheat for grain						Oats 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)
West Virginia	191	1.5	7 620	1.2	421 453	1.2	321	1.3	2 720	1.8	132 249	1.9
Barbour	2	14.5	(D)	(D)	(D)	(D)	1	17.7	(D)	(D)	(D)	(D)
Berkeley	32	3.6	860	5.1	42 621	4.6	17	6.0	191	7.1	7 861	6.7
Boone	—	—	—	—	—	—	—	—	—	—	—	—
Braxton	—	—	—	—	—	—	1	24.3	(D)	(D)	(D)	(D)
Brooke	3	8.2	25	3.9	1 805	4.8	8	7.5	97	4.9	7 080	4.1
Cabell	1	19.6	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Calhoun	—	—	—	—	—	—	—	—	—	—	—	—
Clay	—	—	—	—	—	—	2	23.6	(D)	(D)	(D)	(D)
Doddridge	—	—	—	—	—	—	—	—	—	—	—	—
Fayette	—	—	—	—	—	—	3	15.7	12	16.6	530	16.6
Gilmer	—	—	—	—	—	—	—	—	—	—	—	—
Grant	—	—	—	—	—	—	5	11.1	40	10.9	2 430	12.0
Greenbrier	1	29.5	(D)	(D)	(D)	(D)	12	6.7	79	6.1	3 455	6.8
Hampshire	12	6.2	231	11.2	11 004	10.7	21	6.3	179	6.2	10 013	6.9

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	Selected crops harvested—Con.											
	Wheat for grain						Oats 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)
Hancock	3	12.1	25	13.4	940	13.1	12	6.5	85	8.4	3 380	5.4
Hardy	3	—	46	—	1 630	—	9	3.6	80	4.4	4 000	4.7
Harrison	1	28.7	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Jackson	6	8.8	67	8.5	2 000	9.2	—	—	—	—	—	—
Jefferson	46	2.7	3 623	1.9	225 064	1.9	6	10.2	144	14.4	6 420	14.3
Kanawha	—	—	—	—	—	—	—	—	—	—	—	—
Lewis	—	—	—	—	—	—	1	27.8	(D)	(D)	(D)	(D)
Lincoln	—	—	—	—	—	—	—	—	—	—	—	—
Logan	—	—	—	—	—	—	—	—	—	—	—	—
McDowell	—	—	—	—	—	—	—	—	—	—	—	—
Marion	1	19.6	(D)	(D)	(D)	(D)	1	19.6	(D)	(D)	(D)	(D)
Marshall	—	—	—	—	—	—	1	18.9	(D)	(D)	(D)	(D)
Mason	15	5.2	471	3.1	22 110	2.4	2	22.2	(D)	(D)	(D)	(D)
Mercer	—	—	—	—	—	—	5	11.7	31	14.7	2 340	18.7
Mineral	4	7.5	31	10.5	(D)	(D)	13	4.7	83	3.2	3 529	3.3
Mingo	—	—	—	—	—	—	—	—	—	—	—	—
Monongalia	—	—	—	—	—	—	7	7.9	61	8.3	2 480	7.1
Monroe	22	4.9	1 153	1.4	(D)	(D)	36	3.8	278	4.0	11 479	4.8
Morgan	11	4.9	143	7.5	4 145	6.7	21	4.5	165	5.0	7 350	5.5
Nicholas	1	25.1	(D)	(D)	(D)	(D)	4	11.2	12	14.0	350	13.8
Ohio	7	10.5	57	9.4	2 300	9.6	16	6.3	107	7.8	3 874	8.7
Pendleton	4	4.0	25	2.6	1 195	1.2	1	16.0	(D)	(D)	(D)	(D)
Pleasants	—	—	—	—	—	—	—	—	—	—	—	—
Pocahontas	4	12.8	85	22.4	4 515	21.3	10	5.5	75	6.6	4 473	6.7
Preston	3	6.5	(D)	(D)	(D)	(D)	82	2.2	772	3.8	42 729	4.1
Putnam	1	—	(D)	(D)	(D)	(D)	1	28.8	(D)	(D)	(D)	(D)
Raleigh	—	—	—	—	—	—	1	—	(D)	(D)	(D)	(D)
Randolph	2	16.5	(D)	(D)	(D)	(D)	7	8.1	62	5.2	2 236	5.2
Ritchie	—	—	—	—	—	—	—	—	—	—	—	—
Roane	—	—	—	—	—	—	1	21.8	(D)	(D)	(D)	(D)
Summers	—	—	—	—	—	—	4	9.0	33	18.1	1 100	10.9
Taylor	—	—	—	—	—	—	—	—	—	—	—	—
Tucker	—	—	—	—	—	—	6	9.9	40	12.8	1 660	12.1
Tyler	—	—	—	—	—	—	—	—	—	—	—	—
Upshur	—	—	—	—	—	—	3	12.9	4	15.3	184	15.3
Wayne	2	22.9	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Webster	—	—	—	—	—	—	—	—	—	—	—	—
Wetzel	1	28.1	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Wirt	—	—	—	—	—	—	—	—	—	—	—	—
Wood	3	20.3	23	27.6	(D)	(D)	1	25.0	(D)	(D)	(D)	(D)
Wyoming	—	—	—	—	—	—	—	—	—	—	—	—

Geographic area	Selected crops harvested—Con.											
	Tobacco					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)	Pounds	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)
West Virginia	744	.9	1 630	1.5	2 737 090	1.4	13 895	.4	525 257	.4	886 054	.4
Barbour	—	—	—	—	—	—	397	.4	16 622	1.0	24 859	1.2
Berkeley	—	—	—	—	—	—	345	.8	17 419	1.5	26 761	1.7
Boone	7	12.5	6	25.0	12 373	31.5	12	7.6	97	15.0	120	21.5
Braxton	—	—	—	—	—	—	233	.7	9 408	1.9	14 538	1.6
Brooke	—	—	—	—	—	—	78	1.4	2 763	3.2	5 412	3.8
Cabell	121	1.8	268	2.7	467 674	3.0	175	1.4	3 233	2.3	4 499	3.1
Calhoun	—	—	—	—	—	—	145	.9	4 632	1.9	6 732	2.5
Clay	—	—	—	—	—	—	73	1.7	1 903	6.2	3 306	5.2
Doddridge	—	—	—	—	—	—	260	.7	8 392	1.7	12 120	1.9
Fayette	—	—	—	—	—	—	168	1.0	4 621	2.3	8 231	2.6
Gilmer	—	—	—	—	—	—	178	.8	7 487	1.9	11 732	1.6
Grant	—	—	—	—	—	—	290	.7	13 735	1.4	22 694	1.4
Greenbrier	1	18.1	(D)	(D)	(D)	(D)	536	.8	23 688	1.0	52 180	1.1
Hampshire	—	—	—	—	—	—	410	.7	20 620	1.2	33 793	1.7
Hancock	—	—	—	—	—	—	48	1.8	1 655	3.0	2 868	6.7
Hardy	—	—	—	—	—	—	327	.7	14 149	.9	29 855	.9
Harrison	—	—	—	—	—	—	504	.6	19 016	1.3	27 707	1.4
Jackson	48	3.3	77	3.9	125 380	4.0	602	.6	17 908	1.1	31 504	1.6
Jefferson	—	—	—	—	—	—	232	1.1	13 874	1.9	26 139	2.2
Kanawha	3	17.9	4	18.6	3 900	18.6	90	2.1	2 083	4.3	2 485	4.2
Lewis	—	—	—	—	—	—	308	.7	11 930	1.3	20 428	1.6
Lincoln	124	1.9	326	2.8	515 478	2.6	90	2.5	1 549	3.7	2 759	4.0
Logan	1	—	(D)	(D)	(D)	(D)	6	—	(D)	(D)	(D)	(D)
McDowell	—	—	—	—	—	—	2	—	(D)	(D)	(D)	(D)
Marion	—	—	—	—	—	—	251	.7	6 910	1.5	10 320	2.3
Marshall	—	—	—	—	—	—	468	.5	16 917	1.1	22 909	1.3
Mason	208	1.6	439	2.5	756 468	2.6	521	.8	16 966	1.1	34 345	1.3
Mercer	2	18.5	(D)	(D)	(D)	(D)	324	.8	7 450	1.5	13 232	1.7
Mineral	—	—	—	—	—	—	250	.8	12 113	1.4	17 289	1.3

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.											
	Tobacco						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)	Pounds	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)
Mingo	—	—	—	—	—	—	—	—	—	—	—	—
Monongalia	1	27.2	(D)	(D)	(D)	(D)	359	.6	11 936	1.3	21 479	1.5
Monroe	26	4.8	65	4.9	83 512	4.3	481	.7	17 943	1.1	36 800	1.3
Morgan	—	—	—	—	—	—	117	1.4	4 649	2.3	6 673	2.9
Nicholas	—	—	—	—	—	—	253	.7	8 344	2.3	13 446	2.1
Ohio	—	—	—	—	—	—	116	1.1	6 991	2.9	11 586	2.7
Pendleton	—	—	—	—	—	—	429	.5	15 205	.6	29 278	.8
Pleasants	—	—	—	—	—	—	87	1.6	2 578	3.0	4 458	3.7
Pocahontas	—	—	—	—	—	—	288	.8	14 881	1.0	31 438	1.2
Preston	—	—	—	—	—	—	748	.4	37 732	.5	63 386	.7
Putnam	143	2.1	323	4.7	551 853	3.7	321	1.0	7 588	1.7	12 810	2.4
Raleigh	6	7.9	9	7.5	13 738	7.8	201	1.0	6 279	2.1	12 629	4.3
Randolph	1	26.0	(D)	(D)	(D)	(D)	323	.7	15 403	1.5	23 032	1.6
Ritchie	1	31.4	(D)	(D)	(D)	(D)	300	.6	13 798	2.0	18 784	2.1
Roane	10	7.5	16	9.7	26 102	9.5	382	.5	14 272	1.4	20 075	1.3
Summers	1	20.5	(D)	(D)	(D)	(D)	246	.8	7 928	1.4	12 883	2.0
Taylor	—	—	—	—	—	—	237	.5	8 297	1.3	14 558	1.6
Tucker	—	—	—	—	—	—	157	.9	5 499	1.3	8 834	2.0
Tyler	—	—	—	—	—	—	193	1.0	7 974	2.1	11 931	2.3
Upshur	—	—	—	—	—	—	336	.7	11 955	1.6	17 579	1.9
Wayne	15	7.8	46	9.6	86 131	10.8	108	1.5	2 963	3.0	5 294	3.5
Webster	—	—	—	—	—	—	56	1.9	1 338	3.6	2 312	3.9
Wetzel	1	22.8	(D)	(D)	(D)	(D)	214	.8	6 306	1.5	6 940	1.7
Wirt	17	5.8	31	6.3	57 042	7.6	177	.9	6 110	1.7	11 701	2.0
Wood	7	10.6	12	16.6	19 400	21.0	419	.7	11 595	1.3	18 617	1.7
Wyoming	—	—	—	—	—	—	24	2.8	487	4.4	573	4.9
Geographic area	Selected crops harvested—Con.											
	Land in orchards											
	Farms						Acres					
	Number		Relative standard error of estimate (percent)		Number		Relative standard error of estimate (percent)		Relative standard error of estimate (percent)			
West Virginia						530					1.2	
Barbour	8	7.0	10	7.0	10	7.0						
Berkeley	69	2.5	7 045	2.5	7 045	2.5						
Boone	7	12.2	15	12.2	15	12.2						
Braxton	9	8.1	20	8.1	20	8.1						
Brooke	6	12.3	41	12.3	41	12.3						
Cabell	9	8.6	48	8.6	48	8.6						
Calhoun	3	14.2	3	14.2	3	14.2						
Clay	10	8.7	36	8.7	36	8.7						
Doddridge	9	8.5	17	8.5	17	8.5						
Fayette	6	10.8	10	10.8	10	10.8						
Gilmer	6	8.0	14	8.0	14	8.0						
Grant	8	7.2	19	7.2	19	7.2						
Greenbrier	17	7.1	33	7.1	33	7.1						
Hampshire	50	3.3	2 183	3.3	2 183	3.3						
Hancock	1	30.7	(D)	30.7	(D)	30.7						
Hardy	5	11.4	13	11.4	13	11.4						
Harrison	7	12.6	38	12.6	38	12.6						
Jackson	8	9.0	22	9.0	22	9.0						
Jefferson	19	6.0	1 490	6.0	1 490	6.0						
Kanawha	4	15.4	16	15.4	16	15.4						
Lewis	7	10.7	15	10.7	15	10.7						
Lincoln	3	19.3	5	19.3	5	19.3						
Logan	—	—	—	—	—	—						
McDowell	4	12.5	(D)	12.5	(D)	12.5						
Marion	4	11.0	8	11.0	8	11.0						
Marshall	22	4.9	69	4.9	69	4.9						
Mason	11	9.0	17	9.0	17	9.0						
Mercer	11	9.2	28	9.2	28	9.2						
Mineral	8	9.2	44	9.2	44	9.2						
Mingo	—	—	—	—	—	—						
Monongalia	16	6.5	47	6.5	47	6.5						
Monroe	8	11.1	108	11.1	108	11.1						
Morgan	20	5.0	495	5.0	495	5.0						
Nicholas	11	6.4	53	6.4	53	6.4						
Ohio	1	37.7	(D)	37.7	(D)	37.7						
Pendleton	8	8.9	17	8.9	17	8.9						
Pleasants	5	12.6	9	12.6	9	12.6						
Pocahontas	13	7.9	26	7.9	26	7.9						
Preston	10	7.3	19	7.3	19	7.3						
Putnam	12	8.6	27	8.6	27	8.6						
Raleigh	9	10.6	40	10.6	40	10.6						
Randolph	17	6.3	52	6.3	52	6.3						
Ritchie	5	11.3	8	11.3	8	11.3						
Roane	8	8.3	37	8.3	37	8.3						

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.				
	Land in orchards				
	Farms		Acres		
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	
Summers	6	8.2	11	9.9	
Taylor	3	8.3	6	4.2	
Tucker	6	11.3	7	13.1	
Tyler	5	12.6	14	16.5	
Upshur	15	6.9	33	9.3	
Wayne	3	10.3	(D)	(D)	
Webster	3	15.8	(D)	(D)	
Wetzel	10	7.7	22	6.8	
Wirt	3	17.4	10	18.5	
Wood	1	25.0	(D)	(D)	
Wyoming	1	—	(D)	(D)	

¹Data 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..	17 772	3 745	21 517	3.4	17.4
Land in farms acres..	3 455 532	227 569	3 683 101	3.6	6.2
Average size of farm acres..	194	61	171	(X)	(X)
Farms by size of farm:					
Less than 10 acres	727	273	1 000	16.0	27.3
10 to 49 acres	3 026	1 336	4 362	9.2	30.6
50 to 179 acres	8 164	1 560	9 724	4.1	16.0
180 acres or more	5 855	576	6 431	5.0	9.0
Farms by value of sales:					
Less than \$2,500	7 819	2 798	10 617	5.1	26.4
\$2,500 to \$9,999	6 278	814	7 092	4.6	11.5
\$10,000 or more	3 675	133	3 808	3.5	3.5
Market value of agricultural products sold \$1,000..	447 428	12 872	460 300	1.0	2.8
Farms by type of organization:					
Individual or family	16 475	3 705	20 180	3.6	18.4
Partnership, corporation, or other	1 297	40	1 337	12.0	3.0
Farms by tenure of operator:					
Full owners	12 761	2 406	15 167	3.7	15.9
Part owners	4 286	1 208	5 494	6.0	22.0
Tenants	725	131	856	13.2	15.3
Operators by place of residence:					
On farm operated	13 764	3 345	17 109	3.9	19.6
Not on farm operated	2 954	313	3 267	8.8	9.6
Not reported	1 054	87	1 141	5.3	7.6
Operators by principal occupation:					
Farming	7 145	895	8 040	3.2	11.1
Other	10 627	2 850	13 477	4.8	21.1
Operators by sex:					
Male	16 088	3 377	19 465	3.4	17.3
Female.....	1 684	368	2 052	9.3	17.9
Operators by race:					
White	17 702	3 730	21 432	3.4	17.4
Black and other races	70	15	85	77.6	17.6
Operators by years on present farm:					
4 years or less	1 748	508	2 256	10.0	22.5
5 years or more	12 839	2 893	15 732	3.2	18.4
Not reported	3 185	344	3 529	9.2	9.7

¹ See text in Appendix C regarding coverage estimates.