Appendix 1: Data Source Discussion

This appendix contains more detailed discussion on the data sources used in the research brief:

Did More People Move During the Pandemic?

American Community Survey (ACS)

The ACS is typically the preferred source of data on residential mobility, given its large sample size and detailed demographic information. Unfortunately, the collection of the 2020 ACS was so severely impacted by the pandemic that the Census Bureau advised against comparing the experimental data to other years of ACS data (US Census Bureau 2021a). The 1-year estimates from the 2021 ACS were released in late October 2022 and did not carry these same notes of caution, so I rely on these estimates and exclude 2020 ACS from my analysis.

Current Population Survey Annual Social and Economic Supplement (CPS-ASEC)

Each year, the CPS-ASEC is collected in March and contains questions about residential mobility. Data collection for CPS-ASEC (henceforth CPS) was affected by the pandemic in 2020, 2021, and 2022, and the Census Bureau recommends caution in comparing these years of data to previous years (US Census Bureau 2022). Additionally, 2021 CPS relied on Vintage 2020 population controls based on the 2010 Census, as opposed to the 2022 CPS, which used Vintage 2021 population controls based on the 2020 Census (US Census Bureau 2022). With the reasoning that 2022 CPS was slightly less affected by the pandemic than 2020 and 2021 and given this difference in population controls, I exclude 2020 and 2021 CPS from my analysis. However, by using Vintage 2021 controls, the 2022 CPS used the same 'blended base' as the 2021 PEP (see PEP discussion below).

American Housing Survey (AHS)

A less commonly used data source for residential mobility is the American Housing Survey (AHS). The AHS is released every two years and asks respondents whether they moved in the past three years. The ACS and CPS both ask about moving in the past year, which makes it difficult to compare mobility results with AHS, hence its exclusion from this research brief.

However, the declining mobility trends found in AHS data match those found in ACS and CPS data fairly well, so I will summarize them here. In 2019, 29.4 percent of households moved within the past three years, which fell to 28.1 percent in 2021. The 2021 rate is similar to the mobility rates recorded by the AHS for the past decade but lower than mobility in the 2000s, when mobility rates ranged from 30–33 percent.

The sharpest decline in mobility by tenure is among renters in ACS and CPS data, and the same is true in AHS data. More than half of renter households (52.6 percent) moved in the past three years as of 2019, but fewer than half (49.5 percent) did so in 2021. These rates are much lower than in previous years, especially the peak of 60.4 percent in 2011. The homeowner mobility rate, on the other hand, stayed roughly the same in 2019 and 2021 just above 16.0 percent. This is higher than the post-recession years when it bottomed out at 12.0 percent in 2013 but still lower than the pre-recession years when it peaked at 20.2 percent in 2001.

United States Postal Service Change of Address Data

Anyone can make a change of address (CoA) request with the United States Postal Service (USPS) to forward mail to a new address, temporarily or permanently. Temporary—or 'seasonal'—changes of address are up to six months, after which the USPS reverts to using the original address, while permanent changes of address do not revert to the original address. Requesters must choose which type of CoA request they are making as well as whether they are changing the address of an individual, family, or business. The data are then aggregated to the ZIP code level and released monthly, dating back four years, in keeping with USPS policy to permanently delete changes of address older than 48 months.

For each ZIP code, data users can see how many CoA requests originated there ('moves from') and how many terminated there ('moves to'). The public data do not, however, contain information linking CoA requests by origin and destination (e.g. X individuals moved from ZIP code Y to ZIP code Z). Additionally, as a privacy protection measure, if a type of CoA in a ZIP code has fewer than 11 requests, USPS does not report that number (e.g. 8 families moving to ZIP code Y would be reported as 0 families; if 12 individuals moved to ZIP code Y, that number

would be reported). To create aggregate change of address numbers, I sum the 'moves from' all ZIP codes, which is similar to but slightly larger than the aggregated 'moves to' all ZIP codes, likely due to this data suppression. For example, there were 22.4 million total 'moves from' ZIP codes and 21.9 million total 'moves to' ZIP codes reported in USPS data in 2021.

The public USPS data are available by type of CoA or duration of CoA, but not by both type and duration. Data users can distinguish between individual and family CoA requests, but cannot distinguish between permanent individual and permanent family CoA requests. The most common CoA duration is permanent: there were 31.7 million permanent CoA requests in 2019 compared to 2.5 million temporary requests. The most common CoA type is individual: there were 22.6 million CoA requests for individuals in 2019, compared to 10.0 million family requests, and 900,000 business requests. This distribution means that business CoA requests are not large enough to noticeably affect trends in permanent requests, though they may affect trends in temporary requests. This also means that a permanent CoA request for an individual is the most common type made, and that the USPS CoA system is used much less for business moves and temporary moves – whether because there are fewer of those moves or because those movers do not file change of address requests is unclear.

Population Estimates Program (PEP)

PEP data contains estimates of population and components of population change on the national, state, and local levels. Components include natural population change (births minus deaths), net international migration, and net domestic migration. Since these are net flows, they do not provide information on demographics of movers nor on the exact levels of moves each year.

Each year, the Census Bureau estimates population changes using the most recent decennial Census results as a base point. When the Census Bureau was calculating the 2021 estimates, however, the full 2020 decennial results were not available due to pandemic-related delays and new data disclosure controls. Instead, the Census Bureau developed a 'blended base' consisting of redistricting data from the 2020 decennial census as well as other population and demographic estimates produced by the Census Bureau (US Census Bureau

2021b). Since this is a new approach, the 2021 data are not entirely comparable to estimates from previous years, but they are still instructive in showing the direction moves took. Additionally, while Vintage 2022 PEP state-level data were available at the time of publication, county-level data were not yet available. As such, I used Vintage 2021 PEP data for both state- and county-level analysis.

In my analysis of PEP county-level data, I rely on the 2013 Urban-Rural Classification Scheme for Counties from the National Center for Health Statistics (Rothwell, Madans, and Arispe 2014). This splits counties up into six categories: large central metro, large fringe metro, medium metro, small metro, micropolitan, and non-core. Here is how each category is defined:

> ***Metropolitan categories***
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> **Large central metro**—Counties in MSAs of 1 million or more population that:
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> 1. Contain the entire population of the largest principal city of the MSA, or
>
> 2. Have their entire population contained in the largest principal city of the MSA, or
>
> 3. Contain at least 250,000 inhabitants of any principal city of the MSA.
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> **Large fringe metro**—Counties in MSAs of 1 million or more population that did not qualify as large central metro counties.
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> **Medium metro**—Counties in MSAs of populations of 250,000 to 999,999.
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> **Small metro**—Counties in MSAs of populations less than 250,000.
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> ***Nonmetropolitan categories***
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> **Micropolitan**—Counties in micropolitan statistical areas.
>
> **Noncore**—Nonmetropolitan counties that did not qualify as micropolitan.
>
> (Rothwell, Madans, and Arispe 2014)

In my analysis, I combine the 'medium metro' and 'small metro' categories, which I call 'smaller metro areas,' as well as the 'micropolitan' and 'noncore' categories, which I call 'non-metropolitan counties.' As non-metropolitan counties are largely rural, I also use that term to describe them, though I do so sparingly as this is an imprecise classification of rurality.

Appendix References

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