

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. These sample sizes were used to estimate future sample sizes in Item #12 in Supporting Statement A.

Onion, strawberry, and other fresh market vegetable growers are sampled to represent the various growing areas in a State. The sample is stratified by commodity and size with the larger acreage growers being sampled more heavily than the smaller acreage growers. Data collection is usually by mail, with telephone follow-up and personal enumeration when needed.

Vegetable processing firms obtain most of their raw products through contracts with growers and so control the utilization of production. Thus, for processed vegetables, processing firms 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.

The response rates for all of the vegetable surveys are expected to increase as States increase the amount of phone and personal enumeration they will be conducting in the coming years. In the past, States would attempt to contact respondents until they reached at least an 80% coverage rate of the commodity. To help strengthen the quality of the data, they are now trying for a minimum response rate of 80%, with special emphasis being placed on the larger growers and processors to try and exceed 90% or more of the target commodity acreage.

| Response Rates for Vegetable Surveys | | | | | | |
|-------------------------------------------------------------|----------------------------------------|-------------|-------|----------------|-----------------|----------------|
| Survey | QID | Sample Size | Freq. | Total Contacts | Total Responses | Response Rates |
| Master Fresh Market Vegetables | | | | | | |
| Spring | 000128 | 3,129 | 1 | 3,129 | 2,603 | 83.2% |
| Summer | 000128 | 3,329 | 1 | 3,329 | 2,746 | 82.5% |
| Fall | 000128 | 2,438 | 1 | 2,438 | 1,826 | 74.9% |
| Winter | 000128 | 1,381 | 1 | 1,381 | 1,005 | 72.8% |
| End of Season ¹² | 000136 | 12,863 | 1 | 12,863 | 8,734 | 67.9% |
| Master Processed Vegetables | | | | | | |
| Spring | 000104, 000107 | 96 | 1 | 96 | 86 | 89.6% |
| Summer | 000104, 000107 | 224 | 1 | 224 | 219 | 97.8% |
| Fall | 000104, 000107, 000121, QID, 000202 | 119 | 1 | 119 | 105 | 88.2% |
| Fall, for CA and IL | 000112 | 38 | 1 | 38 | 29 | 76.3% |
| End of Season | 000136, 000104, 000107 | 373 | 1 | 373 | 342 | 91.7% |
| Price | | | | | | |
| Sweet Corn Prices | 000020 | 316 | 3 | 948 | 657 | 69.3% |
| Specialty Surveys | | | | | | |
| Chile Grower Survey | QID | 171 | 1 | 171 | 150 | 87.7% |
| Chile Buyer and Processor Survey | QID | 30 | 1 | 30 | 26 | 86.7% |
| Cucumbers for Pickles | 000118 | 32 | 3 | 96 | 75 | 78.1% |
| Fresh Market Winter Melon and Vegetable Shipper Survey | 000236 | 131 | 4 | 524 | 423 | 80.7% |
| Utah Onion Shipper Survey | QID | 30 | 1 | 30 | 28 | 93.3% |
| Onions | | | | | | |
| Spring | 000220, 000234, 000232 | 729 | 1 | 729 | 606 | 83.1% |
| Summer | 000233, 000234, 000220, 000232 | 883 | 1 | 883 | 622 | 70.4% |
| Fall | 000233, 000222, 000234, 000220, 000232 | 404 | 1 | 404 | 353 | 87.4% |
| Winter | 000233, 000234, 000220, 000232 | 537 | 1 | 537 | 448 | 83.4% |
| End of Season | 000233, 000234, 000220, 000232 | 1,911 | 1 | 1,911 | 1,550 | 81.1% |
| Disposition Surveys | | | | | | |
| Generic Questionnaire for Production and Disposition Survey | QID | 913 | 1 | 913 | 563 | 61.7% |
| Totals | | 30,077 | | 31,166 | 23,196 | 74.4% |

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 State-specific. Data are gathered by telephone interviews, mail-out/mail-back, faxed questionnaires, personal interviews and EDR. Data accuracy and respondent burden are taken into account in conducting the surveys. The most desirable method is complete enumeration; when this is not possible, a sample is used. Because of the variable nature of the vegetable industry, mail lists are frequently updated to ensure maximum coverage.

As a part of one of the major internal initiatives NASS is undertaking; NASS has begun transitioning towards a centralized database processing environment. While obtaining a centralized environment is a major benefit of this plan, there are several other important benefits to be gained. Benefits derived not only from centralization, but from streamlining the process, upgrading our tools, and migrating all surveys, estimates, products, etc. to the new environment. Some currently used tools will only need a new communication bridge to the centralized databases, while other tools will need to be completely re-engineered.

NASS is also working to improve the efficiency of our regional data collection centers under another major initiative. With the standardization of questionnaires for specialty commodities, the phone enumerators can be better trained to collect this very specialized data. This should be indicated by a future reduction in respondent burden along with an increase in response rates.

Once the transition is complete, NASS will have a standard series of 'services' and tools available that will perform all project tasks needed from survey inception to publication of estimates. In addition, the current stand-alone business processes, which number in the hundreds, will be reduced to one process with three data collection and editing models. This will not only reduce IT maintenance and employee training on different systems, but will improve the staff's capability of transferring their skills from one survey or commodity to the next. The centralized environment will remove many of the barriers to shifting work activities between work units in different geographic locations. A major long term benefit of the transition will be more time for data analysis and review, rather than spending that time logistically moving the data from system to system.

The fresh market vegetable program consists of seasonal estimates from specialty growers for crops such as onions and strawberries, and seasonal estimates for the remaining vegetable crops in the program from growers of multiple crops in the major producing States.

Each Field Office maintains a sample list of growers raising at least one of the vegetables for which estimates are prepared. These lists have been built up over the years to represent each of the estimated commodities from sources such as the Census of Agriculture and grower association directories. In some States, questionnaires are mailed to the entire sample because fresh market vegetables are grown in highly concentrated areas by a relatively small number of producers, making it feasible to perform a complete enumeration of the acreage. When the rate of return is low for a particular commodity, follow-up telephone calls or personal interviews are made to ensure reliable results. Special effort is made to ensure that all large growers provide a report, guaranteeing that a high percentage of the target commodity is used to set the estimate.

Vegetable processing firms are contacted by the Field Office for the State in which the headquarters plant is located. That FO in turn provides the other States with data obtained for plants located in their State. Processors are surveyed the first week of April for their intended acreage of vegetables for processing and the first week of July for acreage contracted. Mid-season surveys (green peas, July 1; snap beans, sweet corn, and tomatoes, September 1) are conducted to forecast crop production. In the fall, processors are asked for final acreage harvested, yield/production, and value for the above crops. California tomato processors are surveyed separately for intended acreage; preliminary acreage; and acreage, production, and price. Processors of asparagus, an early season crop, are surveyed for acreage in April, and in September for acreage, yield/production, price/value.

At a minimum, State level questionnaires will contain the commodities of interest for US level estimates. However, as a part of the State Cooperator agreements we have with many State Governments; who have asked us to collect data for additional vegetables not in the Federal program, some of our questionnaires will contain additional crops that do not appear in our national publications. To help reduce burden on both the respondent and on Field Office 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 at a minimum it will appear in the States 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 planted and harvested, production, and utilization for thirty-three crops. Reports are published throughout the growing season and at the end of the crop 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 Field Offices (FO) take great care to keep respondent burden to a minimum. Most contacts have a long-standing relationship with the servicing FO. 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.

Included in the attached sample questionnaires are several "Master" versions. These are comprehensive questionnaires that include all crops that data is collected for, nationwide. States will create shorter versions of the questionnaires that contain only the commodities produced in their State. Some States will also divide the questionnaires up into growers who produce vegetables for the fresh market and those who produce vegetables for the processing market. By customizing these questionnaires FO's are able to keep the respondent burden to a minimum.

To keep the data published by NASS current and relevant to data users, the questions will change with the seasons, from early planting intentions, to actual spring or summer plantings, crop condition during the growing season and finally the end of season yield and prices.

Some States will ask extra questions of this industry that are not on the "Master" questionnaires to fulfill the requirements of State Cooperator agreements. For example in Alabama they also ask if the acres in vegetable production were irrigated for each of the crops produced. This data is used for State water management decisions. To keep respondent burden to a minimum, these questions were added to our existing questionnaires rather than conducting a separate irrigation survey.

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 field offices.

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

The vegetable estimating program was “overhauled” in the early 1990's. Since that time the program has been working well. 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.

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.

Survey design for the vegetable surveys is determined by the Statistical Methods Branch, Statistics Division; Branch Chief is Dave Aune, (202)720-4008.

List sampling frame control data and item codes are determined by the Sampling Branch, Census and Survey Division; Branch Chief is William Iwig, (202)720-3895.

Data collection is carried out by NASS Field Offices; Deputy Administrator for Field Operations is Marshal Dantzler, (202)720-8220.

The NASS commodity statistician in Headquarters for the vegetable surveys is Debbie Flippin, (202) 720-2157, in the Fruits, Vegetables, and Special Crops Section of the Crops Branch, Statistics Division. She is responsible for coordination of sampling, questionnaires, data collection, data processing, the Estimation Manual, and other FO support. She is also responsible for national summaries, analysis, presentation to the Agricultural Statistics Board for final estimates, and publication.

September, 2009