



Updated December 28, 2020

New Census Bureau Products Track COVID-19's Effects

Introduction

In May 2020, the U.S. Census Bureau released its first findings from the new Household Pulse and Small Business Pulse Surveys, both now in Phase 3. These experimental products are designed to track the effects of the novel coronavirus disease—first observed in Wuhan, China, in 2019 (COVID-19) and declared a pandemic by the World Health Organization in March 2020. The bureau defines such products as those “using new data sources or methodologies that benefit data users in the absence of the relevant products.” Long before COVID-19 struck, the federal statistical system produced data that could gauge changes in mortality, health status, food supplies, unemployment, and business conditions, among other important variables. Not previously available, however, were the kind of data now provided by the pulse surveys, which are not only detailed but also being disseminated in almost real time to help policymakers respond to the pandemic and plan for recovery.

Household Pulse Survey

The Household Pulse Survey questionnaire is the product of collaboration among some of the major agencies in the federal statistical system, led by the Census Bureau (Department of Commerce), which is conducting the survey and presenting the results. The other collaborators are the Economic Research Service (Department of Agriculture), Bureau of Labor Statistics (BLS, Department of Labor), Bureau of Transportation Statistics (Department of Transportation), National Center for Health Statistics (Department of Health and Human Services), National Center for Education Statistics (Department of Education), Department of Housing and Urban Development, and Social Security Administration. Phase 1 topics covered were individuals’ “employment status, spending patterns, food security, housing, physical and mental health, access to health care, and educational disruption.” Phase 2 asked additional questions, including those about application for and receipt of benefits, “mental health services,” evictions and foreclosures, “availability of financial resources,” postsecondary educational disruptions, “capacity to telework, and travel practices.” The Phase 3 questionnaire is unchanged from Phase 2. Phase 3 responses are made online and are voluntary, as they were in Phases 1 and 2.

Level of Geography and Frequency

The Census Bureau is producing statistics from the survey for the 50 states, the District of Columbia (DC), and the 15 most populous metropolitan statistical areas (MSAs).

Data collection for Phase 1 began on April 23, 2020, and ended on July 21. Phase 2 began on August 19, and results were released biweekly through November 4. The first data were released from Phase 3 on November 18; the bureau

expects these releases to continue biweekly through January 6, 2021.

Sample Design and Methods

The survey draws on a systematic sample of housing units from the Census Bureau’s Master Address File, supplemented by email addresses and mobile telephone numbers from the bureau’s Contact Frame. The initial Phase 1 sample, according to the bureau, was divided into three panels, and each was interviewed up to three times. In successive weeks, the bureau replaced one panel with another to avoid overburdening respondents. The sample included four panels in the second and third weeks and three subsequently. Phase 2 involved the selection of independent panels for successive data collection periods, and respondents were interviewed once. Phase 3 uses the same design and methods as Phase 2.

Advantages and Limitations

The Census Bureau has noted that efforts are underway to introduce new questions about COVID-19 into the statistical agencies’ benchmark surveys. Producing these surveys, however, is “a highly deliberative process,” so data on the pandemic might not be available for months or years. The Household Pulse Survey, in contrast, has a short turnaround time. Although response rates may be lower than in the bureau’s traditional surveys, the pulse survey’s benefits include, in the bureau’s words, “implementation efficiency, cost, and timeliness of responses.”

Because, as the bureau has explained, “experimental data may not meet all” of its quality standards, it clearly identifies the pulse survey data, provides technical documentation, includes a “Source and Accuracy Statement” with each release, and invites user feedback about data quality and usefulness. (See, for example, <https://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html>.)

Illustrative Findings: November 25 to December 7, 2020

This period, highlighted below at the national level, was one when children could have had to meet school requirements from home and adults could have had to teach or help teach them. Adults, with or without children, could have faced multiple other challenges, which the survey results indicate.

Time devoted to learning activities. Of households with children enrolled in public or private schools, 49.9% reported that the children spent “much less” or “a little less” time on all learning activities in the past week (that is, the week before the survey) than before the pandemic.

Loss of employment income. Households with children under age 18 were more likely than childless households (55.3% versus 43.3%) to report loss of employment income since March 13, 2020.

Food. Whereas 17.1% of households reported that, before March 13, their households had enough food, but not always the types of food wanted, 24.8% of households reported this situation for the past seven days. The proportions who responded that, before March 13, the household sometimes or often did not have enough to eat were 6.6% and 2.0% respectively, compared with 8.4% and 2.6%, respectively, over the past week. Of households with children under age 18, 8.6% reported sometimes not having enough food for their households before March 13; 2.9% reported often not having enough food. These households acknowledged that they sometimes (10.9%) or often (3.9%) lacked enough food in the past seven days. Unemployed respondents living with children reported sometimes (15.8%) or often (6.2%) having insufficient food for their households in the last week.

Mental Health. Over half of respondents (53.4%) reported “feeling nervous, anxious, or on edge”; 45.8% reported “having little interest or pleasure in doing things”; and 43.7% acknowledged “feeling down, depressed, or hopeless” for “several days,” “more than half the days,” or “nearly every day” during the past week.

Housing. Of homeowners with mortgages, 10.1% reported not being up to date with their mortgage payments, while 19.5% of renters had missed rent payments. As for confidence that they could make the next month’s payment, 5.1% of owners with mortgages and 13.2% of renters expressed “no confidence”; the respective proportions rose to 8.7% and 19.6% among those not currently employed.

Small Business Pulse Survey

Agencies collaborating on the Small Business Pulse Survey include, among others, the Small Business Administration; Minority Business Development Administration and Bureau of Economic Analysis, both in the Department of Commerce; and BLS.

As in Phases 1 and 2, the Phase 3 questionnaire asks about altered conditions facing small businesses during the pandemic, including effects on “operating revenues and availability of cash; closures; changes in the number of paid employees or hours; the re-hiring of laid-off or furloughed employees; disruption of supply chains; adoption of different business practices; changes in operating capacity; missed loan and other payments; requests [for]/ receipt [of] financial assistance; and overall well-being and outlook for recovery.” Responses, like those for the Household Pulse Survey, continue to be online and voluntary in Phase 3.

Level of Geography and Frequency

The Census Bureau is releasing Phase 3 survey results weekly through January 14, 2021, by state and North American Industry Classification System (NAICS) sector and for the 50 most populous MSAs. Considered out of scope for the survey are agricultural production, railroads, the U.S. Postal Service, monetary authorities, funds and

other financial vehicles, religious grant operations and organizations, private households, public administration, and unclassified entities.

Sample Design and Methods

The survey’s target population is all nonfarm, single-location businesses with fewer than 500 employees and annual receipts of at least \$1,000 in the 50 states, DC, and Puerto Rico. Businesses eligible to participate in the survey are those that responded to the 2017 Economic Census. The sample had about 940,500 businesses in the first week and has had about 885,000 since then, after email addresses linked to multiple businesses were removed. As the Census Bureau explained, the sample in all phases of the survey has been divided into nine panels to reduce respondent burden.

Advantages and Limitations

A key advantage of the survey, as of its household counterpart, is that it provides frequent, detailed information on the topics covered.

The Census Bureau has pointed out that although the sample for the pulse survey is not a probability sample, “weights were applied to ensure that each weekly panel represented the full population.”

The survey’s definition of “small business” may differ from the definition(s) used by other organizations or federal agencies.

Nonresponse bias could affect the survey; businesses closed due to the pandemic might not respond because they have not received the bureau’s request to do so. Also, the survey estimates could be biased if businesses participating in the survey differ systematically from nonparticipants.

Illustrative Findings: December 7 to December 13, 2020

In response to the survey question, “Overall, how has this business been affected by the COVID-19 pandemic?”, a national average of 30.7% of businesses reported a “large negative effect.” More than one-third (38.5%) reported decreased “revenues/sales/receipts” in the past week (referring to the week before businesses answered the survey); 5.1% reported temporary or permanent closings; 12.6% answered that they had fewer paid employees; and 21.3% reported that the paid employees worked fewer hours. Disruptions in obtaining supplies were noted by 51.6% of businesses. Almost three-quarters (73.8%) acknowledged requesting assistance from the Paycheck Protection Program (see CRS Report R46284, *COVID-19 Relief Assistance to Small Businesses: Issues and Policy Options*) since March 13, 2020, and 72.7% reported receiving assistance from this source since March 13. Responding to the question “how much time do you think will pass before this business returns to its normal level of operations relative to one year ago?”, 45.9% answered “more than six months,” while 9.1% did not think the business would return to its normal level of operations or reported it permanently closed.

Jennifer D. Williams, Specialist in American National Government

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.