

**TURFGRASS ECONOMIC SURVEY**

OMB No. 0535-NEW

**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.**

The universe is all homeowners, golf courses, sod producers, turfgrass service providers, and commercial businesses with turfgrass in the State of New Jersey. The universe of sod producers is determined by active farms with sod on the NASS List Frame for New Jersey. The universe of all homeowners and commercial businesses was determined from business and consumer databases from Infogroup (<http://www.infogroup.com>). Infogroup has a proprietary list of 245 million individuals and 25 million businesses nationally. The universe of service providers, golf courses, and cemeteries are provided by the respective industry groups in New Jersey. Phone follow-up contacts for non-respondents will be done to ensure a high level of coverage for each sector.

This is a new information collection.

- 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**

Overview – As with all NASS surveys, the goal is to collect data from at least 80% of the records sampled. We utilize mail, phone interviews, and if funded, Computer Aided Self Interviewing (CASI) to collect data. In our ongoing effort to collect quality data in a timely and economic manner, NASS utilizes mail as the first method of data collection (with a CASI option, if funded) with phone interview follow up for non-response. With limited funds for extensive data collection,

phone enumeration is targeted for non-response.

**Sampling** – The target population for this survey is all homeowners, golf courses, sod producers, turfgrass service providers, and commercial businesses with turfgrass in the State of New Jersey.

For sod producers, a profile, known as control data, of each establishment is maintained on the list frame to allow NASS to select all sod producers in New Jersey.

Lists will be obtained from respective industry groups in New Jersey for the following sectors: Service providers, golf courses and cemeteries.

For homeowners and commercial businesses, a sample with expansion factors will be purchased from Infogroup.

For each sector, operations are sorted by Agricultural Statistics District and county and then a systematic simple random sample of the required size is selected from that sector. Based on target coefficients of variation of 15% and previous efforts, the following sample sizes are recommended:

<b>Sector</b>	<b>Estimated Population</b>	<b>Sample Size</b>
Commercial Institutions	230,600	450
Large Business (>=500 employees)	590	145
Small Business (<500 employees)	230,041	305
Service Providers	2,442	250
Sod producers	50	50
Golf Courses	347	200
Cemeteries	430	200
Homeowners	1,770,771	250
Total	2,004,625	1,400

- 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.**

Regional Office staff routinely visit producers and industry organizations to promote the programs and importance of cooperating. NASS maintains a presence at National industry meetings, often setting up promotional booths at trade shows. Occasionally, letters of endorsement are obtained from industry leaders. A NASS representative attended the NJ Turf Grass Advisory Council

annual meeting and at the meeting each sector pledged to promote survey participation. Most States conduct a full non-response follow up.

NASS relies on multiple modes for collecting data. The questionnaires are mailed to the respondents who can either return them by postage paid envelope, email, fax, Computer Aided Self Interviewing (if funded), or telephone. If we have not received a response within the allotted time, phone enumerators will be used to contact the respondents.

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

Data will be analyzed after each survey to determine if cognitive testing is needed prior to the next survey.

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

Population and sample sizes for each State are reviewed by the Agency's Sampling, Editing and Imputation Methodology Branch, Methods Division; Branch Chief is Mark Apodaca (202) 720-5805.

Summary, analysis, estimation, and publication will be done by Rutgers University utilizing a NASS data lab in Trenton, New Jersey. The primary contact is Kevin Sullivan (848) 932-4662

The NASS survey administration and data collection are carried out by NASS Regional Field Offices; Eastern Field Operation's Director is Jay Johnson, (202) 720-3638. The survey administrators are responsible for coordination of sampling, questionnaires, documentation, training, data processing.

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