
Appendix C. Statistical Methodology

THE SCREENING PHASE AND THE MAIL LIST MODEL

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

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

- 1) Records on selected agriculture specialty lists that had no other list source,
- 2) Records identified by a mail list model as having a low probability of being a farm.

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

Each address record on the 1997 preliminary census mail list was assigned to a model group by matching record characteristics to model group characteristics. Records belonging to the groups with the highest farm probability were those more likely to be farms. Records with a farm probability of approximately 30 percent or less were selected for screening, along with records included on selected agriculture specialty lists as noted above.

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

CENSUS SAMPLE DESIGN

All name and address records on the final census mail list were designated to receive a 1997 Census of Agriculture report form. Two different types of census report forms, sample and nonsample, were used to collect data. Sections 1 through 20 and 28 through 32 of the sample form were identical to sections on the nonsample census form. Sample form sections 21 through 27 contained additional questions on usage of fertilizers and chemicals, farm production expenditures, value of machinery and equipment, value of land and buildings, farm-related income, and hired workers. There were 11 regional versions of the nonsample form and 13 regional versions of the sample form with listings of crops varying by region. These different forms were used to reduce the response burden of the census, while providing reliable information on a large number of data items.

The sample form was mailed to all mail list records in Alaska, Hawaii, and Rhode Island and to a sample of records in other States selected from the final mail list. Mail list records were selected into the sample with certainty if they (1) were expected to have large total value of agricultural products sold or large acreage, (2) were multi-unit operations (i.e., separate farms producing under one company organization), (3) were in a county with less than 100 farms in 1992, or (4) had other special characteristics. Farms with special characteristics were abnormal farms, such as institutional farms, experimental and research farms, and Indian reservations. Mail list records in counties containing 100 to 199 farms in 1992 were systematically sampled at a rate of 1 in 2; records in counties containing 200 to 299 farms in 1992 were systematically sampled at a rate of 1 in 4; and records in counties containing 300 or more farms in 1992 were systematically sampled at a rate of 1 in 6. The remaining mail list records not chosen to receive the sample form received the nonsample census form. This differential sampling scheme was used to provide reliable data for the sample sections of the report form for all counties.

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

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

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

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

For the 1997 Census of Agriculture, as in previous censuses, all reported data were keyed and then edited by computer. The edits were used to determine whether the reports met the minimum criteria to be counted as farms in the census. The complex edit and imputation system provided the basis for deciding to accept, impute (supply), delete, or alter the reported value for each data record item.

Whenever possible, edit imputations, deletions, and changes were based on component or related data on the respondent's report form. For some items, such as operator characteristics, data for that record from the previous census were used when available. Values for other missing or unacceptable reported data items were calculated based on reported quantities and known fixed price parameters.

When these and similar methods were not available and values had to be supplied, the imputation process used information reported for another farm operation in a geographically adjacent area with characteristics similar to those of the farm operation with incomplete data. For example, a farm operation that reported acres of corn harvested, but did not report quantity of corn harvested, was assigned the same bushels of corn per acre harvested as that of the last nearby farm with similar characteristics that reported acceptable yields during that particular execution of the computer edit. The imputation for missing items in each section of the report form was conducted separately; thus, assigned values for one operation could come from more than one respondent.

Prior to the imputation operation, a set of default values and relationships was assigned to the possible imputation variables. The relationships and values varied depending on the item being imputed. For example, different default values were assigned for several Standard Industrial Classifications and total value of sales categories when imputing hired farm labor expenses. These values and item relationships for the possible imputation variables were stored in the computer in a series of matrices.

Each execution of the computer edit consisted of records from only one State sorted by reported State and county. For a given execution of the edit, the stored entries in the various matrices were retained in memory only until a succeeding record having acceptable characteristics for the same sections of the report form was processed by the

computer. Then the acceptable responses of the succeeding operation replaced those previously stored. When a record processed through the edit had unreported or unacceptable data, the record was assigned the last acceptable ratio or response from an operation with a similar set of characteristics. Once each execution of the computer edit for a State was completed, the possible imputation variables were reset to the default values and relationships for subsequent executions. An edit run usually consisted of 10,000 or more records.

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

CENSUS ESTIMATION

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

Whole Farm Nonresponse Estimation

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

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

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

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

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

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

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

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

Table A quantifies the effect of the nonresponse estimation procedure on selected census data items. The percentages in this table are percents of the census values contributed by nonresponse estimation. These indicate the potential for bias in published figures resulting from nonresponse to the census. The estimates provided in this table do not reflect the effect of item nonresponse to individual census data items. The effect of this item nonresponse is discussed in the "Census Nonsampling Error" section.

Sample Estimation

Sample data estimation determined the population totals that would have resulted from a complete census for the items in sections 21 through 27 of the sample form. The estimates were obtained from a weighting procedure that assigned a weight to each respondent record containing sample items. For any given county, a sample item total was estimated by multiplying the data items for each farm in the county by the corresponding sample weight and summing over all sample records.

Each respondent sample farm was assigned a sample weight for use in producing estimates for all sample items. For example, if the weight given to a sample farm had the value 6, all sample data items reported by that farm were multiplied by 6.

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

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

TVP	SIC	Acres
\$1 to \$999	01, 08 All crops	1 to 69
\$1,000 to \$2,499	02 All livestock	70 or more
\$2,500 to \$4,999		
\$5,000 to \$9,999		
\$10,000 to \$24,999		
\$25,000 to \$49,999		
\$50,000 to \$99,999		
\$100,000 or more		

The first step in the estimation procedure classified the sample records into 32 mutually exclusive initial strata formed by the three variable groups. The total and sample farm counts were expanded to account for nonresponse. Each cell containing sample farm records was assigned an initial sample factor equal to the ratio of the total farm count to the sample farm count. This factor was approximately equal to the inverse of the probability of selecting a farm for the census sample.

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

depending on whether the county had a 1 in 2, 1 in 4, or 1 in 6 sample selection rate. The collapsing occurred within the 32 initial strata according to a specified collapsing pattern. After the collapsing process was completed, new total farm counts and sample farm counts were computed from each final strata and used to calculate final sample factors.

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

CENSUS SAMPLING ERROR

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

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

If all possible samples were selected, each of the samples surveyed under essentially the same conditions, and an estimate and its standard error calculated from each sample, then:

1. Approximately 90 percent of the intervals from 1.65 standard errors below the estimate to 1.65 standard errors above the estimate would include the true population parameter.
2. Approximately 95 percent of the intervals from 1.96 standard errors below the estimate to 1.96 standard errors above the estimate would include the true population parameter.

The following example illustrates the computations necessary to produce a confidence statement for an estimate. Assume that the estimate of number of farms for a State is 94,382 and the relative standard error of the estimate is 0.1 percent (0.001). Multiplying 94,382 by 0.001 yields 94, the standard error; therefore, a 90-percent confidence interval is 94,227 to 94,537 (i.e., 94,382 plus or minus 1.65 x 94).

If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 90 percent of these intervals would contain the true population parameter. Similarly, a 95-percent confidence interval is 94,198 to 94,566 (i.e., 94,382 plus or minus 1.96 x 94).

Census items were classified as either complete count or sample count items. All farm operators were asked the complete count items. Examples of complete count items were: land in farms, harvested cropland, livestock inventory and sales, crop acreage, quantities harvested and crop sales, land use, irrigation, government loans and payments, conservation acreage, type of organization, and operator characteristics.

Only a sample of farm operators were asked the sample count items. These items appeared only in sections 21 through 27 of the sample form. Sample count items were included under the following section headings: commercial fertilizers, chemicals, production expenses, farm machinery and equipment, value of land and buildings, farm-related income, and hired workers.

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

Table B provides the generalized reliability estimates of the estimated number of farms in a county that reported complete count and sample count items. The top half of the table shows the percent relative standard errors for estimated number of farms in a county that reported a complete count item, and the bottom half relates to sample count items. These reliability estimates are derived from regression equations. Separate regression equations were used to produce each section of table B. Each regression equation was fit with the estimated number of farms in a county reporting an item as the independent variable and the relative variance of that estimate as the dependent variable for the appropriate counties in the State. To illustrate the use of this table, assume that the estimate of the number of farms reporting hogs and pigs for a particular county, as given in county table 15, is 89. Since hogs and pigs is a complete count data item, refer to the first part of table B and use the estimated percent relative standard error of the estimate from the row with farm count equal to or just less than the estimated number of farms, 89. For this example, the percent relative standard error of the estimate comes from the row for 75 farms reporting. For sample count items, follow the same procedure using the second part of table B. For counties with fewer than 100 farms in the 1992 Census of Agriculture, variability in sample count

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

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

Table C presents the percent relative standard error of selected State data items for all farms, and table D presents the percent relative standard error of selected State data items for all farms with sales of \$10,000 or more.

Table E presents the standard error for percent change in State totals from 1992 to 1997. The general purpose of the percent change estimate is to provide a relative measure of the difference in a characteristic between censuses. The relative change for a given characteristic is defined as the ratio of the difference of the 1997 and the 1992 estimate for that characteristic to the 1992 estimate. This ratio is multiplied by 100 to obtain the percent change. The standard error of a percent change estimate is the standard error of the ratio multiplied by 100.

Table F presents the percent relative standard error for State and county totals for selected data items. The percent relative standard error of the estimate for the same item differs among counties in the State. Reasons for this are differences among counties in the (1) total number of farms, (2) number of large farms included with certainty, (3) size classifications of the farms sampled, (4) amount of nonresponse, (5) general agricultural characteristics, and (6) specific characteristic being measured.

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

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

CENSUS NONSAMPLING ERROR

The accuracy of the census counts is affected jointly by sampling errors (described in the previous section) and nonsampling errors. Extensive efforts were made to compile a complete and accurate mail list for the census, to

design an understandable report form with instructions, and to minimize processing errors through the use of quality control measures. Nonsampling errors arise from many sources, including respondent or enumerator error or incorrect data keying, editing, or imputing for missing data. These nonsampling errors are further discussed in this section. Nonsampling error due to mail list incompleteness and duplication as well as misclassification of records on the mail list is called coverage error. The section titled "Coverage Evaluation" discusses the evaluation studies conducted to measure the extent of this error in the census.

Respondent and Enumerator Error

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

Item Nonresponse

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

Processing Error

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

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

COVERAGE EVALUATION

Coverage Overview

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

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

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

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

The first component, mail list undercount, is by far the largest component of coverage error. Duplication, though occurring far less frequently, can involve larger farms and have a larger impact on acreage and sales estimates. The

last two components involve the misclassification of either farms or nonfarms. Misclassification can arise from errors in either reporting or processing the data.

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

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

Area Frame Surveys to Measure Mail List Undercoverage

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

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

Classification Error Survey to Measure Three Types of Coverage Error

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

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

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

Coverage Estimation

The adjusted census total, T , is estimated as the census farm count, C , plus undercount and minus overcount adjustments. Undercount includes 1) farms not on the mail

list (NML) and 2) farms incorrectly classified as nonfarms (ICU). Overcount includes 3) nonfarms incorrectly classified as farms (ICO) and 4) farms duplicated in the census (DUP). Altogether, the adjusted census total is:

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

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

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

Item	Percent of total	Item	Percent of total
Farms number..	11.8	Corn for grain or seed acres..	7.5
Land in farms acres..	9.4	Wheat for grain acres..	6.9
Estimated market value of land and buildings ¹ \$1,000..	8.7	Livestock and poultry inventory:	
Market value of agricultural products sold \$1,000..	6.5	Cattle and calves..... number..	8.9
Harvested cropland..... acres..	8.4	Hogs and pigs	5.3
		Layers 20 weeks old and older..... number..	.4

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			
Number of farms reporting:			
25	5.9	25	45.0
50	4.1	50	31.2
75	3.2	75	25.0
100	2.7	100	21.3
150	2.1	150	16.6
200	1.7	200	13.8
300	1.1	300	10.1
5003	500	5.7
7502	750	4.7
1,000.....	.2	1,000.....	4.0
1,500.....	.1	1,500.....	3.3
2,000.....	.1	2,000.....	2.9

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

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)			
F FARMS AND LAND IN FARMS								
Farms	65 602	.9	FARM PRODUCTION EXPENSES ¹					
Land in farms	14 900 205	.9	Total farm production expenses	farms..	65 584 .9			
Average size of farm	227	1.2	\$1,000..	4 202 802 .7				
			Average per farm	dollars..	64 083 1.2			
M MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD								
Total sales (see text)	65 602	.9	Livestock and poultry purchased	farms..	22 888 1.5			
\$1,000.	5 579 861	.9	\$1,000..	306 830 1.3				
Average per farm	85 056	1.1	Feed for livestock and poultry	farms..	39 355 1.2			
			\$1,000..	847 206 .9				
Farms by value of sales:			Commercially mixed formula feeds	farms..	31 337 1.3			
Less than \$1,000 (see text)	9 384	.8	\$1,000..	492 180 .9				
\$1,000.	1 229	.9						
\$1,000 to \$2,499	4 623	.7	Seeds, bulbs, plants, and trees	farms..	45 101 1.2			
\$1,000.	7 638	.7	\$1,000..	179 427 .9				
\$2,500 to \$4,999	5 161	.7	Commercial fertilizer	farms..	44 200 1.2			
\$1,000.	18 690	.7	\$1,000..	258 450 1.0				
\$5,000 to \$9,999	6 177	.8	Agricultural chemicals	farms..	40 404 1.2			
\$1,000.	44 479	.8	\$1,000..	169 356 1.0				
\$10,000 to \$19,999	6 639	1.1	Petroleum products	farms..	60 160 1.0			
\$1,000.	95 030	1.1	\$1,000..	187 629 1.0				
\$20,000 to \$24,999	2 202	1.5	Electricity	farms..	52 272 1.1			
\$1,000.	49 192	1.5	\$1,000..	107 204 1.0				
\$25,000 to \$39,999	4 484	1.5	Hired farm labor	farms..	25 179 1.4			
\$1,000.	142 720	1.5	\$1,000..	409 009 .9				
\$40,000 to \$49,999	2 342	1.6	Contract labor	farms..	4 464 3.2			
\$1,000.	104 796	1.6	\$1,000..	20 509 2.9				
\$50,000 to \$99,999	8 818	1.5	Repair and maintenance	farms..	56 062 1.0			
\$1,000.	647 708	1.5	\$1,000..	337 991 1.1				
\$100,000 to \$249,999	11 163	1.4	Customwork, machine hire, and rental of machinery and equipment	farms..	29 186 1.4			
\$1,000.	1 729 062	1.3	\$1,000..	87 204 1.6				
\$250,000 to \$499,999	3 162	—	Interest	farms..	34 539 1.3			
\$1,000.	1 074 790	—	\$1,000..	356 573 1.2				
\$500,000 or more	1 447	—	Secured by real estate	farms..	26 877 1.4			
\$1,000.	1 664 528	—	\$1,000..	242 678 1.3				
Sales by commodity or commodity group:			Not secured by real estate	farms..	18 981 1.7			
Crops, including nursery and greenhouse crops	37 558	.9	\$1,000..	113 896 1.5				
\$1,000.	1 640 283	.5						
Grains	27 313	1.0	Cash rent	farms..	21 766 1.5			
\$1,000.	879 967	.7	\$1,000..	193 761 1.3				
Corn for grain	21 668	1.1	Property taxes	farms..	61 736 .9			
\$1,000.	580 698	.7	\$1,000..	217 808 1.0				
Wheat	4 445	1.0	All other farm production expenses	farms..	60 364 1.0			
\$1,000.	25 529	.7	\$1,000..	523 843 1.0				
Soybeans	11 875	1.0						
\$1,000.	255 335	.6	NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)¹					
Sorghum for grain	7	10.6	All farms	number..	65 585 .9			
\$1,000.	95	13.6	\$1,000..	1 318 913 1.1				
Barley	1 016	1.5	Average per farm	dollars..	20 110 1.4			
\$1,000.	2 571	1.6						
Oats	5 003	1.2	Farms with net gains ²	number..	35 554 1.3			
\$1,000.	9 454	1.1	\$1,000..	1 552 569 .9				
Other grains	533	1.5	Average net gain	dollars..	43 668 1.6			
\$1,000.	6 286	1.3						
Cotton and cottonseed	—	—	Farms with net losses	number..	30 031 1.1			
\$1,000.	—	—	\$1,000..	233 656 1.7				
Tobacco	836	1.4	Average net loss	dollars..	7 781 2.0			
\$1,000.	7 692	1.6						
Hay, silage, and field seeds	15 505	.9	GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME					
\$1,000.	106 572	1.0	Government payments	farms..	36 946 1.0			
Vegetables, sweet corn, and melons	3 281	.9	\$1,000..	137 274 .8				
\$1,000.	149 443	.4	Other farm-related income ¹	farms..	32 101 1.4			
Fruits, nuts, and berries	1 005	1.1	\$1,000..	110 211 2.5				
\$1,000.	140 140	.4	Customwork and other agricultural services	farms..	5 336 3.1			
Nursery and greenhouse crops	1 977	1.0	\$1,000..	38 485 4.9				
\$1,000.	157 348	.6	Gross cash rent or share payments	farms..	7 622 2.6			
Other crops	1 633	1.1	\$1,000..	30 574 4.1				
\$1,000.	199 119	.3	Forest products, excluding Christmas trees and maple products	farms..	2 800 4.4			
Livestock, poultry, and their products	43 067	1.0	\$1,000..	15 996 6.6				
\$1,000.	3 939 578	.8	Other farm-related income sources	farms..	24 703 1.6			
Poultry and poultry products	1 805	1.0	\$1,000..	25 156 3.1				
\$1,000.	241 523	.1						
Dairy products	22 592	1.3	COMMODITY CREDIT CORPORATION LOANS					
\$1,000.	2 746 950	.9	Total	farms..	3 066 1.1			
Cattle and calves	38 832	1.1	\$1,000..	66 597 .6				
\$1,000.	670 518	.7						
Hogs and pigs	3 591	1.1						
\$1,000.	151 164	.7						
Sheep, lambs, and wool	1 934	1.0						
\$1,000.	4 847	1.7						
Other livestock and livestock products (see text)	2 968	.9						
\$1,000.	124 576	.4						
Value of agricultural products sold directly to individuals for human consumption (see text)	3 843	.9						
\$1,000.	21 866	1.1						

See footnotes at end of table.

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

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)		
LAND IN FARMS ACCORDING TO USE							
Total cropland	farms..	61 166	All operators	farms..	65 602		
	acres..	10 353 300		acres..	14 900 205		
Harvested cropland	farms..	54 369	Full owners	farms..	39 217		
	acres..	8 625 011		acres..	5 816 483		
Farms by acres harvested:			Part owners	farms..	21 921		
1 to 9 acres	farms..	4 995		acres..	8 200 835		
	acres..	20 646	Tenants	farms..	4 464		
10 to 19 acres	farms..	4 019		acres..	882 887		
	acres..	54 721					
20 to 29 acres	farms..	3 443	OWNED AND RENTED LAND				
	acres..	80 443	Land owned	farms..	61 266		
30 to 49 acres	farms..	5 778		acres..	11 600 493		
	acres..	219 428	Owned land in farms	farms..	61 138		
50 to 99 acres	farms..	10 349		acres..	10 833 260		
	acres..	738 625	Land rented or leased from others	farms..	26 563		
100 to 199 acres	farms..	12 846		acres..	4 125 776		
	acres..	1 819 365	Rented or leased land in farms	farms..	70 042		
200 to 499 acres	farms..	10 030		acres..	26 385		
	acres..	2 929 734	Rented or leased land in farms	farms..	4 066 945		
500 to 999 acres	farms..	2 117		acres..	10 586		
	acres..	1 420 379	Land rented or leased to others	farms..	826 064		
1,000 acres or more	farms..	792		acres..			
	acres..	1 341 670					
Cropland:			OPERATOR CHARACTERISTICS				
Pasture or grazing only	farms..	27 104	Operators by place of residence:				
	acres..	959 426	On farm operated	farms..	53 287		
Other cropland	farms..	18 348	Not on farm operated	farms..	9 098		
	acres..	768 863	Not reported	farms..	3 217		
Total woodland	farms..	40 687	Operators by principal occupation:				
	acres..	2 849 832	Farming	farms..	39 030		
Pastureland and rangeland other than cropland and			Other	farms..	26 572		
woodland pastured	farms..	15 896	Operators by days worked off farm:				
	acres..	707 024	Any	farms..	31 303		
Land in house lots, ponds, roads, wasteland, etc.	farms..	45 793	200 days or more	farms..	21 088		
	acres..	990 049	Operators by sex:				
Irrigated land	farms..	2 025	Male	farms..	61 201		
	acres..	341 813	Female	farms..	14 312 164		
Acres irrigated:							
1 to 9 acres	farms..	866	Average age of operator	years..	52.2		
	acres..	2 028					
10 to 49 acres	farms..	360	Individual or family (sole proprietorship)	farms..	56 598		
	acres..	8 821		acres..	11 157 231		
50 to 99 acres	farms..	200	Partnership	farms..	5 746		
	acres..	13 967		acres..	1 993 730		
100 to 199 acres	farms..	218	Corporation:				
	acres..	30 132	Family held	farms..	2 651		
200 to 499 acres	farms..	226		acres..	1 554 968		
	acres..	68 743	More than 10 stockholders	farms..	.5		
500 to 999 acres	farms..	72		acres..	47		
	acres..	49 782	10 or less stockholders	farms..	2 604		
1,000 acres or more	farms..	83		acres..	.9		
	acres..	168 340	Other than family held	farms..	219		
Harvested cropland irrigated	farms..	1 980		acres..	101 346		
	acres..	339 850	More than 10 stockholders	farms..	45		
Pasture and other land irrigated	farms..	100		acres..	174		
	acres..	1 963	10 or less stockholders	farms..	388		
Land under Conservation Reserve or Wetlands				acres..	92 930		
Reserve Programs	farms..	11 907	Other—cooperative, estate or trust, institutional, etc.	farms..	1.6		
	acres..	593 739		acres..	1.6		
VALUE OF LAND AND BUILDINGS¹							
Estimated market value of land and buildings	farms..	65 585	HIRED FARM LABOR¹				
	\$1,000..	.9					
Average per farm	dollars..	18 503 801	Hired workers by days worked:				
Average per acre	dollars..	282 135	150 days or more	farms..	13 262		
		1 244		workers..	30 026		
			Less than 150 days	farms..	20 203		
				workers..	66 456		
VALUE OF MACHINERY AND EQUIPMENT¹							
Estimated market value of all machinery and			INJURIES AND DEATHS				
equipment	farms..	65 571					
	\$1,000..	.9	Farm-related injuries:				
Average per farm	dollars..	4 375 650	Operator and family members	farms..	1 282		
		66 731		number..	1 503		
			Hired workers	farms..	477		
				number..	777		
AGRICULTURAL CHEMICALS¹							
Commercial fertilizer	farms..	43 969	Farm-related deaths:				
	acres on which used..	6 260 175	Operator and family members	farms..	19		
				number..	19		
			Hired workers	farms..	4		
				number..	4		

See footnotes at end of table.

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

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)	
F FARMS BY SIZE						
1 to 9 acres	farms..	3 142	Cattle and calves inventory	farms..	39 593	1.1
	acres..	13 322	Beef cows	farms..	3 440 300	.9
10 to 49 acres	farms..	9 673	Milk cows	farms..	11 642	.9
	acres..	281 228	Cattle and calves sold	farms..	222 522	1.0
50 to 69 acres	farms..	3 684	number..		22 576	1.3
	acres..	216 197	Hogs and pigs inventory	farms..	1 336 626	1.0
70 to 99 acres	farms..	6 876	number..		3 686	1.0
	acres..	564 923	\$1,000..		670 518	.7
100 to 139 acres	farms..	7 141	number..		738 339	.7
	acres..	837 889	Hogs and pigs sold	farms..	3 591	1.1
			number..		1 523 490	.7
			\$1,000..		151 164	.7
140 to 179 acres	farms..	6 845	Sheep and lambs of all ages inventory	farms..	2 100	1.0
	acres..	1 080 572	number..		76 113	1.7
180 to 219 acres	farms..	5 418	Sheep and lambs sold	farms..	1 781	1.0
	acres..	1 072 539	number..		59 000	1.7
220 to 259 acres	farms..	4 495	Horses and ponies inventory	farms..	8 822	.8
	acres..	1 069 623	number..		52 448	1.0
260 to 499 acres	farms..	12 315	Horses and ponies sold	farms..	1 657	1.1
	acres..	4 314 476	number..		6 682	1.2
500 to 999 acres	farms..	4 573				
	acres..	3 030 517				
1,000 to 1,999 acres	farms..	1 121	POULTRY			
	acres..	1 457 744	Layers and pullets 13 weeks old and older inventory (see text)	farms..	2 534	1.0
2,000 acres or more	farms..	319	number..		4 117 078	.6
	acres..	961 175	Layers 20 weeks old and older	farms..	2 457	1.0
			number..		3 692 115	.3
			Broilers and other meat-type chickens sold	farms..	587	1.4
			number..		27 607 761	.1
F FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM						
Oilseed and grain farming (1111)	farms..	15 982	Corn for grain or seed	farms..	34 315	1.1
	acres..	3 736 711	acres..		2 877 971	.8
Vegetable and melon farming (1112)	farms..	1 293	bushels..		362 498 739	.8
	acres..	448 435	Corn for silage or green chop	farms..	22 498	1.2
Fruit and tree nut farming (1113)	farms..	839	acres..		717 549	.9
	acres..	201 628	tons, green..		10 444 465	.9
Greenhouse, nursery, and floriculture production (1114)	farms..	1 680	Wheat for grain	farms..	4 578	1.0
	acres..	183 672	acres..		150 469	.8
Other crop farming (1119)	farms..	7 527	bushels..		8 083 650	.7
	acres..	1 113 637	Oats for grain	farms..	14 925	1.2
Beef cattle ranching and farming (11211)	farms..	9 469	acres..		314 722	1.2
	acres..	1 570 784	bushels..		18 623 580	1.1
Cattle feedlots (112112)	farms..	2 540	Tobacco	farms..	839	1.4
	acres..	426 805	acres..		2 553	1.6
Dairy cattle and milk production (11212)	farms..	20 958	pounds..		5 355 466	1.6
	acres..	6 648 952	Soybeans for beans	farms..	12 028	1.0
Hog and pig farming (1122)	farms..	1 179	acres..		990 531	.7
	acres..	207 872	bushels..		42 681 842	.7
Poultry and egg production (1123)	farms..	466	Potatoes, excluding sweetpotatoes	farms..	418	1.4
	acres..	70 930	acres..		85 304	.2
Sheep and goat farming (1124)	farms..	805	cwt..		30 242 152	.2
	acres..	58 746	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms..	44 115	1.0
Animal aquaculture and other animal production (1125, 1129)	farms..	2 864	acres..		3 554 932	1.0
	acres..	232 033	tons, dry..		8 606 243	1.0
			Alfalfa hay	farms..	35 608	1.1
			acres..		1 784 096	1.1
			Vegetables harvested for sale (see text)	farms..	5 169 767	1.1
			acres..		3 288	.9
			Land in orchards	farms..	270 130	.5
			acres..		853	1.2
					10 851	1.9

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**

[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)	
F FARMS AND LAND IN FARMS						
Farms	40 257	1.2	Total farm production expenses	40 270	1.2	
Land in farms	12 443 775	.9	farms.. \$1,000..	4 037 894	.7	
Average size of farm	309	1.5	Average per farm	100 271	1.4	
M MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD						
Total sales (see text)	40 257	1.2	Livestock and poultry purchased	17 651	1.7	
farms.. \$1,000..	5 507 826	.7	farms.. \$1,000..	296 732	1.4	
Average per farm	136 817	1.4	Feed for livestock and poultry	30 517	1.3	
Farms by value of sales:			farms.. \$1,000..	836 831	.9	
\$10,000 to \$19,999	farms.. \$1,000..	6 639	Commercial mixed formula feeds	26 171	1.4	
95 030	1.1	farms.. \$1,000..	488 347	.9		
\$20,000 to \$24,999	farms.. \$1,000..	2 202	Seeds, bulbs, plants, and trees	35 879	1.3	
49 192	1.4	farms.. \$1,000..	175 091	.9		
\$25,000 to \$39,999	farms.. \$1,000..	4 484	Commercial fertilizer	34 742	1.3	
142 720	1.4	farms.. \$1,000..	251 909	1.0		
\$40,000 to \$49,999	farms.. \$1,000..	2 342	Agricultural chemicals	32 215	1.3	
104 796	1.6	farms.. \$1,000..	165 004	1.0		
\$50,000 to \$99,999	farms.. \$1,000..	8 818	Petroleum products	39 760	1.2	
647 708	1.5	farms.. \$1,000..	177 075	1.0		
\$100,000 to \$249,999	farms.. \$1,000..	11 163	Electricity	37 514	1.2	
1 729 062	1.3	farms.. \$1,000..	101 787	1.0		
\$250,000 to \$499,999	farms.. \$1,000..	3 162	Hired farm labor	21 567	1.5	
1 074 790	—	farms.. \$1,000..	406 012	.9		
\$500,000 or more	farms.. \$1,000..	1 447	Contract labor	3 671	3.5	
1 664 528	—	farms.. \$1,000..	19 799	3.0		
Sales by commodity or commodity group:			Repair and maintenance	38 556	1.2	
Crops, including nursery and greenhouse crops	farms.. \$1,000..	26 226	farms.. \$1,000..	315 389	1.1	
1 602 161	.5	Customwork, machine hire, and rental of machinery and equipment	farms.. \$1,000..	23 630	1.5	
Grains	farms.. \$1,000..	22 033	Interest	84 035	1.6	
863 879	1.1	farms.. \$1,000..	27 259	1.4		
Corn for grain	farms.. \$1,000..	17 976	Secured by real estate	336 713	1.2	
570 180	.7	farms.. \$1,000..	20 717	1.6		
Wheat	farms.. \$1,000..	4 007	Not secured by real estate	224 998	1.4	
24 752	.7	farms.. \$1,000..	16 454	1.8		
Soybeans	farms.. \$1,000..	10 820	111 715	1.6		
251 954	.6	All other farm production expenses	farms.. \$1,000..	507 146	1.0	
Sorghum for grain	farms.. \$1,000..	6	Cash rent	19 608	1.6	
(D)		12.2	farms.. \$1,000..	191 368	1.3	
Barley	farms.. \$1,000..	861	Property taxes	37 452	1.2	
Oats	farms.. \$1,000..	3 920	farms.. \$1,000..	173 004	1.1	
Other grains	farms.. \$1,000..	8 324	All other farm production expenses	farms.. \$1,000..	40 266	1.2
459	1.6	Interest	farms.. \$1,000..	507 146	1.0	
6 187	1.3	Secured by real estate	farms.. \$1,000..	111 715	1.6	
Cotton and cottonseed	farms.. \$1,000..	—	Not secured by real estate	farms.. \$1,000..	111 715	1.6
Tobacco	farms.. \$1,000..	562	Customwork, machine hire, and rental of machinery and equipment	farms.. \$1,000..	23 630	1.5
Hay, silage, and field seeds	farms.. \$1,000..	6 729	Interest	84 035	1.6	
9 225	1.2	farms.. \$1,000..	27 259	1.4		
91 853	1.1	Secured by real estate	farms.. \$1,000..	336 713	1.2	
Vegetables, sweet corn, and melons	farms.. \$1,000..	2 684	Not secured by real estate	farms.. \$1,000..	20 717	1.6
147 865	.4	All other farm production expenses	farms.. \$1,000..	224 998	1.4	
Fruits, nuts, and berries	farms.. \$1,000..	607	Cash rent	19 608	1.6	
139 259	.4	farms.. \$1,000..	191 368	1.3		
Nursery and greenhouse crops	farms.. \$1,000..	1 113	Property taxes	37 452	1.2	
154 916	.6	farms.. \$1,000..	173 004	1.1		
Other crops	farms.. \$1,000..	1 202	All other farm production expenses	farms.. \$1,000..	40 266	1.2
197 661	.3	Interest	farms.. \$1,000..	507 146	1.0	
Livestock, poultry, and their products	farms.. \$1,000..	32 473	Secured by real estate	farms.. \$1,000..	111 715	1.6
Poultry and poultry products	farms.. \$1,000..	3 905 665	Not secured by real estate	farms.. \$1,000..	20 717	1.6
Dairy products	farms.. \$1,000..	960	All other farm production expenses	farms.. \$1,000..	224 998	1.4
Cattle and calves	farms.. \$1,000..	240 986	Cash rent	19 608	1.6	
Hogs and pigs	farms.. \$1,000..	22 427	farms.. \$1,000..	191 368	1.3	
Sheep, lambs, and wool	farms.. \$1,000..	2 746 094	Gross cash rent or share payments	farms.. \$1,000..	36 784	5.1
Other livestock and livestock products (see text)	farms.. \$1,000..	30 743	farms.. \$1,000..	2 939	4.3	
1 377	1.3	Forest products, excluding Christmas trees and maple products	farms.. \$1,000..	16 587	5.5	
121 055	.4	Other farm-related income sources	farms.. \$1,000..	1 736	5.5	
Value of agricultural products sold directly to individuals for human consumption (see text)	farms.. \$1,000..	1 990	Other farm-related income	farms.. \$1,000..	11 490	8.1
19 145	1.3	Total	farms.. \$1,000..	19 928	1.7	
				22 979	2.6	
See footnotes at end of table.						

C-12 APPENDIX C

1997 CENSUS OF AGRICULTURE

USDA, National Agricultural Statistics Service

**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						
Total cropland	farms..	38 942	Individual or family (sole proprietorship)	farms..	33 309	
acres..		9 244 303	acres..	8 956 665	1.3	
Harvested cropland	farms..	38 130	Partnership	farms..	4 323	
acres..		8 137 473	acres..	1 834 947	1.2	
Cropland:			Corporation:		.8	
Pasture or grazing only	farms..	18 843	Family held	farms..	.9	
acres..		756 583	More than 10 stockholders	farms..	.4	
Total woodland	farms..	25 485	10 or less stockholders	farms..	39	
acres..		1 955 617	Other than family held	farms..	.9	
Pastureland and rangeland other than cropland and			More than 10 stockholders	farms..	84 092	
woodland pastured.....	farms..	10 335	10 or less stockholders	farms..	.9	
acres..		535 046	Other—cooperative, estate or trust, institutional, etc.	farms..	1.4	
Land in house lots, ponds, roads, wasteland, etc.	farms..	28 005	acres..	130	2.3	
acres..		708 809				
Irrigated land	farms..	1 687	Hired Farm Labor¹			
acres..		339 594	Hired workers by days worked:			
Harvested cropland irrigated	farms..	1 667	150 days or more	farms..	12 238	
acres..		337 972	workers..	28 983	1.7	
Pasture and other land irrigated	farms..	.68	Less than 150 days	farms..	16 644	
acres..		1 622	workers..	58 900	1.7	
Land under Conservation Reserve or Wetlands					2.1	
Reserve Programs	farms..	3 955	Injuries and Deaths			
acres..		177 472	Farm-related injuries:			
			Operator and family members	farms..	1 086	
Estimated market value of land and buildings	farms..	40 270	number..	1 283	1.5	
\$1,000.		14 996 964	Hired workers	farms..	456	
Average per farm	dollars..	372 410	number..	748	.8	
Average per acre	dollars..	1 210				
VALUE OF LAND AND BUILDINGS¹						
Estimated market value of all machinery and			Farm-related deaths:			
equipment	farms..	40 268	Operator and family members	farms..	16	
\$1,000.		3 816 566	number..	(D)	—	
Average per farm	dollars..	94 779	Hired workers	farms..	4	
Average per acre	dollars..	1.7	number..	(D)	—	
VALUE OF MACHINERY AND EQUIPMENT¹						
Estimated market value of all machinery and			Farms By Size			
equipment	farms..	40 268	1 to 9 acres		1 026	
\$1,000.		3 816 566	10 to 49 acres		2 143	
Average per farm	dollars..	94 779	50 to 69 acres		1 111	
Average per acre	dollars..	1.7	70 to 99 acres		2 774	
AGRICULTURAL CHEMICALS¹			100 to 139 acres		3 904	
Commercial fertilizer	farms..	34 649	140 to 179 acres		4 526	
acres on which used..		6 054 691	180 to 219 acres		4 155	
			220 to 259 acres		3 689	
			260 to 499 acres		11 123	
			500 to 999 acres		4 394	
			1,000 to 1,999 acres		1 101	
			2,000 acres or more		311	
TENURE OF OPERATOR						
All operators	farms..	40 257	Farms By North American Industry Classification System			
acres..		12 443 775	Oilseed and grain farming (111)		7 420	
Full owners	farms..	17 714	Vegetable and melon farming (1112)		887	
acres..		3 743 339	Fruit and tree nut farming (1113)		418	
Part owners	farms..	19 135	Greenhouse, nursery, and floriculture production (1114)		924	
acres..		7 869 343	Other crop farming (1119)		1.4	
Tenants	farms..	3 408	Beef cattle ranching and farming (112111)		2 752	
acres..		831 093	Cattle feedlots (112112)		3 887	
OWNED AND RENTED LAND			Dairy cattle and milk production (11212)		1 326	
Land owned	farms..	36 922	Hog and pig farming (1122)		20 812	
acres..		8 914 926	Poultry and egg production (1123)		852	
Owned land in farms	farms..	36 849	Sheep and goat farming (1124)		214	
acres..		8 546 669	Animal aquaculture and other animal production (1125, 1129)		143	
Land rented or leased from others	farms..	22 649			3.0	
acres..		3 944 074				
Rented or leased land in farms	landlords..	63 387	Livestock			
acres..		22 543	Cattle and calves inventory	farms..	30 376	
Land rented or leased to others	farms..	4 059	number..	3 274 242	1.2	
acres..		415 225	Beef cows	farms..	6 087	
		.8	number..	162 643	1.1	
OPERATOR CHARACTERISTICS			Milk cows	farms..	22 009	
Operators by place of residence:			number..	1 334 084	1.0	
On farm operated		34 180	Cattle and calves sold	farms..	30 743	
Not on farm operated		4 506	number..	1 482 668	1.2	
Not reported		1 571	\$1,000..	644 629	.8	
Operators by principal occupation:			number..	2 733	.7	
Farming		31 974	Hogs and pigs inventory	farms..	726 247	
Other		8 283	number..	2 766	.7	
Operators by days worked off farm:			Hogs and pigs sold	farms..	1 507 021	
Any		13 919	number..	149 712	.7	
200 days or more		7 777	Sheep and lambs of all ages inventory	farms..	917	
Operators by sex:			number..	44 717	1.6	
Male		38 670	Sheep and lambs sold	farms..	773	
Female		1 587	number..	35 890	1.6	
Average age of operator	years..	50.5	Horses and ponies inventory	farms..	3 841	
		1.7	number..	22 799	1.4	
			Horses and ponies sold	farms..	704	
			number..	4 452	1.5	

See footnotes at end of table.

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

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
POULTRY					
Layers and pullets 13 weeks old and older inventory (see text)	farms..	1 224	Oats for grain	farms..	12 697
number..		4 076 883	acres..	288 713	1.2
Layers 20 weeks old and older	farms..	1 188	bushels..	17 257 297	1.2
number..		3 658 668	farms..	563	1.6
Broilers and other meat-type chickens sold	farms..	291	acres..	2 191	1.7
number..		27 575 764	pounds..	4 683 397	1.7
SELECTED CROPS HARVESTED					
Corn for grain or seed	farms..	29 399	Oats for grain	farms..	10 950
acres..		2 811 611	acres..	971 558	.7
bushels..		356 157 448	bushels..	42 040 140	.7
Corn for silage or green chop	farms..	20 881	farms..	361	1.4
acres..		697 822	acres..	85 204	.2
tons, green..		10 222 804	cwt..	30 227 332	.2
Wheat for grain	farms..	4 091	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms..	31 761
acres..		143 646	acres..	3 210 328	1.1
bushels..		7 808 341	tons, dry..	7 993 358	1.0
			farms..	26 833	1.3
			acres..	1 590 131	1.2
			tons, dry..	4 775 173	1.1
			farms..	2 689	1.0
			acres..	266 875	.5
			Land in orchards.....	farms..	313
			acres..	8 373	1.9
					2.3

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 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	-3.5	1.3	-12.7	1.5
Land in farms	-3.6	1.2	-6.9	1.2
Average size of farm	-4	1.8	6.6	2.3
Estimated market value of land and buildings ¹ :				
Average per farm	dollars..	34.2	2.7	40.7
Average per acre	dollars..	34.5	2.7	32.7
Estimated market value of all machinery and equipment ¹ :				
Average per farm	dollars..	1.1	2.1	9.2
Farms by size:				
1 to 9 acres		-12.8	1.3	-28.6
10 to 49 acres		11.8	1.4	-3.3
50 to 179 acres		1.8	1.1	-11.3
180 to 499 acres		-13.1	1.3	-16.6
500 to 999 acres		-4.5	1.1	-4.8
1,000 to 1,999 acres		10.6	-	10.1
2,000 acres or more		56.4	-	57.1
Total cropland	farms..	-4.8	1.3	-12.4
	acres..	-5.4	1.2	-6.7
Harvested cropland	farms..	-11.1	1.2	-12.6
	acres..	-2.5	1.2	-1.9
Irrigated land	farms..	-5.6	1.2	-4.3
	acres..	3.3	.5	3.6
Market value of agricultural products sold	\$1,000..	6.1	1.1	6.3
Average per farm	dollars..	9.9	1.9	21.7
Crops, including nursery and greenhouse crops	\$1,000..	45.6	1.1	47.4
Livestock, poultry, and their products	\$1,000..	-4.7	1.1	-4.7
Farms by value of sales:				
Less than \$2,500		41.0	1.6	(X)
\$2,500 to \$4,999		-3.6	1.3	(X)
\$5,000 to \$9,999		-6.1	1.3	(X)
\$10,000 to \$24,999		-1.7	1.4	1.4
\$25,000 to \$49,999		-13.3	1.6	-13.3
\$50,000 to \$99,999		-26.0	1.6	-26.0
\$100,000 to \$249,999		-19.2	1.5	-19.2
\$250,000 to \$499,999		18.8	-	18.8
\$500,000 or more		71.9	-	71.9
Total farm production expenses ¹	\$1,000..	4.3	1.3	4.1
Average per farm	dollars..	8.1	1.9	19.2
Net cash return from agricultural sales for the farm unit (see text) ¹	farms..	-3.5	1.4	-12.6
	\$1,000..	7.1	1.7	8.0
Average per farm	dollars..	11.0	2.4	23.6
Operators by principal occupation:				
Farming		-15.5	1.3	-17.4
Other		22.0	1.5	12.4
Operators by days worked off farm:				
Any		11.5	1.5	1.7
200 days or more		15.2	1.5	7.8
Livestock and poultry:				
Cattle and calves inventory	farms..	-14.0	1.3	-18.1
	number..	-11.0	1.2	-11.8
Beef cows	farms..	12.0	1.5	8.7
	number..	13.6	1.5	11.3
Milk cows	farms..	-25.1	1.3	-25.4
	number..	-12.2	1.2	-12.2
Cattle and calves sold	farms..	-14.1	1.3	-17.8
	number..	-14.4	1.0	-15.3
Hogs and pigs inventory	farms..	-45.5	.8	-45.5
	number..	-37.1	.6	-36.1
Hogs and pigs sold	farms..	-47.0	.8	-46.4
	number..	-32.1	.7	-31.0
Sheep and lambs inventory	farms..	-14.1	1.3	-13.7
	number..	-10.4	2.1	-3.9
Layers and pullets 13 weeks old and older inventory (see text)	farms..	-11.4	1.4	-15.5
	number..	10.3	.7	10.6
Broilers and other meat-type chickens sold	farms..	16.5	2.5	14.6
	number..	101.7	.4	102.1
Selected crops harvested:				
Corn for grain or seed	farms..	-6.4	1.5	-6.1
	acres..	1.7	1.1	2.5
	bushels..	27.8	1.4	28.5
Corn for silage or green chop	farms..	-21.6	1.3	-21.1
	acres..	-23.4	1.0	-23.2
	tons, green..	2.5	1.3	3.0
Oats for grain	farms..	-32.8	1.1	-33.3
	acres..	35.6	1.0	-35.8
	bushels..	-33.2	1.0	-33.4
Soybeans for beans	farms..	34.3	1.9	40.7
	acres..	72.2	1.7	77.0
	bushels..	141.7	2.3	145.8
Potatoes, excluding sweetpotatoes	farms..	-6.5	1.7	-.3
	acres..	9.0	.3	9.1
	cwt..	13.5	.2	13.5
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms..	-13.9	1.2	-15.9
	acres..	-9.1	1.3	-9.6
	tons, dry..	-.2	1.4	-.4
Vegetables harvested for sale (see text)	farms..	-23.0	1.0	-24.1
	acres..	-22.3	.6	-21.6

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)
Wisconsin.....	65 602	.9	14 900 205	.9	227	1.2	282 135	1.3	4 375 650	1.1
Adams.....	360	.5	121 572	.7	338	.9	403 930	6.4	40 671	6.3
Ashland.....	186	.5	46 503	1.3	250	1.4	165 770	6.0	6 839	4.9
Barron.....	1 384	1.1	325 009	1.2	235	1.6	196 970	4.1	86 039	5.6
Bayfield.....	325	.7	84 222	1.3	259	1.4	215 718	28.0	14 523	26.3
Brown.....	1 059	.9	195 966	1.0	185	1.4	333 355	6.0	78 227	5.6
Buffalo.....	1 000	1.0	308 581	1.1	309	1.5	223 544	3.9	68 395	4.4
Burnett.....	351	.7	82 742	1.5	236	1.6	200 486	7.4	25 485	17.1
Calumet.....	703	1.0	143 579	1.0	204	1.5	271 733	4.2	58 773	6.0
Chippewa.....	1 471	1.4	372 844	1.4	253	2.0	198 650	4.1	95 187	5.0
Clark.....	1 883	1.3	413 901	1.3	220	1.9	175 414	3.7	109 355	4.2
Columbia.....	1 359	.8	325 723	.9	240	1.2	362 458	3.3	96 340	4.0
Crawford.....	958	1.1	233 481	1.4	244	1.7	201 760	8.0	40 597	9.9
Dane.....	2 595	.6	512 971	.6	198	.9	366 967	2.3	188 624	3.8
Dodge.....	1 807	.9	391 959	.9	217	1.3	328 519	3.0	154 989	3.5
Door.....	702	.8	121 879	1.2	174	1.4	262 365	6.7	40 862	6.7
Douglas.....	267	.8	70 806	1.4	265	1.6	176 971	8.0	6 349	10.4
Dunn.....	1 397	.8	368 618	.9	264	1.2	242 152	3.1	99 726	4.1
Eau Claire.....	927	1.1	191 367	1.3	206	1.7	195 570	4.2	48 347	6.4
Florence.....	86	.7	19 371	2.4	225	2.5	151 578	4.9	3 741	5.7
Fond du Lac.....	1 488	.9	324 893	.8	218	1.2	305 591	6.0	113 558	4.2
Forest.....	111	1.0	26 150	2.4	236	2.6	166 540	7.4	3 957	8.8
Grant.....	2 238	1.0	599 617	1.0	268	1.4	287 666	2.5	151 613	3.2
Green.....	1 295	1.3	304 963	1.3	235	1.9	312 787	3.6	95 809	5.4
Green Lake.....	584	1.1	134 271	1.3	230	1.7	305 958	5.9	36 367	12.3
Iowa.....	1 394	1.1	366 709	1.1	263	1.5	334 517	3.4	87 061	4.4
Iron.....	38	.5	9 633	2.5	254	2.5	182 505	5.2	1 545	4.1
Jackson.....	774	1.2	243 923	1.2	315	1.6	335 588	3.4	48 189	4.7
Jefferson.....	1 240	.9	242 301	1.0	195	1.3	374 852	3.2	83 218	4.2
Juneau.....	654	1.0	169 188	1.1	259	1.5	320 793	5.0	42 925	5.9
Kenosha.....	388	.6	84 744	1.1	218	1.2	612 746	5.1	38 115	14.9
Kewaunee.....	795	.7	161 268	.9	203	1.1	287 524	5.0	69 561	4.8
La Crosse.....	759	.6	169 543	.9	223	1.1	232 544	5.3	38 858	5.1
Lafayette.....	1 127	1.1	338 376	.9	300	1.4	345 058	3.1	94 269	3.8
Langlade.....	453	.7	123 892	.9	273	1.2	299 650	4.8	44 976	6.6
Lincoln.....	425	.9	83 918	1.6	197	1.8	179 579	5.4	23 530	9.7
Manitowoc.....	1 227	.7	244 864	.7	200	1.0	256 478	2.6	88 177	4.5
Marathon.....	2 703	.8	515 888	.9	191	1.2	201 529	3.3	183 528	4.7
Marinette.....	551	.9	131 641	1.3	239	1.6	216 973	6.5	26 175	5.1
Marquette.....	443	.7	124 804	1.0	282	1.2	334 301	6.7	24 443	6.1
Menominee.....	5	—	387	—	77	—	189 350	—	67	—
Milwaukee.....	83	.9	6 334	5.9	76	5.9	318 984	6.6	3 532	4.4
Monroe.....	1 567	1.1	329 561	1.3	210	1.7	255 281	5.6	103 285	4.8
Oconto.....	940	.9	203 866	1.1	217	1.5	224 535	4.3	58 738	5.4
Oneida.....	117	.7	39 036	1.6	334	1.7	420 959	3.3	7 589	2.4
Outagamie.....	1 286	.7	252 471	.8	196	1.1	304 666	3.2	106 179	3.4
Ozaukee.....	427	.7	69 930	1.3	164	1.5	424 211	8.1	24 573	5.6
Pepin.....	425	1.0	104 044	1.5	245	1.8	197 552	7.8	26 259	10.8
Pierce.....	1 265	.9	267 586	1.1	212	1.4	244 146	4.8	62 537	4.5
Polk.....	1 301	.8	267 639	1.1	206	1.4	215 868	4.6	63 770	6.0
Portage.....	913	.7	262 799	.7	288	1.0	355 095	3.7	91 696	6.6
Price.....	370	.8	92 599	1.5	250	1.7	215 237	10.7	17 761	11.1
Racine.....	554	.8	123 012	.8	222	1.1	519 777	4.2	42 841	5.1
Richland.....	1 032	.8	238 266	1.0	231	1.2	211 072	3.6	50 740	6.1
Rock.....	1 324	.8	351 013	.7	265	1.1	452 648	2.5	104 106	3.9
Rusk.....	578	1.2	159 104	1.4	275	1.8	171 571	5.7	31 829	7.6
St. Croix.....	1 520	.8	312 076	1.0	205	1.2	282 263	4.9	81 033	4.5
Sauk.....	1 452	.7	332 878	.9	229	1.1	285 633	3.7	112 261	4.7
Sawyer.....	184	.7	48 463	1.5	263	1.7	207 326	4.5	10 043	5.9
Shawano.....	1 337	.9	270 478	1.0	202	1.4	213 320	4.0	94 663	4.2
Sheboygan.....	968	.7	182 460	.9	188	1.1	313 404	6.1	75 410	8.1
Taylor.....	887	1.2	223 587	1.5	252	2.0	177 302	11.3	45 516	5.5
Trempealeau.....	1 408	1.1	340 536	1.2	242	1.6	203 567	3.7	80 429	4.6
Vernon.....	1 893	1.1	344 172	1.3	182	1.7	197 627	4.3	87 902	5.4
Vilas.....	44	.6	7 578	1.9	172	2.0	369 136	3.7	4 295	1.0
Walworth.....	853	.8	220 089	.8	258	1.2	537 064	2.7	68 564	5.0
Washington.....	354	.8	97 839	1.4	276	1.6	232 965	6.0	18 226	5.7
Waukesha.....	787	1.0	127 127	1.2	162	1.6	359 221	4.9	54 231	6.7
Waupaca.....	630	.6	105 608	1.0	168	1.2	461 147	6.7	33 195	11.0
Waupaca.....	1 129	.9	226 746	1.1	201	1.4	226 507	3.3	62 634	5.6
Waushara.....	634	.7	174 524	.8	275	1.0	382 855	4.1	54 046	3.5
Winnebago.....	860	.9	167 459	1.1	195	1.4	331 110	5.5	64 960	6.5
Wood.....	968	.9	219 258	1.0	227	1.4	319 738	4.8	73 795	4.8

See footnotes at end of table.

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

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

Geographic area	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)
Wisconsin	66 731	1.4	5 579 861	.7	85 056	1.1	65 584	.9	4 202 802	.7
Adams	113 289	6.4	58 306	.4	161 962	.6	359	.7	40 641	3.8
Ashland	36 969	5.2	4 921	2.3	26 458	2.3	185	1.7	4 324	7.6
Barron	62 257	5.7	164 557	.7	118 900	1.3	1 382	1.1	120 392	1.7
Bayfield	44 825	26.3	9 839	1.8	30 275	1.9	324	.9	7 739	9.3
Brown	73 869	5.7	128 466	.7	121 309	1.2	1 059	1.1	95 936	2.2
Buffalo	68 395	4.6	102 160	.8	102 160	1.3	1 000	1.1	83 928	1.9
Burnett	72 814	17.1	14 187	2.0	40 418	2.1	350	.9	13 022	8.3
Calumet	83 603	6.1	75 984	1.0	108 086	1.4	703	1.1	56 392	2.4
Chippewa	64 665	5.2	118 689	1.4	80 686	2.0	1 472	1.4	89 670	2.6
Clark	57 983	4.4	159 135	1.3	84 511	1.8	1 886	1.3	116 665	2.2
Columbia	70 787	4.1	106 871	.8	78 639	1.1	1 361	.9	88 252	2.1
Crawford	42 421	10.0	39 983	1.6	41 736	2.0	957	1.1	31 362	3.6
Dane	72 716	3.8	284 637	.4	109 687	.8	2 594	.7	195 160	1.1
Dodge	85 677	3.6	193 585	.7	107 131	1.2	1 809	1.0	139 983	1.5
Door	58 710	6.8	38 296	1.2	54 552	1.5	701	1.0	29 345	3.7
Douglas	23 781	10.5	5 689	2.3	21 307	2.5	267	1.3	4 490	9.1
Dunn	71 437	4.2	114 375	.8	81 872	1.1	1 396	1.0	88 432	1.6
Eau Claire	52 042	6.5	57 778	1.4	62 328	1.7	929	1.1	42 319	3.6
Florence	43 503	6.5	1 850	4.7	21 513	4.7	86	3.1	1 791	6.2
Fond du Lac	76 316	4.3	151 140	.8	101 573	1.2	1 488	1.0	111 875	1.9
Forest	35 973	9.1	3 698	3.8	33 313	3.9	110	2.4	3 251	6.4
Grant	67 775	3.3	204 300	.9	91 287	1.4	2 237	1.0	158 419	1.8
Green	73 984	5.6	125 372	1.2	96 813	1.8	1 295	1.3	94 888	2.5
Green Lake	61 954	12.4	45 256	1.2	77 493	1.6	587	1.2	29 201	5.0
Iowa	62 499	4.5	110 905	1.0	79 559	1.4	1 393	1.1	89 189	2.1
Iron	40 655	5.8	819	4.6	21 553	4.6	38	4.1	732	5.8
Jackson	62 019	4.9	77 915	.9	100 666	1.5	777	1.2	54 091	2.4
Jefferson	67 111	4.3	131 266	.6	105 860	1.1	1 240	1.0	108 688	1.5
Juneau	65 735	6.0	52 541	1.0	80 338	1.4	653	1.0	38 488	3.8
Kenosha	98 235	14.9	33 251	.9	85 699	1.1	388	.9	25 312	3.2
Kewaunee	87 608	4.9	80 730	.8	101 548	1.1	794	.9	60 847	2.2
La Crosse	51 196	5.2	45 758	1.0	60 287	1.2	759	.8	35 921	4.0
Lafayette	83 646	4.0	136 208	.9	120 859	1.4	1 127	1.2	102 721	2.0
Langlade	99 726	6.7	50 915	.6	112 395	1.0	451	1.0	37 035	3.5
Lincoln	55 626	9.8	20 290	1.6	47 741	1.8	423	1.3	17 204	5.6
Manitowoc	71 923	4.6	138 456	.6	112 841	.9	1 226	.8	101 201	1.6
Marathon	67 873	4.8	204 288	.8	75 578	1.2	2 704	.9	145 645	1.5
Marinette	47 592	5.2	39 586	1.2	71 845	1.5	550	1.0	29 884	2.7
Marquette	55 300	6.2	32 281	1.0	72 870	1.2	442	.8	23 819	4.2
Menominee	13 448	—	13	—	2 506	—	5	—	19	—
Milwaukee	43 606	5.6	6 820	2.6	82 173	2.7	83	3.5	4 949	3.2
Monroe	65 913	5.0	101 789	1.1	64 958	1.5	1 567	1.3	74 530	2.5
Oconto	62 553	5.5	66 618	1.1	70 870	1.4	939	1.1	51 328	2.7
Oneida	64 867	3.7	13 290	.6	113 594	.9	117	2.8	8 570	.9
Outagamie	82 565	3.5	142 184	.6	110 563	1.0	1 286	.8	102 722	1.8
Ozaukee	57 683	5.7	32 047	1.1	75 052	1.3	426	1.0	25 764	4.3
Pepin	61 786	10.9	29 421	1.6	69 226	1.8	425	1.2	21 372	6.6
Pierce	49 437	4.7	76 374	1.2	60 375	1.5	1 265	1.0	59 876	3.0
Polk	49 016	6.1	67 944	1.2	52 225	1.5	1 301	.9	52 273	2.9
Portage	100 544	6.6	115 093	.5	126 060	.9	912	.9	85 449	1.4
Price	48 395	11.2	15 155	1.8	40 960	2.0	367	1.0	10 981	3.7
Racine	77 471	5.2	78 438	.5	141 584	.9	553	.9	58 639	2.1
Richland	49 119	6.1	61 143	1.0	59 247	1.3	1 033	.9	47 967	2.7
Rock	78 630	4.0	129 628	.6	97 906	1.0	1 324	.9	106 292	1.5
Rusk	55 259	7.7	32 479	1.6	56 192	2.0	576	1.3	23 829	3.6
St. Croix	53 311	4.6	91 606	.9	60 267	1.2	1 520	.9	74 569	1.8
Sauk	77 262	4.8	121 224	.7	83 487	1.0	1 453	.8	98 335	1.9
Sawyer	54 877	6.1	10 220	1.6	55 544	1.8	183	1.8	7 559	3.8
Shawano	70 855	4.3	126 533	.8	94 640	1.2	1 336	1.0	79 023	2.1
Sheboygan	78 064	8.2	92 206	.7	95 254	1.0	966	.9	65 984	2.1
Taylor	51 315	5.6	61 754	1.5	69 621	1.9	887	1.3	49 617	3.6
Trempealeau	57 082	4.7	124 348	.8	88 315	1.3	1 409	1.2	100 814	1.7
Vernon	46 411	5.5	86 491	1.4	45 690	1.8	1 894	1.2	66 910	2.7
Vilas	97 616	3.4	6 190	.2	140 675	.6	43	3.3	5 202	.5
Walworth	80 285	5.1	93 389	.6	109 484	1.0	854	.9	77 154	1.4
Washburn	51 485	5.8	15 933	1.7	45 010	1.9	354	1.0	11 785	7.6
Washington	68 996	6.7	61 445	1.1	78 075	1.5	786	1.0	45 708	2.6
Waukesha	52 691	11.1	42 099	.8	66 823	1.0	630	.9	32 731	4.6
Waupaca	55 526	5.6	86 182	.9	76 334	1.3	1 128	.9	64 459	3.0
Waushara	85 380	3.6	75 001	.5	118 298	.8	633	.8	58 139	1.5
Winnebago	75 535	6.6	61 689	1.0	71 731	1.3	860	1.0	49 923	2.2
Wood	76 870	5.0	90 831	.9	93 834	1.3	967	1.0	62 076	2.5

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	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)
Wisconsin	22 888	1.5	306 830	1.3	39 355	1.2	847 206	.9	45 101	1.2	179 427	.9
Adams	122	16.0	673	25.2	131	15.5	711	20.3	267	4.9	3 746	2.9
Ashland	60	11.7	314	25.3	111	6.8	1 226	12.4	77	9.2	78	10.3
Barron	508	8.2	10 047	6.5	953	3.9	42 684	1.7	987	3.6	2 796	4.1
Bayfield	79	20.6	206	17.4	181	10.3	2 010	20.6	117	16.7	148	9.8
Brown	450	7.6	12 078	4.4	736	4.1	24 896	3.2	724	4.1	2 882	5.1
Buffalo	414	7.5	6 530	6.8	673	4.4	27 428	2.1	734	3.7	2 612	4.0
Burnett	113	16.4	791	19.0	188	10.0	1 638	21.0	242	8.7	587	14.1
Calumet	240	11.7	3 826	9.4	447	4.6	13 599	4.5	570	3.9	2 016	5.3
Chippewa	567	8.0	5 969	9.8	1 062	3.7	22 298	4.4	1 120	2.9	3 097	5.0
Clark	775	6.8	9 234	10.5	1 398	3.3	29 483	3.5	1 449	3.2	3 854	4.3
Columbia	484	7.5	7 729	6.2	727	5.1	12 809	4.5	1 078	2.9	5 363	3.9
Crawford	311	11.3	2 190	15.4	593	5.6	5 137	8.0	607	5.4	1 156	8.2
Dane	768	5.8	22 686	3.9	1 293	3.3	29 898	2.6	1 705	2.2	9 571	2.1
Dodge	652	6.9	10 406	4.6	1 178	3.5	28 694	2.8	1 518	2.4	6 492	3.5
Door	202	14.3	1 308	19.1	338	8.5	4 296	7.4	466	4.9	1 289	5.0
Douglas	114	15.2	780	26.6	165	9.9	758	21.6	52	22.8	32	22.3
Dunn	462	8.2	5 688	8.2	810	4.5	19 447	2.4	872	3.3	4 013	5.0
Eau Claire	259	11.1	1 750	11.8	546	4.7	6 856	6.5	615	3.9	2 516	4.9
Florence	23	6.7	91	7.9	45	4.6	350	8.7	35	5.2	46	8.4
Fond du Lac	574	7.4	7 019	8.5	857	3.8	23 048	3.7	1 160	2.3	5 176	4.2
Forest	33	13.1	505	2.5	74	6.2	870	4.2	44	8.9	63	27.9
Grant	1 055	4.8	15 025	6.2	1 642	2.4	35 352	4.0	1 619	2.5	5 908	3.1
Green	619	7.1	6 927	6.7	928	4.0	17 173	5.2	903	3.6	4 042	4.5
Green Lake	214	12.7	3 133	16.8	277	10.3	4 483	12.5	472	4.3	1 617	6.1
Iowa	502	8.3	9 802	3.8	948	3.7	16 119	3.9	843	3.0	3 515	5.4
Iron	10	7.7	4	12.2	19	6.0	173	10.1	17	6.3	(D)	(D)
Jackson	265	12.6	2 780	9.8	414	8.1	7 473	7.4	559	4.6	1 847	3.8
Jefferson	408	8.8	8 409	6.0	657	5.5	24 657	2.6	920	2.5	5 099	3.0
Juneau	180	15.5	1 699	23.1	303	8.8	4 167	12.9	471	4.6	2 820	4.4
Kenosha	82	18.8	1 198	21.6	167	11.0	2 617	12.2	256	4.2	1 669	4.1
Kewaunee	291	9.3	3 902	9.4	532	4.8	13 553	4.4	606	3.4	2 560	3.7
La Crosse	292	10.6	2 863	14.6	425	6.0	8 060	6.9	525	4.3	1 264	7.0
Lafayette	526	7.7	10 730	8.1	889	4.0	17 470	4.8	848	3.3	4 774	3.2
Langlade	181	13.6	1 200	19.2	274	7.8	5 191	7.3	251	7.7	1 853	4.5
Lincoln	115	20.3	709	29.2	242	9.2	3 588	19.1	231	11.1	399	18.5
Manitowoc	386	9.0	6 748	7.2	728	4.6	23 984	3.2	881	2.8	3 437	3.7
Marathon	764	6.7	7 206	6.4	1 647	2.4	34 819	3.0	1 858	2.9	4 245	3.7
Marinette	246	11.3	3 238	6.9	264	10.2	6 544	4.3	360	6.0	1 006	5.6
Marquette	93	22.7	926	25.6	192	13.3	2 604	11.4	290	8.1	1 260	3.8
Menominee	—	—	—	—	—	—	—	—	—	—	—	—
Milwaukee	5	13.6	3	22.4	9	10.5	30	33.6	56	4.0	422	3.2
Monroe	661	6.7	4 903	9.1	972	3.8	13 247	6.1	1 136	3.4	2 394	7.2
Oconto	377	8.5	4 682	18.2	595	5.1	10 870	3.7	623	4.0	1 914	5.7
Oneida	28	6.1	130	10.7	54	4.4	613	1.1	43	4.4	423	4.2
Outagamie	494	7.4	8 906	6.5	753	4.1	22 320	3.5	951	3.2	4 581	4.7
Ozaukee	136	16.6	1 078	19.6	225	10.8	4 870	14.9	247	7.9	1 100	7.3
Pepin	151	16.5	1 260	20.3	266	7.5	3 716	10.0	307	5.7	915	8.1
Pierce	377	10.0	4 408	11.6	697	4.9	9 498	6.6	862	3.2	3 108	8.4
Polk	392	9.4	2 873	13.7	748	4.9	10 299	5.2	829	4.0	2 275	7.4
Portage	318	10.6	2 880	13.1	525	6.1	5 702	7.9	652	3.6	5 957	2.2
Price	75	24.8	280	16.2	222	8.4	2 359	8.3	174	11.3	209	10.2
Racine	175	15.0	2 328	16.4	226	11.2	10 310	4.9	348	6.7	3 420	3.6
Richland	309	10.4	3 360	16.9	643	5.0	11 350	5.2	591	4.3	1 519	6.3
Rock	428	8.6	9 252	5.0	607	5.6	9 832	5.0	890	3.4	6 458	3.0
Rusk	150	13.4	1 466	9.4	371	6.4	5 614	6.1	351	6.1	691	9.1
St. Croix	423	8.3	3 826	10.3	827	4.7	13 222	3.5	882	3.7	3 650	4.2
Sauk	581	7.3	7 029	6.5	957	3.4	24 206	3.0	1 057	2.7	3 558	5.8
Sawyer	73	10.5	450	17.7	119	5.1	1 207	8.6	90	7.1	209	8.0
Shawano	435	8.5	6 593	8.5	884	3.8	18 223	4.3	976	3.3	2 549	4.7
Sheboygan	332	10.6	3 067	6.7	579	5.8	15 748	4.8	642	4.3	2 775	9.1
Taylor	324	10.2	4 533	12.2	637	4.5	14 225	5.4	618	4.7	1 084	7.7
Trempealeau	432	9.7	8 060	6.5	801	4.7	38 039	2.5	872	3.5	3 046	7.3
Vernon	696	7.0	6 274	7.6	1 153	3.4	13 175	5.0	1 429	3.0	2 480	5.1
Vilas	9	8.2	62	26.4	18	5.8	45	3.5	13	5.7	(D)	(D)
Walworth	289	10.0	6 653	6.7	427	7.3	12 333	2.9	537	4.7	4 310	2.9
Washburn	103	18.4	654	24.7	191	9.9	2 476	14.1	163	12.3	236	8.7
Washington	283	12.2	2 658	6.7	473	7.0	8 945	6.3	558	5.1	2 167	6.2
Waukesha	114	19.5	880	11.0	288	9.6	3 653	21.3	335	7.7	2 360	6.0
Waupaca	438	8.6	3 445	9.1	715	4.5	12 950	9.1	820	3.0	2 733	6.9
Waushara	203	11.6	1 846	12.3	281	9.0	4 203	9.0	437	5.2	3 856	1.6
Winnebago	260	12.5	3 034	14.8	421	7.6	8 224	6.6	583	3.9	2 259	4.8
Wood	378	8.5	3 640	20.0	617	5.0	9 539	6.8	680	4.4	1 832	9.1

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	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)
Wisconsin	44 200	1.2	258 450	1.0	40 404	1.2	169 356	1.0	60 160	1.0	187 629	1.0
Adams	238	7.6	5 468	2.2	202	9.4	4 247	5.8	326	3.0	1 561	4.8
Ashland	77	9.2	152	6.2	36	15.9	449	5.9	178	2.6	238	8.8
Barron	980	4.0	4 349	5.9	849	4.8	2 383	5.5	1 296	1.8	5 273	3.7
Bayfield	124	16.5	176	11.8	71	26.5	101	27.5	306	2.9	515	10.7
Brown	709	4.1	3 977	5.9	587	4.9	2 083	6.5	1 030	1.5	3 542	3.5
Buffalo	723	4.0	3 978	5.2	634	4.8	2 426	6.7	913	2.3	2 867	3.6
Burnett	218	9.8	918	15.0	200	11.4	498	14.6	332	3.8	688	10.0
Calumet	525	4.7	2 838	5.6	493	5.5	1 767	7.2	664	2.2	2 201	4.2
Chippewa	1 090	3.1	5 302	4.8	979	3.9	2 229	6.7	1 323	2.3	4 375	4.1
Clark	1 444	3.2	6 284	4.8	1 255	4.0	2 638	5.0	1 785	1.8	4 727	6.2
Columbia	1 073	2.9	7 507	3.5	1 000	3.1	5 280	4.6	1 299	1.9	4 464	2.8
Crawford	584	5.9	1 721	9.3	470	7.0	1 236	13.6	826	2.5	1 868	6.2
Dane	1 629	2.5	13 472	3.3	1 697	2.6	9 860	3.2	2 316	1.4	8 464	2.3
Dodge	1 399	2.6	8 759	3.3	1 403	2.6	6 058	4.0	1 720	1.6	6 081	2.7
Door	487	5.2	1 848	7.2	476	5.7	1 222	9.3	655	2.2	1 473	5.9
Douglas	69	22.3	155	38.4	26	29.3	118	50.9	251	4.0	291	13.4
Dunn	925	3.1	6 090	4.0	776	4.5	3 587	6.6	1 235	2.2	4 526	2.9
Eau Claire	605	4.0	2 270	6.8	571	4.4	1 572	6.9	796	2.6	2 304	5.5
Florence	45	4.5	108	11.8	26	6.5	64	14.9	82	3.2	108	4.9
Fond du Lac	1 117	2.8	7 200	4.3	1 023	3.8	4 634	7.0	1 351	1.7	5 094	3.0
Forest	50	10.0	132	21.5	25	16.5	77	49.2	108	2.6	180	8.9
Grant	1 597	2.5	8 985	3.5	1 467	3.1	5 741	4.9	2 095	1.7	7 502	2.9
Green	920	3.5	6 778	5.8	896	3.6	4 667	5.8	1 159	2.4	4 174	4.4
Green Lake	457	4.8	2 747	8.9	433	5.6	1 810	7.0	540	3.6	1 407	5.6
Iowa	825	3.0	5 591	5.2	836	4.3	3 612	3.4	1 208	2.5	3 713	3.7
Iron	17	6.3	(D)	(D)	13	6.6	(D)	(D)	36	4.3	60	6.1
Jackson	515	5.9	2 877	3.8	444	6.5	1 750	3.7	731	2.5	2 494	4.1
Jefferson	910	2.9	6 040	3.8	873	3.9	5 411	3.7	1 142	2.1	3 951	3.2
Juneau	440	4.7	2 964	5.6	406	5.8	2 270	8.9	596	2.2	1 496	3.2
Kenosha	240	5.9	2 334	6.9	269	6.4	1 869	5.2	354	3.5	1 690	9.0
Kewaunee	558	4.0	2 861	6.2	501	5.2	1 551	6.6	716	2.6	2 688	5.4
La Crosse	536	4.6	1 921	6.5	458	5.7	1 105	9.6	695	2.4	1 620	5.5
Lafayette	841	3.4	7 233	4.5	827	3.7	5 438	4.8	1 049	2.3	4 993	3.5
Langlade	246	9.2	2 555	6.9	281	9.4	2 399	4.9	430	2.5	1 696	8.0
Lincoln	222	10.9	492	12.9	203	11.9	227	15.6	407	2.7	867	9.0
Manitowoc	788	3.5	4 542	4.7	783	4.3	2 614	7.2	1 130	1.9	3 650	3.1
Marathon	2 053	2.6	7 523	3.7	1 791	3.1	3 118	3.4	2 570	1.4	6 343	2.9
Marinette	373	6.2	1 852	5.9	357	6.9	1 035	10.1	526	2.2	1 342	5.5
Marquette	291	8.4	2 145	6.9	210	9.8	1 203	4.6	393	4.5	1 199	5.3
Menominee	2	—	(D)	(D)	2	—	(D)	(D)	3	—	2	—
Milwaukee	53	4.2	189	5.0	52	4.3	121	9.4	72	3.7	443	4.1
Monroe	1 070	3.9	3 442	6.5	930	4.8	2 590	6.9	1 466	1.9	3 404	4.1
Oconto	662	4.3	3 936	5.7	553	5.5	1 566	6.4	825	2.8	2 240	3.4
Oneida	58	3.5	631	1.3	45	3.8	501	.3	112	2.9	402	1.0
Outagamie	917	3.6	6 296	5.0	855	3.7	3 624	4.8	1 225	1.8	4 256	3.2
Ozaukee	213	9.3	1 183	8.7	237	7.9	913	14.6	409	2.9	1 192	7.0
Pepin	308	5.8	1 399	11.1	298	7.3	1 025	13.1	406	2.3	1 237	17.4
Pierce	838	3.3	4 268	6.0	811	4.0	2 341	5.8	1 141	2.0	3 211	4.7
Polk	786	4.4	3 601	6.4	717	5.4	1 867	8.4	1 150	2.0	2 691	6.1
Portage	658	3.7	8 795	2.1	576	5.1	8 267	1.3	855	1.8	3 287	3.8
Price	195	10.6	499	13.9	113	16.6	194	9.1	345	3.4	731	12.4
Racine	376	6.8	3 611	5.4	393	5.6	2 805	5.6	516	3.3	3 087	3.7
Richland	573	4.8	2 174	7.8	514	6.1	1 289	7.2	856	3.3	2 130	5.9
Rock	881	3.4	10 305	2.5	816	4.1	7 229	3.4	1 135	2.2	5 292	4.3
Rusk	353	7.3	1 019	8.3	288	7.0	385	8.0	532	2.7	1 188	5.6
St. Croix	885	3.5	5 158	4.5	789	4.3	3 006	5.9	1 296	1.8	3 773	3.6
Sauk	972	3.6	4 997	7.0	960	4.1	3 533	4.7	1 312	1.6	4 273	4.4
Sawyer	97	6.7	394	10.5	75	6.8	223	3.1	168	3.0	423	4.0
Shawano	910	3.9	4 031	5.5	829	4.8	1 943	8.9	1 232	1.5	3 076	3.4
Sheboygan	636	4.6	3 834	6.9	610	4.7	2 420	7.4	898	1.7	2 615	6.1
Taylor	634	4.5	2 116	8.5	499	6.3	648	9.5	830	1.9	1 995	6.2
Trempealeau	857	3.8	4 964	5.5	784	5.3	2 841	8.3	1 288	2.2	3 396	3.8
Vernon	1 312	3.6	2 492	5.3	1 166	4.2	1 631	5.9	1 776	1.7	3 164	4.1
Vilas	19	3.2	183	.2	16	4.6	182	.1	41	3.3	177	.9
Walworth	550	4.8	5 700	3.5	546	5.4	5 617	3.0	730	2.6	3 497	2.8
Washburn	156	14.0	770	12.8	113	15.9	385	10.8	326	3.9	574	5.7
Washington	527	5.8	2 322	6.8	486	7.0	1 742	7.7	729	3.0	2 234	4.0
Waukesha	338	7.4	2 435	10.6	293	8.6	1 843	4.6	501	4.3	1 749	6.9
Waupaca	804	3.5	3 942	6.0	711	4.2	2 500	9.8	1 086	1.7	2 550	3.8
Waushara	418	5.0	5 505	2.5	411	5.3	4 196	2.4	584	2.6	2 281	2.9
Winnebago	517	6.0	3 089	5.2	500	5.3	2 376	5.5	810	2.4	2 544	4.7
Wood	685	4.3	3 006	6.1	569	6.0	1 595	6.9	936	1.7	2 787	5.9

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	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)
Wisconsin	52 272	1.1	107 204	1.0	25 179	1.4	409 009	.9	4 464	3.2	20 509	2.9
Adams	222	9.4	1 095	2.9	145	12.8	5 735	7.2	12	—	163	—
Ashland	138	4.0	160	8.0	60	11.1	226	14.7	9	32.3	9	26.8
Barron	1 165	2.9	3 269	2.7	585	7.2	8 600	4.4	44	28.8	1 330	.5
Bayfield	264	6.0	345	13.8	73	22.6	641	20.1	42	34.6	52	23.1
Brown	888	3.1	2 155	3.1	403	7.4	8 737	5.4	65	21.9	678	5.4
Buffalo	789	3.3	1 970	3.5	369	7.9	4 760	6.9	111	18.6	569	10.4
Burnett	280	7.6	523	14.3	144	16.0	1 382	7.9	9	2.9	19	1.8
Calumet	632	2.8	1 530	5.0	297	8.5	4 715	11.0	71	24.4	275	16.9
Chippewa	1 233	2.5	3 120	3.8	676	6.1	7 592	9.2	92	23.8	567	22.1
Clark	1 662	2.5	3 663	2.9	834	5.7	8 481	4.7	131	19.2	579	22.4
Columbia	1 070	3.2	1 649	3.5	478	7.5	5 645	4.6	60	21.6	246	2.9
Crawford	779	3.5	1 248	7.0	360	10.0	1 800	8.5	53	33.4	128	55.3
Dane	1 983	2.1	3 892	3.4	1 021	4.9	16 914	3.6	180	14.0	805	9.8
Dodge	1 594	2.2	3 167	2.3	724	5.9	12 045	4.1	150	18.9	472	18.9
Door	547	4.5	978	6.1	314	9.7	4 082	9.7	35	32.0	109	35.1
Douglas	215	5.9	146	11.6	49	18.4	254	13.8	18	48.5	81	71.7
Dunn	1 171	2.5	2 492	3.3	510	7.4	7 136	4.6	62	21.3	580	6.6
Eau Claire	639	3.8	1 325	5.4	324	9.2	4 659	7.6	46	29.1	72	31.5
Florence	66	3.7	66	6.0	14	7.5	72	15.1	5	14.7	3	20.1
Fond du Lac	1 194	2.6	2 844	3.4	606	6.4	8 419	4.9	105	18.9	915	7.4
Forest	91	4.8	95	9.4	30	13.7	183	18.5	4	34.1	7	36.8
Grant	1 930	2.1	4 198	2.7	967	5.1	9 186	7.2	151	18.3	597	12.9
Green	1 104	2.5	2 266	3.7	607	6.9	7 120	8.7	92	26.2	252	35.9
Green Lake	472	5.6	625	8.4	143	17.0	2 012	12.2	44	35.4	148	28.0
Iowa	1 113	3.0	2 098	3.2	540	7.2	5 946	7.0	100	23.7	224	24.1
Iron	28	4.8	(D)	(D)	13	7.1	50	5.4	2	18.8	(D)	(D)
Jackson	600	4.5	1 434	4.1	291	9.3	9 663	2.7	87	25.0	285	12.5
Jefferson	866	4.1	1 604	3.2	369	8.3	14 031	2.1	93	21.3	327	21.3
Juneau	471	5.3	1 216	5.9	202	12.2	5 225	4.5	49	31.9	245	29.4
Kenosha	264	7.8	462	6.2	121	13.7	2 889	10.3	27	34.3	65	10.7
Kewaunee	652	3.1	1 597	3.0	368	6.5	7 287	5.0	30	31.4	145	8.6
La Crosse	589	4.2	989	4.6	303	10.1	3 287	13.2	62	25.1	70	28.6
Lafayette	1 045	2.4	2 291	3.8	530	7.9	5 516	9.0	109	22.6	393	23.5
Langlade	378	5.0	976	3.6	183	12.4	7 108	5.0	43	24.8	232	41.5
Lincoln	343	5.4	461	7.6	157	12.8	3 772	9.5	19	55.4	25	22.3
Manitowoc	1 046	2.3	2 441	2.7	527	6.4	12 938	5.8	96	19.9	407	7.4
Marathon	2 267	2.0	4 403	2.5	1 221	4.6	16 684	4.7	300	11.8	1 014	10.9
Marinette	404	6.0	680	6.2	241	9.7	2 808	7.5	59	30.8	98	11.0
Marquette	306	7.5	493	6.2	145	11.0	2 952	4.8	28	37.5	167	5.0
Menominee	2	—	(D)	(D)	—	—	—	—	—	—	—	—
Milwaukee	57	3.9	126	4.0	35	4.2	1 596	2.9	4	9.5	11	.4
Monroe	1 221	3.2	2 143	4.1	534	7.7	9 380	4.2	53	28.5	370	4.6
Oconto	740	3.7	1 299	4.3	388	8.1	4 602	3.8	44	28.9	129	31.9
Oneida	91	3.1	177	1.1	48	3.8	2 170	.8	11	8.1	16	3.1
Outagamie	1 024	3.2	2 469	3.3	495	6.5	11 001	6.2	110	17.2	447	18.0
Ozaukee	355	4.7	677	8.4	156	11.0	3 388	8.3	12	—	162	—
Pepin	328	5.8	623	7.2	174	12.6	1 469	14.2	16	60.1	177	19.9
Pierce	984	3.3	1 823	4.7	463	8.2	4 009	11.3	71	28.3	75	26.5
Polk	991	3.4	1 760	4.1	406	9.0	4 315	10.6	56	31.2	389	62.0
Portage	686	3.8	2 388	1.9	346	7.8	14 883	1.6	84	16.4	382	35.1
Price	310	4.3	447	7.6	129	14.6	1 463	5.3	23	30.9	78	11.4
Racine	469	5.0	1 330	7.6	193	12.0	8 311	4.6	46	31.1	530	3.0
Richland	756	3.0	1 476	4.0	342	9.6	3 569	5.7	57	26.0	186	17.5
Rock	941	3.6	1 576	3.3	419	6.7	8 179	4.1	73	26.5	590	21.5
Rusk	493	3.4	886	5.2	195	11.1	2 165	15.6	50	27.2	147	44.8
St. Croix	1 064	3.1	2 271	3.8	468	7.0	6 122	5.3	143	17.2	390	10.8
Sauk	1 159	2.5	2 262	3.5	514	7.6	9 195	5.5	97	20.7	490	14.4
Sawyer	158	3.3	229	6.1	63	9.7	1 276	6.5	19	24.8	71	27.0
Shawano	1 136	2.8	2 195	3.0	586	6.7	7 037	5.3	100	21.4	530	50.9
Sheboygan	760	3.7	1 565	4.3	353	8.5	7 262	4.7	78	20.4	469	4.4
Taylor	763	3.1	1 756	5.0	375	9.1	3 917	9.7	74	22.1	231	49.7
Trempealeau	1 063	3.0	2 163	3.7	550	7.6	5 022	7.0	66	31.3	266	28.9
Vernon	1 439	2.9	2 245	4.1	718	7.3	4 160	12.6	130	21.1	198	32.3
Vilas	32	3.3	53	1.3	17	3.5	2 448	(L)	4	—	(D)	(D)
Walworth	593	5.1	1 238	3.1	298	7.9	7 697	4.8	55	26.4	292	10.3
Washburn	294	4.6	382	11.8	97	19.6	1 443	7.8	20	50.6	41	48.9
Washington	626	4.6	1 097	4.0	279	10.1	4 754	6.0	37	38.7	109	19.3
Waukesha	421	6.6	513	8.1	211	11.7	4 594	5.5	35	37.6	255	16.6
Waupaca	919	3.2	1 602	4.4	448	7.3	6 316	5.0	43	32.3	295	4.7
Waushara	436	4.5	1 500	3.1	194	11.0	9 999	2.1	58	19.8	350	3.7
Winnebago	647	4.7	1 312	6.0	329	10.0	5 053	7.8	44	30.8	219	6.2
Wood	814	2.6	1 631	4.7	412	7.5	11 658	4.2	56	26.3	242	26.4

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	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)
Wisconsin	56 062	1.0	337 991	1.1	29 186	1.4	87 204	1.6	34 539	1.3	356 573	1.2
Adams	285	6.4	2 828	5.4	154	14.0	1 557	19.2	155	14.1	4 237	5.0
Ashland	164	3.3	432	7.5	34	15.7	36	15.2	86	8.2	521	11.8
Barron	1 180	2.9	7 951	5.5	664	7.1	2 003	9.9	810	5.7	8 490	5.9
Bayfield	274	4.7	965	24.7	92	20.3	51	14.7	123	16.6	582	20.8
Brown	973	2.3	6 575	4.0	511	6.7	1 725	6.0	559	6.8	7 683	7.8
Buffalo	895	2.7	5 548	5.5	491	6.7	2 498	16.8	592	5.5	6 298	6.1
Burnett	296	6.4	1 309	12.9	87	21.0	209	15.6	160	16.1	797	12.9
Calumet	648	2.6	4 908	6.7	472	5.6	1 773	18.6	340	7.4	4 288	8.5
Chippewa	1 288	2.5	7 599	4.6	635	6.9	1 723	12.7	860	4.6	7 352	6.0
Clark	1 702	2.4	10 771	4.2	1 074	5.0	2 731	6.8	1 218	4.5	9 210	5.5
Columbia	1 199	2.4	6 649	3.8	651	6.5	1 861	7.7	779	4.7	8 332	5.8
Crawford	796	3.5	3 153	7.8	379	8.8	567	10.7	559	6.7	3 366	10.2
Dane	2 028	2.2	15 193	3.7	1 119	4.4	3 451	5.6	1 155	4.5	17 274	3.9
Dodge	1 613	2.3	11 097	3.7	976	4.9	2 994	8.7	1 056	4.5	12 436	4.6
Door	616	2.9	3 162	7.2	278	10.2	703	29.9	312	9.3	2 399	13.3
Douglas	213	7.7	368	15.8	39	26.5	36	18.6	81	13.4	515	13.1
Dunn	1 194	2.4	6 703	3.7	543	7.2	1 646	7.7	785	4.8	6 791	5.5
Eau Claire	762	3.3	3 807	5.8	427	7.4	820	12.2	549	6.3	4 398	9.0
Florence	72	3.5	212	6.1	21	6.9	16	6.3	35	5.2	131	10.0
Fond du Lac	1 283	2.0	9 340	4.8	801	5.2	2 133	6.8	804	5.3	10 167	6.1
Forest	91	4.6	320	10.6	29	13.1	40	18.6	35	12.4	173	12.9
Grant	1 968	2.0	13 096	3.7	1 181	4.4	3 571	7.4	1 389	3.8	14 925	4.2
Green	1 075	2.7	8 597	4.2	649	6.5	1 682	8.3	768	5.4	8 572	8.2
Green Lake	495	4.5	2 256	10.4	311	8.8	585	13.7	290	10.6	2 338	13.6
Iowa	1 196	2.6	7 078	3.7	653	6.3	2 047	6.5	803	5.2	8 788	6.4
Iron	30	4.8	(D)	(D)	7	7.8	(D)	(D)	13	6.9	(D)	(D)
Jackson	616	4.5	4 355	5.0	339	9.5	1 535	5.2	400	7.6	5 617	8.1
Jefferson	1 031	3.0	7 054	3.3	644	5.8	1 679	7.9	665	6.1	8 726	5.2
Juneau	558	3.5	3 135	7.5	252	11.4	708	13.6	330	8.7	4 397	6.3
Kenosha	356	3.1	1 794	6.7	102	16.7	343	15.2	175	11.0	1 562	7.0
Kewaunee	700	2.8	4 381	4.1	349	7.4	1 507	8.5	417	6.6	5 248	6.5
La Crosse	692	2.6	2 724	4.8	265	11.8	495	10.7	376	8.7	3 088	10.7
Lafayette	987	2.9	8 608	5.1	577	6.7	2 013	10.0	808	4.4	10 580	5.7
Langlade	398	4.3	3 235	12.4	122	17.6	607	4.7	234	9.9	2 188	6.9
Lincoln	336	5.5	1 420	8.4	111	17.5	215	22.6	216	11.6	1 543	18.8
Manitowoc	1 058	2.4	7 815	3.2	654	5.7	2 066	5.2	681	5.3	8 974	4.6
Marathon	2 400	1.8	12 534	3.8	1 318	4.3	3 211	4.4	1 364	4.4	12 261	4.8
Marinette	465	4.3	2 159	8.2	217	12.5	667	18.0	230	10.5	2 448	10.7
Marquette	327	6.6	1 894	5.9	173	13.9	570	16.7	155	13.6	1 691	10.0
Menominee	1	—	(D)	(D)	—	—	—	—	2	—	(D)	(D)
Milwaukee	66	3.8	357	4.1	17	7.9	24	10.2	27	5.3	229	7.2
Monroe	1 355	2.6	6 855	4.8	685	6.9	1 502	7.6	924	4.9	7 618	7.3
Oconto	790	3.6	4 233	5.4	409	8.2	1 208	8.3	457	6.9	4 440	7.2
Oneida	98	3.1	831	1.1	13	6.8	69	3.5	42	4.2	988	1.3
Outagamie	1 162	2.3	8 771	5.4	650	5.9	2 122	5.5	704	5.1	7 315	5.6
Ozaukee	358	4.1	2 250	10.3	137	14.7	533	12.1	190	10.3	1 957	12.6
Pepin	345	5.1	2 014	13.4	203	13.0	595	15.9	231	10.9	1 830	13.7
Pierce	1 039	3.0	5 758	5.2	535	7.2	1 227	10.0	664	5.0	5 059	6.8
Polk	1 067	3.1	4 458	5.5	502	7.7	1 206	12.9	630	6.5	4 215	6.3
Portage	775	2.9	6 585	4.2	322	10.1	1 228	6.1	459	7.6	6 040	5.3
Price	327	3.8	1 242	10.9	99	16.0	187	27.8	121	14.9	740	13.0
Racine	461	5.1	3 408	5.2	219	13.2	767	21.1	251	10.2	4 020	10.3
Richland	826	3.0	4 072	5.1	387	7.9	843	14.1	526	5.9	4 233	6.1
Rock	1 059	3.1	7 703	4.3	548	7.0	1 916	6.1	679	5.5	9 699	4.5
Rusk	499	3.8	2 450	9.8	290	8.4	734	14.6	333	7.1	1 878	11.6
St. Croix	1 191	2.5	6 439	5.4	518	7.3	1 460	8.9	758	5.4	7 083	5.3
Sauk	1 264	1.9	8 085	4.1	723	5.7	2 096	9.6	782	5.2	8 217	5.5
Sawyer	155	3.5	645	5.4	62	11.4	165	29.0	72	7.9	627	7.9
Shawano	1 138	2.4	6 827	4.7	628	6.6	1 787	8.1	713	5.9	6 688	5.4
Sheboygan	808	3.0	5 073	4.2	362	9.2	969	10.8	452	7.4	4 385	4.9
Taylor	788	2.9	4 152	6.1	432	7.6	1 307	10.9	504	6.4	3 692	8.8
Trempealeau	1 250	2.4	6 660	5.9	725	5.7	2 114	10.6	809	5.2	6 944	7.8
Vernon	1 627	2.4	5 736	6.0	838	6.1	1 475	9.2	948	5.4	8 139	7.3
Vilas	38	3.4	223	.5	10	4.3	(D)	(D)	14	4.3	350	.4
Walworth	666	4.0	4 842	3.4	306	9.2	1 529	10.8	384	6.7	5 337	6.1
Washburn	308	3.4	1 167	13.3	111	18.7	261	11.3	119	16.5	883	16.3
Washington	668	4.0	4 303	7.9	304	10.2	658	7.0	347	8.6	3 075	9.8
Waupaca	1 034	2.1	5 814	5.2	475	6.0	2 029	5.5	664	5.5	5 529	8.5
Waushara	538	3.4	3 979	3.5	273	8.9	1 622	7.9	282	8.3	4 652	5.3
Winnebago	800	2.7	4 046	5.8	330	9.7	1 063	9.7	378	8.8	4 439	8.2
Wood	831	3.2	5 161	6.4	452	7.4	1 735	9.9	530	6.4	5 838	10.0

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	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)
Wisconsin	21 766	1.5	193 761	1.3	61 736	.9	217 808	1.0	60 364	1.0	523 843	1.0
Adams	86	17.4	3 521	6.2	323	4.9	1 419	4.6	319	3.5	3 681	5.1
Ashland	41	13.0	.65	9.5	177	2.5	357	5.6	169	2.6	461	10.4
Barron	513	7.8	2 968	10.2	1 285	2.3	3 430	3.4	1 281	2.1	14 817	4.6
Bayfield	79	24.2	154	35.5	313	3.5	711	11.7	295	3.3	1 082	23.5
Brown	483	6.3	3 737	7.3	954	2.4	3 440	4.5	996	2.2	11 748	6.0
Buffalo	279	10.0	2 768	9.1	972	1.6	3 526	3.5	954	1.9	10 151	5.6
Burnett	127	12.3	646	22.6	336	2.7	923	5.4	275	6.0	2 094	10.4
Calumet	287	10.2	2 227	10.6	678	1.9	2 430	4.4	676	2.0	7 999	6.4
Chippewa	438	8.7	2 294	9.5	1 411	1.9	4 103	4.0	1 409	1.9	12 049	4.6
Clark	704	6.4	2 737	9.9	1 800	1.8	5 269	3.6	1 794	1.9	17 005	4.0
Columbia	570	6.7	7 036	6.3	1 264	2.0	4 819	4.3	1 226	2.1	8 864	6.8
Crawford	247	12.2	1 036	10.9	900	2.1	2 443	4.1	830	3.3	4 314	7.6
Dane	860	5.4	12 221	4.4	2 342	1.6	10 886	2.9	2 309	1.5	20 573	2.6
Dodge	708	5.9	7 662	5.3	1 729	1.6	7 889	2.8	1 693	1.7	15 731	3.6
Door	228	11.8	828	12.7	669	2.5	1 794	7.6	631	2.5	3 855	7.7
Douglas	48	23.3	.57	16.2	252	3.7	437	9.5	252	3.9	462	14.0
Dunn	416	7.9	2 893	9.0	1 378	1.2	5 443	2.7	1 261	2.1	11 398	3.4
Eau Claire	285	9.6	1 699	13.7	899	1.9	2 661	4.9	771	2.9	5 608	7.1
Florence	24	6.3	32	9.1	83	3.2	158	4.3	71	3.5	333	8.5
Fond du Lac	561	7.3	5 240	7.9	1 414	1.6	5 370	3.4	1 361	1.7	15 277	4.7
Forest	29	14.7	.22	14.5	109	2.4	193	6.4	100	3.7	392	7.5
Grant	679	6.4	6 869	6.8	2 104	1.6	7 907	3.4	2 112	1.6	19 556	3.5
Green	507	8.2	5 774	10.6	1 101	3.1	4 718	4.7	1 208	2.1	12 145	5.8
Green Lake	177	14.4	1 427	14.6	530	4.0	1 570	6.8	500	4.1	3 044	10.0
Iowa	429	8.0	4 509	9.1	1 293	2.1	5 875	4.7	1 301	1.9	10 272	6.2
Iron	4	14.0	(D)	(D)	37	4.1	68	4.6	32	4.5	91	7.5
Jackson	230	12.2	2 366	9.1	706	2.8	3 080	3.9	715	2.9	6 533	5.0
Jefferson	497	6.1	5 575	6.2	1 113	2.4	4 604	3.2	1 103	2.7	11 522	4.7
Juneau	211	9.8	1 565	10.3	624	2.5	2 053	5.0	591	2.7	4 527	5.2
Kenosha	146	11.8	2 950	8.6	357	3.3	1 533	5.2	366	3.3	2 335	8.4
Kewaunee	333	7.0	2 160	10.5	794	.9	2 592	3.9	731	2.4	8 815	4.6
La Crosse	219	13.5	1 457	14.3	696	2.9	2 204	6.0	710	2.1	4 774	16.7
Lafayette	438	8.3	6 779	9.1	1 011	2.7	5 300	4.7	1 100	1.7	10 601	4.4
Langlade	160	10.5	1 312	5.9	437	2.1	1 608	4.1	431	2.6	4 875	4.7
Lincoln	143	15.1	294	15.5	383	4.3	927	6.0	392	3.7	2 265	12.8
Manitowoc	546	5.8	3 870	7.4	1 171	1.7	4 264	3.7	1 111	2.0	13 451	3.4
Marathon	890	6.1	3 564	7.5	2 488	1.5	7 049	2.7	2 577	1.3	21 672	2.8
Marinette	170	13.7	748	10.4	528	2.3	1 332	7.7	519	2.5	3 927	5.5
Marquette	106	18.3	1 399	5.0	431	2.0	1 358	5.9	373	4.8	3 958	4.3
Menominee	—	—	—	—	4	—	5	—	4	—	2	—
Milwaukee	26	6.1	189	9.0	73	3.7	281	4.4	70	3.7	928	4.7
Monroe	442	9.2	2 106	12.7	1 480	2.0	4 941	4.1	1 447	2.1	9 635	4.4
Oconto	267	9.3	1 599	11.0	903	1.9	2 207	6.2	840	3.0	6 402	3.8
Oneida	19	6.6	25	8.3	116	2.8	539	1.8	109	2.9	1 055	1.0
Outagamie	394	7.6	3 824	8.9	1 261	1.0	4 398	3.6	1 215	1.8	12 392	3.6
Ozaukee	177	8.1	1 641	17.4	403	2.6	1 689	7.6	394	3.4	3 151	11.3
Pepin	155	14.4	1 169	34.5	406	2.8	1 307	6.8	415	1.9	2 635	7.1
Pierce	397	7.2	2 347	9.1	1 196	2.1	4 125	4.8	1 169	2.1	8 618	6.5
Polk	450	7.5	1 582	10.0	1 246	1.8	3 347	4.2	1 200	2.0	7 393	4.4
Portage	262	10.8	4 722	2.6	873	1.9	3 859	3.4	845	1.8	10 474	4.1
Price	101	17.8	199	17.4	359	2.0	762	5.9	330	3.8	1 591	6.6
Racine	187	13.0	4 020	9.3	508	3.2	2 562	5.8	506	3.7	8 130	4.4
Richland	241	10.5	1 525	10.2	1 025	1.0	3 460	3.6	920	2.5	6 783	5.4
Rock	497	6.4	13 602	3.8	1 185	2.3	5 479	3.5	1 184	2.0	9 180	3.7
Rusk	251	8.6	563	11.6	563	1.8	1 068	5.1	516	2.8	3 573	10.1
St. Croix	415	7.9	2 410	7.3	1 476	1.2	5 430	4.1	1 334	2.3	10 329	3.6
Sauk	460	7.1	4 379	8.3	1 346	1.9	4 947	3.7	1 366	1.6	11 066	3.7
Sawyer	48	11.2	.97	12.9	176	2.1	396	6.1	161	3.5	1 150	3.4
Shawano	475	7.7	2 354	13.7	1 288	1.6	3 895	5.7	1 261	1.7	11 295	3.4
Sheboygan	446	7.2	3 403	8.6	904	2.3	3 240	4.9	904	1.9	9 159	3.5
Taylor	240	11.0	871	30.4	864	1.8	1 988	4.3	807	2.5	7 100	7.4
Trempealeau	379	9.1	3 147	13.3	1 327	2.1	4 239	3.9	1 276	2.1	9 913	6.5
Vernon	512	8.3	1 546	9.8	1 824	1.7	5 506	3.7	1 756	1.9	8 690	4.7
Vilas	7	10.6	(D)	(D)	39	3.3	224	1.6	41	3.3	894	.6
Walworth	310	7.5	7 914	4.4	785	2.6	3 628	4.5	783	2.4	6 566	3.2
Washburn	81	21.9	362	37.2	339	3.1	853	8.1	348	1.9	1 296	7.7
Washington	317	7.6	2 560	8.7	718	2.9	3 275	7.6	716	3.2	5 808	5.8
Waukesha	180	12.8	2 967	7.3	544	4.2	2 219	7.1	568	3.6	3 954	4.8
Waupaca	392	8.1	2 364	13.8	1 067	2.0	3 408	4.6	1 036	2.2	8 980	5.4
Waushara	176	12.3	3 737	1.9	604	2.1	2 471	4.8	578	2.6	7 943	2.4
Winnebago	265	8.6	2 506	8.4	825	2.0	3 068	4.5	817	2.5	6 691	4.2
Wood	299	9.7	1 360	11.2	917	2.1	3 248	3.6	903	2.0	8 806	5.0

See footnotes at end of table.

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

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

Geographic area	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)
Wisconsin	65 585	.9	1 318 913	1.1	61 166	.9	10 353 300	.9	54 369	1.0	8 625 011	.8
Adams	359	.7	15 113	2.4	342	.6	84 142	.7	299	.8	74 362	.7
Ashland	185	1.7	1 027	16.1	180	.6	23 855	1.6	169	.8	17 236	1.7
Barron	1 382	1.1	43 964	4.2	1 298	1.1	217 903	1.2	1 209	1.2	181 105	1.3
Bayfield	324	.9	2 019	21.5	314	.7	47 986	1.5	300	.8	37 503	1.6
Brown	1 059	1.1	31 114	4.7	947	1.0	167 918	1.0	856	1.1	150 708	1.0
Buffalo	1 000	1.1	18 858	7.0	934	1.0	171 119	1.1	831	1.1	136 473	1.1
Burnett	350	.9	5 210	15.8	326	.8	44 578	1.8	306	1.0	34 631	2.1
Calumet	703	1.1	17 322	5.5	665	1.1	122 247	1.1	625	1.2	111 518	1.1
Chippewa	1 472	1.4	29 378	6.9	1 389	1.4	238 095	1.4	1 271	1.5	194 784	1.5
Clark	1 886	1.3	44 435	4.7	1 796	1.3	288 868	1.3	1 724	1.4	240 808	1.4
Columbia	1 361	.9	14 034	9.6	1 261	.8	253 404	.9	1 150	.9	220 834	.9
Crawford	957	1.1	6 741	17.9	901	1.2	114 153	1.4	749	1.3	82 000	1.5
Dane	2 594	.7	89 250	2.7	2 383	.7	413 711	.6	1 981	.7	354 307	.6
Dodge	1 809	1.0	51 674	3.7	1 693	.9	330 516	.9	1 571	1.0	301 793	.9
Door	701	1.0	7 118	13.8	676	.8	93 350	1.2	619	.9	77 867	1.3
Douglas	267	1.3	694	29.5	239	1.0	33 886	1.8	216	1.3	21 869	2.0
Dunn	1 396	1.0	24 335	5.9	1 308	.9	234 530	.9	1 108	1.0	193 548	1.0
Eau Claire	929	1.1	13 339	7.5	875	1.1	133 288	1.4	742	1.3	100 954	1.5
Florence	86	3.1	60	42.5	82	1.0	11 080	3.3	79	1.2	7 913	3.9
Fond du Lac	1 488	1.0	39 129	5.5	1 387	.9	273 448	.8	1 206	1.0	239 607	.9
Forest	110	2.4	758	27.9	105	1.2	11 735	2.9	95	1.5	8 085	3.1
Grant	2 237	1.0	45 322	5.5	2 051	1.1	376 191	1.0	1 765	1.1	297 085	1.0
Green	1 295	1.3	30 311	8.6	1 197	1.4	249 164	1.3	1 049	1.5	206 243	1.3
Green Lake	587	1.2	9 988	13.0	543	1.1	105 560	1.4	466	1.3	88 888	1.4
Iowa	1 393	1.1	18 186	8.7	1 275	1.1	231 855	1.1	980	1.2	160 061	1.1
Iron	38	4.1	87	17.1	37	1.0	4 720	4.3	36	1.0	2 506	4.9
Jackson	777	1.2	22 089	4.4	709	1.3	132 558	1.4	629	1.4	104 760	1.5
Jefferson	1 240	1.0	22 871	5.8	1 160	.9	199 635	1.0	1 026	1.0	176 700	1.0
Juneau	653	1.0	11 797	6.2	599	1.1	110 027	1.2	515	1.3	92 015	1.2
Kenosha	388	.9	6 587	10.7	357	.7	73 716	1.1	308	.9	68 454	1.1
Kewaunee	794	.9	20 233	5.9	765	.8	131 884	.9	681	.9	116 075	.9
La Crosse	759	.8	9 168	15.4	696	.7	89 323	1.0	610	.9	71 935	1.1
Lafayette	1 127	1.2	28 543	6.5	1 014	1.2	262 873	.9	927	1.2	219 982	.9
Langlade	451	1.0	13 505	5.6	411	.9	81 874	1.0	392	.9	64 171	1.1
Lincoln	423	1.3	3 735	15.9	395	1.0	44 417	1.7	377	1.1	34 897	1.8
Manitowoc	1 226	.8	38 656	4.5	1 139	.7	205 720	.7	1 030	.8	182 961	.8
Marathon	2 704	.9	57 245	3.9	2 587	.9	336 656	.9	2 498	.9	278 656	.9
Marinette	550	1.0	9 922	6.4	522	1.0	82 958	1.4	484	1.1	69 049	1.5
Marquette	442	.8	6 331	10.8	420	.8	86 037	1.0	359	1.0	69 719	1.2
Menominee	5	—	—	—	2	—	(D)	(D)	2	—	(D)	(D)
Milwaukee	83	3.5	1 871	4.4	81	1.0	(D)	(D)	74	1.4	4 441	8.0
Monroe	1 567	1.3	26 799	5.7	1 478	1.1	177 725	1.3	1 317	1.2	139 832	1.4
Oconto	939	1.1	13 784	10.0	895	1.0	144 044	1.2	790	1.1	118 792	1.3
Oneida	117	2.8	4 721	1.1	106	1.0	16 424	1.9	90	1.6	9 473	2.1
Outagamie	1 286	.8	41 291	4.4	1 198	.8	212 260	.8	1 077	.8	189 055	.9
Ozaukee	426	1.0	4 630	20.1	394	.9	59 478	1.3	321	1.2	51 092	1.4
Pepin	425	1.2	4 464	21.9	392	1.1	65 691	1.6	365	1.2	53 865	1.7
Pierce	1 265	1.0	14 895	11.6	1 139	1.0	184 451	1.1	943	1.1	146 786	1.2
Polk	1 301	.9	15 644	7.8	1 203	.9	171 040	1.2	1 041	1.0	134 055	1.3
Portage	912	.9	27 971	2.9	866	.8	188 792	.7	814	.8	164 630	.7
Price	367	1.0	4 025	16.0	356	.9	39 978	1.8	341	.9	29 732	1.9
Racine	553	.9	22 215	5.2	513	.9	110 369	.9	446	1.0	102 790	.9
Richland	1 033	.9	11 345	9.5	947	.8	127 714	1.1	789	1.0	97 706	1.1
Rock	1 324	.9	21 972	6.3	1 235	.8	308 241	.7	1 052	.9	281 802	.7
Rusk	576	1.3	6 960	10.4	557	1.2	82 903	1.5	527	1.3	64 028	1.6
St. Croix	1 520	.9	15 892	7.3	1 405	.8	237 069	1.0	1 071	1.0	178 096	1.0
Sauk	1 453	.8	26 086	6.8	1 349	.8	213 340	.9	1 183	.9	176 424	.9
Sawyer	183	1.8	1 857	9.7	171	1.0	27 240	1.7	162	1.2	19 853	1.8
Shawano	1 336	1.0	46 675	3.4	1 257	1.0	184 047	1.1	1 185	1.0	159 993	1.1
Sheboygan	966	.9	22 810	5.9	869	.8	153 112	.9	798	.9	138 156	.9
Taylor	887	1.3	14 043	8.6	837	1.3	122 468	1.6	799	1.3	96 574	1.7
Trempealeau	1 409	1.2	22 903	6.6	1 298	1.1	211 227	1.2	1 049	1.3	159 536	1.3
Vernon	1 894	1.2	15 460	10.7	1 802	1.1	202 819	1.4	1 628	1.2	154 283	1.5
Vilas	44	3.3	988	2.6	39	1.3	(D)	(D)	35	1.8	(D)	(D)
Walworth	854	.9	16 734	6.1	768	.9	187 142	.9	678	1.0	174 636	.9
Washburn	354	1.0	4 429	17.5	328	1.0	45 912	1.6	295	1.2	33 013	1.9
Washington	786	1.0	14 572	7.8	732	1.1	105 484	1.2	671	1.2	96 016	1.3
Waukesha	630	.9	9 592	8.1	569	.7	88 063	1.0	488	.9	77 514	1.1
Waupaca	1 128	.9	18 912	7.0	1 066	1.0	162 243	1.1	972	1.0	140 574	1.1
Waushara	633	.8	14 270	6.6	596	.7	126 543	.7	542	.8	108 073	.8
Winnebago	860	1.0	13 889	8.3	814	.9	135 709	1.1	699	1.0	118 356	1.1
Wood	967	1.0	27 071	5.3	926	1.0	137 805	1.2	887	1.0	111 356	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	Irrigated land				Livestock and poultry							
	Farms		Acres		Cattle and calves inventory				Beef cows inventory			
					Farms		Total		Farms		Total	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Wisconsin	2 025	.9	341 813	.3	39 593	1.1	3 440 300	.9	11 642	.9	222 522	1.0
Adams	65	2.3	41 896	.6	146	1.7	7 874	2.8	64	3.1	1 163	4.3
Ashland	—	—	—	—	123	1.5	5 778	1.9	75	2.6	1 037	3.5
Barron	39	4.6	9 400	.9	991	1.3	74 105	1.4	334	1.8	5 044	2.8
Bayfield	20	7.0	123	10.3	195	1.5	10 100	2.1	116	2.3	1 475	3.4
Brown	34	5.2	423	9.4	696	1.3	92 705	1.0	106	3.1	1 245	4.3
Buffalo	20	5.7	4 690	1.8	693	1.2	68 130	1.2	281	1.9	5 946	2.8
Burnett	9	9.2	243	4.6	204	1.6	10 376	2.3	100	2.7	1 718	3.3
Calumet	4	17.6	6	21.5	467	1.4	50 497	1.2	58	4.1	679	6.0
Chippewa	20	6.8	1 505	7.6	1 073	1.6	87 227	1.6	269	2.2	3 950	2.8
Clark	19	6.8	686	7.8	1 468	1.5	123 409	1.4	278	2.0	3 447	2.8
Columbia	23	6.1	1 066	13.5	714	1.1	59 602	1.1	219	2.1	4 526	2.7
Crawford	13	8.3	377	.7	663	1.4	42 437	1.7	290	2.0	6 450	2.9
Dane	79	3.0	6 639	2.3	1 199	.9	130 422	.7	253	1.8	3 775	2.4
Dodge	33	4.8	1 322	6.0	1 076	1.2	118 854	.9	158	2.4	2 341	3.4
Door	41	4.2	716	3.3	306	1.6	23 038	1.6	61	3.8	608	5.3
Douglas	4	14.6	(D)	(D)	153	1.9	7 115	2.4	120	2.4	2 443	3.3
Dunn	51	3.3	13 425	1.8	871	1.1	69 216	1.1	314	1.7	5 754	2.6
Eau Claire	23	6.5	2 768	5.4	564	1.5	39 671	1.7	196	2.3	3 860	2.6
Florence	2	19.6	(D)	(D)	46	3.0	1 883	4.9	26	4.9	423	11.9
Fond du Lac	19	6.4	790	7.2	850	1.2	91 677	.9	101	3.0	1 782	5.2
Forest	1	—	(D)	(D)	71	2.5	5 304	2.4	40	4.1	448	4.2
Grant	8	11.0	(D)	(D)	1 725	1.1	178 329	1.0	721	1.4	24 584	1.4
Green	22	6.2	5 118	3.2	898	1.5	92 941	1.4	221	2.3	6 283	3.7
Green Lake	19	5.1	2 625	3.1	305	1.7	27 357	1.6	51	4.3	695	5.4
Iowa	34	5.2	7 629	1.9	909	1.3	97 844	1.2	359	1.8	12 543	2.3
Iron	3	11.0	(D)	(D)	20	4.1	814	6.6	9	8.5	167	12.5
Jackson	49	3.6	3 687	1.5	421	1.8	36 138	1.8	132	2.9	2 345	5.1
Jefferson	36	3.5	8 663	.9	581	1.4	43 923	1.5	148	2.7	2 208	4.3
Juneau	22	4.5	10 363	1.1	367	1.6	25 133	1.7	119	2.9	1 981	3.8
Kenosha	15	6.7	84	2.0	123	2.0	10 407	1.8	37	4.4	469	4.6
Kewaunee	12	7.0	173	8.4	538	1.0	53 258	1.0	80	2.9	812	4.7
La Crosse	11	6.0	853	4.2	455	1.1	35 817	1.4	166	2.0	3 194	2.6
Lafayette	8	10.4	86	17.7	870	1.2	101 497	1.1	301	1.9	12 278	1.9
Langlade	47	2.9	12 951	2.2	229	1.6	17 800	1.6	73	3.4	1 122	4.5
Lincoln	21	5.9	175	2.8	241	1.7	13 680	2.1	95	2.9	1 190	5.3
Manitowoc	24	5.2	819	6.4	762	.9	94 833	.7	118	2.5	1 230	3.4
Marathon	71	3.3	5 948	2.3	1 628	1.0	136 602	1.0	349	1.7	4 675	2.6
Marinette	19	5.6	1 738	2.8	316	1.5	32 145	1.3	111	2.7	1 318	4.6
Marquette	35	4.0	4 327	2.7	205	1.7	14 501	1.9	89	3.0	1 438	5.3
Menominee	—	—	—	—	1	—	(D)	(D)	1	—	(D)	(D)
Milwaukee	28	4.5	146	5.9	9	10.6	(D)	(D)	2	21.2	(D)	(D)
Monroe	65	3.4	2 659	1.1	1 049	1.4	70 262	1.5	330	1.8	5 564	2.1
Oconto	15	7.2	454	6.8	587	1.3	51 918	1.3	170	2.2	2 833	3.3
Oneida	22	3.9	2 487	.6	35	4.4	1 099	5.8	31	4.9	(D)	(D)
Outagamie	22	5.9	237	11.6	755	1.0	83 897	.9	107	2.8	1 229	4.5
Ozaukee	15	6.0	239	2.8	182	1.8	18 942	1.5	37	4.9	475	6.8
Pepin	11	9.3	908	12.8	285	1.5	22 228	2.1	77	3.5	1 408	4.9
Pierce	21	6.3	477	1.3	745	1.2	57 518	1.4	268	1.9	5 282	2.5
Polk	21	6.2	712	5.7	755	1.2	50 690	1.3	326	1.8	4 652	2.6
Portage	154	1.8	76 051	.5	529	1.2	38 501	1.3	181	2.1	2 777	3.4
Price	5	8.7	(D)	(D)	229	1.5	12 180	2.0	109	2.3	1 867	3.7
Racine	45	4.2	5 256	1.5	183	2.0	12 501	1.7	49	4.3	424	6.1
Richland	16	6.2	1 526	4.2	683	1.1	49 516	1.2	279	1.7	5 355	2.5
Rock	55	3.1	9 794	1.3	602	1.3	50 810	1.0	204	2.1	3 344	3.2
Rusk	10	10.0	181	24.6	425	1.5	30 952	1.6	171	2.3	3 178	3.0
St. Croix	35	4.7	4 095	3.5	851	1.1	62 884	1.1	348	1.6	6 578	2.0
Sauk	64	2.9	10 123	2.4	942	1.0	90 217	.9	324	1.7	7 694	2.4
Sawyer	12	6.1	455	2.2	115	1.9	8 187	2.2	58	3.6	1 224	8.4
Shawano	13	9.4	251	7.1	911	1.2	83 189	1.1	177	2.3	2 098	3.2
Sheboygan	17	7.3	143	11.4	536	1.1	59 330	1.0	78	3.3	1 295	3.8
Taylor	8	11.2	58	17.6	649	1.6	49 030	1.8	162	2.5	2 352	3.1
Trempealeau	17	6.6	3 912	3.2	841	1.4	71 249	1.4	290	2.1	5 418	2.6
Vernon	18	7.5	95	25.0	1 300	1.3	80 236	1.5	391	1.7	7 311	2.4
Vilas	11	—	948	—	8	8.7	176	11.6	5	12.0	98	12.7
Walworth	26	6.2	804	7.7	329	1.6	31 684	1.3	81	3.5	1 390	5.0
Washburn	19	5.4	1 553	.3	202	1.8	12 815	2.3	121	2.5	3 279	3.8
Washington	26	5.1	209	2.7	433	1.5	36 828	1.4	85	3.2	1 441	4.1
Waukesha	49	3.7	1 096	1.4	193	1.8	12 795	2.2	71	3.4	940	5.0
Waupaca	46	4.7	8 869	2.6	696	1.3	56 749	1.2	154	2.5	1 570	3.6
Waushara	96	2.2	49 203	.7	283	1.4	16 396	1.6	75	3.1	892	6.0
Winnebago	14	8.3	479	18.7	399	1.5	35 726	1.4	64	3.8	609	4.8
Wood	74	2.6	5 811	.5	689	1.2	49 158	1.4	178	2.2	2 833	4.0

See footnotes at end of table.

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

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

Geographic area	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)
Wisconsin	22 576	1.3	1 336 626	1.0	3 686	1.0	738 339	.7	2 100	1.0	76 113	1.7
Adams	43	3.6	1 806	3.7	25	5.5	1 008	6.1	9	8.8	146	19.3
Ashland	43	2.9	1 947	3.2	6	12.0	49	8.5	7	11.6	129	14.2
Barron	647	1.7	32 567	1.5	39	5.2	3 430	10.0	47	4.8	1 100	10.9
Bayfield	76	2.9	3 432	2.7	11	7.7	848	5.3	15	7.6	760	16.9
Brown	443	1.6	36 712	1.0	54	4.5	1 451	9.9	22	7.2	297	10.4
Buffalo	383	1.7	25 222	1.2	62	3.8	9 647	4.4	21	7.2	1 138	15.1
Burnett	78	3.1	3 109	3.4	17	7.8	1 052	27.7	5	14.7	146	17.0
Calumet	322	1.7	22 020	1.3	33	5.9	2 230	12.3	11	9.3	204	15.1
Chippewa	740	2.0	40 394	1.7	45	5.3	1 893	4.7	28	6.5	1 138	9.0
Clark	1 119	1.7	59 735	1.4	66	4.5	5 563	7.2	43	5.1	1 868	8.0
Columbia	305	1.7	16 759	1.4	133	2.5	43 751	1.6	76	3.4	3 900	4.1
Crawford	306	2.2	13 269	2.1	73	3.9	8 904	4.9	15	9.1	679	16.4
Dane	650	1.1	50 432	.7	130	2.3	43 562	1.4	107	2.7	3 829	5.0
Dodge	690	1.4	46 487	1.0	156	2.4	51 117	1.9	50	4.2	1 538	6.7
Door	201	2.0	10 615	1.8	17	7.6	910	26.1	21	6.3	910	11.7
Douglas	28	5.6	1 035	5.3	16	9.1	292	19.6	13	8.9	825	10.8
Dunn	478	1.5	26 511	1.3	69	3.1	15 487	1.7	33	5.1	1 906	10.1
Eau Claire	329	2.1	15 068	1.9	42	5.4	1 338	13.5	19	7.8	381	10.0
Florence	16	7.0	562	6.9	3	13.5	17	14.3	3	15.6	(D)	(D)
Fond du Lac	583	1.4	40 210	1.0	72	3.6	13 257	4.1	32	5.3	1 367	9.4
Forest	21	6.5	670	6.8	6	13.5	28	13.5	3	24.7	(D)	(D)
Grant	878	1.4	52 702	1.2	306	1.8	117 593	1.3	81	3.7	2 422	6.0
Green	575	1.9	36 951	1.5	104	3.4	37 411	2.0	50	4.7	1 895	8.1
Green Lake	162	2.4	9 140	1.9	44	5.0	5 592	5.1	19	6.9	333	10.6
Iowa	500	1.7	30 056	1.4	91	3.3	28 249	2.5	47	5.0	1 726	12.5
Iron	6	8.3	235	9.3	1	—	(D)	(D)	1	33.1	(D)	(D)
Jackson	254	2.4	14 143	2.1	33	5.6	8 037	3.2	24	6.4	952	14.0
Jefferson	281	1.9	16 087	1.6	68	3.9	13 199	3.6	51	4.3	999	6.4
Juneau	176	2.5	9 445	2.0	36	5.7	847	12.2	25	6.3	581	8.2
Kenosha	56	3.1	3 675	2.3	28	5.0	4 653	7.8	19	6.8	518	14.5
Kewaunee	387	1.3	26 363	1.0	54	3.4	7 549	5.0	9	8.4	610	13.2
La Crosse	226	1.7	13 154	1.4	42	3.9	24 988	1.2	20	6.3	694	8.5
Lafayette	490	1.6	33 830	1.3	150	2.6	49 532	1.9	40	5.6	1 250	9.0
Langlade	121	2.3	8 434	1.6	19	7.0	207	8.8	11	9.7	279	13.4
Lincoln	113	2.8	5 428	2.6	15	7.8	800	17.5	18	6.8	424	14.4
Manitowoc	525	1.2	43 282	.7	55	3.9	4 404	9.2	44	4.2	1 206	5.8
Marathon	1 100	1.2	62 799	1.0	61	3.9	3 010	8.8	63	3.9	1 693	6.9
Marinette	159	2.4	10 795	1.8	33	5.5	1 454	10.7	9	9.0	257	15.3
Marquette	75	2.9	4 836	2.3	28	5.5	5 868	4.5	13	9.2	1 464	18.6
Menominee	—	—	—	—	1	—	(D)	(D)	—	—	—	—
Milwaukee	2	28.8	(D)	(D)	—	—	(D)	(D)	1	42.4	(D)	(D)
Monroe	601	1.9	28 228	1.6	88	3.8	3 353	6.2	56	4.9	1 991	4.9
Oconto	329	1.8	20 850	1.3	45	4.3	6 156	4.5	17	7.4	341	7.6
Oneida	2	—	(D)	(D)	12	8.6	91	21.7	8	11.5	225	32.0
Outagamie	479	1.3	34 179	1.0	62	3.8	13 238	4.1	22	6.4	617	11.6
Ozaukee	106	2.3	8 361	1.7	21	6.3	2 285	7.0	14	8.1	298	13.6
Pepin	151	2.3	8 155	2.1	26	6.1	3 615	8.3	6	12.2	393	28.8
Pierce	352	1.8	18 705	1.7	75	3.6	9 957	4.5	51	4.3	2 567	9.6
Polk	366	1.8	20 042	1.5	59	4.2	2 299	5.6	68	3.8	3 211	7.1
Portage	279	1.7	14 875	1.5	46	4.1	5 529	1.6	23	5.5	1 056	17.3
Price	117	2.6	4 623	2.8	4	13.6	14	17.5	10	10.0	1 063	16.7
Racine	66	3.4	4 279	2.3	27	5.7	3 235	4.9	31	5.2	1 911	21.8
Richland	350	1.6	18 686	1.4	40	4.4	14 981	1.7	51	4.1	1 988	8.2
Rock	240	2.0	14 353	1.5	91	3.2	23 930	2.5	77	3.5	3 010	5.1
Rusk	274	2.0	13 050	1.8	20	7.6	514	14.6	22	6.5	846	11.3
St. Croix	374	1.7	22 372	1.3	61	3.9	7 373	1.9	53	4.1	1 538	7.3
Sauk	500	1.3	29 735	1.0	112	2.5	54 439	1.3	56	4.0	2 656	8.4
Sawyer	54	3.1	2 920	2.4	9	9.6	408	23.2	6	13.4	122	15.2
Shawano	642	1.4	37 063	1.1	52	4.6	3 725	10.1	27	6.2	464	9.5
Sheboygan	342	1.4	25 655	.9	59	3.7	4 343	7.5	34	4.8	1 205	9.1
Taylor	438	2.0	20 633	1.9	28	6.2	1 484	13.6	14	9.9	339	14.1
Trempealeau	434	1.9	25 699	1.5	78	3.9	9 813	4.4	33	6.1	1 198	15.3
Vernon	729	1.8	31 031	1.7	113	3.2	6 369	8.4	52	4.8	1 904	13.8
Vilas	—	—	—	—	1	—	(D)	(D)	5	13.9	504	9.5
Walworth	158	2.2	11 521	1.5	67	3.1	26 065	2.2	50	4.4	1 859	6.4
Washburn	65	3.8	2 906	3.8	15	8.1	362	12.4	13	8.7	821	12.7
Washington	226	2.2	14 374	1.7	46	4.4	3 595	11.7	27	5.7	501	9.3
Waukesha	70	3.2	4 573	2.2	21	5.9	1 466	4.2	35	5.0	959	9.1
Waupaca	432	1.6	25 171	1.2	41	5.1	2 535	8.5	34	5.4	837	13.1
Waushara	129	2.3	6 192	2.0	51	4.2	2 803	6.0	25	5.9	617	8.4
Winnebago	249	1.8	16 229	1.4	22	7.2	2 477	11.8	26	6.5	420	11.2
Wood	435	1.6	22 120	1.5	50	4.5	2 646	7.7	29	5.9	798	21.5

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	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)
Wisconsin	2 457	1.0	3 692 115	.3	587	1.4	27 607 761	.1
Adams	15	7.6	687	14.5	—	—	—	—
Ashland	16	7.0	497	15.9	3	20.1	300	22.6
Barron	60	4.4	2 023	7.3	13	7.6	2 910	13.7
Bayfield	16	7.1	327	7.7	5	14.2	1 082	27.1
Brown	22	7.4	427	9.0	5	16.7	(D)	(D)
Buffalo	30	5.8	93 481	7.8	24	3.0	8 899 668	(L)
Burnett	25	6.1	614	9.9	—	—	—	—
Calumet	12	9.3	373	14.5	3	20.8	(D)	(D)
Chippewa	43	5.2	(D)	(D)	8	11.7	1 817	22.7
Clark	121	3.5	3 010	4.2	21	7.4	2 736	12.5
Columbia	44	4.5	(D)	(D)	14	8.6	1 634	17.2
Crawford	44	5.0	1 643	15.4	4	16.2	805	25.2
Dane	61	3.4	7 541	3.5	13	7.5	2 831	10.3
Dodge	55	4.1	14 203	2.7	29	5.0	5 743	15.9
Door	29	5.3	746	6.6	3	17.8	(D)	(D)
Douglas	20	7.7	603	10.2	3	17.9	244	19.5
Dunn	46	4.5	2 478	17.1	8	11.8	1 702	23.4
Eau Claire	50	5.0	1 487	9.7	13	8.6	925 121	(L)
Florence	5	13.9	89	14.2	—	—	—	—
Fond du Lac	28	5.9	791	8.7	7	11.4	952	21.9
Forest	7	11.0	169	14.7	—	—	—	—
Grant	59	4.3	48 454	11.2	12	8.1	6 481	26.4
Green	48	5.0	1 082	7.7	4	17.8	140	18.2
Green Lake	11	9.7	1 396	10.4	4	16.4	1 553	23.0
Iowa	43	4.6	(D)	(D)	6	13.2	5 808	22.6
Iron	2	15.0	(D)	(D)	—	—	(D)	(D)
Jackson	20	6.9	558	9.0	3	11.5	316	12.7
Jefferson	68	3.8	1 837 218	(L)	7	11.2	255	28.5
Juneau	17	7.5	785	9.5	4	17.5	—	—
Kenosha	20	6.7	663	10.8	4	17.7	251	24.4
Kewaunee	22	5.5	591	6.8	1	22.6	(D)	(D)
La Crosse	12	8.8	225	12.0	4	15.2	313	16.0
Lafayette	21	7.1	321	10.4	3	23.4	503	24.4
Langlade	16	7.9	(D)	(D)	—	—	—	—
Lincoln	20	6.2	703	10.5	3	16.9	277	30.7
Manitowoc	30	5.1	(D)	(D)	7	11.3	7 208	20.6
Marathon	90	3.3	3 682	8.8	19	7.5	1 657	11.6
Marinette	21	6.5	981	8.6	5	13.5	375	18.6
Marquette	24	6.0	1 093	9.2	10	9.8	632	14.4
Menominee	—	—	(D)	(D)	—	—	—	—
Milwaukee	3	21.7	(D)	(D)	1	28.7	(D)	(D)
Monroe	91	4.0	4 629	17.1	29	6.7	39 817	17.9
Oconto	42	4.8	1 668	6.7	4	14.3	296	16.8
Oneida	6	12.0	117	9.1	5	17.1	1 051	19.8
Outagamie	34	4.8	1 179	8.2	12	8.2	(D)	(D)
Ozaukee	13	8.9	(D)	(D)	9	11.6	2 198	19.0
Pepin	11	8.6	291	14.0	2	22.2	(D)	(D)
Pierce	40	5.1	1 033	7.5	9	10.7	1 115	19.0
Polk	50	4.3	1 468	9.1	11	9.2	783	17.4
Portage	45	4.0	1 489	6.5	10	9.3	1 505	15.2
Price	18	7.4	511	9.8	—	—	—	—
Racine	32	5.2	3 380	22.9	15	8.1	17 475	12.8
Richland	40	4.7	823	6.4	1	36.4	(D)	(D)
Rock	50	3.9	1 339	8.1	15	7.0	2 137	9.9
Rusk	24	7.2	518	9.4	2	19.1	(D)	(D)
St. Croix	44	4.6	3 535	20.9	12	8.6	817	9.7
Sauk	75	3.4	413 759	.1	14	7.7	(D)	(D)
Sawyer	11	9.3	527	20.3	2	24.1	(D)	(D)
Shawano	45	4.7	1 593	8.9	10	8.9	882	11.9
Sheboygan	40	4.8	2 389	16.6	12	9.1	(D)	(D)
Taylor	46	4.9	1 503	6.9	8	11.9	772	17.5
Trempealeau	28	6.2	(D)	(D)	46	2.6	17 241 247	.1
Vernon	112	3.3	13 429	10.1	16	9.3	9 806	39.3
Vilas	3	14.8	22	10.1	1	—	(D)	(D)
Walworth	35	5.2	(D)	(D)	6	11.6	665	14.6
Washburn	10	10.4	264	12.7	1	31.8	(D)	(D)
Washington	43	4.6	291 423	.1	9	10.9	719	14.2
Waukesha	26	5.7	1 778	11.5	10	9.3	2 556	13.4
Waupaca	37	5.4	1 240	9.0	7	12.8	632	19.8
Waushara	42	4.6	1 492	5.4	13	8.5	2 694	12.0
Winnebago	20	6.6	(D)	(D)	6	13.4	765	20.3
Wood	48	4.4	1 183	6.4	17	7.1	1 263	12.0

See footnotes at end of table.

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

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

Geographic area	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)
Wisconsin	34 315	1.1	2 877 971	.8	362 498 739	.8	22 498	1.2	717 549	.9	10 444 465	.9
Adams	189	1.4	17 783	1.5	2 093 918	1.5	51	3.3	1 890	3.5	22 252	3.6
Ashland	9	8.6	196	2.0	19 254	.9	22	4.9	637	4.2	7 640	4.4
Barron	774	1.5	57 193	1.3	6 854 504	1.3	601	1.7	14 983	1.7	227 120	1.7
Bayfield	7	9.0	1 008	6.1	98 425	5.4	24	5.8	681	6.0	7 462	5.2
Brown	434	1.6	34 221	1.4	4 111 905	1.3	463	1.6	23 248	1.3	336 331	1.1
Buffalo	674	1.3	52 020	1.3	6 426 853	1.3	350	1.7	10 214	1.5	174 359	1.4
Burnett	168	1.9	11 670	3.0	1 146 858	2.9	86	3.0	2 743	3.5	30 803	3.5
Calumet	412	1.5	26 509	1.2	3 168 068	1.3	334	1.7	12 485	1.5	174 987	1.5
Chippewa	857	1.8	63 998	1.5	8 088 389	1.5	687	1.9	19 727	1.9	279 153	1.9
Clark	1 090	1.6	59 499	1.4	6 987 007	1.4	1 031	1.7	30 531	1.5	428 122	1.4
Columbia	878	1.1	109 907	1.0	14 145 362	1.0	355	1.6	11 557	1.6	167 402	1.5
Crawford	527	1.7	24 514	1.7	2 977 493	1.7	274	2.2	4 917	2.4	72 392	2.5
Dane	1 370	.9	166 255	.7	21 814 834	.6	697	1.1	25 984	.8	402 265	.7
Dodge	1 268	1.1	120 303	.9	15 911 017	.9	728	1.3	28 085	1.4	419 753	1.3
Door	200	2.0	12 006	2.0	1 277 998	2.0	218	1.9	6 987	2.1	84 231	2.2
Douglas	—	—	—	—	—	—	5	13.0	195	6.4	2 188	5.4
Dunn	742	1.2	73 054	1.1	9 065 139	1.0	447	1.5	13 476	1.3	200 332	1.3
Eau Claire	505	1.7	36 965	1.6	4 461 029	1.7	273	2.3	5 365	2.7	70 541	3.0
Florence	1	31.4	(D)	(D)	(D)	(D)	21	5.9	577	6.4	6 638	7.0
Fond du Lac	891	1.2	78 306	1.0	10 067 568	1.0	586	1.4	21 643	1.1	319 665	1.0
Forest	4	18.5	112	25.4	10 280	22.1	17	7.1	754	8.6	5 638	7.5
Grant	1 504	1.2	126 233	1.0	17 148 705	1.0	769	1.4	16 879	1.3	271 185	1.5
Green	851	1.6	78 803	1.4	10 672 858	1.3	519	1.9	13 523	1.7	200 771	1.7
Green Lake	388	1.5	39 211	1.7	4 990 165	1.7	165	2.4	5 516	1.9	75 324	1.9
Iowa	717	1.4	56 295	1.1	6 995 482	1.1	506	1.6	14 834	1.4	222 488	1.5
Iron	1	28.7	(D)	(D)	(D)	(D)	2	20.8	(D)	(D)	(D)	(D)
Jackson	425	1.8	33 586	1.8	4 151 452	1.8	253	2.4	6 978	2.5	99 442	2.5
Jefferson	753	1.3	71 015	1.1	9 135 550	1.1	306	1.9	9 549	1.6	149 798	1.6
Juneau	381	1.6	34 243	1.5	4 186 135	1.6	178	2.5	4 544	2.5	64 566	2.4
Kenosha	176	1.5	30 183	1.4	4 118 553	1.3	67	2.8	2 367	2.0	37 297	2.1
Kewaunee	387	1.3	23 168	1.3	2 835 658	1.3	419	1.2	17 705	1.1	257 830	1.0
La Crosse	466	1.1	28 506	1.3	3 750 234	1.3	254	1.6	5 976	1.6	95 233	1.7
Lafayette	755	1.3	96 985	.9	13 587 976	.9	462	1.6	13 163	1.6	204 202	1.6
Langlade	85	2.7	4 709	2.4	425 081	2.5	121	2.3	3 409	2.3	40 105	2.2
Lincoln	68	3.8	2 581	3.9	254 981	4.2	118	2.8	3 392	2.7	43 233	2.6
Manitowoc	567	1.1	41 230	.9	4 833 398	.9	539	1.1	26 023	.9	389 963	.8
Marathon	1 069	1.2	58 818	1.0	6 716 257	1.0	1 074	1.2	31 837	1.1	418 607	1.1
Marinette	250	1.8	17 066	2.1	1 707 535	2.1	191	2.1	9 406	2.0	124 936	2.0
Marquette	252	1.4	27 232	1.5	3 098 644	1.7	109	2.4	4 754	1.7	65 633	1.3
Menominee	—	—	—	—	—	—	—	—	—	—	—	—
Milwaukee	13	8.0	965	13.9	120 823	14.0	2	28.8	(D)	(D)	(D)	(D)
Monroe	909	1.5	41 790	1.5	5 317 035	1.5	657	1.8	14 366	1.7	211 560	1.8
Oconto	494	1.4	37 685	1.6	4 118 568	1.6	401	1.6	14 848	1.6	201 635	1.6
Oneida	2	22.0	(D)	(D)	(D)	(D)	5	15.2	60	17.3	310	17.7
Outagamie	688	1.1	62 597	1.1	7 739 525	1.0	526	1.2	23 834	1.0	365 211	1.0
Ozaukee	157	2.0	12 728	2.1	1 400 144	2.2	113	2.3	4 515	1.9	63 144	1.8
Pepin	299	1.4	22 014	2.0	2 707 165	2.1	133	2.5	3 397	3.5	54 851	3.9
Pierce	677	1.3	64 382	1.3	8 177 334	1.2	365	1.8	9 470	1.7	152 601	1.8
Polk	600	1.4	47 349	1.5	5 501 530	1.6	362	1.8	11 190	1.7	166 313	1.7
Portage	509	1.2	36 950	1.2	4 713 466	1.1	296	1.7	9 195	1.7	127 730	1.7
Price	45	4.6	1 511	5.5	160 213	5.5	85	3.2	1 790	4.1	18 247	4.4
Racine	225	1.7	39 741	1.1	5 459 864	1.0	78	3.1	3 159	2.5	45 264	3.1
Richland	518	1.3	26 284	1.5	3 324 354	1.5	317	1.7	7 961	1.4	129 348	1.3
Rock	758	1.2	142 138	.7	19 241 169	.7	252	1.8	8 181	1.8	129 485	1.7
Rusk	217	2.2	10 579	2.3	1 150 245	2.2	239	2.1	7 752	2.0	91 751	2.1
St. Croix	687	1.3	69 998	1.2	8 588 575	1.1	368	1.7	12 994	1.4	206 545	1.3
Sauk	905	1.0	66 895	.9	8 460 290	.9	509	1.3	15 217	1.1	230 981	1.1
Sawyer	47	3.5	3 738	3.0	422 566	3.1	47	3.5	1 809	4.4	24 600	5.3
Shawano	718	1.3	39 246	1.4	4 652 892	1.4	689	1.3	24 731	1.2	361 940	1.2
Sheboygan	463	1.2	32 653	1.1	3 757 458	1.0	339	1.4	13 770	1.1	207 840	1.1
Taylor	328	2.1	15 193	2.6	1 680 938	2.5	406	2.0	10 987	2.1	141 475	2.4
Trempealeau	788	1.5	62 501	1.3	7 838 459	1.3	416	1.9	12 788	1.8	209 538	1.7
Vernon	1 097	1.5	40 329	1.8	4 977 307	1.9	741	1.7	15 213	1.9	243 633	1.8
Vilas	—	—	—	—	—	—	1	—	(D)	(D)	(D)	(D)
Walworth	464	1.3	82 441	.9	11 005 174	.9	172	2.1	7 780	1.4	121 308	1.6
Washburn	116	2.6	7 560	3.9	822 769	3.8	58	4.0	1 925	3.9	22 915	4.2
Washington	428	1.6	27 105	1.4	3 410 357	1.4	259	2.0	9 525	1.8	120 380	1.8
Waukesha	239	1.5	31 508	1.3	4 117 655	1.2	87	2.8	3 062	2.3	50 675	2.4
Waupaca	620	1.4	48 591	1.5	5 873 639	1.5	477	1.5	16 787	1.4	227 255	1.4
Waushara	307	1.4	24 216	1.5	2 885 841	1.5	126	2.3	4 245	2.0	51 699	1.8
Winnebago	459	1.4	38 650	1.3	4 381 023	1.4	260	1.8	10 382	1.7	135 774	1.6
Wood	443	1.6	25 222	1.6	3 155 246	1.6	390	1.7	9 957	1.9	129 166	1.8

See footnotes at end of table.

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

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

Geographic area	Selected crops harvested—Con.											
	Oats for grain						Soybeans for beans					
	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)
Wisconsin	14 925	1.2	314 722	1.2	18 623 580	1.1	12 028	1.0	990 531	.7	42 681 842	.7
Adams	36	4.3	706	4.5	34 092	4.3	93	2.3	8 809	2.2	324 969	2.2
Ashland	40	3.9	715	4.3	34 199	4.6	1	35.0	(D)	(D)	(D)	(D)
Barron	215	2.5	4 597	3.1	254 731	3.3	93	3.3	5 117	2.8	188 039	3.0
Bayfield	38	4.7	1 115	4.3	72 602	4.7	—	—	—	—	—	—
Brown	350	1.8	9 499	1.9	609 436	2.0	143	2.4	13 049	2.3	548 682	2.0
Buffalo	228	2.2	4 065	2.4	211 598	2.6	166	2.5	10 490	2.1	410 112	2.1
Burnett	30	5.6	511	6.3	20 511	6.1	56	3.7	2 706	4.8	55 961	4.9
Calumet	189	2.5	3 949	3.0	275 469	3.2	241	1.9	14 481	1.5	648 570	1.5
Chippewa	444	2.2	10 000	2.3	537 774	2.3	131	2.8	11 611	2.3	444 628	2.3
Clark	557	2.0	12 649	2.1	694 853	2.2	246	2.3	11 753	2.1	445 556	1.9
Columbia	277	1.8	4 778	2.2	258 562	2.1	448	1.4	39 536	1.2	1 700 121	1.2
Crawford	242	2.3	4 135	2.7	227 687	2.8	68	3.9	4 504	3.2	188 472	3.2
Dane	324	1.6	5 602	1.8	316 101	1.7	732	1.1	61 570	.9	2 877 620	.9
Dodge	481	1.6	8 078	1.9	529 483	2.0	655	1.4	46 167	1.3	2 123 840	1.3
Door	269	1.7	7 900	2.1	485 622	2.2	53	3.8	2 756	3.4	102 017	3.3
Douglas	22	7.2	461	9.5	26 179	9.0	—	—	—	—	—	—
Dunn	322	1.8	8 067	1.8	419 697	1.9	247	1.9	19 760	1.8	726 930	1.7
Eau Claire	254	2.3	5 552	2.6	293 027	2.5	147	2.7	9 011	2.2	349 457	2.2
Florence	12	8.9	113	13.2	5 605	13.6	—	—	—	—	—	—
Fond du Lac	372	1.7	7 838	1.7	543 396	1.7	503	1.4	36 407	1.2	1 594 485	1.2
Forest	14	8.8	287	12.1	17 469	14.9	—	—	—	—	—	—
Grant	782	1.4	15 505	1.5	964 601	1.5	405	1.6	30 128	1.4	1 506 419	1.4
Green	309	2.3	5 739	2.4	340 396	2.5	378	2.0	29 010	1.6	1 372 553	1.5
Green Lake	147	2.7	2 466	3.0	159 047	3.2	141	2.6	11 881	2.7	503 530	2.6
Iowa	266	2.2	5 160	2.3	280 271	2.1	212	2.2	15 722	1.6	749 865	1.5
Iron	5	11.7	161	13.2	8 200	13.5	—	—	—	—	—	—
Jackson	227	2.5	5 198	2.8	282 786	2.9	148	2.8	10 350	2.4	429 748	2.2
Jefferson	220	2.3	3 049	2.8	191 889	3.0	510	1.5	43 038	1.2	1 913 439	1.2
Juneau	120	3.1	1 947	3.8	104 426	4.3	154	2.6	16 930	1.7	661 189	1.7
Kenosha	27	5.0	504	4.9	37 158	5.2	146	1.8	20 871	1.5	888 293	1.4
Kewaunee	370	1.3	10 320	1.7	736 163	1.7	87	2.6	4 683	2.5	206 284	2.5
La Crosse	145	2.2	2 165	2.3	114 989	2.3	112	2.4	5 140	2.7	211 570	2.5
Lafayette	302	2.0	6 324	2.6	370 219	2.1	352	1.6	42 719	1.1	2 191 895	1.1
Langlade	141	2.1	9 443	1.8	599 461	1.8	20	5.0	1 933	3.2	52 236	1.8
Lincoln	98	3.2	2 042	4.7	96 454	4.8	12	9.6	430	12.5	15 397	13.1
Manitowoc	431	1.4	10 929	1.6	765 840	1.7	232	1.7	11 372	1.6	454 308	1.5
Marathon	751	1.4	15 881	1.5	903 702	1.6	199	2.2	8 182	2.2	312 744	2.2
Marinette	111	2.9	2 310	3.3	127 942	3.5	21	6.8	907	6.9	35 172	6.6
Marquette	53	4.1	1 137	4.3	52 406	4.9	78	3.0	7 025	3.0	267 514	2.9
Menominee	—	—	—	—	—	—	—	—	—	—	—	—
Milwaukee	3	23.4	(D)	(D)	(D)	(D)	15	7.7	1 991	9.5	81 191	9.5
Monroe	417	2.0	6 116	2.3	337 805	2.3	132	3.0	6 191	3.3	244 488	3.1
Oconto	190	2.3	3 864	2.4	240 237	2.5	91	3.0	5 255	3.1	205 233	3.0
Oneida	15	7.5	1 584	1.9	84 026	1.8	—	—	—	—	—	—
Outagamie	247	1.8	5 184	2.2	353 815	2.2	364	1.5	29 649	1.6	1 215 823	1.5
Ozaukee	102	2.6	2 610	3.4	181 877	3.5	105	2.5	7 459	3.4	298 999	2.6
Pepin	125	2.6	2 506	3.0	132 310	3.3	134	2.5	7 068	3.4	267 010	3.2
Pierce	340	1.8	7 963	2.0	453 152	2.0	201	2.3	15 116	2.1	583 122	1.9
Polk	168	2.6	3 487	3.2	163 988	3.5	127	2.8	7 769	3.2	274 368	3.0
Portage	174	2.2	3 784	2.3	207 395	2.3	59	3.0	6 492	1.6	288 274	1.4
Price	59	3.9	1 030	5.6	55 928	5.7	2	27.4	(D)	(D)	(D)	(D)
Racine	62	3.9	911	4.1	56 806	4.5	213	1.8	33 178	1.1	1 450 799	1.0
Richland	137	2.6	2 105	3.1	105 753	3.2	82	3.1	4 834	2.9	209 875	3.1
Rock	179	2.3	3 008	2.1	189 202	2.2	572	1.3	86 326	.9	3 739 951	.9
Rusk	119	3.1	2 536	3.8	138 938	4.3	8	12.2	286	9.0	11 071	8.6
St. Croix	327	1.8	9 016	1.9	495 552	1.9	188	2.1	18 561	2.1	687 728	1.9
Sauk	317	1.7	5 177	2.0	263 901	2.0	305	1.6	18 598	1.6	807 123	1.5
Sawyer	28	5.0	707	4.1	39 015	4.0	2	21.9	(D)	(D)	(D)	(D)
Shawano	374	1.8	8 161	1.9	520 018	2.0	121	2.8	6 258	3.5	248 284	3.5
Sheboygan	274	1.7	6 787	2.0	432 285	2.0	251	1.7	14 809	1.4	626 767	1.4
Taylor	238	2.4	5 005	2.8	269 348	2.9	43	4.7	1 371	4.7	57 073	4.2
Trempealeau	292	2.2	4 826	2.4	243 513	2.5	250	2.3	16 103	2.0	657 099	1.8
Vernon	388	2.2	5 396	2.6	307 095	2.7	140	3.0	7 137	4.0	307 667	3.9
Vilas	4	15.0	(D)	(D)	(D)	(D)	—	—	—	—	—	—
Walworth	95	3.2	1 686	3.5	117 324	3.5	362	1.4	52 216	1.0	2 262 998	1.0
Washburn	41	4.9	677	6.0	32 330	6.9	10	9.6	516	14.0	17 721	11.2
Washington	253	2.1	4 846	2.4	320 792	2.5	216	2.2	14 349	2.3	632 430	2.1
Waukesha	96	2.8	1 648	3.2	101 666	3.2	144	2.1	21 699	1.5	962 925	1.4
Waupaca	252	2.1	4 786	2.2	277 268	2.4	141	2.6	8 518	3.0	345 900	3.1
Waushara	86	3.0	1 405	3.5	78 056	3.7	104	2.7	9 149	2.4	378 831	2.4
Winnebago	130	2.7	2 750	2.7	175 221	2.7	340	1.6	26 561	1.7	1 097 624	1.7
Wood	172	2.5	3 881	2.7	214 170	2.7	76	3.2	4 500	3.8	196 377	3.3

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.											
	Potatoes, excluding sweetpotatoes						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)	Hundredweight	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)
Wisconsin	418	1.4	85 304	.2	30 242 152	.2	44 115	1.0	3 554 932	1.0	8 606 243	1.0
Adams	23	1.7	15 471	.3	5 965 536	.3	186	1.4	12 040	2.0	25 867	2.0
Ashland	3	18.7	5	24.5	635	19.3	158	1.0	14 765	1.9	26 178	2.4
Barron	5	13.4	1 987	(L)	861 715	(L)	1 106	1.2	100 079	1.5	224 802	1.5
Bayfield	—	—	—	—	—	—	258	1.1	31 846	1.8	54 122	2.1
Brown	2	19.1	(D)	(D)	(D)	(D)	729	1.2	70 212	1.2	180 107	1.2
Buffalo	3	12.4	(D)	(D)	(D)	(D)	735	1.2	67 137	1.3	171 380	1.4
Burnett	1	29.4	(D)	(D)	(D)	(D)	251	1.3	18 858	2.2	36 451	2.6
Calumet	3	16.5	1	14.8	425	15.0	527	1.3	48 634	1.3	121 950	1.4
Chippewa	—	—	—	—	—	—	1 136	1.6	104 861	1.7	242 289	1.6
Clark	6	15.7	13	25.9	2 513	26.6	1 610	1.4	141 297	1.5	321 192	1.5
Columbia	7	11.6	(D)	(D)	(D)	(D)	814	1.1	45 652	1.3	120 570	1.4
Crawford	4	16.7	7	18.5	432	17.5	653	1.4	47 439	1.8	121 407	1.9
Dane	15	7.6	12	15.0	1 159	17.1	1 312	.9	97 632	.8	269 739	.9
Dodge	4	14.1	4	26.9	402	23.5	1 219	1.1	87 218	1.1	241 164	1.1
Door	5	12.8	(D)	(D)	(D)	(D)	451	1.2	36 225	1.6	80 025	1.7
Douglas	—	—	—	—	—	—	207	1.3	21 592	2.0	28 106	2.4
Dunn	2	22.4	(D)	(D)	(D)	(D)	926	1.1	79 605	1.2	187 942	1.3
Eau Claire	3	25.1	2	25.1	212	28.5	628	1.4	48 964	1.7	120 832	1.7
Florence	2	19.6	(D)	(D)	(D)	(D)	72	1.5	6 730	4.3	12 367	4.9
Fond du Lac	1	28.7	(D)	(D)	(D)	(D)	919	1.2	78 174	1.1	201 233	1.1
Forest	4	17.4	(D)	(D)	(D)	(D)	87	1.8	7 078	2.7	12 422	3.3
Grant	—	—	—	—	—	—	1 563	1.2	128 475	1.2	381 259	1.2
Green	—	—	—	—	—	—	907	1.6	89 217	1.6	251 899	1.6
Green Lake	6	12.6	43	3.4	(D)	(D)	351	1.6	21 624	1.9	55 937	1.9
Iowa	4	12.0	(D)	(D)	(D)	(D)	839	1.3	74 498	1.4	217 308	1.4
Iron	2	21.9	(D)	(D)	(D)	(D)	29	2.3	2 147	5.3	3 650	5.0
Jackson	3	23.2	(D)	(D)	(D)	(D)	483	1.7	42 356	2.0	101 158	2.0
Jefferson	5	—	1 750	—	380 096	—	745	1.2	39 379	1.7	103 950	1.6
Juneau	6	6.8	3 047	.6	1 024 120	.5	405	1.5	27 561	1.8	66 772	1.8
Kenosha	1	—	(D)	(D)	(D)	(D)	171	1.7	9 124	2.1	24 022	2.4
Kewaunee	1	32.8	(D)	(D)	(D)	(D)	614	.9	57 325	1.0	137 800	1.1
La Crosse	1	32.9	(D)	(D)	(D)	(D)	534	1.0	34 328	1.2	91 769	1.3
Lafayette	1	39.3	(D)	(D)	(D)	(D)	797	1.3	73 079	1.3	214 209	1.3
Langlade	47	2.9	11 908	.9	3 774 493	.7	292	1.3	27 478	2.0	56 118	1.9
Lincoln	—	—	—	—	—	—	311	1.3	25 593	2.1	49 729	2.5
Manitowoc	4	15.2	14	20.1	1 840	19.6	887	.9	86 819	.9	208 321	1.0
Marathon	13	6.3	1 648	1.1	491 405	1.4	1 903	1.0	168 386	1.0	367 283	1.1
Marinette	11	8.5	(D)	(D)	(D)	(D)	402	1.3	37 188	1.8	77 319	1.8
Marquette	5	7.0	823	2.1	233 150	2.0	257	1.4	21 063	1.8	45 649	1.8
Menominee	—	—	—	—	—	—	2	—	(D)	(D)	(D)	(D)
Milwaukee	2	25.6	(D)	(D)	(D)	(D)	19	6.9	826	12.2	2 454	10.1
Monroe	4	18.5	(D)	(D)	(D)	(D)	1 148	1.3	79 509	1.5	189 531	1.6
Oconto	5	14.0	(D)	(D)	(D)	(D)	654	1.2	54 910	1.4	125 286	1.5
Oneida	9	5.1	1 976	.9	556 000	1.3	58	2.7	3 999	5.0	5 743	4.7
Outagamie	1	—	(D)	(D)	(D)	(D)	788	1.0	61 215	1.0	148 150	1.1
Ozaukee	7	10.2	38	5.5	7 428	7.9	226	1.6	18 154	1.7	46 908	1.8
Pepin	1	31.2	(D)	(D)	(D)	(D)	299	1.4	21 698	1.9	58 144	2.1
Pierce	5	13.4	18	16.5	500	15.6	808	1.2	54 958	1.5	148 301	1.5
Polk	4	15.8	1	26.9	330	25.3	898	1.1	67 817	1.3	157 112	1.4
Portage	70	2.2	24 939	.2	8 858 695	.2	657	1.0	54 703	1.4	121 500	1.6
Price	—	—	—	—	—	—	302	1.1	26 579	2.1	40 413	2.1
Racine	5	14.1	14	21.0	2 005	21.1	234	1.7	9 993	2.0	27 130	2.6
Richland	1	26.8	(D)	(D)	(D)	(D)	725	1.0	63 421	1.3	152 433	1.4
Rock	5	13.8	16	19.5	3 412	14.0	675	1.2	35 111	1.3	94 949	1.5
Rusk	2	24.7	(D)	(D)	(D)	(D)	484	1.3	47 085	1.7	85 102	1.9
St. Croix	3	18.1	10	16.4	730	18.3	901	1.1	68 115	1.3	163 602	1.2
Sauk	5	15.7	3	17.4	562	22.9	1 011	1.0	79 938	1.1	200 746	1.2
Sawyer	1	33.6	(D)	(D)	(D)	(D)	136	1.6	13 559	2.3	25 275	2.7
Shawano	2	17.4	(D)	(D)	(D)	(D)	1 028	1.1	87 953	1.2	207 808	1.2
Sheboygan	2	17.0	(D)	(D)	(D)	(D)	624	1.0	56 790	1.1	145 669	1.1
Taylor	4	17.0	(Z)	17.0	98	20.8	717	1.4	69 442	1.8	135 054	1.9
Trempealeau	1	33.2	(D)	(D)	(D)	(D)	903	1.4	69 206	1.5	178 600	1.7
Vernon	13	10.0	2	13.5	306	12.7	1 437	1.3	97 364	1.6	240 937	1.7
Vilas	1	—	(D)	(D)	(D)	(D)	17	4.2	(D)	(D)	(D)	(D)
Walworth	5	13.2	(D)	(D)	(D)	(D)	404	1.4	23 237	2.0	62 578	2.0
Washburn	2	—	(D)	(D)	(D)	(D)	248	1.4	20 481	2.2	38 491	2.8
Washington	7	12.3	45	17.6	11 203	25.7	514	1.4	34 566	1.6	99 275	1.8
Waukesha	4	14.2	10	15.3	800	15.6	292	1.4	15 146	1.9	39 012	1.9
Waupaca	6	8.6	1 597	.2	647 115	.1	833	1.1	60 904	1.2	138 611	1.3
Waushara	37	2.2	12 990	.1	4 890 798	.2	354	1.2	23 754	1.9	47 309	2.0
Winnebago	—	—	(D)	(D)	(D)	(D)	485	1.3	33 385	1.5	80 864	1.5
Wood	1	—	(D)	(D)	(D)	(D)	760	1.1	68 418	1.4	143 466	1.5

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	Selected crops harvested—Con.			
	Vegetables harvested for sale (see text)			
	Farms	Relative standard error of estimate (percent)	Acres	
	Number	(percent)	Number	Relative standard error of estimate (percent)
Wisconsin	3 288	.9	270 130	.5
Adams	33	2.7	18 868	3
Ashland	7	11.0	12	15.1
Barron	90	3.3	6 408	2.3
Bayfield	7	10.5	6	6.1
Brown	42	5.0	2 126	6.7
Buffalo	9	9.6	(D)	(D)
Burnett	11	10.0	320	18.6
Calumet	62	3.9	3 576	3.4
Chippewa	11	10.1	210	1.4
Clark	15	8.4	39	9.8
Columbia	182	2.0	10 226	1.6
Crawford	21	7.8	85	10.2
Dane	145	2.2	4 320	2.0
Dodge	247	2.0	16 875	1.9
Door	78	3.2	4 434	3.5
Douglas	—	—	—	—
Dunn	25	5.4	1 083	5.4
Eau Claire	11	10.8	(D)	(D)
Florence	3	17.8	17	20.7
Fond du Lac	270	1.9	19 406	1.8
Forest	—	—	—	—
Grant	8	8.7	(D)	(D)
Green	18	6.7	1 822	2.5
Green Lake	106	2.9	10 383	2.3
Iowa	45	4.3	1 458	5.8
Iron	5	11.8	12	17.3
Jackson	19	7.2	865	5.2
Jefferson	55	3.9	4 302	1.5
Juneau	18	6.6	4 915	1.2
Kenosha	30	4.6	1 491	2.1
Kewaunee	36	4.4	2 179	4.3
La Crosse	21	6.2	228	11.3
Lafayette	6	12.4	21	13.3
Langlade	36	3.8	3 750	2.8
Lincoln	4	14.5	8	22.1
Manitowoc	126	2.3	7 332	2.0
Marathon	31	4.6	3 595	2.5
Marinette	35	5.0	2 535	3.7
Marquette	30	4.5	2 888	2.3
Menominee	—	—	—	—
Milwaukee	13	7.6	244	1.8
Monroe	18	8.8	101	16.6
Oconto	72	3.6	4 827	4.3
Oneida	3	9.4	(D)	(D)
Outagamie	110	2.6	7 590	2.3
Ozaukee	84	3.0	3 661	3.2
Pepin	7	10.5	82	9.0
Pierce	21	6.8	127	8.9
Polk	38	4.6	1 737	6.7
Portage	77	2.0	33 562	.5
Price	3	20.3	9	19.7
Racine	59	3.9	5 438	1.2
Richland	17	6.8	81	13.5
Rock	79	2.8	8 281	1.3
Rusk	5	13.3	23	17.5
St. Croix	43	4.5	4 644	4.7
Sauk	52	3.6	2 440	3.9
Sawyer	7	13.0	(D)	(D)
Shawano	40	5.0	1 969	7.0
Sheboygan	154	2.2	9 140	2.6
Taylor	9	11.9	43	18.8
Trempealeau	27	5.7	949	3.7
Vernon	30	6.4	98	15.4
Vilas	2	—	(D)	(D)
Walworth	71	3.5	4 519	3.2
Washburn	16	7.6	1 485	3.4
Washington	91	3.2	3 320	3.2
Waukesha	49	4.1	2 726	1.4
Waupaca	41	4.6	4 005	1.8
Waushara	77	2.4	24 732	.8
Winnebago	64	3.7	4 889	3.8
Wood	11	8.2	(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		Relative standard error (percent)	Coverage adjustment (percent)
			Total			
Farms number..	65 602	13 921	79 523		2.3	17.5
Land in farms acres..	14 900 205	1 087 063	15 987 268		1.4	6.8
Average size of farm	227	78	201		(X)	(X)
Farms by size of farm:						
Less than 10 acres	3 142	1 430	4 572		9.8	31.3
10 to 49 acres	9 673	6 167	15 840		7.2	38.9
50 to 179 acres	24 546	4 694	29 240		3.6	16.1
180 acres or more	28 241	1 630	29 871		1.9	5.5
Farms by value of sales:						
Less than \$2,500	14 007	9 029	23 036		5.7	39.2
\$2,500 to \$9,999	11 338	3 112	14 450		5.9	21.5
\$10,000 or more	40 257	1 780	42 037		1.7	4.2
Market value of agricultural products sold.....\$1,000..	5 579 861	122 005	5 701 866		.9	2.1
Farms by type of organization:						
Individual or family	56 598	13 436	70 034		2.6	19.2
Partnership, corporation, or other	9 004	485	9 489		3.4	5.1
Farms by tenure of operator:						
Full owners	39 217	12 328	51 545		3.3	23.9
Part owners	21 921	1 080	23 001		1.9	4.7
Tenants	4 464	513	4 977		2.7	10.3
Operators by place of residence:						
On farm operated	53 287	10 790	64 077		2.5	16.8
Not on farm operated	9 098	2 347	11 445		5.2	20.5
Not reported	3 217	784	4 001		13.6	19.6
Operators by principal occupation:						
Farming	39 030	2 343	41 373		1.9	5.7
Other	26 572	11 578	38 150		4.1	30.3
Operators by sex:						
Male	61 201	12 761	73 962		2.4	17.3
Female	4 401	1 160	5 561		7.8	20.9
Operators by race:						
White	65 418	13 864	79 282		2.2	17.5
Black and other races	184	57	241		143.6	23.7
Operators by years on present farm:						
4 years or less	6 673	3 405	10 078		9.1	33.8
5 years or more	50 872	8 621	59 493		2.3	14.5
Not reported	8 057	1 895	9 952		7.9	19.0

¹ See text in Appendix C regarding coverage estimates.