Appendix C. Statistical Methodology

THE SCREENING PHASE AND THE MAIL LIST MODEL

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

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

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

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

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

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

CENSUS SAMPLE DESIGN

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

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

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

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

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

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

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

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

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

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

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

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

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

CENSUS ESTIMATION

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

Whole Farm Nonresponse Estimation

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

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

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

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

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

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

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

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

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

Sample Estimation

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

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

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

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

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

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

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

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

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

CENSUS SAMPLING ERROR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CENSUS NONSAMPLING ERROR

The accuracy of the census counts is affected jointly by sampling errors (described in the previous section) and nonsampling errors. Extensive efforts were made to compile a complete and accurate mail list for the census, to design an understandable report form with instructions, and to minimize processing errors through the use of quality control measures. Nonsampling errors arise from many sources, including respondent or enumerator error or incorrect data keying, editing, or imputing for missing data. These nonsampling errors are further discussed in this section. Nonsampling error due to mail list incompleteness and duplication as well as misclassification of records on the mail list is called coverage error. The section titled "Coverage Evaluation" discusses the evaluation studies conducted to measure the extent of this error in the census.

Respondent and Enumerator Error

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

Item Nonresponse

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

Processing Error

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

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

COVERAGE EVALUATION

Coverage Overview

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

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

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

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

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

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

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

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

Area Frame Surveys to Measure Mail List Undercoverage

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

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

Classification Error Survey to Measure Three Types of Coverage Error

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

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

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

Coverage Estimation

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

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

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

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

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

Item	Percent of total	Item	Percent of total
Farms number	11.4	Corn for grain or seed acres	3.4
Land in farms acres	6.3	Wheat for grain acres	4.1
Estimated market value of land and buildings¹\$1,000. Market value of agricultural products sold\$1,000. Harvested cropland	2.5	Livestock and poultry inventory: Cattle and calvesnumber. Hogs and pigsnumber. Layers 20 weeks old and oldernumber.	5.4 2.4 1.7

¹Data are based on a sample of farms.

Table B. Reliability Estimates for Number of Farms in a County Reporting a Complete Count Item or Sample Count Item: 1997

Farms	Relative standard error of estimate (percent)	Farms	Relative standard error of estimate (percent)	
COMPLETE COUNT ITEM		SAMPLE COUNT ITEM		
Number of farms reporting:		Number of farms reporting:		
25 50 75 100 150 200	5.8 3.8 2.8 2.1 1.1	25 50 75 100 150 200	40.4 27.7 21.9 18.3 13.9 11.0	
300	.8 .6 .5 .4 .3 (X)	300 500 750 1,000 1,500 2,000	6.9 5.4 4.4 3.8 3.1 (X)	

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

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

[For meaning of abbreviations and symbols, see intro	oductory text]					
ltem		Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)
FARMS AND LAND IN FARMS				FARM PRODUCTION EXPENSES ¹		
Farms		12 084 2 154 875	.8 .6	Total farm production expenses farms	12 109 1 123 200	.9 .6
Average size of farm		178	1.0	Average per farm dollars. Livestock and poultry purchased farms.	92 757 3 714	1.0 2.7
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD				Feed for livestock and poultry \$1,000 Feed for livestock and poultry \$1,000. Commercially mixed formula feeds \$1,000 \$1,000	129 432 6 112 435 279 4 501 406 673	1.9 1.9 .8 2.4 .8
Total sales (see text)	farms \$1,000	12 084 1 312 086	.8 .3	Seeds, bulbs, plants, and trees	6 893 35 862 7 745	1.7 1.3 1.6
Average per farm	dollars	108 580	.9	\$1,000 Agricultural chemicals farms	58 488 6 851	1.4 1.7
Farms by value of sales: Less than \$1,000 (see text)	farms \$1,000	1 748 393	1.2 1.6	\$1,000 Petroleum products \$1,000	38 516 11 311 33 726	1.7 1.0 1.1
\$1,000 to \$2,499		1 349 2 211	1.3 1.3	Electricity farms	8 246	1.6
\$2,500 to \$4,999	farms \$1,000	1 365 4 876	1.3 1.3 1.3	\$1,000 Hired farm labor farms.	17 729 4 814	1.3 2.3
\$5,000 to \$9,999	farms	1 551	1.3	\$1,000	102 425	1.1
\$10,000 to \$19,999		10 947 1 292	1.3 1.4	Contract labor	1 045 5 685	5.8 3.2
\$20,000 to \$24,999	\$1,000 farms	18 240 376	1.4 2.1	Repair and maintenance	10 455 60 624	1.2 1.3
	\$1,000	8 312	2.1	Customwork, machine hire, and rental of machinery and equipment farms	4 036	2.7
\$25,000 to \$39,999	\$1,000	666 20 806	1.7 1.7	\$1,000 Interest farms	13 376 4 219	2.8 2.3
\$40,000 to \$49,999	farms \$1,000	286 12 638	2.0 2.1	\$1,000 Secured by real estate	45 896 2 880	1.7 3.0
\$50,000 to \$99,999	farms \$1,000	854 60 828	1.6 1.6	\$1,000 Not secured by real estate farms	30 699 2 364	2.2 3.1
\$100,000 to \$249,999		1 223 200 719	1.2 1.2	\$1,000	15 197	2.0
\$250,000 to \$499,999	farms	721	_	Cash rent	3 133	2.9
\$500,000 or more		257 240 653	_	\$1,000 Property taxes	36 106 11 088	2.0 1.0
Sales by commodity or commodity group: Crops, including nursery and greenhouse crops	\$1,000 farms	714 877 7 568	.9	\$1,000 All other farm production expenses	23 776 10 879 86 280	1.8 1.1 1.1
Grains		458 719 4 469	.4 .9 .5 .9 .5 .9 .5 .9 .5			
Corn for grain	\$1,000 farms	245 721 2 713	.5 .9	NET CACH DETURN EDOM ACRICIII TURAI		
Wheat	\$1,000	97 630 2 305	.5	NET CASH RETURN FROM AGRICULTURAL SALES FOR THE FARM UNIT (SEE TEXT) ¹		
Soybeans	\$1,000	39 052 3 195	.5	, ,		
·	\$1,000	100 579				
Sorghum for grain	\$1,000	220 2 020	1.7 1.4	All farmsnumber\$1,000	12 109 172 948	.9 2.0
Barley	\$1,000	616 5 751	1.1 .8	Average per farmdollars	14 283	2.2
Oats	farms \$1,000	137 190	2.5 2.8	Farms with net gains ² number\$1,000	5 711 264 091	1.9 1.1
Other grains	farms \$1,000	132 499	1.8 3.3	Average net gaindollars	46 242	2.2
Cotton and cottonseed		.00	-	Farms with net lossesnumber	6 398	1.8
	\$1,000		1.3	\$1,000 Average net lossdollars	91 143 14 246	1.8 2.5
Tobacco	\$1.000	710 19 857	1.2			
Hay, silage, and field seeds	\$1,000	2 379 15 950	1.0 1.1			
Vegetables, sweet corn, and melons	farms	950	1.2	GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME		
Fruits, nuts, and berries	\$1,000 farms	41 679 395	.6 1.6			
	\$1,000	12 153	1.5			
Nursery and greenhouse crops	farms \$1,000	1 009 120 007	1.3 .4	Government payments	2 673 14 330	.9 .6
Other crops		164 3 353	2.2 2.6	Other farm-related income ¹ farms \$1,000	3 559 17 124	3.1 4.9
Livestock, poultry, and their products		6 386	.8	Customwork and other agricultural services farms \$1,000	872 6 731	6.3 7.3
	\$1,000	853 367	.3	Gross cash rent or share payments farms \$1,000	1 129 4 828	6.5 11.6
Poultry and poultry products	\$1,000	1 401 568 987	.3 .8 .2 .9 .5	Forest products, excluding Christmas trees and maple products farms.	456	10.3
Dairy products	\$1.000	963 174 946	.9 .5	\$1,000	2 507	11.9
Cattle and calves	farms \$1,000	4 111 57 115	.8	Other farm-related income sources	1 970 3 058	4.1 5.2
Hogs and pigs	farms \$1,000	495 14 025	1.4 1.1			
Sheep, lambs, and wool	farms	544	1.5	COMMODITY ODEDIT CODES : Ties:		
Other livestock and livestock products (see	\$1,000	1 137	1.7	COMMODITY CREDIT CORPORATION LOANS		
text)	farms \$1,000	1 032 37 157	1.3 .8			
Value of agricultural products sold directly to individuals for human consumption (see text)	farms	1 133	1.2	Total farms.	194	1.8
	\$1,000	8 667	1.1		6 263	.4

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

ltem		Total	Relative standard error of estimate (percent)	ltem	Total	Relative standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			,	TENURE OF OPERATOR		
Total cropland	farms	10 702 1 613 497	.8 .6	All operators	12 084 2 154 875 7 576	.8 .6
Harvested cropland Farms by acres harvested:		9 474 1 382 035	.8 .5	Part owners acres . farms . acres . acres . farms . acres . acres .	723 916 3 179 1 138 048	.6 .9 .9 .8
1 to 9 acres	acres	2 052 8 605 1 341	1.1 1.2 1.2	Tenants farms acres	1 329 292 911	1.3 1.0
20 to 29 acres	acres	17 717 890 20 548	1.2 1.4 1.4	OWNED AND RENTED LAND		
30 to 49 acres	acres	1 008 37 602	1.3 1.3	Land owned farms acres	10 790 1 307 862	.8 .7
50 to 99 acres	acres farms	1 301 88 948 1 213	1.2 1.3 1.3	Owned land in farms	10 755 1 188 733	.8 .7
200 to 499 acres	acres	166 924 999 304 683	1.3 1.1 1.1	Land rented or leased from others	4 543 975 894 14 915	.9 .5 .7
500 to 999 acres	acres farms	402 276 086 268	.9 .8 -	Rented or leased land in farms	4 508 966 142 1 798	.9 .5 1.1
Cropland:	acres	460 922	-	acres	128 881	1.5
Pasture or grazing only Other cropland	acres	4 617 148 667 2 747 82 795	.9 1.0 1.0 1.1	OPERATOR CHARACTERISTICS		
Total woodland		6 534 335 977	.9 .9	Operators by place of residence: On farm operated Not on farm operated	9 175 1 923	.8 1.2
Pastureland and rangeland other than cropland and woodland pastured		2 369 96 460	.9 1.0	Not reported Operators by principal occupation:	986	.9
Land in house lots, ponds, roads, wasteland, etc Irrigated land	acres	8 221 108 941 1 154	.8 .9 1.2	Farming Other Operators by days worked off farm:	6 235 5 849	.8 1.0
Acres irrigated:	acres	68 588	.9	Any	6 362 4 317	.9 1.0
1 to 9 acres	acres farms	658 1 690 240	1.5 1.7 2.0	Male farms. Female farms.	10 694 2 051 885 1 390	.8 .6 1.2
50 to 99 acres	acres	5 197 69 5 129	2.0 3.2 3.3	acres Average age of operator	102 990 55.2	1.7
100 to 199 acres	acres farms	85 11 576 70 20 131	2.2 2.2 1.8 1.9	FARMS BY TYPE OF ORGANIZATION		
500 to 999 acres	acres	20 131 25 16 382	1.3 1.4	Individual or family (sole proprietorship) farms	10 229	.8
Harvested cropland irrigated	acres	8 483 1 130	1.2	acres Partnership acres acres	1 482 680 994 336 763	.6 1.4 1.0
Pasture and other land irrigated	acres	68 042 55 546	.9 4.2 4.0	Corporation: farms farms acres	706 292 251	1.4 .7
Land under Conservation Reserve or Wetlands Reserve Programs		605	1.4	More than 10 stockholders farms 10 or less stockholders farms Other than family held farms	13 693 65	1.4 3.8
	acres	25 507	2.0	More than 10 stockholders acres 10 or less stockholders farms	8 802 7 58	4.8 9.9 4.0
VALUE OF LAND AND BUILDINGS ¹				Other—cooperative, estate or trust, institutional, etc farms acres	90 34 379	3.1 1.9
Estimated market value of land and buildings	farms	12 109 6 824 698	.9 1.5	HIRED FARM LABOR ¹		
Average per farm	dollars	563 605 3 176	1.7 2.0	Hired workers by days worked: 150 days or more	2 233	3.4
VALUE OF MACHINERY AND EQUIPMENT ¹				workers	6 225 4 116 14 987	3.4 1.7 2.6 2.7
Estimated market value of all machinery and				INJURIES AND DEATHS		
equipment	31,000	12 106 728 486 60 176	.9 1.5 1.7	Farm-related injuries: Operator and family members farms	100	20
AGRICULTURAL CHEMICALS ¹				Hired workers	112 89 166	2.9 2.9 2.2 1.9
AGRICULTURAL CHEMICALS.				Farm-related deaths: Operator and family members	2 (D)	_ (D)
Commercial fertilizer		7 680	1.6	Hired workers farms		

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

Item		Total	Relative standard error of estimate (percent)	ltem	Total	Relative standard error of estimate (percent)
FARMS BY SIZE				LIVESTOCK		
1 to 9 acres	acres farms acres farms acres farms acres	1 407 6 556 3 828 95 563 979 56 921 984 81 563 1 090 127 084	1.2 1.2 1.0 1.0 1.3 1.3 1.3 1.2 1.2	Cattle and calves inventory. Beef cows	4 444 261 324 2 726 50 619 1 091 84 953 4 111 136 747 57 115 584 80 850 495 149 472 14 025	.8 .6 1.0 1.1 .9 .7 .7 .8 1.3 1.1 1.4 1.0
140 to 179 acres	acres farms acres farms acres farms acres	772 121 114 531 105 019 434 103 259 1 073 377 592 617 422 996	1.4 1.4 1.5 1.5 1.7 1.7 1.2 1.1 1.1	Sheep and lambs of all ages inventory. farms number. Sheep and lambs sold. farms number. Horses and ponies inventory farms. number. Horses and ponies sold farms. POULTRY	616 21 985 497 14 667 2 572 22 533 639 2 518	1.4 1.5 1.5 1.6 1.1 1.3 1.6
1,000 to 1,999 acres	acres	274 368 163 95 289 045	- - - -	Layers and pullets 13 weeks old and older inventory (see text)	637 4 639 682 618 4 120 639 997 256 926 521	1.4 1.2 1.4 .4 .7
FARMS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM				SELECTED CROPS HARVESTED Corn for grain or seed farms acres bushels Corn for silage or green chop farms acres tons, green Wheat for grain farms acres acres	3 554 405 451 36 823 284 1 404 93 117 865 641 2 339 199 351	.9 .5 .5 1.0 .7 .7 .9 .5 .9 .7
Oilseed and grain farming (1111) Vegetable and melon farming (1112) Fruit and tree nut farming (1113) Greenhouse, nursery, and floriculture production (1114) Other crop farming (1119) Beef cattle ranching and farming (112111) Cattle feedlots (112112) Dairy cattle and milk production (11212) Hog and pig farming (1122) Poultry and egg production (1123) Sheep and goat farming (1124) Animal aquaculture and other animal production (1125,	acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.farms.acres.	2 701 1 003 387 7 1955 226 22 372 821 44 228 1 887 196 314 1 867 222 244 356 34 559 889 294 733 19 975 1 091 160 551 228 11 690	1.1 .7 1.6 1.0 2.2 1.5 1.4 1.5 1.1 1.2 1.1 1.2 1.8 2.4 1.0 .7 2.1 1.3 .7 3.3 2.1 2.6	Barley for grain	12 711 370 972 47 405 3 489 722 460 5 611 302 370 711 7 939 11 987 083 509 683 509 683 15 171 466 2 219 523 810 5 223 223 014 450 781 450 781 1 956 54 137 138 627 951 35 958	.5 .9 .7 .7 .1.4 1.4 1.3 1.3 .5 .5 .5 .2 .5 .3 .2 .8 .8 .8 .9 .9 .1 .0 .8 .1 .2 .8 .8 .8 .9 .9 .9 .9 .9 .9 .9 .9 .9 .9 .9 .9 .9

¹Data are based on a sample of farms. ²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains.

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

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

[1 of friedring of abbreviations and symbols, see intro	ductory text]						
ltem		Total	Relative standard error of estimate (percent)	Item	Total	Relative standard error of estimate (percent)	
FADME AND LAND IN FADME				FARM PRODUCTION EXPENSES			
FARMS AND LAND IN FARMS				FARM PRODUCTION EXPENSES ¹ Total farm production expenses farms	6 089	1.0	
Farms Land in farms		6 071 1 789 295	.9 .6	\$1,000 Average per farmdollars	1 060 380 174 147	.6 1.1	
Average size of farm	acres	295	1.0		2 485	2.6	
				Livestock and poultry purchased	113 297	1.0	
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD				Feed for livestock and poultry	3 526 431 498 2 957 404 843	2.0 .8 2.2 .8	
				Seeds, bulbs, plants, and trees	4 540	1.6	
Total sales (see text)	forms	6 071	.9	\$1,000 Commercial fertilizer	34 760 4 679 56 130	1.4 1.5 1.5	
Average per farm	\$1,000	1 293 660	.3	Agricultural chemicals farms	4 439	1.6	
•	dollars	213 088	.9	\$1,000 Petroleum products \$1,000 \$1,000	37 272 5 869 30 133	1.7 1.1 1.1	
Farms by value of sales: \$10,000 to \$19,999		1 292	1.3 1.3	Electricity farms .	4 889	1.6	
\$20,000 to \$24,999	\$1,000 farms	18 240 376	2.0	\$1,000 Hired farm labor farms	15 946 3 501	1.3 2.2	
\$25,000 to \$39,999	\$1,000 farms	8 312 666	2.0 1.7	\$1,000	98 979	1.2	
\$40,000 to \$49,999	\$1,000	20 806 286	1.7 2.0	Contract labor	745 5 320	6.1 3.2	
φ40,000 to φ4σ,σσσ	\$1,000	12 638	2.0	Repair and maintenance	5 727 52 268	1.2 1.3	
\$50,000 to \$99,999		854	1.5	Customwork, machine hire, and rental of machinery and equipment	2 759	2.6	
\$100,000 to \$249,999	\$1,000 farms	60 828 1 223	1.6 1.2	\$1,000 Interest farms	12 466 3 276	3.5 2.2	
\$250,000 to \$499,999	\$1,000	200 719 721	1.2	\$1,000 Secured by real estate	41 836 2 140	1.5 2.9	
\$500,000 or more	\$1,000	257 240 653	<u>-</u>	\$1,000 Not secured by real estate farms	27 041 2 031	1.9 3.1	
	\$1,000	714 877	_	\$1,000	14 796	2.0	
Sales by commodity or commodity group: Crops, including nursery and greenhouse crops.	farms	4 560	.9	Cash rent farms	2 522	2.7	
Grains	\$1,000 farms	448 131 3 334	.4 .9	\$1,000 Property taxes	35 217 5 404	1.9 1.3	
Corn for grain	\$1,000	241 789 2 165	.4	\$1,000 All other farm production expenses farms	14 615 6 082	2.0 1.0	
Wheat	\$1.000	96 238	.4 .9 .5 .9 .5 .9	\$1,000	80 644	1.1	
	\$1,000	2 030 38 514	.5				
Soybeans	farms \$1,000	2 628 98 799	.9 .5	NET CASH RETURN FROM AGRICULTURAL			
Sorghum for grain	farms	191	1.5	SALES FOR THE FARM UNIT (SEE TEXT) ¹			
Barley	\$1,000	1 922 563	1.3 1.1				
Oats	\$1,000	5 674 89	.8 2.8	All farms number	6 089	1.0	
	\$1.000	155	3.1	\$1,000 Average per farmdollars	216 889 35 620	1.5 1.8	
Other grains	\$1,000	119 488	1.6 3.1	Farms with net gains ² number	4 322	1.8	
Cotton and cottonseed	forms			\$1,000 Average net gain	261 225 60 441	1.1 2.1	
	\$1,000	407					
Tobacco	\$1.000	487 18 816	1.4 1.2	\$1,000	1 767 44 335	3.9 2.8	
Hay, silage, and field seeds	farms \$1,000	1 119 12 937	1.2 1.2		25 091	4.8	
Vegetables, sweet corn, and melons		654	1.3				
Fruits, nuts, and berries	\$1,000 farms	40 870 215	.6 1.9	GOVERNMENT PAYMENTS AND OTHER FARM-RELATED INCOME			
	\$1,000	11 849	1.5	TARREST INCOME			
Nursery and greenhouse crops		576	1.4	Courses	6 645	•	
Other crops	\$1,000 farms	118 580 111	.4 2.5	Government payments	2 015 13 071	.9 .5 3.3 5.4 6.4	
	\$1,000	3 290	2.6	Other farm-related income ¹ farms \$1,000	2 207 13 387	3.3 5.4	
Livestock, poultry, and their products	farms \$1.000	3 671 845 529	.8	Customwork and other agricultural services farms \$1.000	676 6 103	6.4 7.5	
Poultry and poultry products	farms	1 176	.8 .3 .8 .2 .9 .5 .9 .8 1.6	Gross cash rent or share payments	525 2 744	8.4 16.0	
Dairy products	\$1,000 farms	568 821 953	.2 .9	Forest products, excluding Christmas trees and maple products farms	235	14.0	
Cattle and calves		174 926 2 248	.5 .9	\$1,000	1 783	13.3	
Hogs and pigs	\$1,000	51 696 331	.8	Other farm-related income sources	1 394 2 758	4.3 5.7	
Sheep, lambs, and wool	\$1.000	13 679 153	1.1 2.1				
	\$1,000	619	2.1	COMMODITY CREDIT CORRORATION			
Other livestock and livestock products (see text)		431	1.6	COMMODITY CREDIT CORPORATION LOANS			
	\$1,000	35 788	.8				
Value of agricultural products sold directly to individuals for human consumption (see text)	farms	568	1.4	Total farms	179	1.7	
	\$1,000	7 803	1.7	\$1,000	6 238	.4	

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

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

Item		Relative standard			Relative
	Total	error of estimate (percent)	Item	Total	standard error of estimate (percent)
LAND IN FARMS ACCORDING TO USE			FARMS BY TYPE OF ORGANIZATION		
Total cropland farms acres Harvested cropland farms acres acres acres acres	5 402 1 434 207 5 161 1 288 347	.9 .5 .9	Individual or family (sole proprietorship) farms	4 714 1 169 986 715 309 003	.9 .6 1.4 .9
Cropland: farms. acres	2 032 92 362	1.0 1.1	Corporation: farms farmsly held acres More than 10 stockholders farms	556 274 394 11	1.2 .6 –
Total woodland	3 296 217 933	.9 .9	10 or less stockholders farms Other than family held farms	545 _39	1.2 4.2
Pastureland and rangeland other than cropland and woodland pastured farms acres.	1 126 66 784	1.0 1.1	acres	6 720 1 38	5.0 - 4.3
Land in house lots, ponds, roads, wasteland, etc farms acres farms farms	4 167 70 371 875	.9 1.0 1.2	Other—cooperative, estate or trust, institutional, etc farms acres	47 29 192	3.7 1.4
acres Harvested cropland irrigated	67 510 868 67 106	.9 1.2 .9	HIRED FARM LABOR ¹		
Pasture and other land irrigated	27 404	5.2 5.1	Hired workers by days worked: 150 days or more	1 838 5 719	3.3 1.7
Land under Conservation Reserve or Wetlands Reserve Programs	289 11 770	1.5 2.2	Less than 150 days	2 843 12 287	2.7 2.7
VALUE OF LAND AND BUILDINGS ¹			Farm-related injuries: Operator and family members	66	3.1
Estimated market value of land and buildings farms \$1,000 Average per farm dollars	6 089 5 021 327 824 655	1.0 1.7 1.9	number Hired workers	75 78 155	3.2 2.0 1.8
Average per acredollars	2 846	2.1	Farm-related deaths: Operator and family members	1 (D)	_ (D)
VALUE OF MACHINERY AND EQUIPMENT ¹ Estimated market value of all machinery and			Hired workers farms number	` 1 (D)	(D)
equipment	6 088 574 511 94 368	1.0 1.6 1.9	FARMS BY SIZE 1 to 9 acres	552	1.5
AGRICULTURAL CHEMICALS ¹	94 306	1.9	10 to 49 acres 50 to 69 acres 70 to 99 acres	952 312 437	1.1 1.8 1.6
Commercial fertilizer	4 667 1 075 678	1.5 1.5	100 to 139 acres. 140 to 179 acres. 180 to 219 acres. 220 to 259 acres.	632 524 409 352 944	1.3 1.6 1.5 1.8 1.2
TENURE OF OPERATOR			260 to 499 acres 500 to 999 acres 1,000 to 1,999 acres 2,000 acres or more	592 272 93	1.0
All operators farms Full owners farms	6 071 1 789 295 2 893	.9 .6 1.0	FARMS BY NORTH AMERICAN INDUSTRY	33	
Part owners	451 543 2 279 1 066 106	.9 .8 .5	CLASSIFICATION SYSTEM Oilseed and grain farming (1111)	1 677	1.1
Tenants farms acres	899 271 646	1.3 .9	Oilseed and grain farming (1111) Vegetable and melon farming (1112) Fruit and tree nut farming (1113) Greenhouse, nursery, and floriculture production	288 72	1.8 3.2
OWNED AND RENTED LAND			(1114). Other crop farming (1119). Beef cattle ranching and farming (112111)	448 720 440	1.6 1.3 1.6
Land owned	5 194 939 166 5 172 876 769	.8 .7 .8 .7	Cattle feedlots (112112) Dairy cattle and milk production (11212) Hog and pig farming (1122) Poultry and egg production (1123) Sheep and goat farming (1124)	118 885 95 1 036 27	2.7 .9 2.5 .7 5.8
Land rented or leased from others	3 192 919 564 12 701	.9 .5 .7	Animal aquaculture and other animal production (1125, 1129)	265	1.9
landlords Rented or leased land in farms	3 178 912 526	.7 .9 .5	LIVESTOCK Cattle and calves inventory farms	2 288	.9
Land rented or leased to others farms acres	830 69 435	1.2 1.6	Beef cows number . farms . number . number .	225 109 1 107 33 076	6
OPERATOR CHARACTERISTICS			Milk cows farms number	1 004 84 690	1.2 1.3 .9
Operators by place of residence: On farm operated. Not on farm operated. Not reported	1 022	.9 1.4 .8	Cattle and calves sold	2 248 122 233 51 696 370	.9 .7 .8 1.5
Operators by principal occupation: Farming Other	4 350 1 721	.8 1.2	Hogs and pigs sold	78 025 331 145 736 13 679	1.1 1.6 1.1 1.1
Operators by days worked off farm: Any	2 425 1 388	1.1 1.2	Sheep and lambs of all ages inventory farms. number . Sheep and lambs sold farms . number . number .	185 9 913 139 7 914	1.9 2.1 2.2 2.0
Operators by sex: Male Female Average age of operator years.	453	.9 1.6 1.2	Horses and ponies inventory	7 914 740 8 670 268 1 791	1.3 1.9 2.0 2.3

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

Item		Relative standard error of	ltem		Relative standard error of
	Total	estimate (percent)		Total	estimate (percent)
POULTRY			SELECTED CROPS HARVESTED—Con.		
Lavers and pullets 13 weeks old and older inventory			Barley for grain farms acres	893 46 444	.9 . <u>7</u>
Layers and pullets 13 weeks old and older inventory (see text)	262 4 629 329 253	1.7 1.2 1.7	Dats for grain bushels Oats for grain farms acres	3 444 337 304 4 438	.7 1.5 1.5
Layers 20 weeks old and older farms number	4 111 984	.4	Tobacco bushels Tobacco acres	252 711 488 7 249	1.6 1.4 1.3
Broilers and other meat-type chickens sold farms	976 256 925 193	.7 .3	Soybeans for beans pounds Soybeans for beans pounds acres	11 225 357 2 644 497 191	1.3 .9 .5
SELECTED CROPS HARVESTED			Potatoes, excluding sweetpotatoesbushelsfarmsacresacres	14 883 015 84 2 176 520 598	1.3 .9 .5 .5 2.7 .2
			cwt Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) farms	2 572	
Corn for grain or seed	2 741 395 005 36 177 236	.9 .5 .5	acres. tons, dry. Alfalfa hayfarms.	163 586 362 104 1 329	.9 .9 .8 1.0
Corn for silage or green chop	1 196 90 091	1.0	acres tons. dry	44 882 121 645	.9 1.0
Wheat for grain tons, green. farms acres.	836 038 2 046 195 101	.7 .9 .5 .5	Vegetables harvested for sale (see text) farms. acres. Land in orchards farms.	655 34 976 163	1.3 .8 2.2
bushels	12 513 950	.5	acres	4 344	2.0

¹Data are based on a sample of farms. ²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains.

Table E. Reliability Estimates of Percent Change in State Totals: 1992 to 1997

	All fa	arms	Farms with sales	of \$10,000 or more
Item	Percent change from 1992 to 1997	Standard error of estimate	Percent change from 1992 to 1997	Standard error of estimate
Farms	-7.3	1.3	-7.1	1.3
	-3.1	.9	-2.9	.9
	4.1	1.7	4.6	1.7
Estimated market value of land and buildings¹: Average per farm	11.9	2.9	11.5	3.2
	9.1	3.2	8.5	3.5
Estimated market value of all machinery and equipment ¹ : Average per farm	19.0	3.0	13.5	3.2
Farms by size: 1 to 9 acres 10 to 49 acres 50 to 179 acres 180 to 499 acres 500 to 999 acres 1,000 to 1,999 acres 2,000 acres or more	-9.8 -3.8 -10.1 -9.5 -3.7 3.0 11.8	1.6 1.6 1.1 1.2 1.5 -	-10.5 2 -8.7 -10.9 -4.1 3.0 9.4	1.8 1.7 1.3 1.3 1.4 -
Total cropland	-7.8	1.3	-8.1	1.3
	-3.0	.8	-2.4	.8
Harvested cropland	-9.3	1.2	-8.0	1.3
	-1.1	.8	6	.8
Irrigated land farms acres.	8.6	1.8	7.4	1.7
	20.5	1.5	20.7	1.5
Market value of agricultural products sold \$1,000 . Average per farm	12.2	.5	12.6	.5
	21.1	1.7	21.2	1.7
Crops, including nursery and greenhouse crops\$1,000 Livestock, poultry, and their products\$1,000	18.2	.7	19.1	.7
	9.2	.5	9.5	.5
Farms by value of sales: Less than \$2,500 \$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 to \$249,999 \$250,000 to \$49,999 \$250,000 to \$499,999 \$250,000 to \$49,999	-2.1 -16.9 -8.7 -8.5 -13.1 -5.5 -14.8 -9.1 35.8	1.6 1.7 1.8 2.2 1.5	(X) (X) (X) -8.5 -13.1 -5.5 -14.8 -9.1 35.8	(X) (X) (X) 1.6 1.8 2.1 1.5
Total farm production expenses ¹ \$1,000 Average per farm	15.3	1.2	13.9	1.3
	24.1	2.0	23.0	2.1
Net cash return from agricultural sales for the farm unit (see text) ¹	-7.1	1.3	-7.4	1.4
	-7.1	2.8	3.6	2.5
	-	3.3	11.9	3.2
Operators by principal occupation: Farming Other	-10.7	1.1	-6.6	1.2
	-3.4	1.6	-8.1	1.6
Operators by days worked off farm: Any	-5.7	1.5	-6.7	1.6
	-5.4	1.6	-5.3	1.7
Livestock and poultry: Cattle and calves inventory Beef cows farms. number. number.	-10.7	1.2	-10.6	1.3
	-7.7	.9	-7.1	.9
	-6.7	1.5	-1.2	1.8
	-2.0	1.6	1.8	1.9
Milk cowsfarms number Cattle and calves soldfarms	-17.9 -10.3	1.2	-17.8 -10.4	1.2 .8
Hogs and pigs inventory	-9.5	1.2	-10.0	1.3
	2.3	1.1	3.2	1.1
	-35.8	1.3	-36.2	1.4
	-44.4	.8	-44.3	.8
	-41.3	1.2	-42.5	1.3
Sheep and lambs inventory	-48.3 .8 -13.1	.8 2.2 1.9	-48.4 -6.1 -28.0	.8 2.8 2.0 2.0
Layers and pullets 13 weeks old and older inventory (see text)	-24.1 8.7 -10.1	1.6 1.5 .9	-23.4 8.8 -10.3	2.0 1.5 .9 .4
Selected crops harvested: Corn for grain or seed	1 -23.3	.4	1 -21.1	1.1
acres bushels Wheat for grain	-10.7 -30.0 -15.7	.7 .5 1.2 1.0	-10.2 -29.6 -13.0	.7 .5 1.2
acres bushels Barley for grain	6.0 24.2 -24.7 -24.8	1.0 1.1 1.1 .8	6.9 25.0 –21.9 –24.3	1.1 1.1 1.3
Tobacco	-17.7 -25.2 -6.3	.8 1.5 2.0	-17.1 -16.0 .9	.8 .8 1.9 2.2
Soybeans for beans pounds acres bushels	1.6 -11.9 1.3 -6.5	2.2 1.2 .8 .7	8.0 -8.2 2.3 -5.7	1.9 2.2 2.4 1.3 .7
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	-5.6	1.3	-5.1	1.4
	.4	1.3	2	1.4
Vegetables harvested for sale (see text)	-17.4	1.0	-19.0	1.0
	-18.5	1.5	-8.0	1.7
	-1.0	1.2	1.0	1.2

¹Data are based on a sample of farms.

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

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

[For meaning of abbreviati	ons and symbols,	see introductory	ductory text]		t]								
	Far	rms	La	nd in farms	5	Average s	ize of farm	Average and b	market value o uildings per far	f land m ¹	Estimated market value of all machinery and equipment ¹		
Geographic area	Total (number)	Relative standard error of estimate (percent)	T (ac	otal res)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)		'alue e	Relative tandard error of estimate percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
Maryland Allegany Anne Arundel Baltimore Calvert	12 084 239 412 781 349	.8 .8 .9 .9	2 154 41 34 75 33	928 679 795	.6 1.8 1.9 1.2 2.1	178 175 84 97 96	1.0 1.9 2.1 1.5 2.3	263 531 456	605 026 542 780 264	1.7 8.6 10.6 7.1 14.4	728 486 7 511 17 971 37 976 11 185	1.5 9.7 11.6 4.1 8.4	
Caroline Carroll Cecil Charles Dorchester	525 1 041 464 410 297	.8 .7 .9 1.1 1.0	111 160 85 55 122	180 702 928	.9 .7 1.3 1.8	212 154 185 136 414	1.2 1.0 1.5 2.0 1.3	568 682 437	487 327 622 104 174	4.0 5.0 4.4 9.6 5.3	50 074 60 938 26 210 13 273 30 203	5.4 5.6 6.9 7.9 2.9	
FrederickGarrettHarfordHowardKent	1 304 649 651 318 314	1.0 .9 .8 .9 .9	215 107 94 39 117	695 112 846	.8 1.1 .9 1.4 .8	166 166 145 125 374	1.3 1.4 1.2 1.6 1.2	248 613	965 904 280 409 419	3.8 5.4 5.7 10.2 4.2	78 585 29 827 34 760 16 157 32 460	3.3 9.3 5.8 4.3 5.4	
Montgomery	526 473 419 621 288	1.0 .9 .8 .9 .8	77 47 167 71 54	572 957 890	1.0 1.4 .7 1.4 1.2	147 101 401 116 190	1.4 1.7 1.1 1.7 1.4	491 1 206 275	337 286 022 499 812	9.2 9.8 3.9 5.1 3.3	28 979 16 276 48 362 23 857 18 715	12.2 12.6 4.9 7.7 3.9	
Talbot	240 768 580 415	.7 .8 .8 .9	109 126 90 111	292 656	.7 .9 1.4 1.0	457 164 156 269	1.0 1.2 1.6 1.3	405	152 364 688 280	8.0 4.7 6.1 2.2	28 494 52 110 35 582 28 982	12.3 4.4 3.3 2.2	
	Average mark machinery and far			lue of agri		Average ma agricultural pro fai	ducts sold per		Farm	n production	ction expenses ¹		
									Total fa	arm production	on expenses		
Geographic area									Farms		Valu	e	
	Value (dollars)	Relative standard error of estimate (percent)	T (\$1,0	otal (00)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Nur	s e	Relative tandard error of estimate percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
Maryland Allegany Anne Arundel Baltimore Calvert	60 176 31 039 43 618 48 562 32 049	1.7 9.8 11.6 4.3 8.5	12 51	322 621	.3 3.1 1.5 .7 1.5	108 580 13 899 30 635 65 530 22 075	.9 3.2 1.7 1.1 1.8	12	109 242 412 782 349	.9 1.3 1.1 1.0 1.1	1 123 200 3 185 10 449 38 501 5 109	.6 20.5 9.8 3.1 9.8	
Caroline	95 017 58 369 56 487 32 294 102 038	5.5 5.6 7.0 8.0 3.2	95 71 59 10 82	272 052 816	.4 .5 .5 2.1 .3	181 181 68 465 127 267 26 381 277 411	.9 .9 1.0 2.4 1.0	1	527 044 464 411 298	1.0 .8 1.1 1.4 1.3	88 472 61 215 50 294 8 109 69 980	1.7 2.4 1.4 8.2 1.0	
FrederickGarrettHarfordHowardKent	60 219 45 888 53 231 50 649 103 047	3.5 9.4 5.9 4.5 5.5	101 20 38 19 60	997 807 610	.5 1.3 .7 .6 .4	77 960 32 353 59 612 61 667 194 131	1.1 1.6 1.1 1.1	1	306 650 653 319 315	1.0 1.1 1.0 1.1 1.1	90 820 19 658 29 799 16 144 55 535	1.3 6.0 3.5 4.6 2.2	
Montgomery	55 094 34 337 115 148 38 356 64 982	12.2 12.6 5.0 7.8 4.0	28 18 68 21 96	708 736 056	.7 1.0 .4 1.3 .3	54 303 39 553 164 047 33 906 335 182	1.2 1.4 .9 1.6		526 474 420 622 288	1.2 1.0 .9 1.1 1.0	23 958 13 538 57 637 13 899 97 724	3.0 5.6 1.7 3.0 1.0	
Talbot Washington Wicomico Worcester	118 231 67 675 61 243 69 835	12.4 4.5 3.5 2.5	48 60 186 147	604 294	.5 .8 .3 .3	202 208 78 912 321 197 355 548	.9 1.1 .9 .9		241 770 581 415	1.2 1.0 1.1 1.2	39 538 50 569 160 364 118 702	3.6 2.7 1.1 .9	
						Farm production	expenses1—Con	•					
	Live	stock and poultry	v purchased Value			Feed for livest	ock and poultry Value		Far		, plants, and tree	alue	
Geographic area	T dime	Relative standard error of estimate	Total	Relative standard error of estimate		Relative standard error of estimate	Total	Relative standard error of estimate	T di	Relative standare error o estimate	e d f	Relative standard error of estimate	
Maryland	Number 3 714	(percent)	(\$1,000) 129 432	(percent)	Numb	per (percent)	(\$1,000) 435 279	(percent)	Number 6 893	(percent) (\$1,000)	(percent)	
Allegany	58 43 242 43	20.8 30.1 12.0 29.3	333 420 1 831 96	39.5 5.8 5.5 10.1	1 1 3	12 1.9 29 12.7 40 17.9 20 9.4 97 18.6	547 740 3 368 228	36.2 34.4 7.4 28.5	81 222 304 230	17.9 7.9 7.9 9.0	78 5 597 1 2 842	14.4 14.3 7.7 10.4	
Caroline Carroll Cecil Charles Dorchester	155 326 117 98 100	7.6 10.1 17.8 22.1 9.6	5 859 4 192 4 810 355 11 893	3.3 3.8 .7 33.9 .9	6 2 1	08 7.4 226 6.3 07 11.9 42 16.2 08 10.7	46 356 17 150 15 380 309 26 572	2.9 5.4 .7 31.2 3.1	424 517 259 243 241	3.4 6.9 7.4 4.7	5 2 524 7 1 891 4 492	9.2 4.4 2.4 13.2 2.2	

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

[1 Of Theathing of abbreviation	ono ana oymbo	10, 000 11111000	otory toxt]										
						•	expenses ¹ —C			Seeds, bulbs, plants, and trees			
	Lı: Farı	· · · · · ·	oultry purchased			ms	ock and poultry Val		Far		olants, and trees		
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)	
Frederick.	446	8.0	8 227	6.2	894	4.2	29 584	1.7	825	4.2	2 445	3.9	
Garrett.	221	11.7	2 145	24.0	401	5.9	6 024	10.3	344	7.2	404	12.3	
Harford	201	13.5	3 289	6.5	423	6.5	4 041	8.8	323	7.4	1 413	6.3	
Howard	75	17.0	1 198	38.1	150	8.7	1 677	3.6	111	13.4	1 243	6.5	
Kent.	47	19.1	1 270	.9	103	14.4	14 647	3.4	256	3.9	2 905	3.7	
Montgomery	94	21.0	1 120	6.9	238	12.6	2 292	10.2	211	11.5	2 241	2.4	
	62	30.3	586	57.3	135	16.2	901	16.3	257	10.5	886	7.6	
	84	11.0	2 504	3.6	127	8.3	13 843	.5	327	4.3	3 175	2.9	
	155	14.8	673	17.0	232	11.1	720	10.5	418	6.5	845	5.9	
	175	6.5	24 339	.5	188	.8	54 581	1.2	117	12.1	881	3.6	
Talbot	60	17.6	2 498	6.5	73	15.1	17 916	7.1	163	6.9	1 444	7.4	
	281	9.7	3 675	13.4	508	4.7	16 914	5.5	515	4.7	1 531	4.5	
	357	4.0	27 649	.8	377	4.3	93 008	1.5	294	7.2	1 874	6.7	
	274	1.2	20 471	.5	286	3.9	68 483	1.2	211	3.4	1 571	1.3	
					Fa	arm production	expenses1—Co	on.					
	Fa		ial fertilizer		Fa	Agricultura	l chemicals Val		For		n products	lue	
Geographic area .	Farr 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)	Fai Number	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	
Maryland Allegany Anne Arundel Baltimore Calvert	7 745	1.6	58 488	1.4	6 851	1.7	38 516	1.7	11 311	1.0	33 726	1.1	
	108	12.4	193	12.8	50	22.4	57	7.3	220	5.3	194	15.3	
	271	7.4	983	11.8	202	9.1	701	18.1	396	2.8	696	14.0	
	367	6.9	2 207	9.3	357	7.2	1 919	10.4	705	2.8	2 067	4.3	
	275	6.1	579	15.7	259	5.7	258	14.9	327	3.4	369	10.5	
Caroline Carroll Cecil Charles Dorchester	397	4.3	4 326	3.8	402	4.0	3 105	3.7	491	2.7	2 233	3.1	
	619	6.0	3 539	5.8	496	7.3	2 297	5.8	946	2.5	2 513	4.8	
	290	8.0	2 391	3.6	294	6.2	1 571	5.5	446	2.1	1 605	2.9	
	305	6.4	1 092	10.6	275	6.8	734	17.9	374	4.0	665	13.9	
	222	6.1	4 503	2.8	236	4.2	3 484	5.7	277	3.6	1 960	2.8	
Frederick.	876	4.2	5 001	3.4	763	4.8	2 783	3.7	1 264	1.4	2 906	2.9	
Garrett.	435	5.4	1 121	6.5	268	8.4	289	9.9	620	2.1	772	7.1	
Harford	375	7.5	2 921	7.5	335	8.4	1 631	9.0	598	3.5	1 266	5.8	
Howard	183	9.1	1 000	18.1	140	10.4	575	13.6	269	3.9	844	3.7	
Kent.	240	5.0	4 438	6.3	225	5.9	2 614	6.4	308	2.0	1 840	3.8	
Montgomery	278	9.1	1 606	5.2	225	11.0	1 248	9.9	507	2.5	1 101	6.8	
	304	8.9	780	15.1	225	11.8	586	6.9	473	1.0	660	4.7	
	336	4.2	7 068	3.7	331	3.6	4 137	5.0	388	2.6	2 266	3.1	
	535	3.7	1 817	5.8	466	4.3	891	5.5	616	1.5	1 155	4.5	
	143	11.0	1 051	6.7	148	8.9	1 273	4.9	259	3.7	1 615	2.2	
Talbot Washington Wicomico Worcester	190	5.9	3 769	6.4	182	6.6	1 846	7.8	219	4.1	1 053	3.4	
	547	4.4	3 152	6.6	503	4.6	1 876	5.6	747	1.7	1 653	3.4	
	278	6.0	2 382	6.7	282	6.9	2 294	11.3	498	4.3	2 335	4.5	
	171	9.4	2 568	1.3	187	9.1	2 349	1.9	363	3.4	1 960	1.6	
		Flori	4 at a 14 a		Fa	arm production Hired fa	expenses1—Co	on.		0	ıct labor		
	Farr		tricity Val	ue	Fa	ms	Val	ue	Far			lue	
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)	
Maryland Allegany Anne Arundel Baltimore Calvert	8 246	1.6	17 729	1.3	4 814	2.3	102 425	1.1	1 045	5.8	5 685	3.2	
	122	11.2	82	23.3	59	22.4	256	15.3	7	52.1	10	45.1	
	277	8.4	268	14.7	137	15.1	1 816	16.1	39	39.3	131	26.4	
	500	5.5	847	4.8	291	7.8	10 113	5.2	61	24.7	339	6.8	
	185	13.9	77	16.9	171	12.4	765	16.4	17	39.0	28	8.0	
Caroline	390	4.8	1 232	4.1	206	8.7	5 294	6.3	68	19.0	442	6.2	
	712	4.9	1 305	5.2	384	8.3	6 577	5.1	76	24.9	614	2.6	
	285	8.2	933	3.8	126	14.4	7 759	2.1	17	30.9	579	.5	
	226	11.5	168	14.1	157	13.1	850	13.7	39	33.2	86	40.3	
	202	6.5	924	1.3	146	6.2	3 773	.9	30	21.8	233	.6	
Frederick	876	4.6	1 834	2.9	533	6.3	9 315	3.0	108	17.7	312	7.6	
	555	2.6	566	10.1	213	10.3	1 583	20.3	41	33.4	77	24.9	
	446	6.4	552	7.6	254	10.0	4 042	5.9	61	23.4	198	19.0	
	242	6.7	397	7.0	96	13.7	3 590	1.4	31	29.5	123	19.7	
	223	7.7	758	7.9	127	12.5	10 099	1.1	38	24.3	154	6.1	
Montgomery	337	8.7	526	7.8	230	12.1	4 920	4.3	53	32.5	297	14.4	
	264	9.1	287	8.7	173	13.2	3 548	6.6	55	32.2	98	26.3	
	305	5.0	718	3.7	210	8.9	6 277	6.0	40	25.8	217	10.4	
	343	8.3	285	5.1	284	9.5	1 914	5.7	42	31.2	300	39.3	
	236	6.1	1 251	3.1	119	11.7	1 918	1.4	52	21.0	273	.9	
See footnotes at e	end of table.												

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

Electricity

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

	Liectricity			Tilled lattit labor				Contract labor					
Geographic area	Far	ms	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)	
Talbot	176 549 459 336	7.4 4.1 5.0 6.7	451 1 193 1 815 1 258	5.1 3.7 5.7 1.9	95 347 276 180	11.1 7.1 9.1 10.5	2 021 3 770 8 707 3 520	2.3 6.5 3.3 2.0	21 44 75 30	32.3 25.2 17.4 –	145 314 571 145	5.1 1.2 16.8	
					Fa	arm production	expenses1—Co	on.					
	Repair and maintenance				Customwork, machine hire, and rental of machinery and equipment				Interest				
Geographic area	Far	ms	Val	ue	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)	
Maryland Allegany Anne Arundel Baltimore Calvert	10 455 203 348 650 263	1.2 6.6 4.8 4.1 6.4	60 624 450 1 181 2 844 524	1.3 18.6 12.4 5.4 13.1	4 036 54 83 158 73	2.7 22.8 23.4 14.6 24.9	13 376 74 103 481 129	2.8 34.3 26.6 13.3 10.4	4 219 41 100 133 75	2.3 22.3 19.7 14.6 18.3	45 896 153 652 1 616 333	1.7 18.4 29.3 8.8 26.1	
Caroline Carroll Cecil Charles Dorchester	446 907 406 340 278	3.6 2.6 3.6 5.3 3.5	4 126 4 897 3 587 979 2 994	3.6 7.8 4.5 10.5 2.3	263 227 149 96 169	7.3 12.1 13.6 21.1 8.2	1 076 767 523 132 860	8.7 8.0 10.1 21.3 13.6	267 316 138 110 185	7.3 10.6 14.2 19.1 7.6	3 847 2 713 1 678 571 3 576	3.6 5.5 4.9 22.4 2.7	
Frederick. Garrett. Harford Howard Kent	1 221 550 529 276 273	2.1 3.4 4.4 5.2 5.2	6 485 1 688 2 492 1 225 3 447	4.4 6.6 5.2 5.6 2.9	545 230 202 58 181	6.7 9.6 13.4 19.5 9.8	1 245 363 436 297 941	7.8 16.8 7.9 54.1 9.2	424 251 186 61 132	6.8 7.2 11.9 17.5 11.3	5 189 1 215 1 381 559 3 095	5.2 12.3 10.3 6.2 3.8	
Montgomery	429 382 348 524 266	5.7 6.0 4.3 4.3 3.8	2 001 1 342 3 810 1 474 2 021	6.1 12.3 5.9 6.7 3.0	119 73 181 163 161	18.8 28.7 9.8 15.8 10.7	315 434 925 242 541	8.9 4.4 13.1 9.3 11.2	154 58 213 180 178	15.5 18.3 7.5 13.4 9.8	1 399 413 3 639 901 1 900	11.0 6.3 8.8 11.9 4.8	
Talbot	221 679 528 388	3.8 2.9 3.4 3.3	1 873 4 134 3 815 3 235	3.9 4.5 4.6 1.1	86 317 238 210	13.5 7.8 9.5 8.9	447 1 152 905 988	13.0 12.9 8.5 3.5	99 331 367 220	12.1 6.9 6.8 6.3	1 544 2 293 4 503 2 725	7.8 7.4 5.6 6.6	
					Fa	arm production	expenses1—Co	on.					
		Cash rent			Property taxes paid				Al	other farm pro	duction expens	ses	
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)	
Maryland Allegany Anne Arundel Baltimore Calvert	3 133 37 86 151 54	2.9 20.2 20.5 14.2 26.9	36 106 78 453 1 728 454	2.0 23.2 13.3 10.5 62.2	11 088 235 367 727 318	1.0 3.0 3.9 2.3 4.4	23 776 242 809 1 702 514	1.8 11.3 14.2 5.9 10.1	10 879 180 368 675 288	1.1 6.9 4.4 3.7 6.7	86 280 439 898 4 599 424	1.1 33.5 11.1 3.7 8.4	
Caroline Carroll Cecil Charles Dorchester	153 318 146 86 143	9.9 9.1 11.8 19.6 11.1	2 120 3 127 1 580 278 2 406	7.6 6.4 6.5 11.8 3.1	488 955 442 372 290	2.1 2.6 2.5 3.9 1.3	969 2 360 1 237 626 792	4.8 6.3 6.2 9.7 5.3	482 923 406 369 291	2.6 2.8 3.8 4.0 2.6	5 272 6 640 4 771 771 3 979	2.9 6.0 2.9 10.2 1.7	
FrederickGarrettHarfordHowardKent	393 146 152 23 74	7.6 13.8 12.7 – 12.8	4 050 529 1 827 328 1 997	3.8 25.8 7.8 - 3.9	1 148 614 623 302 277	2.2 2.4 1.9 2.8 4.1	2 902 631 1 304 949 800	4.5 6.0 7.6 10.8 8.4	1 173 578 569 294 291	2.3 3.1 4.3 3.8 3.4	8 542 2 250 3 007 2 139 6 534	2.2 13.1 5.1 1.8 4.4	
Montgomery	136 98 128 104 106	15.6 20.1 11.8 14.3 17.3	1 268 416 3 385 341 1 066	13.3 6.2 4.5 6.1 3.6	501 407 370 549 278	2.7 5.3 3.5 3.3 3.0	1 443 749 1 079 871 506	11.6 12.4 7.0 5.8 4.0	459 395 389 580 269	4.6 5.3 2.6 2.6 3.7	2 181 1 852 4 594 1 470 4 507	7.6 12.4 2.5 5.2 1.0	
Talbot	78 236 163 122	13.7 8.8 12.8 12.6	1 982 2 128 2 185 2 381	6.1 12.8 12.7 3.5	214 674 550 387	4.5 2.9 1.8 3.5	609 1 119 890 673	8.3 5.7 3.1 3.5	231 698 558 413	2.3 2.5 2.1 1.2	1 937 5 666 7 432 6 376	7.0 5.0 2.5 1.0	
oee roomores at a	-uo or (ad)e												

Farm production expenses¹—Con.

Hired farm labor

See footnotes at end of table.

Contract labor

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

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

[For modifying or department		s, see introduc										
	Net cash return from agricultural sales for the farm unit (see text) ¹			Total cropland				Harvested cropland				
Geographic area	Farn	ns	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)
Maryland Allegany Anne Arundel Baltimore Calvert	12 109 242 412 782 349	.9 1.3 1.1 1.0 1.1	172 948 130 3 628 13 436 1 693	2.0 (H) 19.5 8.0 27.6	10 702 226 364 665 322	.8 1.0 1.1 1.0 1.0	1 613 497 19 669 23 227 54 361 17 865	.6 2.4 2.1 1.3 2.1	9 474 201 313 538 293	.8 1.2 1.3 1.2 1.2	1 382 035 11 202 16 891 42 430 13 444	.5 2.6 2.4 1.4 2.6
Caroline Carroll Cecil Charles Dorchester	527 1 044 464 411 298	1.0 .8 1.1 1.4 1.3	4 452 10 903 6 655 2 698 10 605	11.4 14.7 5.6 19.1 3.0	462 946 421 393 264	.9 .8 1.0 1.1 1.1	94 605 124 841 63 246 32 640 99 269	.9 .8 1.2 1.9	435 837 348 347 252	1.0 .8 1.2 1.3 1.2	91 067 104 007 51 582 24 252 95 190	1.0 .8 1.1 2.1 .7
FrederickGarrettHarford Howard Kent	1 306 650 653 319 315	1.0 1.1 1.0 1.1 1.1	10 171 3 951 8 912 2 775 4 268	9.8 21.2 7.3 12.5 13.3	1 206 617 586 263 300	1.0 .9 .9 1.2 1.0	171 259 53 915 71 826 30 609 97 863	.8 1.1 .9 1.5	1 080 568 480 213 276	1.0 1.0 1.0 1.5 1.1	134 457 38 372 55 280 23 535 91 298	.8 1.2 1.0 1.6 .8
Montgomery Prince George's Queen Anne's St. Mary's Somerset	526 474 420 622 288	1.2 1.0 .9 1.1 1.0	3 385 4 894 11 828 5 659 –5 615	13.1 12.4 6.8 7.8 5.2	447 439 392 598 205	1.1 1.0 .9 1.0 1.2	60 510 27 618 145 575 43 203 39 815	1.0 1.8 .7 1.6 1.1	363 395 359 571 172	1.3 1.1 1.0 1.0 1.5	46 768 19 948 138 140 35 391 37 641	1.1 2.2 .7 1.6 1.1
Talbot	241 770 581 415	1.2 1.0 1.1 1.2	7 146 14 459 20 552 26 364	3.8 9.3 3.8 .8	219 713 399 255	.9 .8 1.0 1.3	92 953 94 845 70 960 82 823	.7 .9 1.6 .9	202 653 357 221	1.1 .9 1.1 1.4	89 373 75 901 66 635 79 231	.7 .9 1.6 .9
	•	Irrigate	d land		Livestock a				and poultry			
	Farms		Acres		Cattle and ca		alves inventory			Beef cow	ws inventory	
Geographic area					Far		Tot		Fa	rms	To	otal
	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)
Maryland Allegany Anne Arundel Baltimore Calvert	1 154 6 49 102 25	1.2 10.8 4.1 2.7 5.8	68 588 58 751 1 188 335	. 9 17.0 1.9 3.5 2.6	4 444 152 78 231 90	.8 1.8 3.4 1.9 3.0	261 324 5 341 2 149 9 642 1 550	.6 2.9 5.3 2.1 3.6	2 726 127 60 149 72	1.0 2.1 3.9 2.5 3.4	50 619 2 448 (D) 2 210 (D)	1.1 3.4 (D) 2.6 (D)
Caroline	115 56 30 65 70	2.2 3.5 5.4 3.6 2.8	16 183 1 119 1 182 825 15 101	1.9 3.2 1.2 5.4 1.5	72 527 185 126 23	3.0 1.1 1.9 2.6 5.6	3 168 30 584 10 466 3 174 651	2.9 1.2 1.8 3.9 5.2	37 304 122 96 19	4.3 1.5 2.5 3.0 6.4	434 5 575 2 486 1 411 (D)	5.0 3.0 3.5 4.7 (D)
FrederickGarrettHarfordHowardKent	57 10 46 36 29	3.9 9.0 4.2 4.7 4.3	530 63 590 763 5 343	8.6 18.4 4.6 1.5 1.1	778 468 311 139 62	1.1 1.1 1.4 2.0 2.7	65 359 24 895 17 433 6 321 8 388	.7 1.1 1.3 1.8 1.4	411 291 203 105 20	1.6 1.6 1.9 2.5 5.9	9 130 4 555 3 705 1 967 478	1.8 1.9 2.2 2.8 4.1
Montgomery	64 56 56 107 18	3.6 3.6 3.3 2.8 5.3	1 206 405 8 387 1 000 1 179	6.2 3.8 2.3 3.6 3.3	161 96 73 196 36	2.2 3.0 2.8 2.0 4.0	8 543 3 109 5 559 5 372 1 916	2.4 2.7 1.3 2.3 2.8	109 78 37 125 31	2.9 3.3 4.3 2.5 4.2	2 523 (D) 939 1 958 851	3.4 (D) 2.8 3.6 3.4
Talbot	18 41 77 21	5.6 4.4 2.7 5.5	1 596 665 5 729 4 390	7.7 4.3 4.0 3.1	36 507 55 42	3.8 1.0 3.4 4.0	2 212 41 519 2 211 1 762	3.3 1.1 7.3 6.3	22 235 40 33	5.6 1.8 3.9 4.9	381 5 013 (D) (D)	10.7 2.4 (D) (D)
-		A 6""			Livestock and poultry—Con.					Ohan	and the state of	
-	Farn	Milk cows	Inventory	al	Fari	Hogs and pi	gs inventory Tota	al	Farr	Sheep and lar	,	tal
Geographic area		Relative	100	Relative	T un	Relative	100	Relative	T dil	Relative	Total Relative	
	Number	standard error of estimate (percent)	Number	standard error of estimate (percent)	Number	standard error of estimate (percent)	Number	standard error of estimate (percent)	Number	standard error of estimate (percent)	Number	standard error of estimate (percent)
Maryland Allegany Anne Arundel Baltimore Calvert	1 091 11 6 31 2	.9 8.4 12.4 4.2 24.8	84 953 489 (D) 2 865 (D)	8.3 (D) 2.1 (D)	584 11 8 21 14	1.3 9.5 11.8 6.2 7.7	80 850 153 203 2 480 120	1.1 13.7 18.8 16.5 10.9	616 11 19 45 15	1.4 8.8 8.0 4.4 6.4	21 985 241 227 3 004 177	1.5 8.8 11.9 4.0 7.8
Caroline	16 126 40 9 2	5.0 1.9 3.6 10.2 20.7	1 472 9 968 3 239 108 (D)	3.7 1.3 2.0 24.2 (D)	11 60 20 33 10	3.0 3.5 6.1 5.5 6.8	6 098 9 434 4 198 1 553 2 529	.3 2.6 1.0 5.6 .3	11 74 26 21 1	8.1 3.3 5.3 6.2	244 2 645 1 469 391 (D)	16.5 4.6 5.4 6.7 (D)

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

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

[For meaning of abbreviation	ons and symb	ois, see introc	uctory text]										
	Livestock and poultry—Con.												
		Milk cov	s inventory			Hogs and pi	gs inventory			Sheep and lambs inventory			
Geographic area	Farms To			otal Farms		rms	Total		Farms			Tota	l
	Number	Relative standare error o estimate (percent		Relative standard error of estimate (percent)		Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)	Number	Relative standard error o estimate (percent	d f	umber	Relative standard error of estimate (percent)
Frederick	256 132 61 17 36	1.4 1.9 2.7 4.2 3.0	5 825 4 923 1 357	.7 1.9 1.8 .1 1.5	26 17	3.0 5.2 5.4 7.1 10.1	5 117 1 001 3 190 1 254 (D)	.7 8.5 2.0 1.3 (D)	92 41 35 40 12	3.3 4.3 5.0 4.7 8.5	3	3 297 1 341 2 824 477 769	4.8 5.4 1.8 6.6 3.9
Montgomery	26 7 22 53 4	4.4 11.9 4.7 3.9 12.4	(D) 1 745 207	2.1 (D) 1.5 6.2 3.8	71	7.6 6.9 5.7 3.4 8.4	666 934 959 9 733 2 080	7.7 7.4 6.4 6.2 2.5	34 19 9 33 2	5.4 6.5 11.3 4.9 24.5	3	905 761 567 325 (D)	7.7 4.8 7.5 9.1 (D)
Talbot	8 220 4 2	4.2 1.4 14.0	16 683	2.5 1.1 (D) (D)	7 52 20 28	4.8 3.3 4.3 4.5	(D) 10 575 3 526 6 094	(D) 1.9 .8 3.8	10 49 13 4	8.4 3.8 8.3 16.0	3	514 1 451 310 42	6.9 5.6 17.3 16.2
						Livestock and	poultry—Con.						
		Lay	ers 20 weeks old	d and older inv	rentory			Broile	rs and other m	eat-type chick	ens sold		
Geographic area		Farms			Total			Farms			To	otal	
	N	lumber	Relative standard error of estimate (percent)	ı	Number	Relative standard error of estimate (percent)	N	umber	Relative standard error of estimate (percent)		Number		Relative standard error of estimate (percent)
Maryland		618	1.4	4 1	20 639 387	. 4 10.7		997	.7		926 521		.3
Allegany		17 17 44 30	7.3 6.3 4.6 5.3		698 997 480	8.1 5.6 7.7		2 3	25.0 18.0		(D) (D)		(D) (D)
Caroline Carroll Cecil Charles Dorchester		7 57 29 24 4	12.1 3.5 5.0 6.6 14.5	7 1 6	47 836 54 867 89 370 688 35 460	11.8 (L) (L) 7.1 9.2		138 2 3 1 71	1.4 11.7 21.2 33.1 1.4		951 281 (D) (D) (D) 794 937		.5 (D) (D) (D) .8
FrederickGarrettHarfordHoward		74 50 31 18 9	3.6 3.9 5.5 6.7 9.8	(D) 2 636 439 604 (D)		(D) 7.6 7.6 10.0 (D)	4 5 3 3 12		12.4 12.0 15.6 12.2 2.7		(D) (D) (D) 93 885 800		(D) (D) (D) 10.9 .5
Montgomery Prince George's Queen Anne's St. Mary's Somerset		26 22 10 63 7	6.3 6.4 10.2 3.5 11.7		676 771 (D) 8 529 48 140	4.4 14.0 (D) 8.2 12.5	2 5 33 3 150		16.8 11.0 1.0 19.4 1.3	10 3	(D) 266 700 329 600 (D) 167 603		(D) 10.2 .4 (D) .4
Talbot		1 51 22 5	31.4 3.8 5.3 12.2	2	(D) 02 039 74 629 48 233	(D) (L) 4.5 9.3	35 6 283		2.4 12.9 1.1 1.2	76 4	046 400 (D) 432 601 651 265	(Ē	
		•				Selected cro	ps harvested						
			Corn for gr	ain or seed					Wheat	for grain			
Geographic area	Farr	ms	Acres		Quar	tity	Farı	ms	Acres		Quantity		у
	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)	ı	Bushels	Relative standard error of estimate (percent)
Maryland Allegany	3 554 23 68 141 77	.9 5.8 3.2 2.5 2.9	405 451 488 4 911 16 088 3 554	.5 9.4 3.0 1.8 4.1	36 823 284 49 043 477 693 1 127 175 381 195	8.6 2.7 5 1.6	2 339 8 37 60 48	.9 8.4 4.4 3.6 3.5	199 351 85 2 057 2 491 2 456	. 5 14.5 4.5 2.2 4.0	1	711 370 3 434 22 290 41 170 54 819	.5 14.6 4.7 2.2 4.3
Caroline	187 324 170 110 122	1.7 1.3 1.9 2.7 2.0	20 547 29 160 19 570 5 859 19 014	1.2 1.0 1.4 2.9 1.0	1 983 268 1 716 870 1 664 552 534 310 2 547 349	.8 2 1.3 3.3	213 185 95 60 132	1.6 1.5 2.6 3.6 1.7	21 452 8 559 6 639 3 442 18 185	1.2 1.1 1.8 3.2 .9	5 4 1	52 817 45 230 36 288 91 663 80 237	1.2 1.1 2.0 3.2 1.0
FrederickGarrettHarfordHowardKent	261 193 210 53 195	1.8 1.7 1.7 3.4 1.5	15 986 4 497 24 051 7 632 39 205	1.3 2.2 1.2 1.4 .9	1 145 448 448 33 2 054 943 532 763 2 581 070	2.2 3 1.5 3 1.7	249 7 86 35 142	1.7 9.5 2.6 4.2 1.8	11 075 49 4 024 2 211 15 214	1.4 12.1 1.4 4.4 1.4	2	77 177 1 930 61 764 30 754 86 701	1.2 10.0 1.4 3.9 1.5
Montgomery	58 81 223 200 107	3.0 3.0 1.4 2.0 2.0	12 097 4 427 50 885 7 523 12 090	1.2 2.4 .8 2.4 1.2	927 217 344 363 4 590 07 809 799 1 586 518	2.8 .8 9 2.4	46 32 212 119 72	2.8 4.6 1.4 2.6 2.6	5 279 1 671 32 329 6 472 6 387	1.1 4.3 .9 2.6 1.6	2 1	666 734 92 889 93 763 70 372 33 030	1.0 5.1 .9 2.3 1.5

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

-	Corn for stain or and						Wheat for grain							
	Corn for grain or seed								Whea	t for grain				
Geographic area	Far	ms	Acre	es	Quantit	Quantity		ms	Acr	es	Quanti	У		
	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)		
Talbot	130 281 180 160	1.7 1.4 1.6 1.7	33 697 15 821 21 995 36 354	.8 1.1 1.8 .9	2 737 665 1 162 460 2 703 167 4 718 017	1.0 1.2 1.8 .9	115 181 125 80	1.8 1.6 2.1 2.3	21 038 6 264 11 136 10 836	.9 1.6 1.9 1.2	1 333 701 334 288 696 728 703 591	.8 1.6 2.0 1.2		
		Selected crops harvested—Con.												
			Barle	y for grain			Tobacco							
Geographic area	Far	ms	Acre	es	Quantit	у	Far	ms	Acr	es	Quanti	ту		
Coograpiio 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)	Pounds	Relative standard error of estimate (percent)		
Maryland Allegany Anne Arundel Baltimore Calvert	972 2 4 32 8	.9 17.3 - 4.5 8.1	47 405 (D) 230 1 524 262	.7 (D) - 2.8 11.4	3 489 722 (D) 19 700 114 301 20 966	.7 (D) - 3.1 10.2	711 - 85 - 147	1.3 - 3.0 - 2.0	7 939 - 763 - 1 657	1.2 - 3.6 - 1.9	11 987 083 1 113 535 2 083 983	1.3 - 3.3 - 2.2		
Caroline Carroll Cecil Charles Dorchester	107 101 37 4 61	2.1 2.0 3.9 8.4 2.5	8 394 3 804 1 859 156 5 564	1.7 1.5 2.6 3.9 1.0	668 456 267 337 122 264 7 493 404 462	2.1 1.4 3.1 5.0 .9	- - - 114 -	- - - 2.6 -	- - 1 550	- - 2.7 -	- - 2 179 044 -	- - - 2.8 -		
FrederickGarrettHarfordHowardKent	111 68 34 24 40	2.1 2.5 3.7 4.1 3.1	4 319 1 038 960 1 272 2 292	1.3 2.1 2.5 1.9 1.8	295 353 60 076 65 070 104 903 190 392	1.1 2.2 2.9 1.8 1.8	1 - - - -	- - - -	(D) - - - -	(D) - - - -	(D) - - - -	(D) - - - -		
Montgomery	11 - 49 39 16	4.6 - 2.9 4.3 5.1	614 - 4 389 1 365 753	2.0 - 2.5 7.1 3.3	43 424 - 359 303 87 375 65 096	2.4 - 1.9 7.0 3.7	94 2 268	2.8 26.3 1.7	791 (D) 3 167	3.6 (D) 1.6	1 091 872 (D) 5 499 549	3.5 (D) 1.6		
Talbot Washington Wicomico Worcester	27 170 24 3	3.4 1.6 4.6 11.4	2 577 5 055 845 (D)	1.6 1.4 5.8 (D)	212 630 314 190 57 417 (D)	1.8 1.4 4.8 (D)		- - - -	- - -	- - - -	- - -	- - -		
		Selected crops harvested—Con.												
	Soybeans for beans						Hay-alfalf	a, other tame,	small grain, wi	ld, grass silag	e, green chop, etc.	(see text)		
Geographic area	Fan	ms	Acre	es	Quantit	Quantity		Farms		s	Quantit	у		
• .	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)		
Maryland Allegany Anne Arundel Baltimore Calvert	3 226 1 64 70 74	.9 - 3.2 3.3 2.9	509 683 (D) 5 156 9 072 4 348	.5 (D) 2.7 1.7 3.6	15 171 466 (D) 177 156 283 619 150 124	.5 (D) 2.4 1.3 3.4	5 223 177 131 300 93	.8 1.5 2.4 1.7 2.8	223 014 10 063 3 810 8 603 1 842	.8 2.8 5.3 2.2 4.2	450 781 15 714 5 439 18 053 2 867	.8 3.0 4.2 2.4 3.9		
Caroline Carroll Cecil Charles Dorchester	314 217 127 80 197	1.3 1.5 2.1 3.3 1.5	49 631 22 198 14 203 9 313 57 877	1.1 1.2 1.4 2.6 .8	1 401 976 682 590 435 605 264 759 1 917 424	1.2 1.0 1.4 2.6 .7	100 644 212 167 21	2.7 .9 1.8 2.2 6.1	2 266 27 343 8 523 4 395 379	2.6 1.3 2.4 3.3 4.4	5 589 51 096 20 313 8 087 1 415	3.3 1.4 3.4 4.8 4.3		
FrederickGarrettHarfordHowardKent	229 6 102 44 205	1.8 11.2 2.3 3.5 1.4	24 508 (D) 9 750 4 717 35 245	1.5 (D) 1.1 2.8 1.0	587 165 (D) 282 667 126 453 913 976	1.5 (D) 1.1 3.0 1.0	890 513 352 138 86	1.1 1.0 1.3 2.1 2.5	50 090 26 907 13 182 6 502 4 275	1.2 1.2 1.6 2.5 1.8	103 702 57 286 29 276 10 602 11 802	1.2 1.3 1.9 2.5 1.3		
Montgomery	58 97 273 199 126	3.0 2.7 1.3 2.0 1.9	16 047 5 731 69 750 15 827 22 214	1.0 5.2 .9 2.2 1.3	394 279 145 028 2 294 823 485 417 685 633	1.0 5.1 .8 2.1 1.2	223 147 88 231 40	1.9 2.4 2.7 1.8 4.2	12 060 4 544 2 905 4 611 1 149	3.0 3.8 2.7 2.4 4.3	21 814 7 487 6 292 8 938 2 945	3.1 3.9 2.5 2.4 4.5		
Talbot	153 187 236 167 end of table.	1.5 1.6 1.4 1.7	48 075 11 147 34 489 40 267	1.0 1.3 1.6 1.0	1 401 024 396 135 917 758 1 223 893	1.2 1.2 1.5 1.0	26 524 78 42	4.6 1.0 2.8 4.1	1 160 25 120 2 192 1 093	4.3 1.1 5.6 6.2	2 962 50 324 5 914 2 864	5.3 1.2 8.8 6.8		
200 100110103 01 0														

Selected crops harvested

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

[For meaning or appreviation	oris and symbols, see introductory text]										
	Selected crops harvested—Con.										
Geographic area	Vegetables harvested for sale (see text)										
	Far	rms	Acres								
	Number	Relative standard error of estimate (percent)	Number	Relative standard error of estimate (percent)							
Maryland Allegany Anne Arundel Baltimore Calvert	951	1.2	35 958	.8							
	8	8.4	110	8.9							
	53	4.0	716	2.8							
	82	3.2	2 455	3.5							
	31	4.7	476	2.7							
Caroline Carroll Cecil Charles Dorchester	82	2.7	6 758	2.3							
	56	3.2	3 779	1.4							
	22	6.6	102	6.8							
	44	4.8	426	8.8							
	73	2.8	8 148	1.1							
FrederickGarrettHarfordHowardKent	51	4.4	414	4.8							
	20	5.9	83	11.3							
	46	4.2	691	7.5							
	26	5.5	243	6.7							
	11	7.1	1 265	1.2							
Montgomery	37	4.8	832	5.7							
	63	3.4	1 851	1.2							
	34	4.3	2 512	3.6							
	64	3.8	428	7.0							
	18	6.3	830	3.4							
Talbot Washington Wicomico Worcester	12	5.5	1 170	1.8							
	38	4.0	278	4.7							
	72	3.1	2 188	3.9							
	8	11.2	204	8.6							

¹Data are based on a sample of farms.

Table G. Coverage Estimates: 1997

			Adjusted		
Item	Census total	Coverage total ¹	Total	Relative standard error (percent)	Coverage adjustment (percent)
Farms number . Land in farms acres . Average size of farm acres .	12 084	906	12 990	2.7	7.0
	2 154 875	20 129	2 175 004	2.3	.9
	178	22	167	(X)	(X)
Farms by size of farm: Less than 10 acres 10 to 49 acres 50 to 179 acres 180 acres or more	1 407	196	1 603	12.4	12.2
	3 828	452	4 280	5.3	10.6
	3 825	191	4 016	4.4	4.8
	3 024	67	3 091	3.3	2.2
Farms by value of sales: Less than \$2,500 \$2,500 to \$9,999 \$10,000 or more	3 097 2 916 6 071	735 154 17	3 832 3 070 6 088	8.3 3.3 2.5	19.2 5.0 .3
Market value of agricultural products sold	1 312 086	-28 318	1 283 768	2.8	-2.2
Farms by type of organization: Individual or family Partnership, corporation, or other	10 229	901	11 130	3.1	8.1
	1 855	5	1 860	4.7	.3
Farms by tenure of operator: Full owners Part owners Tenants	7 576	606	8 182	3.8	7.4
	3 179	169	3 348	3.2	5.0
	1 329	131	1 460	7.3	9.0
Operators by place of residence: On farm operated Not on farm operated Not reported	9 175	815	9 990	3.2	8.2
	1 923	86	2 009	6.2	4.3
	986	5	991	6.5	.5
Operators by principal occupation: Farming	6 235	245	6 480	2.0	3.8
	5 849	661	6 510	4.9	10.2
Operators by sex: Male Female.	10 694	573	11 267	2.9	5.1
	1 390	333	1 723	9.1	19.3
Operators by race: White	11 837	828	12 665	2.8	6.5
	247	78	325	6.8	24.0
Operators by years on present farm: 4 years or less 5 years or more Not reported	1 176	299	1 475	13.0	20.3
	8 856	615	9 471	2.9	6.5
	2 052	-8	2 044	7.0	4

¹ See text in Appendix C regarding coverage estimates.