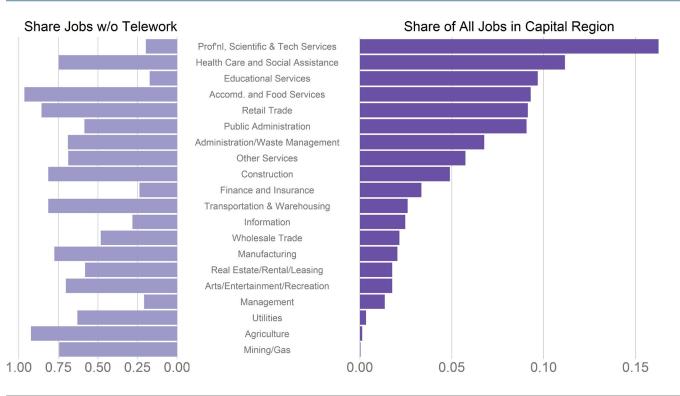
STATE OF THE CAPITAL REGION: COVID ADDENDUM

This year, our State of the Capital Region report explores long-term demographic trends in the region–changes in the distribution of income, trends in the age distribution, and changes in racial composition–and we planned to launch this report in mid-May.

Just as we were finalizing the report, we were all sent home to wait out COVID-19. And it became clear that this report would not be complete without at least some thoughts on what COVID-19 means now for our region, and its implications for the future.

In our preliminary analysis, here are four key findings.

#1: Telework is Difficult in Some of the Region's Largest Industries



Source: Dingel and Neiman (2020), Census 2017 LODES data (v7).

Overall, about 60 percent of jobs in the Capital Region cannot be done from home.¹ This share varies substantially by industry.² As measured by the number of jobs, the Capital Region's largest single industry is "Professional, Scientific and Technical Services," accounting for roughly one in six regional jobs. This industry includes law firms, accounting firms, engineering firms, and other professional services. More than three-quarters of these jobs can be done from home.

2 See the complete list at the Census website here: https://www.census.gov/cgi-bin/sssd/naics/naics/naicsrch?chart_code=54&search=2017%20NAICS%20Search



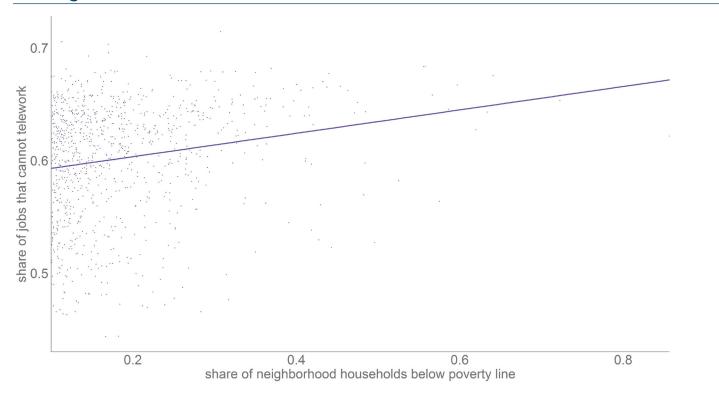
¹ With many thanks to Dingel and Neiman (2020) who have classified NAICS codes by their telework-ability.



What the ability to work from home means for continued employment is mixed. Although jobs with telework capabilities are probably more likely than non-telework jobs to continue, some telework jobs have already disappeared due to the decline in consumer demand. Conversely, some jobs that cannot be done by telework–such as trash pick-up–remain relatively secure.

Relative to the country as a whole, the Capital Region has a more knowledge-centered economy. For example, the share of jobs in "professional, scientific and technical" industries is about twice the national average. While these jobs are less likely to immediately disappear, COVID-related unemployment is still a risk for a very large swath of workers.

#2: Neighborhoods with More Residents Who Can't Telework are Lower Income



Source: Dingel and Neiman (2020), Census 2017 LODES data (v7), and American Community Survey 2014-2018.

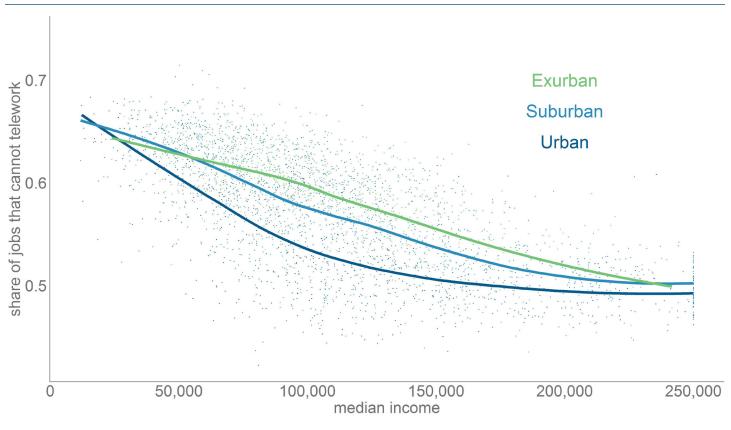
Across the Capital Region, the median neighborhood had a poverty rate of about five percent. In the chart above, we focus on the most vulnerable neighborhoods—the roughly one-quarter of neighborhoods with a poverty rate of 10 percent or more. Among these already vulnerable neighborhoods, the higher the poverty rate, the greater the share of residents who have jobs that cannot be done via telework.

Thus, people in these neighborhoods are at risk in multiple ways: they have less income (and likely less savings) to cope with the virus shock, and they are also more likely to need to go to work, putting them more at risk for virus infection.

However, a sizable share of people in the very highest-poverty neighborhoods relied on public support before the pandemic and their circumstances may be currently less affected. The neighborhoods most likely to face a severe worsening of conditions are those poor neighborhoods with many undocumented immigrants, where residents are largely barred from federal support.







#3: Even At the Same Income, Neighborhoods Farther from the Urban Core Have Relatively Fewer Jobs That Allow for Telework

Source: Dingel and Neiman (2020), Census 2017 LODES data (v7), and American Community Survey 2014-2018.

Across the entire income distribution, those who live in lower income neighborhoods are less likely to have jobs they can do via telework.³ But even in high-income neighborhoods, face-to-face interaction is crucial for many jobs. In neighborhoods with median incomes of roughly \$200,000, half of residents have jobs that cannot be done via telework.

This pattern of income and ability to telework varies by a neighborhood's location in the Capital Region. For residents of neighborhoods where the median income is under roughly \$50,000, all residents of all locations–urban, suburban and exurban–are equally likely to be able to telework at their job. However, as income increases, this pattern diverges. Even for the same income neighborhood, urban residents are strikingly more likely to work in industries where the ability to work from home is common.

For example, in the average urban neighborhood with a median income of \$100,000–just about the Capital Region's median of \$102,000–53 percent of residents have jobs that cannot be done through telework. For exurban areas, this share is 60 percent. These differences may make the downturn more severe and the recovery less speedy in exurban places relative to urban ones.

³ However, within a given industry, lower-income workers -- janitors rather than programmers -- are less likely to be able to work at home.





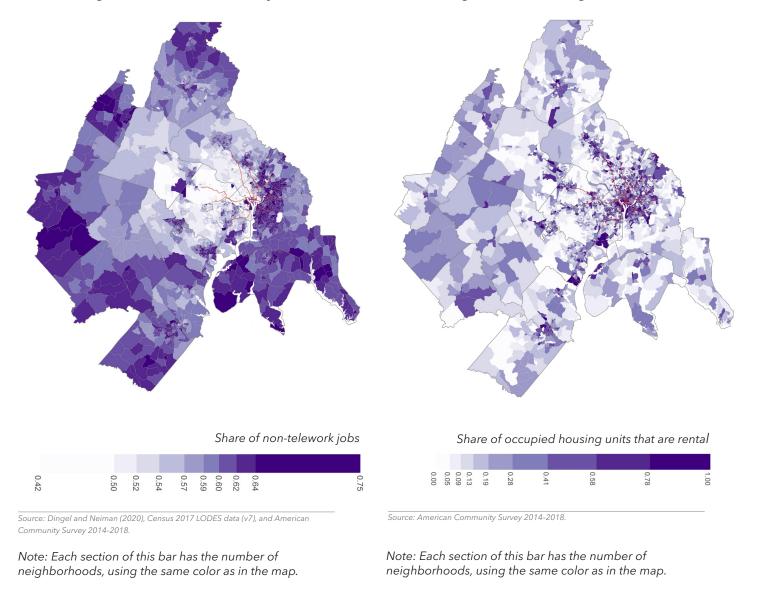
#4: Areas with Near-Term Concerns: Low Telework Potential and High Share of Renters

While most homeowners with mortgages are likely to receive some temporary relief from federal policies that allow leniency on payments, renters are generally in a more precarious position and more likely to rely on local governments to enact protections. Neighborhoods with high shares of renters and many jobs that cannot be done by telework are likely to be among the most vulnerable.

As the maps below show, the overall geographic pattern of these two factors is opposite: neighborhoods with many rental units tend to be close to the city, and neighborhoods where residents are least likely to have telework jobs are in the exurbs. However, about three percent of neighborhoods score high on both dimensions. Many of these most at-risk neighborhoods are in the District's southeast quadrant and in Prince George's county, reflecting the region's persistent racial inequities. Policymakers should keep a careful eye on outcomes in these places.

Share of Neighborhood Jobs with Ability to Telework

Share of Neighborhood Housing Units that are Rental







Bottom Line: On average, residents in low-income neighborhoods are less likely to be able to work from home and face a difficult choice of exposure or job loss. However, even for neighborhoods of the same income, exurban households are less likely to be able to telework than suburban households, and suburban households less likely than urban ones. The areas where there are renters, lower income households, and less telework-able jobs are likely the most vulnerable







Authors

Jaclene Begley Fannie Mae ⁴

Leah Brooks, Faculty Director Center for Washington Area Studies & Trachtenberg School of Public Policy and Public Administration, The George Washington University

Brian J. McCabe Georgetown University

Jenny Schuetz Brookings Institution

Stan Veuger American Enterprise Institute

4 The views expressed here are those of the authors and do not necessarily represent those of Fannie Mae or the Federal Housing Finance Agency.



Data Sources & Notes

Telework-able Jobs

For the share of jobs that are able to telework, we rely on the classification from Dingel and Neiman (2020) <u>https://www.nber.org/papers/w26948</u>. This paper classifies the share of workers that have the ability to telework in their jobs by industry. To estimate the share of workers that have the ability to telework, we combine these data with Census data on the number of workers by industry and residential neighborhood below.

Longitudinal-Employer Household Dynamics (LODES)

LODES data tells us, for each residential neighborhood, the number of workers in each of the two-digit NAICS industry codes.

U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics Data (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on 2020-04-14 at

https://lehd.ces.census.gov/data/#lodes. LODES 7.4 [version]

American Community Survey

For all demographic information, we use the American Community Survey block group-level data.

American Community Survey, 2014-2018, 5-year estimates. United States Census Bureau."Summary File."2014-2018 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2019. Web. 1 January 2018 <<u>http://ftp2.census.gov/</u>>. Counties, zip code tabulation areas and block groups.

Maps

County Boundaries US Census Bureau, 2014. 2010 Census county boundaries. Downloaded cb_2017_us_county_500k.zip 2/28/2014 from https://www.census.gov/geo/maps-data/

data/cbf/cbf_counties.html

Metro Map

Copyright 2017. National Capital Region Transportation Planning Board Downloaded Metro Lines.zip from http://rtdc-mwcog.opendata.arcgis.com/datasets/0d90d7b18c644657ba7646149b72e2d1 1

