

## 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 questionnaires, and given the high costs of entry and production for these operations, the frame coverage should be complete. On average, approximately 25 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.

### Response Rates for 2022

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
January 15, 2022	43	39	116	104	9	9	155	120				
February 15, 2022	43	40	115	104	9	9	156	123				
March 15, 2022	43	37	115	101	9	9	156	127	149	128		
April 15, 2022	43	39	115	105	9	9	154	117				
May 15, 2022	43	38	115	105	9	9	154	120				
June 15, 2022	42	38	115	103	9	9	154	124	149	126		
July 15, 2022	42	32	114	104	9	9	154	126				
August 15, 2022	43	40	114	105	9	9	154	112			14	11
September 15, 2022	42	31	114	109	9	9	154	124	149	125		
October 15, 2022	41	30	114	105	9	9	154	115				
November 15, 2022	41	37	114	105	9	9	154	122				
December 15, 2022	40	35	114	104	9	9	155	121	148	124		
<b>Rate</b>	<b>86.17%</b>		<b>91.20%</b>		<b>100.00%</b>		<b>78.26%</b>		<b>84.54%</b>		<b>78.57%</b>	

Overall Response Rate = 84.5%

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.

The current population is approximately 610 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.

Respondents are mailed a cover letter containing online reporting instructions from the NASS National Operations Division in St. Louis, MO. All data is submitted through NASS's Computer-Aided Self-Administered Interview (CASI) system. Non-respondents will be contacted by email and phone as a reminder to submit 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. If NASS discovers any new operations, they are contacted to complete the profile questionnaire to see if they are eligible to be added to the target population.

While most all data is submitted through NASS's online reporting system (CASI), 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 data. The respondents can also respond by email if they choose.

During future profile surveys, new or unknown respondents can 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. If any significant changes are needed to be made to the questionnaires they will be 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.

Sample design is developed by NASS's Sample Design Section. The Branch Chief is Mark Apodaca, (202) 690-8141.

The samples and survey data are reviewed by NASS Summary, Estimation, and Disclosure Methodology Branch, Methodology Division. The Branch Chief is Jeff Bailey, (202) 690-8141.

Data collection is normally carried out by NASS Regional Field Offices; Eastern Field Operation's Director is Jody McDaniel, (202) 720-3638 and the Western Field Operation's Director is Troy Joshua (202) 720-8220. However, the monthly, quarterly, and annual data collection is primarily carried out by NASS HQ staff.

Regional and national summaries and publications are produced by the Statistics Division, Crops Branch; Branch Chief is Lance Honig (crops) (202)720-2127.

April 2023