Wait! Before you go, just a few more questions:

Pilot test of a piggyback survey

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Annual Refiling Survey Background

The Bureau of Labor Statistics' Annual Refiling Survey (ARS) is a web survey that asks approximately 1.2 million businesses to review and verify or update their industry and geographic information each year. The information is used to ensure that each establishment is assigned to the correct industry and that each address geocodes the correct geographic location of the establishment. The ARS also asks employers to identify the locations of new worksites they have established in the state, information that is used to survey those locations.

The ARS is conducted on a 3-year cycle, with approximately one-third of all in-scope business establishments sampled each year. Respondents are sent survey invitation asking them to go to the data collection website and provide their information. Following two email survey invitations sent to all respondents for whom an email address is available, 2 additional paper mailings are sent. One strength of the ARS is the speed at which large numbers of responses are collected (see Table 1 for 2018 numbers).

Time Period	Number of Additional Responses Collected
3 weeks after 2 email blasts	114,000
3 weeks after 1st mail out	250,000
3 weeks after 2nd mail out	97,000

Piggyback Survey Approach

As a short survey that collects information from a large audience electronically, the ARS offers the opportunity relatively easily to append additional surveys after respondents complete the ARS. This approach, sometimes called a 'piggyback' survey allows for new information to be collected without having to select a new sample, do address refinement, develop data collection procedures, etc. Depending on the information of interest, subgroups of the ARS respondents could be targeted, providing the opportunity to collect information from special populations that might otherwise be hard to locate (e.g., large businesses in rural locations). Using the ARS to do the screening, eliminates the need to do a screening survey or oversample to ensure that you're reaching the population of interest. Additionally, this approach would leverage the ARS' relatively high response rate, leading to more data than might be collected from a stand-alone survey that respondents are not familiar with.

Business Research Survey (BRS) Design

After completing the ARS on the secure website, respondents were shown a transition page and asked to complete a few additional survey questions. They had to actively click 'continue' to move into the Business Research Survey (BRS). This was to ensure that the ARS response would be captured by the system, and that respondents were clearly informed that they were being asked a separate survey request. Respondents could simply close the web browser on the transition page, and their ARS data would be stored and they'd not see the BRS questions. It was technically possible for respondents to log into the ARS data collection page after submitting their ARS data, in which case they'd be shown the BRS transition page. All units were sent 2 mailed survey invitations to mirror the standard ARS procedures.

In this first pilot test, the Business Research Survey, BRS did not ask substantive questions (e.g., How many job openings did your company have on August 12th?). Instead, in the interest of gaining insight about the types of respondents who answer the ARS, we asked questions about the information the respondent had access to. BRS respondents were asked if they could or could not report the following for the sampled establishment:

- How job openings are advertised
- How many job openings the company is currently trying to fill
- Total revenue from sales, shipments or receipts in a given year
- The top three revenue producing products or services in a given year

- The number of 1099-MISCs that were filed in a given year
- Whether there were any permanent layoffs in the last three months and reasons for the layoffs

Two additional questions were asked to understand the respondent's relationship to the sampled company and the department in which they work.

BRS Sampling

Two sampling approaches were tested: random sampling and quota sampling. The goal of testing both was to determine how representative of the target population the resulting data would be. For the random sample, units were selected from the ARS sample frame and flagged to be included in the BRS. Those respondents were flagged in the data collection system to be shown the BRS when they completed the ARS.

Additionally, as the ARS does not collect data from all types of businesses in the US economy, the test included some "BRS-only" units, those that are out of scope for the ARS (e.g., , businesses with an annual average employment of 3 or less, and some industries considered to be low-change, such as cemeteries). This was to reflect the likelihood that any production implementation of a BRS would likely not be targeting only those in-scope of the ARS; the results of a BRS based on only ARS respondents would be of far less interest than one representative of the whole U.S. economy. To include businesses with these characteristics, a BRS-only sample was drawn from the QCEW sampling frame.

For the quota sample, a quota was defined based on the desired number of total responses. Individual establishments were not selected ahead of data collection, for a specified period of time all ARS respondents were included in the BRS. Once the quota was completed, the BRS was ended.

BRS Evaluation

There were several unknowns that will determine the success of the BRS piggybacking approach. Attrition rates, or how many respondents complete the second survey, will determine the true efficiency of the approach. Since the ARS only asks respondents about their industry and location, we do not know who the respondents are and what type of information they could provide about their establishment. This limits the type of information that could be accurately collected with this approach. In 2018, BLS conducted a pilot test of BRS that asked respondents 8 questions after completing the ARS. Rather than

collecting substantive information (e.g., number of job openings or type of ownership), the questions asked what type of information the respondent would be able to provide about their establishment (e.g., could you tell us the top three products produced by your company).

There are some unknowns that will be important to evaluate prior to implementing a BRS, or any piggyback survey. Since respondents are asked to complete the ARS once every three years, the impact of the BRS on future ARS response rates is a factor that needs to be considered when making decisions. Additionally, since survey topic is known to be related to respondent burden and response rates, it seems likely that the topic of the BRS questions will impact the response rates and potential impact on the future ARS response. Given that the goal of the BRS is to collect information more quickly than traditionally possible, it is not feasible to do a field test for each new set of questions prior to BRS fielding. Another way of pretesting new BRS topics and questions would have to be identified.

BDCMW Presentation

In the presentation, we will present results from the BRS pilot test. Results will include ARS response rates, click-through rates, and BRS unit and item response rates. Results for both types of sampling methods will be shown, looking at time required to collect the data and differences in response rates and respondent characteristics. Finally using information from the ARS, we will explore if there are patterns of nonresponse that would limit the effectiveness of this approach. We will end with recommendations, both for the next steps for the BRS as well as for other agencies considering this type of approach.