

SPECIAL REPORT

COVID-19 flight: No great migration but a catalyst to existing trends

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66 Washington is not a place to live in. The rents are high, the food is bad, the dust is disgusting and the morals are deplorable. Go West, young man, go West and grow up with the country.

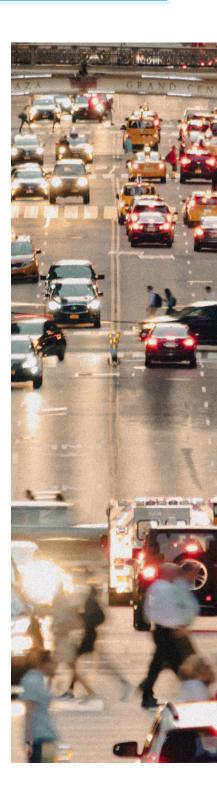
Attributed to Horace Greeley, New York Daily Times (1865)

The U.S. is a country famously built by immigrants but perhaps equally, has seen its diverse shape and economy impacted by the flow of people over centuries.

Indeed, the notion of widespread migration through exploration and expansion are nearly as old as America itself and people historically moved thousands of miles seeking new opportunities. Regional migration trends have created new opportunities for individuals seeking new careers or business opportunities for investors seeking to capitalize on changing growth patterns. Within the developed world, the experience is uniquely American, and has garnered attention in the shadow of COVID-19 as the U.S. may be entering a new period of mobility. The interplay of technology and labor force skillsets are also leading analysts and investors to question whether historical trends are undergoing a cyclical shift or permanent change. For real estate investors, this is a profound question with potentially significant implications on investment performance.

The COVID-19 pandemic has uniquely affected workers as it forced millions into remote roles for the first time. This "new normal" prompted uncertainty for many workers and employers as they pushed the frontier of where they could work. As a result, some workers—particularly in high cost of living metro areas—began to relocate to more affordable or better-weather regions while working remote. Interestingly however, despite the rise of telecommuting and advancements in digital communication over the past two decades, migration trends across the nation have actually been in decline after peaking in the 1980's. This raises the question of whether the COVID-19 pandemic would reverse this secular trend or be a temporary black swan event.

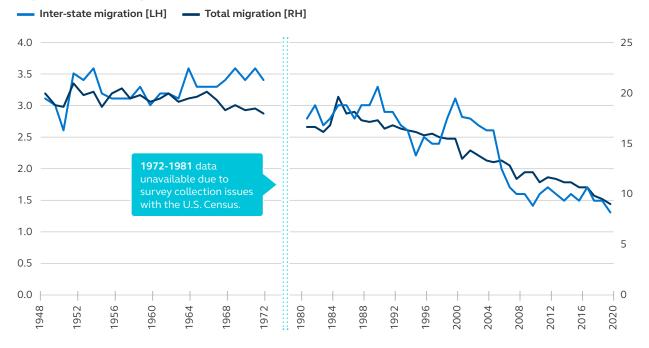
In this special report we trace the history of post-World War II migration and examine the disruption of the COVID-19 pandemic that is intersecting with dramatic technology changes in the workspace. We analyze the factors which have allowed some cities to benefit from migration but also their wherewithal to retain their new growth trajectories—are there enough "sticky" factors to retain and continue to attract new households once the pandemic has fully ebbed? Topics of affordability, education, taxes, climate, and city budgets (i.e., fiscal sustainability) are of increasing importance when viewing the attractiveness of a market for new migrants. Therefore, it is crucial that we also equally assess which markets are supportive of in-migration and will likely remain attractive. This will be critical for the success of these markets as they expand to support a growing population and for real estate investors to fine tune their target markets.



Migration has been in secular decline since the 1980s

The pattern of migration post-World War II can be seen in two distinct patterns. Until the late 1970s, households exhibited high mobility as millions moved toward faster growing metro areas in the south and west. Since the 1980s, migration rates have eased considerably with inter-state movement declining as markets matured (Exhibit 1). While there is no single factor that can explain this slowdown in mobility, vast improvements in technology, lower travel costs and growing equalization of amenities across cities have combined to keep households less mobile since the 1980s. These large secular trends are often difficult to distill down to a single root cause. Below we discuss several demographic and economic factors that have caused the significant slowdown in the movement of the U.S. population over the past several decades.

EXHIBIT 1: Migration patterns show two distinct periods in the post-World War II era Migration as percentage of total population

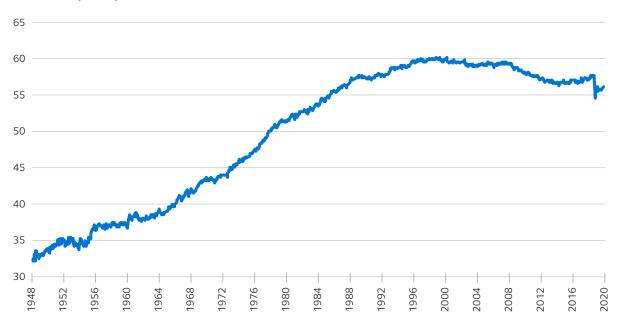


Source: U.S. Census, July 2021

The 1980s marked the beginning of several meaningful shifts in demographics and technology that dramatically slowed down the pace of regional migration. Perhaps most notable was an increasing number of women joining the workforce, raising the number of dual income households. Between 1950 and 2000 the labor force participation rate of women increased from just under 35% to 60% (Exhibit 2). Over roughly the same period dual earner households increased from 25% to 60% of all households. As a result, it became financially and progressively more difficult for households now relying on two incomes to relocate. This was further exacerbated as workers became more specialized and job availability in industries became more heterogenous across cities.

¹ Pew Research, "The Rise of Dual Income Households" (2015)

EXHIBIT 2: The rise in women's labor force participation likely contributed to slower U.S. migration. Labor force participation rate: Female, (%, SA)



Source: Bureau of Labor Statistics; Moody's Analytics, June 2021

Concurrently, home ownership rates increased rapidly from 55% in 1950 to nearly 65% in the 1980s—in line with where it is today. The high transaction costs associated with buying and selling a home is yet another factor which limits longer-haul migration. The declining prevalence of relocation packages compared with just a few decades prior plays no small role here either. As a result, the transactional cost of moving is often higher and necessitates a cost-benefit analysis to gauge the long-term financial impact.

Concurrently, the rapid transformation of the airline industry, both technologically and from a regulatory perspective, created a new dynamic for the U.S. From both perspectives, travel became more expedient and ingrained in everyday life and business. As a result, it has become possible for many employees to stay in a certain geography and travel periodically for business rather than relocate entirely. Gateway cities also saw an erosion in their competitive advantage whether be it in infrastructure, human capital or cultural amenities, as waves of migration began to level the playing field in high growth markets in the south, west and mountain west. Increasingly, cities in these regions began to offer comparative amenities like those offered by larger gateway cities thus narrowing the gap in perceived quality of life.

Finally, slower population growth and aging offer another explanation as to why migration patterns have slowed across the U.S. People aged 30 and under account for two thirds of all inter-state migration according to the U.S. Census Bureau.² While the population of individuals in that age group has continued to grow, they make up a much smaller portion of the population today than 40 years prior. In 1980, for example, the median age in the U.S. was 30, whereas today it is 38 and will likely rise further over the next decade. An aging population is typically less mobile which indicates a structural headwind to more robust migration patterns.

² U.S. Census Bureau, "Geographic Mobility: 2017 to 2018", November 2018.

Patterns post the "Great Migration"

Despite declines in migration since the 1980s, the pattern of long-haul movement has increasingly been dictated by two factors—new jobs and housing affordability (Exhibit 3). Moving for a new job could play less of a role in the future since rapid changes in technology were already making remote work for certain occupations and industries much more feasible. In fact, even before the pandemic workers in all occupations spent 11.4% of their time working from home (WFH), while office workers spent 18.2% of their work day at home, perhaps lessening the growing impact of working from home on office assets.3 A higher WFH ratio for office workers reflects the nature of white collar employment spiking during the pandemic as most office workers were effectively forced to work from home. Yet there is still considerable uncertainty around the proportion of workers that will continue in a remote environment rather than return to their old workplaces.

Had this pandemic unfolded just a decade prior we may not have had the available technology to support such a monumental shift in the workforce, and the resulting fallout to the economy and commercial real estate would have been far worse. Yet as many discovered, the transition was surprisingly effortless for most whitecollar workers and companies, in part due to the rise of remote work prior to the crisis. In this sense, the pandemic likely accelerated trends that had already been observed through slower office demand over the past three decades. What remains to be seen, however, is if this accelerated trend can be sustained or if the reopening of offices brings about a return to normalcy in migration trends, i.e. the recent acceleration may well be cyclical to some extent.

EXHIBIT 3: Housing and employment account for most moves—will the pandemic alter this trend?

	2000-2009	2010-2020		
Family-related reasons				
Change in marital status	6.1%	5.6%		
To establish own household	8.2%	11.3%		
Other family reason	12.9%	12.2%		
Total	27.2%	29.1%		
Employment-related reasons				
New job or job transfer	9.6%	10.0%		
To look for work or lost job	2.0%	1.8%		
To be closer to work/easier commute	3.9%	5.6%		
Retired	0.4%	0.8%		
Other job-related reason	2.1%	1.5%		
Total	18.1%	19.8%		
Housing-related reasons				
Wanted to own home, not rent	8.7%	6.0%		
Wanted newer/better/larger house or apartment	17.6%	16.2%		
Wanted better neighborhood or less crime	4.5%	3.3%		
Wanted cheaper housing	7.0%	8.7%		
Wanted cheaper housing Other housing reason	9.7%	10.0%		
. 3				
Other housing reason	9.7%	10.0%		
Other housing reason Total	9.7%	10.0%		
Other housing reason Total Other reasons	9.7% 47.5%	10.0% 44.2%		
Other housing reason Total Other reasons To attend or leave college	9.7% 47.5% 2.7%	10.0% 44.2% 2.0%		
Other housing reason Total Other reasons To attend or leave college Change of climate	9.7% 47.5% 2.7% 0.5%	10.0% 44.2% 2.0% 0.4%		

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2020.

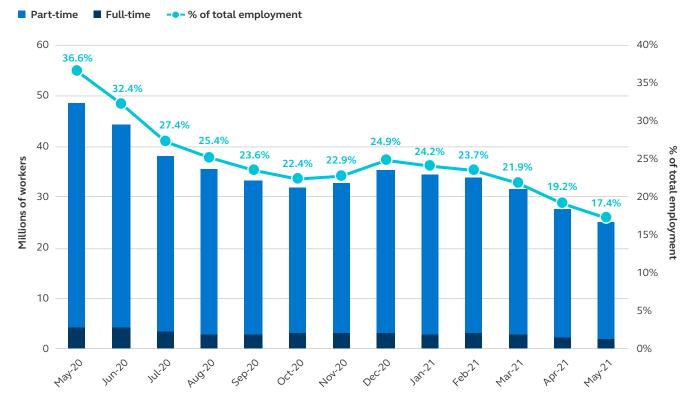
Housing affordability is more of an ingrained issue and one observed prior to the pandemic, however, and has been the kryptonite for large cities with land limitations. The emergence of remote work during the pandemic exacerbated the issue and caused many workers to reevaluate their own living spaces, particularly regarding space and cost. Remote work even gave workers newfound flexibility regarding where they could live. Younger renters were apt to let leases expire and move back in with their parents, transition to the suburbs, or even relocate to a new city entirely. Longerhaul relocations were even possible as a handful of employers provided guidance that they would not be in the office for at least a year—adequate time to run the course on a new lease. Yet data on changes-to-address filings from the USPS suggests that most of these moves are temporary, though it is not difficult to imagine movers would begin with a temporary change of address before reevaluating their situation.⁴ This has the workings of a watershed moment for some workers though, as remote possibilities allow them more geographic freedom.

³ Bureau of Labor Statistics, Monthly Labor Review, "Where did workers perform their jobs in the early 21st century?", July 2019

⁴ MyMove Coronavirus Moving Study, June 2021

Yet despite the massive shift to remote work, workers have already begun to slowly return to the office (remote working has declined from nearly 50m to around 25m over the past 12 months) and many employers who previously noted a willingness to allow permanent WFH arrangements may be rethinking that strategy (Exhibit 4). This suggests that we are beginning to see at least a partial return to pre-COVID-19 normalcy although the transition is still underway as (1) it will take time for workers to continue to vaccinate and cities to relax lockdowns; (2) companies may also exhibit some flexibility in the near term to evaluate whether a more distributed workforce can still create the needed corporate synergies creating an additional level of variability in the return to office trajectory. Over the longer-term, many industries are likely to retain a balance of flexibility for their workforce in a nod to work-life balance as well as the closing of the productivity gap by tectonic improvements in technology.

EXHIBIT 4: Millions of office workers are beginning to return to the workplace Full-and part-time remote workers

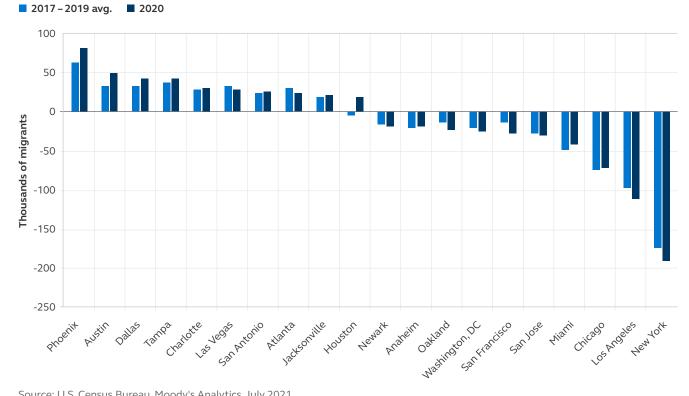


Source: U.S. Census Bureau - Household Pulse Survey (COVID-19), July 2021; Bureau of Labor Statistics, May 2021

The importance of market selection

Although national migration trends have been declining, the data indicates some regions have pulled ahead of the pack and attracted migrants in overwhelming numbers. Exhibit 5 identifies some key markets that have pulled ahead in creating new households due to above average demographic gains and those that have lost. Prominent losers include gateway powerhouses such as New York and Los Angeles, two markets known for their extremely high cost of living, particularly for housing. Winners include smaller cities with significantly lower cost of living and a perceived higher quality of life that have been steadily attracting migrants over the past two decades.

EXHIBIT 5: People have overwhelmingly favored the southern and mountain/western regions recently Domestic net migration, ths.



Source: U.S. Census Bureau, Moody's Analytics, July 2021

Viewing the markets and regions that have seen recent success helps us to establish the factors which are ultimately driving migration trends. Yet, regardless of the success that some metro areas have had in attracting new migrants during the pandemic, retention will be a key factor for future growth. We identify and quantitively rank factors which we believe aid markets in attracting and retaining new migrants. These factors are:

- 1. Cost of doing business—a huge determinant for new businesses looking to relocate or start up while also affecting some key affordability metrics for workers.
- **2. Cost of living—**is straight-forward as we have seen the outsized importance of housing/affordability historically. An important consideration here is the ability to keep a market affordable amid booming population growth. Austin is a good example of a market that is struggling from its own success as huge surges of new migrants have dampened the former lure of affordability. However, the ability to manage growth largely depends on city finances and planning.
- 3. Quality of post-secondary education—acts to support the growth of an educated workforce while also stimulating R&D and consumption. Top research universities in metro areas also generate a synergy with local businesses and help to attract funding for start-ups, which fosters innovation and job creation.

- **4. Climate**—is an increasing consideration particularly as it relates to climate change and impacts on quality of life. This will also play a role as older households continue to age and transition to retirement.
- **5. Employment opportunities—** This has historically been a primary driver of positive in-migration for the fastest growing metro areas. Though it is possible that the marginal effect could be diminished if permanent remote working becomes more prevalent following the return to the office.
- **6. City budgets and planning—**The ability of a city to expand to support new migrants is perhaps one of the most critical in our list, particularly for retention. Here we have used city credit ratings as a proxy for fiscal budgets—a key determinant for city expansion and growth. Markets with poor fiscal budgets may see higher taxes or inadequate infrastructure, which acts as a disincentive for citizens to stay.

When we consider these six factors, we can identify cities most likely to remain demographically advantaged through the attraction and retention of migrants and those which will struggle. The framework for our "sticky table" also incorporates many elements of our "DIGITAL" strategy and acts as a narrower viewpoint of that long-term strategy. Not all aspects of our long-term strategy are present in the below table, however, refining this analysis towards the demographic aptitude of markets. As such, cost of living or secondary education carry significant weight due to their direct involvement in the demographics portion of our strategy. Markets that rank low on these metrics can see lower results long-term, though other pillars of our DIGITAL strategy can still drive growth in markets. This continues to highlight the absence of a silver bullet in a long-term strategy, rather the cooperative effort of numerous structural drivers.

EXHIBIT 6: Markets need to attract and retain migrants: Top/bottom metro areas

		Cost of doing business	Cost of living	Secondary education	Climate	Employment opportunities	City budget
10	Dallas-Plano-Irving, TX						
	Atlanta-Sandy Springs-Roswell, GA		A	A			
	Tampa-St. Petersburg-Clearwater, FL	A	A	A	•	•	•
	Raleigh, NC		A	A	A	•	•
	Denver-Aurora-Lakewood, CO	<u> </u>	♦	•	•	•	•
Тор	San Antonio-New Braunfels, TX	•	A	A	•	A	•
	Austin-Round Rock, TX	•	♦	•	•	•	•
-	San Francisco-Redwood City-South San Francisco, CA	•	♦	•	•	•	•
	Orlando-Kissimmee-Sanford, FL	•	A	A	•	<u> </u>	A
	Jacksonville, FL	•	A	<u> </u>	•	<u> </u>	A
	New York-Jersey City-White Plains, NY-NJ	•	♦	•	A	•	A
	Los Angeles-Long Beach-Glendale, CA	•	♦	•	•	<u> </u>	A
	Oakland-Hayward-Berkeley, CA	♦	♦	•	•	<u> </u>	A
_	Kansas City, MO-KS	<u> </u>	•	♦	A	<u> </u>	•
Bottom 10	Chicago-Naperville-Arlington Heights, IL	<u> </u>	A		•	<u> </u>	•
	Minneapolis-St. Paul-Bloomington, MN-WI	<u> </u>	A	<u> </u>	•	<u> </u>	
	Portland-Vancouver-Hillsboro, OR-WA	<u> </u>	♦	<u> </u>	A	A	•
	Las Vegas-Henderson-Paradise, NV		A	•		*	A
	Miami-Miami Beach-Kendall, FL	•	♦	A	•	A	A
	Tucson, AZ	A	A	•	•	•	•

OutperformanceCaution ♦ Negative impact

Source: Principal Real Estate Investors, July 2021

The information presented in the chart may contain projections or other forward-looking statements regarding future events, targets or expectations and is only current as of the date indicated. There is no assurance that such events or projections will occur and may be significantly different than that shown here. The information is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

^{*}DIGITAL refers to key long-term growth drivers centered around demographics, innovation, globalization, infrastructure, and technology that Principal has identified as metrics of long-term market outperformance.



Data reveals that at a national level, U.S. migration patterns have been slowing since the 1980s. That said, some metro areas, particularly in the south, have certainly seen strong growth in the past decade, largely benefiting from a lower cost of living and business. Although the trend has been evident for some time, COVID-19 has been a catalyst to modestly accelerate the move away from high-priced gateway markets towards faster growing secondary metro areas. Remote work, enabled by technology advancements, has raised questions about the ability of global gateway cities to continue to attract and retain talent and households. Do investors need to shift their focus increasingly toward faster growth markets that screen well on our "sticky table"? As outlined in this special report, to some extent, that out-migration from dense expensive cities has been an ongoing trend. Therefore, metros that have the potential to attract and retain a high-quality workforce are conducive to favorable investment performance. As such, the "sticky table" provides a good starting point toward monitoring relative strength. Yet the continued uncertainty surrounding the long-term implications of the pandemic, along with evolving office trends, suggest the recent acceleration in outmigration from select markets is not conclusive. As such, we do not yet suggest a material downgrade of such markets relative to pre-COVID expectations.

For investors, an early takeaway is a continued focus on markets that embed some of our long-term DIGITAL metrics that will ultimately fuel growth and the retention of human capital. Gateway markets still offer an abundance of human capital, allowing them to remain reasonably attractive. Caution is warranted, however, as the pandemic has likely created a more volatile demand function for converting jobs into real estate demand and therefore should be reviewed from the standpoint of risk-adjusted return potential. On the other hand, markets that offer compelling attraction and retention metrics could be candidates for delivering accretive investment performance. While COVID-19 is clearly a black swan health event of unprecedented magnitude for the world, it is another reminder of the need for real estate investors to constantly evaluate and stay ahead of material shifts in trends.

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