

How Remote Work Changed the Housing Market

Post-Pandemic Housing Market



The world shut down at the onset of the pandemic, with both businesses and schools closing their doors. There was a dramatic and rapid shift in how and where we all worked and learned.

This shift came at a time when there were broader uncertainties about public health issues and economic recession. The policy decisions to move work and learning home also fueled significant changes in housing demand and housing preferences. Fiscal and monetary policies pumped up demand. Simultaneously, the work-and-learn-from-home phenomenon shifted housing and location preferences, including the desire for more space, homes farther out from urban centers, and second or vacation homes.

The shift in housing preferences to farther-out locations has been widely documented.¹ However, less attention has been paid to whether the push to exurbs and rural areas played out the same in all types of metro areas. In addition, it remains uncertain whether the pandemic-induced work-from-home-incentivized housing preferences will be permanent or simply reflect an unprecedented, temporary situation.

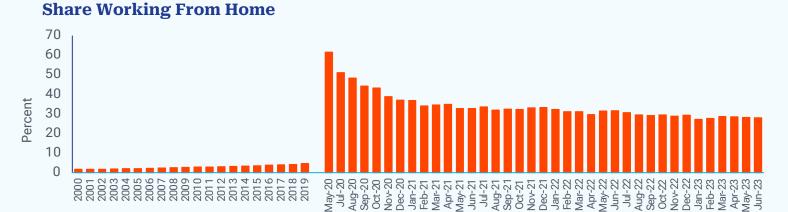
¹ See, for example, Augustus Kmetz, John Mondragon, and Johannes Wieland. 2022. *Remote Work and Housing Demand*, Federal Reserve Bank of San Francisco FRBSF Economic Letter.



Trends in Remote Work

Before the pandemic, less than 5% of the U.S. workforce regularly worked from home or remotely. In May 2020, the U.S. Bureau of Labor Statistics reported that nearly two-thirds of American workers were working from home. The remote worker share declined over time but even three years after the COVID-19 pandemic shut down the economy, the work-from-home share is six times higher than it was prior to the pandemic (4.7% in 2019 versus 28.1% in June of 2023).

Figure 1. Working from home increased significantly during the pandemic



Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.

While working from home became very common during the first few months of the pandemic, its prevalence was by no means similar across industries. The highest shares of employees working from home are among white-collar office workers. In 2021, close to 40% of people in the information, finance, insurance, and real estate industries were working from home. By contrast, less than 10% of workers in the arts, entertainment, accommodations and food services, and construction industries were working from home.

Figure 2. Regional economy drives work from home (WFH) rate

Metro Area	WFH Rate (2021)	Top Industry (2021)*
San Francisco	35%	Prof Svcs
San Jose	35%	Prof Svcs
Washington DC	33%	Govt
Austin	32%	Mgmt
Raleigh	31%	Prof Svcs
Seattle	31%	Prof Svcs
Denver	28%	Info
Portland	27%	Manuf
Boston	27%	Prof Svcs
Minneapolis	26%	Mgmt
Memphis	12%	Transp
New Orleans	12%	Acc & Food Svcs
Oklahoma City	12%	Govt
Las Vegas	12%	Arts & Ent
Riverside	14%	Transp
Virginia Beach	14%	Govt
Buffalo	14%	Educ Svcs
Louisville	15%	Transp
Houston	15%	Mgmt
San Antonio	16%	Mgmt

Source: 2021 Census ACS Based on 50 largest MSAs *LQ industry analysis

Being able to work from home is highly correlated with earnings. Higher-wage workers are more likely than lower-wage workers to be working remotely, and this was particularly true during the pandemic. These are also the workers who were more likely to be homeowners and homebuyers during the pandemic.

Different rates of remote work across industries is a key reason why work-from-home was more common in some metro areas than others, and can help explain how work-from-home might impact housing and location choices in the post-pandemic housing market.

The metro areas with the highest shares of people working from home are also those regions where the economies are highly driven by the professional and business services sector. This sector includes those white-collar office workers who were able to grab their laptops from the office and easily move their work home when the pandemic hit. Of the 10 metro areas with the highest share of people working from home in 2021, seven had regional economies that were highly concentrated in professional and business services or management. By contrast, the regions with lower overall work-from-home shares were more likely to be concentrated in the transportation, accommodations and food services, and arts and entertainment sectors jobs that are much more difficult to do from home. And jobs that are also likely to have lower paychecks and fewer would-be homebuyers.



Housing Market Outcomes: The Impact of Work-from-Home During and After the Pandemic

When more people are able to work from home, it changes homebuyers' priorities. In a typical market, homes tend to be higher priced (on a per-square-foot basis) and smaller near the urban core, which reflects trade-offs between commuting costs and housing costs. Generally, residents of a region who choose to be in the urban core are sacrificing space in order to enjoy shorter commutes.

However, the onset of the coronavirus altered the location-cost trade-off in housing. The previous trade-off between commuting costs and housing costs became less important with the acceleration of work-from-home. But the pandemic introduced new trade-offs. For people who were living in urban areas, the pandemic may have led them to look for more space to accommodate working and learning from home. They may have also been looking to move to less densely populated areas to reduce their chance of being exposed to the virus.

Conventional wisdom is that the changing trade-offs and preferences as a result of remote work during the pandemic had an impact on the housing market, specifically on the relationship between home prices and distance from the urban core, with faster price growth in less urban areas and slower price growth or price drops in urban areas.

Using home sales transactions from the Bright MLS footprint², this analysis examines the relationship between distance and sales price. Distance is measured as the distance between the property and the nearest central business district (CBD) of one of the region's major metro areas (i.e., Philadelphia, Baltimore, or Washington, D.C.).

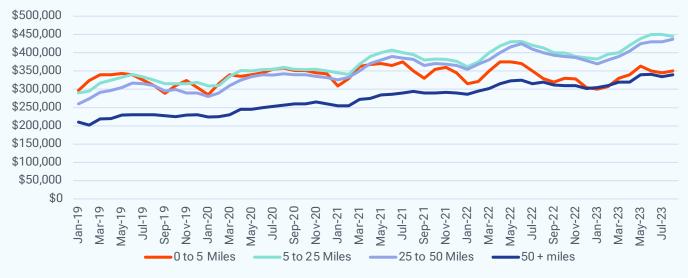
Homes selling within 5 miles of the city center had the highest median price in 2019. The monthly median price of homes sold in the Bright MLS footprint within 5 miles of the city center ranged from \$289,000 to \$324,900 in 2019. In comparison, the monthly median price of sold homes 25 to 50 miles from the city center ranged from \$260,000 to \$316,750 in 2019.

The onset of the pandemic, however, resulted in price growth farther from the city center and price stagnation near the city center. Monthly median prices for homes sold within 5 miles of the city center ranged from \$300,000 to \$363,725 in the first eight months of 2023, while median prices of homes sold 25 to 50 miles from the city center ranged from \$369,900 to \$437,000 over the same period. Prices in the inner core were surpassed by prices of homes sold farther out, specifically those in neighborhoods within 5 and 49 miles of the urban core.

2 The Bright MLS footprint includes 86 counties in six Mid-Atlantic states: New Jersey, Pennsylvania, Delaware, West Virginia, Maryland, Washington DC, and Virginia

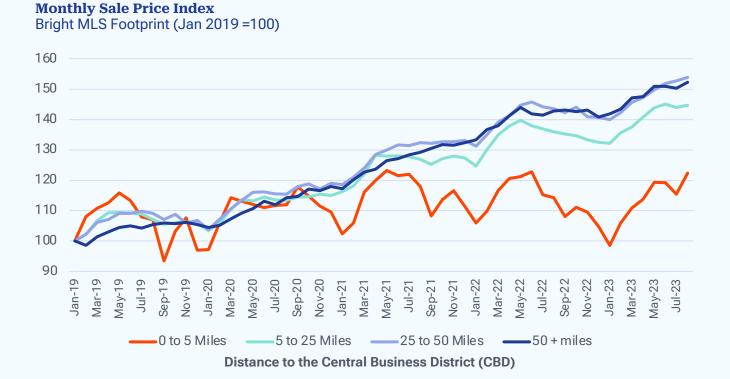
Figure 3. Home prices lower close in and far out





Examining median prices alone ends up conflating price and home size, as homes farther out tend to be larger. Instead, an index of median price per square foot was created and trends in that index were analyzed. Examining this trend shows clearly that prices across the Bright MLS footprint did, in fact, increase farther out during the pandemic. Between January 2019 and January 2023, the median price per square foot was virtually unchanged for home sales within 5 miles of the central business district. The price per square foot increased dramatically outside the urban core over the same time period, rising by 44% for home sales between five and 24 miles from the urban core. Prices rose slightly faster in areas 25 miles or more from the urban core.

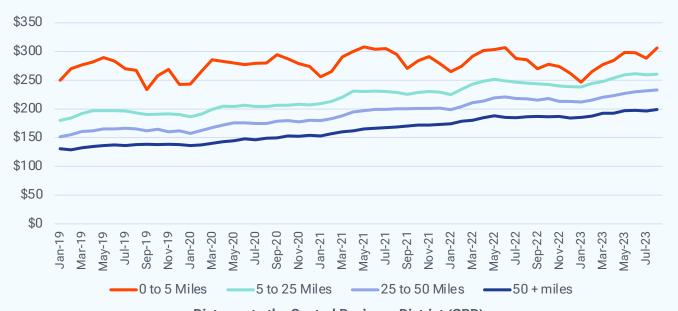
Figure 4. Home prices climbed faster farther out during the pandemic



Despite the increases in the median price per square foot for homes 5 to 50 miles from the city center, the median price of homes within 5 miles remains the highest in level terms. Comparing the most recent data, August 2023, to the same month in 2019, reveals that the median price per square foot of homes within 5 miles of the city center in the Bright MLS region increased 14.4% from \$267.4 to \$305.9. From August 2019 to August 2023, homes 5 to 25 miles from the city center increased 35.1% from \$193.0 to \$260.7, and homes 25 miles to 50 miles from city center increased 41.0% from \$165.3 to \$233.1 per square foot. Despite the gains in median price per square foot in the suburbs, homes close to the city center still command a premium in the Bright MLS footprint.

Figure 5. Price per square foot still highest near city center





Distance to the Central Business District (CBD)

A crucial assumption regarding the flattening of the so-called "bid-rent" curve is that workers do not need to make the trade-off of commuting for space because they either no longer need to commute or they commute far less often, so the trade-off is less severe. However, not all jobs are able to be done from home. Some jobs, such as nursing or construction, have to be performed in-person, on-site. Some jobs, such as data analyst or website designer, can be performed at home, assuming the home has a good internet connection. Given that different metro areas have different occupational mixes, the ability to work from home varies among different metro areas. Researchers estimated that at the outset of the pandemic, 50.2% of all jobs in the Washington, D.C., metropolitan statistical area (MSA) could be performed at home compared with 41.5% for the Baltimore MSA and 39.1% for the Philadelphia MSA.³

There is notable variation in the price trends among the major metros in the Bright MLS region, and that variation can be at least partially explained by the different economic structures in the regions. The median price per square foot of homes sold within 5 miles of the Baltimore city center has increased steadily, rising 40.1% from \$132.3 in January 2019 to \$185.4 in August 2023. By comparison, the median price per square foot index in the Washington, D.C., metro area increased just 10.6%, with median prices (per square foot) rising from \$529.9 in January 2019 to \$585.9 in August 2023. Finally, in the Philadelphia MSA, there was a significant amount of volatility in price per square foot among homes sold within 5 miles of the city center. The volatility in the summer of 2022 in Philadelphia suggests that other market characteristics influenced the Philadelphia housing market in mid-year 2022.

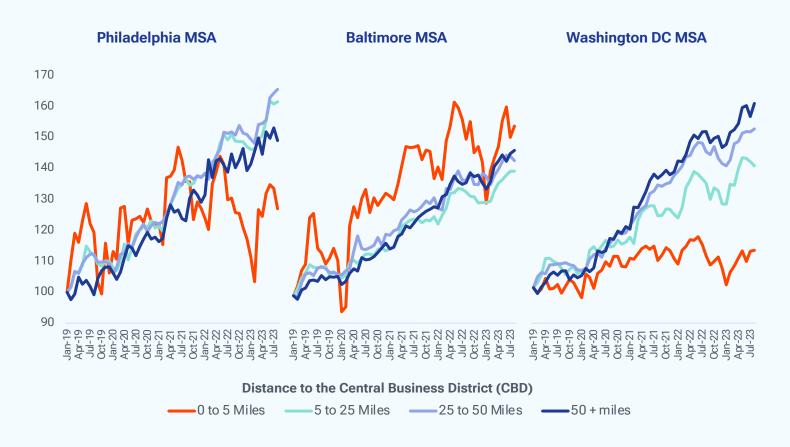
3 Jonathan I. Dingel and Brent Neiman. 2020. How Many Jobs Can be Done at Home? Journal of Public Economics 189; Matthew Dey, Harley Frazis, David S Piccone Jr, and Mark A Loewenstein, 2021. Teleworking and lost work during the pandemic: new evidence from the cps. Monthly Lab. Rev., 144 (1).



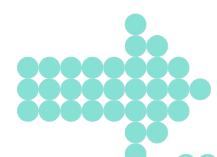
Overall, these results suggest that the structure of the Washington, D.C., MSA economy means its housing market may be influenced more strongly and for longer by work-from-home trends.

Figure 6. Home price growth varies by metro area

Price Per Sq. Ft. Index Jan 2019=100



Work-From-Home Impact: Outlook for 2024



Transition to working from home during the pandemic had an impact on regional housing markets. In general, price growth was faster during the pandemic in suburban regions, reflecting stronger demand for farther-out locations. However, the median price per square foot of homes more than 5 miles from the city center has yet to overtake those within 5 miles, which suggests that closer-in homes will continue to command a premium, despite fewer workers commuting to the central business district.

Examining home price trends in the Bright MLS footprint provides evidence that the work-from-home phenomenon impacted regional housing markets differently depending on the types of jobs in the metro area. The analysis of home price growth among the three major metro areas in the Bright MLS footprint reveals that the median price per square foot of homes sold within 5 miles of downtown Washington, D.C., stagnated immediately after the onset of the pandemic, while city prices in Baltimore and Philadelphia increased before declining in 2022 in Philadelphia. The stagnation of home prices within 5 miles of Washington, D.C., is partially explainable by the economic structure. Roughly 50% of all jobs in the D.C. metro area could be performed at home at the outset of the pandemic, compared with 40% in Baltimore and Philadelphia.

In the post-pandemic economy, work-from-home is still very common, and for some businesses and industries, it is likely to be a long-term or even permanent trend. The long-term impact on the housing market, however, will continue to be more pronounced in metros with high concentrations of occupations that can be done remotely, as seen in the Washington, D.C., region.

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