Appendix C.
Statistical Methodology

MAIL LIST MODEL

Classification analysis was performed to predict the probability that an addressee on the 1992 mail list operated a farm, and thereby separated the preliminary mail list into probable farm and probable nonfarm classes. The analysis was used to reduce the preliminary census mail list of 3.78 million records to a final mail list size of 3.55 million records. All 3.55 million addresses on the final mail list received a census of agriculture report form.

Records from the 1987 final census mail list were used to build a 1992 prediction model for the 1992 analysis. Classification and Regression Trees (CART) software analyzed characteristics of known 1987 farm and nonfarm operations to determine which were most useful in predicting farm and nonfarm classes. Record characteristics such as the source of the mail list record, number of source lists on which the record appeared, expected value of agricultural sales, and geographic location were used to separate mail list records into model groups. (Sources included the previous agriculture census mail list, the Internal Revenue Service administrative records, U.S. Department of Agriculture, and special commodity lists.) The proportion of 1987 census farm records in each model group was calculated to provide an estimate of the probability that an addressee in the group operated a farm.

After the model groups were defined, each address record on the 1992 preliminary 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 according to the classification tree methodology. The model, followed by analyst reviews, was used to remove 229,700 records from the preliminary mail list (those in model groups with the lowest farm probability), and thereby designated the 3.55 million records with the highest farm probability to receive the census report form. This procedure was used to obtain a more complete census enumeration of farm operations without excessive respondent burden and data collection cost.

CENSUS SAMPLE DESIGN

Each of the 3.55 million name and address records on the census mail list was designated to receive one of three different types of census report forms. The three forms were the nonsample form, the screener form, and the sample form. Sections 1 through 20 and 27 through 32 of the sample form are identical to sections on the nonsample form. The sample form, sections 21 through 26, contains additional questions on usage of fertilizers and chemicals, farm production expenditures, value of machinery and equipment, value of land and buildings, and farm-related income. The screener form is identical to the nonsample form with questions added in section 1 to allow quick identification of nonfarm addresses. These three 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. Addresses were selected into the sample with certainty (1) if they were expected to have large total value of agricultural products sold or large acreage, (2) if they were multiunit operations (i.e., separate farms in more than one location), (3) if they had other special characteristics, or (4) if they were in a county with less than 100 farms in 1987. Other addresses in counties containing 100 to 199 farms in 1987 were systematically sampled at a rate of 1 in 2, and other addresses in counties containing 200 farms or more in 1987 were systematically sampled at a rate of 1 in 6. This differential sampling scheme was used to provide reliable data for the sample sections of the report form for all counties. When a nonsample large farm was identified during processing, a supplemental form that contained the additional sample data inquiries was mailed.

To determine which mail list records would receive the screener form, all mail list records not designated for the sample were sorted by model group farm probability as specified by the mail list model. The 412,000 mail list records in the model groups with the lowest probability of being farms and with an expected total value of agricultural product sales less than $25,000 were designated to receive the screener report form. The remaining mail list records received the nonsample report form.

CENSUS ESTIMATION

The 1992 Census of Agriculture used two types of statistical estimation procedures. These estimation procedures accounted for nonresponse to the data collection and for the sample data collection. These procedures are necessary because some farm operators never respond to

the census despite numerous attempts to contact them, and the estimates for the sample data are based on a sample of farm operators rather than a full enumeration.

Whole Farm Nonresponse Estimation

A statistical estimation procedure was used to account for nonrespondent farm operators to the census. We excluded large and unique farm operations that received intensive telephone followup during census processing, assuming complete response from them. A stratified systematic sample of remaining census nonrespondents were contacted by enumerators using a computer-assisted telephone interview system. Five sample strata were defined based on expected value of sales, previous census status, and whether the record was identified by the mail list model to receive the screener report form. The nonresponse survey telephone interview was designed to provide sufficient information to determine the farm status of each record.

In situations where the nonresponse survey case could not be contacted, the contact person refused to cooperate, or when no phone number could be obtained, a screener report form was sent by certified mail.

Estimates of the proportion of census nonrespondents that operated farms were made for each stratum in the State using survey results and applied to the total number of census nonrespondents in that stratum. The number of census nonrespondents that operated farms for each county by stratum was then derived. This estimation procedure is based on the assumption that the distribution of farms in a stratum by county is the same for census nonrespondents as for census respondents.

Certain census respondent farms which exhibited "rare" commodities were designated as "ineligible" to represent census nonrespondent farms and were excluded from the nonresponse weighting operation. The procedure explained below was performed with only the eligible respondent cases: Within each stratum in a county, a noninteger nonresponse weight was calculated and assigned to each eligible respondent farm record. 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 to the number of eligible census respondent farms. Stratum controls were established to ensure that this weight was never greater than 2.0. The noninteger nonresponse weight was used in the calculation of the final weight for the sample items. The noninteger nonresponse weight was randomly rounded to an integer weight of either 1 or 2 for each record for tabulating the complete count items for publication.

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

Table A. **Percent of State Totals Contributed by Whole Farm Nonresponse Estimation: 1992**

Item	Percent of total
Farms _____number__	12.6
Land in farms_____acres__	8.9
Estimated market value of land and buildings[1]_____$1,000__	4.8
Market value of agricultural products sold __$1,000__	6.0
Harvested cropland _____acres__	8.0
Corn for grain or seed_____acres__	7.3
Wheat for grain _____acres__	8.1
Livestock and poultry inventory:	
Cattle and calves _____number__	9.0
Hogs and pigs _____number__	6.6
Hens and pullets of laying age_____number__	.4

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

Sample Estimation

Sample data estimates the population totals that would have resulted from a complete census for the items in sections 21 through 26 of the sample report form. The estimates were obtained from a ratio estimation procedure that resulted in the assignment of 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 in the county.

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 would be multiplied by 6. The weight assigned to a sample certainty farm was 1.

Other than certainty farms, within a county, the ratio estimation procedure for farms was performed in three steps using three variables. The first variable contained eight 1992 total value of agricultural production (TVP) groups. Both the second and third variables, Standard Industrial Classification (SIC) code and farm acreage, contained two groups. The three sets of groups were as follows:

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

The second step in the estimation procedure was to combine, if necessary, the 32 initial post strata to increase the reliability of the ratio estimation procedure. Any stratum that contained less than 10 sample farms after nonresponse adjustment or had a weight greater than two times the mail sample rate was collapsed with another stratum. The mail sample rate was either 2 or 6, depending on whether the county had a 1 in 2 or 1 in 6 sample selection rate. The collapsing occurred within the initial 32 post 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 of the final post strata and were used to calculate final sample weights.

The final step consisted of assigning the noninteger final post stratum weight to the sample farm records in each post stratum. The weight is the ratio of total farm count to sample farm count in each final post stratum. The noninteger sample weight, the product of the noninteger final post stratum weight and the nonresponse weight, was randomly rounded to an integer weight for tabulation. If, for example, the final weight for the farms in a particular post stratum was 7.2, then 0.2 or one-fifth of the sample farms in this post stratum were randomly assigned a weight of 8 and the remaining four-fifths received a weight of 7.

CENSUS SAMPLING ERROR

The sample for the 1992 Census of Agriculture is only one of a large number of possible samples of the same size that could have been selected using the same sample design. Sample refers to the sample for both the nonresponse survey and the selection of farms to receive the sample report forms. Estimates derived from all the possible samples would differ from each other only by random variation.

The standard error or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The percent relative standard error of an estimate is defined as 100 times the standard error of the estimate divided by the value of the estimate.

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

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 average value of all possible samples.

The following example illustrates the computations necessary for producing a confidence interval 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 .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 figure obtained from a complete enumeration. 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. Complete count items were asked of all farm operators. 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.

Sample count items were asked only of a sample of farm operators. These items appeared only in sections 21 through 26 of the sample report 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, and farm-related income.

Variability, measured as percent relative standard error, in the estimates of complete count items is due only to the nonresponse survey estimation procedure. Variability in the estimates of sample count items is due to both the nonresponse survey estimation procedure and the census sample selection and estimation procedure. Thus, variability in the sample count item estimates tends to be larger than the variability in the complete count item estimates.

Table B provides the generalized reliability estimates of the estimated number of farms in a county reporting complete count and sample count items. The top half of the table shows the percent relative standard error for estimated number of farms in a county reporting a complete count item and the bottom half a sample count item. These are derived from regression equations. Separate regression equations were used for complete count items and sample count items. 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 all counties in the State. For sample count items, only data

from counties sampled at a rate of 1 in 6 are used in the estimation of the regression equation.

Table B. **Reliability Estimates for Number of Farms in a County Reporting a Complete Count Item or Sample Count Item: 1992**

Farms	Relative standard error of estimate (percent)
COMPLETE COUNT ITEM	
Number of farms reporting:	
25	5.8
50	4.0
75	3.2
100	2.7
150	2.1
200	1.7
300	1.2
500	.5
750	.4
1,000	.3
1,500	.3
2,000	.2
SAMPLE COUNT ITEM	
Number of farms reporting:	
25	28.7
50	22.1
75	19.3
100	17.8
150	16.2
200	15.3
300	14.3
500	13.5
750	13.1
1,000	12.9
1,500	12.7
2,000	12.6

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 1987 Census of Agriculture, variability in sample count item estimates comes only from nonresponse survey estimation procedures; thus, the estimated relative standard error for a sample count item in these counties may be obtained using the first part of table B.

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 percent standard error for percent change in State totals from 1987 to 1992. 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 1992 and the 1987 estimate for that characteristic to the 1987 estimate. This ratio is multiplied by 100 to obtain the percent change. The percent standard error of a percent change estimate, then, 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 (1) the total number of farms, (2) the number of large farms included with certainty, (3) the size classifications of the farms sampled, (4) the amount of nonresponse, (5) the general agricultural characteristics, and (6) the specific characteristic being measured.

CENSUS NONSAMPLING ERROR

The accuracy of the census counts are 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 on specific operations. Nonsampling errors arise from incompleteness of the census mail list, duplication in the mail list, incorrect data reporting, errors in editing of reported data, and errors in imputation for missing data. These specific nonsampling errors are further discussed in this section. Evaluation studies will be conducted to measure the extent of certain nonsampling errors such as coverage error and classification error.

Census Coverage

The main objective of the census of agriculture is to obtain a complete and accurate enumeration of U.S. farms with accurate data on all aspects of the agricultural operation. However, the high cost and availability of resources for enumeration place restrictions on feasible data collection methodologies. The past six agriculture censuses have been conducted by mail enumeration with telephone contact for selected nonrespondents. The completeness of such an enumeration thus depends to a large extent on the coverage of farm operations by the census mail list.

The past five censuses of agriculture have included approximately 91 percent of farms in the United States and approximately 96 percent of agriculture production. Complete enumeration of agricultural operations satisfying the farm definition of $1,000 or more in agricultural sales is complicated by fluctuations in agricultural operations qualifying for enumeration, the variety of arrangements under which farms are operated, the multiplicity of names used

by an operation, the number of operations in which an operator participates, the accuracy of data reporting, and other factors. A new mail list is compiled for each census because no current single list of agricultural operations is comprehensive.

An evaluation of census coverage has been conducted for each census of agriculture since 1945. The evaluation provides estimates of the completeness of census farm count and major census data items. In addition, the evaluation helps to identify problems in the census enumeration and provide information that can form the basis for improvements. The results of the 1992 Coverage Evaluation program will be published in volume 2, Subject Series (Part 2): Coverage Evaluation.

The evaluation of coverage for the 1992 census was designed to measure four components of error in the census mail list and in farm classification. Mail list error includes two components of error, a measurement of farms not on the census mail list (undercount) and a measurement of farms enumerated more than once in the census (overcount). Classification error includes two components of error, a measurement of farms classified as nonfarms in the census (undercount) and of nonfarms classified as farms in the census (overcount). Classification error arises from reporting and processing errors. Mail list undercount dominates all coverage errors. Net coverage error is defined as the difference between undercounted and overcounted farms. Measurements of these errors, as well as a description of the complete coverage program, will be available in the Coverage Evaluation report.

Mail List Coverage

A major problem with mail enumeration for the census of agriculture is the difficulty encountered in compiling a complete mail list. The percentage of farms included on the census mail list varies considerably by State. Several reasons have contributed to farm operator names not being included on the census mail list—the operation may have been started after the mail list was developed, the operation may be so small as not to appear in any of the agriculture-related source lists used in compiling the census list, or the operation may have been falsely classified as a nonfarm prior to mailout. A large proportion of the farms not included on the mail list are small in both acres and sales of agricultural products.

The 1992 Census of Agriculture Coverage Evaluation used the area segment sample of the 1992 June Agricultural Survey (JAS) of the National Agricultural Statistical Service (NASS) to estimate farms not on the census mail list. The Census Bureau contracted with NASS to augment the JAS data collection. The survey data collected by NASS will be protected under the confidentiality of title 13, U.S. Code. These JAS survey records were matched to the census mail list. Records that did not match were mailed a census of agriculture report form to estimate mail list

coverage. Estimates of farms not on the census mail list are computed using a capture-recapture dual frame estimator which will be described in the Coverage Evaluation report mentioned earlier.

Table G provides coverage evaluation estimates for one component of coverage error associated with the census of agriculture; that is, the error due to farms not on the census mail list. Also provided are estimates of selected characteristics of farms not on the mail list, estimates of characteristics of farms not on the mail list as a percentage of total farms in the State, and the percent relative standard error associated with each estimate. The estimate of total farms in the State is based on census farm count plus the estimated number of farms not on the census mail list. This estimate of total farms in the State was not adjusted for the components of error associated with classification and list duplication error. Estimates of these errors will be made at the regional, rather than the State level, and will be provided in the Coverage Evaluation report mentioned earlier.

Respondent and Enumerator Error

Incorrect or incomplete responses to the mailed census report form or to the questions posed by a telephone enumerator introduce error into the census data. Such incorrect information can lead, in some cases, to incorrect classification of farms. This type of reporting error is measured by the Classification Error Survey discussed later in this section. To reduce all types of reporting error, detailed instructions for completing the report form were provided to each addressee. Questions were phrased as clearly as possible based on tests of the census report form and each respondent's answers were checked for completeness and consistency.

Item Nonresponse

As information flows from data collection to tabulation, various types of item nonresponses are identified on the report forms. Nonresponse to particular questions on the report form that logically should be present may create a type of nonsampling error in both complete count and sample count data. When information from reporting farms is used to edit or impute for item nonresponse, the data may be biased due to characteristics of the nonreporting respondents differing from those reporting the item. Any attempt to correct the data items may not completely reflect this difference either at the element level (individual farm operation) or on the average.

Processing Error

All phases of processing for each report form are sources for the introduction of nonsampling error. The processing of the report forms includes clerical screening for farm activity, computerized check-in of report forms and follow-up of nonrespondents, keying and transmittal of

completed report forms, computerized editing of inconsistent and missing data, review and correction of individual records referred from the computer edit, review and correction of tabulated data, and electronic data processing. These operations undergo a number of quality control checks to ensure as accurate an application as possible, yet some errors are not detected and corrected.

Classification Error

An evaluation study of classification errors was conducted in the 1992 Census of Agriculture as part of the census coverage evaluation program. A sample of census mail list respondents was selected, and these addresses were reenumerated to determine whether they were a farm or nonfarm. A farm status determination was made based on the evaluation report form and compared with the census farm status which was based on the data reported on the report form. Differences in status were reconciled.

In past censuses, the proportion of farms undercounted due to classification errors was higher for farms with small values of sales. For the 1987 census, the classification error rate was higher for (1) farms with small values of sales, (2) farms with a small number of acres, (3) full-owner farms than part-owner or tenant farms, (4) operators with principal occupation other than farming, and (5) males than females. Results from the 1992 Classification Error Survey will be published in the Coverage Evaluation report.

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

The Census of Agriculture Complex Edit and Imputation System performs the following functions:

- Ensuring reasonable relationships between/among data items, values for various sizes of farms, and combinations of commodities.

- Ensuring necessary consistencies are present. There are more than 70 distinct consistency requirements.

- Ensuring geographic, legal, and physical constraints are met.

The system must perform these and similar functions for 900 data keycodes for sample records and 850 data keycodes for nonsample records.

For the 1992 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 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 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 were 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 classification 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. The computer records were 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 some 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.

After the initial computer edit, keyed reports not meeting the census farm definition were reviewed to ensure that the data were keyed correctly. Edit referrals were generated for about 25 percent of the reports included as farms; they were reviewed for keying accuracy 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 was reedited.

Table C.   Reliability Estimates of State Totals for All Farms: 1992

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

Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS		
Farms _____number__	70 711	1.1
Land in farms _____acres__	14 247 969	1.0
Average size of farm _____acres__	201	1.4
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD		
Total sales (see text) _____farms__	70 711	1.1
$1,000__	3 914 040	.7
Average per farm _____dollars__	55 353	1.3
Farms by value of sales:		
Less than $1,000 (see text) _____farms__	6 421	1.3
$1,000__	1 986	1.4
$1,000 to $2,499 _____farms__	7 509	1.2
$1,000__	12 586	1.1
$2,500 to $4,999 _____farms__	8 997	1.0
$1,000__	32 392	1.0
$5,000 to $9,999 _____farms__	9 827	1.0
$1,000__	70 389	1.0
$10,000 to $19,999 _____farms__	10 099	1.4
$1,000__	144 117	1.4
$20,000 to $24,999 _____farms__	3 094	1.7
$1,000__	68 832	1.7
$25,000 to $39,999 _____farms__	5 828	1.8
$1,000__	184 227	1.8
$40,000 to $49,999 _____farms__	2 483	1.8
$1,000__	110 608	1.8
$50,000 to $99,999 _____farms__	6 779	1.8
$1,000__	484 664	1.7
$100,000 to $249,999 _____farms__	6 567	1.2
$1,000__	1 028 485	1.1
$250,000 to $499,999 _____farms__	2 212	–
$1,000__	749 884	–
$500,000 or more _____farms__	895	–
$1,000__	1 025 870	–
Sales by commodity or commodity group:		
Crops, including nursery and greenhouse crops _____farms__	51 798	1.1
$1,000__	2 195 985	.8
Grains _____farms__	41 160	1.2
$1,000__	1 677 049	.9
Corn for grain _____farms__	29 979	1.3
$1,000__	760 444	.8
Wheat _____farms__	23 570	1.3
$1,000__	155 593	1.0
Soybeans _____farms__	31 500	1.2
$1,000__	743 877	.9
Sorghum for grain _____farms__	26	5.8
$1,000__	131	5.0
Barley _____farms__	240	2.2
$1,000__	422	2.3
Oats_____farms__	3 151	1.3
$1,000__	4 899	1.3
Other grains _____farms__	883	1.5
$1,000__	11 683	1.1
Cotton and cottonseed _____farms__	–	–
$1,000__	–	–
Tobacco _____farms__	3 475	1.2
$1,000__	32 203	1.6
Hay, silage, and field seeds _____farms__	13 517	1.1
$1,000__	72 031	1.2
Vegetables, sweet corn, and melons _____farms__	2 346	1.0
$1,000__	81 283	.4
Fruits, nuts, and berries _____farms__	1 432	1.1
$1,000__	26 875	.8
Nursery and greenhouse crops _____farms__	2 032	.8
$1,000__	288 731	.2
Other crops _____farms__	500	1.4
$1,000__	17 814	.6
Livestock, poultry, and their products _____farms__	37 936	1.1
$1,000__	1 718 055	.7
Poultry and poultry products _____farms__	2 599	1.1
$1,000__	379 331	.2
Dairy products _____farms__	6 405	1.5
$1,000__	536 164	.9
Cattle and calves _____farms__	27 852	1.1
$1,000__	412 834	.8
Hogs and pigs _____farms__	9 640	1.2
$1,000__	341 631	.8
Sheep, lambs, and wool _____farms__	4 304	1.1
$1,000__	8 575	1.3
Other livestock and livestock products (see text) _____farms__	4 405	1.2
$1,000__	39 521	.8
Value of agricultural products sold directly to individuals for human consumption (see text) _____farms__	4 698	1.0
$1,000__	21 580	.8

Item	Total	Relative standard error of estimate (percent)
FARM PRODUCTION EXPENSES[1]		
Total farm production expenses _____farms__	70 695	1.1
$1,000__	3 119 014	.7
Average per farm _____dollars__	44 119	1.3
Livestock and poultry purchased _____farms__	21 991	1.6
$1,000__	287 297	1.2
Feed for livestock and poultry _____farms__	35 802	1.3
$1,000__	545 008	.9
Commercially mixed formula feeds _____farms__	17 756	1.8
$1,000__	336 255	1.0
Seeds, bulbs, plants, and trees _____farms__	50 075	1.3
$1,000__	179 519	1.0
Commercial fertilizer _____farms__	52 433	1.2
$1,000__	305 407	1.1
Agricultural chemicals _____farms__	51 627	1.2
$1,000__	189 954	1.1
Petroleum products _____farms__	67 785	1.1
$1,000__	176 670	1.0
Electricity _____farms__	51 576	1.2
$1,000__	54 020	1.1
Hired farm labor _____farms__	20 559	1.6
$1,000__	259 501	.6
Contract labor _____farms__	4 919	3.1
$1,000__	16 012	3.0
Repair and maintenance _____farms__	60 915	1.1
$1,000__	227 455	1.1
Customwork, machine hire, and rental of machinery and equipment _____farms__	26 255	1.6
$1,000__	44 730	1.8
Interest expense _____farms__	30 967	1.5
$1,000__	216 492	1.2
Secured by real estate _____farms__	22 750	1.6
$1,000__	152 940	1.5
Not secured by real estate _____farms__	16 692	1.8
$1,000__	63 552	1.4
Cash rent _____farms__	19 904	1.7
$1,000__	216 114	1.2
Property taxes _____farms__	64 108	1.1
$1,000__	86 406	1.2
All other farm production expenses _____farms__	64 754	1.1
$1,000__	314 430	.8
NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT) [1]		
All farms _____number__	70 695	1.1
$1,000__	787 050	1.2
Average per farm _____dollars__	11 133	1.6
Farms with net gains [2] _____number__	39 522	1.3
$1,000__	969 491	1.0
Average net gain _____dollars__	24 530	1.7
Farms with net losses _____number__	31 173	1.3
$1,000__	182 442	1.8
Average net loss _____dollars__	5 853	2.2
GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Government payments _____farms__	20 730	1.2
$1,000__	109 439	.9
Other farm-related income [1] _____farms__	16 712	1.9
$1,000__	75 440	3.3
Customwork and other agricultural services _____farms__	7 007	2.7
$1,000__	36 245	5.1
Gross cash rent or share payments _____farms__	5 677	3.2
$1,000__	23 894	4.9
Forest products and Christmas trees _____farms__	1 878	5.2
$1,000__	9 286	7.9
Other farm-related income sources _____farms__	4 802	3.0
$1,000__	6 015	9.7
COMMODITY CREDIT CORPORATION LOANS		
Total _____farms__	3 095	1.2
$1,000__	95 441	.6

See footnotes at end of table.

Table C. Reliability Estimates of State Totals for All Farms: 1992 —Con.

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

Item	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE		
Total cropland — farms	66 353	1.1
acres	11 528 727	1.0
Harvested cropland — farms	62 535	1.1
acres	9 790 327	1.0
Farms by acres harvested:		
1 to 9 acres — farms	8 103	1.1
acres	34 705	1.1
10 to 19 acres — farms	6 979	1.0
acres	95 519	1.0
20 to 29 acres — farms	5 431	1.0
acres	126 686	1.0
30 to 49 acres — farms	8 303	1.1
acres	314 548	1.1
50 to 99 acres — farms	11 290	1.4
acres	787 670	1.5
100 to 199 acres — farms	9 191	1.7
acres	1 278 605	1.7
200 to 499 acres — farms	8 309	1.6
acres	2 594 361	1.5
500 to 999 acres — farms	3 507	.9
acres	2 393 729	.8
1,000 acres or more — farms	1 422	–
acres	2 164 504	–
Cropland:		
Pasture or grazing only — farms	24 540	1.1
acres	890 731	1.1
Other cropland — farms	25 982	1.1
acres	847 669	1.0
Total woodland — farms	37 449	1.1
acres	1 513 086	1.1
Pastureland and rangeland other than cropland and woodland pastured — farms	14 204	1.1
acres	623 449	1.1
Land in house lots, ponds, roads, wasteland, etc. — farms	47 568	1.1
acres	582 707	1.0
Irrigated land — farms	1 755	.9
acres	29 479	.8
Acres irrigated:		
1 to 9 acres — farms	1 376	.9
acres	(D)	(D)
10 to 49 acres — farms	260	1.8
acres	5 424	2.0
50 to 99 acres — farms	59	2.7
acres	3 945	2.7
100 to 199 acres — farms	31	3.1
acres	4 114	3.1
200 to 499 acres — farms	22	1.2
acres	6 548	1.1
500 to 999 acres — farms	5	–
acres	3 725	–
1,000 acres or more — farms	2	–
acres	(D)	(D)
Harvested cropland irrigated — farms	1 714	.9
acres	28 423	.8
Pasture and other land irrigated — farms	81	3.0
acres	1 056	6.0
Land under federal acreage reduction programs:		
Diverted under annual commodity programs — farms	14 162	1.3
acres	165 029	.8
Conservation Reserve or Wetlands Reserve Programs — farms	3 643	1.3
acres	162 509	1.4
VALUE OF LAND AND BUILDINGS [1]		
Estimated market value of land and buildings — farms	70 695	1.1
$1,000	20 626 423	1.1
Average per farm — dollars	291 766	1.5
Average per acre — dollars	1 456	1.5
VALUE OF MACHINERY AND EQUIPMENT [1]		
Estimated market value of all machinery and equipment — farms	70 651	1.1
$1,000	3 460 637	1.2
Average per farm — dollars	48 982	1.6
AGRICULTURAL CHEMICALS[1]		
Commercial fertilizer — farms	52 265	1.2
acres on which used	7 528 610	1.1

Item	Total	Relative standard error of estimate (percent)
TENURE OF OPERATOR		
All operators — farms	70 711	1.1
acres	14 247 969	1.0
Full owners — farms	41 342	1.0
acres	4 314 187	1.1
Part owners — farms	21 876	1.2
acres	8 320 042	.9
Tenants — farms	7 493	1.5
acres	1 613 740	1.4
OWNED AND RENTED LAND		
Land owned — farms	63 459	1.0
acres	8 292 829	1.1
Owned land in farms — farms	63 218	1.0
acres	7 621 595	1.0
Land rented or leased from others — farms	29 504	1.2
acres	6 670 531	.9
landlords	87 255	1.1
Rented or leased land in farms — farms	29 369	1.2
acres	6 626 374	.9
Land rented or leased to others — farms	8 764	1.1
acres	715 391	1.3
OPERATOR CHARACTERISTICS		
Operators by place of residence:		
On farm operated	54 856	1.1
Not on farm operated	11 805	1.2
Not reported	4 050	1.1
Operators by principal occupation:		
Farming	34 604	1.2
Other	36 107	1.0
Operators by days worked off farm:		
Any	40 575	1.1
200 days or more	29 330	1.1
Operators by sex:		
Male — farms	66 482	1.1
acres	13 742 296	1.0
Female — farms	4 229	1.1
acres	505 673	1.2
Average age of operator — years	52.0	1.5
FARMS BY TYPE OF ORGANIZATION		
Individual or family (sole proprietorship) — farms	60 936	1.1
acres	10 812 704	1.1
Partnership — farms	7 690	1.2
acres	2 510 540	.8
Corporation:		
Family held — farms	1 602	.9
acres	785 926	.5
More than 10 stockholders — farms	58	3.1
10 or less stockholders — farms	1 544	.9
Other than family held — farms	170	2.0
acres	48 067	1.8
More than 10 stockholders — farms	25	5.0
10 or less stockholders — farms	145	2.2
Other—cooperative, estate or trust, institutional, etc. — farms	313	1.9
acres	90 732	1.2
HIRED FARM LABOR		
Hired workers by days worked:		
150 days or more — farms	8 057	23.2
workers	19 238	12.0
Less than 150 days — farms	18 642	30.7
workers	63 785	24.9
INJURIES AND DEATHS		
Farm-related injuries:		
Operator and family members — farms	597	1.6
number	657	1.6
Hired workers — farms	426	1.0
number	818	.6
Farm-related deaths:		
Operator and family members — farms	18	5.7
number	18	5.7
Hired workers — farms	4	9.1
number	4	9.1

See footnotes at end of table.

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS BY SIZE			**LIVESTOCK**—Con.		
			Cattle and calves sold ____ farms __	27 852	1.1
1 to 9 acres ____ farms __	5 417	1.1	number__	772 063	.8
acres__	22 637	1.2	$1,000__	412 834	.8
10 to 49 acres ____ farms __	15 295	1.0	Hogs and pigs inventory ____ farms __	9 392	1.2
acres__	421 916	1.0	number__	1 957 945	.8
50 to 69 acres ____ farms __	5 719	1.0	Hogs and pigs sold ____ farms __	9 640	1.2
acres__	333 951	1.0	number__	3 936 095	.8
70 to 99 acres ____ farms __	8 269	1.2	$1,000__	341 631	.8
acres__	686 889	1.2			
100 to 139 acres ____ farms __	8 196	1.3	Sheep and lambs of all ages inventory ____ farms __	4 329	1.1
acres__	953 500	1.3	number__	186 444	1.3
			Sheep and lambs sold ____ farms __	4 109	1.1
140 to 179 acres ____ farms __	5 684	1.5	number__	148 487	1.3
acres__	895 183	1.5			
180 to 219 acres ____ farms __	3 997	1.6	Horses and ponies inventory ____ farms __	10 865	1.1
acres__	789 062	1.6	number__	71 989	2.0
220 to 259 acres ____ farms __	2 913	1.6	Horses and ponies sold ____ farms __	2 920	1.2
acres__	693 909	1.6	number__	9 707	1.5
260 to 499 acres ____ farms __	8 373	1.6			
acres__	2 969 512	1.6			
500 to 999 acres ____ farms __	4 793	1.1	**POULTRY**		
acres__	3 251 170	1.1			
			Chickens 3 months old or older inventory ____ farms __	3 904	1.1
1,000 to 1,999 acres ____ farms __	1 719	—	number__	23 226 113	.1
acres__	2 277 583	—	Hens and pullets of laying age ____ farms __	3 830	1.1
2,000 acres or more ____ farms __	336	—	number__	19 356 658	.1
acres__	952 657	—			
			Broilers and other meat-type chickens sold ____ farms __	532	1.8
			number__	25 257 739	1.7
FARMS BY STANDARD INDUSTRIAL CLASSIFICATION					
			CROPS HARVESTED		
Cash grains (011) ____ farms __	29 144	1.2			
acres__	8 440 742	1.0	Corn for grain or seed ____ farms __	37 341	1.3
Field crops, except cash grains (013) ____ farms __	6 946	1.1	acres__	3 486 744	.9
acres__	740 974	1.2	bushels__	467 163 760	.9
Vegetables and melons (016) ____ farms __	923	1.3	Corn for silage or green chop ____ farms __	6 725	1.4
acres__	106 819	.8	acres__	176 367	1.0
Fruits and tree nuts (017) ____ farms __	1 049	1.2	tons, green __	2 969 730	.9
acres__	64 591	1.2	Wheat for grain ____ farms __	24 054	1.3
Horticultural specialties (018) ____ farms __	1 711	.8	acres__	1 089 529	1.0
acres__	79 652	.9	bushels__	54 020 364	1.0
General farms, primarily crop (019) ____ farms __	2 024	1.2	Oats for grain ____ farms __	8 048	1.4
acres__	307 543	1.2	acres__	115 727	1.3
Livestock, except dairy, poultry, and animal specialties (021) ____ farms __	19 373	1.0	bushels__	7 901 758	1.3
acres__	2 692 700	1.0	Tobacco ____ farms __	3 487	1.2
Dairy farms (024) ____ farms __	5 110	1.5	acres__	11 006	1.5
acres__	1 371 359	1.1	pounds__	20 827 989	1.6
Poultry and eggs (025) ____ farms __	803	1.1	Soybeans for beans ____ farms __	31 635	1.2
acres__	90 725	.6	acres__	3 776 952	1.0
Animal specialties (027) ____ farms __	2 800	1.3	bushels__	145 432 936	.9
acres__	125 867	1.4	Irish potatoes ____ farms __	309	1.8
General farms, primarily livestock and animal specialties (029) ____ farms __	828	1.5	acres__	5 931	.8
acres__	226 997	1.2	cwt__	1 367 977	.7
			Sugar beets for sugar ____ farms __	227	1.6
			acres__	20 004	1.0
LIVESTOCK			tons__	317 216	.9
			Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) ____ farms __	33 080	1.1
Cattle and calves inventory ____ farms __	29 874	1.1	acres__	1 200 789	1.1
number__	1 362 489	1.0	tons, dry __	2 949 243	1.1
Beef cows ____ farms __	16 885	1.0	Alfalfa hay ____ farms __	22 651	1.1
number__	272 920	1.2	acres__	658 206	1.1
Milk cows ____ farms __	6 980	1.4	tons, dry __	1 887 046	1.1
number__	295 677	1.0	Vegetables harvested for sale (see text) ____ farms __	2 349	1.1
			acres__	55 024	.6
			Land in orchards ____ farms __	1 717	1.1
			acres__	17 563	1.0

[1]Data are based on a sample of farms.
[2]Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than $1,000.

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Table D. Reliability Estimates of State Totals for Farms With Sales of $10,000 or More: 1992

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS			**FARM PRODUCTION EXPENSES**[1]		
			Total farm production expenses _____farms __	37 897	1.4
Farms _____number__	37 957	1.4	$1,000__	2 931 850	.8
Land in farms _____acres __	11 909 565	1.0	Average per farm _____dollars __	77 364	1.6
Average size of farm _____acres __	314	1.7			
			Livestock and poultry purchased _____farms __	13 429	2.0
			$1,000__	272 218	1.2
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD			Feed for livestock and poultry _____farms __	19 370	1.7
			$1,000__	527 625	.9
			Commercially mixed formula feeds _____farms __	11 216	2.1
			$1,000__	331 280	1.0
Total sales (see text) _____farms __	37 957	1.4			
$1,000__	3 796 687	.7	Seeds, bulbs, plants, and trees _____farms __	33 929	1.5
Average per farm _____dollars__	100 026	1.6	$1,000__	172 854	1.0
			Commercial fertilizer _____farms __	33 996	1.5
Farms by value of sales:			$1,000__	291 548	1.1
$10,000 to $19,999 _____farms __	10 099	1.4	Agricultural chemicals _____farms __	33 144	1.5
$1,000__	144 117	1.4	$1,000__	181 893	1.1
$20,000 to $24,999 _____farms __	3 094	1.7	Petroleum products _____farms __	37 408	1.4
$1,000__	68 832	1.7	$1,000__	161 390	1.0
$25,000 to $39,999 _____farms __	5 828	1.8	Electricity _____farms __	32 089	1.5
$1,000__	184 227	1.8	$1,000__	48 419	1.1
$40,000 to $49,999 _____farms __	2 483	1.8			
$1,000__	110 608	1.8	Hired farm labor _____farms __	14 813	1.8
			$1,000__	255 561	.6
$50,000 to $99,999 _____farms __	6 779	1.8	Contract labor _____farms __	3 239	3.5
$1,000__	484 664	1.7	$1,000__	14 952	3.1
$100,000 to $249,999 _____farms __	6 567	1.2	Repair and maintenance _____farms __	35 525	1.4
$1,000__	1 028 485	1.1	$1,000__	200 478	1.1
$250,000 to $499,999 _____farms __	2 212	–	Customwork, machine hire, and rental of machinery		
$1,000__	749 884	–	and equipment _____farms __	17 739	1.9
$500,000 or more _____farms __	895	–	$1,000__	40 791	1.9
$1,000__	1 025 870	–	Interest expense _____farms __	21 960	1.7
Sales by commodity or commodity group:			$1,000__	194 676	1.3
Crops, including nursery and greenhouse crops _____farms __	33 080	1.4	Secured by real estate _____farms __	15 672	1.8
$1,000__	2 128 048	.8	$1,000__	133 599	1.5
Grains _____farms __	29 556	1.4	Not secured by real estate _____farms __	13 380	2.0
$1,000__	1 633 835	.9	$1,000__	61 076	1.5
Corn for grain _____farms __	23 751	1.4			
$1,000__	744 995	.8	Cash rent _____farms __	16 467	1.8
Wheat _____farms __	19 627	1.4	$1,000__	213 371	1.2
$1,000__	150 053	1.0	Property taxes _____farms __	33 598	1.4
Soybeans _____farms __	24 681	1.4	$1,000__	60 790	1.4
$1,000__	722 497	.9	All other farm production expenses _____farms __	37 896	1.4
			$1,000__	295 284	.8
Sorghum for grain _____farms __	18	6.8			
$1,000__	119	5.4	**NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT)** [1]		
Barley _____farms __	201	2.3			
$1,000__	397	2.3			
Oats_____farms __	2 222	1.6			
$1,000__	4 257	1.4	All farms _____number __	37 897	1.4
Other grains _____farms __	762	1.5	$1,000__	856 381	1.1
$1,000__	11 516	1.1	Average per farm _____dollars __	22 598	1.8
Cotton and cottonseed _____farms __	–	–	Farms with net gains [2] _____number __	29 343	1.5
$1,000__	–	–	$1,000__	949 889	1.0
Tobacco _____farms __	1 760	1.7	Average net gain _____dollars __	32 372	1.8
$1,000__	26 098	1.8			
Hay, silage, and field seeds _____farms __	7 170	1.4	Farms with net losses _____number __	8 554	2.6
$1,000__	59 153	1.3	$1,000__	93 508	2.7
			Average net loss _____dollars __	10 932	3.8
Vegetables, sweet corn, and melons _____farms __	1 441	1.2			
$1,000__	79 375	.4			
Fruits, nuts, and berries _____farms __	707	1.4	**GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME**		
$1,000__	25 448	.9			
Nursery and greenhouse crops _____farms __	1 349	.8			
$1,000__	286 409	.2	Government payments _____farms __	16 071	1.4
Other crops _____farms __	411	1.4	$1,000__	101 360	.8
$1,000__	17 730	.6	Other farm-related income [1] _____farms __	10 424	2.2
			$1,000__	57 614	3.9
Livestock, poultry, and their products _____farms __	21 016	1.4	Customwork and other agricultural services ___farms __	5 368	3.0
$1,000__	1 668 639	.7	$1,000__	32 882	5.5
Poultry and poultry products _____farms __	1 414	1.3	Gross cash rent or share payments _____farms __	2 328	4.7
$1,000__	378 670	.2	$1,000__	14 514	6.6
Dairy products _____farms __	6 178	1.5	Forest products and Christmas trees _____farms __	906	6.8
$1,000__	535 247	.9	$1,000__	5 775	10.5
Cattle and calves _____farms __	15 946	1.4	Other farm-related income sources _____farms __	3 877	3.2
$1,000__	378 062	.8	$1,000__	4 443	11.6
Hogs and pigs _____farms __	7 309	1.4			
$1,000__	336 825	.8			
Sheep, lambs, and wool _____farms __	1 925	1.6	**COMMODITY CREDIT CORPORATION LOANS**		
$1,000__	5 773	1.6			
Other livestock and livestock products (see text) _____farms__	1 608	1.6			
$1,000__	34 062	.9			
			Total _____farms __	2 918	1.2
Value of agricultural products sold directly to individuals for human consumption (see text) _____farms __	2 153	1.4	$1,000__	95 177	.6
$1,000__	18 045	.9			

See footnotes at end of table.

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Table D. Reliability Estimates of State Totals for Farms With Sales of $10,000 or More: 1992 — Con.

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

Item	Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			**FARMS BY TYPE OF ORGANIZATION**		
Total cropland ___ farms	36 718	1.4	Individual or family (sole proprietorship) ___ farms	30 856	1.4
acres	10 240 713	1.0	acres	8 693 274	1.2
Harvested cropland ___ farms	36 130	1.4	Partnership ___ farms	5 456	1.4
acres	9 114 067	1.0	acres	2 332 659	.8
Cropland:			Corporation:		
Pasture or grazing only ___ farms	11 520	1.5	Family held ___ farms	1 369	.9
acres	522 327	1.4	acres	769 166	.5
Total woodland ___ farms	20 002	1.4	More than 10 stockholders ___ farms	51	2.8
acres	881 832	1.3	10 or less stockholders ___ farms	1 318	.9
Pastureland and rangeland other than cropland and woodland pastured ___ farms	6 776	1.5	Other than family held ___ farms	119	1.9
acres	397 035	1.2	acres	43 462	1.8
Land in house lots, ponds, roads, wasteland, etc. ___ farms	25 119	1.4	More than 10 stockholders ___ farms	14	4.4
acres	389 985	1.2	10 or less stockholders ___ farms	105	2.1
Irrigated land ___ farms	1 238	.9	Other—cooperative, estate or trust, institutional, etc. ___ farms	157	2.3
acres	27 119	.8	acres	71 004	1.3
Harvested cropland irrigated ___ farms	1 222	.9	**HIRED FARM LABOR**		
acres	26 378	.8	Hired workers by days worked:		
Pasture and other land irrigated ___ farms	44	3.5	150 days or more ___ farms	6 426	23.6
acres	741	6.7	workers	17 502	11.0
Land under federal acreage reduction programs:			Less than 150 days ___ farms	12 987	35.6
Diverted under annual commodity programs ___ farms	12 900	1.3	workers	51 130	26.7
acres	162 462	.8	**INJURIES AND DEATHS**		
Conservation Reserve or Wetlands Reserve Programs ___ farms	2 144	1.5	Farm-related injuries:		
acres	98 241	1.4	Operator and family members ___ farms	417	1.9
VALUE OF LAND AND BUILDINGS [1]			number	460	1.9
Estimated market value of land and buildings ___ farms	37 897	1.4	Hired workers ___ farms	381	.9
$1,000	16 798 517	1.1	number	763	.5
Average per farm ___ dollars	443 268	1.8	Farm-related deaths:		
Average per acre ___ dollars	1 419	1.6	Operator and family members ___ farms	15	6.4
VALUE OF MACHINERY AND EQUIPMENT [1]			number	(D)	(D)
Estimated market value of all machinery and equipment ___ farms	37 888	1.4	Hired workers ___ farms	3	–
$1,000	2 786 052	1.3	number	(D)	(D)
Average per farm ___ dollars	73 534	1.9	**FARMS BY SIZE**		
AGRICULTURAL CHEMICALS [1]			1 to 9 acres	1 543	1.2
Commercial fertilizer ___ farms	33 950	1.5	10 to 49 acres	2 403	1.3
acres on which used	7 136 114	1.1	50 to 69 acres	1 725	1.5
TENURE OF OPERATOR			70 to 99 acres	3 939	1.5
All operators ___ farms	37 957	1.4	100 to 139 acres	4 842	1.6
acres	11 909 565	1.0	140 to 179 acres	3 905	1.7
Full owners ___ farms	15 368	1.4	180 to 219 acres	3 051	1.8
acres	2 547 174	1.4	220 to 259 acres	2 344	1.8
Part owners ___ farms	17 341	1.3	260 to 499 acres	7 479	1.6
acres	7 859 987	.9	500 to 999 acres	4 686	1.1
Tenants ___ farms	5 248	1.8	1,000 to 1,999 acres	1 707	–
acres	1 502 404	1.4	2,000 acres or more	333	–
OWNED AND RENTED LAND			**FARMS BY STANDARD INDUSTRIAL CLASSIFICATION**		
Land owned ___ farms	32 872	1.3			
acres	5 988 839	1.1	Cash grains (011)	20 094	1.5
Owned land in farms ___ farms	32 709	1.3	Field crops, except cash grains (013)	1 962	1.5
acres	5 615 385	1.1	Vegetables and melons (016)	451	1.5
			Fruits and tree nuts (017)	341	1.5
Land rented or leased from others ___ farms	22 665	1.4	Horticultural specialties (018)	1 147	.8
acres	6 328 457	.9	General farms, primarily crop (019)	702	1.7
landlords	76 106	1.2	Livestock, except dairy, poultry, and animal specialties (021)	6 898	1.4
Rented or leased land in farms ___ farms	22 589	1.4	Dairy farms (024)	4 939	1.5
acres	6 294 180	.9	Poultry and eggs (025)	566	1.1
Land rented or leased to others ___ farms	3 695	1.4	Animal specialties (027)	366	2.1
acres	407 731	1.4	General farms, primarily livestock and animal specialties (029)	491	1.9
OPERATOR CHARACTERISTICS			**LIVESTOCK**		
Operators by place of residence:			Cattle and calves inventory ___ farms	16 073	1.4
On farm operated	29 692	1.4	number	1 140 834	1.0
Not on farm operated	6 257	1.6	Beef cows ___ farms	6 463	1.5
Not reported	2 008	1.4	number	167 099	1.4
Operators by principal occupation:			Milk cows ___ farms	6 308	1.5
Farming	24 707	1.3	number	293 648	1.0
Other	13 250	1.5	Cattle and calves sold ___ farms	15 946	1.4
Operators by days worked off farm:			number	685 251	.9
Any	18 538	1.5	$1,000	378 062	.8
200 days or more	11 882	1.5	Hogs and pigs inventory ___ farms	6 935	1.4
Operators by sex:			number	1 911 844	.8
Male	36 540	1.4	Hogs and pigs sold ___ farms	7 309	1.4
Female	1 417	1.6	number	3 862 754	.8
			$1,000	336 825	.8
			Sheep and lambs of all ages inventory ___ farms	1 938	1.6
			number	115 389	1.6
			Sheep and lambs sold ___ farms	1 850	1.6
			number	95 237	1.5
			Horses and ponies inventory ___ farms	3 835	1.7
			number	32 304	4.0
			Horses and ponies sold ___ farms	1 109	1.8
Average age of operator ___ years	50.5	1.9	number	5 562	2.0

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 5
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

[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			**CROPS HARVESTED**—Con.		
Chickens 3 months old or older inventory _____farms __	1 671	1.6	Tobacco _____ farms__	1 763	1.7
number__	23 148 418	.1	acres__	83 292	1.8
Hens and pullets of laying age _____farms __	1 632	1.6	pounds__	16 697 236	1.8
number__	19 293 351	.1	Soybeans for beans _____ farms __	24 733	1.4
Broilers and other meat-type chickens sold _____farms __	319	2.3	acres__	3 619 712	1.0
number__	25 233 810	1.7	bushels__	140 787 345	.9
			Irish potatoes _____ farms __	180	2.2
CROPS HARVESTED			acres__	5 833	.8
			cwt__	1 354 317	.7
Corn for grain or seed _____farms __	28 820	1.4	Sugar beets for sugar _____ farms __	227	1.6
acres__	3 375 395	.9	acres__	20 004	1.0
bushels__	456 210 424	.9	tons__	317 216	.9
Corn for silage or green chop _____farms __	6 212	1.4	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) _____farms __	17 311	1.4
acres__	171 652	1.0	acres__	865 812	1.2
tons, green__	2 907 244	.9	tons, dry__	2 373 571	1.2
Wheat for grain _____ farms __	19 834	1.4	Alfalfa hay _____ farms __	13 643	1.4
acres__	1 034 952	1.0	acres__	508 479	1.2
bushels__	51 880 979	1.0	tons, dry__	1 591 746	1.2
Oats for grain _____ farms __	5 930	1.6	Vegetables harvested for sale (see text) _____farms __	1 443	1.2
acres__	98 824	1.4	acres__	52 486	.6
bushels__	6 977 858	1.4	Land in orchards _____ farms __	564	1.3
			acres__	12 143	1.2

[1]Data are based on a sample of farms.
[2]Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains of less than $1,000.

Table E. Reliability Estimates of Percent Change in State Totals: 1987 to 1992

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

Item	All farms		Farms with sales of $10,000 or more	
	Percent change from 1987 to 1992	Standard error of estimate	Percent change from 1987 to 1992	Standard error of estimate
Farms_____number__	−10.8	1.3	−4.8	1.6
Land in farms _____acres __	−5.0	1.1	−1.9	1.2
Average size of farm _____acres __	6.3	2.0	3.0	2.2
Estimated market value of land and buildings [1]:				
Average per farm _____dollars __	28.3	2.5	23.0	2.8
Average per acre _____dollars __	21.4	2.3	19.5	2.4
Estimated market value of all machinery and equipment [1]:				
Average per farm _____dollars __	22.5	2.5	14.4	2.7
Farms by size:				
1 to 9 acres	−9.8	1.6	−2.2	1.7
10 to 49 acres	−8.3	1.5	21.3	2.1
50 to 179 acres	−13.1	1.3	−2.1	1.9
180 to 499 acres	−13.7	1.6	−13.8	1.7
500 to 999 acres	−5.5	1.3	−5.4	1.3
1,000 to 1,999 acres	15.8	−	16.1	−
2,000 acres or more	44.2	−	43.5	−
Total cropland _____farms __	−10.8	1.3	−4.9	1.6
acres__	−3.3	1.2	−1.0	1.2
Harvested cropland _____farms __	−11.4	1.2	−5.2	1.6
acres__	5.3	1.3	8.3	1.3
Irrigated land _____farms __	12.4	1.3	10.7	1.2
acres__	−9.2	1.1	−7.6	1.1
Market value of agricultural products sold _____$1,000 __	14.0	1.0	15.3	1.0
Average per farm _____dollars __	27.8	2.1	21.0	2.3
Crops, including nursery and greenhouse crops _____$1,000 __	25.4	1.2	27.5	1.2
Livestock, poultry, and their products _____$1,000 __	2.1	.9	2.7	.9
Farms by value of sales:				
Less than $2,500	−19.3	1.3	(X)	(X)
$2,500 to $4,999	−14.2	1.4	(X)	(X)
$5,000 to $9,999	−15.7	1.2	(X)	(X)
$10,000 to $24,999	−10.2	1.6	−10.2	1.6
$25,000 to $49,999	−7.2	2.0	−7.2	2.0
$50,000 to $99,999	−11.7	1.9	−11.7	1.9
$100,000 to $249,999	2.4	1.4	2.4	1.4
$250,000 to $499,999	42.1	.1	42.1	.1
$500,000 or more	57.0	−	57.0	−
Total farm production expenses [1] _____$1,000__	14.2	1.4	15.9	1.8
Average per farm _____dollars __	28.1	2.2	22.0	2.4
Net cash return from agricultural sales for the farm unit (see text) [1] _____farms__	−10.8	1.2	−5.0	1.7
$1,000__	14.8	1.9	14.9	1.7
Average per farm _____dollars __	28.8	2.8	21.0	2.8
Operators by principal occupation:				
Farming	−12.5	1.3	−10.3	1.5
Other	−9.1	1.4	7.5	2.0
Operators by days worked off farm:				
Any	−11.8	4.5	−2.7	5.1
200 days or more	−10.4	4.6	4.3	5.5
Livestock and poultry:				
Cattle and calves inventory _____farms __	−14.9	1.2	−11.2	1.6
number__	−7.3	1.1	−6.0	1.2
Beef cows _____farms __	−13.0	1.3	−2.1	1.7
number__	−4.1	1.4	3.2	1.7
Milk cows _____farms __	−23.7	1.3	−19.3	1.5
number__	−14.9	1.1	−14.2	1.1
Cattle and calves sold _____farms __	−16.2	1.2	−12.2	1.5
number__	−14.2	.9	−12.9	.9
Hogs and pigs inventory _____farms __	−17.8	1.3	−18.2	1.4
number__	−4.9	1.0	−4.5	1.0
Hogs and pigs sold _____farms __	−18.0	1.3	−18.1	1.4
number__	3.3	1.1	3.5	1.1
Sheep and lambs inventory _____farms __	−21.2	1.2	−21.0	1.6
number__	−22.2	1.3	−24.1	1.6
Chickens 3 months old or older inventory _____farms __	−34.7	1.0	−31.7	1.3
number__	9.3	.2	9.6	.2
Broilers and other meat-type chickens sold _____farms __	1.3	2.5	9.6	3.4
number__	181.7	8.2	182.2	8.2
Selected crops harvested:				
Corn for grain or seed _____farms __	−18.3	1.3	−11.1	1.5
acres__	12.2	1.3	15.1	1.3
bushels__	31.5	1.4	34.2	1.5
Corn for silage or green chop _____farms __	−7.4	1.6	−7.3	1.6
acres__	7.8	1.3	8.2	1.3
tons, green __	10.3	1.3	10.7	1.3
Wheat for grain _____farms __	−7.8	1.4	−4.3	1.6
acres__	29.9	1.7	32.8	1.7
bushels__	27.2	1.6	29.8	1.6
Oats for grain _____farms __	−40.4	1.0	−39.2	1.1
acres__	−44.1	.9	−43.2	1.0
bushels__	−42.7	.9	−41.7	1.0
Soybeans for beans _____farms __	−13.5	1.3	−7.0	1.6
acres__	1.7	1.2	4.1	1.3
bushels__	9.4	1.3	11.7	1.3
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) _____farms __	−12.3	1.2	−7.7	1.6
acres__	−5.5	1.3	−3.0	1.4
tons, dry __	−8.9	1.2	−6.9	1.3
Vegetables harvested for sale (see text) _____farms __	11.6	1.6	10.0	1.8
acres__	−6.9	.8	−7.6	.8

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

1992 CENSUS OF AGRICULTURE

APPENDIX C   C–13

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 7
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. Reliability Estimates for the State and County Totals: 1992

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

Geographic area	Farms Total (number)	Farms Relative standard error of estimate (percent)	Land in farms Total (acres)	Land in farms Relative standard error of estimate (percent)	Average size of farm Total (acres)	Average size of farm Relative standard error of estimate (percent)	Average market value of land and buildings per farm [1] Value (dollars)	Average market value of land and buildings per farm [1] Relative standard error of estimate (percent)	Estimated market value of all machinery and equipment [1] Total ($1,000)	Estimated market value of all machinery and equipment [1] Relative standard error of estimate (percent)
Ohio	**70 711**	**1.1**	**14 247 969**	**1.0**	**201**	**1.4**	**291 766**	**1.5**	**3 460 637**	**1.2**
Adams	1 354	1.3	196 365	1.6	145	2.1	141 635	4.6	33 850	6.4
Allen	978	1.1	194 022	1.3	198	1.7	316 927	4.6	49 494	4.6
Ashland	953	1.1	171 129	1.3	180	1.7	228 174	5.6	49 526	6.3
Ashtabula	1 026	1.1	155 895	1.3	152	1.7	164 916	5.5	42 749	5.5
Athens	501	.9	80 507	1.2	161	1.5	132 057	7.1	12 912	8.1
Auglaize	997	1.2	205 105	1.3	206	1.7	307 232	3.9	58 658	5.2
Belmont	603	.9	126 195	1.2	209	1.5	163 560	10.8	18 045	11.2
Brown	1 493	1.1	202 188	1.3	135	1.7	157 271	4.3	53 845	5.0
Butler	902	1.1	138 297	1.4	153	1.7	307 282	4.4	41 634	6.7
Carroll	689	1.1	122 480	1.4	178	1.8	178 550	7.6	26 958	7.2
Champaign	871	1.1	215 796	1.0	248	1.5	335 457	3.5	48 151	3.8
Clark	732	1.1	179 280	1.0	245	1.5	410 010	5.1	40 632	3.7
Clermont	821	1.1	99 214	1.3	121	1.8	264 206	14.9	24 057	6.0
Clinton	785	1.3	227 382	1.0	290	1.7	447 179	3.0	48 788	5.3
Columbiana	977	1.2	143 773	1.3	147	1.7	190 325	6.1	41 643	4.6
Coshocton	810	.8	161 724	1.0	200	1.3	204 329	5.6	32 806	5.1
Crawford	766	1.3	223 216	1.1	291	1.7	368 722	2.3	52 850	4.5
Cuyahoga	133	.6	4 060	8.8	31	8.8	299 175	3.4	4 503	4.0
Darke	1 905	.9	335 575	.9	176	1.2	325 505	2.4	112 116	3.6
Defiance	830	1.1	196 759	1.3	237	1.7	272 184	6.1	40 029	6.8
Delaware	688	1.1	169 017	1.0	246	1.5	590 444	4.3	35 950	5.3
Erie	406	1.0	88 899	1.4	219	1.7	409 805	4.3	27 614	5.6
Fairfield	1 058	1.1	197 736	1.2	187	1.6	292 888	4.1	51 669	4.6
Fayette	558	.9	235 971	.8	423	1.2	521 438	2.6	46 618	5.8
Franklin	484	1.0	97 020	1.2	200	1.5	553 404	8.2	25 361	7.9
Fulton	847	1.5	205 633	1.2	243	1.9	440 735	5.2	50 975	5.1
Gallia	797	1.2	109 820	1.5	138	1.9	117 192	6.1	21 379	7.1
Geauga	622	1.2	65 266	1.7	105	2.0	297 575	9.1	20 516	9.6
Greene	835	1.1	184 280	1.0	221	1.4	403 208	3.8	44 282	5.4
Guernsey	769	1.0	127 867	1.5	166	1.8	130 222	9.3	23 103	8.2
Hamilton	313	.9	28 983	1.8	93	2.0	302 276	6.9	14 306	7.4
Hancock	1 032	1.2	275 644	1.2	267	1.7	459 680	6.4	67 368	4.4
Hardin	896	1.6	248 400	1.5	277	2.2	307 852	3.9	54 612	4.5
Harrison	393	1.0	113 329	1.2	288	1.5	164 419	8.8	18 250	13.6
Henry	955	1.1	245 049	1.2	257	1.6	403 913	4.2	54 494	4.8
Highland	1 153	1.1	230 988	1.3	200	1.7	215 845	3.7	48 894	4.9
Hocking	355	1.1	48 050	1.6	135	1.9	132 804	10.4	5 925	10.8
Holmes	1 443	1.4	177 194	1.4	123	2.0	197 755	4.5	48 193	5.7
Huron	843	1.2	219 023	1.2	260	1.7	341 679	5.0	63 752	6.7
Jackson	385	1.0	74 461	1.6	193	1.9	151 666	10.6	13 284	8.2
Jefferson	377	.9	68 344	1.5	181	1.7	115 118	8.2	10 563	7.4
Knox	1 102	1.4	210 601	1.5	191	2.1	215 732	4.4	43 034	4.7
Lake	272	.6	17 138	1.3	63	1.4	282 467	6.8	11 588	6.3
Lawrence	512	1.2	61 999	1.4	121	1.8	122 207	9.6	10 628	6.7
Licking	1 256	1.0	227 327	1.1	181	1.5	333 970	4.9	52 351	5.2
Logan	808	1.1	202 927	1.0	251	1.5	297 696	3.9	42 331	4.4
Lorain	850	.9	142 624	1.1	168	1.4	335 218	4.6	45 283	4.3
Lucas	411	.8	74 037	1.3	180	1.5	400 761	5.1	24 091	6.1
Madison	664	1.1	261 320	.8	394	1.3	584 477	3.2	44 138	5.2
Mahoning	580	.8	73 484	1.1	127	1.3	225 682	5.0	30 949	6.8
Marion	596	1.2	217 397	.9	365	1.5	437 279	3.9	51 392	7.0
Medina	906	1.0	103 857	1.2	115	1.5	252 474	5.3	33 893	6.4
Meigs	493	.9	87 036	1.4	177	1.7	137 456	7.8	15 242	7.8
Mercer	1 393	1.1	269 163	.9	193	1.4	356 565	2.5	95 371	3.4
Miami	1 017	1.0	200 405	1.2	197	1.6	362 066	3.0	46 375	4.0
Monroe	628	.8	109 986	1.1	175	1.4	120 376	7.5	18 887	9.2
Montgomery	806	.9	107 157	1.2	133	1.5	336 460	6.1	31 217	6.9
Morgan	559	1.4	113 892	1.8	204	2.3	134 664	5.3	17 196	13.6
Morrow	746	2.5	164 607	2.2	221	3.3	257 291	4.6	33 909	5.9
Muskingum	1 051	.9	187 718	1.1	179	1.4	158 138	5.2	33 335	5.5
Noble	551	1.1	104 197	1.2	189	1.6	140 730	7.5	13 452	6.4
Ottawa	522	1.1	106 573	1.4	204	1.7	311 093	4.6	30 066	6.0
Paulding	621	1.0	219 037	.9	353	1.3	448 105	3.2	47 142	4.8
Perry	580	1.2	96 060	1.5	166	1.9	174 125	7.8	19 859	9.5
Pickaway	683	1.1	259 390	.9	380	1.4	496 007	5.3	55 514	4.5
Pike	378	1.3	87 954	1.7	233	2.1	206 793	6.4	15 091	10.5
Portage	721	.8	96 293	1.1	134	1.4	267 554	4.8	28 646	4.5
Preble	1 067	1.2	204 079	1.2	191	1.7	300 669	2.9	54 268	4.6
Putnam	1 473	.8	286 698	.9	195	1.2	328 203	3.4	90 576	3.7
Richland	922	1.3	160 734	1.4	174	1.9	250 786	4.6	45 941	5.1
Ross	809	1.2	253 383	1.1	313	1.6	319 164	3.3	45 716	8.1
Sandusky	850	1.2	202 324	1.2	238	1.7	350 236	3.2	51 497	8.4
Scioto	607	2.0	95 704	2.6	158	3.3	172 853	8.6	23 715	10.4
Seneca	1 265	1.5	296 368	1.5	234	2.1	289 743	3.9	65 746	4.9
Shelby	971	1.1	203 498	1.1	210	1.6	348 648	3.2	56 963	4.5
Stark	1 120	.9	136 612	1.2	122	1.5	229 813	4.0	48 736	4.5
Summit	260	.9	19 088	1.9	73	2.0	301 860	17.6	7 766	7.1
Trumbull	842	1.0	120 519	1.4	143	1.7	214 129	3.9	41 931	7.3
Tuscarawas	922	1.2	148 479	1.4	161	1.8	207 255	6.9	38 024	5.9
Union	803	1.1	222 957	1.1	278	1.6	359 955	3.7	57 993	5.2
Van Wert	790	.8	241 787	.8	306	1.2	514 020	3.4	59 744	5.9
Vinton	205	.9	41 666	1.8	203	2.0	154 008	14.1	5 837	10.2
Warren	792	.9	129 416	1.0	163	1.3	484 257	4.7	36 506	4.9
Washington	864	.9	139 655	1.2	162	1.5	139 815	6.3	26 086	6.8

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 8
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

[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)
Wayne	1 582	1.1	246 938	1.0	156	1.5	274 657	3.1	91 438	3.5
Williams	763	1.5	187 175	1.5	245	2.1	259 144	4.5	36 794	4.8
Wood	1 089	1.2	302 456	1.1	278	1.6	449 517	3.1	63 527	3.6
Wyandot	674	1.1	216 318	1.0	321	1.5	389 618	4.5	40 497	5.5

Geographic area	Average market value of all machinery and equipment per farm[1]		Market value of agricultural products sold		Average market value of agricultural products sold per farm		Farm production expenses [1] — Total farm production expenses			
							Farms		Value	
	Value (dollars)	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Ohio	**48 982**	**1.6**	**3 914 040**	**.7**	**55 353**	**1.3**	**70 695**	**1.1**	**3 119 014**	**.7**
Adams	25 000	6.5	26 236	2.0	19 377	2.4	1 354	1.2	17 091	6.1
Allen	50 972	4.8	51 986	1.1	53 155	1.5	978	1.2	39 799	2.4
Ashland	52 023	6.4	46 579	1.1	48 876	1.6	952	1.2	37 878	2.2
Ashtabula	41 666	5.6	36 398	1.3	35 476	1.7	1 026	1.2	28 384	2.5
Athens	25 772	8.2	5 801	1.8	11 579	2.0	501	1.3	5 910	10.2
Auglaize	58 835	5.4	68 407	1.0	68 613	1.5	997	1.2	53 890	2.0
Belmont	29 926	11.3	11 023	2.0	18 281	2.2	603	1.2	8 400	9.7
Brown	36 065	5.2	34 754	1.4	23 278	1.8	1 493	1.3	25 025	3.4
Butler	46 158	6.8	34 463	1.3	38 207	1.7	902	1.1	27 745	5.4
Carroll	39 183	7.3	19 821	1.7	28 767	2.0	688	1.1	16 739	4.2
Champaign	55 666	4.1	58 514	.9	67 180	1.4	872	1.3	45 301	2.1
Clark	56 277	4.0	64 298	.7	87 839	1.2	732	1.2	53 091	1.3
Clermont	29 231	6.1	18 347	1.4	22 347	1.8	823	1.3	13 986	10.2
Clinton	62 229	5.5	57 606	.9	73 384	1.6	784	1.4	43 345	1.9
Columbiana	42 536	4.8	44 185	1.2	45 225	1.7	979	1.4	35 580	3.3
Coshocton	40 502	5.2	27 888	1.0	34 429	1.3	810	.9	23 528	2.2
Crawford	68 995	4.6	55 663	.9	72 667	1.6	766	1.1	45 581	1.9
Cuyahoga	34 111	4.4	15 916	.4	119 666	.8	132	1.8	13 696	1.1
Darke	58 853	3.7	199 283	.4	104 610	1.0	1 905	.9	162 263	.8
Defiance	48 228	7.0	39 647	1.0	47 767	1.5	830	1.3	29 831	3.2
Delaware	52 406	5.5	40 741	.8	59 216	1.4	686	1.1	33 384	3.5
Erie	68 016	5.7	26 099	1.1	64 284	1.5	406	1.3	20 887	2.6
Fairfield	48 790	4.7	43 477	1.1	41 093	1.5	1 059	1.1	35 843	2.4
Fayette	83 696	5.9	58 788	.7	105 355	1.1	557	1.1	41 772	1.4
Franklin	52 508	8.0	39 589	.6	81 796	1.2	483	1.1	31 810	2.1
Fulton	60 112	5.3	83 426	.8	98 496	1.7	848	1.5	70 549	1.2
Gallia	26 858	7.2	13 763	1.7	17 269	2.1	796	1.3	11 455	5.3
Geauga	32 931	9.7	16 086	1.6	25 862	2.0	623	1.2	13 542	4.9
Greene	53 032	5.6	51 295	.9	61 431	1.4	835	1.2	41 262	2.0
Guernsey	30 003	8.3	9 639	2.1	12 534	2.4	770	1.2	8 890	7.3
Hamilton	45 706	7.5	15 981	.9	51 058	1.3	313	1.2	12 851	2.8
Hancock	65 279	4.6	62 709	1.0	60 764	1.6	1 032	1.4	46 400	3.1
Hardin	60 951	4.7	54 161	1.3	60 447	2.1	896	1.4	41 341	2.4
Harrison	46 556	13.6	8 393	1.8	21 357	2.1	392	1.1	7 388	4.2
Henry	57 062	5.0	64 101	1.0	67 122	1.5	955	1.4	43 711	2.7
Highland	42 406	5.0	44 197	1.3	38 333	1.7	1 153	1.2	35 487	4.2
Hocking	16 691	10.8	2 653	2.4	7 473	2.6	355	1.2	2 538	10.2
Holmes	33 421	5.9	78 961	1.3	54 720	1.9	1 442	1.4	61 194	2.8
Huron	75 715	6.9	63 569	.8	75 408	1.5	842	1.4	52 879	1.7
Jackson	34 503	8.3	18 593	.8	48 292	1.2	385	1.1	13 883	3.7
Jefferson	28 093	7.5	6 420	2.0	17 028	2.2	376	1.2	4 841	10.1
Knox	39 015	4.9	57 980	1.2	52 613	1.8	1 103	1.4	47 355	2.1
Lake	42 760	6.4	49 766	.2	182 962	.7	271	1.1	39 656	1.1
Lawrence	20 799	6.8	4 794	1.9	9 364	2.3	511	1.2	5 196	19.3
Licking	41 714	5.3	94 131	.5	74 945	1.1	1 255	1.1	83 660	1.2
Logan	52 455	4.5	55 941	.8	69 234	1.3	807	1.1	46 240	1.9
Lorain	53 337	4.5	70 567	.4	83 021	1.0	849	1.1	59 386	1.2
Lucas	58 617	6.2	36 607	.6	89 068	1.0	411	1.0	29 214	2.8
Madison	66 473	5.4	67 433	.7	101 556	1.3	664	1.3	49 778	2.2
Mahoning	53 452	6.9	27 780	.8	47 896	1.1	579	1.0	23 452	2.4
Marion	86 374	7.2	49 552	.8	83 141	1.4	595	1.3	38 513	3.7
Medina	37 409	6.5	27 454	1.1	30 302	1.5	906	1.2	24 243	6.4
Meigs	30 854	7.8	10 325	1.6	20 944	1.8	494	1.1	9 458	8.1
Mercer	68 415	3.6	190 678	.4	136 883	1.2	1 394	1.3	150 923	.9
Miami	45 645	4.2	62 231	.9	61 190	1.3	1 016	1.2	43 439	1.8
Monroe	30 123	9.3	8 289	2.3	13 200	2.4	627	.9	7 046	10.4
Montgomery	38 731	7.0	31 417	1.0	38 978	1.3	806	1.0	24 184	4.1
Morgan	30 761	13.7	10 652	1.7	19 055	2.2	559	1.6	9 046	6.7
Morrow	45 455	6.5	35 500	1.8	47 587	3.0	746	2.7	29 261	3.7
Muskingum	31 687	5.6	25 390	1.0	24 158	1.4	1 052	1.0	23 277	2.6
Noble	24 459	6.5	4 822	2.1	8 752	2.4	550	1.2	4 934	7.1
Ottawa	58 154	6.2	23 766	1.0	45 529	1.5	522	1.2	19 731	3.2
Paulding	76 035	4.9	55 001	.6	88 568	1.1	620	1.1	37 057	1.9
Perry	34 299	9.6	14 135	1.6	24 371	2.0	579	1.3	11 695	10.4

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 9
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

Geographic area	Average market value of all machinery and equipment per farm[1]		Market value of agricultural products sold		Average market value of agricultural products sold per farm		Farm production expenses [1]			
							Total farm production expenses			
							Farms		Value	
	Value (dollars)	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Pickaway	81 999	4.8	58 425	.8	85 542	1.3	683	1.2	47 292	2.0
Pike	40 787	10.8	9 358	2.0	24 756	2.4	378	1.4	8 188	10.6
Portage	39 786	4.6	23 394	.9	32 447	1.2	720	.9	20 309	3.7
Preble	50 860	4.7	61 737	1.1	57 860	1.6	1 067	1.1	49 267	2.1
Putnam	61 533	3.8	87 345	.7	59 297	1.1	1 472	.9	66 006	2.2
Richland	49 882	5.3	44 262	1.4	48 007	1.9	921	1.4	37 002	2.6
Ross	56 509	8.2	43 853	1.0	54 207	1.5	809	1.3	34 687	2.7
Sandusky	60 585	8.6	55 026	.9	64 736	1.6	850	1.5	45 249	2.6
Scioto	39 069	10.6	16 259	2.1	26 786	2.9	607	2.0	13 857	4.6
Seneca	52 015	5.1	73 439	1.1	58 055	1.8	1 264	1.4	57 753	2.1
Shelby	58 664	4.6	61 659	1.0	63 501	1.5	971	1.0	46 745	2.0
Stark	43 514	4.6	56 435	.7	50 388	1.2	1 120	1.0	47 557	2.1
Summit	29 869	7.2	7 793	1.0	29 974	1.3	260	1.3	6 967	6.5
Trumbull	49 682	7.3	25 125	1.4	29 840	1.7	844	1.1	21 136	2.8
Tuscarawas	41 240	6.0	46 253	1.1	50 165	1.6	922	1.3	36 252	3.6
Union	72 041	5.3	77 820	.6	96 912	1.3	805	1.2	63 814	1.1
Van Wert	75 530	6.0	59 603	.7	75 447	1.1	791	1.0	38 548	2.2
Vinton	28 474	10.3	2 109	4.0	10 288	4.1	205	1.2	2 117	20.2
Warren	46 152	5.0	31 932	.8	40 318	1.2	791	1.0	28 697	2.2
Washington	30 227	6.9	19 152	1.3	22 167	1.6	863	1.1	15 244	4.6
Wayne	57 872	3.7	138 969	.8	87 844	1.4	1 581	1.2	115 851	1.7
Williams	48 287	5.1	48 072	1.1	63 004	1.9	762	1.7	41 018	2.6
Wood	58 336	3.8	82 649	.8	75 895	1.4	1 089	1.2	61 416	1.5
Wyandot	60 174	5.6	49 703	.9	73 744	1.4	673	1.2	38 325	2.6

Farm production expenses [1] —Con.

Geographic area	Livestock and poultry purchased				Feed for livestock and poultry				Seeds, bulbs, plants, and trees			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Ohio	**21 991**	**1.6**	**287 297**	**1.2**	**35 802**	**1.3**	**545 008**	**.9**	**50 075**	**1.3**	**179 519**	**1.0**
Adams	387	10.7	1 311	20.6	730	5.5	2 960	12.4	867	4.9	599	7.9
Allen	255	13.4	2 705	10.4	355	10.4	5 212	9.7	820	2.8	2 845	4.7
Ashland	301	11.2	3 449	10.6	577	6.0	7 854	3.5	760	3.8	1 690	4.0
Ashtabula	307	10.1	2 312	14.1	552	6.3	5 627	5.0	535	6.3	1 098	4.6
Athens	141	16.0	511	25.3	328	7.1	1 066	12.3	210	12.0	131	18.7
Auglaize	350	9.2	6 115	9.5	519	6.7	12 015	4.1	833	3.2	2 839	3.8
Belmont	176	15.5	982	14.0	386	7.2	2 237	20.6	198	12.4	151	18.9
Brown	287	13.5	780	15.9	605	7.9	1 607	24.9	948	4.2	1 529	6.8
Butler	280	10.6	3 837	11.6	528	6.2	4 062	9.6	558	4.2	1 542	5.0
Carroll	338	8.1	1 963	26.2	439	5.2	3 432	6.3	396	6.5	710	7.5
Champaign	287	11.9	3 069	13.0	474	7.6	3 890	4.2	679	4.2	3 058	3.0
Clark	218	11.5	6 529	7.9	442	6.8	3 909	8.1	520	4.7	3 909	2.3
Clermont	173	17.5	1 226	52.8	394	9.5	1 347	26.2	425	8.2	856	5.0
Clinton	187	12.1	2 251	9.9	351	8.3	4 504	4.5	625	3.8	3 158	3.4
Columbiana	350	10.1	2 364	14.7	591	5.7	5 897	7.5	583	5.0	2 403	19.5
Coshocton	276	11.3	1 593	11.6	543	5.9	5 364	8.9	571	5.3	1 101	5.8
Crawford	295	10.3	4 177	9.9	349	8.9	3 954	5.9	673	3.3	3 052	3.8
Cuyahoga	33	12.1	(D)	(D)	55	5.6	176	8.0	68	6.0	1 748	2.2
Darke	627	6.8	21 091	3.0	869	5.0	65 142	.8	1 599	2.3	4 908	3.7
Defiance	125	16.8	4 276	2.8	175	13.4	3 803	13.9	721	3.1	2 241	5.3
Delaware	162	15.0	1 497	8.4	325	9.5	1 789	7.8	449	4.9	2 466	3.6
Erie	121	17.3	743	13.9	159	14.1	1 096	12.6	351	4.3	1 354	4.0
Fairfield	389	9.8	3 511	7.4	668	5.8	3 373	6.9	686	4.1	2 522	4.5
Fayette	163	11.7	1 834	5.5	266	8.9	3 720	8.7	460	4.2	3 231	3.6
Franklin	117	17.4	(D)	(D)	180	12.4	1 286	8.4	296	8.8	2 958	2.3
Fulton	280	11.4	14 858	2.9	346	9.6	7 878	4.9	728	3.2	4 005	3.0
Gallia	170	17.1	1 560	8.1	466	7.3	2 169	9.0	407	7.7	223	16.0
Geauga	306	9.8	1 252	18.5	461	5.4	2 700	8.2	455	5.7	663	5.3
Greene	281	10.6	2 800	5.7	386	8.6	3 386	5.6	610	4.2	2 969	4.7
Guernsey	246	12.0	827	10.7	476	7.2	1 799	13.3	292	11.4	196	15.2
Hamilton	79	21.3	1 107	11.5	150	10.3	619	10.4	138	10.3	1 588	1.6
Hancock	185	14.8	1 899	9.1	255	11.7	3 693	7.3	955	2.3	3 941	4.3
Hardin	210	13.4	3 256	5.5	301	10.5	2 908	8.7	792	3.0	2 898	3.6
Harrison	144	14.0	596	17.1	248	8.7	1 600	10.1	191	12.1	163	9.2
Henry	172	15.3	3 237	12.7	238	12.6	3 799	12.7	897	2.1	3 841	5.1
Highland	337	11.6	2 801	20.1	554	7.4	2 339	9.2	856	4.0	2 661	4.9
Hocking	127	17.5	147	19.9	245	8.9	181	13.8	151	14.0	84	19.9
Holmes	964	4.7	8 862	8.2	1 245	2.8	26 658	5.3	1 070	3.7	1 204	5.0
Huron	286	12.5	2 047	18.8	410	9.9	3 671	9.9	655	5.3	2 997	4.6
Jackson	135	16.9	632	17.1	272	8.3	940	6.9	118	17.1	124	31.8
Jefferson	95	20.3	169	24.9	250	7.4	868	12.8	171	12.7	196	9.7
Knox	401	8.2	10 341	4.6	650	5.4	7 791	9.1	745	4.8	1 872	6.6
Lake	25	44.6	99	62.5	89	15.9	211	41.4	147	6.9	2 441	3.4
Lawrence	84	23.0	353	18.2	280	9.1	773	39.4	274	9.4	88	17.2

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 10
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

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

Geographic area	Livestock and poultry purchased — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)	Feed for livestock and poultry — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)	Seeds, bulbs, plants, and trees — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)
Licking	494	8.4	12 946	1.8	808	4.9	31 845	1.0	717	5.1	2 486	4.2
Logan	235	10.8	2 992	10.7	368	7.6	8 961	6.3	627	4.0	2 761	5.7
Lorain	191	16.0	1 762	13.8	316	11.3	2 994	7.7	634	4.3	6 407	1.5
Lucas	48	31.5	954	40.4	90	23.8	1 023	26.6	311	6.4	2 465	2.8
Madison	214	13.6	3 611	4.8	322	9.1	3 605	12.4	537	4.4	3 592	5.2
Mahoning	198	13.9	1 783	15.1	316	9.7	3 923	7.4	393	6.1	776	5.4
Marion	148	17.4	2 418	5.8	251	11.9	3 917	4.2	491	4.6	2 692	3.7
Medina	275	12.6	1 190	23.0	482	6.8	3 780	10.4	535	5.7	1 111	8.7
Meigs	149	15.6	900	23.4	280	8.6	1 335	8.3	238	9.6	341	10.0
Mercer	593	5.6	20 196	3.0	805	3.9	69 737	1.3	1 166	2.6	3 837	2.5
Miami	283	10.3	3 405	5.9	389	8.7	4 196	7.0	879	3.2	2 911	3.9
Monroe	214	12.8	613	18.1	469	5.5	2 306	21.2	184	12.1	159	15.0
Montgomery	171	16.9	934	8.6	309	10.7	1 816	7.6	647	4.0	2 349	3.4
Morgan	228	11.7	1 653	12.4	381	6.7	1 807	5.3	277	9.1	216	7.6
Morrow	272	13.6	2 420	6.3	390	9.3	3 051	5.0	553	5.1	2 085	6.6
Muskingum	374	11.2	3 993	3.7	662	5.8	4 850	4.2	530	7.5	906	8.4
Noble	194	13.2	520	14.2	367	6.7	851	15.0	187	12.3	79	23.6
Ottawa	46	32.0	182	60.2	81	23.9	627	14.7	394	6.0	1 310	7.8
Paulding	117	20.1	3 147	8.9	161	15.6	5 199	3.5	528	4.4	2 510	6.2
Perry	207	14.9	1 145	19.3	459	5.1	1 349	17.0	333	9.2	639	15.0
Pickaway	199	14.1	2 394	8.6	299	9.8	4 288	15.6	567	3.8	3 935	3.2
Pike	127	18.0	904	35.3	207	11.4	1 723	23.7	197	9.5	288	10.0
Portage	235	12.5	1 345	14.4	374	7.8	4 111	4.9	411	6.4	898	5.6
Preble	386	9.6	5 591	6.1	604	6.6	6 603	3.6	860	3.5	3 039	7.8
Putnam	364	8.5	6 425	10.3	462	7.1	11 146	5.5	1 355	2.0	4 538	6.1
Richland	400	8.7	4 885	11.4	569	5.6	5 121	4.8	664	4.7	1 869	4.5
Ross	306	11.3	2 889	13.1	525	5.9	3 062	11.7	583	4.3	2 677	2.5
Sandusky	181	15.7	1 102	24.9	234	13.8	1 664	8.5	747	2.8	3 832	7.8
Scioto	139	18.3	1 527	7.4	365	7.6	4 330	6.1	363	7.6	487	10.0
Seneca	362	10.2	4 907	10.1	495	8.5	5 828	8.4	1 088	2.9	3 921	4.3
Shelby	306	9.7	3 885	8.3	453	7.2	9 381	5.3	882	2.5	2 760	3.5
Stark	391	8.6	4 591	8.9	617	5.9	13 894	3.5	739	4.0	1 584	3.9
Summit	31	36.4	353	55.3	112	13.5	531	14.4	129	11.6	453	7.6
Trumbull	317	9.3	1 143	12.2	492	6.4	2 975	7.4	553	4.8	1 187	6.3
Tuscarawas	422	9.2	4 484	7.6	595	6.2	10 075	6.0	525	6.5	902	12.8
Union	198	15.9	4 833	2.3	340	10.4	11 287	1.4	604	4.5	2 519	3.8
Van Wert	167	14.4	1 764	16.4	212	12.2	3 239	6.2	713	2.9	3 148	6.2
Vinton	63	26.5	(D)	(D)	115	15.6	161	20.1	76	25.3	79	41.5
Warren	224	13.8	1 423	11.0	378	8.8	2 731	5.5	542	5.4	2 826	2.4
Washington	336	9.4	2 119	11.8	540	5.8	3 156	5.8	393	8.1	453	7.9
Wayne	815	5.2	12 970	5.1	1 118	3.3	37 008	3.3	1 207	2.7	3 560	3.3
Williams	168	16.0	7 519	3.8	296	11.5	6 057	11.0	652	3.3	2 544	3.9
Wood	193	14.0	4 281	3.3	255	12.6	5 557	3.5	981	2.7	5 565	3.5
Wyandot	138	18.5	2 523	14.2	257	11.9	4 600	8.5	600	3.5	2 573	4.9

Farm production expenses [1] —Con.

Geographic area	Commercial fertilizer — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)	Agricultural chemicals — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)	Petroleum products — Farms Number	RSE (percent)	Value Total ($1,000)	RSE (percent)
Ohio	**52 433**	**1.2**	**305 407**	**1.1**	**51 627**	**1.2**	**189 954**	**1.1**	**67 785**	**1.1**	**176 670**	**1.0**
Adams	1 154	2.9	1 898	7.2	982	4.1	688	9.1	1 288	2.0	1 183	5.9
Allen	792	3.0	5 446	5.2	828	2.9	3 293	5.9	921	1.7	2 572	3.5
Ashland	726	4.4	3 183	4.5	743	4.3	1 838	4.5	914	2.2	2 380	4.1
Ashtabula	704	4.6	2 054	7.7	624	5.1	772	6.7	995	1.8	1 458	4.5
Athens	301	7.8	484	13.2	226	10.7	91	12.0	454	3.4	382	8.8
Auglaize	795	3.7	5 932	4.5	843	3.6	3 106	4.7	973	1.8	2 809	3.8
Belmont	339	8.3	436	17.6	247	10.7	172	18.5	580	2.3	646	8.5
Brown	1 262	2.7	4 696	10.9	1 223	3.0	2 091	8.1	1 432	1.9	2 089	6.1
Butler	526	5.8	2 753	6.0	628	3.7	1 617	8.7	854	2.0	1 626	8.5
Carroll	425	6.2	1 045	9.0	340	7.3	491	10.1	652	2.5	1 035	5.2
Champaign	665	4.2	5 256	3.0	659	4.2	4 153	4.2	841	2.0	2 890	3.6
Clark	543	4.4	4 922	3.0	526	4.9	3 312	3.5	720	1.7	2 724	3.0
Clermont	512	6.0	1 662	3.7	508	6.3	907	4.1	767	2.3	874	5.0
Clinton	648	4.2	6 797	5.0	602	4.6	3 848	3.3	771	1.7	3 016	3.8
Columbiana	640	5.3	2 378	8.1	657	5.0	1 198	14.1	908	2.5	2 041	3.0
Coshocton	561	5.4	2 191	7.0	591	5.5	912	7.7	779	2.1	1 608	4.5
Crawford	643	3.6	6 797	2.9	616	4.1	3 995	4.1	748	1.9	3 040	3.1
Cuyahoga	89	4.8	123	6.1	95	4.2	84	23.3	126	2.3	1 207	1.4
Darke	1 520	2.6	9 014	2.9	1 516	2.6	5 509	3.2	1 802	1.4	5 500	2.8
Defiance	680	4.1	3 600	7.0	680	3.7	3 161	5.9	804	2.2	1 795	6.3
Delaware	390	6.1	3 712	5.0	441	5.4	2 664	7.1	660	2.1	2 168	6.0
Erie	332	3.9	2 828	4.3	353	4.0	1 721	5.6	390	2.6	1 566	6.5
Fairfield	767	4.1	4 618	3.9	717	4.3	2 858	4.4	1 024	1.7	2 560	4.1
Fayette	430	5.0	6 412	2.9	422	4.6	4 053	3.8	551	1.4	2 852	2.4

See footnotes at end of table.

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

	Farm production expenses [1]—Con.											
	Commercial fertilizer				Agricultural chemicals				Petroleum products			
	Farms		Value		Farms		Value		Farms		Value	
Geographic area	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)
Franklin	302	7.3	2 271	7.0	327	8.0	1 627	9.8	440	2.9	1 819	2.4
Fulton	718	2.9	6 575	3.3	709	3.8	4 091	3.5	825	1.9	3 688	4.9
Gallia	630	4.2	873	7.4	509	6.6	247	18.2	756	2.3	746	8.2
Geauga	458	5.8	621	6.9	441	6.5	235	8.4	583	3.2	786	6.7
Greene	626	4.1	5 142	2.4	622	4.7	3 077	3.8	815	1.6	2 488	2.3
Guernsey	446	7.8	585	9.1	407	8.7	167	11.6	729	2.4	570	9.7
Hamilton	163	12.5	539	10.3	234	5.9	332	10.2	279	5.0	867	2.2
Hancock	911	2.5	8 081	4.5	914	3.2	4 609	5.5	987	2.2	3 469	3.6
Hardin	737	3.1	6 027	4.0	780	3.4	4 131	4.6	872	2.0	2 832	3.4
Harrison	210	11.1	395	11.9	206	11.5	161	5.0	362	4.2	501	7.8
Henry	896	2.2	6 762	7.0	865	2.7	4 122	5.1	947	1.6	2 758	4.0
Highland	937	3.5	6 102	5.8	894	4.0	3 500	8.6	1 124	1.7	2 408	4.8
Hocking	198	11.9	246	17.1	158	14.3	106	22.1	341	2.9	216	10.8
Holmes	1 057	3.8	1 860	4.6	1 097	3.6	986	4.2	1 402	1.8	2 194	3.5
Huron	606	6.4	5 066	4.6	627	5.5	3 948	4.0	823	2.0	3 219	3.2
Jackson	223	10.3	525	12.0	131	14.4	122	9.7	365	3.5	823	6.2
Jefferson	230	9.6	343	16.0	195	11.7	127	11.2	352	3.3	427	11.1
Knox	674	5.1	3 530	6.1	753	4.5	2 463	8.0	1 019	2.6	2 572	6.4
Lake	194	7.2	706	4.3	213	6.4	786	11.4	269	1.1	1 063	4.6
Lawrence	359	7.0	314	15.7	257	9.6	77	16.9	479	2.6	369	10.3
Licking	764	4.4	3 807	4.9	831	4.0	2 740	5.0	1 218	1.6	2 815	2.9
Logan	608	4.2	4 860	3.0	627	3.9	3 223	4.6	774	1.8	2 625	3.8
Lorain	617	4.9	3 022	6.2	638	5.1	2 637	5.6	819	2.2	4 348	1.8
Lucas	282	6.5	2 264	7.3	360	4.7	1 876	6.9	394	2.8	2 148	2.6
Madison	516	4.9	7 640	3.7	528	4.4	4 327	4.2	640	2.3	3 004	3.3
Mahoning	380	6.8	1 458	7.2	419	6.5	782	9.7	560	2.4	1 102	4.4
Marion	464	5.4	5 335	5.8	507	4.6	3 893	5.7	595	1.3	2 667	4.6
Medina	616	5.0	1 758	6.2	615	5.4	893	7.3	820	2.9	1 466	6.4
Meigs	321	6.9	537	16.5	321	6.6	232	23.3	475	2.2	667	7.6
Mercer	1 127	2.8	8 083	3.3	1 158	2.7	3 703	3.0	1 354	1.6	4 816	2.8
Miami	829	3.7	5 283	4.8	844	3.3	3 400	3.8	1 002	1.5	2 942	3.6
Monroe	385	7.5	437	11.7	267	10.9	104	29.6	598	2.4	515	8.4
Montgomery	556	5.4	2 531	6.8	617	4.9	1 675	5.9	789	1.5	1 412	6.0
Morgan	337	7.3	679	18.5	310	8.5	319	14.0	526	2.6	596	12.5
Morrow	584	5.7	3 960	4.0	567	5.7	3 014	7.2	718	3.7	1 743	5.8
Muskingum	584	6.6	2 090	7.5	577	6.4	948	10.1	1 018	2.0	1 313	6.6
Noble	286	9.7	269	16.1	214	13.2	175	23.7	494	3.1	384	9.6
Ottawa	411	5.4	2 305	7.3	466	4.1	2 434	4.6	522	1.2	1 251	3.2
Paulding	513	4.6	4 146	4.1	502	4.6	3 082	3.7	615	1.3	2 275	3.9
Perry	384	7.4	1 411	17.5	345	8.7	681	16.2	574	1.6	819	12.0
Pickaway	562	3.8	8 255	5.9	541	4.4	4 233	3.6	644	2.1	3 058	3.7
Pike	265	7.9	950	14.4	252	7.9	411	6.8	345	4.8	526	10.3
Portage	455	5.7	1 514	5.8	420	6.6	866	12.3	669	2.1	1 066	3.8
Preble	836	3.4	6 058	4.3	857	3.1	3 710	4.6	981	2.4	3 157	3.9
Putnam	1 311	2.4	7 846	4.0	1 235	2.8	5 059	4.7	1 439	1.2	4 411	4.0
Richland	691	4.8	3 972	5.7	706	4.8	2 352	8.8	911	1.6	2 346	3.9
Ross	584	4.7	4 417	3.2	654	4.0	2 726	3.4	786	2.0	2 714	2.7
Sandusky	738	3.0	6 365	4.4	708	3.4	5 375	5.8	801	2.3	2 626	5.3
Scioto	455	5.7	808	8.2	397	7.8	583	9.4	606	2.0	643	9.3
Seneca	1 100	3.1	7 612	4.2	1 024	3.5	4 936	4.6	1 225	1.9	3 721	3.7
Shelby	872	2.6	5 501	3.6	850	2.9	3 099	4.7	946	1.7	2 691	2.7
Stark	803	3.8	2 555	3.9	791	3.9	1 256	4.5	1 078	1.6	2 112	3.1
Summit	156	10.2	303	15.8	142	9.3	219	18.1	245	4.2	542	5.6
Trumbull	611	4.2	2 104	6.7	576	5.1	944	8.5	823	1.5	1 331	3.8
Tuscarawas	534	6.1	1 727	6.4	492	7.6	974	12.7	859	2.3	1 761	3.7
Union	584	5.2	4 580	5.1	629	4.6	3 434	4.5	794	1.6	3 000	5.7
Van Wert	695	3.0	6 044	5.7	675	3.5	4 095	6.4	743	2.4	3 048	5.0
Vinton	99	19.0	252	25.6	97	18.7	171	48.1	205	1.2	216	18.7
Warren	588	4.6	2 853	3.7	616	4.7	2 142	4.0	767	1.9	1 603	3.5
Washington	578	5.4	1 049	9.0	488	7.0	534	22.4	809	2.5	997	8.5
Wayne	1 180	2.9	5 386	4.0	1 205	3.0	3 212	4.6	1 486	1.7	4 036	2.2
Williams	593	4.2	4 291	5.9	627	4.5	2 768	4.6	737	2.5	2 084	5.8
Wood	970	2.8	8 520	3.4	956	3.0	5 623	3.6	1 039	1.9	3 682	4.1
Wyandot	590	3.3	5 768	5.1	570	4.1	3 641	5.0	619	3.0	2 555	3.2

	Farm production expenses [1]—Con.											
	Electricity				Hired farm labor				Contract labor			
	Farms		Value		Farms		Value		Farms		Value	
Geographic area	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)
Ohio	**51 576**	**1.2**	**54 020**	**1.1**	**20 559**	**1.6**	**259 501**	**.6**	**4 919**	**3.1**	**16 012**	**3.0**
Adams	822	4.9	355	7.9	622	6.9	1 215	23.4	208	15.4	213	23.8
Allen	754	4.6	672	8.5	122	14.9	1 873	10.7	51	29.1	110	16.4
Ashland	736	4.2	879	4.5	343	9.3	2 796	4.4	78	25.9	142	21.4
Ashtabula	825	3.8	824	3.8	297	9.3	3 628	3.4	115	15.7	420	17.5

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 12
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

[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)
Athens	278	8.9	130	14.4	128	12.2	370	43.4	45	31.2	21	29.7
Auglaize	748	4.6	956	4.9	276	11.1	1 877	5.1	51	30.3	118	34.9
Belmont	445	5.3	237	13.0	119	19.0	412	3.7	22	42.0	14	40.0
Brown	1 018	4.3	371	7.5	630	7.3	1 621	19.3	183	15.9	267	15.0
Butler	626	5.4	543	9.8	280	11.3	1 641	2.6	65	24.9	127	24.1
Carroll	476	5.3	488	7.9	239	10.2	1 577	13.1	73	23.6	114	21.5
Champaign	626	5.2	877	7.8	298	9.7	2 667	6.8	47	27.5	116	13.3
Clark	471	5.7	782	4.8	206	10.6	8 184	1.1	46	26.2	94	15.8
Clermont	458	8.6	234	13.6	234	14.2	1 293	23.0	66	30.7	102	25.2
Clinton	572	4.9	667	4.2	238	8.5	2 181	6.4	65	25.3	140	30.8
Columbiana	739	4.0	1 079	4.2	271	11.5	5 017	4.0	49	30.6	305	41.3
Coshocton	581	5.4	476	5.2	164	14.2	1 829	6.7	44	34.2	87	35.2
Crawford	646	3.6	568	3.5	178	12.0	1 635	1.9	76	23.8	125	21.9
Cuyahoga	104	3.8	314	7.2	70	6.1	5 548	1.7	15	2.3	(D)	(D)
Darke	1 479	3.0	2 550	2.0	501	7.5	7 255	1.5	105	16.7	966	9.3
Defiance	560	4.9	461	7.0	148	15.8	841	16.8	20	30.9	85	8.8
Delaware	489	6.2	477	6.0	186	12.5	3 826	4.2	64	27.8	181	18.7
Erie	304	7.5	442	5.9	141	14.6	1 771	1.8	17	31.9	55	26.7
Fairfield	766	4.6	665	7.0	355	9.4	1 815	4.4	118	22.0	120	21.8
Fayette	464	4.6	620	4.9	186	8.9	2 147	1.7	47	23.5	62	21.4
Franklin	364	6.4	588	4.7	203	12.4	6 568	1.1	9	4.4	(D)	(D)
Fulton	742	3.3	976	4.1	296	9.6	4 037	2.0	38	32.9	249	85.3
Gallia	547	5.8	264	10.9	291	10.7	913	20.6	88	25.9	112	20.9
Geauga	468	5.8	407	7.5	170	13.9	1 708	5.8	28	29.9	214	42.3
Greene	626	4.9	589	3.8	283	9.2	3 188	3.4	78	20.9	422	14.6
Guernsey	577	5.2	270	9.4	193	16.1	452	22.4	73	29.9	52	43.1
Hamilton	207	9.1	299	4.9	105	16.6	3 307	1.5	18	30.8	79	1.7
Hancock	845	4.2	579	6.0	231	12.4	863	4.3	20	27.6	170	3.3
Hardin	685	4.5	507	5.3	264	10.8	1 391	8.5	74	26.6	147	24.0
Harrison	264	8.3	189	11.7	100	19.0	707	2.0	25	40.0	72	60.6
Henry	670	4.6	623	5.9	179	13.7	1 720	14.7	48	28.0	82	10.5
Highland	890	3.9	539	5.2	492	8.5	1 369	10.2	73	25.7	60	12.2
Hocking	169	13.9	55	17.9	90	23.5	(D)	(D)	11	72.2	(D)	(D)
Holmes	1 084	4.0	906	8.8	458	9.4	3 082	7.5	77	21.0	226	13.5
Huron	655	4.9	961	3.1	192	17.1	8 639	1.0	14	2.6	41	3.4
Jackson	227	10.4	520	2.7	120	18.2	(D)	(D)	19	46.7	(D)	(D)
Jefferson	279	6.8	114	12.2	106	17.3	439	13.8	21	46.4	7	58.5
Knox	822	4.5	681	5.0	295	9.5	2 410	5.1	84	22.9	316	7.3
Lake	192	7.3	409	3.6	141	10.2	21 652	.2	34	23.9	76	15.5
Lawrence	303	8.2	129	15.0	202	11.0	542	33.2	78	23.2	56	28.8
Licking	857	4.5	803	5.5	277	10.5	4 710	4.6	71	25.7	203	16.0
Logan	623	4.3	792	6.2	251	10.3	3 001	4.6	92	19.4	145	16.1
Lorain	633	5.3	1 272	3.9	352	9.4	12 194	3.4	52	31.2	118	24.2
Lucas	277	8.4	580	4.3	90	14.1	6 857	.5	33	32.7	184	13.4
Madison	538	4.5	720	5.4	232	10.8	2 954	7.5	25	29.4	46	23.5
Mahoning	430	5.7	653	3.7	164	14.3	4 326	4.5	21	52.4	29	74.3
Marion	520	4.5	496	6.6	191	13.5	1 784	9.0	40	34.2	170	31.0
Medina	712	4.4	673	9.4	282	10.9	3 060	5.1	72	22.7	205	15.4
Meigs	296	8.1	177	8.6	164	10.5	1 517	18.9	45	33.6	139	20.5
Mercer	1 192	2.6	2 380	3.0	464	6.3	3 655	4.7	143	13.9	534	16.4
Miami	691	5.2	736	5.9	247	10.1	3 313	2.6	73	24.1	173	19.0
Monroe	431	6.2	203	12.5	188	14.0	221	8.3	35	36.5	11	41.8
Montgomery	573	5.6	494	9.8	193	14.9	3 005	1.0	79	29.3	81	16.8
Morgan	413	6.1	205	9.5	153	15.7	499	19.3	23	40.8	22	31.0
Morrow	556	5.7	426	5.1	125	16.0	1 486	2.2	43	27.9	85	6.9
Muskingum	671	5.9	412	6.4	272	13.1	1 523	15.0	63	34.1	60	56.5
Noble	318	8.0	107	10.8	126	17.6	621	14.1	22	41.9	9	47.4
Ottawa	401	5.9	357	8.0	117	17.5	2 010	.9	34	31.0	902	.4
Paulding	465	5.7	383	3.6	217	11.3	2 353	2.0	18	23.5	59	6.7
Perry	450	5.1	191	8.6	186	15.0	345	7.8	61	32.9	45	31.7
Pickaway	539	4.9	673	6.0	230	11.4	2 633	10.0	42	31.3	139	3.1
Pike	208	11.9	126	14.1	92	22.3	615	17.4	27	48.4	19	57.6
Portage	479	5.7	601	5.3	186	11.9	1 962	5.4	83	22.1	249	6.8
Preble	808	4.1	866	4.5	251	10.6	1 982	2.1	68	23.2	64	24.1
Putnam	1 113	3.3	977	3.4	363	9.3	3 075	2.8	48	22.0	432	3.7
Richland	705	4.8	627	5.2	254	12.4	2 684	4.7	86	22.4	132	14.3
Ross	531	5.7	459	4.1	274	10.2	2 086	3.8	17	34.0	73	3.3
Sandusky	649	4.6	687	4.7	225	12.7	3 011	3.5	60	23.9	1 037	6.2
Scioto	377	8.0	391	42.6	173	15.7	1 046	12.6	41	34.5	25	41.7
Seneca	982	4.0	779	4.7	264	11.4	1 797	4.0	52	19.9	430	1.6
Shelby	798	3.5	884	3.5	253	9.8	1 457	6.3	51	30.0	61	26.0
Stark	816	4.1	1 047	4.0	339	9.2	5 509	2.2	80	18.1	156	16.0
Summit	193	7.2	228	12.2	96	15.9	1 607	1.8	11	3.2	71	.8
Trumbull	608	4.4	689	5.4	276	9.7	1 990	5.3	68	23.7	263	31.4
Tuscarawas	639	5.4	808	5.2	245	10.7	4 066	7.2	74	27.6	82	13.6
Union	618	4.7	976	3.4	227	13.9	7 259	1.2	69	29.1	131	34.0
Van Wert	628	4.3	537	6.5	201	11.8	1 358	8.3	49	28.7	498	10.0
Vinton	94	19.0	35	31.4	53	28.4	250	79.9	1	–	(D)	(D)
Warren	532	5.5	601	10.6	237	11.3	3 897	2.7	78	25.3	144	19.6
Washington	577	5.2	341	9.2	195	15.8	1 029	6.1	27	38.8	54	7.7

See footnotes at end of table.

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

	Farm production expenses [1]—Con.											
Geographic area	Electricity				Hired farm labor				Contract labor			
	Farms		Value		Farms		Value		Farms		Value	
	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Total ($1,000)	Relative standard error of estimate (percent)
Wayne	1 283	2.8	2 398	3.4	567	6.3	11 792	1.9	115	15.3	380	6.6
Williams	524	6.4	580	11.2	195	13.9	1 464	22.6	37	51.8	147	12.5
Wood	761	4.4	884	6.4	242	9.9	4 739	3.3	72	16.7	1 040	26.1
Wyandot	464	5.5	495	5.6	187	12.7	1 446	6.0	38	36.1	129	14.2

	Farm production expenses [1]—Con.											
Geographic area	Repair and maintenance				Customwork, machine hire, and rental of machinery and equipment				Interest expense			
	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)
Ohio	**60 915**	**1.1**	**227 455**	**1.1**	**26 255**	**1.6**	**44 730**	**1.8**	**30 967**	**1.5**	**216 492**	**1.2**
Adams	1 060	3.8	1 703	7.6	440	9.9	373	19.0	447	9.6	1 418	12.0
Allen	866	2.7	3 327	6.2	479	8.0	1 014	12.9	472	7.7	3 016	9.5
Ashland	853	3.1	3 453	4.7	428	8.3	533	10.5	426	8.2	2 591	5.9
Ashtabula	883	3.1	2 533	4.9	372	8.5	444	13.7	385	8.1	1 904	6.5
Athens	417	4.4	687	16.0	90	22.9	65	31.6	223	12.0	593	12.8
Auglaize	882	3.2	3 732	5.5	475	8.2	1 060	13.3	507	7.2	4 107	6.8
Belmont	556	3.0	899	8.6	144	15.9	112	38.2	192	13.4	367	14.1
Brown	1 207	3.3	2 240	6.6	463	10.0	337	15.5	573	8.2	2 525	11.6
Butler	781	3.3	2 400	6.8	330	8.0	323	13.2	311	9.3	2 540	16.8
Carroll	571	3.7	1 588	7.1	218	12.0	178	12.0	302	8.0	1 284	13.1
Champaign	708	4.1	3 418	4.7	408	8.6	804	11.7	464	7.3	3 895	7.7
Clark	652	2.9	3 446	3.1	270	10.4	811	12.6	358	7.1	3 949	5.3
Clermont	669	4.5	1 485	6.7	135	17.2	99	13.8	139	16.9	795	11.6
Clinton	688	3.5	3 550	4.9	285	10.0	685	7.8	379	7.6	3 825	6.9
Columbiana	812	3.5	2 861	4.1	306	10.2	543	14.1	414	8.7	2 873	10.2
Coshocton	719	3.1	2 293	6.1	185	14.4	232	14.1	399	8.9	1 726	11.7
Crawford	709	2.7	3 319	3.4	362	8.3	631	9.1	408	7.6	3 961	5.7
Cuyahoga	119	2.9	754	1.5	24	12.6	33	2.9	42	7.4	523	.9
Darke	1 674	2.3	7 883	3.4	847	5.7	1 538	13.8	1 074	4.3	8 873	5.7
Defiance	655	4.5	2 318	5.7	366	9.2	441	12.2	422	8.1	2 539	8.5
Delaware	592	4.2	2 432	4.2	277	9.8	492	16.1	327	8.7	2 588	6.9
Erie	364	4.2	1 960	5.6	162	13.3	396	7.3	196	8.9	1 314	7.2
Fairfield	950	2.5	3 231	7.5	369	8.7	854	11.0	367	9.3	2 468	8.3
Fayette	486	4.0	2 996	4.1	245	9.9	834	6.2	305	7.8	3 596	4.1
Franklin	413	5.1	2 233	5.2	149	15.8	277	16.8	193	13.3	1 386	11.7
Fulton	754	3.2	3 598	3.9	400	8.3	885	6.7	482	6.9	4 605	4.4
Gallia	705	3.4	1 254	8.7	177	14.4	114	18.4	259	11.8	1 070	11.9
Geauga	508	4.2	1 049	7.9	171	15.1	160	12.1	167	15.9	863	17.1
Greene	725	3.5	2 971	4.2	308	10.0	621	7.8	412	7.8	3 195	6.0
Guernsey	673	3.8	930	13.2	193	15.3	202	54.2	224	13.4	883	20.3
Hamilton	279	5.3	938	6.9	57	23.6	73	32.4	56	18.1	531	7.5
Hancock	907	3.3	3 688	4.2	510	7.6	854	13.4	547	7.0	4 434	7.2
Hardin	817	2.8	3 688	8.0	361	9.0	809	10.2	441	8.1	4 131	7.3
Harrison	339	5.3	752	9.2	109	21.0	117	6.1	147	14.1	590	17.5
Henry	819	2.9	3 544	7.7	500	7.3	704	10.1	578	5.9	3 600	8.3
Highland	1 019	3.0	3 111	5.5	445	9.0	825	15.0	504	8.0	2 834	9.6
Hocking	271	7.2	317	15.9	72	27.5	70	40.5	54	30.9	181	37.3
Holmes	1 218	3.0	3 674	6.5	558	8.1	593	12.1	621	7.2	2 094	6.5
Huron	814	2.1	3 885	3.6	306	11.2	557	7.4	419	8.8	3 242	6.3
Jackson	341	4.8	953	7.8	79	22.5	69	21.7	158	16.6	543	28.1
Jefferson	317	4.1	613	9.4	54	29.2	20	37.4	125	15.8	461	21.7
Knox	992	2.9	3 381	7.7	449	8.4	553	12.4	530	7.3	3 740	8.9
Lake	237	4.3	1 507	2.9	58	20.4	304	1.8	68	17.5	1 716	1.9
Lawrence	372	6.6	665	18.1	66	28.8	104	58.7	139	17.5	573	22.6
Licking	1 079	2.9	4 155	4.0	534	8.2	941	11.5	545	7.3	4 035	6.2
Logan	639	3.4	3 037	5.4	369	8.1	708	7.7	422	6.5	3 771	6.4
Lorain	780	2.9	4 082	3.8	235	13.2	358	11.9	277	10.3	3 362	6.0
Lucas	352	5.0	1 887	7.2	154	13.8	324	8.8	129	14.4	1 149	7.8
Madison	576	3.4	3 324	6.1	309	10.2	1 030	5.4	348	7.7	3 616	7.8
Mahoning	513	4.0	2 035	5.2	235	11.6	329	14.3	171	14.6	1 292	13.0
Marion	475	5.2	2 528	5.4	253	11.4	568	12.7	344	8.8	3 289	8.0
Medina	806	2.8	2 388	8.2	285	11.6	439	16.1	342	9.2	1 708	11.6
Meigs	437	3.9	716	8.2	66	24.8	127	16.7	169	13.7	852	28.2
Mercer	1 203	2.6	6 190	3.9	606	6.2	1 121	6.8	823	4.8	7 348	3.7
Miami	837	3.7	3 946	4.5	372	9.2	506	13.2	460	7.0	3 678	7.0
Monroe	571	3.3	682	8.8	125	18.6	127	41.7	196	14.2	322	18.4
Montgomery	650	4.4	1 881	5.7	324	10.1	622	24.6	254	10.3	1 538	6.3
Morgan	439	4.9	980	11.3	182	13.8	61	17.5	168	12.8	533	16.3
Morrow	658	4.9	2 042	5.2	238	12.8	364	11.7	350	9.9	2 475	7.5
Muskingum	880	3.8	1 985	6.3	251	13.6	291	15.9	403	10.4	1 328	10.1
Noble	447	5.0	671	11.8	71	28.6	25	41.4	164	16.5	303	21.3
Ottawa	454	4.8	1 514	6.5	286	9.7	650	9.2	213	11.0	1 455	7.2
Paulding	539	4.0	2 998	5.1	289	8.4	454	7.8	348	8.2	2 536	5.8
Perry	511	3.7	1 227	12.5	148	15.3	161	13.8	264	11.5	1 191	13.3

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 14
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. Reliability Estimates for the State and County Totals: 1992 —Con.

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

Farm production expenses [1]—Con.

Geographic area	Repair and maintenance				Customwork, machine hire, and rental of machinery and equipment				Interest expense			
	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)
Pickaway	617	3.1	3 836	4.9	287	10.3	735	11.9	359	7.6	3 814	7.2
Pike	290	7.8	662	12.4	79	22.5	111	39.8	101	20.2	569	25.1
Portage	591	3.8	1 688	7.6	280	9.6	313	15.7	238	10.7	1 544	10.7
Preble	934	3.3	3 906	6.0	516	7.1	830	7.9	507	7.5	3 713	7.5
Putnam	1 267	2.3	5 394	4.5	653	6.8	1 033	8.1	785	5.2	4 501	5.6
Richland	828	3.0	2 883	7.2	343	10.4	402	17.6	425	8.9	2 518	8.2
Ross	697	3.8	2 958	4.2	305	10.3	610	10.4	379	7.9	3 101	9.1
Sandusky	731	3.4	3 555	5.4	470	7.7	1 332	9.1	503	7.2	4 350	8.9
Scioto	535	4.4	1 029	11.3	147	18.3	95	17.5	217	15.0	727	16.9
Seneca	1 113	3.0	4 727	4.2	620	7.1	1 007	7.3	648	6.0	4 895	7.1
Shelby	884	2.6	3 736	4.4	407	8.2	735	11.6	501	6.4	3 479	7.4
Stark	974	2.8	3 509	4.4	329	9.3	466	9.4	414	8.8	2 274	9.1
Summit	204	7.4	713	9.9	42	26.9	71	28.4	42	25.3	245	15.1
Trumbull	782	2.3	2 152	5.6	314	9.5	446	15.8	297	9.5	1 592	9.2
Tuscarawas	768	3.7	2 756	5.5	330	10.5	585	14.7	293	10.5	1 976	7.7
Union	683	4.0	3 450	3.8	339	10.0	610	10.1	379	8.8	3 582	6.5
Van Wert	711	2.9	3 037	4.1	335	8.6	724	9.6	462	6.2	3 384	5.0
Vinton	164	9.5	245	28.5	40	33.8	15	64.0	56	27.3	239	36.8
Warren	634	4.5	2 034	3.8	210	12.4	673	6.5	238	11.5	2 105	8.8
Washington	731	3.4	1 614	7.3	167	14.9	139	11.7	303	9.8	947	9.7
Wayne	1 403	2.2	7 722	3.6	753	5.6	1 403	7.1	806	4.7	7 284	5.8
Williams	647	4.2	2 588	7.2	368	8.9	602	10.9	430	7.5	3 218	7.9
Wood	897	3.0	4 842	3.4	541	6.9	1 050	9.1	616	6.0	4 318	4.7
Wyandot	591	3.2	2 893	4.4	346	9.0	790	13.7	322	8.6	2 393	9.6

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)
Ohio	**19 904**	**1.7**	**216 114**	**1.2**	**64 108**	**1.1**	**86 406**	**1.2**	**64 754**	**1.1**	**314 430**	**.8**
Adams	147	17.4	268	17.1	1 210	2.7	745	5.6	1 155	2.8	2 163	8.2
Allen	340	9.6	3 789	9.0	866	3.3	999	5.1	902	2.2	2 925	5.8
Ashland	300	10.5	1 825	7.7	875	2.7	1 210	7.0	876	2.5	4 054	4.3
Ashtabula	255	10.2	596	16.4	962	2.2	1 127	4.3	941	2.4	3 586	4.3
Athens	120	17.9	130	25.3	492	1.6	516	6.5	457	3.4	734	12.6
Auglaize	336	9.5	3 802	10.8	890	2.7	1 271	5.4	941	2.2	4 151	5.7
Belmont	118	19.2	142	12.3	585	2.0	483	8.4	553	3.0	1 109	14.3
Brown	273	11.6	1 431	11.3	1 343	2.4	1 204	5.9	1 324	2.5	2 235	6.4
Butler	214	13.1	1 675	10.4	810	3.0	1 135	5.8	845	2.0	1 923	5.5
Carroll	173	13.7	502	14.2	657	2.3	668	5.9	597	3.5	1 664	4.9
Champaign	298	9.8	6 205	5.1	764	3.3	1 041	6.0	776	3.1	3 963	3.4
Clark	312	7.9	5 187	3.7	627	3.6	984	4.7	696	2.4	4 349	2.2
Clermont	107	20.0	916	5.8	771	2.6	903	11.3	733	3.2	1 288	6.5
Clinton	241	9.5	4 522	3.2	670	3.6	1 063	5.4	714	2.6	3 138	4.1
Columbiana	233	11.2	1 228	13.6	891	2.7	1 023	4.2	907	2.4	4 369	3.1
Coshocton	169	12.7	1 178	9.6	782	1.9	874	4.1	767	2.3	2 065	5.6
Crawford	275	7.9	5 714	5.4	655	3.4	981	4.0	732	2.2	3 632	4.9
Cuyahoga	18	9.1	42	11.2	116	2.7	325	4.7	130	1.8	2 257	.5
Darke	559	6.9	6 127	5.2	1 734	1.9	2 484	3.5	1 754	1.7	13 422	1.7
Defiance	234	10.9	1 374	9.1	762	2.9	901	4.9	724	3.2	1 994	8.1
Delaware	261	10.5	4 637	7.3	617	3.2	1 203	6.3	666	1.7	3 252	5.7
Erie	226	8.9	2 860	6.5	385	3.0	736	14.2	399	1.8	2 044	4.3
Fairfield	251	11.0	2 749	6.0	936	3.0	1 324	6.6	983	2.1	3 174	5.4
Fayette	178	8.8	5 180	3.9	482	3.0	976	4.0	537	2.4	3 258	2.7
Franklin	147	14.8	2 325	10.9	430	4.2	920	7.8	430	3.5	5 836	2.4
Fulton	433	7.0	9 422	4.8	741	3.7	1 266	4.1	803	2.3	4 416	2.7
Gallia	85	22.8	182	24.9	770	1.9	539	8.5	663	3.8	1 191	9.5
Geauga	226	11.7	347	18.2	566	3.0	1 003	11.5	569	3.6	1 536	9.6
Greene	226	10.7	4 439	3.9	727	3.1	1 319	5.2	800	1.9	4 657	5.6
Guernsey	185	16.1	172	20.4	737	2.1	677	5.2	705	3.2	1 109	6.2
Hamilton	67	21.9	333	19.8	277	5.3	559	5.1	272	6.0	1 679	3.0
Hancock	340	9.2	4 945	9.2	920	3.0	1 507	7.5	1 010	1.8	3 667	11.7
Hardin	352	9.0	4 332	5.9	773	3.4	1 169	5.6	824	2.4	3 116	6.2
Harrison	81	21.8	297	5.4	385	1.7	372	8.9	349	4.8	877	6.8
Henry	333	9.6	4 690	6.9	797	3.7	1 218	5.6	900	2.1	3 011	8.2
Highland	292	11.3	3 219	12.8	972	3.2	999	5.4	1 056	2.6	2 718	5.0
Hocking	44	36.3	113	32.6	348	2.1	337	11.0	306	5.3	365	17.8
Holmes	265	12.6	1 412	7.9	1 329	2.3	1 903	5.0	1 372	2.0	5 539	6.7
Huron	312	10.0	4 238	6.6	781	2.8	1 052	3.8	790	3.0	9 317	2.0
Jackson	77	22.3	112	14.4	370	2.3	348	9.4	332	4.9	2 972	3.6
Jefferson	38	27.6	86	40.5	369	1.9	240	11.4	330	4.5	730	20.8
Knox	278	9.8	2 101	7.5	1 037	2.4	1 531	7.0	1 011	2.7	4 071	3.0
Lake	82	14.7	481	3.4	245	3.5	407	6.7	251	3.5	7 798	1.0
Lawrence	75	25.4	87	37.4	445	3.8	361	18.4	438	4.3	705	26.1

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 15
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

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

	Farm production expenses [1]—Con.											
	Cash rent				Property taxes paid				All other farm production expenses			
Geographic area	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)
Licking	309	10.8	3 096	3.0	1 133	2.5	1 476	4.4	1 149	2.2	7 602	2.8
Logan	189	10.8	3 924	9.8	740	2.6	1 070	6.0	760	2.3	4 370	4.0
Lorain	214	13.1	1 992	6.6	794	2.5	1 223	5.3	816	2.0	13 614	2.6
Lucas	193	9.8	2 515	9.4	354	4.8	689	8.1	347	4.6	4 302	1.5
Madison	279	9.6	6 670	5.8	536	4.5	1 240	7.3	642	2.3	4 399	3.4
Mahoning	206	10.6	648	8.0	544	1.2	681	5.4	555	2.3	3 635	2.7
Marion	179	12.0	4 801	10.0	564	3.0	1 034	6.5	553	3.7	2 922	5.4
Medina	230	12.7	1 240	12.1	862	2.3	1 131	4.3	825	2.9	3 200	15.6
Meigs	67	25.4	160	14.4	472	2.5	439	7.0	436	3.7	1 319	11.2
Mercer	437	7.5	5 263	7.7	1 311	1.9	2 241	3.8	1 337	1.8	11 818	2.5
Miami	298	8.8	3 756	7.3	889	2.7	1 224	4.9	838	3.4	3 971	3.8
Monroe	112	20.1	127	53.6	611	1.6	442	11.2	582	2.8	778	12.0
Montgomery	204	12.7	2 724	14.6	709	3.4	1 067	6.4	697	3.8	2 055	3.0
Morgan	130	16.3	199	24.4	541	2.5	362	6.7	496	3.4	916	7.3
Morrow	217	11.5	3 125	10.6	680	3.6	839	4.8	692	4.2	2 147	2.8
Muskingum	199	15.1	499	5.8	1 026	1.6	985	5.0	917	3.5	2 093	5.4
Noble	132	17.0	91	16.5	520	2.5	358	8.4	452	4.6	471	15.7
Ottawa	179	12.2	2 472	7.3	489	2.9	503	5.5	480	3.2	1 759	4.5
Paulding	167	15.3	1 702	8.1	539	4.0	826	4.8	599	1.8	5 386	2.4
Perry	157	18.2	707	15.0	572	1.6	558	7.2	541	2.8	1 225	16.4
Pickaway	277	9.5	4 959	6.0	558	4.6	849	5.4	636	2.6	3 491	6.1
Pike	79	21.8	265	12.2	377	1.4	351	12.4	305	6.2	667	15.9
Portage	244	9.6	1 078	7.8	638	3.0	828	5.5	626	3.1	2 246	9.9
Preble	306	9.9	3 925	5.7	935	3.3	1 412	8.0	976	2.5	4 410	3.7
Putnam	491	7.7	4 485	7.1	1 324	2.2	1 661	4.7	1 383	1.8	5 022	4.6
Richland	268	10.7	2 508	7.9	850	2.8	1 185	5.9	865	2.6	3 518	5.1
Ross	196	12.7	2 595	5.1	722	2.8	1 122	9.9	707	3.4	3 197	3.7
Sandusky	330	8.7	5 310	5.6	738	3.6	1 176	8.4	801	2.1	3 827	3.8
Scioto	110	20.1	218	12.7	575	2.8	496	7.9	542	4.2	1 453	11.9
Seneca	376	9.4	4 300	7.9	1 140	2.6	1 492	4.5	1 173	2.5	7 402	3.7
Shelby	346	7.5	3 858	5.2	878	2.4	1 357	5.2	897	2.4	3 861	3.4
Stark	358	7.9	1 760	6.4	1 042	1.8	1 378	3.8	990	2.7	5 463	3.0
Summit	55	19.6	112	19.0	245	2.5	506	13.2	203	7.5	1 013	11.6
Trumbull	248	8.6	665	12.3	795	2.1	1 015	6.2	796	2.1	2 641	3.8
Tuscarawas	267	12.4	1 322	13.6	827	3.1	1 060	9.4	845	2.7	3 675	7.2
Union	294	11.6	4 441	8.6	668	4.0	1 286	6.0	739	2.4	12 426	1.4
Van Wert	243	10.8	2 983	8.7	685	3.4	1 198	8.0	713	2.4	3 493	3.3
Vinton	25	47.9	19	72.7	190	5.5	168	10.4	181	7.0	185	19.5
Warren	225	10.5	2 263	5.2	679	3.8	1 138	9.0	689	3.5	2 264	5.1
Washington	151	15.6	429	14.0	836	1.8	695	15.5	826	2.1	1 688	5.9
Wayne	536	6.6	4 337	6.8	1 458	1.9	2 456	3.4	1 503	1.7	11 909	3.1
Williams	257	12.1	3 280	21.8	669	4.0	887	5.0	713	2.6	2 988	6.3
Wood	342	8.3	5 480	5.3	934	3.1	1 613	4.6	1 040	2.0	4 220	3.2
Wyandot	206	12.5	4 399	7.1	558	4.4	788	6.9	571	3.6	3 332	5.8

	Net cash return from agricultural sales for the farm unit (see text) [1]				Total cropland				Harvested cropland			
	Farms		Value		Farms		Acres		Farms		Acres	
Geographic area	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)
Ohio	**70 695**	**1.1**	**787 050**	**1.2**	**66 353**	**1.1**	**11 528 727**	**1.0**	**62 535**	**1.1**	**9 790 327**	**1.0**
Adams	1 354	1.2	7 744	11.9	1 313	1.3	114 178	1.8	1 243	1.3	56 938	2.0
Allen	978	1.2	11 786	6.3	918	1.1	178 035	1.3	903	1.1	168 177	1.3
Ashland	952	1.2	8 389	10.3	911	1.2	134 502	1.3	869	1.2	110 503	1.3
Ashtabula	1 026	1.2	6 294	11.0	982	1.1	109 201	1.4	928	1.2	72 760	1.5
Athens	501	1.3	(D)	(D)	467	1.0	40 005	1.3	425	1.1	19 008	1.6
Auglaize	997	1.2	14 522	8.0	926	1.3	188 648	1.3	900	1.3	173 995	1.3
Belmont	603	1.2	2 436	24.6	570	1.0	62 475	1.4	534	1.0	36 558	1.6
Brown	1 493	1.3	11 152	10.1	1 452	1.1	148 293	1.3	1 388	1.1	104 122	1.4
Butler	902	1.1	6 549	13.4	830	1.1	109 122	1.4	754	1.2	88 351	1.5
Carroll	688	1.1	3 570	14.6	663	1.1	75 554	1.6	621	1.2	50 745	1.7
Champaign	872	1.3	11 401	7.1	798	1.2	190 251	1.0	751	1.2	170 855	1.0
Clark	732	1.2	12 389	5.7	689	1.1	162 936	1.0	639	1.2	145 622	1.0
Clermont	823	1.3	2 351	34.2	774	1.2	75 617	1.4	697	1.2	57 781	1.5
Clinton	784	1.4	12 385	7.5	756	1.3	204 187	1.0	720	1.4	183 578	1.0
Columbiana	979	1.4	7 719	11.0	917	1.2	102 703	1.4	850	1.3	78 647	1.5
Coshocton	810	.9	5 011	11.4	752	.8	98 240	1.0	694	.9	64 664	1.1
Crawford	766	1.1	10 536	6.6	727	1.4	204 150	1.1	708	1.4	189 599	1.1
Cuyahoga	132	1.8	2 306	4.6	113	1.3	2 416	12.7	93	1.7	1 222	10.9
Darke	1 905	.9	38 295	2.9	1 794	.9	307 930	.9	1 731	.9	289 331	.9
Defiance	830	1.3	10 240	8.6	802	1.2	175 541	1.3	774	1.2	161 069	1.3
Delaware	686	1.1	6 651	9.0	640	1.2	151 347	1.0	590	1.2	135 255	1.1
Erie	406	1.3	6 003	10.3	385	1.1	80 665	1.4	372	1.2	76 022	1.4
Fairfield	1 059	1.1	7 758	10.2	974	1.1	164 828	1.2	895	1.2	138 622	1.2
Fayette	557	1.1	15 471	3.6	518	1.0	215 525	.8	487	1.1	195 466	.8

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 16
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. Reliability Estimates for the State and County Totals: 1992 —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)
Franklin	483	1.1	7 320	8.2	442	1.1	89 306	1.2	390	1.2	75 524	1.3
Fulton	848	1.5	12 593	5.0	783	1.5	191 867	1.2	762	1.5	182 114	1.2
Gallia	796	1.3	1 863	19.5	759	1.3	51 453	1.8	700	1.3	25 260	2.2
Geauga	623	1.2	1 192	44.7	581	1.2	40 607	1.7	525	1.3	28 361	2.0
Greene	835	1.2	7 782	7.6	775	1.1	161 841	1.0	709	1.2	146 163	1.0
Guernsey	770	1.2	972	46.1	727	1.1	66 815	1.7	690	1.1	37 341	1.8
Hamilton	313	1.2	2 778	9.2	265	1.2	18 462	1.9	238	1.3	13 540	2.0
Hancock	1 032	1.4	16 877	7.3	989	1.2	259 189	1.2	975	1.2	246 735	1.2
Hardin	896	1.4	13 604	6.4	843	1.6	228 145	1.5	828	1.7	207 711	1.5
Harrison	392	1.1	1 236	22.9	367	1.0	47 850	1.5	350	1.1	29 753	1.7
Henry	955	1.4	21 887	4.3	929	1.1	232 281	1.2	917	1.1	223 831	1.2
Highland	1 153	1.2	9 508	8.6	1 104	1.1	187 225	1.3	1 009	1.2	138 000	1.3
Hocking	355	1.2	(D)	(D)	322	1.2	23 447	1.7	289	1.4	12 608	2.1
Holmes	1 442	1.4	16 718	8.6	1 276	1.4	119 592	1.4	1 196	1.5	85 464	1.4
Huron	842	1.4	11 340	6.9	779	1.3	190 861	1.2	755	1.3	173 728	1.2
Jackson	385	1.1	(D)	(D)	361	1.1	43 251	1.9	329	1.2	22 567	2.4
Jefferson	376	1.2	1 586	31.4	368	.9	39 492	1.6	349	1.0	23 266	1.7
Knox	1 103	1.4	9 131	9.2	1 026	1.4	157 056	1.6	936	1.5	119 364	1.6
Lake	271	1.1	10 183	3.6	253	.8	12 646	1.3	238	.9	8 335	1.3
Lawrence	511	1.2	(D)	(D)	484	1.2	24 092	1.7	429	1.3	9 441	2.2
Licking	1 255	1.1	10 972	8.6	1 176	1.0	177 838	1.1	1 057	1.1	137 970	1.1
Logan	807	1.1	11 171	10.3	743	1.1	176 055	1.0	709	1.1	155 219	1.1
Lorain	849	1.1	10 897	7.2	800	1.0	118 873	1.1	752	1.0	104 421	1.1
Lucas	411	1.0	6 957	8.4	396	.9	69 692	1.3	376	1.0	66 318	1.3
Madison	664	1.3	17 983	4.9	617	1.1	240 484	.8	582	1.2	221 281	.8
Mahoning	579	1.0	4 636	13.2	540	.9	57 127	1.1	506	.9	45 135	1.1
Marion	595	1.3	12 745	5.0	553	1.2	202 960	.9	533	1.3	187 295	.9
Medina	906	1.2	1 923	34.5	846	1.0	82 712	1.2	758	1.0	68 356	1.3
Meigs	494	1.1	2 414	26.8	465	1.0	36 784	1.6	440	1.0	20 368	1.8
Mercer	1 394	1.3	39 676	3.1	1 253	1.1	245 675	.9	1 210	1.1	229 723	.9
Miami	1 016	1.2	18 355	3.9	963	1.1	180 265	1.2	916	1.1	168 952	1.2
Monroe	627	.9	1 310	31.9	594	.8	52 411	1.4	553	.9	24 238	1.5
Montgomery	806	1.0	6 552	11.0	761	.9	93 796	1.3	704	1.0	86 310	1.3
Morgan	559	1.6	1 134	42.6	524	1.5	49 225	2.1	492	1.5	27 040	1.9
Morrow	746	2.7	6 730	6.5	695	2.5	138 057	2.1	657	2.7	118 844	2.1
Muskingum	1 052	1.0	2 023	39.2	975	.9	104 021	1.2	904	1.0	63 666	1.3
Noble	550	1.2	(D)	(D)	521	1.1	51 530	1.5	489	1.2	21 740	1.5
Ottawa	522	1.2	2 472	17.4	511	1.1	99 706	1.4	503	1.1	93 319	1.4
Paulding	620	1.1	19 792	4.0	578	1.0	205 703	.9	566	1.0	189 734	.9
Perry	579	1.3	1 364	42.6	551	1.2	64 584	1.6	508	1.3	46 471	1.8
Pickaway	683	1.2	12 385	6.7	635	1.1	237 077	.9	602	1.2	209 786	.9
Pike	378	1.4	1 961	41.1	360	1.3	51 969	1.9	302	1.6	29 178	2.3
Portage	720	.9	2 662	22.6	681	.8	69 373	1.2	624	.9	52 199	1.3
Preble	1 067	1.1	12 271	8.0	999	1.2	179 653	1.2	936	1.3	164 043	1.2
Putnam	1 472	.9	22 131	5.3	1 404	.8	271 249	.9	1 389	.8	259 476	.9
Richland	921	1.4	7 006	11.5	880	1.4	126 115	1.4	835	1.4	105 035	1.4
Ross	809	1.3	10 542	7.1	744	1.2	190 780	1.1	674	1.3	151 475	1.1
Sandusky	850	1.5	9 033	10.6	813	1.3	188 979	1.2	798	1.3	178 471	1.2
Scioto	607	2.0	2 488	33.0	561	2.1	52 781	2.8	510	2.2	32 519	3.3
Seneca	1 264	1.4	14 187	6.6	1 204	1.5	266 057	1.5	1 182	1.5	249 481	1.5
Shelby	971	1.0	14 759	5.2	919	1.1	184 258	1.1	884	1.1	169 437	1.1
Stark	1 120	1.0	9 289	7.6	1 043	1.0	109 766	1.2	946	1.0	89 786	1.2
Summit	260	1.3	881	22.5	232	1.1	12 449	2.0	197	1.4	8 296	2.0
Trumbull	844	1.1	3 746	16.3	803	1.0	84 664	1.5	750	1.1	60 387	1.7
Tuscarawas	922	1.3	9 175	8.4	850	1.2	96 434	1.4	791	1.3	66 764	1.4
Union	805	1.2	11 864	4.3	764	1.2	202 370	1.1	730	1.2	180 673	1.1
Van Wert	791	1.0	20 782	4.7	750	.8	227 574	.8	739	.8	218 100	.8
Vinton	205	1.2	(D)	(D)	195	1.1	19 116	2.2	176	1.3	9 300	2.5
Warren	791	1.0	3 606	14.3	729	.9	102 467	1.1	652	1.0	83 692	1.2
Washington	863	1.1	2 538	20.4	806	1.0	70 255	1.3	746	1.0	38 381	1.4
Wayne	1 581	1.2	23 529	6.2	1 421	1.2	202 073	1.0	1 338	1.2	172 716	1.0
Williams	762	1.7	8 304	16.0	722	1.6	167 430	1.5	696	1.6	148 880	1.5
Wood	1 089	1.2	21 774	4.3	1 032	1.2	288 262	1.1	1 017	1.2	272 420	1.1
Wyandot	673	1.2	13 013	7.5	640	1.2	198 251	1.0	626	1.2	185 436	1.0

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)
Ohio	**1 755**	**.9**	**29 479**	**.8**	**29 874**	**1.1**	**1 362 489**	**1.0**	**16 885**	**1.0**	**272 920**	**1.2**
Adams	16	7.7	139	19.3	733	1.6	28 267	2.1	588	1.7	11 845	2.1
Allen	13	5.4	179	13.3	164	2.1	6 670	1.2	44	4.1	525	3.3
Ashland	15	8.1	93	12.2	488	1.5	30 554	1.3	168	2.3	2 252	3.8
Ashtabula	34	5.0	377	13.3	526	1.5	24 284	1.6	188	2.3	1 516	3.1

See footnotes at end of table.

1992 CENSUS OF AGRICULTURE

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 17
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. Reliability Estimates for the State and County Totals: 1992 —Con.

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

Geographic area	Irrigated land — Farms — Number	Irrigated land — Farms — Relative standard error of estimate (percent)	Irrigated land — Acres — Number	Irrigated land — Acres — Relative standard error of estimate (percent)	Cattle and calves inventory — Farms — Number	Cattle and calves inventory — Farms — Relative standard error of estimate (percent)	Cattle and calves inventory — Total — Number	Cattle and calves inventory — Total — Relative standard error of estimate (percent)	Beef cows inventory — Farms — Number	Beef cows inventory — Farms — Relative standard error of estimate (percent)	Beef cows inventory — Total — Number	Beef cows inventory — Total — Relative standard error of estimate (percent)
Athens	9	8.0	16	12.0	334	1.3	9 907	1.7	274	1.5	3 740	2.0
Auglaize	8	9.0	706	15.3	336	1.7	23 881	1.3	56	4.1	792	5.1
Belmont	11	5.5	68	3.2	468	1.2	19 085	1.5	354	1.3	7 441	1.7
Brown	16	6.8	41	10.8	609	1.4	19 357	1.8	476	1.5	7 737	1.9
Butler	28	4.9	365	3.9	462	1.5	19 563	1.8	320	1.8	5 055	2.4
Carroll	14	8.2	81	17.6	493	1.3	21 104	1.7	301	1.7	5 173	2.3
Champaign	14	6.2	(D)	(D)	324	1.7	16 020	1.6	182	2.2	2 622	2.8
Clark	27	4.4	1 743	.5	289	1.7	18 367	1.1	173	2.2	3 603	2.1
Clermont	26	5.6	92	8.3	294	1.9	7 301	2.9	241	2.0	3 102	3.2
Clinton	8	8.6	20	3.4	202	2.1	7 825	2.2	142	2.5	2 833	2.8
Columbiana	37	3.4	309	3.2	559	1.5	27 419	1.5	267	2.1	3 430	2.8
Coshocton	15	7.5	359	9.6	528	1.1	22 937	1.5	318	1.4	5 981	1.7
Crawford	4	6.5	6	8.6	236	2.0	12 710	2.5	68	3.4	1 080	4.0
Cuyahoga	56	1.9	280	1.1	13	8.9	315	27.7	9	11.4	121	31.7
Darke	16	6.4	78	14.2	553	1.3	35 575	.9	195	2.1	2 210	2.4
Defiance	7	9.7	44	9.4	118	2.5	9 092	1.2	31	4.9	295	4.9
Delaware	22	4.0	269	1.0	175	2.3	6 746	1.9	88	3.3	1 182	2.7
Erie	14	6.4	267	4.4	100	2.6	4 412	1.7	38	4.6	461	5.0
Fairfield	21	5.3	130	14.7	490	1.5	17 509	1.7	342	1.8	5 169	2.3
Fayette	2	21.5	(D)	(D)	163	2.0	8 503	3.0	113	2.5	3 606	3.8
Franklin	49	3.4	352	3.5	100	2.8	4 409	2.0	47	4.5	575	3.7
Fulton	19	3.9	1 021	.2	198	2.1	21 410	1.2	43	4.6	394	8.1
Gallia	7	12.3	8	12.3	507	1.5	18 118	1.8	448	1.6	7 971	2.0
Geauga	47	4.2	159	5.1	338	1.8	10 228	2.1	96	3.4	710	4.7
Greene	26	5.2	513	.8	301	1.7	12 471	1.9	204	2.0	3 642	2.2
Guernsey	4	11.6	47	19.7	571	1.3	21 307	2.1	477	1.4	9 477	1.9
Hamilton	67	2.7	335	4.5	103	2.8	2 891	4.4	66	3.7	1 061	5.9
Hancock	13	6.2	89	13.2	164	2.2	4 271	2.1	38	4.6	265	5.8
Hardin	7	9.1	16	18.1	230	2.3	10 757	1.8	65	3.7	1 227	3.8
Harrison	2	19.8	(D)	(D)	295	1.3	14 016	1.5	240	1.4	6 100	1.7
Henry	12	5.8	663	.9	121	2.4	6 609	2.1	29	5.5	360	6.3
Highland	12	9.0	38	13.0	533	1.4	22 178	1.8	413	1.6	9 109	1.9
Hocking	4	14.2	16	18.6	209	1.8	4 397	2.3	191	1.9	2 099	2.5
Holmes	23	5.5	105	8.8	1 131	1.5	49 758	1.5	224	2.1	2 846	2.9
Huron	21	5.2	3 412	.6	248	2.0	10 534	2.3	80	3.4	1 017	5.0
Jackson	3	16.3	59	21.1	252	1.5	12 133	2.1	224	1.7	5 757	2.4
Jefferson	3	13.8	(D)	(D)	285	1.3	9 666	1.9	246	1.4	4 246	2.4
Knox	6	10.3	30	23.8	604	1.7	27 484	1.8	348	1.9	5 414	2.3
Lake	83	2.0	1 468	.5	45	4.1	749	7.2	20	6.7	131	6.9
Lawrence	19	6.7	171	15.3	320	1.6	7 844	1.8	285	1.8	3 551	2.1
Licking	20	5.0	170	14.8	663	1.3	24 508	1.5	466	1.5	6 399	2.1
Logan	9	6.6	(D)	(D)	307	1.6	16 863	1.7	133	2.5	2 174	4.4
Lorain	87	2.3	1 157	3.5	228	1.9	12 145	1.3	67	3.5	604	3.8
Lucas	54	2.3	1 183	.3	33	5.1	1 256	4.2	11	8.7	181	9.0
Madison	9	7.6	60	8.8	243	1.7	15 415	1.7	136	2.3	2 727	3.0
Mahoning	47	3.6	925	4.3	268	1.5	13 583	1.4	128	2.4	1 711	3.8
Marion	7	11.2	59	13.1	110	2.5	7 046	1.9	52	3.6	788	4.0
Medina	36	3.6	217	9.0	383	1.5	13 618	1.6	178	2.2	1 286	2.7
Meigs	33	4.7	659	4.4	317	1.3	11 055	1.8	274	1.5	3 897	2.1
Mercer	7	11.6	75	13.5	492	1.4	50 084	.9	27	4.8	365	6.4
Miami	28	4.4	558	1.1	275	1.7	11 691	1.6	153	2.4	2 071	3.5
Monroe	8	7.3	20	12.6	519	.9	15 530	1.4	437	1.1	6 863	1.4
Montgomery	35	4.3	442	7.0	226	1.9	5 576	2.4	126	2.7	1 496	3.2
Morgan	7	10.8	34	11.5	437	1.7	17 624	1.9	377	1.7	6 405	2.3
Morrow	2	19.0	(D)	(D)	317	3.2	13 565	2.7	162	3.7	2 432	5.2
Muskingum	22	5.3	80	4.2	737	1.1	30 174	1.3	625	1.2	11 758	1.6
Noble	4	18.3	(D)	(D)	415	1.3	12 813	1.4	376	1.4	6 925	1.5
Ottawa	21	5.9	744	3.0	42	4.1	1 358	1.7	17	6.7	86	7.9
Paulding	5	14.2	(D)	(D)	87	2.8	4 756	2.2	25	5.5	211	8.7
Perry	7	9.9	80	25.2	359	1.5	12 302	2.1	297	1.7	4 752	2.8
Pickaway	13	5.0	1 156	.2	231	1.9	11 739	2.0	136	2.5	2 967	3.3
Pike	2	26.4	(D)	(D)	236	1.9	9 744	2.5	204	2.1	4 594	2.9
Portage	39	3.7	467	11.5	325	1.4	11 000	1.5	173	2.1	1 455	2.7
Preble	5	–	20	–	428	1.6	16 796	2.0	248	2.1	2 947	3.7
Putnam	11	9.2	149	21.5	283	1.6	10 577	1.6	34	4.3	337	4.9
Richland	26	5.1	250	9.3	450	1.8	22 085	1.9	200	2.3	3 091	2.4
Ross	11	7.9	(D)	(D)	438	1.5	22 353	1.6	359	1.7	8 388	1.9
Sandusky	21	5.4	397	7.5	203	2.1	6 861	2.2	75	3.6	904	4.9
Scioto	12	8.4	111	11.6	369	2.4	11 690	3.2	306	2.6	4 991	3.5
Seneca	14	6.7	224	10.0	328	1.8	12 330	2.0	82	3.2	895	3.9
Shelby	4	12.3	11	23.1	333	1.6	21 208	1.4	67	3.1	836	3.8
Stark	53	3.4	756	.9	586	1.2	27 150	1.1	281	1.7	3 080	2.5
Summit	36	3.9	528	1.5	65	3.5	1 566	3.5	50	4.1	618	4.0
Trumbull	36	3.5	149	6.4	438	1.4	16 527	1.7	207	1.9	1 988	2.8
Tuscarawas	12	6.6	162	2.0	646	1.4	32 404	1.3	349	1.7	5 337	2.2
Union	22	6.4	173	9.7	221	1.9	14 216	1.4	92	3.0	1 305	3.9
Van Wert	6	5.9	19	8.7	89	2.7	3 770	2.9	23	5.1	240	5.1
Vinton	1	38.2	(D)	(D)	134	1.9	4 267	2.2	112	2.2	2 124	2.6
Warren	37	4.2	463	9.1	243	1.7	10 029	1.3	183	2.1	2 564	2.6
Washington	30	4.9	355	4.8	628	1.1	24 166	1.4	518	1.2	7 990	1.8

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 18
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

[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)
Wayne	22	3.3	213	1.0	1 050	1.3	85 799	.9	215	2.0	3 567	2.4
Williams	8	10.0	356	12.3	173	2.3	13 979	1.1	58	3.7	780	3.5
Wood	22	4.9	594	8.1	162	2.2	6 628	1.8	41	4.5	523	4.3
Wyandot	4	8.1	11	5.9	145	2.3	6 010	2.4	45	4.1	545	5.0

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)
Ohio	**6 980**	**1.4**	**295 677**	**1.0**	**9 392**	**1.2**	**1 957 945**	**.8**	**4 329**	**1.1**	**186 444**	**1.3**
Adams	106	3.3	3 454	3.7	122	3.2	15 473	3.6	41	4.9	1 406	6.0
Allen	22	4.2	1 129	1.7	133	2.5	47 984	2.1	48	3.8	1 651	5.3
Ashland	202	2.2	10 509	1.6	165	2.4	27 220	1.9	102	3.0	6 191	2.9
Ashtabula	219	2.2	10 109	1.8	115	3.1	5 387	5.1	34	5.2	1 740	7.6
Athens	55	3.3	1 697	2.4	34	4.9	581	4.9	31	5.0	1 197	5.4
Auglaize	145	2.2	7 351	1.8	148	2.3	41 805	2.0	59	4.2	1 800	5.9
Belmont	101	2.9	3 102	3.4	30	5.7	1 145	7.8	50	4.2	2 701	6.7
Brown	62	4.0	2 017	4.4	85	3.6	5 808	4.2	49	4.6	1 481	7.8
Butler	49	4.1	2 998	3.2	149	2.5	29 293	2.5	60	4.1	1 140	4.5
Carroll	148	2.6	5 903	2.5	64	3.8	2 133	7.7	56	3.9	2 137	7.8
Champaign	74	2.8	3 861	2.2	131	2.6	22 120	2.0	60	4.0	1 924	6.8
Clark	26	5.7	969	5.6	84	3.2	17 628	2.4	48	4.5	928	6.7
Clermont	23	6.8	678	6.5	44	4.7	3 033	4.9	23	6.3	(D)	(D)
Clinton	20	6.1	544	6.0	163	2.2	72 927	1.2	43	4.5	1 627	7.7
Columbiana	207	2.2	10 496	1.7	117	3.1	8 162	6.5	47	4.5	2 537	9.6
Coshocton	137	2.3	4 642	1.9	189	2.0	25 625	2.7	104	2.7	7 540	2.1
Crawford	38	4.4	2 011	2.6	132	2.4	27 662	1.7	72	3.3	3 402	4.5
Cuyahoga	3	21.8	3	21.8	6	13.4	76	28.0	7	12.8	76	15.6
Darke	143	2.0	8 551	1.4	367	1.4	114 867	1.2	88	3.1	2 160	4.6
Defiance	38	3.6	1 826	2.5	97	2.9	24 737	2.3	28	5.2	868	6.7
Delaware	36	4.9	1 488	4.1	55	4.1	14 255	2.4	54	4.7	2 672	7.9
Erie	22	4.2	1 404	2.1	37	4.6	6 595	3.9	27	5.4	906	7.0
Fairfield	55	4.1	1 905	3.7	164	2.4	25 151	3.4	91	3.3	2 724	4.1
Fayette	6	10.9	265	6.8	139	2.0	45 052	1.5	44	4.2	5 158	8.1
Franklin	20	5.5	984	4.2	42	3.8	6 180	3.2	20	7.1	517	8.4
Fulton	38	4.7	1 653	3.5	162	2.2	81 100	1.2	26	5.9	931	11.0
Gallia	47	4.6	1 764	4.0	47	5.3	2 936	7.9	25	6.9	378	8.7
Geauga	207	2.3	4 565	2.7	98	3.4	1 912	12.4	30	6.0	872	7.7
Greene	32	5.7	950	6.8	130	2.6	40 431	1.6	64	3.7	2 688	4.3
Guernsey	74	3.7	1 892	3.9	65	3.8	4 468	8.6	50	4.5	2 104	7.1
Hamilton	6	12.9	364	10.2	8	10.5	686	13.9	11	10.3	131	15.4
Hancock	24	4.5	1 006	3.3	129	2.2	35 791	1.5	57	3.7	2 043	4.5
Hardin	63	3.6	1 669	3.7	146	2.8	25 295	2.6	82	3.6	4 509	6.0
Harrison	49	4.1	2 126	3.4	31	5.1	1 097	9.1	59	3.3	6 674	2.7
Henry	28	3.9	1 380	3.0	80	2.9	21 724	2.4	20	6.2	449	8.7
Highland	43	4.2	2 084	4.0	148	2.6	23 206	3.2	47	4.6	2 793	6.2
Hocking	8	12.8	13	15.5	53	4.2	1 676	5.4	26	6.1	982	6.1
Holmes	761	1.8	17 262	1.6	547	1.9	64 556	2.4	129	3.0	2 375	4.0
Huron	63	3.6	2 857	2.7	118	2.8	26 664	2.5	55	4.1	1 866	5.7
Jackson	18	6.5	588	5.7	17	7.4	880	16.5	15	9.0	330	13.5
Jefferson	36	4.2	1 340	3.8	43	4.1	3 198	5.5	18	7.0	1 002	9.2
Knox	191	2.9	6 541	2.5	174	2.9	32 861	2.7	149	2.8	13 161	2.4
Lake	7	13.0	115	20.0	16	7.9	494	7.0	15	7.2	300	8.6
Lawrence	20	7.2	534	6.8	17	8.5	155	10.9	12	8.6	241	11.5
Licking	105	2.7	4 701	2.2	128	2.7	16 105	3.1	128	2.8	5 271	4.2
Logan	87	2.5	4 339	1.9	107	2.7	20 624	2.4	75	3.6	3 697	4.4
Lorain	84	2.7	4 598	1.7	61	3.7	17 409	2.1	52	4.3	1 059	7.9
Lucas	3	15.3	74	10.3	38	4.1	10 886	3.6	14	7.1	216	9.1
Madison	35	4.9	1 736	3.8	68	3.0	28 811	1.8	64	3.2	2 278	4.0
Mahoning	87	2.6	4 525	1.6	56	4.0	4 955	6.7	29	5.5	477	8.1
Marion	13	4.8	922	.3	97	2.8	26 147	1.3	80	3.4	3 553	7.0
Medina	106	2.5	4 966	2.0	106	2.8	6 106	4.8	52	4.2	954	5.6
Meigs	41	3.8	1 878	3.6	18	6.9	213	9.8	20	6.4	764	8.6
Mercer	269	1.6	18 811	1.1	335	1.6	137 703	1.0	41	4.1	1 206	5.4
Miami	40	3.3	2 317	1.8	133	2.3	36 503	1.5	57	3.7	1 999	4.8
Monroe	64	3.5	1 938	4.2	52	4.0	2 539	7.0	23	5.8	909	7.7
Montgomery	27	4.9	891	4.6	95	3.0	13 723	2.4	52	4.0	929	6.2
Morgan	50	4.8	1 384	4.6	50	4.8	8 676	2.4	63	4.1	2 503	6.7
Morrow	59	5.0	2 977	2.6	116	4.2	17 993	4.6	68	4.8	3 805	7.0
Muskingum	68	3.2	2 328	2.7	122	2.6	27 050	1.3	96	2.9	8 144	5.9
Noble	27	5.4	432	5.4	34	5.7	895	8.5	54	4.3	2 565	4.1
Ottawa	8	7.4	547	1.9	29	5.7	6 699	6.5	19	6.2	320	8.7
Paulding	16	5.2	693	2.7	46	3.6	11 833	2.7	16	7.1	578	9.2
Perry	28	4.9	1 072	3.6	85	3.3	6 294	5.6	54	4.1	2 131	6.9

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 19
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

	Livestock and poultry —Con.											
	Milk cows inventory				Hogs and pigs inventory				Sheep and lambs inventory			
Geographic area	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)
Pickaway	26	5.3	1 311	4.9	101	2.7	44 276	1.8	40	4.7	1 388	6.8
Pike	19	7.5	954	6.5	31	6.0	3 908	3.8	3	21.0	(D)	(D)
Portage	76	2.9	3 419	2.0	51	4.0	6 541	2.6	22	6.3	955	11.0
Preble	62	3.6	2 736	3.3	221	1.9	67 380	1.7	71	3.4	1 557	4.8
Putnam	63	3.1	2 447	3.0	265	1.6	96 406	1.2	48	3.9	1 923	4.8
Richland	152	3.0	5 641	2.8	148	2.7	21 432	2.9	55	4.4	2 931	8.8
Ross	27	6.0	1 356	3.9	110	3.0	19 940	2.5	50	4.7	1 865	7.3
Sandusky	28	4.3	1 189	3.8	100	2.9	17 052	3.1	34	5.2	865	6.9
Scioto	22	7.7	971	7.8	45	5.4	1 377	8.0	11	10.2	224	14.9
Seneca	50	3.8	1 659	3.1	187	2.2	44 600	1.3	102	3.1	6 002	5.8
Shelby	137	2.0	7 325	1.6	174	2.2	41 442	1.8	49	3.6	2 271	5.0
Stark	188	2.0	10 047	1.4	116	2.7	7 218	2.6	63	3.7	1 708	4.7
Summit	7	10.9	132	8.6	14	8.9	873	5.5	14	9.1	243	9.8
Trumbull	158	2.5	5 398	2.3	92	3.0	4 084	5.5	23	5.6	428	6.8
Tuscarawas	206	2.3	9 940	1.5	141	2.9	11 418	4.5	49	4.5	2 643	7.4
Union	53	3.3	2 744	2.2	114	2.7	22 857	2.6	78	3.6	4 916	3.6
Van Wert	21	4.6	819	3.7	72	2.9	16 713	2.1	29	4.3	1 060	3.9
Vinton	11	10.0	196	13.9	36	4.9	2 945	12.6	10	9.7	269	9.5
Warren	21	4.5	2 062	1.1	82	2.9	19 782	1.8	53	3.9	1 101	5.6
Washington	60	3.6	2 647	2.8	90	3.0	11 868	3.1	40	4.5	1 683	5.4
Wayne	635	1.6	31 879	1.1	318	2.0	60 777	1.3	118	2.7	3 436	4.9
Williams	27	5.1	1 208	3.5	104	2.9	26 705	1.9	35	5.1	2 510	5.0
Wood	15	6.0	558	5.6	91	2.8	13 392	2.8	43	4.5	1 683	6.1
Wyandot	27	4.5	1 311	3.7	72	3.0	33 766	.9	56	3.8	2 547	7.7

	Livestock and poultry —Con.							
	Hens and pullets of laying age inventory				Broilers and other meat-type chickens sold			
Geographic area	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)
Ohio	**3 830**	**1.1**	**19 356 658**	**.1**	**532**	**1.8**	**25 257 739**	**1.7**
Adams	59	4.2	7 282	14.7	–	–	–	–
Allen	21	6.4	71 260	7.3	4	13.4	376	15.5
Ashland	98	3.3	19 508	40.9	5	13.3	900	18.2
Ashtabula	75	3.8	2 365	4.9	5	12.9	225	13.2
Athens	33	5.1	2 590	17.5	2	23.2	(D)	(D)
Auglaize	21	6.9	195 452	1.0	1	39.7	(D)	(D)
Belmont	33	5.3	687	7.9	–	–	–	–
Brown	56	4.4	2 090	9.3	1	23.9	(D)	(D)
Butler	59	4.1	1 902	6.2	3	18.0	(D)	(D)
Carroll	39	5.0	(D)	(D)	4	18.2	(D)	(D)
Champaign	34	5.3	775	7.1	5	15.9	138	18.1
Clark	27	6.1	1 270	10.7	3	22.5	78	30.0
Clermont	41	5.3	1 257	10.6	4	16.1	548	17.6
Clinton	26	6.4	1 531	19.0	2	24.1	(D)	(D)
Columbiana	52	4.5	(D)	(D)	5	14.9	200	16.1
Coshocton	63	3.4	89 523	.1	6	11.5	(D)	(D)
Crawford	31	5.2	(D)	(D)	4	13.7	(D)	(D)
Cuyahoga	11	8.1	727	9.7	2	21.1	(D)	(D)
Darke	83	2.8	5 701 964	(L)	18	7.0	(D)	(D)
Defiance	22	6.3	538	8.8	6	11.5	(D)	(D)
Delaware	25	7.6	846	13.3	3	18.3	167	20.3
Erie	22	6.3	2 224	18.6	3	18.1	(D)	(D)
Fairfield	74	3.6	(D)	(D)	9	10.3	2 005	12.0
Fayette	11	9.0	216	12.6	1	27.6	(D)	(D)
Franklin	21	6.3	4 008	2.8	1	–	(D)	(D)
Fulton	21	6.7	25 321	9.1	7	11.5	1 876	12.2
Gallia	28	7.3	572	9.2	2	20.4	(D)	(D)
Geauga	73	3.9	3 119	7.4	10	10.4	2 257	20.0
Greene	46	4.5	1 544	7.4	5	12.8	933	21.4
Guernsey	57	3.9	1 616	5.2	1	27.8	(D)	(D)
Hamilton	20	7.5	755	10.5	1	25.8	(D)	(D)
Hancock	25	5.7	(D)	(D)	2	26.1	(D)	(D)
Hardin	29	6.0	1 831	9.2	4	15.4	680	13.6
Harrison	26	5.5	651	7.0	2	14.6	(D)	(D)
Henry	22	5.8	29 066	7.8	1	32.5	(D)	(D)
Highland	33	5.3	716	7.4	1	33.9	(D)	(D)
Hocking	40	5.2	1 581	8.3	–	–	–	–
Holmes	248	2.3	210 795	.9	100	3.3	9 346 377	3.0
Huron	45	4.8	1 174	6.1	8	11.9	593	13.0
Jackson	12	9.9	270	11.2	–	–	–	–
Jefferson	29	5.6	874	8.7	–	–	–	–
Knox	105	3.4	17 508	1.2	19	7.9	87 474	26.8
Lake	12	8.0	2 270	15.5	1	–	(D)	(D)
Lawrence	18	7.5	414	12.8	–	–	–	–

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 20
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

	Livestock and poultry —Con.							
	Hens and pullets of laying age inventory				Broilers and other meat-type chickens sold			
	Farms		Total		Farms		Total	
Geographic area	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)
Licking	63	3.9	(D)	(D)	1	–	(D)	(D)
Logan	39	4.8	(D)	(D)	5	15.4	646	18.3
Lorain	46	4.5	6 633	18.3	8	10.0	727	16.0
Lucas	7	11.4	206	14.0	2	22.9	(D)	(D)
Madison	20	7.0	526	8.5	2	20.8	(D)	(D)
Mahoning	43	4.0	(D)	(D)	6	10.8	903	14.3
Marion	21	6.6	14 734	.5	–	–	–	–
Medina	81	3.3	3 257	6.4	14	7.9	2 264	15.1
Meigs	28	5.5	(D)	(D)	1	33.0	(D)	(D)
Mercer	105	1.6	3 967 791	.3	4	6.3	(D)	(D)
Miami	37	5.0	4 139	5.1	7	10.6	649	16.9
Monroe	51	3.9	1 742	6.4	1	33.9	(D)	(D)
Montgomery	51	4.1	(D)	(D)	12	9.4	792	13.8
Morgan	36	5.7	883	7.5	3	21.3	(D)	(D)
Morrow	37	6.9	1 244	7.6	1	38.4	(D)	(D)
Muskingum	49	4.6	2 163	7.0	–	–	–	–
Noble	46	5.0	1 140	7.9	–	–	–	–
Ottawa	8	9.5	192	14.7	3	13.9	(D)	(D)
Paulding	10	9.2	250	13.3	2	25.0	(D)	(D)
Perry	40	5.4	2 100	7.8	–	–	–	–
Pickaway	22	6.7	931	11.4	1	34.9	(D)	(D)
Pike	13	8.2	(D)	(D)	–	–	–	–
Portage	50	4.1	(D)	(D)	2	20.5	(D)	(D)
Preble	45	4.6	6 365	1.8	6	12.5	357	18.8
Putnam	23	5.6	220 812	1.1	3	13.9	955	17.0
Richland	74	4.0	3 841	9.1	13	8.6	912 791	(L)
Ross	42	5.1	1 901	7.0	2	24.1	(D)	(D)
Sandusky	35	5.2	1 452	6.8	10	10.4	1 810	13.4
Scioto	35	6.4	(D)	(D)	2	29.0	(D)	(D)
Seneca	43	4.5	66 304	2.4	8	12.3	1 877	16.3
Shelby	26	5.2	131 818	(L)	3	17.0	115	16.1
Stark	78	3.4	23 969	.9	25	5.7	7 554 676	.8
Summit	25	6.3	(D)	(D)	3	20.6	(D)	(D)
Trumbull	77	3.3	4 135	7.6	7	10.2	515	10.6
Tuscarawas	69	3.8	(D)	(D)	35	5.3	3 003 899	5.3
Union	25	6.0	(D)	(D)	2	29.2	(D)	(D)
Van Wert	14	6.8	259 871	(L)	2	25.6	(D)	(D)
Vinton	14	8.6	350	10.9	1	29.0	(D)	(D)
Warren	44	4.4	1 420	7.2	8	11.8	970	27.0
Washington	52	4.2	2 129	7.8	3	22.7	(D)	(D)
Wayne	210	2.2	385 501	.1	41	4.5	3 482 269	4.4
Williams	20	6.7	(D)	(D)	7	10.6	1 460	9.7
Wood	26	5.7	(D)	(D)	10	9.5	1 297	11.4
Wyandot	24	5.9	518	8.3	5	14.2	964	15.5

	Selected crops harvested										
	Corn for grain or seed						Corn for silage or green chop					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
Geographic area	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, green	Relative standard error of estimate (percent)
Ohio	**37 341**	**1.3**	**3 486 744**	**.9**	**467 163 760**	**.9**	**6 725**	**1.4**	**176 367**	**1.0**	**2 969 730**	**.9**
Adams	456	2.0	15 792	2.4	1 702 270	2.4	59	3.9	1 154	3.7	20 226	3.8
Allen	695	1.3	60 755	1.4	8 293 660	1.3	28	3.4	916	2.7	14 803	3.5
Ashland	619	1.4	40 837	1.4	4 677 978	1.5	184	2.2	5 929	1.7	83 089	1.7
Ashtabula	378	1.7	17 414	1.6	1 619 075	1.7	165	2.6	4 586	2.4	57 001	2.6
Athens	95	2.7	2 384	5.5	233 560	4.7	35	3.2	1 146	2.9	13 931	3.3
Auglaize	706	1.4	57 707	1.3	7 470 577	1.3	163	2.2	4 216	1.7	74 449	1.7
Belmont	140	2.4	2 213	3.0	202 824	3.2	41	4.5	710	5.4	8 935	5.4
Brown	435	1.7	27 524	1.7	3 451 775	1.7	37	4.1	1 207	4.7	22 836	4.7
Butler	415	1.7	38 633	1.6	5 222 767	1.6	75	3.1	2 013	2.8	37 929	2.7
Carroll	321	1.8	12 645	1.9	1 321 554	2.0	96	3.0	2 329	2.3	34 001	2.6
Champaign	551	1.5	85 199	1.0	11 898 816	1.0	78	2.6	2 902	2.9	53 886	2.9
Clark	404	1.5	65 699	1.0	9 841 579	1.0	52	3.2	1 697	3.4	31 661	2.1
Clermont	216	2.1	16 906	1.9	2 363 920	1.9	9	11.5	146	14.6	2 316	14.4
Clinton	525	1.6	89 161	1.0	13 314 274	1.0	36	4.5	1 012	7.9	19 174	9.0
Columbiana	491	1.6	25 611	1.7	2 940 271	1.8	184	2.3	5 378	2.1	83 581	1.7
Coshocton	429	1.3	28 923	1.4	3 819 487	1.4	134	2.2	2 359	2.4	41 168	2.4
Crawford	562	1.5	67 344	1.1	9 009 889	1.1	58	3.3	1 626	4.3	25 772	3.7
Cuyahoga	6	14.5	66	14.7	5 860	16.3	2	25.0	(D)	(D)	(D)	(D)
Darke	1 277	1.0	109 361	.9	16 031 969	.9	167	1.8	5 336	1.7	103 693	1.7
Defiance	455	1.5	35 746	1.3	4 484 241	1.3	39	3.7	1 656	2.4	29 080	2.5
Delaware	310	1.7	47 142	1.1	6 376 042	1.1	31	4.9	1 035	9.3	18 959	9.6
Erie	268	1.5	30 107	1.6	3 954 549	1.5	26	3.8	967	7.3	13 574	2.8
Fairfield	625	1.4	68 203	1.2	9 033 303	1.2	50	3.6	1 657	2.7	31 048	2.0
Fayette	399	1.2	87 504	.7	13 181 892	.7	25	5.1	461	6.7	9 387	5.3

See footnotes at end of table.

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

Selected crops harvested

Geographic area	Corn for grain or seed						Corn for silage or green chop					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, green	Relative standard error of estimate (percent)
Franklin	206	1.8	28 767	1.4	3 750 662	1.3	19	4.5	678	2.9	11 050	2.4
Fulton	615	1.6	83 633	1.2	11 381 465	1.2	84	2.5	3 860	1.7	70 943	1.7
Gallia	165	2.5	3 978	4.6	454 622	4.6	65	3.8	1 645	3.9	27 028	3.7
Geauga	284	2.0	6 445	3.2	648 715	3.5	175	2.5	2 122	2.5	27 523	2.6
Greene	470	1.5	69 421	1.0	10 202 333	1.0	41	4.4	847	4.5	16 050	4.0
Guernsey	209	2.2	5 588	4.5	644 473	5.4	57	4.1	788	4.2	11 147	4.3
Hamilton	44	4.2	3 917	3.3	512 189	2.3	6	11.8	265	15.1	5 310	11.8
Hancock	757	1.4	79 159	1.2	10 667 189	1.2	27	4.4	886	3.7	14 951	2.9
Hardin	605	2.0	67 747	1.6	9 159 070	1.5	57	3.3	1 148	3.0	22 216	2.8
Harrison	133	2.2	4 686	3.0	496 148	3.8	28	5.1	903	4.0	15 148	4.5
Henry	770	1.2	78 637	1.1	11 416 924	1.1	46	3.5	1 739	4.5	24 144	4.1
Highland	550	1.6	55 654	1.5	7 465 243	1.5	70	3.5	2 106	4.9	36 039	5.4
Hocking	102	2.8	3 626	4.0	377 297	4.1	3	17.5	16	17.8	258	18.4
Holmes	959	1.6	27 994	1.3	3 307 178	1.3	600	2.0	6 372	1.7	99 827	1.8
Huron	536	1.6	56 926	1.2	6 761 515	1.2	56	3.9	2 009	3.4	37 970	4.8
Jackson	103	2.7	5 983	4.7	570 814	5.7	29	4.8	779	5.1	12 108	4.8
Jefferson	143	2.1	3 076	2.8	332 763	2.9	30	4.6	625	4.9	8 471	4.0
Knox	605	1.8	51 787	1.8	6 862 916	1.8	119	3.4	2 577	4.1	39 236	3.3
Lake	26	5.0	900	5.9	62 316	7.6	7	11.1	31	10.8	280	11.1
Lawrence	74	3.2	1 227	4.2	139 685	4.6	37	4.1	788	3.6	12 569	4.3
Licking	567	1.5	54 047	1.2	7 077 291	1.2	91	2.6	2 174	2.5	35 837	2.4
Logan	466	1.5	62 735	1.2	7 992 588	1.2	91	2.5	2 919	2.1	49 209	2.1
Lorain	300	1.7	25 961	1.3	2 732 934	1.3	66	2.7	2 948	4.4	42 608	4.5
Lucas	205	1.7	22 904	1.6	3 180 066	1.7	6	12.1	173	7.3	2 725	7.1
Madison	423	1.4	89 723	.8	13 334 019	.8	44	4.1	1 266	2.5	26 761	2.4
Mahoning	282	1.5	17 234	1.5	1 844 553	1.4	91	2.4	3 112	1.4	52 081	1.3
Marion	397	1.5	65 779	1.0	8 459 348	1.0	19	5.8	633	2.8	10 693	2.8
Medina	365	1.5	19 623	1.5	2 131 637	1.5	97	2.6	2 899	2.7	39 573	2.8
Meigs	136	2.4	3 779	4.7	391 990	5.6	47	3.7	1 160	3.4	17 249	2.6
Mercer	987	1.2	87 375	.9	12 429 836	.9	273	1.5	9 193	1.3	179 552	1.2
Miami	659	1.4	70 070	1.2	10 386 249	1.1	59	3.0	1 392	3.4	28 641	2.7
Monroe	149	2.2	2 474	3.8	253 207	4.3	47	4.1	610	3.9	9 243	4.2
Montgomery	367	1.5	35 346	1.3	5 039 740	1.3	26	5.8	569	6.4	9 806	5.8
Morgan	186	2.6	5 723	2.4	641 467	2.0	44	4.7	847	4.0	12 779	4.0
Morrow	441	3.1	43 877	2.0	5 369 431	1.9	67	4.4	1 394	4.9	25 102	5.4
Muskingum	398	1.4	19 688	1.9	2 482 990	2.3	96	2.7	2 140	3.6	37 336	3.9
Noble	101	2.9	1 493	3.0	140 410	3.7	19	5.9	296	6.8	3 659	9.9
Ottawa	269	1.7	16 223	1.6	1 854 016	1.7	4	6.7	(D)	(D)	(D)	(D)
Paulding	353	1.3	51 167	1.0	6 748 481	.9	15	5.6	740	5.2	9 446	5.1
Perry	274	1.9	21 004	2.0	2 621 944	1.8	32	5.0	591	6.7	11 033	6.5
Pickaway	442	1.4	90 878	.8	12 792 860	.8	50	3.3	1 932	2.4	26 693	2.6
Pike	97	3.2	9 106	2.9	997 339	2.6	20	7.0	696	5.3	11 554	4.8
Portage	263	1.6	17 954	1.6	1 809 265	1.6	67	2.7	1 677	1.8	23 921	1.9
Preble	688	1.5	83 752	1.3	12 270 975	1.3	83	3.0	2 176	2.8	44 640	3.0
Putnam	1 035	.9	72 601	.9	9 896 073	.9	61	3.1	1 764	3.5	32 825	5.4
Richland	558	1.8	43 796	1.5	5 135 838	1.5	147	3.1	4 066	3.2	69 387	3.3
Ross	415	1.7	59 631	1.0	8 364 841	1.0	63	3.5	1 850	2.4	38 254	2.3
Sandusky	603	1.5	59 541	1.2	7 884 125	1.2	40	4.5	960	3.3	12 952	4.5
Scioto	197	3.6	9 096	4.2	1 008 203	4.9	47	5.9	774	8.2	14 217	8.3
Seneca	942	1.7	75 950	1.5	9 919 083	1.5	75	2.9	1 979	3.5	34 873	3.8
Shelby	694	1.3	58 819	1.2	7 938 157	1.2	146	1.9	4 518	1.6	89 247	1.9
Stark	555	1.3	33 159	1.5	3 868 149	1.5	165	2.0	5 201	1.4	72 635	1.5
Summit	52	3.8	1 684	3.1	177 195	3.0	7	9.2	84	6.7	1 251	5.8
Trumbull	406	1.5	20 882	2.4	2 306 966	2.4	141	2.6	2 565	2.2	37 750	2.3
Tuscarawas	430	1.7	23 018	2.1	2 823 835	2.1	172	2.3	4 666	1.4	85 130	1.3
Union	429	1.6	56 045	1.1	7 519 244	1.1	57	2.9	2 279	1.4	40 386	1.4
Van Wert	617	1.0	75 250	.9	10 954 851	.9	26	4.1	735	4.7	14 551	4.8
Vinton	53	4.0	1 901	4.8	184 764	5.2	2	14.7	(D)	(D)	(D)	(D)
Warren	300	1.6	30 597	1.3	4 406 940	1.2	35	4.1	601	3.0	10 385	2.5
Washington	305	1.7	10 209	1.9	1 248 013	2.0	76	3.3	1 354	4.0	24 072	3.9
Wayne	1 016	1.4	65 068	1.1	8 585 525	1.1	569	1.6	15 471	1.1	275 483	1.0
Williams	492	1.8	46 271	1.5	5 566 008	1.4	50	3.3	2 658	2.4	40 965	2.1
Wood	810	1.3	93 277	1.1	12 615 045	1.1	31	3.8	1 019	4.9	21 320	6.7
Wyandot	483	1.4	60 007	1.0	8 112 620	1.0	31	4.2	1 072	6.0	15 369	5.5

Selected crops harvested —Con.

Geographic area	Wheat for grain						Oats for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Ohio	**24 054**	**1.3**	**1 089 529**	**1.0**	**54 020 364**	**1.0**	**8 048**	**1.4**	**115 727**	**1.3**	**7 901 758**	**1.3**
Adams	180	2.7	3 716	2.9	122 617	2.9	20	6.9	276	8.3	12 438	8.7
Allen	616	1.3	25 505	1.5	1 241 679	1.5	70	3.0	741	3.2	52 916	3.3
Ashland	390	1.8	9 725	1.8	435 587	1.9	301	2.0	4 845	2.0	335 873	2.2
Ashtabula	145	2.5	3 626	3.0	169 081	3.5	256	2.0	5 253	2.3	337 096	2.6

See footnotes at end of table.

TIPS [UPF] BATCH_874 [ACEN,C_ARLEDGE] 3/ 2/94 11:51 AM MACHINE: EPCV21 DATA:VOL1_TIPS_APX_31.TIPS;1 * 2/25/94 10:10:00 TAPE: NOreel FRAME: 22
TSF:TIPS92-10110629.DAT;1 2/25/94 10:11:17 UTF:TIPS93-10110629.DAT;1 2/25/94 10:11:18 META:VOL1_TIPS96_APX_31.DAT;4 2/25/94 10:13:31

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

	Selected crops harvested —Con.											
	Wheat for grain						Oats for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
Geographic area	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)
Athens	17	6.2	274	8.2	10 024	8.2	10	8.2	163	5.3	5 875	9.6
Auglaize	570	1.5	25 242	1.5	1 260 865	1.5	122	2.5	1 784	2.5	138 430	2.4
Belmont	32	5.3	252	8.1	10 316	7.7	72	3.5	680	4.2	38 846	4.7
Brown	167	2.2	4 514	2.4	171 986	2.3	8	9.0	84	10.1	4 950	10.7
Butler	216	2.2	7 534	2.0	343 989	2.0	35	5.4	424	5.7	26 085	7.4
Carroll	104	2.9	1 851	3.5	81 359	4.1	206	2.2	2 649	2.6	158 227	2.9
Champaign	316	1.8	12 409	1.6	619 789	1.6	44	4.2	420	3.9	26 081	4.8
Clark	195	2.0	8 734	1.6	451 838	1.6	29	4.8	221	5.2	15 141	4.7
Clermont	51	4.0	1 565	2.4	66 554	2.2	1	35.0	(D)	(D)	(D)	(D)
Clinton	269	2.0	11 045	1.6	509 138	1.6	20	6.3	230	3.5	18 070	3.2
Columbiana	233	2.1	6 485	2.3	332 893	2.3	286	2.1	5 453	2.1	319 274	2.3
Coshocton	142	2.1	2 905	2.0	132 347	2.1	169	2.0	1 768	2.1	107 465	2.2
Crawford	526	1.5	30 641	1.2	1 688 391	1.2	86	2.8	1 049	2.9	75 064	3.2
Cuyahoga	5	16.3	84	28.9	3 550	27.4	2	20.0	(D)	(D)	(D)	(D)
Darke	790	1.1	25 952	1.2	1 189 265	1.2	162	2.1	2 234	2.4	158 008	2.6
Defiance	564	1.4	31 204	1.4	1 234 897	1.5	55	3.7	778	5.0	53 782	6.2
Delaware	258	1.8	15 167	1.3	807 275	1.3	55	4.1	677	4.7	47 076	4.8
Erie	160	2.0	7 266	1.9	451 705	2.0	36	4.6	579	5.3	48 136	5.8
Fairfield	358	1.8	15 283	1.8	712 910	1.8	82	3.4	912	3.6	44 068	3.8
Fayette	219	1.6	13 220	1.4	670 527	1.4	24	5.4	352	4.9	20 656	3.8
Franklin	156	2.1	7 394	1.9	380 157	1.9	10	6.7	138	2.8	6 370	1.7
Fulton	338	1.9	11 589	1.8	656 345	1.7	23	6.1	270	6.9	20 097	7.8
Gallia	37	5.0	706	6.1	27 437	7.3	6	9.4	46	9.6	3 080	9.9
Geauga	63	3.9	1 270	7.6	78 339	7.7	243	2.1	3 020	2.3	219 973	2.5
Greene	229	1.9	8 323	1.5	404 595	1.4	31	6.0	501	9.2	34 787	10.2
Guernsey	27	6.4	221	6.3	8 840	6.3	62	4.0	691	5.0	35 383	5.7
Hamilton	18	6.2	613	5.2	27 395	5.5	4	20.4	28	21.6	1 182	21.7
Hancock	761	1.4	47 185	1.3	2 439 016	1.3	59	3.4	510	3.9	32 552	3.6
Hardin	541	1.9	34 945	1.7	1 866 166	1.7	105	3.0	1 625	3.2	123 897	3.3
Harrison	19	6.8	154	10.1	6 929	11.0	63	3.3	947	3.0	50 654	3.1
Henry	667	1.3	38 477	1.4	2 140 738	1.4	41	4.2	498	5.8	41 263	6.4
Highland	322	1.8	12 097	1.7	519 959	1.8	16	7.9	214	11.2	8 762	11.4
Hocking	27	5.7	455	6.7	15 785	6.8	18	7.1	120	8.2	4 531	8.8
Holmes	350	2.2	3 897	2.0	177 614	2.0	784	1.8	9 157	1.8	721 095	1.9
Huron	457	1.6	23 601	1.3	1 287 286	1.3	94	3.0	1 713	3.7	134 459	3.8
Jackson	33	4.6	954	6.2	33 140	7.2	3	23.3	(D)	(D)	850	23.7
Jefferson	47	4.0	456	4.6	19 914	4.9	70	3.3	725	4.8	36 396	5.1
Knox	269	2.4	7 863	2.3	362 486	2.5	240	2.5	3 411	2.6	226 299	2.7
Lake	15	4.9	300	2.7	14 672	3.7	18	6.0	313	7.7	18 014	9.2
Lawrence	5	7.7	168	8.8	5 088	8.7	–	–	–	–	–	–
Licking	287	2.0	11 230	1.8	533 474	2.0	148	2.4	1 928	2.9	109 861	2.8
Logan	303	1.7	16 551	1.4	829 822	1.5	107	2.8	1 615	3.6	113 095	4.0
Lorain	268	1.7	11 844	1.5	592 105	1.5	69	3.0	1 021	3.3	59 544	3.5
Lucas	144	2.0	6 254	1.9	335 424	2.1	11	7.7	115	15.5	7 569	10.1
Madison	269	1.6	16 187	1.3	889 564	1.3	26	4.2	535	3.6	40 392	3.0
Mahoning	171	1.9	3 829	1.7	195 625	1.7	157	2.1	2 526	2.2	156 704	2.3
Marion	363	1.5	25 494	1.2	1 395 963	1.2	48	3.7	711	3.0	62 397	3.1
Medina	248	1.8	6 818	1.9	322 270	1.9	154	2.3	2 069	2.4	131 360	2.3
Meigs	28	5.2	502	4.2	13 230	2.7	11	8.8	68	7.7	2 637	7.1
Mercer	570	1.4	20 725	1.3	965 543	1.2	271	1.8	4 584	1.6	366 684	1.5
Miami	404	1.5	16 519	1.5	810 420	1.5	55	3.7	526	4.3	32 717	4.4
Monroe	19	5.8	206	4.9	8 525	4.4	49	3.9	345	4.5	18 894	4.5
Montgomery	230	1.9	7 977	2.1	379 401	2.1	12	8.1	118	7.5	6 437	8.7
Morgan	51	4.5	941	4.6	31 325	4.7	33	5.8	433	10.3	19 285	11.3
Morrow	319	3.3	13 452	2.7	657 806	2.6	116	4.3	1 541	5.2	116 652	5.5
Muskingum	147	2.2	2 617	2.7	112 357	2.9	119	2.7	1 315	4.2	70 447	4.5
Noble	9	9.7	63	18.3	2 355	23.7	13	9.4	66	12.2	2 515	11.1
Ottawa	281	1.7	12 354	1.7	595 899	1.7	16	6.6	203	7.5	14 654	8.6
Paulding	391	1.3	36 962	1.0	1 537 144	1.0	35	4.4	769	5.1	48 098	6.1
Perry	119	2.6	3 385	2.7	142 752	2.4	38	4.9	487	5.5	25 669	5.6
Pickaway	366	1.5	27 336	1.3	1 375 108	1.3	15	7.3	242	6.6	17 469	7.5
Pike	44	4.7	1 929	5.2	66 535	4.6	9	12.3	94	14.7	3 910	14.8
Portage	138	2.2	4 610	1.7	235 504	1.8	113	2.5	2 222	3.3	140 418	4.5
Preble	329	1.8	11 051	1.8	526 872	1.8	52	4.4	446	6.2	38 763	8.6
Putnam	1 044	.9	49 035	1.0	2 315 794	1.0	52	3.6	600	5.7	38 556	5.3
Richland	360	2.0	11 621	1.7	564 478	1.8	194	2.6	3 314	2.5	208 432	2.7
Ross	310	1.9	21 909	1.4	1 056 058	1.3	31	5.5	425	6.3	24 609	6.5
Sandusky	481	1.6	18 563	1.5	1 036 627	1.5	87	3.1	1 259	4.9	91 076	3.0
Scioto	44	5.8	1 400	4.8	57 302	5.0	2	28.9	(D)	(D)	(D)	(D)
Seneca	941	1.7	44 970	1.7	2 391 305	1.7	167	2.3	2 793	2.5	191 119	2.3
Shelby	533	1.3	21 546	1.3	1 035 263	1.3	127	2.2	1 975	2.4	165 501	2.6
Stark	312	1.7	8 362	1.9	389 777	2.0	312	1.7	5 284	2.1	342 498	2.3
Summit	32	4.6	736	3.7	29 029	4.1	33	4.8	568	5.1	30 753	5.1
Trumbull	136	2.5	3 693	2.3	186 738	2.5	184	2.2	2 976	1.9	217 172	1.9
Tuscarawas	163	2.4	2 737	2.5	125 824	2.4	214	2.2	2 523	2.0	164 248	2.1
Union	395	1.6	24 051	1.5	1 217 875	1.5	57	3.7	873	3.4	47 844	3.8
Van Wert	461	1.1	26 008	1.1	1 291 596	1.1	57	3.0	867	3.2	57 120	3.0
Vinton	10	9.4	208	10.6	6 715	11.3	3	13.7	50	18.5	1 810	17.6
Warren	148	2.2	6 605	1.3	301 583	1.4	16	6.5	207	4.7	11 319	4.0
Washington	118	2.7	2 050	3.0	79 425	3.2	43	4.4	309	5.0	14 271	5.3

See footnotes at end of table.

Table F. Reliability Estimates for the State and County Totals: 1992 —Con.

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

Geographic area	Selected crops harvested —Con.											
	Wheat for grain						Oats for grain					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)
Wayne	505	1.6	13 213	1.3	715 280	1.3	571	1.6	9 387	1.6	724 189	1.6
Williams	470	1.9	24 104	1.6	953 056	1.6	65	3.4	1 038	3.1	73 405	3.5
Wood	709	1.3	48 627	1.2	2 677 925	1.2	52	3.9	908	4.3	67 411	5.2
Wyandot	480	1.4	36 388	1.1	1 843 208	1.1	63	3.1	826	2.9	59 253	3.0

Geographic area	Selected crops harvested —Con.											
	Soybeans for beans						Hay —alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, dry	Relative standard error of estimate (percent)
Ohio	**31 635**	**1.2**	**3 776 952**	**1.0**	**145 432 936**	**.9**	**33 080**	**1.1**	**1 200 789**	**1.1**	**2 949 243**	**1.1**
Adams	205	2.5	8 347	3.2	278 858	3.0	719	1.6	26 896	2.1	57 760	2.2
Allen	774	1.2	79 361	1.5	3 061 570	1.4	175	1.9	3 300	2.5	9 841	2.6
Ashland	399	1.7	25 916	1.7	868 537	1.7	623	1.4	25 808	1.5	71 079	1.5
Ashtabula	131	2.6	8 862	3.5	271 894	3.4	697	1.3	33 929	1.5	75 104	1.7
Athens	9	8.8	499	9.4	11 238	14.4	393	1.1	15 071	1.4	29 311	1.5
Auglaize	786	1.4	75 147	1.4	2 819 262	1.4	352	1.7	13 569	1.8	43 594	1.7
Belmont	–	–	–	–	–	–	514	1.1	33 239	1.6	63 311	1.7
Brown	557	1.6	54 727	1.7	1 913 990	1.7	555	1.5	15 769	1.8	33 271	2.1
Butler	366	1.8	27 695	2.1	1 143 540	2.1	484	1.4	14 200	1.7	36 745	2.0
Carroll	40	4.5	1 789	5.6	57 104	5.3	569	1.2	30 058	1.8	66 475	1.8
Champaign	513	1.5	61 742	1.3	2 624 787	1.2	347	1.6	9 785	2.0	28 001	2.1
Clark	380	1.5	62 011	1.2	2 720 551	1.1	299	1.7	6 899	2.4	19 256	3.9
Clermont	210	2.2	31 648	1.6	1 110 419	1.6	354	1.7	7 697	2.4	13 855	2.9
Clinton	547	1.6	79 806	1.2	3 281 243	1.2	214	2.1	5 061	2.6	14 776	3.0
Columbiana	107	2.6	5 860	2.3	234 391	2.2	697	1.4	30 620	1.8	78 177	1.7
Coshocton	54	3.7	4 877	2.7	199 641	2.3	600	1.0	25 217	1.3	66 082	1.5
Crawford	602	1.5	84 467	1.1	3 291 855	1.0	235	2.0	5 872	2.1	15 320	2.0
Cuyahoga	3	19.4	80	22.6	(D)	(D)	16	7.5	500	22.4	650	13.1
Darke	1 395	1.0	135 112	1.0	5 734 127	1.0	509	1.3	14 732	1.3	47 582	1.3
Defiance	710	1.3	87 790	1.4	2 823 672	1.4	183	2.0	5 577	2.4	15 957	2.4
Delaware	366	1.6	63 372	1.2	2 476 785	1.1	268	1.9	8 653	2.1	19 247	2.2
Erie	276	1.5	27 783	1.5	1 092 904	1.6	110	2.5	3 487	2.2	10 858	1.9
Fairfield	433	1.7	39 892	1.4	1 635 100	1.3	518	1.4	14 436	2.1	35 479	2.4
Fayette	412	1.2	92 054	.8	4 055 453	.8	161	2.0	6 218	2.8	17 231	2.7
Franklin	228	1.7	34 620	1.6	1 285 275	1.4	133	2.4	4 356	3.3	11 383	3.8
Fulton	629	1.7	77 518	1.3	3 000 813	1.3	149	2.5	4 242	3.7	13 135	3.1
Gallia	26	6.3	1 373	8.2	48 961	8.5	492	1.5	17 125	2.3	36 082	2.2
Geauga	15	9.0	660	10.9	17 146	11.3	425	1.5	15 070	2.0	33 264	2.2
Greene	433	1.5	59 958	1.1	2 590 974	1.0	305	1.7	8 085	2.4	21 818	3.1
Guernsey	11	9.8	722	13.1	27 192	13.2	656	1.1	29 994	1.7	57 661	1.9
Hamilton	44	3.7	5 284	2.4	220 450	2.2	109	2.7	2 245	4.4	4 573	5.9
Hancock	862	1.3	114 531	1.2	4 259 769	1.2	203	2.1	4 826	2.4	14 091	2.5
Hardin	698	1.8	97 043	1.6	3 698 123	1.5	243	2.3	5 981	2.3	16 982	2.3
Harrison	10	9.1	594	11.0	16 964	8.2	342	1.1	23 123	1.8	51 327	1.7
Henry	815	1.2	98 701	1.2	4 092 999	1.2	191	2.0	5 756	2.3	18 514	2.5
Highland	598	1.5	54 628	1.5	2 264 320	1.5	490	1.5	17 285	1.7	40 534	2.4
Hocking	35	4.8	2 022	4.1	62 423	3.5	252	1.5	6 789	2.1	12 349	2.4
Holmes	51	3.7	2 674	2.8	99 645	2.8	1 122	1.5	38 040	1.5	104 485	1.6
Huron	605	1.5	78 202	1.3	2 611 984	1.3	273	1.9	7 561	2.4	22 883	2.4
Jackson	27	4.7	1 772	6.0	52 163	5.3	293	1.4	13 789	2.0	28 032	2.4
Jefferson	6	11.7	1 138	2.6	41 785	3.2	325	1.1	17 612	1.8	37 518	2.4
Knox	325	2.2	24 942	2.1	1 034 384	2.1	669	1.7	29 486	1.8	78 712	2.1
Lake	4	10.7	(D)	(D)	10 275	2.9	70	3.0	1 913	3.7	4 258	4.5
Lawrence	10	8.8	330	5.3	12 340	4.4	297	1.6	6 630	2.6	12 780	2.4
Licking	420	1.7	44 757	1.4	1 645 495	1.3	745	1.3	26 013	1.6	62 837	1.6
Logan	464	1.4	61 083	1.2	2 314 751	1.2	366	1.5	12 121	1.7	33 977	1.6
Lorain	438	1.4	49 929	1.3	1 523 745	1.3	317	1.6	12 091	1.7	30 840	1.9
Lucas	253	1.4	32 137	1.5	1 114 403	1.5	51	4.0	1 525	6.7	4 806	6.9
Madison	483	1.3	109 599	.9	4 680 418	.9	203	1.9	6 606	2.4	17 322	3.9
Mahoning	102	2.6	3 813	2.6	121 088	2.5	353	1.3	14 803	1.1	31 977	1.5
Marion	459	1.4	94 102	1.0	3 471 172	1.0	143	2.2	3 640	1.8	10 810	1.7
Medina	277	1.7	20 975	1.6	595 067	1.7	523	1.3	17 147	1.6	42 814	1.6
Meigs	16	7.0	899	14.3	35 411	14.3	355	1.2	13 177	1.7	25 922	2.0
Mercer	958	1.2	88 162	1.1	3 472 201	1.0	503	1.4	24 666	1.2	89 127	1.2
Miami	699	1.3	75 354	1.3	3 330 661	1.2	310	1.6	6 703	1.8	20 420	1.6
Monroe	5	8.9	(D)	(D)	(D)	(D)	537	.9	21 097	1.5	40 797	1.9
Montgomery	423	1.5	37 299	1.4	1 568 728	1.4	278	1.7	5 676	2.6	14 408	3.6
Morgan	16	7.3	540	4.5	24 876	3.7	464	1.6	20 062	2.2	45 161	2.5
Morrow	443	3.0	50 109	2.0	1 883 198	2.0	352	3.2	9 851	3.1	26 829	2.8
Muskingum	56	3.7	3 804	3.3	145 126	3.1	815	1.0	35 520	1.4	79 485	1.5
Noble	–	–	–	–	–	–	481	1.2	20 323	1.5	32 164	1.8
Ottawa	413	1.3	55 966	1.6	1 587 276	1.6	140	2.4	5 700	1.7	19 089	1.4
Paulding	521	1.1	99 098	1.0	3 437 334	1.0	91	2.7	3 411	2.5	5 672	2.4
Perry	119	2.8	8 379	3.5	299 351	3.1	401	1.4	12 981	1.7	27 172	1.9

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

Geographic area	Selected crops harvested —Con.											
	Soybeans for beans						Hay —alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)					
	Farms		Acres		Quantity		Farms		Acres		Quantity	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Bushels	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Tons, dry	Relative standard error of estimate (percent)
Pickaway	438	1.4	84 952	.9	3 670 386	.9	221	1.9	6 403	2.1	18 032	2.6
Pike	66	3.9	8 734	3.9	331 455	3.4	238	1.9	8 767	2.7	16 847	3.7
Portage	122	2.3	10 193	2.3	348 892	2.2	467	1.1	15 010	1.5	31 323	1.7
Preble	616	1.5	60 960	1.3	2 703 854	1.3	384	1.7	8 814	2.0	23 088	2.3
Putnam	1 266	.8	123 304	.9	4 471 915	.9	339	1.4	10 916	1.9	30 830	1.8
Richland	396	2.0	30 493	1.7	1 066 207	1.7	533	1.7	16 362	1.8	39 651	1.9
Ross	368	1.7	54 201	1.1	2 379 757	1.1	415	1.6	16 116	1.8	34 831	1.7
Sandusky	684	1.4	79 772	1.3	2 735 932	1.3	229	2.0	5 167	2.3	15 228	2.3
Scioto	85	4.7	10 662	4.0	355 437	4.4	361	2.5	10 609	3.7	21 260	3.8
Seneca	1 069	1.6	116 318	1.6	4 184 849	1.6	331	1.8	7 207	2.2	20 726	2.3
Shelby	742	1.2	72 419	1.2	2 951 058	1.2	347	1.5	13 408	1.7	40 567	1.5
Stark	175	2.1	12 816	1.8	462 222	1.9	673	1.2	25 319	1.3	64 928	1.3
Summit	23	5.1	887	4.3	24 756	4.5	94	2.7	2 804	3.3	5 386	3.0
Trumbull	201	2.1	13 540	2.7	422 516	2.7	538	1.3	17 942	1.6	41 935	1.8
Tuscarawas	66	3.3	3 571	3.5	126 018	3.3	705	1.3	32 726	1.4	87 143	1.4
Union	551	1.4	92 126	1.1	3 394 334	1.1	281	1.8	8 391	1.8	23 231	2.0
Van Wert	683	.9	107 344	.9	4 439 587	.9	120	2.1	2 266	2.2	7 233	2.2
Vinton	11	9.8	659	6.5	19 448	6.8	152	1.6	6 416	2.4	11 714	4.6
Warren	326	1.5	39 584	1.6	1 521 511	1.5	281	1.6	6 359	1.9	16 266	2.0
Washington	65	3.4	2 736	2.9	109 984	3.0	666	1.1	22 607	1.5	49 107	1.6
Wayne	370	1.6	23 133	1.6	914 949	1.5	1 066	1.3	52 006	1.1	157 428	1.1
Williams	595	1.8	69 418	1.6	2 364 186	1.6	219	2.3	6 707	3.1	15 306	3.2
Wood	882	1.3	119 876	1.2	4 746 713	1.2	210	2.0	4 677	2.5	14 395	2.5
Wyandot	563	1.3	86 710	1.0	3 269 030	1.1	151	2.1	4 176	2.4	11 816	2.4

Geographic area	Selected crops harvested —Con.			
	Vegetables harvested for sale (see text)			
	Farms		Acres	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Ohio	**2 349**	**1.1**	**55 024**	**.6**
Adams	16	7.3	33	8.8
Allen	14	6.8	414	2.1
Ashland	34	5.2	431	6.6
Ashtabula	48	4.5	230	4.1
Athens	13	8.3	27	10.0
Auglaize	3	18.6	(D)	(D)
Belmont	14	7.7	79	11.3
Brown	26	6.4	204	16.4
Butler	38	4.9	152	5.7
Carroll	18	6.6	48	7.8
Champaign	24	4.4	1 453	.2
Clark	21	7.2	201	5.8
Clermont	28	5.5	294	6.3
Clinton	20	6.5	149	6.1
Columbiana	59	4.0	405	4.6
Coshocton	18	7.0	132	6.8
Crawford	9	7.3	72	11.2
Cuyahoga	15	6.0	242	2.0
Darke	29	4.6	628	4.0
Defiance	7	8.7	59	4.7
Delaware	27	6.2	301	4.9
Erie	47	3.8	995	2.3
Fairfield	32	5.1	199	6.4
Fayette	5	13.6	39	17.8
Franklin	30	4.8	403	4.0
Fulton	29	4.0	2 220	1.1
Gallia	15	8.7	42	10.5
Geauga	69	3.8	516	4.9
Greene	39	4.8	414	2.0
Guernsey	5	13.0	24	18.5
Hamilton	33	4.5	656	1.1
Hancock	16	4.4	896	4.8
Hardin	10	7.6	556	2.6
Harrison	8	9.7	20	8.9
Henry	36	3.8	2 474	1.5
Highland	9	8.9	17	7.7
Hocking	12	9.5	62	12.0
Holmes	34	5.0	63	6.6
Huron	32	4.9	6 902	.4
Jackson	10	6.6	161	5.0
Jefferson	6	11.3	32	11.4
Knox	27	6.4	93	9.3
Lake	37	3.8	383	7.7
Lawrence	24	5.5	132	7.9

See footnotes at end of table.

Table F. **Reliability Estimates for the State and County Totals: 1992** —Con.

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

Geographic area	Selected crops harvested —Con.			
	Vegetables harvested for sale (see text)			
	Farms		Acres	
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)
Licking	35	4.9	251	8.6
Logan	16	7.5	493	3.3
Lorain	77	3.0	1 359	3.6
Lucas	49	3.1	2 125	.7
Madison	11	8.2	86	12.9
Mahoning	64	3.3	924	3.8
Marion	13	8.2	140	9.5
Medina	56	3.7	459	5.9
Meigs	63	3.5	1 258	3.5
Mercer	20	6.7	130	7.6
Miami	22	6.1	1 249	1.3
Monroe	9	7.0	58	14.2
Montgomery	34	4.9	422	8.2
Morgan	5	12.8	36	24.6
Morrow	10	12.6	26	15.1
Muskingum	25	5.2	174	10.5
Noble	1	41.9	(D)	(D)
Ottawa	23	3.9	1 934	.5
Paulding	1	–	(D)	(D)
Perry	13	8.3	30	5.4
Pickaway	22	5.3	485	4.0
Pike	4	18.0	18	25.1
Portage	62	3.6	1 424	6.6
Preble	22	6.7	82	8.3
Putnam	46	3.5	3 350	1.7
Richland	23	6.5	150	6.9
Ross	15	9.0	86	8.7
Sandusky	73	2.4	4 896	1.3
Scioto	27	6.2	366	6.7
Seneca	15	3.8	1 471	1.5
Shelby	5	12.8	39	27.8
Stark	94	2.9	1 922	3.1
Summit	38	4.7	1 184	3.9
Trumbull	63	3.2	272	5.2
Tuscarawas	20	6.3	199	1.5
Union	14	7.8	45	9.6
Van Wert	3	17.7	10	6.9
Vinton	3	18.6	4	22.2
Warren	43	4.2	449	7.2
Washington	36	4.8	639	4.2
Wayne	54	3.8	272	8.2
Williams	18	5.4	550	3.1
Wood	50	3.2	2 916	1.6
Wyandot	6	9.4	(D)	(D)

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

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Table G. State Estimates of the Not on the Mail List Component of Farm Coverage Error: 1992

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Item	Census published farms — Total (number)	Census published farms — Relative standard error of estimate (percent)	Not on mail list [1] — Total (number)	Not on mail list [1] — Relative standard error of estimate (percent)	Percent not on mail list [1] — Total (percent)	Percent not on mail list [1] — Standard error of percent
Farms ____ number__	70 711	1.1	10 443	18.0	12.9	2.1
Land in farms ____ acres__	14 247 969	1.0	440 760	22.2	3.0	.6
Average size of farm ____ acres__	201.5	.3	42.2	17.9	(X)	(X)
Farms by size:						
Less than 10 acres	5 417	1.1	3 522	29.2	39.4	7.2
10 to 49 acres	15 295	1.0	4 054	28.5	21.0	4.7
Less than 50 acres	20 712	1.0	7 576	21.6	26.8	4.4
50 acres or more	49 999	1.2	2 867	32.6	5.4	1.7
50 to 99 acres	13 988	1.1	2 135	41.5	13.2	4.8
100 to 179 acres	13 880	1.3	434	63.0	3.0	1.9
180 acres or more	22 131	1.3	298	48.5	1.3	.6
Harvested cropland ____ farms__	62 535	1.1	6 333	21.5	9.2	1.8
acres__	9 790 327	1.0	176 857	30.4	1.8	.5
Farms by value of sales:						
Less than $1,000	6 421	1.3	3 767	31.3	37.0	7.3
$1,000 to $2,499	7 509	1.2	3 032	32.4	28.8	6.6
Less than $2,500	13 930	1.2	6 799	23.1	32.8	5.1
$2,500 or more	56 781	1.2	3 644	25.2	6.0	1.4
$2,500 to $9,999	18 824	.9	1 907	33.8	9.2	2.8
$10,000 or more	37 957	1.4	1 737	40.1	4.4	1.7
Market value of agricultural products sold ____$1,000__	3 914 040	.7	48 732	29.0	1.2	.4
Farms by standard industrial classification:						
Crops (01)	41 797	1.1	3 945	25.3	8.6	2.0
Livestock (02)	28 914	1.0	6 498	21.7	18.4	3.4
Farms by type of organization:						
Individual or family	60 936	1.1	9 930	18.8	14.0	2.3
Partnership or corporation	9 462	1.1	513	61.2	5.1	3.0
Other	313	1.9	–	(X)	–	(X)
Farms by tenure of operator:						
Full owners	41 342	1.0	8 115	20.6	16.4	2.9
Part owners and tenants	29 369	1.2	2 328	31.7	7.3	2.2
Part owners	21 876	1.2	1 461	44.2	6.3	2.6
Tenants	7 493	1.5	867	42.6	10.4	4.0
Operators by place of residence:						
On farm operated	54 856	1.1	7 142	20.7	11.5	2.1
Not on farm operated	11 805	1.2	1 362	42.9	10.3	4.0
Not reported	4 050	1.1	1 939	40.4	32.4	9.3
Operators by principal occupation:						
Farming	34 604	1.2	1 598	39.7	4.4	1.7
Other	36 107	1.0	8 468	18.8	19.0	3.0
Operators by sex:						
Male	66 482	1.1	9 795	18.5	12.8	2.1
Female	4 229	1.1	648	69.3	13.3	8.0
Operators by race:						
White	70 468	1.1	10 067	17.7	12.5	2.0
Black and other races	243	2.2	–	(X)	–	(X)
Operators by years on present farm:						
4 years or less	7 648	1.4	1 720	30.8	18.4	4.6
5 years or more	51 955	1.1	6 180	23.3	10.6	2.2
Average years on present farm	20.3	1.5	15.2	25.8	(X)	(X)
Not reported	11 108	1.1	2 544	37.2	18.6	5.9
Average age of operator	52.0	.1	49.3	17.3	(X)	(X)

NOTE: These estimates do not account for incorrectly classified farms or farms appearing more than once in the census and are subject to change in the 1992 Coverage Evaluation publication. See appendix C text for further explanation.

[1] Estimates are based on a sample survey conducted independently of census data collection.

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