U.S. Census Bureau’s Household Pulse Survey and Its Possible Uses for SCAG Region

JungHo Park, PhD
Research Professor at Chung-Ang University, Seoul, South Korea
Nonresident Research Associate at USC Population Dynamics Research Group

USC Price
Sol Price School of Public Policy
Background

The COVID-19 pandemic disrupted nearly all Americans’ lives and livelihoods from a wide range of public health and socioeconomic perspectives.

But some demographic and socioeconomic groups were hit harder than others.

Pandemic experiences and hardships also vary across regions and over time.

How do we know the variations and disparities in the pandemic hardships? Do we have any data?

Yes – here is the U.S. Census Bureau’s new data for all, Household Pulse Survey (HPS).
The Advent of U.S. Census Bureau’s Household Pulse Survey (HPS)
U.S. COVID-19 Trend and the Advent of HPS in April, 2020

Since 4/23/2020, the **ONLY RECORD** of the past one year and two months in the U.S.

And the survey **STILL ONGOING NOW**

https://doi.org/10.1080/12265934.2021.1877566
What is the Household Pulse Survey?

**One** of U.S. Census Bureau’s quick and timely responses to the pandemic, together with 11 federal agencies*

- **Who** – Adult (18+) Americans (including SCAG residents)
- **When** – Biweekly since 4/23/2020 (initially even weekly)
- **Where** – Entire U.S. mainland (including SCAG region)
- **How** – 20-minute online survey
- **What** – i) Pandemic hardships & ii) various policies and programs

## Public Health and Socioeconomic Hardships and Pandemic Policies

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Example Survey Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandemic Hardships</td>
<td>Income Loss</td>
<td>Have you, or has anyone in your household experienced a loss of employment income since March 13, 2020?</td>
</tr>
<tr>
<td></td>
<td>Housing Instability</td>
<td>Is this household currently caught up on mortgage (or rent) payments?</td>
</tr>
<tr>
<td></td>
<td>Transit Use Changes</td>
<td>Have you taken fewer trips than you normally would have by bus, rail, or ride-sharing services because of the coronavirus pandemic?</td>
</tr>
<tr>
<td></td>
<td>Food Insufficiency</td>
<td>Which of these statements best describes the food eaten in your household?</td>
</tr>
<tr>
<td></td>
<td>K-12/Secondary Education</td>
<td>How has the coronavirus pandemic affected how the children in this household received education for the 2020 – 2021 school year?</td>
</tr>
<tr>
<td></td>
<td>Expenditure Difficulty</td>
<td>How difficult has it been for your household to pay for usual household expenses?</td>
</tr>
<tr>
<td></td>
<td>Mental Health Problems</td>
<td>How often have you been bothered by the following problems ... Feeling Nervous, anxious, or on edge?</td>
</tr>
<tr>
<td>Other Types of Hardship</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pros and Cons of HPS Data When Used for SCAG Region

**Pros**

- **Data Type** – i) Simple Excel tables, ii) online tables & maps, and iii) microdata about individual respondents (2.5 million)
- **Spatial Scope** – Nationally representative, including SCAG region
- **Temporal Scope** – One year and two months since 4/23/2020, and ongoing
- **Survey Frequency** – Biweekly
- **Data Release Timing** – Near real-time, today’s survey result released in 2 weeks
- **Data Cost** – Free even without login

**Cons**

- **Spatial Level** – i) available across states but not counties, and ii) only 4 SCAG counties except Imperial and Ventura
- **Missing Period** – No survey at the very beginning of the pandemic from the 1\(^{st}\) confirmed case in 1/20/2020 to 4/22
- **Survey Break Time** – No survey for several weeks between 4 survey phases, the 4\(^{th}\) phase ongoing now
- **(For Researchers) Data Structure** – Pooled cross-sectional data but not panel data, except mid-2020 survey period (phase 1)
Possible Uses of HPS Data for Local SCAG Residents
Temporal Trajectory of Pandemic Hardships Over Time, U.S.

Sources: USC JungHo Park’s working paper based on the U.S. Census Bureau’s Household Pulse Survey (HPS) microdata

You can add other trendlines of your interest:

- Housing instability,
- Mental health disorders,
- Household expenditure difficulty, and many more
Comparisons Between SCAG Region, California, and U.S.

Sources: USC JungHo Park's working paper based on the U.S. Census Bureau’s Household Pulse Survey (HPS) microdata

You can add other states and the 15 largest metropolitan areas
Racial and Ethnic Differences in Pandemic Hardships, U.S.

### Sources:

Instead of race/ethnicity, you can use other common demographic and socioeconomic variables.

---

8/9, JungHo Park, USC PopDynamics
Compounded Pandemic Hardships by Race/Ethnicity, U.S.


* Four pandemic hardships include employment income loss, housing instability, food insufficiency, and self-rated overall health problem.
Thank you

For new papers based on the Household Pulse Survey:


JungHo Park, PhD
Jhpark.planner@gmail.com

USC Price
Sol Price School of Public Policy