
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..	13.1	Corn for grain or seed acres..	8.0
Land in farms acres..	9.2	Wheat for grain acres..	5.0
Estimated market value of land and buildings ¹ \$1,000..	8.6	Livestock and poultry inventory:	10.3
Market value of agricultural products sold \$1,000..	5.6	Cattle and calves..... number..	2.7
Harvested cropland..... acres..	7.8	Hogs and pigs .....	.5
		Layers 20 weeks old and older..... number..	

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	6.1	25	36.1
50	4.1	50	25.9
75	3.2	75	21.4
100	2.6	100	18.8
150	1.9	150	15.8
200	1.4	200	14.0
300 .....	.4	300	11.9
500 .....	.3	500	10.0
750 .....	.2	750	8.9
1,000.....	.2	1,000.....	8.3
1,500.....	.2	1,500.....	7.6
2,000.....	.2	2,000.....	7.3

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	73 367	.6	FARM PRODUCTION EXPENSES ¹			
Land in farms	25 994 621	.5	Total farm production expenses	farms..	73 375 .6	
Average size of farm	354	.7	\$1,000..	6 362 110 .4		
			Average per farm	dollars..	86 707 .7	
M MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD						
Total sales (see text)	73 367	.6	Livestock and poultry purchased	farms..	22 175 1.3	
\$1,000.	8 290 264	.3	\$1,000..	639 336 .8		
Average per farm	112 997	.6	Feed for livestock and poultry	farms..	35 429 1.0	
			\$1,000..	1 301 623 .4		
Farms by value of sales:			Commercially mixed formula feeds	farms..	23 617 1.3	
Less than \$1,000 (see text)	9 829	.7	\$1,000..	858 742 .4		
\$1,000.	1 304	.9				
\$1,000 to \$2,499	4 818	.7	Seeds, bulbs, plants, and trees	farms..	50 093 .8	
\$2,500 to \$4,999	8 021	.7	\$1,000..	361 065 .6		
\$5,000 to \$9,999	5 260	.6	Commercial fertilizer	farms..	48 605 .8	
\$10,000 to \$19,999	18 959	.6	\$1,000..	491 584 .7		
\$20,000 to \$24,999	6 179	.6	Agricultural chemicals	farms..	44 527 .9	
			\$1,000..	406 227 .7		
			Petroleum products	farms..	68 346 .6	
			\$1,000..	306 292 .6		
			Electricity	farms..	58 622 .7	
			\$1,000..	107 403 .7		
			Hired farm labor	farms..	27 434 1.1	
			\$1,000..	334 790 .7		
			Contract labor	farms..	5 188 2.9	
			\$1,000..	29 103 1.7		
			Repair and maintenance	farms..	63 378 .7	
			\$1,000..	428 577 .7		
			Customwork, machine hire, and rental of machinery and equipment	farms..	30 080 1.1	
			\$1,000..	133 906 1.1		
			Interest	farms..	42 431 .9	
			\$1,000..	499 899 .8		
			Secured by real estate	farms..	30 403 1.1	
			\$1,000..	273 531 1.0		
			Not secured by real estate	farms..	27 962 1.1	
			\$1,000..	226 367 .9		
			Cash rent	farms..	27 246 1.1	
			\$1,000..	554 892 .9		
			Property taxes	farms..	67 831 .6	
			\$1,000..	167 927 .8		
			All other farm production expenses	farms..	67 792 .6	
			\$1,000..	599 485 .6		
Sales by commodity or commodity group:			NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)¹			
Crops, including nursery and greenhouse crops	50 713	.6	All farms	number..	73 375 .6	
\$1,000.	4 200 970	.4	\$1,000..	1 835 509 .8		
Grains	42 216	.6	Average per farm	dollars..	25 015 1.0	
\$1,000.	3 407 898	.4				
Corn for grain	32 411	.7	Farms with net gains ²	number..	41 752 .9	
\$1,000.	1 578 147	.4	\$1,000..	2 146 543 .6		
Wheat	9 466	.7	Average net gain	dollars..	51 412 1.1	
\$1,000.	266 583	.3				
Soybeans	31 233	.6	Farms with net losses	number..	31 623 .9	
\$1,000.	1 433 590	.4	\$1,000..	311 034 1.4		
Sorghum for grain	28	5.9	Average net loss	dollars..	9 836 1.7	
\$1,000.	168	9.3				
Barley	2 927	.7	GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME			
\$1,000.	38 440	.4	Government payments	farms..	46 977 .6	
Oats	4 397	.9	\$1,000..	318 419 .5		
\$1,000.	10 613	1.0	Other farm-related income ¹	farms..	36 817 1.0	
Other grains	2 149	.7	\$1,000..	168 674 2.1		
\$1,000.	80 358	.4	Customwork and other agricultural services	farms..	6 627 2.7	
Cotton and cottonseed	-	-	\$1,000..	46 972 4.3		
\$1,000.	-	-	Gross cash rent or share payments	farms..	8 853 2.4	
Tobacco	-	-	\$1,000..	69 609 3.9		
\$1,000.	-	-	Forest products, excluding Christmas trees and maple products	farms..	1 431 6.1	
Hay, silage, and field seeds	15 351	.6	\$1,000..	5 305 9.5		
\$1,000.	119 207	.7	Other farm-related income sources	farms..	29 888 1.2	
			\$1,000..	46 789 1.6		
Vegetables, sweet corn, and melons	2 999	.7	COMMODITY CREDIT CORPORATION LOANS			
\$1,000.	97 155	.5	Total	farms..	9 618 .7	
Fruits, nuts, and berries	580	1.4	\$1,000..	426 691 .4		
\$1,000.	8 990	2.1				
Nursery and greenhouse crops	1 242	1.1				
\$1,000.	153 313	.5				
Other crops	2 014	.6				
\$1,000.	414 408	.2				
Livestock, poultry, and their products	38 927	.6				
\$1,000.	4 089 293	.3				
Poultry and poultry products	1 972	.8				
\$1,000.	744 210	.1				
Dairy products	9 554	.8				
\$1,000.	1 093 657	.6				
Cattle and calves	30 320	.6				
\$1,000.	742 357	.4				
Hogs and pigs	7 717	.6				
\$1,000.	1 449 187	.1				
Sheep, lambs, and wool	2 672	.8				
\$1,000.	16 081	1.1				
Other livestock and livestock products (see text)	3 033	.8				
\$1,000.	43 802	1.0				
Value of agricultural products sold directly to individuals for human consumption (see text)	3 145	.8				
\$1,000.	14 198	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..	67 545	All operators	farms..	73 367
	acres..	21 491 743	Full owners	acres..	25 994 621
Harvested cropland	farms..	60 726	Part owners	acres..	40 317
	acres..	18 968 607	Tenants	acres..	8 557 969
Farms by acres harvested:					25 772
1 to 9 acres	farms..	3 958			15 021 079
	acres..	18 137			7 278
10 to 19 acres	farms..	3 779			2 415 573
	acres..	50 399			.7
20 to 29 acres	farms..	3 057			
	acres..	70 801			
30 to 49 acres	farms..	4 681			
	acres..	176 718			
50 to 99 acres	farms..	8 295			
	acres..	592 544			
100 to 199 acres.....	farms..	11 444			
	acres..	1 629 526			
200 to 499 acres.....	farms..	14 272			
	acres..	4 506 339			
500 to 999 acres.....	farms..	7 055			
	acres..	4 864 108			
1,000 acres or more	farms..	4 185			
	acres..	7 060 035			
Cropland:					
Pasture or grazing only	farms..	19 988			
	acres..	998 431			
Other cropland	farms..	20 325			
	acres..	1 524 705			
Total woodland	farms..	28 471	Operators by place of residence:		
	acres..	1 987 025	On farm operated		56 454
Pastureland and rangeland other than cropland and			Not on farm operated		10 660
woodland pastured.....	farms..	15 503	Not reported		6 253
Land in house lots, ponds, roads, wasteland, etc.	farms..	946 159	Operators by principal occupation:		
	acres..	50 306	Farming		44 047
Irrigated land	farms..	1 569 694	Other		29 320
	acres..	2 193	Operators by days worked off farm:		
		380 394	Any		37 550
Acres irrigated:			200 days or more		23 115
1 to 9 acres	farms..	707	Operators by sex:		
	acres..	1 691	Male	farms..	69 750
10 to 49 acres	farms..	298		acres..	25 355 203
	acres..	7 533	Female	farms..	3 617
50 to 99 acres	farms..	291		acres..	639 418
	acres..	21 108	Average age of operator	years..	51.2
100 to 199 acres.....	farms..	411			
	acres..	55 871			
200 to 499 acres.....	farms..	315			
	acres..	97 508			
500 to 999 acres.....	farms..	107			
	acres..	74 818			
1,000 acres or more.....	farms..	64			
	acres..	121 865			
Harvested cropland irrigated	farms..	2 152			
	acres..	376 853			
Pasture and other land irrigated	farms..	98			
	acres..	3 541			
Land under Conservation Reserve or Wetlands					
Reserve Programs	farms..	14 523			
	acres..	1 264 917			
VALUE OF LAND AND BUILDINGS¹					
Estimated market value of land and buildings	farms..	73 375			
\$1,000..					
Average per farm	dollars..	926 921			
Average per acre	dollars..	407 863			
		1 164			
VALUE OF MACHINERY AND EQUIPMENT¹					
Estimated market value of all machinery and					
equipment	farms..	73 374			
\$1,000..					
Average per farm	dollars..	208 376			
		84 613			
AGRICULTURAL CHEMICALS¹					
Commercial fertilizer	farms..	48 466			
acres on which used..		12 717 478			
TENURE OF OPERATOR					
Total cropland	farms..	67 545	All operators	farms..	73 367
	acres..	21 491 743	Full owners	acres..	25 994 621
Harvested cropland	farms..	60 726	Part owners	acres..	40 317
	acres..	18 968 607	Tenants	acres..	8 557 969
Farms by acres harvested:					25 772
1 to 9 acres	farms..	3 958			15 021 079
	acres..	18 137			7 278
10 to 19 acres	farms..	3 779			2 415 573
	acres..	50 399			.7
20 to 29 acres	farms..	3 057			
	acres..	70 801			
30 to 49 acres	farms..	4 681			
	acres..	176 718			
50 to 99 acres	farms..	8 295			
	acres..	592 544			
100 to 199 acres.....	farms..	11 444			
	acres..	1 629 526			
200 to 499 acres.....	farms..	14 272			
	acres..	4 506 339			
500 to 999 acres.....	farms..	7 055			
	acres..	4 864 108			
1,000 acres or more	farms..	4 185			
	acres..	7 060 035			
Cropland:					
Pasture or grazing only	farms..	19 988			
	acres..	998 431			
Other cropland	farms..	20 325			
	acres..	1 524 705			
Total woodland	farms..	28 471	Operators by place of residence:		
	acres..	1 987 025	On farm operated		56 454
Pastureland and rangeland other than cropland and			Not on farm operated		10 660
woodland pastured.....	farms..	15 503	Not reported		6 253
Land in house lots, ponds, roads, wasteland, etc.	farms..	946 159	Operators by principal occupation:		
	acres..	50 306	Farming		44 047
Irrigated land	farms..	1 569 694	Other		29 320
	acres..	2 193	Operators by days worked off farm:		
		380 394	Any		37 550
Acres irrigated:			200 days or more		23 115
1 to 9 acres	farms..	707	Operators by sex:		
	acres..	1 691	Male	farms..	69 750
10 to 49 acres	farms..	298		acres..	25 355 203
	acres..	7 533	Female	farms..	3 617
50 to 99 acres	farms..	291		acres..	639 418
	acres..	21 108	Average age of operator	years..	51.2
100 to 199 acres.....	farms..	411			
	acres..	55 871			
200 to 499 acres.....	farms..	315			
	acres..	97 508			
500 to 999 acres.....	farms..	107			
	acres..	74 818			
1,000 acres or more.....	farms..	64			
	acres..	121 865			
Harvested cropland irrigated	farms..	2 152			
	acres..	376 853			
Pasture and other land irrigated	farms..	98			
	acres..	3 541			
FARMS BY TYPE OF ORGANIZATION					
Individual or family (sole proprietorship).....	farms..	64 428			.6
	acres..	20 313 325			
Partnership	farms..	6 174			.7
	acres..	3 459 442			
Corporation:					
Family held	farms..	2 207			.6
	acres..	2 021 730			
More than 10 stockholders	farms..	48			.3
	acres..	2 159			
10 or less stockholders	farms..	235			.6
	acres..	98 307			
Other than family held	farms..	45			.1
	acres..	190			
More than 10 stockholders	farms..	323			.2
	acres..	101 817			
HIRED FARM LABOR¹					
Hired workers by days worked:					
150 days or more	farms..	10 284			
	workers..	22 114			
Less than 150 days	farms..	24 813			
	workers..	77 325			
INJURIES AND DEATHS					
Farm-related injuries:					
Operator and family members	farms..	890			
	number..	1 038			
Hired workers	farms..	319			
	number..	488			
Farm-related deaths:					
Operator and family members	farms..	18			
	number..	18			
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..	3 090	Cattle and calves sold	farms..	30 320	
	acres..	13 170	number..	1 339 902	.5	
10 to 49 acres	farms..	10 104	\$1,000..	742 357	.4	
	acres..	274 034	farms..	7 512	.6	
50 to 69 acres	farms..	2 987	number..	5 722 460	.2	
	acres..	174 625	Hogs and pigs sold..	farms..	7 717	
70 to 99 acres	farms..	6 033	number..	12 943 053	.2	
	acres..	491 536	\$1,000..	1 449 187	.1	
100 to 139 acres	farms..	5 523	Sheep and lambs of all ages inventory	farms..	2 627	
	acres..	647 441	number..	161 212	.8	
140 to 179 acres	farms..	6 992	Sheep and lambs sold	farms..	2 599	
	acres..	1 103 422	number..	172 649	1.1	
180 to 219 acres	farms..	4 544	Horses and ponies inventory	farms..	8 783	
	acres..	897 875	number..	55 888	.8	
220 to 259 acres	farms..	4 210	Horses and ponies sold	farms..	2 084	
	acres..	999 332	number..	12 364	2.1	
260 to 499 acres	farms..	14 611	POULTRY			
	acres..	5 269 824	Layers and pullets 13 weeks old and older inventory (see text)	farms..	1 964	
500 to 999 acres	farms..	9 781	number..	13 047 875	.9	
	acres..	6 728 570	Layers 20 weeks old and older	farms..	1 892	
1,000 to 1,999 acres	farms..	4 251	number..	11 951 233	.2	
2,000 acres or more	farms..	5 732 463	Broilers and other meat-type chickens sold	farms..	621	
	acres..	1 241	number..	28 456 532	1.2	
	3 662 329				.4	
F FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM						
Oilseed and grain farming (1111)	farms..	33 741	SELECTED CROPS HARVESTED			
	acres..	15 594 180	Corn for grain or seed	farms..	37 630	
Vegetable and melon farming (1112)	farms..	736	acres..	6 227 640	.4	
	acres..	270 272	bushels..	783 739 207	.4	
Fruit and tree nut farming (1113)	farms..	437	Corn for silage or green chop	farms..	12 373	
	acres..	28 310	acres..	438 176	.7	
Greenhouse, nursery, and floriculture production (1114)	farms..	1 060	tons, green..	6 482 293	.7	
	acres..	93 824	Wheat for grain	farms..	9 518	
Other crop farming (1119)	farms..	7 797	acres..	2 391 598	.3	
	acres..	2 702 863	bushels..	74 531 074	.3	
Beef cattle ranching and farming (112111)	farms..	10 243	Barley for grain	farms..	3 910	
	acres..	2 348 790	acres..	433 610	.5	
Cattle feedlots (112112)	farms..	2 507	bushels..	21 915 338	.4	
	acres..	634 598	Oats for grain	farms..	10 122	
Dairy cattle and milk production (11212)	farms..	7 972	acres..	296 188	.8	
	acres..	2 645 741	bushels..	16 179 495	.8	
Hog and pig farming (1122)	farms..	3 800	Sunflower seed	farms..	588	
	acres..	1 141 809	acres..	99 245	1.1	
Poultry and egg production (1123)	farms..	819	pounds..	106 405 806	.8	
	acres..	155 998	farms..	31 292	.6	
Sheep and goat farming (1124)	farms..	1 083	bushels..	233 714 926	.4	
	acres..	81 180	Dry edible beans, excluding dry limas	farms..	833	
Animal aquaculture and other animal production (1125, 1129)	farms..	3 172	acres..	163 716	.6	
	acres..	297 056	cwt..	2 514 605	.6	
L LIVESTOCK						
Cattle and calves inventory	farms..	30 913	Potatoes, excluding sweetpotatoes	farms..	348	
	number..	2 395 456	acres..	72 434	1.4	
Beef cows	farms..	15 745	cwt..	18 851 460	.4	
	number..	409 184	farms..	1 622	.6	
Milk cows	farms..	9 603	acres..	456 360	.3	
	number..	541 650	tons..	8 269 808	.3	
			Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms..	35 500	
			acres..	2 168 932	.6	
			tons, dry..	5 033 905	.7	
			Alfalfa hay	farms..	27 640	
			acres..	1 271 521	.7	
			tons, dry..	3 571 907	.7	
			Vegetables harvested for sale (see text)	farms..	3 002	
			acres..	219 881	.5	
			Land in orchards	farms..	533	
			acres..	4 390	1.5	
					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 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	47 281	.7	FARM PRODUCTION EXPENSES ¹		
Land in farms	22 997 409	.5	Total farm production expenses	farms..	.7
Average size of farm	486	.8	\$1,000..	6 208 354	.4
			Average per farm	dollars..	.8
			Livestock and poultry purchased	farms..	1.5
			\$1,000..	629 532	.8
			Feed for livestock and poultry	farms..	1.1
			\$1,000..	1 288 681	.4
			Commercially mixed formula feeds	farms..	1.4
			\$1,000..	853 893	.4
			Seeds, bulbs, plants, and trees	farms..	.8
			\$1,000..	41 999	.6
			Commercial fertilizer	farms..	.8
			\$1,000..	357 314	.7
			Agricultural chemicals	farms..	.9
			\$1,000..	40 598	.7
			Petroleum products	farms..	.7
			\$1,000..	46 796	.7
			Electricity	farms..	.7
			\$1,000..	42 841	.8
			Hired farm labor	farms..	1.2
			\$1,000..	101 274	.7
			Contract labor	farms..	.7
			\$1,000..	332 537	.7
			Repair and maintenance	farms..	3.0
			\$1,000..	4 321	.8
			Customwork, machine hire, and rental of machinery and equipment	farms..	.7
			\$1,000..	24 579	1.2
			Interest	farms..	.9
			\$1,000..	130 917	1.1
			Secured by real estate	farms..	.8
			\$1,000..	477 671	.9
			Not secured by real estate	farms..	1.2
			\$1,000..	23 653	1.0
			Electricity	farms..	.7
			\$1,000..	254 107	.7
			Hired farm labor	farms..	1.2
			\$1,000..	44 834	.7
			Contract labor	farms..	.7
			\$1,000..	405 111	.7
			Repair and maintenance	farms..	.9
			Customwork, machine hire, and rental of machinery and equipment	farms..	.9
			\$1,000..	223 564	.6
Sales by commodity or commodity group:					
Crops, including nursery and greenhouse crops	farms..				
\$1,000..					
Grains	farms..				
\$1,000..					
Corn for grain	farms..				
\$1,000..					
Wheat	farms..				
\$1,000..					
Soybeans	farms..				
\$1,000..					
Sorghum for grain	farms..				
\$1,000..					
Barley	farms..				
\$1,000..					
Oats	farms..				
\$1,000..					
Other grains	farms..				
\$1,000..					
Cotton and cottonseed	farms..				
\$1,000..					
Tobacco	farms..				
\$1,000..					
Hay, silage, and field seeds	farms..				
\$1,000..					
Vegetables, sweet corn, and melons	farms..				
\$1,000..					
Fruits, nuts, and berries	farms..				
\$1,000..					
Nursery and greenhouse crops	farms..				
\$1,000..					
Other crops	farms..				
\$1,000..					
Livestock, poultry, and their products	farms..				
\$1,000..					
Poultry and poultry products	farms..				
\$1,000..					
Dairy products	farms..				
\$1,000..					
Cattle and calves	farms..				
\$1,000..					
Hogs and pigs	farms..				
\$1,000..					
Sheep, lambs, and wool	farms..				
\$1,000..					
Other livestock and livestock products (see text)	farms..				
\$1,000..					
Value of agricultural products sold directly to individuals for human consumption (see text)	farms..				
\$1,000..					
			Total	farms..	.7
			\$1,000..	9 477	.4
				426 399	.4
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..		Individual or family (sole proprietorship)	farms..	40 150 .7	
acres..	19 940 852 .4		acres..	17 581 134 .5		
Harvested cropland	farms..		Partnership	farms..	4 797 .8	
acres..	44 676 .7		acres..	3 264 699 .4		
Cropland:			Corporation:			
Pasture or grazing only	farms..		Family held	farms..	2 007 .6	
acres..	12 559 .8		acres..	1 996 597 .3		
741 326 .9			More than 10 stockholders	farms..	46 .27	
Total woodland	farms..		10 or less stockholders	farms..	1 961 .6	
acres..	15 465 .8		Other than family held	farms..	186 1.5	
Pastureland and rangeland other than cropland and			acres..	87 321 1.2		
woodland pastured.....	farms..		More than 10 stockholders	farms..	37 3.1	
acres..	9 380 .8		10 or less stockholders	farms..	149 1.8	
Land in house lots, ponds, roads, wasteland, etc.	farms..		Other—cooperative, estate or trust, institutional, etc.	farms..	141 2.9	
acres..	31 868 .7		acres..	67 658 2.4		
Irrigated land	farms..		Hired Farm Labor¹			
acres..	1 136 877 .6		Hired workers by days worked:			
1 799 .9			150 days or more	farms..	9 197 1.8	
Harvested cropland irrigated	farms..		workers..	21 008 1.4		
acres..	375 613 .6		Less than 150 days	farms..	20 641 1.3	
Pasture and other land irrigated	farms..		workers..	68 925 1.3		
acres..	1 789 .6		INJURIES AND DEATHS			
Land under Conservation Reserve or Wetlands			Farm-related injuries:			
Reserve Programs	farms..		Operator and family members	farms..	719 1.4	
acres..	6 731 .8		number..	850 1.4		
			Hired workers	farms..	305 1.1	
			number..	463 1.2		
			Farm-related deaths:			
			Operator and family members	farms..	14 —	
			number..	(D) —		
			Hired workers	farms..	3 —	
			number..	(D) —		
VALUE OF LAND AND BUILDINGS¹						
Estimated market value of land and buildings	farms..		Farms By Size			
\$1,000.			1 to 9 acres		1 120 1.1	
Average per farm	dollars..		10 to 49 acres		2 082 .9	
Average per acre	dollars..		50 to 69 acres		921 1.3	
			70 to 99 acres		2 278 1.0	
VALUE OF MACHINERY AND EQUIPMENT¹			100 to 139 acres		2 777 1.0	
Estimated market value of all machinery and			140 to 179 acres		4 396 1.0	
equipment	farms..		180 to 219 acres		3 211 1.0	
\$1,000..			220 to 259 acres		3 247 1.1	
Average per farm	dollars..		260 to 499 acres		12 509 .9	
			500 to 999 acres		9 327 .7	
AGRICULTURAL CHEMICALS¹			1,000 to 1,999 acres		4 178 .3	
Commercial fertilizer	farms..		2,000 acres or more		1 235 —	
acres on which used..			Farms By North American Industry Classification System			
			Oilseed and grain farming (1111)		24 639 .7	
			Vegetable and melon farming (1112)		444 1.5	
			Fruit and tree nut farming (1113)		141 2.8	
TENURE OF OPERATOR			Greenhouse, nursery, and floriculture production (1114)		640 1.3	
All operators	farms..		Other crop farming (1119)		3 318 .7	
acres..			Beef cattle ranching and farming (112111)		4 027 .9	
Full owners	farms..		Cattle feedlots (112112)		1 523 1.0	
acres..			Dairy cattle and milk production (11212)		7 928 .9	
Part owners	farms..		Hog and pig farming (1122)		3 343 .6	
acres..			Poultry and egg production (1123)		524 .8	
Tenants	farms..		Sheep and goat farming (1124)		155 2.8	
acres..			Animal aquaculture and other animal production (1125, 1129)		599 1.4	
OWNED AND RENTED LAND			LIVESTOCK			
Land owned	farms..		Cattle and calves inventory	farms..	21 848 .8	
acres..			number..	2 222 652 .6		
Owned land in farms	farms..		Beef cows	farms..	9 127 .8	
acres..			number..	328 388 .8		
Land rented or leased from others	farms..		Milk cows	farms..	9 337 .8	
acres..			number..	540 630 .6		
Rented or leased land in farms	farms..		Cattle and calves sold	farms..	22 169 .8	
landlords..			number..	1 266 139 .5		
acres..			\$1,000..	714 075 .4		
Land rented or leased to others	farms..		Hogs and pigs inventory	farms..	6 525 .6	
acres..			number..	5 694 279 .2		
			Hogs and pigs sold	farms..	6 853 .6	
			number..	12 921 651 .2		
			\$1,000..	1 447 280 .1		
OPERATOR CHARACTERISTICS			Sheep and lambs of all ages inventory	farms..	1 219 1.2	
Operators by place of residence:			number..	118 535 1.3		
On farm operated			Sheep and lambs sold	farms..	1 231 1.2	
Not on farm operated			number..	139 161 1.3		
Not reported			Horses and ponies inventory	farms..	3 347 .9	
Operators by principal occupation:			number..	21 202 1.3		
Farming			Horses and ponies sold	farms..	687 1.4	
Other			number..	8 966 2.8		
Operators by days worked off farm:						
Any						
200 days or more						
Operators by sex:						
Male						
Female						
Average age of operator	years..					

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.. number..	757 13 010 746	Barley for grain	farms.. acres.. bushels..	3 609 424 669 21 615 173
Layers 20 weeks old and older	farms.. number..	719 11 918 254	Oats for grain	farms.. acres.. bushels..	.5 .4 .9
Broilers and other meat-type chickens sold	farms.. number..	330 28 416 916	Sunflower seed	farms.. acres.. pounds..	.8 .9 .7
SELECTED CROPS HARVESTED					
Corn for grain or seed	farms.. acres.. bushels..	34 376 6 174 919 779 173 465	Dry edible beans, excluding dry limas	farms.. acres.. cwt..	.1.1 .7 .7
Corn for silage or green chop	farms.. acres.. tons, green..	11 489 425 152 6 341 694	Potatoes, excluding sweetpotatoes	farms.. acres.. cwt..	.4 .4 .4
Wheat for grain	farms.. acres.. bushels..	8 774 2 363 470 73 910 271	Sugar beets for sugar	farms.. acres.. tons..	.4 .6 .2
			Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms.. acres.. tons, dry..	.8 .7 .7
			Alfalfa hay	farms.. acres.. tons, dry..	.8 .7 .7
			Vegetables harvested for sale (see text)	farms.. acres..	.5 .5
			Land in orchards	farms.. acres..	.2.5 3.1

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	-2.3	1.3	-10.7	1.3
Land in farms	1.3	1.0	-.9	1.0
Average size of farm	3.5	1.7	11.0	1.9
Estimated market value of land and buildings ¹ :				
Average per farm	dollars..	31.3	2.3	40.9
Average per acre	dollars..	27.9	2.0	28.2
Estimated market value of all machinery and equipment ¹ :				
Average per farm	dollars..	21.1	2.3	29.0
Farms by size:				
1 to 9 acres		-12.1	1.4	-28.3
10 to 49 acres		13.2	1.7	-6.2
50 to 179 acres		2.7	1.1	-10.5
180 to 499 acres		-11.5	1.1	-16.4
500 to 999 acres		-6.8	1.0	-8.1
1,000 to 1,999 acres		8.6	.4	7.9
2,000 acres or more		43.8	-	.4
Total cropland	farms..	-3.3	1.3	-10.2
	acres..	.5	.9	-.7
Harvested cropland	farms..	-8.7	1.2	-9.9
	acres..	4.2	.9	4.7
Irrigated land	farms..	-7.4	1.2	-8.2
	acres..	2.7	.8	3.0
Market value of agricultural products sold	\$1,000..	28.0	.9	28.5
Average per farm	dollars..	31.0	2.0	43.8
Crops, including nursery and greenhouse crops	\$1,000..	37.5	1.0	38.2
Livestock, poultry, and their products	\$1,000..	19.5	.8	19.8
Farms by value of sales:				
Less than \$2,500		50.6	1.9	(X)
\$2,500 to \$4,999		-2.4	1.7	(X)
\$5,000 to \$9,999		-12.1	1.5	(X)
\$10,000 to \$24,999		-17.7	1.2	-17.7
\$25,000 to \$49,999		-21.0	1.4	-21.0
\$50,000 to \$99,999		-24.7	1.5	-24.7
\$100,000 to \$249,999		-8.0	1.0	-8.0
\$250,000 to \$499,999		32.2	-	32.2
\$500,000 or more		107.4	-	107.4
Total farm production expenses ¹	\$1,000..	21.3	1.0	21.5
Average per farm	dollars..	24.1	2.0	36.0
Net cash return from agricultural sales for the farm unit (see text) ¹	farms..	-2.3	1.4	-10.6
	\$1,000..	50.8	1.9	50.5
Average per farm	dollars..	54.3	2.9	68.4
Operators by principal occupation:				
Farming		-13.7	1.2	-15.1
Other		21.9	1.9	9.5
Operators by days worked off farm:				
Any		10.7	1.7	1.4
200 days or more		16.6	1.8	5.8
Livestock and poultry:				
Cattle and calves inventory	farms..	-10.4	1.3	-15.7
	number..	-5.8	1.1	-6.8
Beef cows	farms..	4.3	1.6	-1
	number..	7.2	1.6	5.3
Milk cows	farms..	-28.2	1.2	-28.4
	number..	-11.1	1.1	-11.1
Cattle and calves sold	farms..	-10.4	1.3	-15.1
	number..	-3.5	.9	-4.4
Hogs and pigs inventory	farms..	-42.8	.7	-42.5
	number..	22.6	.7	23.4
Hogs and pigs sold	farms..	-43.9	.7	-42.7
	number..	41.6	.8	42.5
Sheep and lambs inventory	farms..	-23.9	1.2	-30.2
	number..	-27.3	1.2	-26.5
Layers and pullets 13 weeks old and older inventory (see text)	farms..	-15.0	1.4	-30.8
	number..	-8.9	.3	-8.8
Broilers and other meat-type chickens sold	farms..	-8.5	1.8	-16.5
	number..	-22.7	.3	-22.7
Selected crops harvested:				
Corn for grain or seed	farms..	-12.4	1.2	-10.1
	acres..	1.7	.9	2.5
	bushels..	17.1	1.0	17.7
Wheat for grain	farms..	-25.4	1.0	-24.3
	acres..	-8.3	.6	-8.1
	bushels..	-41.0	.4	-40.9
Barley for grain	farms..	-25.0	1.0	-25.2
	acres..	-26.9	.6	-27.3
	bushels..	-48.5	.4	-48.6
Oats for grain	farms..	-39.2	.9	-39.8
	acres..	-36.4	1.0	-36.9
	bushels..	-44.5	.8	-44.5
Sunflower seed	farms..	-48.0	.8	-48.7
	acres..	-50.9	.4	-50.9
	pounds..	-61.8	.3	-61.9
Soybeans for beans	farms..	-6.8	1.3	-4.1
	acres..	21.6	1.1	22.7
	bushels..	44.1	1.2	45.0
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms..	-7.4	1.3	-11.5
	acres..	3.4	1.4	1.2
	tons, dry..	-1.0	1.3	-1.9

¹Data are based on a sample of farms.

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

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

Geographic area	Farms		Land in farms		Average size of farm		Average market value of land and buildings per farm ¹		Estimated market value of all machinery and equipment ¹	
	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Minnesota	73 367	.6	25 994 621	.5	354	.7	407 863	.8	6 208 376	.8
Aitkin	587	.5	163 523	1.0	279	1.2	160 604	5.8	20 360	10.0
Anoka	473	.4	57 313	1.6	121	1.6	315 126	10.4	27 495	9.9
Becker	1 084	.5	388 733	.8	359	.9	232 935	4.4	62 359	6.0
Beltrami	656	.7	224 898	1.2	343	1.4	154 076	4.7	23 488	9.8
Benton	834	.7	176 330	1.0	211	1.2	211 857	4.1	59 523	5.6
Big Stone	420	.6	253 988	.9	605	1.1	505 636	3.7	41 826	5.7
Blue Earth	1 037	.5	403 362	.6	389	.8	738 013	2.3	117 061	3.3
Brown	1 054	.8	350 398	.9	332	1.2	587 575	3.1	108 029	5.3
Carlton	527	.3	107 166	1.2	203	1.2	142 168	6.8	20 031	8.4
Carver	779	.5	153 223	.8	197	1.0	417 851	5.6	78 946	7.0
Cass	598	.5	191 847	1.3	321	1.4	177 812	7.4	18 662	6.2
Chippewa	618	.6	318 472	.6	515	.9	677 278	2.7	79 788	6.4
Chisago	762	.5	121 527	1.1	159	1.2	261 815	4.9	34 882	7.6
Clay	887	.5	581 226	.5	655	.7	666 373	3.1	113 252	5.4
Clearwater	570	.7	212 285	1.3	372	1.5	161 177	7.0	20 367	8.2
Cook	11	—	(D)	(D)	(D)	(D)	212 577	—	382	—
Cottonwood	784	.5	368 346	.6	470	.7	652 877	2.8	95 074	3.7
Crow Wing	593	.6	135 322	1.4	228	1.5	185 655	6.4	19 900	12.7
Dakota	890	.4	221 316	.7	249	.8	569 875	4.2	85 228	4.8
Dodge	674	.4	246 818	.6	366	.7	579 459	3.1	69 918	3.5
Douglas	1 042	.7	267 875	1.1	257	1.3	201 885	4.5	57 641	6.3
Faribault	878	.4	413 409	.5	471	.7	782 872	1.9	116 353	3.3
Fillmore	1 546	.7	434 581	.8	281	1.0	296 734	3.4	118 391	4.9
Freeborn	1 151	.4	379 580	.6	330	.7	523 186	3.2	109 542	3.2
Goodhue	1 489	.5	384 565	.6	258	.8	384 418	2.9	112 455	3.3
Grant	468	.6	278 495	.7	595	.9	583 532	5.2	57 995	6.9
Hennepin	574	.6	69 128	1.5	120	1.6	433 057	10.3	32 253	11.9
Houston	954	.6	298 173	.8	313	1.0	304 730	3.3	58 274	4.8
Hubbard	431	.5	130 530	1.0	303	1.1	221 720	3.5	20 054	11.5
Isanti	746	.5	139 417	1.2	187	1.3	272 696	6.5	28 115	6.6
Itasca	415	.3	103 716	1.1	250	1.1	167 984	11.6	14 564	10.7
Jackson	963	.7	383 631	.7	398	1.0	642 270	3.4	92 777	4.0
Kanabec	626	.5	138 850	1.1	222	1.2	167 732	6.4	22 716	10.1
Kandiyohi	1 131	.5	378 831	.6	335	.8	464 543	3.3	93 907	3.2
Kitson	558	.5	501 466	.6	899	.8	535 759	4.9	71 222	3.8
Koochiching	213	.6	76 635	1.8	360	1.9	135 112	4.4	6 202	11.5
Lac qui Parle	790	.8	397 519	.8	503	1.2	519 278	3.2	82 431	6.4
Lake	37	.7	3 970	5.2	107	5.2	105 774	6.7	529	5.7
Lake of the Woods	196	.5	117 644	1.1	600	1.2	296 621	2.9	11 924	3.3
Le Sueur	877	.5	214 652	.8	245	1.0	439 638	5.2	77 598	6.5
Lincoln	724	.9	269 646	1.2	372	1.5	291 650	6.1	49 554	5.5
Lyon	931	.8	403 001	.8	433	1.1	503 187	4.3	80 136	4.0
McLeod	1 008	.5	250 244	.7	248	.9	361 998	3.8	91 329	6.7
Mahnomen	341	.7	189 927	1.0	557	1.2	365 417	11.2	27 239	7.8
Marshall	1 144	.6	774 342	.6	677	.8	380 677	4.0	126 480	5.5
Martin	987	.4	420 634	.5	426	.7	839 398	2.9	127 901	4.6
Meeker	1 016	.6	293 213	.7	289	.9	335 339	4.1	94 988	5.0
Mille Lacs	711	.6	134 622	1.2	189	1.4	182 572	6.5	33 410	10.2
Morrison	1 808	.6	430 467	.8	238	1.0	175 124	3.4	121 619	3.6
Mower	1 123	.6	404 238	.6	360	.8	567 017	2.5	115 808	6.5
Murray	836	.7	383 725	.8	459	1.1	546 184	2.9	89 871	4.8
Nicollet	723	.6	249 259	.7	345	.9	594 521	3.0	88 729	4.6
Nobles	1 021	.7	390 286	.8	382	1.0	561 180	3.7	108 978	4.7
Norman	670	.6	483 041	.5	721	.8	521 185	3.8	71 451	4.2
Olmsted	1 317	.5	303 665	.7	231	.9	327 524	3.9	98 919	7.0
Outer Tail	2 647	.6	840 353	.7	317	.9	226 066	4.9	184 602	5.3
Pennington	528	.7	312 752	1.0	592	1.3	281 392	4.9	37 050	9.8
Pine	950	.5	246 804	1.0	260	1.1	212 580	7.2	34 995	8.7
Pipestone	690	.8	243 525	1.1	353	1.4	367 780	6.2	59 505	9.1
Polk	1 366	.4	1 051 813	.4	770	.6	596 977	3.3	204 113	4.2
Pope	825	.7	324 730	.9	394	1.1	322 726	5.2	70 553	7.3
Ramsey	59	1.1	(D)	(D)	(D)	(D)	242 315	7.1	2 544	5.6
Red Lake	376	.5	204 977	.9	545	1.0	307 338	6.4	23 302	9.9
Redwood	1 168	.7	508 129	.7	435	1.0	688 544	2.8	139 992	5.5
Renville	1 114	.6	601 103	.5	540	.7	912 570	2.4	183 929	4.0
Rice	1 191	.5	251 031	.7	211	.9	403 646	3.5	85 219	4.5
Rock	704	.8	280 715	.9	399	1.2	542 774	4.5	70 337	5.4
Roseau	1 051	.7	577 455	.8	549	1.0	246 292	2.6	67 776	3.8
St. Louis	713	.5	155 452	1.2	218	1.3	135 249	7.7	18 505	9.1
Scott	805	.5	117 830	1.0	146	1.1	415 549	6.6	49 509	9.9
Sherburne	512	.5	105 042	.9	205	1.1	369 930	4.2	37 257	7.7
Sibley	958	.5	309 860	.5	323	.7	507 163	4.2	110 281	4.9
Stearns	2 982	.8	646 025	.9	217	1.1	226 504	3.0	213 877	3.4
Steele	774	.5	226 926	.7	293	.8	457 039	2.8	71 655	3.9
Stevens	497	.5	299 346	.6	602	.8	648 317	6.4	68 115	2.7
Swift	739	.8	388 215	.8	525	1.1	506 216	4.6	87 546	5.8
Todd	1 741	.7	387 462	1.0	223	1.2	154 603	4.8	85 177	5.7
Traverse	385	.5	315 068	.6	818	.8	726 069	2.3	56 168	5.4
Wabasha	963	.7	253 401	.9	263	1.2	306 367	4.0	75 715	6.2
Wadena	625	.8	174 833	1.4	280	1.6	161 745	5.5	29 429	11.5
Waseca	709	.5	235 351	.7	332	.9	585 652	4.0	71 626	4.7
Washington	653	.5	89 935	1.4	138	1.5	484 459	7.9	40 312	8.2
Watonwan	576	.5	255 994	.6	444	.8	706 932	3.7	67 060	5.5
Wilkin	441	.4	457 806	.4	1 038	.6	963 902	2.9	76 881	4.2

See footnotes at end of table.

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

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

Geographic area	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)
Winona	1 044	.4	289 708	.7	277	.8	307 368	3.2	90 215	5.4
Wright	1 422	.6	251 832	.9	177	1.1	364 086	4.4	84 734	5.8
Yellow Medicine	876	.7	415 269	.8	474	1.1	504 387	3.5	102 470	4.4
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)	Number	Total farm production expenses		Relative standard error of estimate (percent)
								Farms		
Minnesota	84 613	1.0	8 290 264	.3	112 997	.6	73 375	.6	6 362 110	.4
Aitkin	34 684	10.1	14 419	1.5	24 563	1.5	587	.8	11 626	5.5
Anoka	58 129	9.9	23 794	1.0	50 305	1.1	473	.7	20 232	6.6
Becker	57 421	6.0	99 870	.5	92 131	.7	1 086	.7	71 290	2.4
Beltrami	35 805	9.9	17 231	1.5	26 267	1.6	656	.8	14 313	9.2
Benton	71 456	5.7	89 610	.6	107 446	.9	833	.8	65 342	1.5
Big Stone	99 585	5.8	54 617	.7	130 039	.9	420	.9	41 593	3.1
Blue Earth	112 776	3.3	221 470	.3	213 568	.6	1 038	.6	149 315	1.1
Brown	102 592	5.4	181 843	.5	172 526	1.0	1 053	.9	132 437	1.4
Carlton	38 009	8.4	8 451	1.8	16 035	1.8	527	.7	7 293	7.8
Carver	101 342	7.0	62 056	.9	79 661	1.0	779	.7	49 576	2.6
Cass	31 208	6.3	20 639	1.3	34 514	1.4	598	.7	15 844	7.2
Chippewa	129 107	6.4	101 231	.5	163 804	.8	618	.7	80 407	1.6
Chisago	45 837	7.7	30 249	1.2	39 696	1.3	761	.7	22 070	7.1
Clay	127 393	5.4	137 664	.4	155 202	.7	889	.7	111 634	1.1
Clearwater	35 731	8.3	20 421	1.3	35 826	1.4	570	.9	15 963	10.0
Cook	34 727	—	101	—	9 210	—	11	—	84	—
Cottonwood	121 268	3.8	160 266	.3	204 420	.6	784	.6	118 933	1.2
Crow Wing	33 558	12.8	14 219	2.0	23 978	2.1	593	.7	13 881	8.6
Dakota	95 870	4.9	102 979	.5	115 707	.6	889	.7	82 251	1.5
Dodge	103 737	3.6	104 794	.4	155 481	.6	674	.7	77 295	1.4
Douglas	55 371	6.4	58 881	1.2	56 508	1.4	1 041	.9	47 266	2.9
Faribault	132 520	3.3	171 051	.3	194 818	.6	878	.5	125 380	1.5
Fillmore	76 579	5.0	148 261	.6	95 900	.9	1 546	.8	108 365	2.0
Freeborn	95 171	3.3	163 067	.4	141 674	.6	1 151	.6	118 803	1.2
Goodhue	75 575	3.4	160 642	.5	107 886	.7	1 488	.6	119 955	1.4
Grant	123 921	6.9	60 726	.6	129 757	.8	468	.8	43 823	3.2
Hennepin	56 288	11.9	43 748	.8	76 217	.9	573	.8	33 614	2.8
Houston	61 020	4.8	77 659	.8	81 404	1.0	955	.7	57 480	2.8
Hubbard	46 528	11.6	23 359	.7	54 198	.8	431	.7	20 673	6.2
Isanti	37 738	6.6	24 923	1.3	33 408	1.4	745	.6	21 602	4.3
Itasca	35 095	10.8	4 962	2.3	11 958	2.4	415	.8	4 660	12.6
Jackson	96 341	4.1	150 391	.5	156 169	.8	963	.8	105 748	1.8
Kanabec	36 346	10.1	16 633	1.8	26 570	1.8	625	.8	15 159	5.9
Kandiyohi	82 810	3.3	223 670	.3	197 763	.6	1 134	.6	189 760	.8
Kitson	127 410	3.9	55 591	.5	99 626	.7	559	.7	52 714	2.1
Koochiching	29 119	11.6	3 519	2.3	16 519	2.4	213	1.4	3 377	5.6
Lac qui Parle	104 343	6.5	113 080	.6	143 139	1.0	790	1.0	80 536	1.9
Lake	14 291	7.2	124	4.6	3 356	4.6	37	4.5	171	6.5
Lake of the Woods	60 839	3.6	7 818	1.4	39 886	1.5	196	1.5	7 298	4.2
Le Sueur	88 381	6.6	84 524	.6	96 378	.8	878	.7	65 829	2.3
Lincoln	68 445	5.5	68 956	.9	95 244	1.2	724	1.0	53 221	2.8
Lyon	86 168	4.1	147 152	.6	158 058	1.0	930	.8	111 823	1.7
McLeod	90 604	6.7	82 787	.7	82 130	.9	1 008	.7	62 014	2.6
Mahnomen	79 879	7.9	24 657	1.0	72 309	1.3	341	.9	24 594	5.6
Marshall	110 367	5.5	91 090	.5	79 624	.7	1 146	.7	84 158	1.7
Martin	129 586	4.6	253 722	.3	257 064	.5	987	.6	178 251	1.0
Meeker	93 492	5.1	139 385	.4	137 190	.7	1 016	.7	113 163	1.0
Mille Lacs	47 056	10.2	26 221	1.5	36 879	1.6	710	.7	18 791	8.3
Morrison	67 267	3.7	156 769	.6	86 708	.8	1 808	.7	126 394	1.4
Mower	103 032	6.5	162 784	.5	144 955	.7	1 124	.7	116 176	1.5
Murray	107 501	4.9	126 415	.6	151 214	1.0	836	.9	95 667	1.7
Nicollet	122 724	4.6	172 307	.3	238 322	.7	723	.6	126 258	1.1
Nobles	106 737	4.7	158 548	.5	155 287	.8	1 021	.8	124 376	1.3
Norman	106 326	4.2	75 243	.5	112 303	.8	672	.8	65 175	2.3
Olmsted	75 167	7.0	106 320	.6	80 729	.8	1 316	.6	75 354	2.6
Outer Tail	69 740	5.3	201 431	.6	76 098	.8	2 647	.6	151 496	1.5
Pennington	70 038	9.9	23 895	1.0	45 255	1.2	529	.8	22 616	4.6
Pine	36 876	8.7	37 856	1.0	39 848	1.1	949	.6	32 299	4.4
Pipestone	86 239	9.1	118 444	.5	171 658	1.0	690	1.0	85 359	2.1
Polk	149 205	4.3	193 650	.3	141 764	.5	1 368	.6	166 304	1.0
Pope	85 415	7.4	80 204	.8	97 217	1.1	826	.8	62 197	2.4
Ramsey	43 111	7.3	6 235	2.3	105 681	2.6	59	4.7	4 098	1.9
Red Lake	61 810	9.9	21 104	.9	56 128	1.0	377	.8	16 018	7.5
Redwood	119 856	5.6	209 724	.5	179 558	.8	1 168	.8	155 591	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	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)		
Renville	165 255	4.1	300 612	.3	269 849	.6	1 113	.7	235 354	1.0		
Rice	71 613	4.5	127 410	.5	106 977	.7	1 190	.6	108 077	1.2		
Rock	100 053	5.4	134 842	.5	191 537	1.0	1 704	.9	103 960	1.5		
Roseau	64 425	3.9	53 348	.8	50 759	1.0	1 052	.8	49 713	2.0		
St. Louis	25 953	9.1	9 679	2.1	13 575	2.1	713	.7	7 333	10.0		
Scott	61 501	9.9	46 150	1.0	57 329	1.2	805	.6	35 646	3.0		
Sherburne	72 910	7.7	42 760	.6	83 516	.8	511	.8	32 248	2.7		
Sibley	115 116	4.9	144 034	.4	150 349	.6	958	.6	117 328	1.5		
Stearns	71 675	3.5	302 244	.7	101 356	1.0	2 984	.8	231 285	1.4		
Steele	92 578	4.0	96 432	.5	124 590	.7	774	.7	70 232	1.7		
Stevens	136 778	2.8	106 646	.4	214 580	.6	498	.7	79 054	1.3		
Swift	118 145	5.9	119 209	.6	161 311	1.0	741	.9	99 981	2.2		
Todd	48 952	5.8	112 540	.8	64 641	1.1	1 740	.8	91 291	1.9		
Traverse	146 272	5.5	68 215	.6	177 181	.8	384	.9	50 657	2.3		
Wabasha	78 706	6.2	93 514	.8	97 107	1.1	962	.8	70 393	2.4		
Wadena	47 012	11.5	52 948	.8	84 717	1.1	626	1.0	48 761	2.6		
Waseca	101 023	4.8	118 269	.4	166 811	.7	709	.7	90 191	1.4		
Washington	61 734	8.2	57 258	.6	87 685	.8	653	.7	41 771	1.8		
Watsonwan	116 424	5.6	120 131	.4	208 562	.7	576	.8	77 425	1.9		
Wilkin	173 939	4.2	100 540	.3	227 982	.6	442	.7	76 568	1.9		
Winona	86 496	5.4	122 064	.5	116 920	.7	1 043	.6	90 709	1.4		
Wright	59 630	5.8	92 839	.8	65 287	1.0	1 421	.7	70 594	2.8		
Yellow Medicine	116 975	4.5	125 126	.6	142 838	.9	876	.8	88 554	1.8		
Farm production expenses ¹ —Con.												
Geographic area	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms			
	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)		
Minnesota ...	22 175	1.3	639 336	.8	35 429	1.0	1 301 623	.4	50 093	.8	361 065	.6
Aitkin	137	16.7	577	5.8	304	7.1	4 300	8.6	158	15.1	247	4.9
Anoka	102	21.4	659	14.1	200	13.9	3 004	5.0	196	11.5	1 951	13.1
Becker	328	10.8	7 300	7.7	578	6.2	20 892	3.9	561	5.9	2 135	5.6
Beltrami	219	13.9	1 332	19.2	348	9.7	2 389	11.4	193	14.7	889	36.6
Benton	441	7.9	9 930	3.3	539	5.5	18 249	3.1	580	4.3	2 258	7.2
Big Stone	97	16.5	1 343	8.8	186	11.5	4 975	3.4	338	3.2	3 027	5.2
Blue Earth	326	9.2	17 919	1.4	397	8.0	40 589	1.8	849	2.0	7 849	3.7
Brown	388	8.5	16 275	3.7	479	7.7	34 396	1.7	944	2.3	6 178	2.5
Carlton	154	14.9	468	37.0	302	8.7	1 719	14.2	195	13.4	150	8.0
Carver	241	11.0	3 816	12.5	451	6.7	9 464	9.0	602	2.8	2 973	9.1
Cass	218	12.2	2 829	9.2	390	7.1	4 630	9.1	194	12.0	235	12.4
Chippewa	131	18.7	4 111	4.1	182	16.5	5 097	2.7	464	3.3	6 752	3.4
Chicago	233	12.1	473	18.9	360	8.3	2 703	23.1	419	6.6	1 436	10.1
Clay	163	16.0	4 466	12.1	292	10.5	12 228	3.9	611	3.0	7 615	2.1
Clearwater	167	16.6	1 416	23.9	271	10.2	3 340	12.7	257	11.5	468	11.2
Cook	3	—	(D)	(D)	6	—	11	—	5	—	1	—
Cottonwood	273	10.5	19 873	3.7	353	8.7	25 129	2.5	654	3.1	6 541	2.6
Crow Wing	179	13.6	1 268	26.1	377	7.2	3 569	9.8	228	10.8	330	12.2
Dakota	252	9.9	8 888	4.7	392	7.6	13 172	3.7	541	4.4	7 120	3.4
Dodge	208	12.2	5 900	8.2	346	8.5	12 777	4.5	487	4.3	4 705	2.9
Douglas	252	12.1	2 999	11.4	499	5.8	11 299	6.6	610	3.4	2 042	5.9
Faribault	236	9.6	9 839	8.8	302	7.8	19 893	3.2	781	2.1	8 395	2.4
Fillmore	567	7.7	10 204	5.6	867	4.4	22 102	2.8	1 118	2.6	6 367	4.8
Freeborn	328	9.0	12 966	3.6	449	7.3	18 488	2.6	870	2.9	7 963	2.5
Goodhue	558	7.2	12 145	8.5	815	4.6	23 900	3.0	1 108	3.0	5 966	3.7
Grant	62	21.6	1 702	8.3	119	17.2	2 966	11.0	308	5.8	2 933	5.6
Hennepin	133	17.5	1 176	20.9	260	11.0	2 504	8.8	309	8.3	3 747	2.6
Houston	321	11.6	5 341	11.1	614	5.4	10 163	5.0	695	3.9	2 813	5.5
Hubbard	134	18.0	424	28.2	195	12.6	968	32.6	188	11.6	2 160	8.0
Isanti	216	14.0	922	15.2	363	9.3	4 059	15.3	414	6.6	1 456	8.3
Itasca	140	14.2	421	32.6	263	7.2	575	35.9	161	10.6	98	16.8
Jackson	275	10.0	10 977	2.8	339	8.8	16 207	3.5	799	2.1	6 959	2.7
Kanabec	208	13.2	1 265	19.1	404	7.7	2 533	9.7	306	9.5	852	19.3
Kandiyohi	281	10.8	26 971	1.3	440	7.3	66 083	.7	730	3.5	6 778	4.6
Kitson	78	19.8	2 108	25.8	146	14.8	878	10.4	295	6.0	3 433	4.6
Koochiching	56	12.7	197	11.8	106	8.0	556	4.5	94	7.7	124	20.4
Lac qui Parle	167	12.8	12 671	3.1	309	9.7	9 929	4.8	637	2.6	5 583	3.7
Lake	11	7.9	20	11.9	18	6.8	17	9.7	5	10.3	2	24.5
Lake of the Woods	40	13.3	160	27.6	58	11.0	252	11.8	97	7.3	500	5.4
Le Sueur	244	11.6	9 914	2.6	384	7.5	11 338	5.1	585	3.3	3 401	5.2
Lincoln	201	14.5	7 645	9.9	301	10.4	9 420	3.9	453	5.9	3 462	5.9
Lyon	329	8.6	21 480	5.0	460	7.2	19 948	2.5	714	2.2	7 705	3.6
McLeod	313	11.2	4 684	10.9	553	6.7	8 023	8.6	780	3.5	4 255	4.3
Mahnomen	99	26.7	1 399	23.8	146	17.1	1 557	40.3	227	6.7	1 553	4.0

See footnotes at end of table.

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

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

Geographic area	Farm production expenses ¹ —Con.											
	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Marshall	86	19.3	1 136	23.5	244	11.5	2 301	17.9	639	3.8	6 279	3.6
Martin	365	8.1	25 599	3.7	414	7.2	41 916	2.2	856	2.9	8 881	3.3
Meeker	301	10.0	11 789	5.1	461	7.6	43 050	1.1	727	4.0	4 579	3.6
Mille Lacs	226	13.9	2 422	22.0	449	6.1	3 728	14.0	409	7.8	869	9.7
Morrison	684	7.3	12 041	5.7	1 232	3.5	58 769	1.4	1 191	3.7	3 755	6.0
Mower	352	9.4	10 103	5.0	509	6.1	18 729	2.2	913	2.7	7 709	2.7
Murray	344	8.8	14 711	5.3	433	7.7	13 781	4.5	723	2.2	7 337	3.6
Nicollet	301	9.0	16 504	4.2	392	7.1	42 839	1.6	606	3.4	4 542	3.8
Nobles	359	9.3	17 680	4.4	471	7.2	24 870	3.9	878	2.3	8 026	3.7
Norman	98	20.9	635	25.7	169	14.7	1 099	21.9	458	4.4	4 932	4.0
Olmsted	366	11.5	5 819	18.6	645	7.2	10 259	6.8	875	4.0	4 851	4.7
Otter Tail	894	6.3	11 740	5.7	1 373	3.4	33 448	3.4	1 718	2.9	7 245	4.8
Pennington	72	26.6	464	10.8	123	18.6	1 054	17.9	278	8.8	1 529	11.7
Pine	347	10.4	2 629	29.9	601	5.6	8 760	8.0	495	7.3	997	6.7
Pipestone	303	8.7	11 246	5.8	431	7.3	26 147	3.3	541	3.2	4 104	5.3
Polk	164	16.2	2 183	17.6	330	10.6	3 126	8.2	956	2.9	13 357	2.3
Pope	202	13.3	3 525	8.8	351	8.0	10 083	7.0	572	3.8	4 393	4.7
Ramsey	7	14.9	(D)	(D)	7	14.9	6	19.6	37	5.5	435	1.4
Red Lake	67	20.9	338	14.2	135	14.8	1 319	7.2	219	7.0	1 162	12.1
Redwood	371	8.9	25 977	2.9	562	7.1	28 223	2.7	993	1.7	9 625	2.8
Renville	262	11.5	25 183	2.3	373	9.3	49 624	1.4	999	2.3	12 912	2.5
Rice	375	8.9	16 701	2.4	602	5.6	25 741	1.9	737	3.5	5 166	3.3
Rock	319	9.3	23 152	4.7	394	8.3	22 449	3.8	548	4.6	5 491	4.7
Roseau	196	15.5	2 171	6.1	364	9.5	6 536	3.8	486	5.9	2 937	5.0
St. Louis	216	14.3	663	30.8	473	6.6	1 238	13.3	259	10.8	425	28.4
Scott	279	11.3	4 039	10.0	386	9.6	5 201	6.7	484	7.0	2 151	6.9
Sherburne	98	18.9	1 565	2.7	199	13.0	5 487	4.3	307	6.5	1 832	4.3
Sibley	380	9.0	13 270	3.8	488	6.9	32 809	1.4	835	2.9	5 293	3.7
1 Stearns	1 051	5.4	25 085	5.1	1 893	2.4	85 684	1.8	2 187	2.0	8 068	4.0
Steele	284	10.7	6 924	6.9	392	7.7	12 184	5.2	590	4.2	4 642	2.8
Stevens	114	13.6	9 551	6.4	172	12.8	14 147	1.8	344	4.8	4 673	3.4
Swift	138	18.2	7 201	11.3	237	12.9	20 166	3.3	554	3.8	6 906	5.5
Todd	598	7.8	7 535	7.2	1 082	3.8	33 021	2.2	1 227	3.2	2 815	5.1
Traverse	54	29.4	1 248	8.2	114	19.7	2 961	12.6	337	4.8	4 026	3.8
Wabasha	502	7.0	5 766	9.5	714	4.2	15 020	5.1	753	3.4	3 354	4.8
Wadena	141	15.5	3 517	3.3	330	6.9	21 172	2.3	393	6.2	1 293	6.1
Waseca	237	10.8	8 367	5.5	363	8.0	23 913	2.3	569	3.2	4 933	3.5
Washington	98	20.1	947	33.1	235	11.9	1 472	19.6	344	6.7	2 629	5.1
Watonwan	178	13.3	10 292	5.0	216	11.8	12 801	2.4	516	2.8	4 270	4.0
Wilkin	64	29.1	478	18.4	76	26.3	1 892	29.3	353	6.4	5 624	3.0
Winona	479	7.8	8 519	7.0	750	4.5	23 401	3.4	829	3.4	3 857	4.0
Wright	488	7.9	6 512	13.7	772	4.8	13 258	7.7	934	3.8	4 106	5.4
Yellow Medicine	206	12.5	7 616	9.1	309	10.1	11 647	4.7	664	3.3	7 647	4.5
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)
Minnesota	48 605	.8	491 584	.7	44 527	.9	406 227	.7	68 346	.6	306 292	.6
Aitkin	250	11.2	468	9.5	93	21.7	162	6.1	535	2.3	732	6.1
Anoka	232	8.6	1 228	26.8	164	14.8	663	15.9	422	4.0	976	12.9
Becker	488	6.6	3 986	7.5	380	7.3	3 223	10.9	1 015	2.2	3 047	3.9
Beltrami	295	10.6	722	8.4	97	19.2	447	26.8	582	3.3	1 205	9.1
Benton	564	5.2	3 558	5.4	556	5.4	2 414	10.6	810	1.6	4 080	2.5
Big Stone	331	3.8	4 481	4.8	306	4.8	4 729	7.2	395	2.4	2 565	2.9
Blue Earth	796	2.6	9 155	3.3	777	2.9	7 670	4.1	983	1.6	6 272	2.0
Brown	902	3.1	8 880	3.9	878	3.1	6 854	4.3	1 052	.9	5 826	2.7
Carlton	223	11.6	194	18.4	107	16.1	40	14.7	512	2.1	491	9.7
Carver	589	4.2	3 382	7.6	540	4.7	2 650	5.6	702	2.4	2 369	4.2
Cass	252	10.3	699	12.7	115	19.0	189	22.3	526	3.9	909	7.9
Chippewa	483	4.3	10 045	3.2	469	4.3	8 332	3.3	588	2.3	4 014	3.1
Chisago	452	6.5	1 714	11.0	359	7.2	1 245	12.6	725	1.7	1 399	14.2
Clay	604	3.1	11 689	2.1	576	3.8	11 887	3.0	754	2.8	5 112	2.1
Clearwater	232	11.8	1 126	12.0	137	19.4	505	12.5	529	2.3	1 044	10.7
Cook	6	—	1	—	2	—	(D)	(D)	10	—	6	—
Cottonwood	642	3.5	8 694	3.8	636	3.8	7 806	3.9	761	1.3	4 504	2.2
Crow Wing	269	9.6	917	20.0	164	14.8	411	27.6	549	2.7	903	8.5
Dakota	565	4.3	5 452	5.0	554	5.1	4 858	6.4	822	2.0	3 813	2.8
Dodge	494	4.1	6 433	3.3	452	5.7	5 606	4.1	664	1.4	3 610	2.7
Douglas	562	4.8	2 791	5.0	635	5.3	2 380	8.8	945	2.5	2 448	4.6
Faribault	752	3.0	12 284	3.0	703	3.3	8 338	2.9	869	1.0	5 963	2.6
Fillmore	1 041	3.0	9 440	5.5	990	3.6	6 297	5.5	1 392	1.6	5 635	3.1
Freeborn	834	3.4	11 088	3.7	803	3.6	8 925	2.9	1 084	1.8	5 564	3.4

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.											
	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)
Goodhue.....	1 071	3.6	7 858	4.9	1 024	3.8	6 434	3.9	1 390	1.9	5 381	3.2
Grant.....	305	5.7	4 698	6.4	336	5.7	4 766	4.5	425	2.8	2 928	6.3
Hennepin.....	319	8.5	1 371	13.0	229	10.7	1 174	15.1	519	3.1	1 836	6.6
Houston.....	660	4.5	3 474	6.2	664	4.4	2 456	7.1	926	1.5	3 047	4.5
Hubbard.....	180	11.6	2 028	10.8	108	16.9	2 893	6.2	357	4.6	892	8.6
Isanti.....	434	6.7	2 486	10.8	335	8.0	1 596	10.8	682	2.5	1 246	6.0
Itasca.....	168	10.4	2 265	11.8	84	19.6	67	31.9	394	2.2	582	11.0
Jackson.....	779	2.4	9 469	3.2	803	2.8	7 706	5.9	905	2.1	4 627	4.2
Kanabec.....	299	8.5	1 154	12.3	234	11.4	542	20.4	586	2.9	896	9.1
Kandiyohi.....	721	3.4	8 923	5.0	621	4.6	7 671	4.4	1 021	2.3	8 702	1.7
Kitson.....	326	5.5	7 432	4.0	324	6.5	6 647	4.2	485	3.9	3 310	3.2
Koochiching.....	99	7.6	262	22.1	47	15.4	72	33.4	208	1.9	264	6.9
Lac qui Parle.....	643	3.3	8 076	3.5	615	4.0	6 452	4.2	775	1.5	3 612	2.8
Lake.....	13	7.3	5	14.0	5	8.2	(D)	(D)	33	4.8	20	6.4
Lake of the Woods.....	107	5.8	1 173	4.6	72	8.2	668	10.5	181	2.4	586	3.7
Le Sueur.....	535	4.6	4 932	5.3	544	4.6	3 998	7.2	809	1.9	3 157	3.4
Lincoln.....	458	6.3	3 932	6.7	460	6.8	3 177	8.9	661	2.0	2 621	5.9
Lyon.....	699	3.3	8 825	3.0	659	4.3	7 010	6.7	890	1.8	5 153	4.2
McLeod.....	762	4.2	5 572	4.3	705	4.8	5 099	5.8	964	1.7	3 399	3.4
Mahnomen.....	234	6.4	2 802	8.7	173	13.3	2 821	12.6	304	6.5	1 514	7.6
Marshall.....	706	2.8	12 454	3.4	592	4.8	8 965	3.7	1 016	2.4	5 719	3.1
Martin.....	797	3.5	12 690	3.5	766	4.0	9 102	4.0	975	1.1	6 183	2.4
Meeker.....	663	4.5	6 376	3.9	613	5.2	5 249	3.5	935	2.2	5 695	2.4
Mille Lacs.....	424	5.9	1 220	11.4	302	9.0	719	11.2	674	2.2	966	7.5
Morrison.....	1 200	3.7	4 598	4.8	1 077	4.3	3 364	4.8	1 702	1.5	4 726	3.3
Mower.....	852	2.8	10 320	3.3	829	3.1	9 215	3.6	1 041	1.9	6 039	2.2
Murray.....	691	3.1	8 175	3.8	671	3.5	7 125	4.6	827	1.2	4 404	3.7
Nicollet.....	602	3.6	6 396	3.7	577	3.7	5 555	3.8	706	1.6	4 774	4.1
Nobles.....	860	2.4	8 821	3.7	848	2.9	7 398	4.0	989	1.4	5 466	3.5
Norman.....	466	4.9	8 591	3.7	408	5.8	8 516	3.7	596	2.7	3 738	2.9
Olmsted.....	772	4.7	7 054	6.0	798	4.8	6 309	6.7	1 225	1.8	4 024	3.7
Outer Tail.....	1 554	3.5	10 707	4.5	1 413	4.0	7 732	4.0	2 375	1.7	7 643	3.2
Pennington.....	336	6.3	3 516	7.1	285	8.6	2 367	8.3	464	4.5	1 564	7.5
Pine.....	513	7.0	1 894	11.1	345	9.6	804	25.2	864	2.1	1 456	6.0
Pipestone.....	458	5.1	3 654	7.0	500	4.7	3 838	7.9	653	2.4	3 725	4.0
Polk.....	952	2.9	20 481	2.1	885	3.7	19 719	1.9	1 262	1.6	8 768	1.7
Pope.....	517	4.4	6 400	6.5	577	4.1	6 133	7.1	766	2.1	4 025	5.4
Ramsey.....	33	6.1	51	4.9	31	6.4	18	4.9	52	4.9	243	2.2
Red Lake.....	222	6.9	2 328	12.0	169	10.8	1 509	7.8	304	6.6	1 232	12.7
Redwood.....	958	2.4	12 046	3.2	905	3.1	9 984	3.7	1 127	1.6	6 543	2.4
Renville.....	928	2.5	16 920	2.3	927	2.8	16 107	2.8	1 096	.7	9 323	1.9
Rice.....	631	4.9	4 933	4.3	661	4.3	4 698	4.6	1 068	2.2	5 318	4.2
Rock.....	568	4.4	5 934	5.3	533	5.3	5 289	6.4	649	3.0	3 479	3.8
Roseau.....	540	5.3	7 026	3.9	455	6.1	5 111	5.4	930	2.5	3 337	2.9
St. Louis.....	265	11.0	205	12.2	148	16.7	88	20.3	675	2.2	672	13.8
Scott.....	389	7.7	2 049	5.6	366	8.5	2 060	8.8	748	2.6	1 684	4.0
Sherburne.....	319	6.8	2 339	2.7	265	8.8	1 439	2.9	477	2.3	1 550	11.7
Sibley.....	781	3.8	8 152	4.3	772	3.9	6 749	4.1	930	1.7	4 781	2.7
Stearns.....	1 935	2.8	10 009	4.4	1 754	3.3	6 559	4.2	2 650	1.7	9 921	2.8
Steele.....	547	4.5	6 185	3.8	517	5.5	5 423	4.8	706	2.4	3 682	2.6
Stevens.....	348	2.0	6 388	4.2	361	3.9	5 646	4.5	465	2.8	4 180	4.8
Swift.....	570	3.7	10 969	5.3	540	4.3	8 279	4.5	673	2.8	5 846	3.6
Todd.....	1 149	3.8	4 653	9.4	988	4.8	2 451	5.9	1 625	1.5	4 355	3.3
Traverse.....	327	5.5	6 334	4.8	330	5.3	6 443	6.2	382	.9	3 033	2.4
Wabasha.....	708	4.3	4 179	7.0	661	4.5	3 336	4.6	936	1.7	3 402	3.8
Wadena.....	412	6.3	1 815	8.2	324	8.3	1 307	9.2	597	2.6	3 129	2.7
Waseca.....	554	3.8	6 156	3.8	488	4.4	4 913	4.8	701	1.2	3 768	2.7
Washington.....	340	7.8	1 241	7.5	306	8.8	1 150	8.8	618	2.6	1 505	6.5
Watonwan.....	502	3.3	6 427	5.0	478	3.8	5 379	4.3	555	2.0	3 191	3.3
Wilkin.....	361	5.3	10 991	2.9	371	4.1	9 073	2.7	413	3.6	4 087	2.2
Winona.....	724	4.7	4 103	4.4	738	4.1	3 372	5.5	999	1.8	4 542	5.1
Wright.....	803	5.2	4 568	8.5	764	5.4	3 383	10.8	1 324	1.3	3 681	6.2
Yellow Medicine.....	658	3.2	9 072	3.5	654	3.8	7 475	4.6	835	1.5	4 630	2.8
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)
Minnesota....	58 622	.7	107 403	.7	27 434	1.1	334 790	.7	5 188	2.9	29 103	1.7
Aitkin.....	400	5.8	323	9.3	103	20.3	756	4.6	34	43.2	67	5.9
Anoka.....	340	6.9	343	6.1	153	14.4	4 208	13.1	30	36.2	44	21.2
Becker.....	832	4.0	1 448	4.4	415	8.4	5 344	5.0	76	24.4	446	5.9
Beltrami.....	484	6.1	430	8.7	172	18.0	1 495	24.8	12	72.1	3	55.1

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.											
	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)
Benton.....	678	4.2	1 614	4.9	347	8.8	3 965	4.1	69	21.2	263	25.1
Big Stone.....	369	3.7	687	4.9	169	12.3	1 488	14.8	20	44.5	59	32.2
Blue Earth.....	799	3.4	1 760	2.5	384	8.0	5 850	2.8	48	25.6	191	8.8
Brown.....	902	3.3	1 998	3.3	443	7.9	4 894	6.0	142	16.1	621	13.4
Carlton.....	402	5.6	271	10.1	178	13.3	472	14.3	29	42.5	40	47.0
Carver.....	630	3.7	1 306	7.0	301	10.0	3 254	7.3	52	29.0	234	13.3
Cass.....	496	4.8	394	7.4	157	16.6	710	15.8	53	32.2	100	20.6
Chippewa.....	494	4.5	788	4.8	360	7.1	4 176	1.8	53	22.9	413	3.5
Chisago.....	611	4.2	572	7.0	203	11.8	2 433	7.0	60	28.2	264	35.5
Clay.....	600	4.6	1 197	4.9	373	7.0	7 458	3.1	107	16.1	1 254	3.6
Clearwater.....	419	5.7	410	10.3	110	21.8	1 106	15.8	40	41.1	24	23.3
Cook.....	8	—	4	—	4	—	(D)	(D)	1	—	(D)	(D)
Cottonwood.....	679	2.6	1 340	3.1	316	9.4	2 794	3.8	55	22.4	273	12.5
Crow Wing.....	498	4.5	416	9.7	151	13.0	822	20.6	42	38.3	26	58.6
Dakota.....	667	4.2	1 316	4.5	293	9.3	7 092	2.8	65	19.8	203	20.2
Dodge.....	594	3.3	1 364	3.7	278	9.2	3 934	3.3	60	26.4	222	13.4
Douglas.....	749	3.6	1 330	4.2	357	8.8	3 075	7.9	90	24.1	218	18.7
Faribault.....	738	3.7	1 541	3.3	377	7.3	3 487	4.8	84	20.7	406	4.8
Fillmore.....	1 274	2.8	2 327	3.2	506	7.6	5 582	9.3	64	26.4	210	14.8
Freeborn.....	947	3.2	1 680	2.9	498	6.9	4 005	2.7	93	17.5	379	10.3
Goodhue.....	1 232	2.7	2 506	3.8	554	6.5	6 591	3.5	63	26.6	181	15.5
Grant.....	358	5.2	555	8.4	146	11.1	2 179	6.3	36	26.9	127	18.9
Hennepin.....	437	6.2	652	10.1	207	11.9	8 883	2.8	56	28.9	73	12.0
Houston.....	826	3.2	1 455	5.5	335	10.6	2 708	6.5	43	31.2	100	16.2
Hubbard.....	293	6.9	407	7.2	98	18.6	2 219	5.1	24	50.1	(D)	(D)
Isanti.....	560	4.5	443	7.5	168	14.8	898	9.5	11	44.2	80	14.6
Itasca.....	340	3.9	197	13.0	98	18.3	105	31.4	8	87.5	51	96.1
Jackson.....	772	3.7	1 306	3.7	316	8.8	4 513	12.1	100	22.4	368	24.2
Kanabec.....	526	4.3	473	8.0	168	14.5	870	16.7	69	27.9	69	36.1
Kandiyohi.....	875	3.0	2 514	2.2	409	7.7	10 605	.8	61	22.7	1 569	2.9
Kittson.....	421	4.8	621	4.3	252	7.8	3 658	4.5	70	24.2	212	17.2
Koochiching.....	141	6.0	89	8.2	49	14.7	359	12.1	9	46.1	5	55.8
Lac qui Parle.....	658	3.6	1 000	6.8	441	6.2	2 310	6.2	73	25.0	262	33.2
Lake.....	18	6.4	5	7.3	12	7.7	(D)	(D)	1	(D)	(D)	(D)
Lake of the Woods.....	142	4.7	150	6.6	57	10.0	528	8.6	16	23.2	47	24.2
Le Sueur.....	650	4.2	1 091	5.5	248	11.3	2 442	11.2	31	28.7	52	7.7
Lincoln.....	625	3.2	873	5.6	216	12.4	1 523	7.9	37	40.1	146	11.0
Lyon.....	807	2.9	1 437	3.7	365	8.1	3 493	2.7	79	22.0	211	12.7
McLeod.....	804	3.7	1 370	6.7	361	9.4	3 272	7.7	49	30.0	117	22.2
Mahnomen.....	293	5.7	404	10.4	172	14.9	1 861	11.1	28	44.0	56	31.6
Marshall.....	778	4.7	1 043	5.0	465	6.8	4 663	6.1	130	17.8	1 832	17.0
Martin.....	839	3.5	2 091	3.0	474	6.9	6 524	3.5	86	20.2	1 345	9.4
Meeker.....	776	3.8	1 991	3.7	311	9.9	4 581	3.0	40	27.6	203	5.6
Mille Lacs.....	569	4.4	587	8.7	222	13.0	715	23.0	68	29.6	55	27.0
Morrison.....	1 552	2.1	3 018	2.6	758	6.8	5 277	5.5	140	19.0	418	12.9
Mower.....	856	3.3	1 705	2.8	485	6.7	5 033	3.9	89	19.9	325	12.5
Murray.....	733	3.4	1 222	5.5	371	8.5	2 382	5.8	63	25.0	129	36.5
Nicollet.....	625	3.7	1 679	4.1	251	10.8	3 461	4.9	38	25.2	308	4.3
Nobles.....	880	2.8	1 512	4.1	459	6.4	3 776	9.6	89	22.6	636	27.0
Norman.....	468	6.0	987	13.3	307	7.3	3 808	5.3	87	16.0	998	4.3
Olmsted.....	1 009	4.0	1 648	8.7	496	9.2	4 125	4.5	26	43.8	86	10.3
Outer Tail.....	1 980	2.5	3 779	3.3	865	6.0	10 452	7.2	168	17.7	1 496	4.2
Pennington.....	395	5.7	474	11.1	170	15.4	658	7.4	28	45.3	164	6.3
Pine.....	740	3.8	838	4.8	299	11.0	3 176	12.5	46	34.4	24	18.4
Pipestone.....	602	3.2	1 413	4.1	374	8.0	2 075	6.7	19	50.9	165	23.4
Polk.....	1 047	3.4	1 910	5.0	663	5.2	15 625	3.2	171	13.4	1 203	5.8
Pope.....	617	3.1	1 288	4.8	310	9.6	2 270	4.1	63	23.3	271	5.2
Ramsey.....	36	5.6	49	4.4	21	7.0	1 647	1.2	5	13.0	80	1.9
Red Lake.....	274	7.5	365	7.5	106	20.2	866	7.6	18	53.9	103	8.6
Redwood.....	1 047	2.4	2 025	3.5	588	5.7	5 150	4.8	90	19.1	376	5.5
Renville.....	976	2.3	2 275	2.4	607	5.6	12 907	2.1	114	14.4	2 532	6.9
Rice.....	873	4.0	2 258	3.0	395	8.2	6 624	3.2	104	21.5	455	17.1
Rock.....	591	3.7	1 220	5.7	288	10.1	2 798	7.0	35	34.0	228	17.8
Roseau.....	750	4.0	855	5.2	310	9.6	2 075	7.4	83	22.5	137	22.7
St. Louis.....	471	6.3	257	12.8	210	13.8	913	41.1	51	29.2	37	20.0
Scott.....	632	4.5	845	6.1	289	11.9	2 166	13.0	73	26.8	130	23.5
Sherburne.....	374	5.4	926	4.2	140	15.3	5 032	6.7	22	29.8	103	3.8
Sibley.....	846	2.6	1 736	2.9	372	9.0	5 287	6.7	66	24.7	102	5.1
Stearns.....	2 403	2.0	6 255	3.6	1 131	4.9	10 750	4.7	172	18.4	609	20.4
Steele.....	645	3.9	1 208	4.6	260	9.9	2 513	3.7	37	29.9	289	4.4
Stevens.....	408	4.8	1 055	4.1	196	9.9	3 391	2.2	49	22.2	472	16.8
Swift.....	587	3.8	1 486	5.1	263	10.7	3 691	3.0	60	26.4	521	20.0
Todd.....	1 464	2.2	2 474	3.3	641	7.0	4 671	6.8	104	21.7	215	14.8
Traverse.....	336	4.7	610	5.0	136	12.8	2 072	4.2	36	30.6	141	17.3
Wabasha.....	838	3.2	1 807	3.9	428	7.9	4 091	6.5	65	29.7	206	9.9
Wadena.....	450	5.7	1 068	3.6	201	14.3	3 887	7.8	39	35.4	107	17.0
Waseca.....	598	3.6	1 392	3.3	255	9.2	4 045	3.7	51	27.4	214	7.0
Washington.....	434	6.5	528	7.0	197	12.2	13 208	2.3	56	22.7	1 776	9.2
Watsonwan.....	495	3.5	1 000	5.2	270	9.5	1 987	3.6	27	44.2	102	4.0
Wilkin.....	376	5.0	869	5.9	187	8.6	5 385	1.9	54	20.5	689	4.8
Winona.....	938	2.5	2 526	2.9	465	6.8	6 431	5.0	83	20.4	457	17.7
Wright.....	1 198	2.7	1 609	4.3	493	8.2	4 376	5.0	75	24.2	173	16.0
Yellow Medicine.....	728	3.3	1 111	3.5	385	7.6	2 792	5.9	25	18.1	122	1.1

See footnotes at end of table.

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

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

Geographic area	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)
Minnesota	63 378	.7	428 577	.7	30 080	1.1	133 906	1.1	42 431	.9	499 899	.8
Aitkin	448	4.7	904	9.7	91	20.2	193	16.2	221	11.9	777	14.4
Anoka	321	6.1	1 171	6.6	29	31.6	139	7.9	142	16.6	915	13.0
Becker	938	3.0	4 923	4.3	272	12.0	802	11.1	602	6.3	5 415	5.8
Beltrami	575	3.4	1 539	7.6	115	21.1	258	24.4	229	14.2	1 017	18.8
Benton	764	2.7	4 352	5.2	246	12.2	858	8.8	431	7.9	3 986	7.5
Big Stone	381	3.2	3 971	8.6	204	11.3	813	11.9	322	5.2	3 716	6.5
Blue Earth	912	2.6	7 937	3.1	367	8.4	2 129	7.9	636	4.8	10 290	4.1
Brown	997	2.0	7 976	3.2	434	8.5	1 868	10.7	693	5.3	10 453	5.3
Carlton	460	3.4	871	11.5	99	19.0	117	21.6	204	12.4	886	12.7
Carver	713	2.3	4 401	5.4	294	10.8	845	13.0	408	8.1	3 596	9.2
Cass	490	4.6	1 427	10.7	104	21.0	129	18.9	250	11.4	1 307	17.8
Chippewa	544	3.7	5 156	6.7	276	11.1	2 139	11.6	407	6.7	8 636	4.0
Chisago	615	4.1	1 732	7.5	234	11.6	439	11.1	409	7.5	2 474	12.1
Clay	742	3.2	7 817	2.1	386	6.9	3 249	4.9	586	4.8	8 668	2.9
Clearwater	457	5.4	1 313	10.9	140	18.5	365	32.4	282	9.4	1 814	19.1
Cook	9	—	10	—	1	—	(D)	(D)	2	—	(D)	(D)
Cottonwood	709	2.3	6 595	3.4	398	7.7	1 611	8.5	601	4.3	10 837	3.0
Crow Wing	478	5.0	1 383	11.2	180	15.3	150	25.8	265	10.3	1 470	15.4
Dakota	696	3.8	5 140	2.9	386	7.9	2 902	7.1	417	6.0	6 106	4.9
Dodge	656	1.9	5 306	3.7	387	6.2	1 749	5.0	464	5.2	6 581	3.6
Douglas	948	2.5	4 734	6.5	480	7.2	944	13.5	514	6.9	3 799	8.4
Faribault	790	1.7	7 685	2.8	407	7.5	1 960	8.1	705	3.2	11 243	3.4
Fillmore	1 319	2.0	7 831	3.4	721	6.1	2 261	7.9	887	5.2	9 305	5.5
Freeborn	990	2.6	8 069	2.8	559	6.5	2 230	8.4	744	4.7	9 966	3.9
Goodhue	1 281	2.6	8 369	3.9	808	5.3	3 785	4.9	887	4.7	10 084	4.4
Grant	394	4.3	3 713	8.4	238	9.7	1 148	8.1	293	7.0	4 748	4.5
Hennepin	458	5.3	2 277	9.9	147	15.5	281	16.6	226	11.9	2 025	15.0
Houston	875	2.4	5 639	5.4	492	7.5	1 384	15.1	615	6.4	4 369	8.6
Hubbard	333	5.8	1 762	6.5	98	21.5	(D)	(D)	197	12.2	1 446	9.5
Isanti	588	4.5	1 582	8.9	175	15.4	373	9.9	319	10.4	2 197	9.3
Itasca	318	4.9	785	13.2	76	21.8	165	50.7	121	16.5	377	27.5
Jackson	867	2.5	6 979	4.2	472	7.2	2 235	11.1	646	4.9	7 865	7.0
Kanabec	568	3.3	1 604	10.8	159	16.7	150	26.0	333	8.4	1 923	15.1
Kandiyohi	966	3.0	8 616	3.4	479	6.7	2 895	5.1	630	5.5	11 692	3.5
Kittson	424	4.9	3 600	4.8	266	7.2	2 200	16.4	347	6.5	4 315	5.4
Koochiching	180	3.7	433	9.0	33	19.7	30	14.0	95	9.0	395	11.8
Lac qui Parle	718	3.0	5 843	5.1	361	8.6	1 062	10.7	527	5.2	6 935	4.0
Lake	23	5.8	35	9.5	4	15.1	3	15.2	5	13.2	(D)	(D)
Lake of the Woods	172	2.7	750	6.4	67	9.9	227	8.4	107	7.0	704	11.3
Le Sueur	776	2.3	4 706	4.1	343	8.1	1 309	21.9	482	5.8	6 089	7.5
Lincoln	615	3.0	4 149	5.9	274	10.6	856	18.3	451	6.6	4 954	6.6
Lyon	843	2.7	6 278	4.5	400	8.6	1 464	10.0	637	5.9	8 312	6.5
McLeod	908	2.5	5 579	4.6	471	7.9	1 189	14.3	562	6.7	4 545	7.7
Mahnomen	272	9.4	2 462	19.0	162	15.0	516	9.2	259	8.7	2 184	9.8
Marshall	886	3.6	6 279	4.5	451	7.4	2 799	12.3	673	5.0	6 477	5.5
Martin	899	2.6	9 574	2.7	421	7.9	2 446	8.2	742	4.1	13 494	4.5
Meeker	858	3.1	5 639	3.7	441	7.8	1 736	9.8	569	5.9	5 801	6.0
Mille Lacs	606	3.6	1 987	11.6	257	11.6	260	12.0	352	9.2	1 930	17.6
Morrison	1 586	2.4	7 598	4.6	756	6.7	1 635	10.6	930	5.5	6 612	5.1
Mower	951	2.9	8 199	3.4	573	6.3	3 215	5.4	714	4.4	9 258	3.7
Murray	772	2.8	6 686	4.3	468	6.9	1 424	10.4	600	5.3	8 424	5.0
Nicollet	653	3.1	5 822	3.4	324	9.7	1 648	15.8	545	4.9	8 972	5.6
Nobles	938	2.6	8 245	4.1	435	7.3	1 750	10.4	757	3.9	9 314	4.7
Norman	557	3.9	4 616	4.4	262	9.5	1 905	4.9	416	6.4	6 178	5.3
Olmsted	1 101	2.8	5 968	5.1	515	8.8	1 687	7.8	628	6.9	5 801	8.1
Otter Tail	2 250	2.1	12 736	3.8	1 163	5.4	4 378	4.9	1 423	4.5	11 032	5.0
Pennington	429	5.3	2 134	12.2	231	12.3	1 023	5.1	250	9.7	1 866	10.6
Pine	801	2.9	2 622	7.5	222	14.2	719	17.2	488	7.3	2 967	10.7
Pipestone	640	2.3	5 152	4.6	385	7.2	1 158	10.4	477	6.0	6 835	7.2
Polk	1 199	2.3	12 079	2.5	631	6.0	4 962	3.0	897	4.5	13 929	3.0
Pope	669	3.0	4 597	3.7	370	7.8	1 940	11.9	442	6.3	4 752	5.0
Ramsey	44	5.2	226	2.8	9	10.6	(D)	(D)	10	8.8	(D)	(D)
Red Lake	294	7.1	1 576	12.5	131	13.8	159	12.1	212	10.8	1 348	15.2
Redwood	1 087	2.0	9 002	4.3	559	7.0	1 928	10.9	851	3.9	13 147	3.5
Renville	1 033	1.9	11 525	3.1	574	6.3	4 161	4.3	846	3.8	19 220	2.1
Rice	991	3.0	7 401	4.6	482	7.6	2 229	5.2	503	7.1	9 785	4.4
Rock	623	2.9	5 508	5.0	334	10.0	1 948	7.3	487	5.4	6 898	4.9
Roseau	849	3.4	3 878	3.8	374	8.3	1 788	5.3	620	6.0	4 066	6.3
St. Louis	567	4.9	881	9.7	76	24.6	42	38.6	184	15.3	395	25.7
Scott	695	3.9	2 708	5.3	230	13.7	742	12.8	346	9.3	3 392	8.9
Sherburne	416	5.1	2 141	4.8	136	14.7	806	3.1	233	10.5	2 546	10.5
Sibley	908	1.9	7 149	4.1	453	8.3	2 029	6.8	600	5.9	7 745	5.6
Stearns	2 523	1.7	16 748	3.5	1 448	4.2	4 260	6.9	1 665	3.8	16 186	6.0
Steele	664	3.3	5 043	3.2	315	9.3	1 554	12.4	461	6.1	5 870	5.4
Stevens	417	4.2	5 118	3.2	237	8.7	1 975	5.3	325	7.2	5 937	5.7
Swift	667	3.2	5 835	5.3	370	8.6	2 498	13.9	492	6.4	7 748	8.2
Todd	1 528	2.2	6 629	7.5	681	6.9	2 011	6.0	942	4.9	6 126	6.0
Traverse	365	3.3	4 111	6.6	235	10.3	1 279	5.6	291	7.6	4 752	5.5
Wabasha	851	3.2	5 670	4.7	576	6.5	2 493	4.6	691	4.8	6 348	5.4

See footnotes at end of table.

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

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

Geographic area	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)
Wadena	526	4.3	2 810	9.0	200	11.1	920	5.7	295	9.5	1 646	7.2
Waseca	614	3.4	5 235	3.5	303	9.0	2 049	3.9	491	5.0	6 312	5.3
Washington	497	5.3	2 650	6.6	232	12.2	1 379	4.4	211	11.6	2 234	8.2
Watonwan	538	2.7	4 869	4.2	298	9.7	2 601	4.3	420	5.7	7 894	4.0
Wilkin	380	5.3	5 601	3.3	179	11.2	3 771	4.4	292	8.6	7 206	3.8
Winona	938	2.4	7 471	3.5	509	6.0	2 325	7.0	615	5.6	6 890	6.7
Wright	1 255	2.2	5 565	5.3	497	8.2	1 558	9.4	713	5.4	5 536	9.1
Yellow Medicine	782	2.7	5 889	4.1	402	7.9	1 420	10.2	572	5.3	8 520	5.7
Farm production expenses ¹ —Con.												
Geographic area	Cash rent				Property taxes paid				All other farm production expenses			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Minnesota	27 246	1.1	554 892	.9	67 831	.6	167 927	.8	67 792	.6	599 485	.6
Aitkin	95	18.9	213	27.3	586	.8	538	8.1	491	3.8	1 370	8.9
Anoka	91	20.9	806	17.2	467	1.0	940	5.8	413	3.4	3 184	4.7
Becker	288	10.7	3 413	14.6	1 062	1.4	1 809	4.8	976	2.4	7 106	3.9
Beltrami	117	20.8	401	9.9	656	.8	716	6.2	536	4.9	1 471	11.8
Benton	248	11.1	1 441	10.8	803	1.7	1 642	4.1	774	2.5	6 733	3.0
Big Stone	245	7.9	4 577	8.2	376	3.3	1 235	6.0	414	1.4	3 926	6.5
Blue Earth	501	6.4	15 990	5.0	907	2.8	3 581	9.6	970	1.8	12 130	2.1
Brown	519	7.1	10 601	6.7	946	2.7	3 064	5.0	1 045	1.1	12 553	4.1
Carlton	104	18.4	128	18.7	526	.7	555	7.1	455	4.0	890	7.0
Carver	322	8.6	3 553	7.0	712	2.7	2 048	6.2	738	2.0	5 685	4.6
Cass	79	21.8	137	27.8	590	1.0	587	6.5	509	4.3	1 560	10.1
Chippewa	363	7.2	12 609	6.3	505	5.3	2 247	8.7	562	2.8	5 892	3.2
Chisago	208	11.4	1 141	20.0	735	1.7	1 306	6.6	710	2.5	2 738	9.1
Clay	434	6.1	15 479	4.1	746	3.4	2 710	4.8	824	2.4	10 806	3.1
Clearwater	175	15.3	373	12.0	538	2.7	640	9.7	518	3.5	2 018	12.6
Cook	1	—	(D)	(D)	11	—	9	—	9	—	25	—
Cottonwood	432	6.8	10 679	5.2	709	2.7	2 703	5.6	770	1.2	9 554	3.3
Crow Wing	139	15.6	119	20.8	593	.7	539	4.8	519	3.7	1 559	10.7
Dakota	330	7.4	7 022	8.0	794	1.9	2 368	4.1	818	2.0	6 801	3.0
Dodge	300	7.8	8 643	7.1	615	2.4	2 057	5.7	661	1.4	8 407	2.6
Douglas	306	9.1	1 819	12.2	1 031	1.0	1 390	4.9	997	1.9	5 999	5.4
Faribault	517	5.8	19 794	3.8	773	2.9	3 064	5.0	849	1.8	11 487	4.3
Fillmore	403	8.9	6 304	9.1	1 466	1.7	3 486	4.2	1 484	1.6	11 014	4.8
Freeborn	551	5.5	14 239	4.3	985	2.9	3 375	4.9	1 078	2.0	9 863	1.9
Goodhue	586	5.9	10 722	5.5	1 346	1.8	3 681	3.9	1 365	2.0	12 351	3.6
Grant	185	10.6	5 123	8.4	436	2.8	1 946	4.7	423	3.3	4 292	8.6
Hennepin	133	15.1	1 478	10.2	533	2.9	1 886	12.9	531	3.2	4 251	4.4
Houston	309	10.5	3 459	7.7	906	2.1	2 067	5.1	904	2.0	9 004	6.8
Hubbard	143	15.0	1 208	32.8	429	.7	523	5.1	363	4.6	1 519	4.7
Isanti	167	13.4	1 133	11.4	712	2.1	1 063	5.9	656	3.3	2 068	5.4
Itasca	97	15.5	130	23.4	410	1.3	328	7.4	318	5.2	514	11.4
Jackson	549	5.5	13 564	5.3	784	3.8	2 555	5.7	918	1.8	10 419	2.7
Kanabec	142	16.1	439	11.9	594	2.2	799	6.8	533	4.0	1 590	8.5
Kandiyohi	365	8.6	10 132	5.0	1 041	2.0	3 168	5.4	989	2.4	13 443	2.7
Kitson	274	5.7	7 814	5.7	502	2.4	1 664	5.6	493	3.4	4 823	3.3
Koochiching	38	18.0	73	47.0	207	1.8	137	4.9	190	2.8	382	5.3
Lac qui Parle	374	7.3	8 237	6.7	698	3.2	1 849	6.1	757	1.9	6 715	3.1
Lake	3	14.8	(D)	(D)	36	4.6	.28	5.1	25	5.4	11	6.4
Lake of the Woods	55	9.6	388	17.6	196	1.5	343	4.7	172	2.8	819	3.8
Le Sueur	304	9.3	5 863	10.4	803	2.7	1 994	6.4	812	2.0	5 544	7.0
Lincoln	241	10.7	3 767	9.4	675	2.8	1 355	7.5	673	2.4	5 340	7.4
Lyon	451	6.8	9 178	8.3	823	3.0	2 400	7.4	884	1.8	8 930	4.4
McLeod	373	9.1	6 137	8.2	946	2.0	2 293	6.0	969	1.5	6 482	5.5
Mahnomen	157	12.9	2 271	11.8	330	2.7	950	8.4	304	6.5	2 243	8.2
Marshall	506	5.2	13 429	5.9	1 014	2.2	2 410	6.6	1 015	2.3	9 372	3.7
Martin	534	5.6	19 945	5.2	805	3.2	3 084	7.2	968	1.5	15 378	1.5
Meeker	303	9.0	4 729	8.2	979	1.5	2 309	4.6	915	2.2	9 436	2.5
Mille Lacs	197	12.5	410	15.1	675	2.3	1 016	7.5	640	2.9	1 907	8.3
Morrison	443	9.1	1 943	11.0	1 737	1.4	2 526	4.0	1 668	1.8	10 114	4.4
Mower	475	6.7	12 623	5.6	1 026	2.2	3 371	4.0	1 076	1.6	10 334	2.7
Murray	395	7.8	10 246	7.3	722	3.6	2 134	6.5	803	1.7	7 487	3.7
Nicollet	396	7.0	9 736	6.3	628	3.7	3 020	6.3	705	1.6	11 003	4.7
Nobles	566	5.6	13 670	5.9	889	3.0	2 278	5.8	1 003	1.2	10 934	3.3
Norman	300	8.8	9 968	6.3	568	3.8	2 329	9.0	592	3.3	6 875	4.4
Olmsted	413	9.8	6 440	8.1	1 204	2.3	2 712	4.7	1 205	1.9	8 571	4.6
Outer Tail	817	6.5	8 001	8.1	2 546	1.2	3 835	5.1	2 399	1.6	17 271	5.3
Pennington	110	18.1	2 641	10.9	510	2.1	975	12.7	460	4.2	2 186	5.4
Pine	296	10.7	730	21.7	949	.6	1 176	5.6	828	2.6	3 508	10.8
Pipestone	383	6.9	5 829	8.1	626	2.9	1 549	7.1	667	1.9	8 469	4.4

See footnotes at end of table.

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

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

Geographic area	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)
Polk	691	5.2	28 079	3.4	1 247	2.0	4 430	4.4	1 288	1.6	16 455	3.6
Pope	260	9.9	5 173	9.0	749	2.4	1 688	6.1	748	2.1	5 659	4.5
Ramsey	9	11.8	9	13.9	51	4.9	148	8.8	49	5.0	1 052	4.2
Red Lake	89	21.6	1 245	10.5	360	2.8	539	8.7	301	6.1	1 926	8.9
Redwood	726	4.7	15 756	5.6	975	3.2	3 364	5.2	1 153	1.0	12 444	4.5
Renville	641	4.8	28 067	3.4	987	2.6	4 154	5.6	1 107	.9	20 446	1.5
Rice	355	9.0	6 776	7.4	1 141	1.5	2 847	4.5	1 057	2.3	7 145	3.6
Rock	332	9.7	9 623	8.3	596	3.7	1 793	9.5	698	1.2	8 149	3.3
Roseau	279	9.3	3 049	7.2	1 013	1.7	1 888	3.9	891	2.9	4 859	5.0
St. Louis	109	20.0	110	28.3	685	2.2	539	8.2	608	3.9	869	9.8
Scott	267	10.9	3 165	10.9	755	1.8	1 769	5.9	690	3.8	3 544	6.8
Sherburne	107	17.2	1 380	2.8	507	.8	905	3.7	451	2.9	4 196	2.5
Sibley	449	7.1	10 437	6.1	852	2.7	3 075	6.8	900	1.9	8 715	4.7
Stearns	731	7.2	5 152	14.3	2 911	1.0	4 613	3.1	2 769	1.4	21 386	3.4
Steele	355	8.1	6 844	5.6	707	2.6	2 074	4.4	720	2.2	5 796	3.9
Stevens	256	6.5	7 844	3.5	458	2.8	1 510	6.0	463	3.1	7 168	3.1
Swift	362	7.3	7 595	7.4	664	3.3	2 435	5.5	705	2.0	8 807	4.3
Todd	428	9.2	1 961	10.9	1 691	1.2	2 120	4.2	1 577	1.9	10 256	5.3
Traverse	202	10.3	7 456	8.2	303	6.9	1 313	5.4	384	.9	4 879	3.8
Wabasha	316	10.1	4 202	11.7	897	2.4	2 107	4.3	919	2.1	8 412	5.1
Wadena	152	11.4	882	5.0	616	1.5	811	5.3	560	3.8	4 398	10.1
Waseca	358	7.0	8 919	6.3	641	2.6	2 366	4.1	665	2.2	7 609	3.0
Washington	175	12.1	1 516	10.4	609	2.5	1 769	7.1	626	1.6	7 767	2.0
Watonwan	279	9.3	9 269	8.1	474	4.9	1 633	7.2	560	1.5	5 710	6.3
Wilkin	270	8.3	11 133	4.8	373	5.6	2 168	7.3	433	2.2	7 602	2.8
Winona	345	8.4	3 763	6.3	967	2.1	2 281	4.3	1 003	2.0	10 770	4.4
Wright	404	9.2	4 743	8.9	1 379	1.3	2 586	3.8	1 286	2.0	8 940	8.0
Yellow Medicine	451	6.4	9 802	5.7	806	2.6	2 641	6.5	838	1.8	8 169	3.6
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)
	Minnesota	73 375	.6	1 835 509	.8	67 545	.6	21 491 743	.4	60 726	.6	18 968 607	.4
Aitkin	587	.8	1 392	29.0	544	.6	81 090	1.3	517	.7	56 968	1.3
Anoka	473	.7	6 126	20.1	420	.6	39 909	1.9	363	.9	32 623	2.1
Becker	1 086	.7	25 762	5.2	980	.6	269 322	.8	825	.8	223 292	.9
Beltrami	656	.8	3 573	14.6	615	.8	120 736	1.5	542	.9	76 350	1.5
Benton	833	.8	22 550	4.0	770	.8	131 129	1.1	715	.8	113 719	1.1
Big Stone	420	.9	12 374	6.1	390	.7	227 048	.9	362	.9	207 388	.9
Blue Earth	1 038	.6	70 067	2.2	950	.6	370 410	.6	898	.6	356 956	.6
Brown	1 053	.9	50 937	4.5	974	.9	321 374	.9	953	.9	306 835	.9
Carlton	527	.7	500	82.4	503	.4	55 523	1.4	477	.5	39 376	1.4
Carver	779	.7	11 618	9.6	729	.6	125 988	.8	683	.6	117 514	.9
Cass	598	.7	4 602	20.9	540	.7	95 084	1.7	488	.8	61 142	1.6
Chippewa	618	.7	19 558	6.4	577	.7	297 971	.6	543	.8	287 385	.7
Chisago	761	.7	7 523	10.0	709	.6	84 160	1.3	633	.7	68 456	1.5
Clay	889	.7	25 170	5.1	807	.6	529 223	.5	697	.7	478 174	.5
Clearwater	570	.9	3 523	28.7	532	.8	114 659	1.4	482	1.0	76 510	1.5
Cook	11	—	18	—	11	—	946	—	11	—	538	—
Cottonwood	784	.6	38 831	2.9	732	.5	333 499	.6	681	.6	316 894	.6
Crow Wing	593	.7	875	(H)	547	.7	69 496	1.5	472	.9	44 096	1.7
Dakota	889	.7	18 888	5.4	808	.5	196 148	.7	731	.6	183 564	.7
Dodge	674	.7	26 310	4.2	612	.6	224 431	.6	568	.7	214 172	.6
Douglas	1 041	.9	10 694	12.3	954	.8	200 930	1.2	749	1.0	160 402	1.3
Faribault	878	.5	46 432	3.2	828	.5	388 825	.5	801	.5	383 623	.5
Fillmore	1 546	.8	35 388	4.7	1 384	.7	327 011	.8	1 233	.8	278 008	.8
Freeborn	1 151	.6	39 978	3.4	1 043	.5	351 342	.6	956	.6	335 774	.6
Goodhue	1 488	.6	34 945	5.7	1 355	.5	314 883	.6	1 233	.6	280 316	.6
Grant	468	.8	17 089	6.4	412	.8	251 089	.7	349	.9	231 834	.7
Hennepin	573	.8	8 556	8.2	511	.7	54 432	1.6	467	.9	48 671	1.6
Houston	955	.7	18 086	9.9	877	.7	186 799	.8	789	.8	154 015	.8
Hubbard	431	.7	2 609	14.8	394	.7	71 086	1.2	331	.9	52 725	1.2
Isanti	745	.6	2 569	23.6	693	.6	99 017	1.4	601	.7	86 592	1.6
Itasca	415	.8	753	61.8	388	.5	55 433	1.3	357	.6	38 106	1.5
Jackson	963	.8	43 595	4.1	886	.7	355 106	.7	839	.8	342 472	.7
Kanabec	625	.8	1 664	52.9	569	.7	68 054	1.4	533	.7	54 773	1.5
Kandiyohi	1 134	.6	30 581	4.8	1 011	.6	326 925	.7	852	.7	292 516	.7
Kittson	559	.7	3 331	34.9	523	.6	430 887	.6	404	.9	338 627	.5
Koochiching	213	1.4	291	81.1	198	.8	41 971	2.2	177	1.1	24 427	2.4
Lac qui Parle	790	1.0	31 661	5.0	734	.9	361 544	.8	678	.9	327 013	.8
Lake	37	4.5	47	15.6	32	2.3	1 606	7.6	26	3.5	1 098	7.8
Lake of the Woods	196	1.5	824	20.7	186	.7	78 126	1.2	156	1.1	53 479	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	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)
Le Sueur	878	.7	15 506	10.3	794	.6	183 523	.8	653	.8	163 535	.8
Lincoln	724	1.0	15 097	9.2	666	1.0	233 699	1.2	550	1.1	178 387	1.3
Lyon	930	.8	32 309	5.6	852	.8	365 967	.8	761	.9	338 234	.8
McLeod	1 008	.7	19 331	7.9	934	.6	222 561	.8	881	.7	207 771	.8
Mahnomen	341	.9	155	(H)	324	.9	152 524	1.0	290	1.1	132 212	1.1
Marshall	1 146	.7	8 213	23.0	1 086	.6	690 774	.6	809	.8	531 693	.5
Martin	987	.6	78 074	2.3	905	.5	398 209	.5	888	.5	386 932	.5
Meeker	1 016	.7	24 842	5.1	903	.7	248 780	.8	798	.8	225 722	.8
Mille Lacs	710	.7	3 747	27.6	664	.6	83 660	1.4	621	.7	67 356	1.4
Morrison	1 808	.7	29 333	5.9	1 671	.7	249 951	.9	1 552	.7	197 290	.9
Mower	1 124	.7	46 891	3.0	1 042	.6	375 487	.6	968	.7	360 159	.6
Murray	836	.9	25 973	7.3	775	.8	355 254	.8	748	.8	334 326	.8
Nicollet	723	.6	46 567	2.9	679	.6	233 200	.7	666	.7	226 478	.7
Nobles	1 021	.8	31 967	5.2	938	.8	365 961	.8	910	.8	350 661	.8
Norman	672	.8	7 148	30.0	634	.7	435 252	.5	523	.8	380 285	.5
Olmsted	1 316	.6	28 499	7.4	1 197	.6	244 678	.7	1 006	.7	206 649	.8
Otter Tail	2 647	.6	47 601	5.4	2 398	.6	595 303	.7	1 984	.7	491 486	.8
Pennington	529	.8	.26	(H)	498	.8	263 999	1.0	383	1.1	190 149	1.0
Pine	949	.6	5 227	24.2	902	.5	129 411	1.2	850	.6	95 706	1.1
Pipestone	690	1.0	32 389	4.3	615	.9	213 407	1.1	575	1.0	190 792	1.1
Polk	1 368	.6	24 697	7.4	1 294	.5	936 719	.3	1 088	.6	820 928	.3
Pope	826	.8	18 207	6.0	771	.8	268 108	.9	650	1.0	224 390	1.0
Ramsey	59	4.7	2 137	4.5	51	2.1	2 515	10.1	44	3.0	693	10.1
Red Lake	377	.8	2 664	24.9	333	.8	171 638	.9	255	1.1	127 015	.9
Redwood	1 168	.8	54 760	3.4	1 074	.7	472 615	.7	1 034	.8	455 195	.7
Renville	1 113	.7	63 493	2.8	1 051	.6	567 231	.5	1 027	.6	551 829	.5
Rice	1 190	.6	17 152	6.5	1 096	.6	208 613	.8	912	.7	184 682	.8
Rock	704	.9	28 884	6.2	639	.9	260 316	.9	624	.9	246 720	.8
Roseau	1 052	.8	3 632	30.8	963	.8	466 711	.8	733	.9	336 651	.7
St. Louis	713	.7	1 622	41.5	653	.6	86 902	1.4	599	.7	62 624	1.5
Scott	805	.6	9 408	9.1	730	.7	99 795	1.0	673	.7	91 205	1.1
Sherburne	511	.8	8 737	7.9	466	.7	77 099	1.0	422	.8	66 029	1.0
Sibley	958	.6	27 153	5.9	897	.5	282 890	.6	876	.5	270 951	.6
Stearns	2 984	.8	67 476	4.7	2 757	.8	492 359	.9	2 546	.8	421 559	.9
Steele	774	.7	24 589	5.3	710	.6	210 373	.7	642	.7	199 032	.7
Stevens	498	.7	26 522	3.5	453	.6	283 641	.6	402	.7	265 633	.6
Swift	741	.9	24 670	8.4	696	.8	352 100	.8	636	.9	323 844	.8
Todd	1 740	.8	20 548	8.5	1 610	.8	247 689	1.1	1 463	.8	193 372	1.2
Traverse	384	.9	17 315	5.9	368	.7	300 203	.6	336	.8	287 908	.6
Wabasha	962	.8	20 277	9.1	883	.8	183 722	1.0	795	.9	157 523	1.0
Wadena	626	1.0	5 526	14.7	584	.9	99 564	1.5	508	1.0	73 644	1.7
Waseca	709	.7	27 952	2.6	640	.7	213 468	.7	609	.7	206 532	.7
Washington	653	.7	14 163	6.2	582	.7	68 516	1.6	515	.8	58 476	1.8
Watsonwan	576	.8	38 023	3.2	533	.6	237 082	.6	512	.7	231 054	.6
Wilkin	442	.7	25 985	4.2	418	.6	435 320	.4	389	.7	415 243	.4
Winona	1 043	.6	30 159	4.0	964	.5	190 542	.7	896	.6	164 852	.7
Wright	1 421	.7	20 047	10.6	1 309	.7	201 132	1.0	1 204	.7	178 451	1.0
Yellow Medicine	876	.8	31 621	4.7	815	.8	380 068	.8	748	.8	350 326	.8
Geographic area	Irrigated land				Livestock and poultry							
	Farms		Acres		Cattle and calves inventory				Beef cows 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	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Minnesota	2 193	.8	380 394	.6	30 913	.6	2 395 456	.6	15 745	.6	409 184	.7
Aitkin	18	6.2	4 895	.9	323	1.2	14 215	2.1	255	1.5	6 007	2.5
Anoka	53	3.9	1 645	4.4	125	2.4	3 335	4.3	79	3.2	807	4.9
Becker	31	5.9	1 548	7.6	550	1.1	35 404	1.6	331	1.6	7 937	2.8
Beltrami	26	5.8	2 627	1.7	396	1.3	26 014	2.2	325	1.5	11 691	2.5
Benton	37	4.8	11 458	2.5	519	1.1	36 711	1.4	242	1.9	4 112	3.0
Big Stone	10	9.6	1 103	9.5	128	2.4	8 335	3.0	76	3.4	2 186	4.6
Blue Earth	8	7.6	610	20.1	229	1.8	17 408	1.5	88	3.1	1 558	4.8
Brown	29	5.6	2 952	4.1	343	1.7	35 765	1.3	87	3.7	2 418	4.1
Carlton	11	8.5	194	17.7	329	1.0	11 541	1.7	240	1.4	3 818	3.2
Carver	18	6.5	563	10.3	436	1.1	34 767	1.1	113	2.7	1 505	3.9
Cass	13	8.5	3 156	7.0	405	1.0	31 154	1.5	323	1.3	13 769	1.9
Chippewa	14	7.6	1 510	7.8	122	2.6	7 120	3.0	71	3.8	1 581	5.1
Chisago	18	6.9	1 049	2.9	346	1.3	13 834	2.3	210	1.9	2 980	3.5
Clay	15	7.1	3 944	1.8	241	1.8	17 855	2.0	148	2.4	4 657	3.7
Clearwater	16	5.7	6 994	.3	330	1.4	24 515	2.3	273	1.7	10 529	2.6
Cook	1	—	(D)	(D)	3	—	98	—	3	—	(D)	(D)
Cottonwood	6	5.9	670	.2	221	1.6	29 375	.9	119	2.5	3 521	3.0
Crow Wing	28	6.6	1 462	8.3	330	1.3	17 631	2.6	240	1.7	7 235	3.3
Dakota	193	1.7	41 386	1.3	304	1.4	32 991	1.0	118	2.6	3 014	2.4

See footnotes at end of table.

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

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

Geographic area	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)
Dodge	4	15.3	(D)	(D)	297	1.3	22 651	1.2	119	2.7	1 825	3.1
Douglas	23	6.9	2 245	4.3	476	1.4	31 134	1.8	191	2.4	3 852	3.4
Faribault	4	13.0	237	7.1	160	2.0	13 859	1.6	69	3.2	2 050	4.0
Fillmore	13	9.3	128	21.0	881	1.0	75 043	1.2	519	1.4	18 714	1.9
Freeborn	17	7.1	1 402	9.4	322	1.5	14 784	1.7	140	2.4	2 250	3.3
Goodhue	27	5.6	2 037	4.7	832	.8	75 521	.8	311	1.6	6 698	2.1
Grant	26	5.6	3 102	3.8	100	2.9	7 493	3.3	50	4.5	1 402	6.1
Hennepin	49	3.8	1 613	2.8	171	2.1	9 540	2.5	84	3.4	1 017	5.4
Houston	10	10.5	270	5.6	588	1.0	53 653	1.2	354	1.5	11 984	2.3
Hubbard	34	4.4	23 640	1.5	219	1.4	10 374	2.1	181	1.7	4 670	2.5
Isanti	27	5.9	1 296	12.4	269	1.6	8 527	2.4	176	2.1	2 172	3.9
Itasca	14	6.5	315	2.1	247	1.0	11 049	2.2	219	1.1	5 395	2.0
Jackson	5	12.8	36	7.7	205	2.1	16 864	1.4	110	3.1	2 928	2.9
Kanabec	7	11.7	(D)	(D)	401	1.1	21 261	1.9	279	1.5	6 619	2.4
Kandiyohi	38	4.7	8 932	2.7	398	1.3	26 894	1.6	155	2.3	2 817	4.0
Kitson	2	19.5	(D)	(D)	123	2.6	11 740	2.7	115	2.7	6 019	3.2
Koochiching	3	21.0	(D)	(D)	126	2.0	5 206	3.3	107	2.3	2 889	3.9
Lac qui Parle	18	7.3	2 811	8.0	198	2.3	15 490	2.5	124	3.0	4 365	3.7
Lake	3	14.1	3	14.1	20	4.0	235	8.9	15	6.0	(D)	(D)
Lake of the Woods	4	10.0	(D)	(D)	71	3.0	3 758	4.0	55	3.7	1 848	4.6
Le Sueur	8	10.6	(D)	(D)	297	1.6	21 755	1.5	128	2.7	2 183	5.1
Lincoln	3	14.8	287	20.5	304	1.8	27 264	1.8	178	2.6	5 469	3.5
Lyon	13	8.9	260	19.5	313	1.6	43 614	1.4	156	2.6	5 847	5.3
McLeod	12	8.5	394	10.9	464	1.2	33 898	1.5	156	2.4	2 154	3.4
Mahnomen	6	13.7	157	10.1	156	2.1	12 701	2.1	103	2.9	3 323	4.3
Marshall	12	6.8	816	4.9	270	1.8	16 311	2.1	205	2.1	5 907	2.5
Martin	10	9.7	697	9.5	207	1.7	21 628	1.7	87	2.9	2 106	3.5
Meeker	26	5.9	2 727	4.8	389	1.4	27 577	1.4	145	2.6	2 862	2.6
Mille Lacs	9	10.9	117	2.1	417	1.1	23 385	1.5	211	2.0	3 587	3.0
Morrison	70	3.8	13 786	3.0	1 167	.9	82 001	1.1	565	1.3	12 800	1.9
Mower	14	5.3	1 712	1.4	361	1.5	24 430	1.5	149	2.6	2 590	3.9
Murray	5	15.3	(D)	(D)	308	1.6	42 484	1.3	142	2.7	4 315	3.2
Nicollet	7	11.6	480	19.4	210	1.9	18 941	1.8	50	4.4	835	7.5
Nobles	—	—	—	—	313	1.6	45 779	.9	155	2.5	5 193	2.7
Norman	5	11.9	621	19.3	177	2.1	11 466	2.7	123	2.6	3 220	3.6
Olmsted	11	9.8	110	14.0	629	1.1	50 829	1.2	325	1.6	9 700	2.0
Outer Tail	164	2.4	48 264	1.4	1 359	.9	103 462	1.1	649	1.3	16 189	1.8
Pennington	5	12.8	(D)	(D)	151	2.6	8 158	3.2	119	3.0	3 386	3.8
Pine	20	6.6	3 332	.3	594	.8	33 079	1.4	379	1.3	8 282	2.1
Pipestone	13	8.2	3 044	4.5	373	1.5	39 955	1.5	221	2.1	9 769	2.1
Polk	27	5.3	6 794	2.6	336	1.5	26 586	2.1	232	2.0	9 359	2.9
Pope	90	3.0	29 207	1.4	377	1.5	31 155	1.9	210	2.2	6 530	3.2
Ramsey	19	6.7	171	2.3	3	23.4	13	23.4	2	25.0	(D)	(D)
Red Lake	4	14.1	(D)	(D)	146	1.9	11 900	3.2	105	2.5	4 602	4.0
Redwood	2	16.2	(D)	(D)	285	1.7	32 805	1.1	112	2.9	6 829	1.6
Renville	9	10.3	1 675	5.3	202	2.1	28 203	1.0	69	3.8	1 330	4.2
Rice	14	8.4	543	16.6	451	1.3	28 466	1.5	164	2.3	2 173	3.2
Rock	4	11.2	(D)	(D)	329	1.5	40 383	1.2	186	2.3	6 445	2.4
Roseau	8	14.0	200	20.5	378	1.6	26 021	1.9	299	1.9	9 393	2.5
St. Louis	43	4.5	547	7.7	384	1.1	11 308	2.0	316	1.3	4 435	2.1
Scott	17	7.7	393	12.1	311	1.5	23 047	1.5	114	2.9	1 788	4.3
Sherburne	93	2.8	25 724	1.6	172	2.0	10 130	2.3	98	3.0	1 536	5.9
Sibley	7	12.6	642	31.5	427	1.2	30 330	1.2	124	2.6	1 823	3.4
Stearns	188	2.5	30 305	2.6	1 870	1.0	167 662	1.0	478	1.7	8 935	2.8
Steele	8	7.8	968	14.8	310	1.5	18 367	1.7	100	3.0	1 081	4.1
Stevens	46	3.0	12 635	1.2	130	2.1	23 382	.9	62	3.4	2 623	2.5
Swift	62	3.5	19 947	2.3	197	2.2	18 196	1.9	103	3.2	3 365	3.7
Todd	53	4.6	8 324	2.6	1 067	1.0	65 537	1.3	504	1.5	10 046	2.4
Traverse	2	—	(D)	(D)	79	3.1	6 957	3.0	55	3.8	(D)	(D)
Wabasha	13	10.7	798	21.9	629	1.1	64 275	1.1	281	2.0	9 082	2.3
Wadena	64	4.4	14 212	4.1	348	1.5	24 602	1.9	192	2.3	5 149	3.7
Waseca	3	17.6	(D)	(D)	221	1.8	13 810	1.9	71	3.5	936	4.2
Washington	61	3.5	3 991	2.6	200	1.9	7 023	2.8	134	2.4	1 798	3.5
Watonwan	6	10.6	321	10.5	107	2.7	9 383	3.0	46	4.4	827	5.7
Wilkin	10	6.5	2 952	2.6	72	3.1	4 743	3.3	47	3.9	1 483	4.2
Winona	16	7.3	356	2.6	744	.7	82 531	.8	299	1.6	8 451	2.5
Wright	33	5.3	2 455	6.1	668	1.1	45 243	1.3	256	2.0	3 426	3.3
Yellow Medicine	5	13.9	576	17.2	227	2.0	21 537	2.1	126	2.9	4 799	3.9

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	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)
Minnesota	9 603	.8	541 650	.6	7 512	.6	5 722 460	.2	2 627	.8	161 212	1.1
Aitkin	51	4.2	1 446	5.5	17	7.5	186	18.0	16	8.0	743	15.2
Anoka	9	10.9	487	10.4	23	5.3	3 497	4.9	21	6.3	335	10.1
Becker	171	2.5	8 523	2.1	31	5.9	6 682	4.5	20	7.2	968	11.2
Beltrami	59	4.2	2 826	3.6	22	7.1	186	12.5	22	7.6	1 084	15.5
Benton	209	2.1	13 025	1.7	83	3.5	29 030	2.8	16	8.5	515	14.7
Big Stone	27	5.3	1 323	3.7	35	4.4	36 103	.9	11	10.4	457	15.9
Blue Earth	31	5.6	1 563	4.0	217	1.4	325 829	.3	44	4.7	2 083	7.1
Brown	149	2.6	8 192	2.0	204	1.8	227 511	.6	30	6.2	2 650	9.7
Carlton	55	3.7	2 302	3.1	21	5.8	380	10.0	20	6.3	512	8.2
Carver	226	1.7	13 569	1.4	64	3.5	20 158	3.5	25	6.2	655	10.5
Cass	69	3.7	2 409	3.9	30	5.4	11 402	4.0	27	6.0	912	8.4
Chippewa	16	7.5	757	4.8	75	3.0	37 535	1.7	22	7.6	2 527	11.2
Chisago	70	3.7	3 234	3.6	41	4.8	7 849	6.5	29	5.9	776	20.2
Clay	44	4.7	2 811	3.7	15	8.2	8 210	5.8	21	6.8	1 002	10.0
Clearwater	40	5.8	1 581	6.2	18	8.2	691	10.7	19	8.6	1 174	12.5
Cook	—	—	—	—	—	—	—	—	—	—	—	—
Cottonwood	23	5.7	1 562	3.2	132	1.8	138 938	.5	34	4.8	2 888	11.0
Crow Wing	50	4.8	2 210	5.0	39	5.1	4 588	10.6	25	6.3	1 112	9.4
Dakota	65	2.9	4 795	2.1	65	3.3	32 324	1.4	32	5.4	944	7.5
Dodge	99	2.5	6 854	1.7	83	2.3	80 100	.6	20	6.7	588	10.9
Douglas	220	2.4	10 176	2.2	71	4.1	19 548	4.1	30	6.4	1 434	12.0
Faribault	30	4.5	2 882	1.5	180	1.5	187 067	.5	44	4.1	1 337	5.9
Fillmore	282	1.9	16 033	1.4	202	2.0	140 188	.8	75	4.0	2 640	6.0
Freeborn	62	3.8	2 695	3.4	229	1.5	188 125	.6	49	3.9	2 038	8.8
Goodhue	352	1.3	26 602	.9	113	2.3	95 899	.8	94	3.1	3 910	5.8
Grant	30	5.9	1 648	5.2	29	5.5	18 222	2.7	12	9.7	4 799	1.4
Hennepin	49	4.1	3 002	3.2	24	6.6	2 537	10.2	18	8.2	649	13.9
Houston	188	2.1	10 551	1.8	102	3.0	36 230	1.9	28	6.2	1 159	9.5
Hubbard	25	5.8	1 068	4.4	19	7.1	1 402	4.6	20	7.2	1 350	22.2
Isanti	32	5.5	1 499	4.1	54	4.0	7 975	4.6	33	5.2	1 040	12.2
Itasca	15	7.1	338	10.8	16	5.8	262	8.8	22	5.1	390	6.4
Jackson	12	8.1	545	7.7	168	1.9	179 189	.7	46	5.1	2 934	6.6
Kanabec	69	3.7	3 064	3.6	42	4.6	9 406	2.1	28	6.1	1 662	16.1
Kandiyohi	159	2.4	7 819	2.0	98	2.6	90 627	.8	38	5.0	4 828	3.4
Kitson	5	16.4	223	19.1	5	9.6	(D)	(D)	11	10.2	857	13.8
Koochiching	11	10.1	181	11.4	4	17.8	269	19.8	5	17.9	315	23.6
Lac qui Parle	43	5.3	2 024	3.9	104	2.7	61 722	1.5	21	6.7	1 932	15.6
Lake	2	21.2	(D)	(D)	6	10.7	70	12.2	1	27.6	(D)	(D)
Lake of the Woods	7	13.1	221	14.2	5	11.7	256	2.2	5	12.2	130	11.6
Le Sueur	83	3.1	5 435	1.9	121	2.3	77 777	.9	35	5.4	1 491	8.4
Lincoln	59	4.4	3 481	3.3	79	3.3	59 672	.9	39	5.9	6 818	8.0
Lyon	37	4.8	2 280	3.9	218	1.8	176 014	.8	46	5.2	2 866	7.8
McLeod	192	2.1	10 135	1.7	88	3.1	25 876	3.3	25	6.6	1 077	14.2
Mahnomen	37	5.3	1 778	4.6	9	9.7	3 188	6.5	3	21.9	(D)	(D)
Marshall	34	5.9	2 066	3.7	19	7.1	1 246	21.4	24	6.6	2 000	9.7
Martin	25	4.6	1 543	4.0	225	1.2	489 024	.2	33	4.9	2 922	3.9
Meeker	126	2.6	8 182	2.0	119	2.6	43 315	2.3	45	4.9	2 273	6.7
Mille Lacs	125	2.6	6 121	2.6	51	4.7	4 118	12.5	30	5.9	823	10.9
Morrison	550	1.4	27 434	1.3	175	2.6	24 628	3.5	49	4.9	1 255	6.3
Mower	89	3.0	5 821	2.2	226	1.7	164 745	.9	42	4.8	2 072	7.4
Murray	60	4.0	4 696	2.7	194	2.0	109 288	1.2	46	4.8	8 638	3.0
Nicollet	90	2.9	6 230	1.9	164	1.9	218 318	.6	21	5.3	974	10.7
Nobles	43	4.3	3 197	2.7	264	1.5	224 050	.7	47	4.8	3 127	5.1
Norman	35	5.7	2 115	4.3	27	5.6	7 600	7.3	8	12.6	252	17.2
Olmsted	186	2.1	11 342	1.6	77	3.2	38 217	2.0	61	3.9	2 771	6.7
Otter Tail	579	1.4	30 344	1.2	111	3.1	30 322	2.2	83	3.6	3 401	5.2
Pennington	24	7.2	834	7.1	3	16.0	(D)	(D)	8	13.8	191	17.9
Pine	169	2.0	8 171	1.9	43	4.5	2 014	12.2	33	5.3	1 857	12.5
Pipestone	78	3.4	5 250	2.3	107	2.5	166 604	.7	60	4.5	6 817	6.2
Polk	69	3.5	3 663	2.7	18	7.0	6 418	5.0	18	7.9	1 120	11.5
Pope	141	2.7	6 795	2.6	44	4.5	27 438	1.3	21	8.1	1 456	12.0
Ramsey	—	—	—	—	—	—	—	—	3	23.4	16	22.7
Red Lake	25	5.3	1 387	3.2	6	14.2	678	20.1	11	8.8	1 533	4.1
Redwood	45	4.3	2 248	3.6	243	1.6	230 496	.6	38	5.1	2 446	11.4
Renville	65	4.2	2 781	3.8	158	1.9	258 970	.4	33	5.3	19 004	1.1
Rice	176	2.1	9 535	1.8	119	2.4	185 748	.4	47	4.5	1 441	11.0
Rock	45	4.5	2 965	3.1	188	1.9	149 178	1.1	38	5.3	1 531	7.5
Roseau	66	4.1	3 615	3.6	15	9.3	2 863	2.3	20	8.2	698	7.5
St. Louis	38	4.8	1 372	5.7	40	4.6	796	15.3	41	4.6	967	6.1
Scott	115	2.7	7 209	2.2	57	4.0	18 725	2.5	26	6.1	677	8.6
Sherburne	27	5.7	1 751	3.8	45	4.4	11 280	4.1	20	7.4	540	12.4
Sibley	162	2.0	10 152	1.5	158	1.9	111 484	.9	35	5.1	1 618	7.1
Stearns	1 120	1.2	62 793	1.1	330	2.0	92 800	2.0	57	4.7	1 985	6.0
Steele	123	2.5	6 023	1.9	117	2.5	78 004	1.0	32	6.0	928	10.2
Stevens	15	7.3	2 253	1.5	83	2.0	85 979	.7	27	5.2	1 609	11.0
Swift	51	4.7	2 727	3.9	46	4.3	23 789	3.2	10	9.4	356	10.7
Todd	463	1.7	21 757	1.6	116	3.3	16 115	3.8	80	3.8	2 987	6.1
Traverse	6	13.2	(D)	(D)	27	4.4	21 032	1.9	12	10.7	657	13.5
Wabasha	281	1.8	19 121	1.3	90	3.3	28 497	2.8	41	5.6	1 355	7.0

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			
	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)		
Wadena	124	3.0	5 607	3.0	26	7.0	922	12.1	29	6.0	1 526	8.9
Waseca	59	3.9	3 727	2.5	127	2.0	149 158	.5	43	4.8	2 106	8.8
Washington	33	5.7	1 212	6.3	19	7.5	2 054	9.0	32	5.2	1 532	6.3
Watonwan	16	6.9	741	6.3	120	2.0	142 713	.6	20	7.3	947	10.9
Wilkin	11	8.4	691	6.8	25	4.3	12 953	.8	5	11.1	191	13.6
Winona	378	1.2	28 559	.8	84	3.0	43 525	1.5	31	5.6	1 456	2.6
Wright	235	2.1	14 027	1.7	77	3.6	20 224	2.7	58	4.3	1 407	6.4
Yellow Medicine	37	5.3	2 289	3.6	128	2.4	120 116	.8	27	6.2	2 026	9.5
Livestock and poultry—Con.												
Geographic area	Layers 20 weeks old and older inventory					Broilers and other meat-type chickens sold						
	Farms		Total		Farms		Total		Farms			
	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)		
	Minnesota	1 892	.9	11 951 233	.2	621	1.2	28 456 532	.4			
Aitkin	29	5.4	(D)	(D)	6	12.8	120	19.2				
Anoka	22	6.4	711	17.0	4	15.4	(D)	(D)				
Becker	26	6.3	(D)	(D)	1	40.7	(D)	(D)				
Beltrami	23	7.0	524	9.0	3	17.3	238	19.6				
Benton	31	5.3	109 328	4.9	32	3.3	5 158 371	.5				
Big Stone	5	9.8	(D)	(D)	1		(D)	(D)				
Blue Earth	28	5.9	109 021	6.5	8	11.5	445	12.2				
Brown	16	8.7	(D)	(D)	2	—	(D)	(D)				
Carlton	33	4.3	1 034	4.6	4	14.0	703	18.8				
Carver	18	6.9	545	4.9	10	8.9	1 975	18.4				
Cass	31	5.2	667	6.4	5	15.6	672	15.8				
Chippewa	8	11.9	128	13.0	8	12.2	1 100	16.6				
Chisago	34	5.4	957	11.0	8	11.1	386	15.0				
Clay	11	8.0	658 259	(L)	2	19.3	(D)	(D)				
Clearwater	10	10.3	222 216	(L)	2	28.5	(D)	(D)				
Cook	1	—	(D)	(D)	—	—	—	—				
Cottonwood	8	9.6	(D)	(D)	9	7.8	546 530	(L)				
Crow Wing	29	5.5	998	9.4	11	10.1	(D)	(D)				
Dakota	29	5.8	1 912	18.4	16	7.1	2 456	10.5				
Dodge	16	7.1	(D)	(D)	—	—	—	—				
Douglas	18	8.4	439	10.2	6	16.5	37 474	31.0				
Fairbault	12	9.3	55 724	11.8	9	9.0	(D)	(D)				
Fillmore	52	4.7	1 397	5.8	13	9.4	16 380	18.9				
Freeborn	25	5.5	31 902	18.0	9	10.4	7 033	26.9				
Goodhue	44	4.4	1 230	9.0	27	5.6	3 494	9.2				
Grant	4	15.0	84	15.5	3	13.4	(D)	(D)				
Hennepin	13	10.4	313	12.5	3	16.8	112	18.5				
Houston	28	6.2	(D)	(D)	6	14.5	(D)	(D)				
Hubbard	12	8.6	201	10.3	1	29.1	(D)	(D)				
Isanti	35	4.6	791	6.3	12	8.3	717	13.7				
Itasca	22	4.8	344	5.7	5	10.6	349	11.0				
Jackson	13	10.5	(D)	(D)	6	13.8	(D)	(D)				
Kanabec	45	4.2	1 135	9.7	7	10.3	159	19.5				
Kandiyohi	21	6.8	400	11.2	5	11.3	1 324	18.9				
Kitson	4	16.2	188	21.5	2	26.6	(D)	(D)				
Koochiching	16	7.9	314	8.1	—	—	—	—				
Lac qui Parle	11	9.9	(D)	(D)	4	13.9	320	16.1				
Lake	2	21.2	(D)	(D)	3	17.4	138	17.6				
Lake of the Woods	12	7.7	305	7.7	1	24.7	(D)	(D)				
Le Sueur	23	7.3	1 129	15.1	7	12.5	832	18.0				
Lincoln	14	10.1	1 365	18.1	4	18.5	630	14.9				
Lyon	13	8.6	(D)	(D)	8	10.8	1 888	9.9				
McLeod	18	7.2	(D)	(D)	6	12.6	436	13.6				
Mahnomen	3	18.1	27	25.3	—	—	—	—				
Marshall	8	12.5	153	13.9	3	21.9	45	23.6				
Martin	20	6.5	1 945	10.7	3	15.5	(D)	(D)				
Meeker	31	5.8	(D)	(D)	11	10.2	3 025	15.7				
Mille Lacs	46	4.7	1 233	5.6	8	11.2	(D)	(D)				
Morrison	72	3.5	803 945	1.4	47	2.1	10 897 550	.3				
Mower	25	6.3	(D)	(D)	7	11.6	(D)	(D)				
Murray	12	8.1	554	16.6	1	41.8	(D)	(D)				
Nicollet	13	9.0	(D)	(D)	4	17.7	170	38.9				
Nobles	14	9.2	(D)	(D)	1	40.8	(D)	(D)				
Norman	7	13.7	297	18.4	3	17.1	360	9.4				
Olmsted	24	6.3	789	12.9	3	18.3	(D)	(D)				
Outer Tail	57	4.3	(D)	(D)	23	6.7	5 240	16.9				
Pennington	5	18.6	207	26.6	3	18.9	(D)	(D)				
Pine	60	3.7	(D)	(D)	4	16.5	(D)	(D)				
Pipestone	8	12.2	169	13.3								

See footnotes at end of table.

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

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

Geographic area	Livestock and poultry—Con.							
	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)
Polk	7	12.1	323	21.4	2	26.0	(D) 1 280	(D) 25.1
Pope	12	9.3	(D)	(D)	4	20.7	—	—
Ramsey	1	49.3	(D)	(D)	—	—	—	—
Red Lake	3	11.4	(D)	(D)	—	—	—	—
Redwood	23	6.3	43 733	8.8	7	10.6	(D)	(D)
Renville	12	10.3	(D)	(D)	6	14.4	2 217	28.6
Rice	37	4.8	1 101	5.9	15	7.5	5 106	12.2
Rock	13	9.8	1 134	17.2	4	15.1	(D)	(D)
Roseau	5	18.3	102	21.0	2	19.4	(D)	(D)
St. Louis	53	3.9	1 896	5.6	14	7.1	7 137	9.6
Scott	30	5.0	721	13.6	13	7.3	2 445	5.0
Sherburne	26	5.7	(D)	(D)	10	8.4	(D) 6 438	32.7
Sibley	24	5.7	(D)	(D)	9	11.4	8 859 329	.7
Stearns	96	3.3	752 405	1.6	45	3.2	(D)	(D)
Steele	19	8.1	53 956	16.8	4	19.0	(D)	(D)
Stevens	5	10.3	(D)	(D)	5	12.5	901	11.5
Swift	8	12.7	(D)	(D)	2	22.3	(D)	(D)
Todd	60	4.6	(D)	(D)	13	10.1	(D)	(D)
Traverse	—	—	—	—	3	18.6	270	26.5
Wabasha	28	6.8	(D)	(D)	17	8.9	(D)	(D)
Wadena	25	6.6	898	14.7	2	16.9	(D)	(D)
Waseca	18	6.6	(D)	(D)	8	10.8	450	12.1
Washington	31	5.6	680	5.6	8	10.5	7 361	33.1
Watonwan	6	13.4	(D)	(D)	2	26.5	(D)	(D)
Wilkin	2	24.5	(D)	(D)	3	20.0	1 859	22.5
Winona	27	6.4	2 141	13.2	14	8.6	3 221	13.0
Wright	36	5.2	(D)	(D)	9	10.7	(D)	(D)
Yellow Medicine	15	9.1	253	11.9	—	—	—	—
Geographic area	Selected crops harvested							
	Corn for grain or seed				Wheat for grain			
	Farms		Acres		Quantity		Farms	
	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)
Minnesota	37 630	.7	6 227 640	.4	783 739 207	.4	9 518	.7
Aitkin	24	6.6	912	6.4	79 172	6.7	1	(D)
Anoka	119	2.4	10 303	3.3	991 228	3.6	1	(D)
Becker	178	2.3	14 224	2.0	1 217 128	1.8	182	2.1
Beltrami	13	10.8	485	19.0	35 385	19.8	35	5.8
Benton	483	1.2	50 697	1.4	5 453 824	1.3	21	7.5
Big Stone	261	1.3	61 782	1.1	6 950 012	1.0	231	1.4
Blue Earth	762	.7	170 142	.6	23 407 774	.6	38	4.1
Brown	869	1.0	134 271	.9	17 852 548	.9	102	3.3
Carlton	5	12.4	(D)	(D)	(D)	(D)	—	—
Carver	469	1.0	48 877	1.1	5 950 584	1.1	82	3.2
Cass	50	4.3	4 350	7.0	406 141	6.9	—	—
Chippewa	458	1.0	117 119	.7	14 260 532	.7	109	2.6
Chicago	310	1.3	26 590	2.0	2 791 941	2.0	14	7.7
Clay	201	1.7	35 964	1.1	3 764 333	1.0	475	.9
Clearwater	27	6.9	2 296	6.2	170 426	6.2	66	4.2
Cook	—	—	—	—	—	—	1	(D)
Cottonwood	632	.7	149 057	.6	18 464 071	.6	23	6.0
Crow Wing	97	3.2	7 819	4.6	741 106	4.7	2	31.4
Dakota	445	.9	88 550	.7	12 697 826	.7	91	2.6
Dodge	424	.9	96 447	.7	14 079 226	.6	16	6.9
Douglas	439	1.5	39 168	1.6	4 172 034	1.6	297	1.9
Fairbaul	735	.6	198 827	.5	28 537 415	.5	25	4.8
Fillmore	976	1.0	136 491	.8	19 362 826	.9	7	12.7
Freeborn	780	.7	166 520	.6	23 788 926	.6	4	12.8
Goodhue	952	.7	124 130	.7	17 500 480	.7	34	4.6
Grant	207	1.5	42 413	1.0	5 601 168	.9	268	1.2
Hennepin	163	2.0	17 364	1.8	2 153 289	1.8	19	6.6
Houston	617	.9	67 237	1.0	9 110 078	1.0	9	8.4
Hubbard	47	4.0	10 303	2.4	1 166 249	1.9	4	17.9
Isanti	310	1.3	40 166	2.0	4 202 834	2.0	9	7.9
Itasca	11	7.5	1 195	12.9	95 715	11.6	4	13.0
Jackson	764	.9	164 853	.8	20 118 842	.8	10	11.7
Kanabec	192	1.9	13 979	2.7	1 399 133	2.7	3	18.3
Kandiyohi	640	.9	129 068	.8	15 242 715	.7	129	2.3
Kittson	24	4.9	3 245	2.9	275 587	2.9	265	1.1
Koochiching	4	17.5	157	28.2	12 570	28.2	9	10.5
Lac qui Parle	575	1.1	127 903	.9	15 048 534	.9	333	1.6
Lake	—	—	—	—	—	—	—	—
Lake of the Woods	1	—	(D)	(D)	(D)	(D)	59	3.1
							18 232	1.7
							722 500	1.6

See footnotes at end of table.

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

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

Geographic area	Selected crops harvested											
	Corn for grain or seed						Wheat for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Le Sueur	497	1.0	73 481	.9	10 073 169	.9	91	2.7	2 342	2.6	94 658	2.7
Lincoln	437	1.4	71 140	1.4	6 724 144	1.5	154	2.7	7 913	2.8	233 434	2.8
Lyon	675	1.0	154 986	.9	17 899 087	.8	121	2.7	5 140	5.3	157 654	4.2
McLeod	699	.9	82 991	.9	9 816 906	.9	165	2.2	4 674	2.4	174 922	2.4
Mahnomen	58	3.9	5 413	2.8	517 583	2.6	181	1.8	53 546	1.6	1 793 283	1.6
Marshall	43	4.1	8 101	1.9	592 211	1.9	541	1.0	302 837	.6	8 241 613	.6
Martin	804	.6	192 253	.5	27 488 924	.5	7	11.0	176	11.5	5 425	8.5
Meeker	593	1.0	98 655	.9	11 404 354	.9	136	2.4	5 726	2.1	183 976	2.1
Mille Lacs	280	1.5	22 293	2.2	2 320 433	2.3	16	7.2	531	8.5	12 487	8.1
Morrison	967	1.0	71 505	1.2	7 920 091	1.3	19	7.6	864	9.1	25 281	9.1
Mower	799	.8	169 284	.6	24 333 069	.6	16	7.1	764	7.4	28 329	6.6
Murray	673	.9	149 288	.9	16 266 307	.9	24	6.5	639	8.2	20 462	7.8
Nicollet	587	.8	104 077	.7	14 672 953	.7	79	3.0	2 289	2.6	89 121	2.6
Nobles	840	.9	166 327	.8	17 988 495	.8	17	6.9	363	6.7	13 465	7.2
Norman	134	2.1	16 053	1.3	1 254 597	1.3	365	1.0	175 570	.6	4 806 167	.7
Olmsted	1 723	.9	97 352	.9	13 600 896	.9	9	11.4	139	9.9	4 990	13.2
Otter Tail	1 108	1.0	116 693	.9	12 261 024	.9	556	1.4	72 930	1.4	2 505 426	1.3
Pennington	37	4.4	3 916	4.3	299 204	4.0	234	1.7	91 852	1.2	2 393 547	1.2
Pine	236	1.7	15 997	2.3	1 705 202	2.5	9	8.7	189	8.5	4 562	7.7
Pipestone	494	1.2	85 114	1.1	8 251 519	1.1	26	5.9	723	5.3	23 063	5.3
Polk	188	1.7	32 173	.9	2 662 860	.9	739	.7	374 715	.4	11 304 947	.4
Pope	457	1.3	84 360	1.0	10 644 297	1.0	246	1.9	18 173	2.1	597 727	2.1
Ramsey	2	21.7	(D)	(D)	(D)	(D)	1	—	(D)	(D)	(D)	(D)
Red Lake	57	3.1	6 294	1.9	548 090	1.8	151	1.8	54 013	1.0	1 591 712	.9
Redwood	949	.8	207 462	.7	26 441 989	.7	107	3.0	2 664	4.3	103 664	4.2
Renville	885	.7	221 254	.5	28 131 621	.5	194	2.0	6 652	2.3	259 999	2.2
Rice	642	.9	87 103	.9	11 982 090	.8	56	4.0	1 287	5.9	49 399	5.9
Rock	542	1.1	117 712	.9	13 822 875	.8	4	20.0	(D)	(D)	(D)	(D)
Roseau	39	4.2	4 280	1.8	377 585	1.7	403	1.4	152 717	.8	4 625 007	.9
St. Louis	4	16.0	(D)	(D)	9 850	21.5	5	12.7	27	19.0	650	18.6
Scott	342	1.3	37 174	1.2	4 964 882	1.3	59	4.0	1 894	5.1	66 224	5.7
Sherburne	199	1.7	26 579	1.5	3 106 412	1.5	8	10.6	261	11.5	6 477	15.1
Sibley	706	.7	113 065	.6	15 161 730	.6	157	2.1	4 116	2.7	153 809	2.7
Stearns	1 893	1.0	163 227	1.0	19 256 272	1.0	106	3.5	4 854	3.6	160 551	3.5
Steele	515	.9	96 425	.8	13 164 908	.8	26	5.8	612	11.6	24 874	12.4
Stevens	301	1.0	94 870	.6	12 746 945	.6	263	1.1	41 166	1.4	1 577 429	1.5
Swift	521	1.1	142 287	.9	17 195 074	.9	171	2.3	12 968	2.5	401 547	2.6
Todd	884	1.2	61 056	1.4	6 388 387	1.5	102	3.5	5 384	4.8	135 718	4.8
Traverse	220	1.4	63 946	.9	8 232 884	.9	275	1.1	77 398	.9	2 920 421	.9
Wabasha	642	1.1	69 158	1.1	9 853 273	1.1	16	9.3	588	12.1	21 322	11.0
Wadena	218	2.1	20 114	2.8	2 035 033	3.0	12	10.6	716	7.8	15 487	6.3
Waseca	534	.8	103 034	.7	14 570 926	.7	19	5.6	417	4.4	18 812	4.8
Washington	206	1.7	23 467	2.4	3 243 251	2.4	9	10.7	224	16.4	7 460	13.5
Watsonwan	479	.8	113 348	.7	15 864 385	.7	14	6.6	412	9.0	15 347	8.9
Wilkin	163	1.5	35 147	1.0	3 889 998	1.0	337	.8	174 736	.4	6 460 478	.4
Winona	691	.8	68 983	.8	9 638 038	.8	7	12.4	115	9.1	4 085	8.2
Wright	742	1.1	70 502	1.1	8 573 296	1.1	76	3.7	3 188	4.8	90 974	4.1
Yellow Medicine	661	.9	156 331	.8	18 719 985	.8	211	2.0	12 873	2.2	452 412	2.3
Geographic area	Selected crops harvested—Con.											
	Barley for grain						Oats for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Minnesota ...	3 910	.8	433 610	.5	21 915 338	.4	10 122	.8	296 188	.8	16 179 495	.8
Aitkin	9	9.8	468	4.4	18 750	5.4	48	4.4	974	6.4	42 228	8.0
Anoka	—	—	—	—	—	—	12	8.4	182	9.7	7 476	9.0
Becker	93	3.3	8 153	2.5	418 498	2.3	165	2.5	6 862	3.3	347 828	3.6
Beltrami	22	7.8	1 231	12.2	49 168	12.7	137	2.7	5 754	5.1	276 186	5.5
Benton	37	5.4	1 001	6.8	39 822	7.2	147	2.7	3 410	3.0	146 375	3.1
Big Stone	2	19.1	(D)	(D)	(D)	(D)	14	8.6	296	11.5	14 582	11.9
Blue Earth	1	38.0	(D)	(D)	(D)	(D)	57	3.7	935	3.6	64 666	3.8
Brown	10	10.0	223	8.8	14 480	9.6	154	2.6	3 165	3.2	194 087	3.2
Carlton	2	22.8	(D)	(D)	(D)	(D)	52	3.7	736	4.8	39 925	4.7
Carver	6	11.9	116	10.1	6 055	9.9	148	2.3	2 664	2.6	146 754	2.4
Cass	6	13.3	880	17.7	36 100	18.3	35	4.9	1 081	6.1	43 784	6.4
Chippewa	6	9.7	177	6.9	8 773	6.3	34	5.0	1 221	2.7	73 990	3.1
Chisago	2	18.1	(D)	(D)	(D)	(D)	72	3.6	1 387	4.8	56 147	5.2
Clay	158	1.9	25 420	1.1	1 390 043	1.1	48	4.3	2 374	5.0	122 113	4.4
Clearwater	49	5.0	3 705	5.4	137 878	5.0	124	3.0	6 191	3.4	291 720	3.7
Cook	1	—	(D)	(D)	(D)	(D)	1	—	(D)	(D)	(D)	(D)
Cottonwood	5	10.2	115	5.7	6 920	4.0	35	4.5	648	3.1	43 468	3.2
Crow Wing	5	16.1	147	18.7	5 100	19.0	70	3.8	2 151	5.4	98 284	5.7
Dakota	9	8.9	194	7.6	10 390	8.1	69	3.3	1 372	3.3	93 776	3.4

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	Selected crops harvested—Con.											
	Barley for grain						Oats for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Dodge	10	8.7	174	8.6	11 695	9.0	93	2.7	1 975	2.4	133 652	2.3
Douglas	69	4.1	2 694	5.0	128 138	5.3	230	2.3	8 993	3.0	488 187	3.3
Faribault	2	24.3	(D)	(D)	(D)	(D)	64	3.0	1 198	2.8	88 416	2.8
Fillmore	103	3.2	2 537	3.0	157 150	3.1	351	1.7	7 798	1.9	486 252	1.9
Freeborn	8	10.3	108	11.1	5 866	10.9	119	2.6	1 738	2.9	112 370	3.0
Goodhue	114	2.8	2 799	3.0	156 421	2.6	278	1.7	5 942	1.8	390 332	2.0
Grant	40	4.0	4 749	2.0	336 698	1.7	12	10.5	323	12.3	19 052	12.6
Hennepin	1	36.2	(D)	(D)	(D)	(D)	53	4.1	2 025	8.4	95 457	9.7
Houston	64	3.7	1 169	3.6	61 183	3.8	238	1.9	4 929	2.4	286 019	2.3
Hubbard	5	15.8	267	19.1	10 472	20.8	56	3.8	1 900	5.6	67 640	6.0
Isanti	1	41.2	(D)	(D)	(D)	(D)	40	4.8	746	5.9	36 322	7.9
Itasca	9	8.4	220	11.6	12 225	12.9	52	3.2	1 580	3.6	93 536	4.0
Jackson	1	39.9	(D)	(D)	(D)	(D)	47	4.2	921	4.4	60 699	4.7
Kanabec	17	7.5	861	9.9	36 969	9.1	61	3.9	1 441	4.9	75 079	5.3
Kandiyohi	21	6.1	427	5.1	19 023	5.1	135	2.6	4 509	3.5	234 453	3.3
Kitson	140	1.7	28 256	1.3	1 526 285	1.2	57	3.6	6 206	3.6	272 063	4.2
Koochiching	19	7.5	542	10.3	22 461	10.8	50	4.2	1 280	5.9	64 064	8.0
Lac qui Parle	2	24.4	(D)	(D)	(D)	(D)	34	6.1	603	7.4	30 430	7.4
Lake	—	—	—	—	—	—	3	19.0	(D)	(D)	(D)	(D)
Lake of the Woods	29	4.7	2 909	3.8	156 254	3.4	50	3.8	3 097	5.3	166 818	5.5
Le Sueur	10	9.2	113	7.4	7 310	8.2	69	3.7	1 118	4.1	71 649	4.4
Lincoln	12	9.0	303	7.2	15 470	6.7	55	4.8	1 460	5.7	84 887	5.7
Lyon	8	7.7	161	6.2	6 915	6.4	76	3.5	1 637	3.3	113 795	3.4
McLeod	18	6.9	418	6.8	20 904	7.3	184	2.1	3 686	2.3	225 837	2.2
Mahnomen	98	2.8	14 323	2.1	719 159	1.9	42	5.3	1 720	6.2	93 646	6.0
Marshall	321	1.4	62 069	1.0	3 187 363	1.0	134	2.6	8 493	2.7	423 660	2.7
Martin	1	—	(D)	(D)	(D)	(D)	82	2.6	1 639	4.1	117 581	4.2
Meeker	37	4.8	986	6.0	47 595	5.3	78	3.6	2 407	6.2	116 428	5.8
Mille Lacs	25	5.8	726	7.6	26 560	7.2	96	3.3	1 880	4.4	80 024	4.1
Morrison	108	3.3	2 484	4.0	122 383	4.3	337	1.9	7 603	2.4	386 431	2.6
Mower	24	5.3	495	6.2	33 705	5.6	152	2.4	3 229	2.8	221 925	2.5
Murray	17	7.7	502	6.9	25 054	7.7	123	2.8	2 853	3.2	174 005	3.1
Nicollet	3	12.6	60	18.9	4 300	15.8	85	2.9	1 611	2.8	111 844	2.9
Nobles	6	11.8	145	8.1	6 847	6.9	121	2.6	1 998	2.7	146 441	2.5
Norman	189	1.6	35 960	1.1	1 596 652	1.2	51	4.2	2 088	4.6	116 204	4.6
Olmsted	25	6.4	478	6.1	25 475	5.8	237	1.9	5 610	1.8	332 590	2.1
Outer Tail	168	2.6	8 367	2.8	422 095	3.2	662	1.3	26 095	1.6	1 379 874	1.6
Pennington	174	2.0	37 869	1.4	1 534 320	1.5	99	3.4	6 851	3.5	325 339	3.8
Pine	14	8.6	468	9.5	21 217	10.1	122	2.6	2 769	3.2	134 648	3.4
Pipestone	24	5.3	663	3.9	36 000	3.8	128	2.7	2 844	3.1	171 030	3.3
Polk	419	1.0	81 226	.6	4 319 963	.6	90	3.3	5 236	2.7	312 454	2.4
Pope	10	11.7	260	17.7	14 450	18.6	115	3.2	3 691	4.2	191 576	3.8
Ramsey	1	—	(D)	(D)	(D)	(D)	1	—	(D)	(D)	(D)	(D)
Red Lake	120	2.1	19 146	1.5	919 858	1.5	65	3.4	4 106	3.7	252 046	3.5
Redwood	5	—	115	—	8 110	—	78	3.2	1 347	4.2	90 325	3.8
Renville	9	11.1	217	12.6	10 890	11.7	73	3.3	1 373	3.4	100 166	3.5
Rice	21	6.7	254	8.2	11 601	7.5	169	2.3	2 973	2.6	191 792	2.9
Rock	3	14.9	114	7.8	6 668	10.7	62	3.3	1 413	2.7	101 237	2.8
Roseau	219	2.0	37 398	1.4	1 856 285	1.5	180	2.5	10 868	2.8	532 938	2.9
St. Louis	22	6.2	493	15.1	18 005	15.5	120	2.6	3 037	4.1	142 322	4.9
Scott	12	9.9	222	8.8	9 212	8.9	109	3.0	2 271	2.7	119 808	2.8
Sherburne	4	14.7	(D)	(D)	(D)	(D)	34	5.2	538	6.2	22 423	5.5
Sibley	8	10.2	151	14.2	8 570	10.0	142	2.2	2 472	2.2	150 659	2.2
Stearns	209	2.5	7 359	3.1	349 069	2.7	853	1.4	24 492	1.6	1 317 322	1.7
Steele	8	9.7	199	6.1	11 710	5.9	126	2.6	2 521	2.7	173 449	2.7
Stevens	6	8.5	752	7.1	38 633	5.6	12	6.7	431	7.6	27 604	6.5
Swift	8	5.6	328	2.2	16 591	.5	40	5.0	1 334	4.6	80 271	4.4
Todd	145	3.1	5 996	3.9	277 936	3.8	439	1.7	12 855	2.3	599 518	2.3
Traverse	29	4.9	3 009	3.9	181 478	4.2	6	11.6	2 016	18.2	99 750	18.3
Wabasha	76	3.8	2 020	3.8	118 428	3.7	233	2.2	6 053	2.4	399 759	2.6
Wadena	21	8.8	914	9.6	50 751	11.8	127	3.0	5 353	4.1	282 248	4.3
Waseca	1	—	(D)	(D)	(D)	(D)	55	4.1	991	3.9	75 459	3.9
Washington	8	12.0	167	12.9	7 654	12.3	53	4.3	1 325	5.3	58 341	5.1
Watowwan	1	—	(D)	(D)	(D)	(D)	40	4.6	654	4.6	40 075	5.2
Wilkin	94	2.1	14 683	1.3	916 568	1.3	23	6.1	1 090	9.1	64 100	8.8
Winona	52	4.0	1 008	4.7	57 604	4.8	279	1.6	7 296	2.2	418 184	1.7
Wright	31	6.2	551	6.2	24 578	6.5	180	2.5	3 582	2.7	167 850	2.9
Yellow Medicine	8	11.1	124	14.0	6 003	15.3	40	4.9	641	5.9	34 201	5.6

See footnotes at end of table.

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

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

Geographic area	Selected crops harvested—Con.											
	Sunflower seed								Soybeans for beans			
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Pounds	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Minnesota	588	1.1	99 245	.7	106 405 806	.8	31 292	.6	6 174 563	.4	233 714 926	.4
Aitkin	—	—	—	—	—	—	4	17.4	40	17.2	712	19.1
Anoka	—	—	—	—	—	—	53	4.0	5 450	4.1	150 284	5.1
Becker	10	9.3	755	12.5	1 129 150	15.0	136	2.2	58 733	1.2	1 800 879	1.2
Beltrami	4	21.0	272	26.6	167 000	31.8	2	31.3	(D)	(D)	(D)	(D)
Benton	4	17.0	84	18.2	60 392	20.9	172	2.4	16 856	2.3	579 905	2.2
Big Stone	—	—	—	—	—	—	325	1.0	101 532	.9	3 434 097	.9
Blue Earth	—	—	—	—	—	—	788	.7	176 854	.7	7 375 974	.6
Brown	1	—	(D)	(D)	(D)	(D)	869	1.0	138 492	.9	5 775 575	.9
Carlton	—	—	—	—	—	—	—	—	—	—	—	—
Carver	—	—	—	—	—	—	327	1.4	34 332	1.2	1 325 644	1.2
Cass	—	—	—	—	—	—	3	20.8	80	25.5	2 800	19.9
Chippewa	—	—	—	—	—	—	473	.9	126 456	.8	4 433 156	.8
Chisago	4	15.7	28	18.8	16 700	17.5	196	1.9	17 098	2.6	499 979	2.3
Clay	38	4.7	5 993	3.2	7 942 053	3.3	399	1.1	104 972	.8	3 459 567	.8
Clearwater	4	18.7	172	19.6	194 000	20.4	13	9.7	846	11.8	22 698	10.9
Cook	—	—	—	—	—	—	621	.7	160 915	.6	6 359 457	.6
Cottonwood	—	—	—	—	—	—	6	13.8	592	7.5	15 092	4.2
Crow Wing	1	44.6	(D)	(D)	(D)	(D)	414	1.0	64 453	.9	2 696 216	.9
Dakota	—	—	—	—	—	—	782	.7	149 014	.7	6 448 587	.6
Dodge	—	—	—	—	—	—	406	.9	87 698	.7	3 720 840	.7
Douglas	—	—	—	—	—	—	379	1.7	47 734	1.8	1 631 375	1.7
Faribault	—	—	—	—	—	—	710	.6	168 806	.5	7 367 588	.5
Fillmore	—	—	—	—	—	—	650	1.2	77 107	1.1	3 419 361	1.1
Freeborn	—	—	—	—	—	—	782	.7	149 014	.7	6 448 587	.6
Goodhue	1	36.1	(D)	(D)	(D)	(D)	687	.9	83 718	.9	3 631 318	.9
Grant	1	—	(D)	(D)	(D)	(D)	294	1.1	95 766	.9	3 484 302	.9
Hennepin	—	—	—	—	—	—	102	2.7	13 776	3.4	515 106	2.9
Houston	—	—	—	—	—	—	278	1.7	32 398	1.1	1 322 194	1.2
Hubbard	1	36.9	(D)	(D)	(D)	(D)	3	15.7	(D)	(D)	(D)	(D)
Isanti	5	13.8	8	18.0	3 200	18.0	215	1.8	26 952	2.1	715 246	2.1
Itasca	—	—	—	—	—	—	5	12.0	1 010	21.7	14 440	18.3
Jackson	1	39.9	(D)	(D)	(D)	(D)	773	.9	170 892	.8	6 804 356	.8
Kanabec	—	—	—	—	—	—	57	4.2	4 577	5.7	138 045	5.9
Kandiyohi	3	13.3	(D)	(D)	167 995	13.3	552	1.0	104 884	.9	3 791 471	.9
Kitson	45	2.8	12 174	1.0	11 887 768	.9	65	2.6	9 448	2.4	254 620	2.4
Koochiching	—	—	—	—	—	—	629	1.0	163 348	.9	5 730 409	.9
Lac qui Parle	—	—	—	—	—	—	—	—	—	—	—	—
Lake	—	—	—	—	—	—	5	8.8	673	3.9	16 675	3.8
Lake of the Woods	2	—	(D)	(D)	(D)	(D)	109	3.1	6 330	3.2	228 084	3.2
Le Sueur	—	—	—	—	—	—	493	1.0	72 608	.9	2 921 377	.9
Lincoln	—	—	—	—	—	—	673	1.4	78 386	1.5	2 426 882	1.5
Lyon	1	43.5	(D)	(D)	(D)	(D)	675	1.0	163 984	.8	6 087 178	.8
McLeod	—	—	—	—	—	—	641	.9	88 409	.9	3 099 662	.9
Mahnomen	11	9.6	1 575	5.8	2 341 613	6.8	129	2.4	34 103	1.7	1 038 887	1.7
Marshall	83	2.6	16 238	1.8	17 181 487	1.9	183	1.5	33 091	1.1	994 309	1.0
Martin	—	—	—	—	—	—	799	.6	185 334	.5	7 948 706	.5
Meeker	—	—	—	—	—	—	550	1.0	95 199	.9	3 261 302	.9
Mille Lacs	—	—	—	—	—	—	98	3.0	6 708	3.9	203 434	3.4
Morrison	18	7.4	882	3.2	1 135 066	3.2	109	3.1	6 330	3.2	228 084	3.2
Mower	5	12.1	378	8.7	516 485	8.1	797	.8	163 771	.7	7 154 693	.7
Murray	—	—	—	—	—	—	673	.9	166 425	.8	6 106 168	.8
Nicollet	—	—	—	—	—	—	590	.8	104 669	.7	4 283 283	.8
Nobles	—	—	—	—	—	—	858	.8	172 116	.8	6 511 995	.8
Norman	34	3.7	4 536	2.1	4 563 377	1.9	317	1.2	87 583	.8	2 445 625	.8
Olmsted	—	—	—	—	—	—	545	1.2	58 684	1.0	2 499 171	1.0
Otter Tail	35	5.0	2 702	4.4	3 370 175	4.8	475	1.5	89 799	1.2	3 013 595	1.2
Pennington	49	3.1	10 404	1.7	8 821 299	2.5	47	3.6	11 073	2.0	309 018	2.3
Pine	1	33.0	(D)	(D)	(D)	(D)	73	3.4	5 276	4.1	169 940	4.5
Pipestone	—	—	—	—	—	—	479	1.2	86 073	1.3	2 923 365	1.3
Polk	81	2.7	13 936	1.6	13 921 489	2.1	448	1.0	109 553	.6	3 197 066	.6
Pope	1	—	(D)	(D)	(D)	(D)	421	1.3	81 491	1.2	2 998 394	1.2
Ramsey	—	—	—	—	—	—	1	—	(D)	(D)	(D)	(D)
Red Lake	36	3.9	6 022	2.2	6 431 462	2.2	72	2.6	15 553	1.3	444 537	1.3
Redwood	—	—	—	—	—	—	970	.8	225 892	.7	9 050 144	.7
Renville	—	—	—	—	—	—	928	.7	234 458	.5	9 067 427	.5
Rice	—	—	—	—	—	—	559	1.1	70 210	1.0	2 924 637	1.0
Rock	—	—	—	—	—	—	538	1.1	115 688	.9	4 561 731	.9
Roseau	46	3.3	16 379	1.4	19 659 834	1.5	8	7.5	2 104	4.6	51 640	4.6
St. Louis	—	—	—	—	—	—	—	—	—	—	—	—
Scott	—	—	—	—	—	—	285	1.5	31 074	1.5	1 248 857	1.4
Sherburne	4	13.7	64	14.9	38 800	13.6	128	2.3	14 465	1.8	505 869	1.6
Sibley	2	23.5	(D)	(D)	(D)	(D)	716	.7	120 073	.6	4 534 212	.6
Stearns	3	23.2	(D)	(D)	51 100	36.9	691	1.4	66 386	1.5	2 491 241	1.5
Steele	—	—	—	—	—	—	495	.9	82 074	.8	3 339 235	.8
Stevens	5	—	468	—	431 550	—	352	.9	118 893	.7	4 441 035	.6
Swift	2	—	(D)	(D)	(D)	(D)	552	1.1	145 511	.9	5 096 558	.9
Todd	17	7.6	734	8.2	941 474	9.1	169	2.7	15 504	3.0	523 433	3.1
Traverse	3	—	555	—	666 000	—	309	.9	127 872	.7	4 464 175	.8
Wabasha	—	—	—	—	—	—	362	1.6	31 614	1.5	1 397 119	1.6

See footnotes at end of table.

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

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

Geographic area	Selected crops harvested—Con.											
	Sunflower seed						Soybeans for beans					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Pounds	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Bushels	Relative standard error of estimate (percent)	
Wadena	5	19.7	(D)	(D)	(D)	(D)	8	12.5	684	9.7	24 414	6.8
Waseca	—	—	—	—	—	—	501	.9	90 022	.8	3 780 775	.8
Washington	—	—	—	—	—	—	119	2.5	16 102	2.7	596 730	2.7
Watonwan	—	—	—	—	—	—	481	.7	113 938	.7	4 747 401	.7
Wilkin	19	5.3	2 738	5.5	3 052 851	4.5	316	.9	134 325	.5	4 302 493	.5
Winona	—	—	(D)	(D)	(D)	(D)	264	1.6	21 262	1.6	952 419	1.6
Wright	2	26.4	(D)	(D)	(D)	(D)	578	1.3	61 816	1.4	2 249 289	1.3
Yellow Medicine	—	—	—	—	—	—	675	.9	171 875	.9	6 122 675	.8
Selected crops harvested—Con.												
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)												
Geographic area	Farms			Acres			Quantity			Relative standard error of estimate (percent)		
	Number	Relative standard error of estimate (percent)	Number	Number	Relative standard error of estimate (percent)	Tons, dry						
Minnesota	35 500	.6	2 168 932	.6	5 033 905	.7						
Aitkin	486	.7	48 286	1.5	73 125	1.7						
Anoka	209	1.6	9 087	2.9	21 340	3.0						
Becker	664	1.0	51 555	1.6	115 110	1.8						
Beltrami	495	1.0	54 677	1.5	93 712	1.9						
Benton	553	1.1	31 036	1.8	73 626	1.8						
Big Stone	120	2.4	5 982	3.3	16 618	3.0						
Blue Earth	233	1.8	6 527	2.0	18 920	2.4						
Brown	337	1.7	12 343	2.2	38 653	1.9						
Carlton	450	.6	36 595	1.4	48 627	1.7						
Carver	510	.9	24 755	1.4	73 311	1.6						
Cass	450	.9	49 068	1.7	81 587	1.9						
Chippewa	142	2.4	4 671	3.5	13 276	3.7						
Chisago	462	1.0	18 137	1.8	37 641	2.3						
Clay	263	1.6	23 652	2.4	53 629	3.4						
Clearwater	425	1.1	47 528	1.9	84 642	2.2						
Cook	8	—	507	—	887	—						
Cottonwood	195	1.8	5 269	2.2	12 588	2.8						
Crow Wing	411	1.0	30 332	1.9	49 787	2.3						
Dakota	334	1.3	12 830	1.7	35 896	1.7						
Dodge	307	1.3	12 723	1.5	35 156	1.8						
Douglas	563	1.3	34 029	1.7	88 830	1.8						
Fairbault	135	2.1	3 569	2.7	8 692	2.6						
Fillmore	900	1.0	51 119	1.2	149 998	1.2						
Freeborn	317	1.5	7 897	2.6	19 826	2.5						
Goodhue	857	.8	51 197	1.0	155 191	1.0						
Grant	124	2.5	6 212	3.4	18 912	3.7						
Hennepin	304	1.4	11 248	2.6	29 350	2.8						
Houston	668	.9	44 752	1.1	133 604	1.2						
Hubbard	285	1.1	23 192	2.0	34 813	2.5						
Isanti	406	1.1	13 887	1.9	28 428	2.0						
Itasca	323	.7	33 115	1.3	44 856	1.9						
Jackson	202	2.1	4 246	3.0	9 328	3.7						
Kanabec	489	.9	30 903	1.5	46 002	1.8						
Kandiyohi	458	1.2	23 991	1.5	69 171	1.4						
Kitson	158	2.0	19 229	3.5	35 594	3.3						
Koochiching	170	1.2	21 548	2.9	26 144	3.0						
Lac qui Parle	237	2.0	12 198	2.5	34 414	2.7						
Lake	22	4.4	1 102	7.8	1 301	6.0						
Lake of the Woods	110	2.0	15 106	2.9	24 736	3.4						
Le Sueur	328	1.5	10 144	2.1	26 122	2.3						
Lincoln	358	1.6	17 002	2.1	47 107	2.1						
Lyon	344	1.5	11 428	2.5	31 345	2.5						
McLeod	509	1.1	21 257	2.1	65 184	2.4						
Mahnomen	192	1.8	16 650	2.5	37 348	2.5						
Marshall	334	1.5	34 531	1.9	68 273	2.5						
Martin	181	1.8	4 739	3.3	13 496	4.3						
Meeker	406	1.3	16 899	1.6	49 255	1.7						
Mille Lacs	523	.9	30 982	1.6	56 285	1.7						
Morrison	1 324	.8	82 516	1.1	189 613	1.2						
Mower	351	1.5	11 535	2.0	35 260	2.1						
Murray	329	1.5	13 158	2.0	36 122	1.9						
Nicollet	239	1.7	8 028	2.2	25 437	2.2						
Nobles	287	1.7	8 378	1.9	25 085	2.1						
Norman	213	1.8	16 206	3.0	45 424	2.8						
Olmsted	702	1.0	30 007	1.2	90 537	1.2						
Outer Tail	1 585	.8	123 924	1.1	297 851	1.1						
Pennington	210	2.0	25 223	3.1	54 502	3.2						
Pine	759	.7	63 002	1.3	103 383	1.5						
Pipestone	338	1.6	15 374	2.3	37 487	2.3						

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.					
	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)					
	Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)		Number	Relative standard error of estimate (percent)	Tons, dry
Polk	392	1.4		41 860	1.7	89 917
Pope	420	1.4		23 659	2.0	70 181
Ramsey	6	12.9		370	19.1	364
Red Lake	163	1.8		17 933	2.5	41 873
Redwood	269	1.8		7 535	2.2	19 404
Renville	214	2.0		6 347	2.5	19 545
Rice	564	1.1		20 037	1.6	55 570
Rock	335	1.5		10 923	2.0	30 449
Roseau	461	1.4		49 440	1.9	93 470
St. Louis	521	.8		58 343	1.6	70 129
Scott	455	1.1		17 169	1.9	45 275
Sherburne	257	1.5		8 565	2.4	19 276
Sibley	422	1.2		13 554	2.2	41 954
Stearns	2 063	.9		118 990	1.0	332 242
Steele	317	1.4		11 592	2.3	32 780
Stevens	133	2.0		6 874	3.3	21 094
Swift	218	2.1		13 474	2.5	37 215
Todd	1 257	.9		76 026	1.3	168 993
Traverse	101	2.5		7 000	2.6	18 353
Wabasha	615	1.1		40 397	1.5	122 645
Wadena	440	1.2		33 519	2.0	65 887
Waseca	221	1.8		6 354	4.0	19 397
Washington	331	1.3		12 616	2.6	27 893
Watsonwan	98	2.8		2 085	3.0	5 432
Wilkin	87	2.7		8 449	5.5	19 105
Winona	748	.7		58 495	.9	175 385
Wright	863	.9		32 740	1.4	90 307
Yellow Medicine	235	1.9		9 503	2.7	27 333

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..	73 367	5 362	78 729		1.7	6.8
Land in farms acres..	25 994 621	28 062	26 022 683		1.8	.1
Average size of farm	354	5	331		(X)	(X)
Farms by size of farm:						
Less than 10 acres	3 090	975	4 065		11.8	24.0
10 to 49 acres	10 104	1 912	12 016		5.5	15.9
50 to 179 acres	21 535	2 627	24 162		3.2	10.9
180 acres or more	38 638	-152	38 486		1.5	-4
Farms by value of sales:						
Less than \$2,500	14 647	4 768	19 415		4.8	24.6
\$2,500 to \$9,999	11 439	868	12 307		4.2	7.1
\$10,000 or more	47 281	-274	47 007		1.4	-6
Market value of agricultural products sold.....\$1,000..	8 290 264	-249 469	8 040 795		2.7	-3.1
Farms by type of organization:						
Individual or family	64 428	5 258	69 686		1.8	7.5
Partnership, corporation, or other	8 939	104	9 043		4.4	1.2
Farms by tenure of operator:						
Full owners	40 317	4 988	45 305		2.5	11.0
Part owners	25 772	-53	25 719		1.8	-2
Tenants	7 278	427	7 705		3.9	5.5
Operators by place of residence:						
On farm operated	56 454	3 787	60 241		1.9	6.3
Not on farm operated	10 660	1 443	12 103		4.6	11.9
Not reported	6 253	132	6 385		4.6	2.1
Operators by principal occupation:						
Farming	44 047	-589	43 458		1.4	-1.4
Other	29 320	5 951	35 271		3.2	16.9
Operators by sex:						
Male	69 750	4 471	74 221		1.6	6.0
Female	3 617	891	4 508		9.2	19.8
Operators by race:						
White	73 171	5 323	78 494		1.7	6.8
Black and other races	196	39	235		41.7	16.6
Operators by years on present farm:						
4 years or less	6 356	2 242	8 598		5.7	26.1
5 years or more	55 134	3 849	58 983		1.6	6.5
Not reported	11 877	-729	11 148		6.3	-6.5

¹ See text in Appendix C regarding coverage estimates.