RENTAL RATES PILOT

OMB No. 0535-0264

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 Rental Rates Pilot will target operations that likely rent non-irrigated cropland from others in areas where share rental arrangements dominate over cash rental arrangements.

The National Agricultural Statistics Service (NASS) maintains a list of farmers known to operate farmland, to include acres owned and rented from others. The sample size is determined for researching if the proposed questions will obtain the data necessary to analyze and determine rental rates for share rental arrangements. Telephone follow-up is conducted for any survey which does not obtain at least an 80 percent response rate, subject to available funds, to ensure enough data are available for analysis.

This is a new information collection under the Quick Response for Cooperator-funded Surveys Generic Clearance (OMB 0535-0264).

- 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

<u>Overview</u> – As with all USDA-NASS surveys, the goal is to collect data from at least 80% of the records sampled and more importantly, achieve a weighted unit response rate of at least 70% of the production data or production area. We utilize mail, phone interviews, and if funded, Computer Aided Web Interviewing

(CAWI) to collect data. In our ongoing effort to collect quality data in a timely and economic manner, USDA-NASS utilizes mail as the first method of data collection (with a CAWI 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.

<u>Sampling</u> – The target population for this survey is select agricultural operations in the Northwest (10 counties in the State of Washington), Southern Plains (10 counties in Northern Texas) and Mississippi River (10 counties in Arkansas), as noted in question one. USDA-NASS's list frame includes all known agricultural establishments. A profile, known as control data, of each establishment is maintained on the list frame to allow USDA-NASS to define list frame sampling populations for specific surveys and to employ efficient sampling designs.

Samples for the Cash Rents Survey (0535-0002) are drawn with a county-level stratified design to produce state, district, and county-level estimates. A targeted probability sample is selected based primarily on operations that have historically reported cash rented non-irrigated cropland, irrigated cropland, or pasture. In addition, operations from each county that previously reported renting or leasing land from others but did not report a cash rental agreement have a small probability of being selected for the survey.

Estimation - The Cash Rents Survey utilizes direct expansions and/or ratio expansions for all survey indications. Direct expansions are calculated by applying sampling weights and nonresponse adjustments to reported data and summing these values. Similarly, ratios are calculated by applying sampling weights and nonresponse adjustments to data when both the numerator and denominator are reported. For the Cash Rent Survey, ratio estimates are used to set the district and county level cash rental rates, while direct expansions are used to set acreage estimates used to weight the rental rates within a state. Modes of data collection used for this group of surveys include original mailing of questionnaires, internet response, follow-up mailing of questionnaires to nonrespondents, post card reminders, phone follow-up, and limited face to face enumeration in certain situations. The amount of time allotted to collect the data as well as amount of funds available for data collection will be considered when determining the modes to be used on each of the surveys. Each Regional Field Office (RFO) is responsible for utilizing the resources available to them to maximize the response rates while minimizing the respondent burden and out of pocket expenses.

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.

USDA-NASS's Field Office (FO) staff routinely visit producers and industry organizations to promote the programs and importance of cooperating. USDA-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.

NASS relies on multiple modes for collecting data. Questionnaires are mailed to the sampled operations who can either return them by supplied postage-paid envelopes, 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. FOs conduct this non-response follow up until data collection funds are exhausted.

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

Valid pilot survey responses will be married with crop price, production cost, and yield data available from other sources (and outside the scope of the pilot instrument) to generate a cash-rent equivalent estimate for each response. In other words, since returns to production data are available from other sources, the pilot scope is limited to just the critical missing pieces of information associated with lease terms that are necessary for estimating the cash rent equivalent, such as what fraction of receipts are shared with the landowner under a share lease arrangement.

A point estimate and its standard error will be calculated for each of the thirty counties comprising the sampling frame. Since, in theory, the cash-rent equivalent associated with a share lease should be at least as much as cash rents in the same area, a one-way Welch's t-test will be used to evaluate whether the cash-rent equivalent estimate from the pilot survey is greater than the cash rent estimate (from the NASS Cash Rent Survey) for each county. Such a result would suggest that estimates informed by the pilot survey could inform the payment setting process and assuage concerns from the field.

If the evaluation finds the null rejected (at 90% significance) in at least five of the thirty counties, FPAC technical staff will recommend to the FSA Administrator that the cash rents survey be complemented with a one-off share and hybrid rents survey to be administered to regions where cash leases are uncommon. This expansion of the pilot would utilize a similar instrument, fine-tuned as necessary. And as with the pilot, estimates of survey responses would not be published, given the relative complexity of the questions. Rather, the survey responses would be converted internally (in a NASS data lab as necessary) to

cash-rent equivalent estimates by post-hoc analysis. Such a survey may also enable the effort made to administer the NASS Cash Rent Survey to shift toward regions where the latter is most meaningful.

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.

Survey administration will be carried out by the Survey Administration Branch, Census and Survey Division; Branch Chief is Gerald Tillman, (202) 720-3895. The survey administrators are responsible for coordination of sampling, questionnaires, documentation, training, data processing.

Sample sizes for each state are determined by the agency's Sampling, Editing, and Imputation Methodology Branch, headed by Branch Chief Mark Apodaca, (202) 690-8141

Data collection is carried out by NASS Regional Field Offices. The Western Field Operations Director is Troy Joshua, 202-720-9567. The Eastern Field Operations Director is Jay Johnson, (202) 720-3638. Survey data are also reviewed and summarized by the Regional Field Offices. Publications are released from the Regional Offices and Headquarters.

November, 2019