

Supporting Statement

**VEGETABLE SURVEYS**

OMB No. 0535-0037

**B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved during the last collection.**

Sample sizes, responses, and individual response rates for each group of surveys are shown in the table below.

For the asparagus, onion, strawberry, and other fresh market vegetable grower surveys, stratified samples are drawn for each State. Strata definitions and sample sizes vary by State. The asparagus, onion, and strawberry samples are stratified by commodity and size, with larger growers (by acreage) sampled more heavily than smaller growers. The End of Season Vegetable Growers Inquiry uses a multivariate probability proportional to size (MPPS) sample design. Data collection for these surveys is usually by mail and EDR, with telephone follow-up and personal enumeration when needed.

Vegetable processors establish contracts with growers to provide a steady supply of vegetables for processing. As a result, processors decide utilization and are the primary source of information. Complete enumeration of the processing firms is used because of the relatively small number of firms involved in each state.

Vegetable Surveys Response Rates - Most Recent Year					
Survey	Sample Size	Waves of Data Collection	Total Responses	Average Response Rate	Coverage Commodity Rate (%)
<b>Fresh Market Vegetables Forecast</b>					
Asparagus	203	1	102	50.2%	35
Strawberry	1,771	1	1,025	57.9%	50
Onion	1,355	1	753	55.6%	62
Processors	137	1	99	72.3%	74
<b>End of Season Vegetables</b>					
Strawberry	278	1	131	47.1%	52
Onion	816	1	359	44.0%	45
Processors	173	1	102	59.0%	72
End of Season Vegetables	10,999	1	5,109	46.4%	52
Cucumbers for Pickles	Discontinued				
<b>Specialty Surveys</b>					
Chile Grower Survey	124	1	107	86.3%	NA
Chile Buyer & Processor Survey	21	1	18	85.7%	NA
Processed Tomato Report (Not for County Estimates) - California	25	1	21	84.0%	NA
Processed Tomato County Estimates - California	25	2	47	94.0%	NA
Vegetable Survey - Delaware	Discontinued				
Annual Specialty Crops Survey - Hawaii	Discontinued				
New England End of Season Fruit & Vegetable Inquiry	Discontinued				
Vegetables End of Season - New Jersey	Discontinued				

2. Describe the procedures for the collection of information including:
- statistical methodology for stratification and sample selection,
  - estimation procedure,
  - degree of accuracy needed for the purpose described in the justification,
  - unusual problems requiring specialized sampling procedures

Currently, questionnaire content, survey timetables, and survey administration are established by HQ and followed by all States. In addition, there are individual State surveys that are administered directly by the respective Regional Field Offices (RFOs). The master questionnaires submitted are reduced in size to only include the commodities of interest in each State. Data are gathered by telephone interviews, mailed paper questionnaires, faxed questionnaires, personal interviews, and Electronic Data Reporting (EDR) or internet. Data accuracy and respondent burden are taken into account in conducting the surveys. Because of the variable nature of the vegetable industry, mail lists are frequently updated to ensure maximum coverage.

Vegetable grower surveys include the Asparagus, Onion, Strawberry, Chile, and

End of Season (EOS) Vegetable Grower Surveys. The Asparagus, Onion, Strawberry, and Chile sampling frames are comprised of ELMO operations that have positive acreage control data for asparagus, dry onions, strawberries, and chiles, respectively. The sampling frames are stratified by their respective control data and samples are selected using a stratified simple random sample design. The sampling frame for the EOS Vegetable Grower Survey is comprised of ELMO operations that have positive acreage control data for one or more State-specific targeted crops. In contrast, samples are selected using a multivariate probability proportional to size (MPPS) sample design. For both sampling designs, operations with relatively large acreage are sampled at higher rates compared to operations with relatively small acreage.

Vegetable processor surveys include the EOS Vegetable Processor Survey and the California Tomato Processor Survey. Sampling frames and samples for these surveys are all ELMO vegetable processing operations and California tomato processing operations, respectively. Complete enumeration is employed since there are relatively few processing operations. Vegetable processing firms are contacted by the RFO for the State in which the headquarters plant is located. That RFO in turn provides the other States with data obtained for plants located in their State. Processors are surveyed in August for acreage of vegetables for processing. In November, processors are asked for final acreage harvested, yield/production, and value. California tomato processors are surveyed separately for intended acreage, preliminary acreage, and final acreage, production, and price.

At a minimum, State level questionnaires will contain the commodities of interest for US level estimates. In addition, there are agreements in place with State governments that have asked NASS to collect data for vegetables not in the Federal program, so some questionnaires will contain additional crops that do not appear in NASS's national publications. The Chile Grower Survey is conducted in this way. To help reduce burden on both the respondent and on RFO staff, we include these extra crops on existing questionnaires when possible, so we only have to contact the respondent one time each season. The data will be published in State level releases or will appear in the State's Annual Bulletin.

- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**

Data reported on vegetable inquiries are used by the National Agricultural Statistics Service to estimate acreage, yield, production, and utilization for 27 crops sold through both fresh markets and to processors. The forecast report is published in August and the end of season report is published in February of the following year. Data are used by many State and Federal agencies and

Departments, the vegetable industry, agribusinesses, manufacturing, transportation organizations, educational institutions, foreign governments, and international groups.

While seeking these data, the Regional Field Offices (RFOs) take great care to keep respondent burden to a minimum. Most contacts have a long-standing relationship with the servicing RFOs. Surveying processors instead of the farmers who grow vegetables for processing greatly reduces respondent burden. Most fresh market farmers who produce multiple crops are sent one questionnaire listing all of the commodities grown so they only need to complete one form. When more than one questionnaire must be mailed at the same time, they are combined into one mailing.

Information for the vegetable surveys (list frame) is collected via mail, internet, telephone interview, and face-to-face interview. The mix of data collection modes allows the respondents to reply by whichever mode they are most comfortable with. Over half of the information is obtained by telephone. Mail and telephone non-contacts are followed up with face-to-face enumeration. The entire sample is accounted for. Large operations and operations requiring special handling (previous survey refusals and inaccessible, complex operations, etc.) are generally contacted for a face-to-face interview only.

Starting in 2012, NASS has been working towards standardizing and streamlining the vegetable questionnaires so that they could be completed by internet. This goal has been achieved for all of the national surveys, the specialty State surveys are still being worked on.

Survey data are subject to non-sampling errors such as omissions and mistakes in reporting and in processing the data. While these errors are not measured directly, they are minimized by carefully reviewing all reported data for consistency and reasonableness. An estimation manual helps in maintaining consistency across surveys and RFO's.

**4. Describe any tests of procedures or methods to be undertaken.**

The main validation of current procedures is to remain in contact with vegetable growers, processors, and industry leaders and solicit their expert advice. Following each Census of Agriculture (every 5 years), NASS conducts a complete program review of all crop and livestock commodities. NASS verifies which States are included in the different surveys for each commodity in order to produce accurate estimates. In Supporting Statement A, Item 2 is the newly updated listing of crops to be included under this approval and in Item 5 is a description of the review process conducted by NASS.

**5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit,**

**contractor(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

The Summary, Estimation and Disclosure Methodology Branch Chief is Jeff Bailey, (202)720-4008.

The Sampling, Editing, Imputation Methodology Branch Chief is Mark Apodaca, (202)720-5805.

Data collection is carried out by NASS Regional Field Offices; Eastern Field Operation's Director is Jay Johnson, (202) 720-3638 and the Western Field Operation's Director is Kevin Barnes (202) 720-8220.

The NASS commodity statistician in Headquarters for the vegetable surveys is Vincent Davis, (202) 720-2157, in the Fruits, Vegetables, and Special Crops Section of the Crops Branch, Statistics Division. He is responsible for the Estimation Manual, national summaries, analysis, presenting the summarized data to the Agricultural Statistics Board for final estimates, and publications. The Crops Branch Chief is Lance Honig (202) 720-2127.

The survey administration of the vegetable program is carried out by the Survey Administration Branch, Census and Survey Division; Branch Chief is Gerald Tillman, (202) 720-3895.

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