

**32<sup>nd</sup> Annual USC-SCAG Demographic Workshop**  
**The Post-Pandemic City**  
**Panel on Unequal Impacts of COVID19**  
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# **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

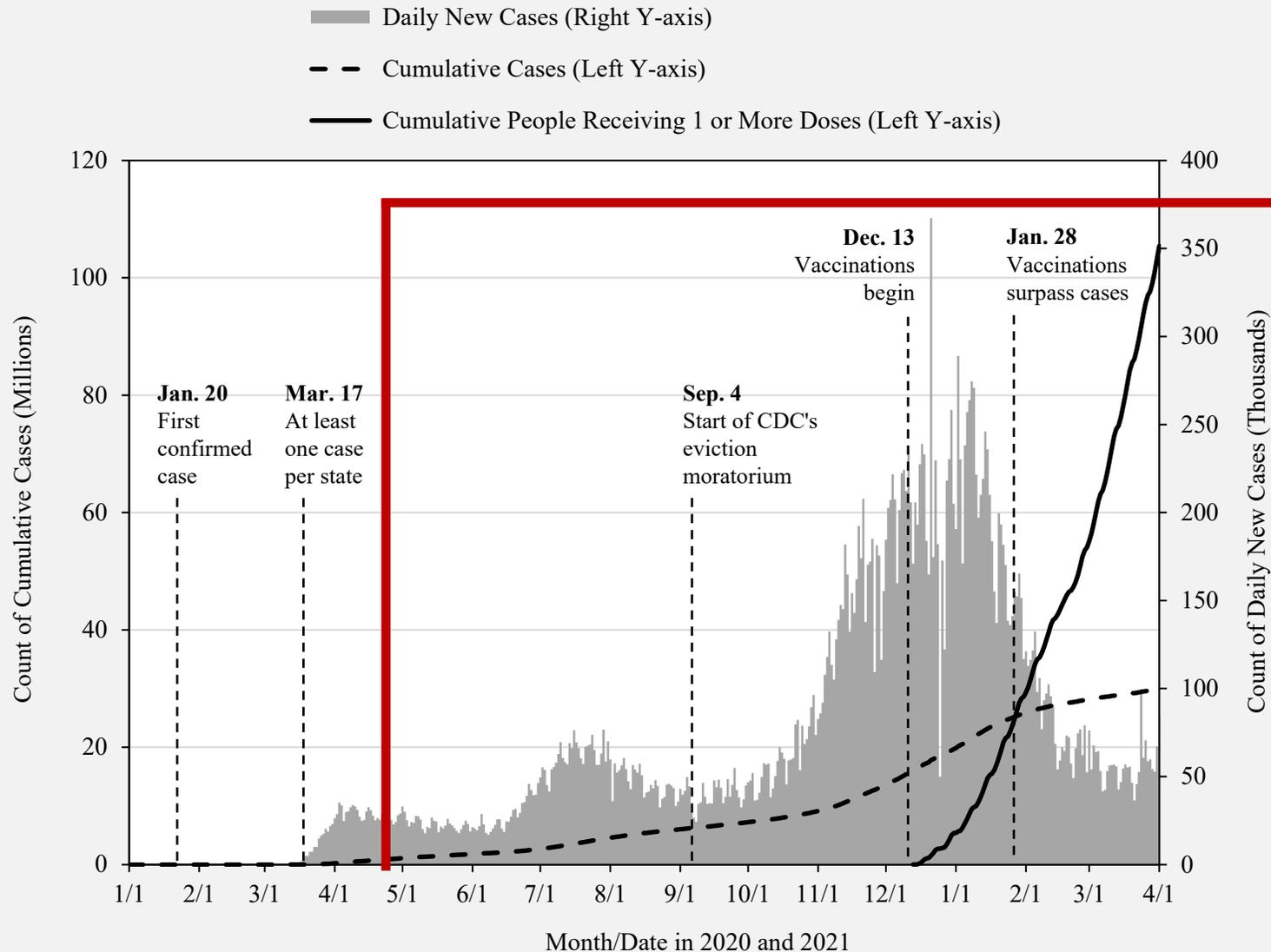
Pandemic experiences and hardships also ***vary across regions and over time***

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

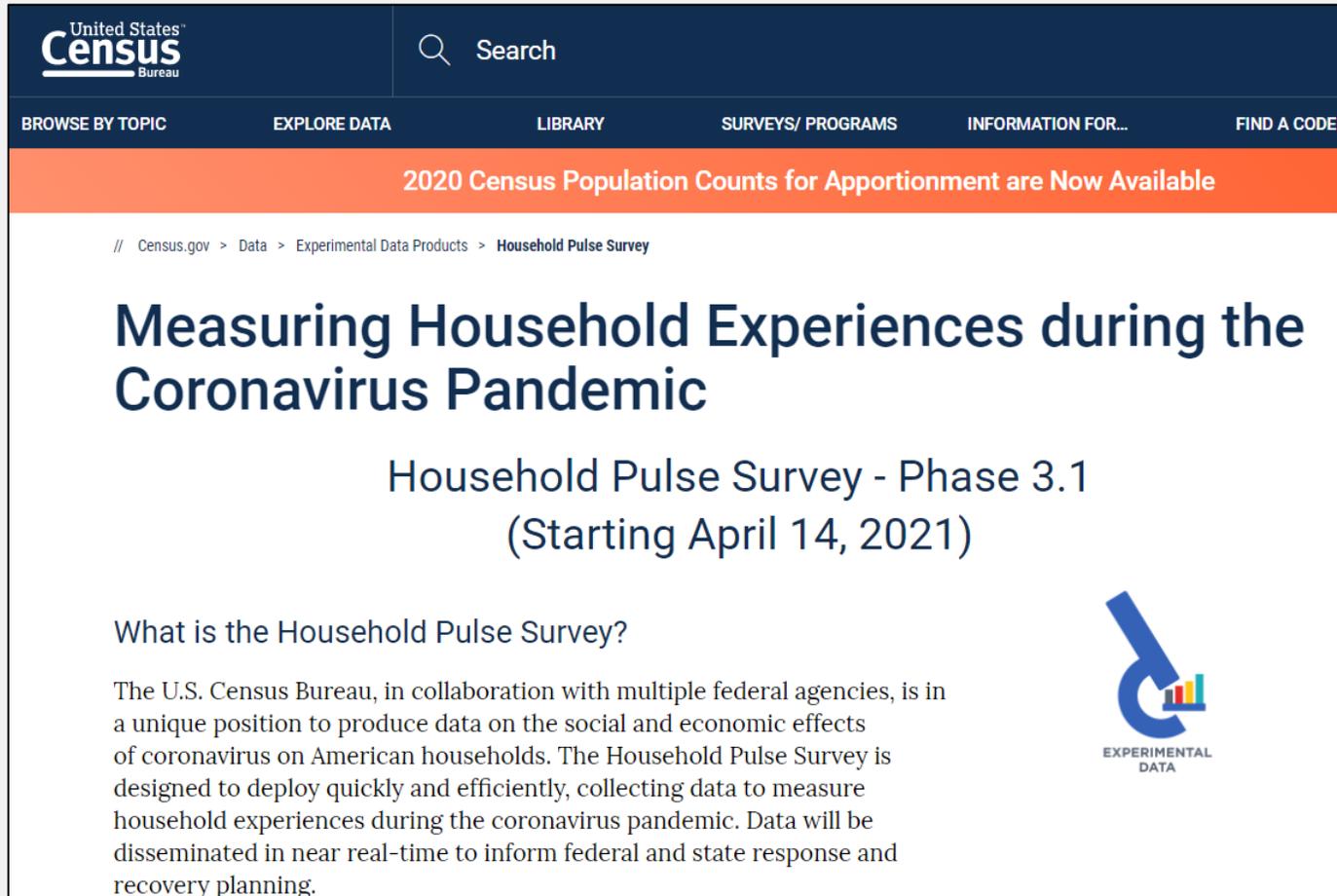


Since 4/23/2020, the **ONLY RECORD** of the past one year and two months in the U.S.

And the survey **STILL ONGOING NOW**

Sources: USC JungHo Park's revised graph from Figure 1 in Park, J. (2021). Who is hardest hit by a pandemic? Racial disparities in COVID-19 hardship in the U.S. International Journal of Urban Sciences, 25(2), 149–177. <https://doi.org/10.1080/12265934.2021.1877566>

# What is the Household Pulse Survey?



The screenshot shows the U.S. Census Bureau website. At the top, there is a dark blue navigation bar with the 'United States Census Bureau' logo on the left and a search bar on the right. Below the navigation bar is an orange banner with the text '2020 Census Population Counts for Apportionment are Now Available'. The main content area has a white background with a breadcrumb trail: '// Census.gov > Data > Experimental Data Products > Household Pulse Survey'. The title 'Measuring Household Experiences during the Coronavirus Pandemic' is prominently displayed in a large, dark blue font. Below the title, the subtitle 'Household Pulse Survey - Phase 3.1 (Starting April 14, 2021)' is shown in a smaller, dark blue font. To the left of the subtitle, there is a section titled 'What is the Household Pulse Survey?' followed by a paragraph of text. To the right of the text, there is a logo for 'EXPERIMENTAL DATA' featuring a stylized blue magnifying glass over a small bar chart.

United States  
**Census**  
Bureau

Search

BROWSE BY TOPIC EXPLORE DATA LIBRARY SURVEYS/ PROGRAMS INFORMATION FOR... FIND A CODE

2020 Census Population Counts for Apportionment are Now Available

// Census.gov > Data > Experimental Data Products > Household Pulse Survey

## Measuring Household Experiences during the Coronavirus Pandemic

Household Pulse Survey - Phase 3.1  
(Starting April 14, 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.



EXPERIMENTAL  
DATA

Sources: U.S. Census Bureau's Household Pulse Survey (HPS) main page  
<https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>

\* 11 federal agencies: 1. Bureau of Labor Statistics (BLS); 2. Bureau of Transportation Statistics (BTS); 3. Centers for Disease Control and Prevention (CDC); 4. Department of Defense (DOD); 5. Department of Housing and Urban Development (HUD); 6. Maternal and Child Health Bureau (MCHB); 7. National Center for Education Statistics (NCES); 8. National Center for Health Statistics (NCHS); 9. National Institute for Occupational Safety and Health (NIOSH); 10. Social Security Administration (SSA); 11. USDA Economic Research Service (ERS).

- 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

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

# Pros and Cons of HPS Data When Used for SCAG Region

## Pros

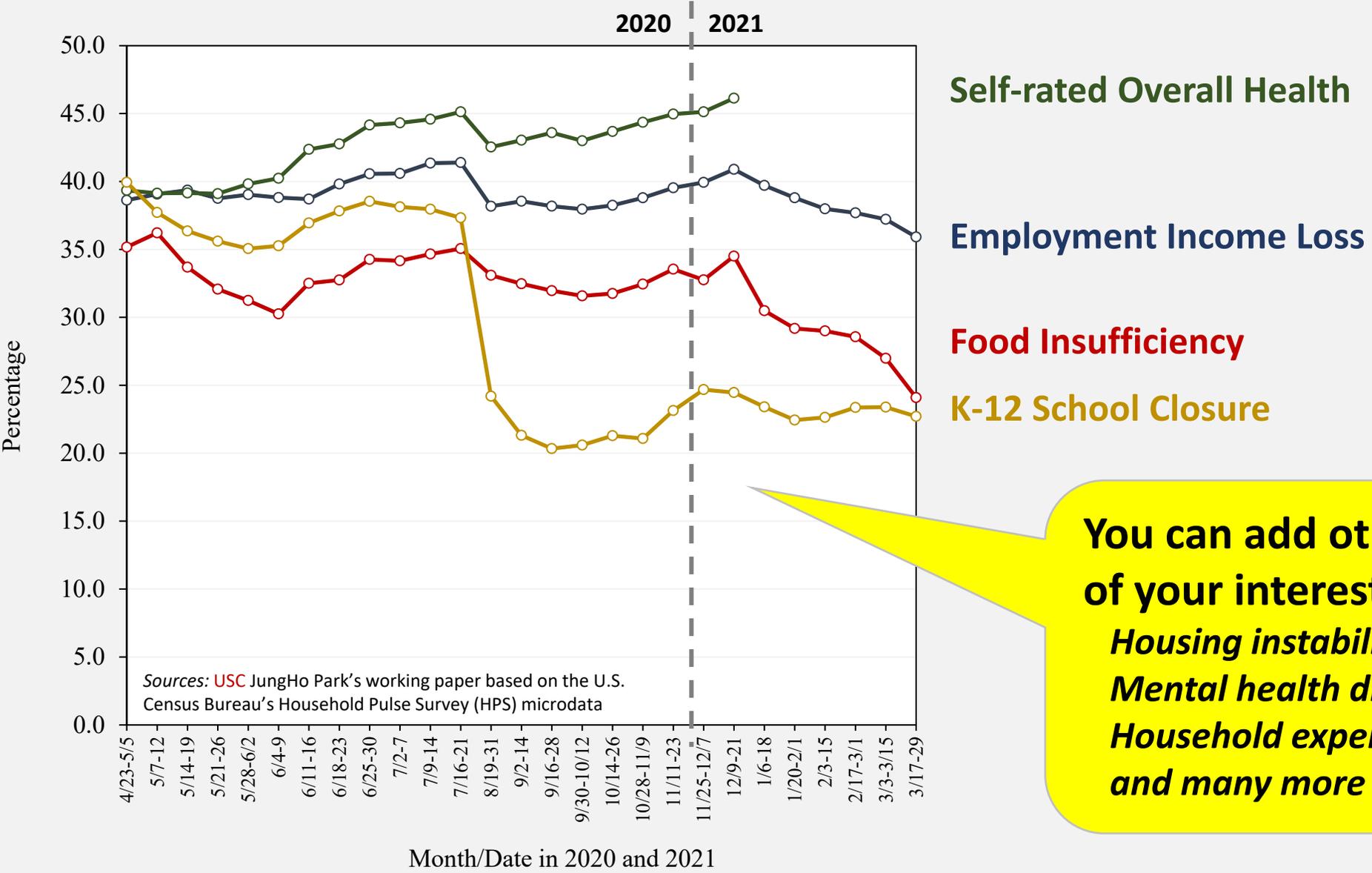
- **Data Type** – i) Simple Excel tables, ii) online tables & maps, and iii) microdata about individual respondents (2.5 million)
- **Spatial Scope** – Nationally representative, including SCAG region
- **Temporal Scope** – One year and two months since 4/23/2020, and ongoing
- **Survey Frequency** – 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<sup>st</sup> confirmed case in 1/20/2020 to 4/22
- **Survey Break Time** – No survey for several weeks between 4 survey phases, the 4<sup>th</sup> 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***

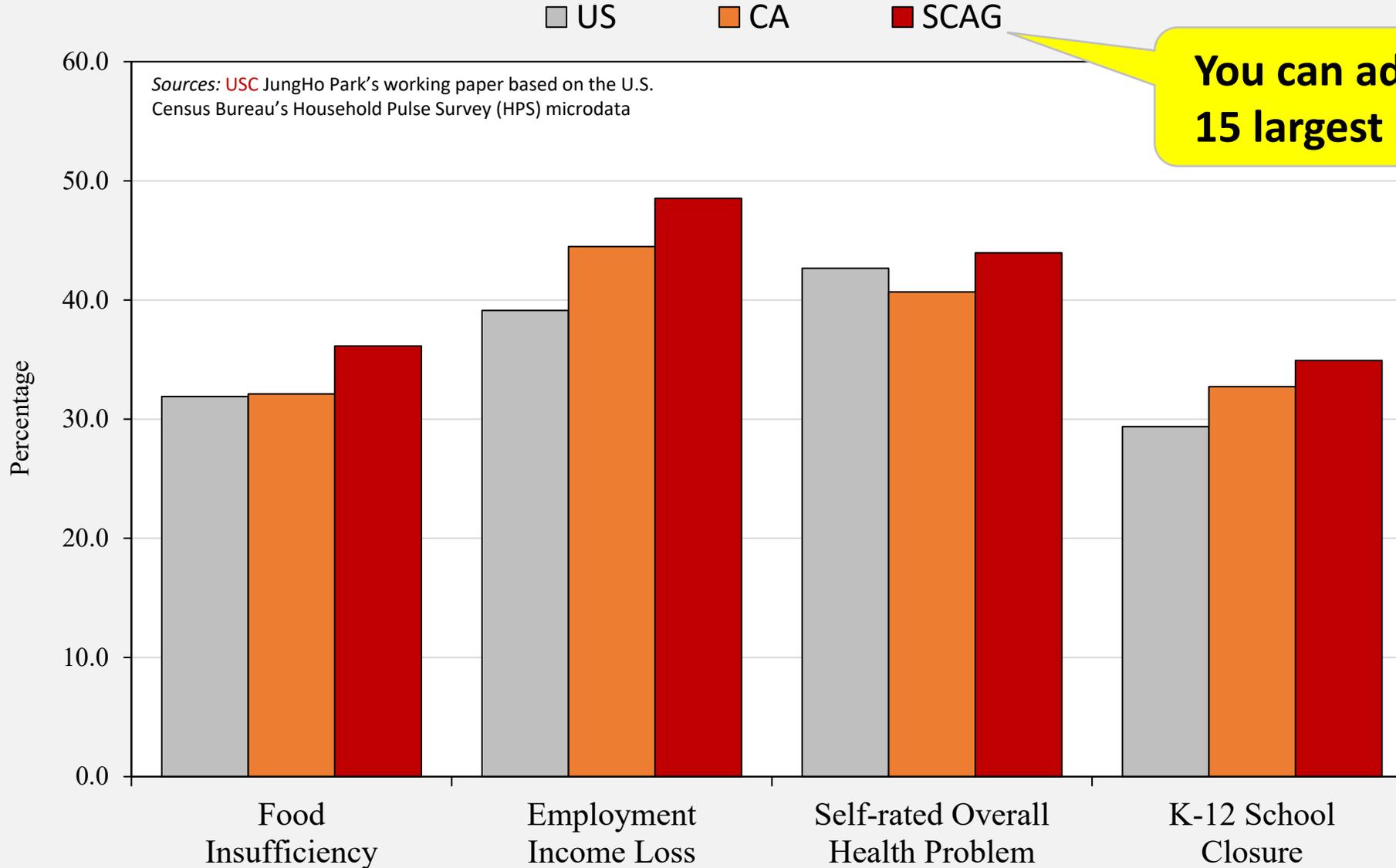
# Temporal Trajectory of Pandemic Hardships Over Time, U.S.



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*

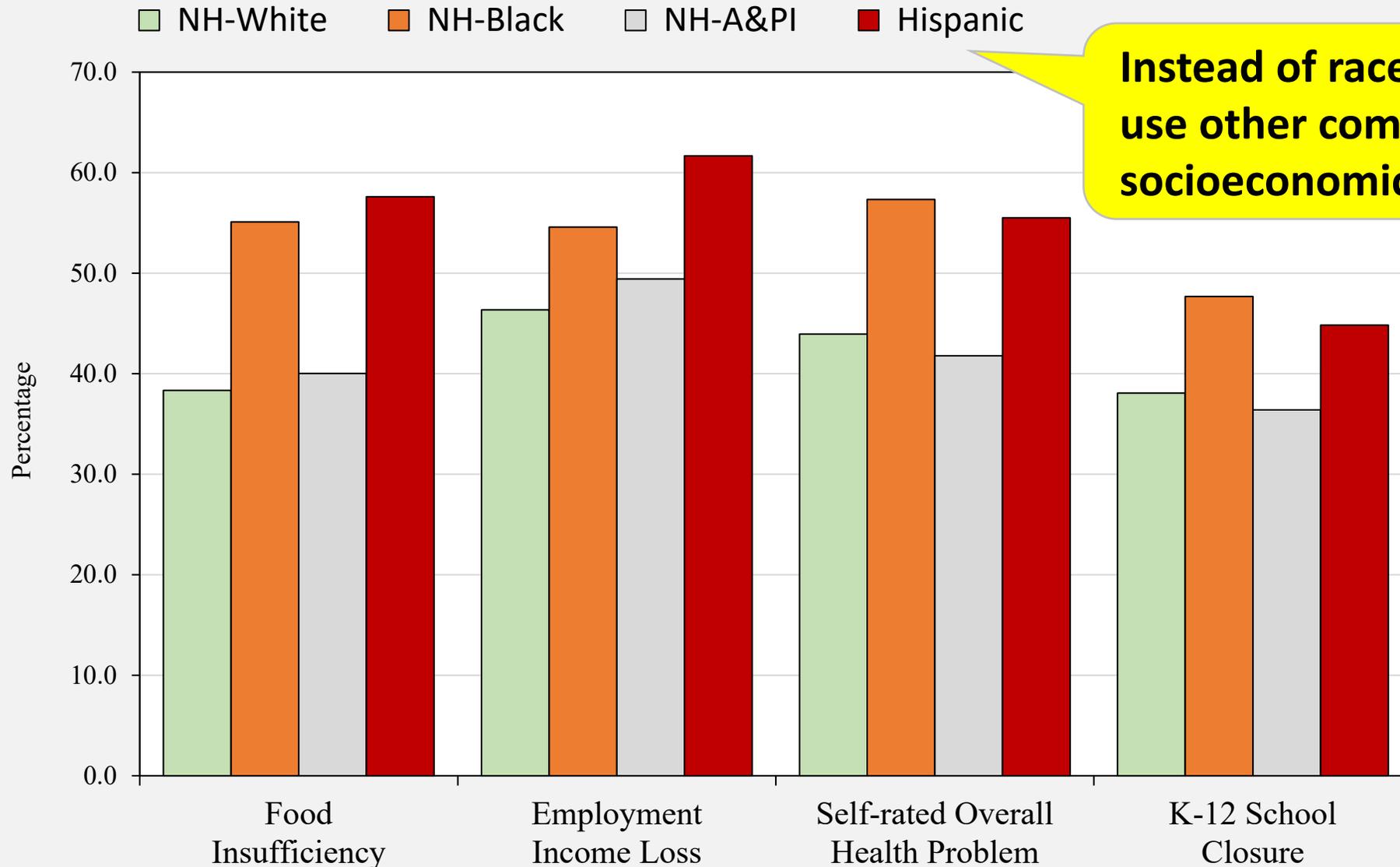
# Comparisons Between SCAG Region, California, and U.S.



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

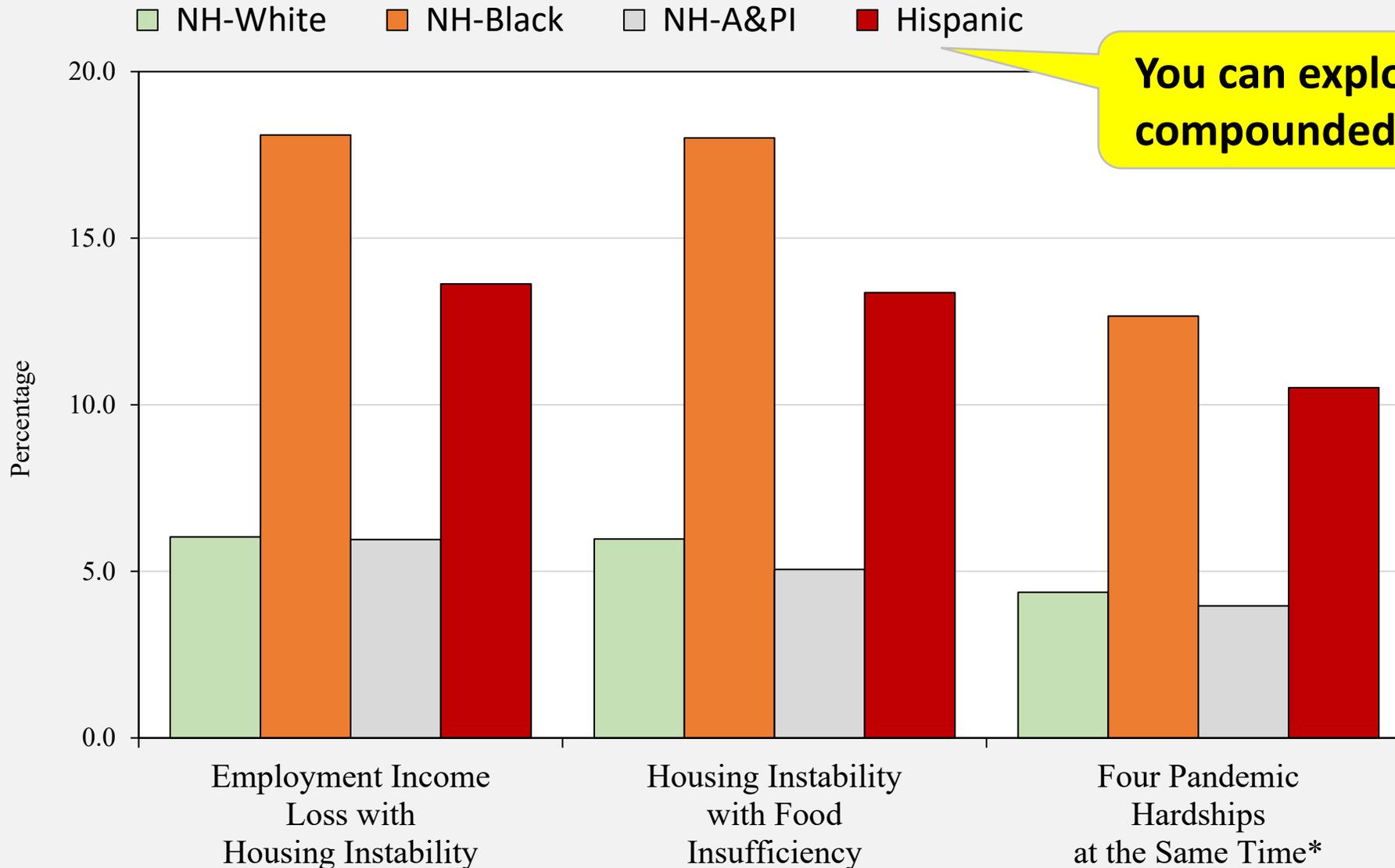
# Racial and Ethnic Differences in Pandemic Hardships, U.S.



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

Sources: USC JungHo Park's revised graph from panel (a) of Figure 2 in Park, J. (2021). Who is hardest hit by a pandemic? Racial disparities in COVID-19 hardship in the U.S. International Journal of Urban Sciences, 25(2), 149–177. <https://doi.org/10.1080/12265934.2021.1877566>

# Compounded Pandemic Hardships by Race/Ethnicity, U.S.



You can explore other types of compounded pandemic hardships

Sources: USC JungHo Park's revised graph from panel (b) of Figure 2 in Park, J. (2021). Who is hardest hit by a pandemic? Racial disparities in COVID-19 hardship in the U.S. *International Journal of Urban Sciences*, 25(2), 149–177. <https://doi.org/10.1080/12265934.2021.1877566>

\* 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:

- Park, J. (2021). Who is hardest hit by a pandemic? Racial disparities in COVID-19 hardship in the U.S. *International Journal of Urban Sciences*, 25(2), 149–177. <https://doi.org/10.1080/12265934.2021.1877566>
- Park, J., & Kim, B. (2021). Associations of Small Business Closure and Reduced Urban Mobility with Mental Health Problems in COVID-19 Pandemic: A National Representative Sample Study. *Journal of Urban Health*, 98(1), 13–26. <https://doi.org/10.1007/s11524-020-00511-0>

**JungHo Park, PhD**

[Jhpark.planner@gmail.com](mailto:Jhpark.planner@gmail.com)

**USC Price**

Sol Price School of Public Policy