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Telecommuting Rates During the Pandemic Differ by Job Type, Income, and Gender

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POLICY BRIEF

Issue

The onset of the COVID-19 pandemic caused massive travel disruptions across the country. When state and local governments began imposing stay-at-home orders restricting non-essential travel in March 2020, many people shifted to telework, while those providing essential operations and services continued to travel to work.

The pandemic's impacts on travel behavior have complex environmental and equity implications. Telecommuting can be a means of decreasing vehicle miles traveled and greenhouse gas emissions associated with commuter travel and can reduce congestion during peak times. However, telecommuters might engage in other home-based discretionary car trips which might at least partially offset the reduction in vehicle travel. Further, not all jobs can be performed from home. Policymakers and regulators who are considering policies to encourage telecommuting to achieve greenhouse gas reduction goals need to consider potential inequities that may arise or be intensified by these policies.

Researchers at the University of California, Davis examined the impacts of the COVID-19 pandemic on telecommuting patterns among various socio-demographic groups in the United States. During the early stages of the pandemic in Spring 2020 they reached out to households that had participated in previous longitudinal travel studies to measure changes in household activities, personal preferences, and travel patterns due to the pandemic. The 1,274 respondents that comprised the longitudinal panel were from urban, suburban, and rural areas in California, as well as from the metropolitan areas of Boston, Seattle, Salt Lake City, Kansas City, and Washington DC.

Key Research Findings

Telecommuting more than tripled during the early months of the COVID-19 pandemic. Prior to the pandemic, employed respondents in the sample reported telecommuting 1.1 days on average. In 2020 this number increased to 3.4 days per week.

Survey respondents with white-collar jobs substantially increased their rate of telecommuting during the pandemic, whereas respondents with blue-collar jobs did not. Office workers and professionals such as lawyers, doctors, and accountants were working remotely an average of 3.7 days per week during early 2020, a significant increase from 1.1 days per week in 2019. Workers such as plumbers, restaurant staff, construction workers, and truck drivers did not significantly increase the number of days they telecommute (Figure 1). While more data is needed to fully understand industry-specific telecommute trends, these findings highlight the difficulty in adopting telecommuting in certain job categories. The survey results also showed that white-collar workers were more likely to retain their jobs during the pandemic than blue-collar workers.

Higher-income respondents reported telecommuting more often during the pandemic than lower-income respondents. While white-collar workers are more likely to belong to higher-income households, household income is a more powerful predictor of the propensity to telecommute. Respondents in households earning more than \$75,000 saw the largest increase in telecommuting, from an average of 1.1 days per week pre-pandemic to 4.1 days per week in Spring 2020. Over the same time period, those in households earning less than \$50,000 also increased their rate of telecommuting, but only from 1.4 days per week prior to the pandemic to 2.3 days per week during the pandemic.

Gender and the presence of children in the household influence perceptions towards telecommuting. Of the working adults surveyed

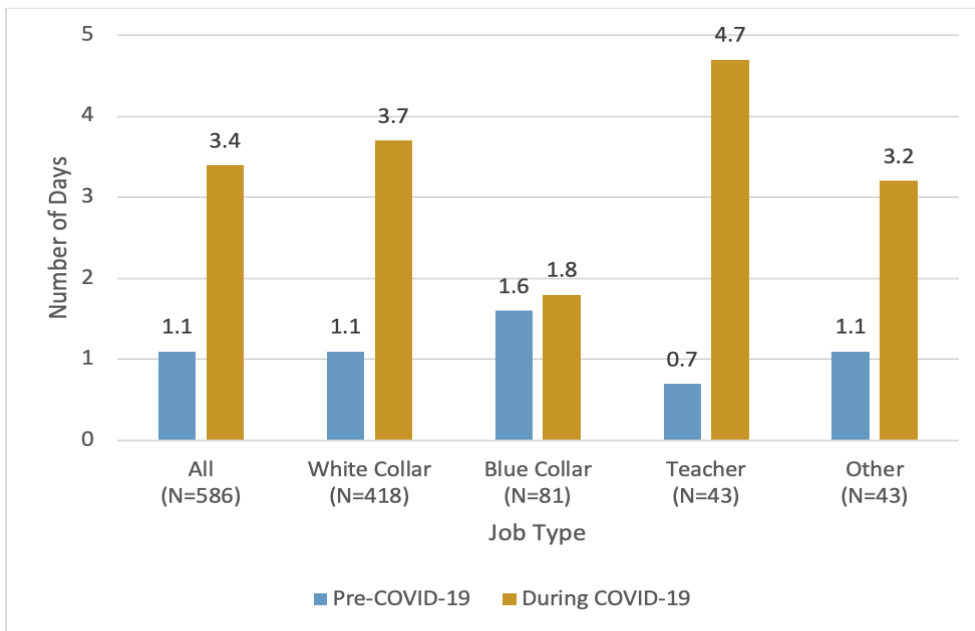


Figure 1. Average number of days telecommuting per week reported by employed survey respondents in various occupations

in Spring 2020, 54% of women and 46% of men in households without children agreed with the statement, “Working from home helps avoid unwanted distractions and interruptions often occurring at the workplace.” Interestingly, the presence of children in the household reversed the above trend; working fathers were more likely to agree that working from home helps avoid unwanted distractions (55%) in comparison to working mothers (50%). More data, including the age of children within households, is needed to fully grasp working adults’ preferences towards telecommuting, especially given that data for this study was collected at a time of widespread school closures during the early stages of the COVID-19 pandemic.

Policy Implications

A shift toward telecommuting by white-collar workers could lead to a reduction in commuting-related vehicle miles traveled. Total travel-related impacts are

uncertain, however, because previous research has indicated that reductions in commuting trips due to telecommuting are often partially offset by an increase in discretionary trips (often made by car) among the same individuals. Still, increased telecommuting translates to less traffic congestion during peak times, while also significantly impacting public transportation ridership (in particular, for rail services). Further, as lower-income and blue-collar workers are less likely to be able to telecommute and thus benefit from the ensuing travel time savings, a long-term shift toward working from home may also exacerbate existing socioeconomic inequities. Finally, policymakers should

consider the potential impacts of long-term telecommuting policies on service industry jobs (e.g., local shops, restaurants, and cafes) in city centers that rely on a daily influx of workers.

More Information

This policy brief is largely drawn from the paper, “Longitudinal Analysis of COVID-19 Impacts on Mobility: An Early Snapshot of the Emerging Changes in Travel Behavior,” by Grant Matson, Sean McElroy, Yongsung Lee, and Giovanni Circella with the 3 Revolutions Future Mobility Program of the Institute of Transportation Studies at the University of California, Davis. The full publication can be found at <https://ncst.ucdavis.edu/project/impact-shared-mobility-use-other-transportation-modes-and-auto-ownership-among-millennials>.

For more information about the findings presented in this brief, contact Giovanni Circella at gcircella@ucdavis.edu.

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