Unequal Access to Remote Work During the Covid-19 Pandemic

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Acknowledgements

As a land grant institution, the authors acknowledge the Gabrielino and Tongva peoples as the traditional land caretakers of Tovaangar (Los Angeles basin, Southern Channel Islands), and recognize that their displacement has enabled the flourishing of UCLA.

We acknowledge that the land on which Dr. Ray is conducting research is the territory of the Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Nipmuc, and Lenape Peoples, who have stewarded this land throughout the generations. We thank them for their strength and resilience in protecting this land, and aspire to uphold our responsibilities according to their example.

We also thank the UCLA Institute for Transportation Studies (www.its.ucla.edu) for providing support to release and disseminate this brief. This project builds on the UCLA Center for Neighborhood Knowledge’s (CNK) COVID-19 Equity Research Initiative, which includes studies examining how the negative economic impacts of COVID-19 are distributed across neighborhoods.

Disclaimer

The views expressed herein are those of the authors and not necessarily those of the University of California, Los Angeles as a whole. The authors alone are responsible for the content of this report.
This research brief examines the inequalities in access to remote work during the COVID-19 pandemic. The analysis uses data from the U.S. Census Household Pulse Survey (HPS) Phase 2 from August 19th to October 26th, when questions were added covering access to remote work, to assess the effects of remote work on employment status and the distribution of access to remote work across racial, income, and other systematic disparities. Remote work is one aspect of the digital divide, which predates the current public-health crisis, but the findings show that the pandemic is amplifying the disparities along race and class lines. Telecommuting, which was once a relatively rare phenomenon, has become a major factor in moderating the economic impacts of novel coronavirus, such that these race and class discrepancies now have life-threatening consequences. The major findings include:

1. Access to remote work lowers rates of joblessness, use of unemployment benefits, and lost earnings.
2. Black and Hispanic workers are switching to remote work at lower rates than Whites.
3. While Asians appear to access remote work at higher rates than Whites, this distinction is reversed when income, education, age, and location are taken into account.
4. The racial disparities are explained partially, but not completely, by differences in income and education.
5. The majority of workers with a bachelors’ degree, and those making over $150k, were most able to access remote work during the pandemic, further exacerbating existing disparities.
The observed disparities in ability to work remotely during the pandemic are continuations of existing inequalities in remote work. In 2019, an estimated 5.4 percent of workers in the American Community Survey reported that they usually telecommute, a slight increase from the 5.2 reported in the 2018 5-year ACS. This percentage is likely an undercount, as the question asks how workers “usually” travel to work – a worker who works from home one or two days a week may not identify as a remote worker. Perhaps a better estimate comes from Gallup’s State of the American Workforce Report. In 2016, Gallup found that 43% of employees spent at least some of their time working remotely in 2016, up from 39% in 2012. While Gallup did not break down its findings by race, the ACS data reveals that even before the pandemic, access to telework varied across racial lines (Chart 1). Hispanic and Black workers were roughly half as likely as non-Hispanic White workers to regularly work remotely, a divide that became even more precarious with the coronavirus pandemic. A study published in the November 6, 2020 edition of the Center for Disease Control’s Morbidity and Mortality Weekly Report found that teleworking significantly reduced the likelihood of testing positive for Covid-19.

Chart 1: Percent of workers working from home, 2019 ACS

<table>
<thead>
<tr>
<th>Race</th>
<th>Share Teleworking</th>
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<tbody>
<tr>
<td>NHW</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3%</td>
</tr>
<tr>
<td>Asian</td>
<td>5%</td>
</tr>
<tr>
<td>Black</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>
Data and Empirical Approach

The analysis uses micro-level (individual responses) from the U.S. Census Bureau’s weekly HPS to empirically examine whether the remote work habits necessitated by COVID-19 are equally available to all workers. The compilation of this dataset is a multiagency collaboration effort to collect information on the social and economic effects of COVID-19 on Americans. As a rapid response demonstration project, HPS is part of the Experimental Data Product series. Although HPS has some limitations, it nonetheless provides useful insights.5

To analyze the nexus between remote work and the pandemic’s impact on employment, we use the HPS questions on employment status, use of unemployment insurance, and whether household members switched to telework during the pandemic. If a respondent answered “No” to “In the last 7 days, did you do ANY work for either pay or profit?” they were given a follow-up question asking “What is your main reason for not working for pay or profit?” (RSNOWORK in the Pulse questionnaire). That question had eleven specific responses as well as an “other” option. We coded responses 8-11 as “displaced” due to joblessness associated with the coronavirus forcing employers to lay off people. Because this question is only for those not working, it only captures a small fraction of total displacements. The HPS also asked if those not currently working had received unemployment insurance since March 13, 2020. Lastly, the HPS asked “Did any adults in this household substitute some or all of their typical in-person work for telework because of the coronavirus?” (TW_START in the Pulse questionnaire). The possible answers were (1) “Yes, at least one adult substituted some or all of their typical in-person work for telework”, (2) “No, no adults substituted their typical in-person work for telework”, or (3) “No, there has been no change in telework.” Respondents can only choose one of these answers. Respondents also report their race/ethnicity (White, Black, Asian, or Hispanic), their household income category (ranging from less the $25,000 to more the $200,000), and their highest level of educational attainment (ranging from less than a high school degree/general educational degree to a bachelor’s degree or higher).
Remote Work Lowers Employment Impacts and Need for Unemployment Insurance

During the pandemic, access to remote work has been associated with reduced job displacement or need for unemployment insurance (Chart 2). Roughly five percent of those who are able to work from home were displaced from their jobs due to the pandemic, compared to 10% of those who did not switch to remote work. Similarly, while 47% of those who are unable to work remotely lost earnings as a result of the pandemic, only 40% of those who are able to work remotely lost earnings. Even more stark is the difference between those who have done any work in the last week: among those who switched to remote work only 19% did not do work in the week of the survey, while 49% of those who did not switch to remote work did not work in the week of the survey. These differentials also show up in access to unemployment benefits: 19% of those who did not switch to remote work have accessed unemployment insurance, while only 11% of those who switched to remote work have accessed unemployment insurance.
Access to Remote Work by Race/Ethnicity, Income, and Education

As seen in the earlier ACS data, the ability to switch to remote work during the pandemic is not evenly distributed by race/ethnicity, income, and education. Charts 3–6 present access to remote work across the three two-week periods of Pulse 2 by race/ethnicity, income, age, and education for households. Chart 3 shows the percent of workers switching to remote work by race/ethnicity. These findings show that 34 percent of White and 44 percent of Asian workers are able to switch to remote work compared to 26 and 27 percent for Black and Hispanic workers, respectively.

Chart 3: Share switching to telework by race/ethnicity

![Chart 3: Share switching to telework by race/ethnicity](chart3.png)

Chart 4 presents differences by income level. These levels are grouped by households with less than $35,000 in income in 2019, between $35,000 to $74,999, between $75,000 and $149,999, or $150,000 or more. Chart 4 shows only those households that reported their income. The data show a systematic inverse relationship, that is, higher income is correlated with a higher share of workers switching to remote work. Low-income households fare the worst, with only 12 percent of workers in households under 35k switching to remote work, while 26 percent of lower-middle-income workers are able to switch. Just under half of workers with household incomes between 75k and 150k are able to switch, while 68 percent of those with household incomes over 150k are able to switch to working from home.

![Chart 4: Differences by income level](chart4.png)
Chart 5 shows that remote work’s relationship to age is non-linear, rising moderately with age until roughly 40 and then declining. Those aged 31-40 had the highest rate, at 43 percent, followed by those aged 41-55, with 40 percent and those 18-30, with 39 percent. Above 55, however, the rate drops considerably, with only 21% of workers over 55 switching to remote work.
Chart 6 presents changes in virtual learning connectivity by educational attainment, using four categories: without a formal high-school degree (not graduating or only a GED), attaining a high school diploma, attaining some college education without a bachelor’s degree, and attaining a bachelor’s degree or higher. Educational attainment presents as stark a divide as income, with access to remote work increasing sharply with additional education. Eleven percent of those with less than a high school education and 15 percent of those with a high school diploma are able to work remotely, compared with 30 percent of those with less than a college education. Fully 58 percent of those with a bachelor’s degree or higher are able to work remotely.

The Racial Disparities Work Mainly Through Income and Education

Using a simple logit model, we test whether the racial disparity in access to remote work persists once we account for income and education or whether the racial disparity operates through existing racial disparities in access to education and in income. We find that the disparities in remote work are maintained mainly through disparities in income and education, but not entirely. In particular, while the raw data seem to show that Asian workers telework at higher rates than Whites, this disparity is flipped once income and schooling are accounted for, and widened when accounting for location fixed effects. In other words, in any given city, workers of color with the same income and education level are more likely to be unable to work from home than White workers. This racial disparity is on top of existing race-based disparities in income and education which lead to workers of color being systematically more likely to be low-income and less educated and thus in fields with less access to remote work.
Concluding Remarks and Recommendations

The empirical analyses presented in this research brief reveal the shift to telework has reproduced and probably widened the consequences of the digital divide along racial and income lines. These social and economic disparities persist even after accounting for levels of education, age, gender, and other factors. Ultimately, the analyses indicate that a long-term solution has to come through education and higher earnings to offset this new form of inequality.

The pandemic induced changes in work commuting generates a greater need for addressing prepandemic, during pandemic and post-pandemic inequalities in our schools and institutions of higher education. Additionally, the increased risk associated with in-person, essential work, and the disparate impact of that increased vulnerability along racial lines, signal a need for some compensating wage differential and greater health protection for essential workers who still must commute to work, similar to the “pandemic premium” hazard pay included in the HEROES Act passed by the House of Representatives. Beyond a temporary premium, however, wages for work that cannot be done remotely should be boosted long-term to reflect its essential nature, and to reflect the extra time and cost of the commute.
Appendix: Related UCLA Center for Neighborhood Knowledge Briefs on COVID-19

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Endnotes

1 Rosalie Singerman Ray is a postdoctoral research associate at the University of Connecticut. Paul Ong is Research Professor at UCLA Luskin School of Public Affairs and Director of the Center for Neighborhood Knowledge.


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