The Experimental Household Pulse Survey

Responding to Data Needs During COVID-19 Era

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Annual Conference on Disability Statistics: Meeting Emerging Demands for Data
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Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau. All results are from the Household Pulse Survey website that notes the following: The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY21-091.
Outline

• Process and Personnel Changes Due to COVID
• Changes to Existing Household and Business Surveys
• Examples of Non-Survey Data Products
• Pulse Surveys
• Health Impacts from the Household Pulse Survey
Process and Personnel

Surveys
In-person contact (CAPI) => telephone contact (CATI)
CATI from call-center => CATI from home
Paper surveys => online surveys
Paper invitation => email invitation
Sampling strategies adjusted

Administrative Data
New uses and enhanced uses

Personnel
Shift to telework where possible (at times mandatory)
Encouraged innovation and experimentation
### Overview

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Changes to Existing Surveys
Business Surveys and Economic Indicators

**Annual Business Survey**
- ABS 2019: ability of workers to work from home and factors affecting this ability
- ABS 2020: effect of the pandemic on sales, federal assistance

**Annual Capital Expenditure Survey**
- Receipt of, and uses of, federal assistance
- Impact to payroll

**Annual Survey of Manufactures**
- May ask days closed due to pandemic
- May ask additional detail for products related to pandemic (N95 respirators)
- Donation of products

**Service Annual Survey**
- May ask telemedicine revenue estimates for hospitals and nursing homes

**Economic Indicators**
- To assess impact on quality of responses, questions added temporarily to five economic indicator programs
- Questions asked whether changes in employment, temporary closures, or delays in the supply chain had an impact on reported revenues, sales, or inventories
Household Surveys

American Community Survey
- Revised messaging
- Altered mail out strategy
- Sampling adjustments
- Contact strategy shifted to telephone

Current Population Survey
- At request of the National Center for Education Statistics, added 7 questions about pandemic impact on schooling at individual child level (for example, availability of computers or other digital devices for educational purposes)
- Concerns about the coronavirus added as an answer category to two questions in the November Voting Supplement

Survey of Income and Program Participation
- Contact strategy shifted to telephone
- Answer lists and help text modified in various sections to specify how pandemic reasons should be handled
- New content added on the receipt and use of economic stimulus payments
- New content added on how the following were impacted by the pandemic: unemployment compensation, school meals, retirement planning, and missed or deferred rent or mortgage payments
Examples of Non-Survey Data Products
Business Formation Statistics

Goal
An experimental, public-use data product designed to fill a gap in the availability of high frequency, timely data on new business formation in the U.S. The quarterly BFS provide information on business applications and business formations 2 weeks after the close of a quarter. Weekly BFS is released approximately 5 days after week’s end.

Process
The Census Bureau receives weekly information on applications for Employer Identification Numbers (EINs) on form SS-4 through the Internal Revenue Service. We clean these according to criteria.

Partners
Economists at Board of Governors of the Federal Reserve System, Federal Reserve Bank of Atlanta, University of Maryland, and University of Notre Dame.

Content
Business Applications
Excludes applications for tax liens, estates, trusts and for certain industries (private households, etc.).

High Propensity Business Applications
Business applications with a high-propensity of turning into a business with payroll (based upon a number of factors on the application such as sector).

Business Applications with Planned Wages
Applications that are high-propensity and that indicate a planned data for paying wages.

Business Applications from Corporations
Applications that are high-propensity and that come from corporations or personal service corporations.
Community Resilience Estimates

**Goal**
Provide tract-level and county-level information on a community’s ability to withstand the health, social, and economic impacts of a disaster (such as the pandemic or a hurricane).

**Process**
Model combines individual and household characteristics from the American Community Survey with publicly available data from the National Health Interview Survey.

**Example**
Prince George’s County Maryland (where headquarter for the Census Bureau is located). Figure shows some of the tract estimates (on website, the user can scroll down to see all tracts).
Pulse Surveys
Small Business Pulse Survey

Goal
Measure the effects of the pandemic on businesses overall and aspects of their operations and finances, leveraging existing infrastructure and producing high frequency geographic and industry detail.

Process
Email invitation to online survey using existing frame. Response rate of >25%. Three phases of collection, phase 4 being planned.

Partners
Small Business Administration; Federal Reserve Board of Governors; International Trade Administration; Minority Business Development Agency; Bureau of Transportation Statistics; National Telecommunications and Information Administration; Office of Tax Analysis, Department of Treasury; Bureau of Labor Statistics

Content
Overall
Overall effect of the pandemic with 5-bin response.

Operations
Change in revenue, change in number of employees, change in employee hours, temporary closures.

Challenges
Supply chain disruptions, factors impacting capacity, change in business’s capacity, future needs

Finance
Cash on hand, loan or other payment defaults, requests for assistance, receipt of assistance.

Outlook
Expectations. How much time until the business returns to average/normal level of operations.
Household Pulse Survey

Goal
Deploy quickly and efficiently, collecting data on a range of ways in which people’s lives have been impacted by the pandemic. Since the environment and circumstances are rapidly changing, designed to be able to quickly assess and report on critical issues.

Process
Qualtrics platform. Used existing email and cell-phone contact frames. Matched to Master Address File (MAF) records. Emails and phone numbers from respondent contacts and from third party vendors. Three phases.

Partners
Bureau of Labor Statistics; National Center for Health Statistics; Housing and Urban Development; National Center for Education Statistics; USDA Economic Research Service; Office of Management and Budget; Bureau of Transportation Statistics; Social Security Administration.

Content
Employment
Expected loss of employment income, ...

Food Security
Past and current food sufficiency, ...

Health
Health and mental health, delays in getting care, health insurance, vaccination and COVID status (new), ...

Housing
Confidence about paying rent/mortgage next month, ...

Education
Hours householder spent on educational activities, ...

Program Use
Social Security Programs, Unemployment Insurance

Spending
Series on expenditures
Health Impacts from the Household Pulse Survey
Mental Health

**Patient Health Questionnaire (PHQ-2)**

*Over the last 7 days, how often have you been bothered by*

... having little interest or pleasure in doing things?
... feeling down, depressed, or hopeless?

**Generalized Anxiety Disorder (GAD-2) scale**

*Over the last 7 days, how often have you been bothered by*

... feeling nervous, anxious, or on edge?
... not being able to stop or control worrying?
Mental Health Measures

Source: Data from the Household Pulse Survey (April 23rd - December 21st, 2020).
Universe: 18+ Adults

2020CENSUS.GOV
Symptoms of Anxiety or Depression
Household Pulse Survey, April 23 – November 23, 2020

NHIS January-June 2019:
- Anxiety Symptoms: 8.2%
- Depressive Symptoms: 6.6%
Vaccinations

**Likelihood of Receiving a COVID-19 Vaccine When Available**
(Percentage of unvaccinated adults)

- **50.9%**: Definitely
- **25.6%**: Probably
- **13.9%**: Probably not
- **9.5%**: Definitely not

Vaccinations

Likelihood of Receiving a COVID-19 Vaccine When Available by Health Insurance Status
(Percentage of unvaccinated adults)

- **Definitely**
- **Probably**
- **Probably not**
- **Definitely not**

### Insured

- **Definitely**: 55.5%
- **Probably**: 23.9%
- **Probably not**: 12.7%
- **Definitely not**: 7.8%

### Uninsured

- **Definitely**: 33.5%
- **Probably**: 31.6%
- **Probably not**: 17.9%
- **Definitely not**: 16.9%

Disability Questions Coming to the Household Pulse Survey

- Do you have difficulty seeing, even when wearing glasses? Select one.
- Do you have difficulty hearing, even when using a hearing aid? Select one.
- Do you have difficulty remembering or concentrating? Select one.
- Do you have difficulty walking or climbing stairs? Select one.

1. No - no difficulty
2. Yes - some difficulty
3. Yes - a lot of difficulty
4. Cannot do at all
Lessons Learned

- High frequency data becomes even more important in crisis
- Existing data assets are invaluable (frames, benchmarking)
- Partnerships with other statistical agencies and outside stakeholders provide critical expertise (especially for content and design)
- Flexible platforms whose use can continue beyond the pandemic
- Resilient and innovative staff
Thank you!

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Household Pulse Survey
https://www.census.gov/householdpulsedata
Not Working Because of Children’s Arrangements

Percent Not Working for Child Arrangement Reasons
Among 25-44 Year Olds who are not Retired or Out of the Labor Force

Source: Data from the Household Pulse Survey (April 23rd - December 21st, 2020).
Universe: 18+ Adults
Percentage of Adults in Households Where Someone Lost Employment Income Since March 13
15 Largest Metros: December 9 - December 21

Confidence in Paying Rent or Mortgage

Low or No Confidence in Paying Rent or Mortgage by Age and Presence of Children

Source: Data from the Household Pulse Survey (April 23rd - December 21st, 2020).
Universe: 18+ Adults

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25 2020CENSUS.GOV
Low or No Confidence in Affording Enough Food among Households with Respondent 18-64 Years Old who are Not Retired or Out of the Labor Force by Presence of Children
Expecting Loss in Employment Income

Source: Data from the Household Pulse Survey (April 23rd - December 21st, 2020).
Universe: 18+ Adults
Not Working Because of Children’s Arrangements

Percent of Men and Women Not Working Because of Children’s Arrangements among Adults who are Not Retired or Out of the Labor Force

Source: Data from the Household Pulse Survey (April 23rd - December 21st, 2020).
Universe: 18+ Adults

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