## **1Supporting Statement**

## **CURRENT AGRICULTURAL INDUSTRIAL REPORTS (CAIR)**

OMB No. 0535-0254

#### 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.

These surveys target several populations of businesses, based on the type of manufactured products they produce. The target populations are US flour millers, cotton linters, alcohol producers, fat and oil renderers, fat and oil processors, and fat and oil warehouse facilities. Estimated population sizes can be found in Supporting Statement A, item 12. Frames on each of the populations were created from external lists provided by industry groups and expanded on by the Operation Profile questionnaires. In addition to obtaining auxiliary data on the surveyed operations, the Operation Profile questionnaires asks whether the surveyed operation is the headquarters for multiple operations or is a single operation. If a headquarters operation is identified with multiple locations we also ask for the contact information for other operations. Between the external lists and the Operation Profile guestionnaires, and given the high costs of entry and production for these operations, the frame coverage should be complete. On average, approximately 750 operations will be profiled each year for all surveys. Based on previous profiles we are expecting only a small number of these operations to qualify for the monthly surveys.

These surveys are censuses of all known operations in each of the target populations. Consequently, no sample design will be used.

Response rates from the previous year are in the table below.

Survey Period	M313P Cotton and Manmade Fiber Staple		M311C Dry Mill Producers		M311C Wet Mill Producers		M311N Animal and Vegetable Fats and Oils		MQ311A Flour Milling Products		M311H Cotton in Private Storage	
	Sample	Response	Sample	Response	Sample	Response	Sample	Response	Sample	Response	Sample	Response
DEC15	65	54	137	121	11	11	182	154				
JAN16	65	32	137	120	11	11	182	154	181	155		
FEB16	65	56	137	122	11	11	182	157				
MAR16	65	56	137	123	11	11	182	152				
APR16	65	53	137	119	11	9	182	154	181	158		
MAY16	65	53	137	122	11	11	182	154				
JUN16	65	52	137	126	11	11	182	155				
JUL16	65	56	137	129	11	10	182	154	181	149		
AUG16	65	53	137	125	11	11	182	151				
SEP16	65	39	137	123	11	11	182	150				
OCT16	65	40	137	126	11	11	172	149	181	155	15	15
NOV16	65	51	137	125	11	11	172	153				
Rate	76.28%		90.09%		97.73%		84.89%		85.22%		100.00%	

## 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.

The Operation Profile questionnaires are used to identify and screen potentially new or previously unknown operations to determine if they qualify for inclusion in the survey universe, as well as to identify a primary contact person for future surveys. The identified contact person will complete the screener. Given that these surveys are censuses of all known operations, we do not expect unusual problems requiring special sampling procedures. However, since we expect some operations to not respond, manual estimation of the missing records will be performed by NASS statisticians. Furthermore, the Profile data will not be summarized for publication.

After extensive list building efforts in 2014 and 2015 using the ReferenceUSA database of businesses, and our Profile questionnaires, NASS came up with a population of approximately 670 operations (Supporting Statement A, item 12). This total sample size is slightly larger than the summation of the sample sizes of the individual surveys from last year (see table above). This rounded up total allows for any new operations that are discovered from our profile or screening surveys to be added to the sample, since this is a complete census of known operations. To ensure that we didn't systematically exclude any operations, our Operation Profile approach and data collection instruments were both revised in order to accommodate budget and total respondent burden hour constraints. First, profiling operations for eligibility consists of a simple screening process using a streamlined instrument that can be mailed or personally enumerated.

Using an adaptive design strategy, only operations identified to have a higher likelihood of eligibility based on source and criteria of the list building process are personally enumerated. The rest of the population is mailed an instrument in order to allow them the chance to report while keeping down costs.

The actual surveys are mailed out from and returned to the NASS National Operations Division in St. Louis, MO. Each mailing will contain a cover letter, instruction sheet, internet access information, and a questionnaire that will capture data for the reference period only. Processors at the National Operations Division will process the mailing, key the data, and edit the keyed data. An electronic data capture tool will be available on the Internet to respondents if they prefer to respond in this fashion. Non-respondents will be contacted by phone interviewers to collect their data for the reference period. Operations can also submit late reports, data from which will be included in the annual publication.

Nonresponse adjustments will be handled through item-level imputation rather than weighting. Imputation will be conducted on items that were indicated to be produced by the operation on their Operation Profile, but for which no data was reported. Missing data for a particular item will be imputed by multiplying the month-to-month change from reporting records to the previous month's data for the operation with the missing data. For unit non-response, NASS statisticians will identify which items will be imputed using item-level imputation methods described above.

Operation counts and commodity totals will be calculated at the national and state level. Furthermore, an average 24-hour capacity estimate will be published for flour millers at the national and state levels. No coverage adjustments will be calculated since the frame should have complete coverage. Some manual smoothing of the final estimates based on market trends may be handled by NASS statisticians. No standard error will be calculated since this is a census of all operations.

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.

The CAIR surveys are an integrated part of the Census of Agriculture. Under the authority of the Census of Agriculture Act of 1997 (Public Law 105-113) participation in these surveys is mandatory.

During the initial phase of this survey program in 2014, NASS conducted a profile questionnaire of each potential organization that may have qualified for this group of surveys. At that time NASS discussed the requirements for responding, which had not changed from when the Census Bureau previously conducted these surveys. Interviewers also discussed the importance of this information with respondents.

NASS provides multiple means by which the respondents can complete the questionnaires. The surveys are available through a password protected website, if they would like to respond online. NASS also employs enumerators from the National Association of State Departments of Agriculture (NASDA) who can collect the data by either phone or through personal interview if the respondent prefers either of these methods. NASS also has a secure fax line set up to receive the data. The respondents can also respond by mail or by email if they choose.

During future profile surveys, new or unknown respondents will be provided with excerpts of the letters of support NASS has received along with examples of how this data is so vital to so many people.

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

Periodically, NASS conducts cognitive interviews with respondents to study whether the questionnaires are being interpreted in the manner in which they are intended. In addition, NASS measures the time it takes the respondent to complete the survey, including any time needed to consult records. NASS also checks to see if the terminology and language used in the questionnaires are still relevant to current business practices. Any significant changes to the questionnaires are tested prior to their implementation.

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.

NASS is conducting the CAIR surveys through its Census and Survey Division. The Census Planning Branch Chief is Donald Buysse, (202) 690-8747. Data collection is supervised by statistician Nate Vandermeer, (202) 720-0660.

Sample design is developed by NASS's Sample Design Section. The Branch Chief is Mark Apodaca, (202) 720-2857.

The samples and survey data are reviewed by NASS Summary, Estimation, and Disclosure Methodology Branch, Methodology Division. The Branch Chief is Jeff

Bailey, (202)720-4008. The data imputation for non-response and data summary will be conducted by Audra Zakzeski, (202) 690-8637.

Data collection for the Profiles is carried out primarily by NASS Regional and State Field Offices. The Eastern Field Operation's Director is Jay Johnson, (202) 720-3638. The Western Field Operations Director is Kevin Barnes, (202) 720-8220. The monthly, quarterly, and annual data collection is carried out by NASS HQ staff.

The NASS Environmental, Economics, and Demographics Branch will be responsible for regional and national summaries and publication. The Branch Chief is Jody McDaniel, (202) 720-6146. Commodity Statisticians are Natasha Bruton, (202) 720-7644 and Courtney Charles, (202) 690-3226.

May 2017