The Experimental Household Pulse Survey

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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, CBDRB-FY21-POP001-0123.
The Experimental Household Pulse Survey

Development of Household Pulse Survey
• Coordinated at the Census Bureau
• Designed to deploy quickly and efficiently
• Collecting data on ways in which people's lives have been impacted by the pandemic
• Since the environment and circumstances rapidly changing, design meant to be able to quickly assess and report on critical issues, as fast as possible

Experimental Rapid Response Survey
• Proof of Concept

Platform: Qualtrics
• FedRAMP Moderate authorization.
• Census Bureau Authority to Operate.
• Could be programmed in-house
• Facilitates multiple distribution modes

Email and Text Invitations to Take an Online Survey
• National Processing Center was shut down due to COVID19.
• We could not mail an invitation.
• Use a new resource that includes email addresses and cell-phone numbers and associates them with addresses

Timeline
• Development: March 23–April 23, 2020
• Phase 1: April 23–July 21, 2020
• Phase 2: August 19–October 2020
• Phase 3: October – December 2020 (shift from OMB emergency clearance to regular clearance)
• Phase 3 update: January 6–March 1, 2021
• Phase 3.1 In the field April 14, 2021

Partners
Phase 1
* 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

Phase 2/3 Additional Agencies
* Bureau of Transportation Statistics
* Social Security Administration

January 2021 update Phase 3
* Centers for Disease Control

Phase 3.1 Additional Agencies
* National Institute of Occupational Health and Safety
* Maternal and Child Health Bureau
* Department of Defense
* Energy Information Administration (expected)
Basics of the Contact Frame

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.

Phone Frame
- The phone frame contains over a billion phone/address pairs.
- The phone frame contains cell-phone/address pairs for over 79% of ACS eligible addresses in the country.
- Three quarters of those phones were acquired in the past two years.

Email Frame
- The email frame contains over 686 million well-formed email/address pairs.
- The email frame contains email/address pairs for almost 74% of ACS eligible addresses in the country.
- Two thirds of those emails were acquired in past two years.

Updates to the contact frame are made multiple times per year.
All Household Addresses - 144,800,000

- 108,100,000 MAFIDs with at least one email
  75%

117,700,000 records on our universe file that have an email, cell phone or both
  81%

All Household Addresses - 144,800,000

- 89,120,000 MAFIDs with at least one cell phone exist
  62%
## Responses

<table>
<thead>
<tr>
<th>PHASE 1 Week</th>
<th>Interviews</th>
<th>Weighted Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 23 – May 5: Week 1</td>
<td>74,413</td>
<td>3.8</td>
</tr>
<tr>
<td>May 7 – May 12: Week 2</td>
<td>41,996</td>
<td>1.3</td>
</tr>
<tr>
<td>May 14 – May 19: Week 3</td>
<td>132,961</td>
<td>2.3</td>
</tr>
<tr>
<td>May 21 – May 26: Week 4</td>
<td>101,215</td>
<td>3.1</td>
</tr>
<tr>
<td>May 28 – June 2: Week 5</td>
<td>105,066</td>
<td>3.5</td>
</tr>
<tr>
<td>June 4 – June 9: Week 6</td>
<td>83,302</td>
<td>3.1</td>
</tr>
<tr>
<td>June 11 – June 16: Week 7</td>
<td>73,472</td>
<td>2.3</td>
</tr>
<tr>
<td>June 18 – June 23: Week 8</td>
<td>108,062</td>
<td>2.9</td>
</tr>
<tr>
<td>June 25 – June 30: Week 9</td>
<td>98,663</td>
<td>3.3</td>
</tr>
<tr>
<td>July 2 – July 7: Week 10</td>
<td>90,767</td>
<td>3.2</td>
</tr>
<tr>
<td>July 9 – July 14: Week 11</td>
<td>91,605</td>
<td>3.1</td>
</tr>
<tr>
<td>July 16 – July 21: Week 12</td>
<td>86,792</td>
<td>2.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHASE 2/3 Week</th>
<th>Interviews</th>
<th>Weighted Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 19 – August 31: Week 13</td>
<td>109,051</td>
<td>10.3</td>
</tr>
<tr>
<td>September 2 – September 14: Week 14</td>
<td>110,019</td>
<td>10.3</td>
</tr>
<tr>
<td>September 16 – September 28: Week 15</td>
<td>99,302</td>
<td>9.2</td>
</tr>
<tr>
<td>September 30 – October 12: Week 16</td>
<td>95,604</td>
<td>8.8</td>
</tr>
<tr>
<td>October 14 – October 26: Week 17</td>
<td>88,716</td>
<td>8.1</td>
</tr>
<tr>
<td>October 28 – November 9: Week 18</td>
<td>58,729</td>
<td>5.3</td>
</tr>
<tr>
<td>November 11 – November 23: Week 19</td>
<td>71,939</td>
<td>6.6</td>
</tr>
<tr>
<td>November 25 – December 7: Week 20</td>
<td>72,484</td>
<td>6.7</td>
</tr>
<tr>
<td>December 9 – December 21: Week 21</td>
<td>69,944</td>
<td>6.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHASE 3 Week</th>
<th>Interviews</th>
<th>Weighted Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 6 – January 18: Week 22</td>
<td>68,348</td>
<td>6.4</td>
</tr>
<tr>
<td>January 20 – February 1: Week 23</td>
<td>80,567</td>
<td>7.5</td>
</tr>
<tr>
<td>February 3 – February 15: Week 24</td>
<td>77,122</td>
<td>7.3</td>
</tr>
<tr>
<td>February 17 – March 1: Week 25</td>
<td>77,788</td>
<td>7.3</td>
</tr>
<tr>
<td>March 3 – March 15: Week 26</td>
<td>78,306</td>
<td>7.4</td>
</tr>
<tr>
<td>March 17 – March 29: Week 27</td>
<td>77,104</td>
<td>7.2</td>
</tr>
</tbody>
</table>

**TOTAL** 29,738,950 Sampled Units 2,388,021 Interviews
Content: Phase 1, Phase 2/3, Phase 3.1

Basic demographics
Age, sex, race, Hispanic origin, marital status, educational attainment
Disability status (NCHS/CDC)
Armed forces status (DOD)

Employment questions
Employment and employment income (BLS/Census)
Spending source of funds (BLS)
Series on expenditures (BLS)
Commuting and Telework series (BTS)
Transportation Questions (BTS)
Essential worker occupations (NIOSH)

Food security questions
Past and current food sufficiency (USDA-ERS)
Free meals (USDA-ERS)
Money spent on groceries and prepared foods (USDA-ERS)
SNAP receipt (USDA-ERS)

Program use
Social Security programs (SSA)
Unemployment Insurance (BLS)

Health questions
Overall health (NCHS)
Mental health and mental health services use (NCHS)
Health insurance (NCHS/Census)
Access and delays in health care (NCHS)
Vaccination receipt, intentions, and COVID diagnosis (CDC: January 2021)
Telehealth (NCHS/MCHB)
Children’s preventive health care (MCHB)

Housing questions
Tenure (HUD)
Living quarters (HUD)
Rent and mortgage current payment status (HUD)
Confidence about paying rent/mortgage next month (HUD)
Eviction and foreclosure expectations (HUD)

Education questions
Effects of COVID on how K-12 children received education (NCES)
Access to computer/digital device and internet availability (NCES)
Time spent with teachers, spent on educational activities, and studying (NCES)
Post-Secondary questions (NCES)
Childcare (MCHB)
Questionnaire Design

• Expert Review
  • English and Spanish
  • Included contact scripts

• Web Probing
  • English only
  • Content focused

• Cognitive Testing
  • English only
  • Content focused

• Field Experiments
  • English and Spanish
  • Content and Contact scripts
Cognitive Testing and Field Experiments

• **Cognitive Testing**
  • Before each phase
  • Remote interviewing delayed (COVID)
  • Findings are somewhat different from Web probing

• **Field Experiments**
  • How to access Spanish translation
  • How to invite to a bilingual survey on email
  • How to measure “homeschooled” in COVID-times
Text analytics and Word clouds
Applied for Unemployment Insurance by Weeks and Hispanic Origin and Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Applied for Unemployment Insurance by Hispanic Origin

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Applied for Unemployment Insurance by Race

Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Received Stimulus Payment by Weeks and Hispanic Origin/Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Received a Stimulus Payment by Hispanic Origin

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
## Received Stimulus Payment by Race

<table>
<thead>
<tr>
<th>Race Group</th>
<th>Stimulus Payment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total not-Hispanic</td>
<td>49.5</td>
</tr>
<tr>
<td>White</td>
<td>47.1</td>
</tr>
<tr>
<td>Black</td>
<td>60.9</td>
</tr>
<tr>
<td>AIAN</td>
<td>56.0</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>49.4</td>
</tr>
<tr>
<td>Chinese</td>
<td>51.7</td>
</tr>
<tr>
<td>Filipino</td>
<td>61.3</td>
</tr>
<tr>
<td>Japanese</td>
<td>47.7</td>
</tr>
<tr>
<td>Korean</td>
<td>60.8</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>58.9</td>
</tr>
<tr>
<td>Other Asian</td>
<td>61.5</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>74.1</td>
</tr>
<tr>
<td>Chamorro</td>
<td>79.4</td>
</tr>
<tr>
<td>Samoan</td>
<td>55.6</td>
</tr>
<tr>
<td>Other Pacific Islander</td>
<td>52.5</td>
</tr>
</tbody>
</table>

### Note:
Race groups are the not-Hispanic population, alone population.

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Mental Health Measures

Source: Data from the Household Pulse Survey (April 23rd, 2020 – March 29th, 2021).
Universe: 18+ Adults

NHIS January-June 2019:
- Anxiety Symptoms: 8.2%
- Depressive Symptoms: 6.6%
Symptoms of Anxiety by Weeks and Hispanic Origin and Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Symptoms of Anxiety by Hispanic Origin

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Symptoms of Anxiety by Race

Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Symptoms of Depression by Weeks and Hispanic Origin and Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
# Symptoms of Depression by Hispanic Origin

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

<table>
<thead>
<tr>
<th>Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28.8</td>
</tr>
<tr>
<td>Mexican</td>
<td>30.8</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>35.5</td>
</tr>
<tr>
<td>Cuban</td>
<td>36.7</td>
</tr>
<tr>
<td>Other Hispanic</td>
<td>31.6</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>28.3</td>
</tr>
</tbody>
</table>
Symptoms of Depression by Race

Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Had COVID by Weeks and Hispanic Origin and Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Had COVID by Hispanic Origin

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Had COVID by Race

Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Received Vaccine by Weeks and Hispanic Origin and Race

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Received Vaccine by Hispanic Origin

<table>
<thead>
<tr>
<th>Hispanic Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>24.6</td>
</tr>
<tr>
<td>Mexican</td>
<td>18.9</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>19.0</td>
</tr>
<tr>
<td>Cuban</td>
<td>22.8</td>
</tr>
<tr>
<td>Other Hispanic</td>
<td>18.2</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>25.8</td>
</tr>
</tbody>
</table>

Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Received Vaccine by Race

Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).
Household Pulse Survey Website

Measuring Household Experiences during the Coronavirus Pandemic

Data collection for Phase 3 of the Household Pulse Survey ran from October 28, 2020 – March 29, 2021 and is now closed. Data collection for Phase 3.1 of the survey is scheduled to begin on April 14, 2021, with the next data release on May 3, 2021.

What is the Household Pulse Survey?

The U.S. Census Bureau, in collaboration with multiple federal agencies, is in a unique position to produce data on the social and economic effects of coronavirus on American households. The Household Pulse Survey is designed to deploy quickly and efficiently, collecting data to measure household experiences during the coronavirus 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.

Household Pulse Survey COVID Vaccine Tracker (cont.)

Percentage of Those Aged 18 and Over Who Are Hesitant About Receiving a COVID-19 Vaccine

National Reasons for Vaccine Hesitancy
Among those who are hesitant about receiving a COVID-19 vaccine (respondents were able to select multiple reasons)

- 48.7% (+/- 1.8%) Concerned about side effects
- 38.6% (+/- 1.6%) Plan to wait and see if it is safe
- 36.4% (+/- 1.8%) Don't trust COVID-19 vaccine
- 28.6% (+/- 1.4%) Don't trust the government
- 27.9% (+/- 1.8%) Don't believe I need it
- 20.3% (+/- 1.3%) Don't know if it will work
- 15.0% (+/- 1.2%) Think other people need it more
- 15.2% (+/- 1.3%) Other
- 14.7% (+/- 1.2%) Don't like vaccines
- 14.3% (+/- 0.9%) Doctor has not recommended it
- 8.6% (+/- 0.8%) Concerned about cost

National Hesitancy Rate by Characteristic

Where to find the data

Household Pulse Survey main page:
https://www.census.gov/householdpulsedata

Data tool:
https://www.census.gov/data-tools/demo/hhp

Vaccine tracker:

Data Tables main page:
https://www.census.gov/programs-surveys/household-pulse-survey/data.html

Technical documentation:
https://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html

Survey Respondent overview:
https://www.census.gov/programs-surveys/household-pulse-survey.html
Questions for NAC

• Are there special considerations for your constituency that we should keep in mind that might inhibit contact and participation to the Household Pulse Survey via the email and text strategy?

• What are your concerns and recommendations regarding differential non-response by subgroups within the covered frame and for MAFID addresses that do not have either emails or cell phone numbers and therefore currently excluded from the survey?

• As we look forward to the future of the Household Pulse Survey, what questions or measures should we consider, especially as we think about recovery?
Thank You!