Census Bureau Pulse Surveys

Experimental Surveys to Address Data Needs During the Covid-19 Pandemic

Presented at Federal Economic Statistics Advisory Committee (FESAC)
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Two Populations, Two Surveys

Small Business Pulse Survey (SBPS)
Designed to understand the effect of the pandemic on operations and financial situation of small businesses and measure their federal program participation as well as their outlook

Timeline for SBPS Data Collection
April 26 through June 25, 2020

Partners
Small Business Administration
Federal Reserve Board of Governors
International Trade Administration
Minority Business Development Administration

Household Pulse Survey (HPS)
Designed to understand impacts of Covid-19 on American families relating to employment, food security, housing, health and educational disruption

Timeline for HPS Data Collection
April 23 through July 31, 2020

Partners
Bureau of Labor Statistics
National Center for Health Statistics
Housing and Urban Development
National Center for Education Statistics
Office of Management and Budget
USDA Economic Research Service
Impetus for the Pulse Surveys

Addressing a Need for Real Time Data on the Social and Economic Impacts of COVID-19

• With circumstances changing rapidly, the Census Bureau sought to address an urgent need for near real time data as American families and businesses are experiencing rapid and unprecedented disruptions during the COVID-19 pandemic.

• The Pulse Surveys were designed to deploy quickly and efficiently
  • We were able to leverage existing Census Bureau infrastructure and data assets for current economic and demographic surveys to design and implement the surveys.
  • Engagement with other federal agencies to solicit questionnaire content resulted in surveys that covered a range of topics related to social and economic impacts that were important to multiple federal and state programs with a minimum of public burden.
  • Pulse Survey topics included
    o Employment, housing and food security, health, education
    o Small business overall well-being, operations, challenges, finances, outlook
Small Business Pulse Survey (SBPS)

Platform: Centurion
- Census Bureau in-house Internet collection instrument
- eBlast system
- Economic programs database for processing

Contact Strategy: Email only
- Weekly emails on Sunday
- Follow-up emails on Wednesday
- High voluntary response rate averaging over 25%
- Conversion rate averaging over 35%

Frames: use email addresses collected in the 2017 Economic Census
- Include all single-location businesses with 1-499 employees and $1000+ revenue with an email address
- Approx. ~1 million small businesses in target population for SBPS
- Representative of 5.6 million small businesses
- Ability to link to Census Bureau business data infrastructure meant only timely, relevant measures need to be surveyed as other important measures (industry, location, size) previously collected
SBPS Development

Concept to Publication
March 23 – May 14: 39 days

March 23: Project Concept

March 23 – April 17: Pre-Collection / Planning
- Content development with external partners
- Create database structure
- Develop communication strategies
- Finalized emails from Economic Census

April 21-30: Content cognitive testing - 11 days

April 22: OMB Approval

April 23: Centurion Live

April 23: Webpages Live

April 26: Survey week 1 emails sent

May 1: Cognitive Testing Results – 30 business days

May 3: Survey week 2 emails sent

May 10: Survey week 3 emails sent

May 8: Confirm publication plans

May 11: Complete data visualization tool and documentation

May 14: Publication – 39 business days

May 14: Survey week 1 Data Published
SBPS Content

- **One** question on overall well-being
- **Five** questions on operations
  - Revenue changes, total revenue, temporary closures, change in employment, change in hours
- **Three** questions on challenges
  - Change in the production of goods or services, change in the mode of delivery, supply chain issues
- **Five** questions on finances
  - Liquidity, missed loan payments, missed other payments, requests for aid, receipt of aid
- **One** question on outlook
- **One** identifying question (EIN)
Overall, how has this business been affected by the COVID-19 pandemic?

Data Collected 3/24 to 3/30

Overall, how has this business been affected by the COVID-19 pandemic?
Data Collected 3/24 to 3/30

Percentage of Businesses (National Average: 42.9%)
PPP loan receipt initially concentrated in central states, but converge over time
As states re-open, the SBPS will show how the effect on small business may have a geographically differential effect.
Survey Responses Weekly Comparison

Overall, how has this business been affected by the COVID-19 pandemic?

Responses Collected 5/24 to 5/30
- 42.8% Large negative effect
- 42.3% Moderate negative effect
- 11.4% Little or no effect
- 2.4% Moderate positive effect
- 1.1% Large positive effect

Percentage of Businesses

4/26 to 5/2: 50
5/3 to 5/9: 40
5/10 to 5/16: 30
5/17 to 5/23: 20
5/24 to 5/30: 10
## Downloads and Documentation

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## Documentation

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Data & Resources: SBPS

- SBPS Data tool: https://portal.census.gov/pulse/data/
- SBPS Data Tables main page: https://portal.census.gov/pulse/data/#downloads
- SBPS Technical Documentation: https://portal.census.gov/pulse/data/#methodology
- About the Census Bureau’s Experimental Data Series: https://www.census.gov/content/census/en/data/experimental-data-products.html
Household Pulse Survey (HPS)

Platform: Qualtrics
FedRAMP Moderate authorization
Census Bureau Authority to Operate

Email and Text Invitations to Take an Online Survey
National Processing Center was shut down due to COVID19
We could not mail an invitation

Frames: Used Existing Email and Cell-Phone Contact Frames
Matched to Census Bureau’s Master Address File (MAF) records
Emails and phone numbers from respondent contacts and from third party vendors
  • The phone frame contains over a billion phone/address pairs
  • The phone frame contains phone/address pairs for over 88% of addresses in the country
  • Three quarters of those phones were acquired in the past two years
  • The email frame contains over 686 million well-formed email/address pairs
  • The email frame contains email/address pairs for almost 80% of addresses in the country
  • Two thirds of those emails were acquired in past two years
HPS Content

Basic demographics
Age, sex, race, Hispanic origin, marital status, educational attainment.

Employment questions
Loss of employment income, expected loss of employment income, working, reasons for not working if not working.

Food security questions
Past food sufficiency, current food sufficiency, free meals, money spent on groceries and prepared foods.

Health questions
Overall health, mental health, health insurance, delay in getting health care.

Housing questions
Tenure, paid rent/mortgage on time this month, confidence about paying rent/mortgage next month.

Education questions
Effects of COVID on how children received education, access to computer/digital device, who provided the device, internet availability, who paid for internet, hours spent with teachers, hours householder spent on educational activities.
Measuring Household Experiences during the Coronavirus (COVID-19) Pandemic

What is the Household Pulse Survey?

The U.S. Census Bureau, in collaboration with five federal agencies, is in a unique position to produce data on the social and economic effects of COVID-19 on American households.

The Household Pulse Survey is designed to deploy quickly and efficiently, collecting data to measure household experiences during the Coronavirus (COVID-19) pandemic. Data will be disseminated in near real-time to inform federal and state response and recovery planning.

The Interactive Tool Application is not supported in Internet Explorer 11 and older versions.

If you have been invited to participate in the survey, you will find more information here.

Household Pulse Survey Questionnaire  [< 1.0 MB]

Encuesta del Pulso de los Hogares  [< 1.0 MB]
Household Pulse Survey: May 21 - May 26

JUNE 03, 2020

The tables below show data that were collected between May 21, 2020 to May 26, 2020. Each detailed table has data for the nation, each of the fifty states, plus Washington, D.C., and the fifteen largest metropolitan areas.

Sections on this page:
- Detailed Tables
- Technical Documentation

Detailed Tables

Education Tables
- Table 1. Time Spent in Last Week on Home Based Education for Households with Children in School, by Select Characteristics
- Table 2. COVID-19 Pandemic Impact on How Children Received Education, by Select Characteristics
- Table 3. Computer and Internet Availability in Households with Children in Public or Private School, by Select Characteristics
- Table 4. Provider of Computer and Internet Services for Households with Children in Public or Private School, by Select Characteristics

Employment Tables
- Table 1. Experienced and Expected Loss of Employment Income by Select Characteristics
- Table 2. Employment Status and Sector of Employment, by Select Characteristics
Household Pulse Survey Public Use File (PUF)

Microdata files contain individual responses to survey questions. They can be used to create custom tabulations and allow users to delve further into the rich detail collected in the Household Pulse Survey (HPS). The weekly HPS microdata files are released one week after the Household Pulse Survey Data Tables.

Each of the weekly releases include a Public Use Data File (PUF), a replicate weight data file, and a data dictionary.

Weekly PUF Releases

Household Pulse Survey PUF: May 14 – May 19

- HPS Week 3 PUF SAS  [22 MB]
- HPS Week 3 PUF CSV  [22 MB]

Household Pulse Survey PUF: May 7 – May 12

- HPS Week 2 PUF SAS  [22 MB]
- HPS Week 2 PUF CSV  [22 MB]

Household Pulse Survey PUF: April 23 – May 5

- HPS Week 1 PUF SAS  [39 MB]
- HPS Week 1 PUF CSV  [47 MB]
Percentage of Adults in Households Where Someone Lost Employment Income Since March 13, 2020
15 Largest Metro Areas: Week 4

Los Angeles-Long Beach-Anaheim, CA: 63.4%
Riverside-San Bernardino-Ontario, CA: 60.6%
Miami-Fort Lauderdale-Pompano Beach, FL: 57.3%
Detroit-Warren-Dearborn, MI: 57.1%
New York-Newark-Jersey City, NY-NJ-PA: 56.0%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD: 53.8%
Dallas-Fort Worth-Arlington, TX: 53.3%
Chicago-Naperville-Elgin, IL-IN-WI: 52.1%
Atlanta-Sandy Springs-Alpharetta, GA: 51.0%
Houston-The Woodlands-Sugar Land, TX: 49.5%
UNITED STATES: 48.1%
Phoenix-Mesa-Chandler, AZ: 48.1%
San Francisco-Oakland-Berkeley, CA: 46.5%
Seattle-Tacoma-Bellevue, WA: 46.0%
Washington-Arlington-Alexandria, DC-VA-MD-WV: 43.5%
Boston-Cambridge-Newton, MA-NH: 43.1%

Percentage of Adults Experiencing Anxiety in the Last 7 Days

Data & Resources: HPS

- Household Pulse Survey main page: https://www.census.gov/householdpulsedata
- HPS Data tool: https://www.census.gov/data-tools/demo/hhp
- HPS Data Tables main page: https://www.census.gov/programs-surveys/household-pulse-survey/data.html
- HPS Survey Respondent overview: https://www.census.gov/programs-surveys/household-pulse-survey.html
- About the Census Bureau’s Experimental Data Series: https://www.census.gov/content/census/en/data/experimental-data-products.html
Future

• The Census Bureau is assessing the potential for a second phase of one or both of the Pulse Surveys.

• Potential for leveraging this new rapid response capability to meet future data needs, particularly when measurement of rapid dramatic social and/or economic changes.

• The agile approach taken to deploy the Pulse Surveys further enables the Census Bureau to mature this capability, tailoring response to emergent information needs, e.g. ????

• A rapid change in economic or social conditions.

• A national or sub-national event that disrupts daily life and demands immediate, objective information to support effective response.