

## **Operations Test of the proposed Quick Business Survey**

### **Part B. Statistical Methods**

#### **1. Respondent/Sample Universe**

##### **1a. Universe**

The Bureau of Labor Statistics (BLS) plans to conduct an operations test of the proposed Quick Business Survey (QBS) on a sample of establishments included on the BLS Quarterly Census of Employment and Wages (QCEW). The universe of respondents to the QCEW are the 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. The primary source of data for these 53 entities are the Quarterly Contribution Reports (QCRs) submitted to State Workforce Agencies (SWAs) by employers subject to State Unemployment Insurance (UI) laws. The QCEW data, which are compiled for each calendar quarter, provide a comprehensive business name and address file with employment and wage information by industry, at the six-digit North American Industry Classification System (NAICS) level, and at the national, State, Metropolitan Statistical Area (MSA), and county levels for employers subject to State UI laws. Similar data for Federal Government employees covered by the Unemployment Compensation for Federal Employees program (UCFE) also are included.

The scope of the Quick Business Survey is:

- Establishments in-scope of the ARS.
- Establishments less than or equal to three employees that are excluded from ARS.
- Establishments that are low-change NAICS that are excluded from ARS.

For the portion in-scope of the ARS, the sample will be restricted to those eligible for the 2018 ARS. These units are selected using the 7<sup>th</sup> and 8<sup>th</sup> digit of the EIN within the range of 00-33 from the QCEW. The QBS sampling frame of 2,245,045 establishments includes this 1/3 of the ARS plus all other in-scope establishments.

##### **1b. Sample size**

BLS will attempt to leverage online response to its largest annual survey by asking respondents to answer additional questions after they have completed the ARS. The size of the ARS, with over one million sample units, requires a collection timeframe of 9-11 months. A random sample for a QBS supplement to the ARS, regardless of size, would require very little additional cost to collect. However, this timeframe would hardly be considered “quick.” BLS would like to take advantage of the high-volume of reporting that occurs immediately following contact with respondents, either through email solicitations or paper mailings. The volume of responses, and the distribution of those responses during peak times across sample strata, is uniform enough to suggest that data for a representative sample can be collected in a matter of days, not months. To test whether early respondents are truly a representative sample, BLS would like to select two samples for this operations test, for a total of 16,790 sample units.

A stratified random sample (Sample 1) of 10,000 establishments will be selected from the QBS in-scope units described in Section B.1a. A second sample (Sample 2) is comprised of 6,790 respondents that reported their ARS online within the first 5 to 10 days of collection. Therefore, a total of 16,970 units will be solicited for QBS.

The panel sample (Sample 2) units will be solicited for the QBS in January of 2018 following the second mailout of the 2018 ARS. Approximately 55,000 ARS responses are expected to be received within 5 days, and 100,000 within 10 days. During that 5-10 day time period, a portion (6,790) of respondents will be asked to answer the QBS and we estimate that a total of 5,195 QBS responses will be collected.

The ARS routinely achieves a 70-75 percent online response rate. BLS expects about 85 percent of the respondents that complete the ARS and are then asked to answer further questions online will “click-through” to see the additional questions. BLS further expects about 90 percent of respondents that click-through will answer the questions online and submit their responses. The table below summarizes our estimated responding sample size calculations for the two samples.

Sample Size for QBS Operations Test				
	Total Sample	ARS Responses (75%)	Click-through Respondents (85%)	Estimated Respondents (90%)
Random Sample (1)	10,000	7,500	6,375	5,737
Panel Sample (2)	6,790	6,790	5,772	5,195
Total Sample	16,790			10,932

## 2. Data Collection

### 2a. Sample Design and Selection Procedures

The sample of 10,000 establishments (Sample 1) will be allocated proportionally to the strata (with a minimum sample of 5 units in each strata). The strata are defined by multi-unit/single-unit employer, 2-digit NAICS industry, and 9 size classes. The sample will be selected randomly within each stratum. All private sector industries except private households are in-scope for this test. The nine size classes are determined by the establishment’s Average Monthly Employment (AME) over the last 12 months -- employment 1-4 (size 1); 5-9 (size 2); 10-19 (size 3); 20-49 (size 4); 50-99 (size 5); 100-249 (size 6); 250-499 (size 7) 500-999 (size 8); and 1000+ (size 9).

In addition, per the description in Section B.1b, information will be collected from the panel sample (Sample 2) for research purposes. The panel sample respondents will be analyzed to determine if they can be used to make representative estimates.

### 2b. Estimation Procedure

Because this operations test is experimental and in its initial phase, no estimates will be computed.

### 2c. Reliability

This operations test is experimental and in its initial phase no sampling errors will be computed.

### 2d. Data Collection Cycles

This survey will be conducted one time, from January through June 2018.

### **3. Response Rates**

#### **3a. Maximize Response Rates**

To maximize response rates, all units selected in the sample that are already part of the ARS will be transitioned to the QBS questions once they complete the ARS. All multi-units and any singles that are out of scope for the ARS, but are selected for the QBS, will be contacted by email and mail for the QBS. Non response follow-up will be conducted per the current ARS procedures as outlined in OMB. No. 1220-0032. For multi-units and singles that are not part of the ARS, nonresponse follow-up will be conducted with email and mail requesting participation in the QBS only.

#### **3b. Non-Response Adjustment**

Because this operations test is experimental and in its initial phase no adjustment will be calculated.

### **4. Testing Procedures**

Upon completion of the operations test we will calculate “click-through” rates, QBS completion rates, and non-response rates. The click-through rate is the percentage of ARS respondents that click on the button after completing the ARS to respond to the additional survey questions. This would be similar to calculating the number of respondents that open the envelope when sent a survey solicitation in the mail. The QBS completion rate is the percentage of respondents that complete the QBS survey online, and the non-response rate is the percentage of sample units that do not submit their data online.

### **5. Statistical and Analytical Responsibility**

Mr. Larry Huff, Division Chief of the Statistical Methods Staff, Office of Employment and Unemployment Statistics, is responsible for the statistical aspects of this survey.

#### **Attachments**

QBS Operations Test Questions  
Solicitation Letters  
Solicitation Email  
Password Email