

**Notes:** The center of the U.S. population has been shifting west and then southwest after every census, but that shift has shortened over the last few decades.  
**Source:** U.S. Census Bureau.

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# No More Californias

As American mobility declines, some wonder if we've lost our pioneer spirit. A closer look at the data suggests that the situation is less dire—and more complicated—than it at first appears.

BY KYLE MANGUM

The modern world moves fast, as the cliché goes, but in the U.S. today, people move less frequently than their parents did a generation ago. The decline in mobility is much more than an academic curiosity. Economists widely view labor mobility as the principal mechanism by which regions adjust to local economic shocks. If local industries fall on hard times, workers can leave; in places where labor demand is high, new residents flow in. The decline has therefore generated concern that the economy is less adaptable to local shocks, ultimately resulting in labor misallocation, unrealized output, and lower productivity.

More broadly, the decline runs counter to widely held notions of American culture. The U.S. is a nation of immigrants and pioneers, always on the move in search of better opportunities. Paradoxically, in a time of easy transportation and information access, this nation of pioneers has parked its wagons.

Before we identify a proper policy response, we need to understand why mobility has declined. But to do that, we need to consider the history of population expansion across the North

American continent. Since European settlers landed on the East Coast, the population of the U.S. has spread to the West and South. This trend continued well into the 20th century, when sparsely populated outpost towns in places such as California, Florida, and Arizona burgeoned into the major metropolitan areas known today.

This geographic expansion of population throughout the continent was mostly complete by the 1980s. Recent population growth is still far from uniform, but the regional component has diminished; a city's presence on the West Coast, for example, is no longer a sufficient predictor of its population growth. So the regional reallocation of population has declined, but rarely is that what people mean when they talk about the decline in migration.

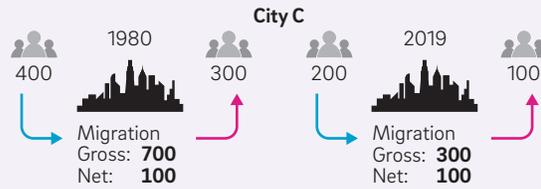
There are two senses of migration, a word meaning generically the movement of population from one settlement to another. Net migration is the difference between inflows and outflows of population, whereas gross migration is the total turnover resulting from those inflows and outflows. It is gross, not net, migration

## Gross vs. Net Migration

If 100 people move into City A and 100 move out, City A's turnover, or gross migration, is 200, but its net migration is zero. If 150 move into City B and 50 move out, City B's turnover is also 200 but its net migration is 100.



Now imagine a third city, City C. In 1980, 400 people moved into City C and 300 moved out, so in 1980 its turnover was 700 and its net migration was 100.



Last year, however, only 200 people moved in and 100 moved out. Now its gross migration is just 300, but its net migration is still 100. That's what we observe in many formerly fast-growing cities throughout the West and South.

that has notably declined in recent years. By differentiating between the two, we can better understand why mobility has declined and, if we are to design policy, at least craft it for the right object.

## Go West, Young Man!

The first clue to understanding the causes of the gross migration decline is its spatial pattern. The decline is substantially different across regions of the country—and not randomly so. The decline has predominantly occurred in cities with typically high rates of turnover, while many low-turnover places have shown no change at all. With high-turnover cities being major sources of inflows to other places, total flows across the system have declined. Thus, the national decline is really the sum of fast-turnover cities slowing down and slow-turnover cities holding steady.

The population of the U.S. has aged during roughly the same period that migration has declined. Older households tend to move less than younger households, making aging an obvious candidate for explaining the decline. It is true that the increase in average household age has contributed to the reduction in the aggregate average rate of migration decline. Aging, however, cannot be the whole story. Researchers have shown that typical aging differences are not quantitatively big

enough to generate the observed national decline.<sup>1</sup> Perhaps more importantly, the decline is present within age groups, so that young people today, for instance, are also moving less than their parents did at the same age. Moreover, aging has occurred at similar rates across cities, so there is no scope for aging to explain the spatial differences in the decline.<sup>2</sup>

Instead, what's important is that the country itself, not just its population, has aged. Cities with high turnover were the population growth destinations of the 20th century in newly developing regions. This growth was the real-world manifestation of the famous 19th century advice, "Go West, young man." The cities of the Northeast, already well established at the founding of the country, have effectively grown at rates below the national average since then (with a modest bump during industrialization). As the country pushed west and south, newly formed cities grew explosively—Chicago and Cleveland in the late 1800s; Los Angeles, Miami, and San Diego in the early 1900s; Phoenix, Las Vegas, and Orlando in the postwar period.<sup>3</sup> (See Figure 1.)

Major technological innovations caused—or at least facilitated—the development of these new regions. Transportation underwent a revolution. Railroads in the 1800s connected the coasts, crisscrossing the continent and making its far reaches accessible for the first time. Automobiles

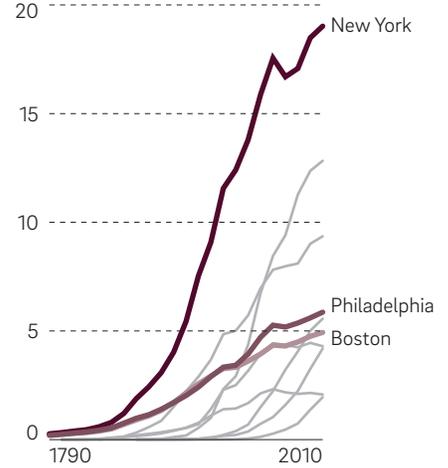
FIGURE 1

## The Boom Moves South and West

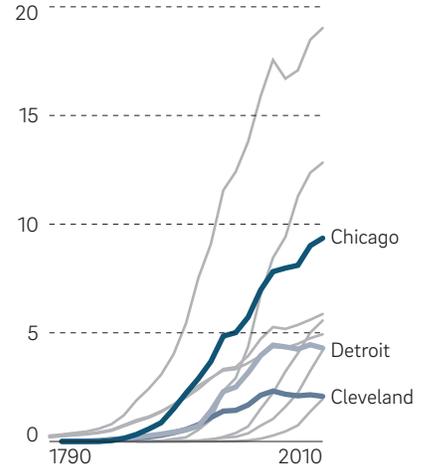
After booming first in the Northeast and Midwest, metro population is booming in the South and West.

Metro area populations, millions of people

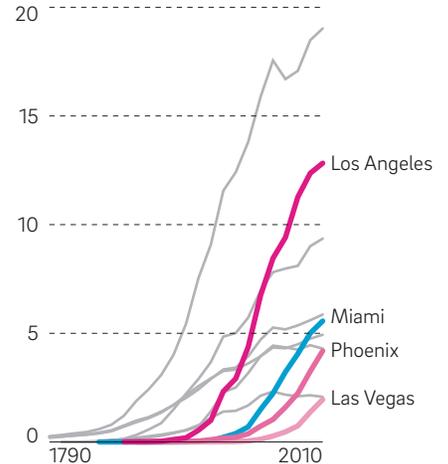
### Northeast Cities



### Midwestern Cities



### Southern and Western Cities

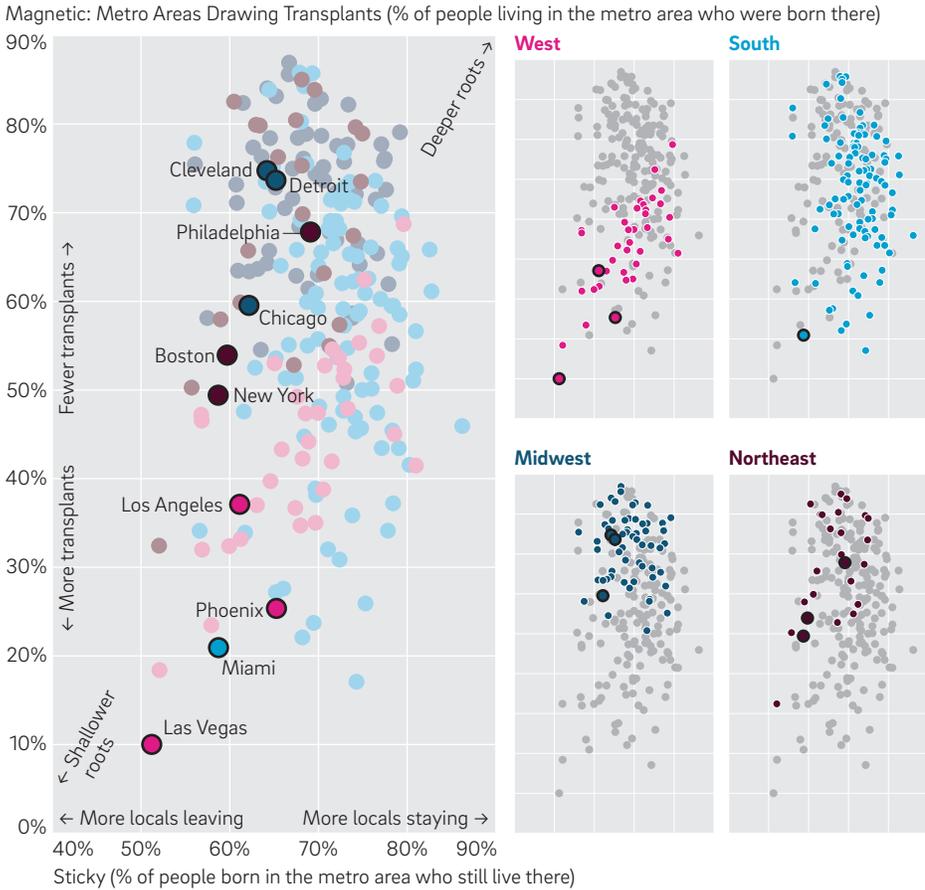


Source: Jonathan Schroeder, Minnesota Population Center, University of Minnesota.

FIGURE 2

### Sticky vs. Magnetic Cities

Some regions see more turnover than others.  
Percent of people

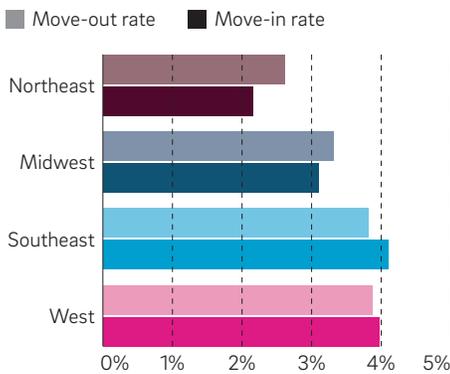


Source: American Community Survey, 2005–2017, via IPUMS USA, University of Minnesota, www.ipums.org.

FIGURE 3

### Turnover Varies by Region

Percent of people who moved into or out of a metro area, summarized by census region

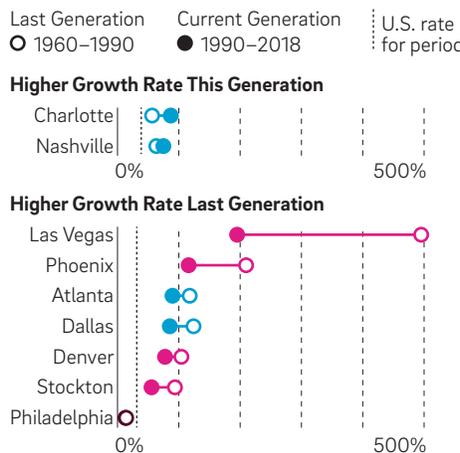


Source: American Community Survey, 2005–2017, via IPUMS USA, University of Minnesota, www.ipums.org.

FIGURE 4

### Population Growth, Then and Now

Even some booming cities have seen a slowdown in their population growth.  
Percent change in metro area population



Source: U.S. Census Bureau.

soon followed, along with an expanding highway system that substantially enhanced regional connections. In the later 20th century, air travel further closed the gaps, turning a transcontinental trip into less than a day's affair.

Developing water technologies made these new regions viable. Water delivery systems (such as the aqueduct serving Los Angeles) were vital to large-scale population growth in the arid West. On the other coast, in damp South Florida, for instance, stormwater control and swamp draining significantly enabled development.

Finally, almost all of these newly developing regions were hot (and sometimes also humid), so the expansion of air conditioning was critical. Besides enhancing household comfort, air conditioning was essential for making viable large-scale buildings like apartment and office towers and manufacturing plants.

The 20th century was then essentially the last movement in the long transition of population expansion across the American continent. Aided by new technologies, unpopulated areas filled with residents relocating from older, colder areas. As the technological shocks abated, and as development blanketed the once-vacant land, rates of population change slowly converged across space. Today, the growing areas are not new cities in unpopulated regions but rather the established midsize, interior cities throughout all regions of the county.<sup>4</sup>

### There's No Place Like Home

Once the westward expansion was complete, an older and arguably more primal tendency became more apparent: On average, all types of people show a preference for their initial locations—an attachment to home. Social scientists have explored this phenomenon by looking closely at trust-based social ties to family and friends. These ties offer nonpecuniary benefits such as the pleasure of close relationships, but also pecuniary benefits such as informal childcare arrangements and financial support in times of personal distress. Moreover, place familiarity—the benefit of “knowing your way around”—can offer myriad pecuniary and nonpecuniary benefits as well.

In principle, home attachment is straightforward and intuitive, but empirically it is difficult to measure what a person considers his or her “home.” One somewhat crude but readily available measure is the U.S. Census question about state of birth. For some people, one’s birth state has little connection to one’s sense of home. Some respondents may not even remember their birth state. Even so, it is a remarkably strong predictor of one’s propensity to migrate. People living near their birthplace show a strong proclivity to remain in their location compared with people born out of state.<sup>5</sup>

A transplanted population, by contrast, is more transient and more subject to various idiosyncratic changes in circumstance. For example, if someone moved to a new place for a job, and the job dissolves for whatever reason, they are likely to move away. Someone with strong local ties whose job dissolves is more inclined to search locally. Hence, turnover rates are high in growing locations. (See Figures 2 and 3.)

This propensity explains why the end of westward expansion could lead, a generation later, to a decline in mobility. High gross migration was an echo effect following population change. Cities with a large share of out-of-state residents lost a lot of their new arrivals, resulting in high turnover rates. Then, as the major shifts in regional population dissipated, an increasing share of people in newly formed locations were “from there” and less susceptible to leaving, and rates of gross migration fell. So the gross migration decline attracting attention today is actually the secondary effect of population shifts that slowed several decades ago. (See Figure 4.)

## The New Normal

So perhaps the U.S. is finally in a “long-run spatial equilibrium,” as some have suggested.<sup>6</sup> The term suggests that households’ incentives to relocate have diminished, either because places are more similar than they used to be,<sup>7</sup> or structural changes in the economy have caused real estate and labor prices to rationalize spatial differences,<sup>8</sup> so that, in either case, relative population adjustments across space are no longer necessary.

It is difficult to know whether the country is (or ever will be) truly in such a state, but there is reason to expect that massive population changes across regions—of the degree seen from colonization to westward expansion—will no longer be business as usual. The major differences in regional habitability have diminished. Transportation has crisscrossed the continent, water delivery-and-control infrastructure has been put in place, and air conditioning is ubiquitous. Technologies today focus on speed and efficiency within cities, not on developing new cities. And in the digital age, new technologies are less spatial.<sup>9</sup>

Population growth today is more balanced across locations compared to the skewness of the early and middle 20th century. Some recently established locations, such as Las Vegas, Phoenix, and Orlando, are still growing at above-average rates, but not at the extreme rates of a generation ago. For the most part, population growth is highest in well-established places with space to accommodate more residents. For example, cities like Atlanta, Charlotte, Dallas, Denver, and Nashville were long-important regional centers that recently achieved major city status on the national stage. Some smaller cities near major metropolitan areas, such as Port St. Lucie, FL, Olympia, WA, and Stockton, CA, are also growing above the national rate.<sup>10</sup> (See Figure 5.)

And this population growth is occurring more within regions than across regions. To the extent that imbalances exist, growing places are established cities rising in the urban hierarchy, leaving the rest of their home region behind and largely drawing people from within their region.<sup>11</sup>

## On the Road Again

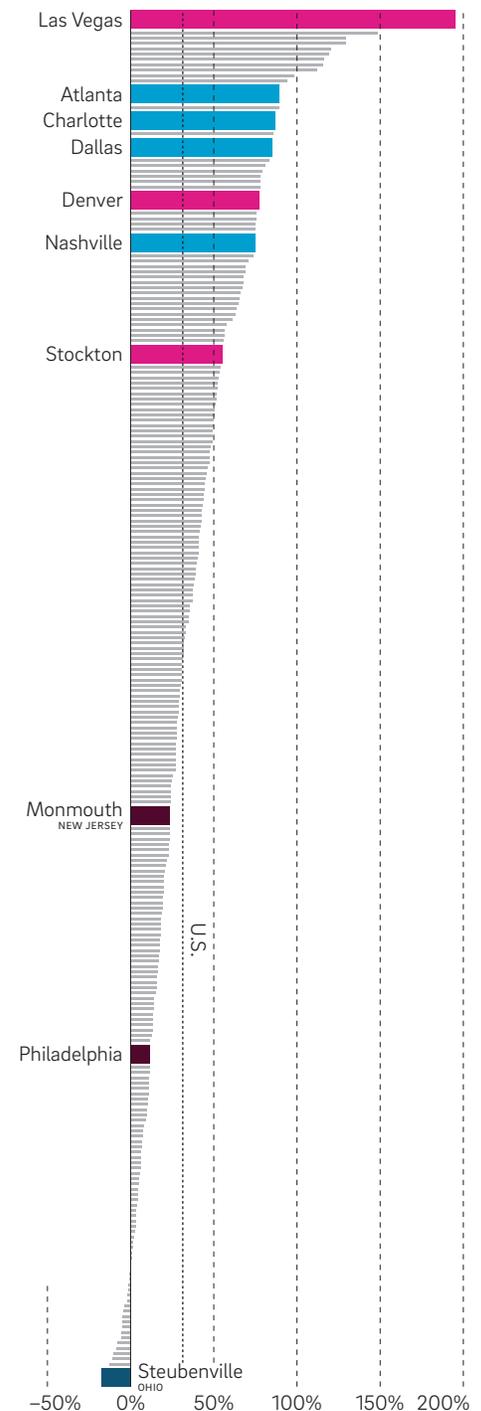
Now that we understand why mobility has declined, we can ask, what if anything should policymakers do about it?

If decreasing turnover is the result of more people rationally deciding to remain in place, the decline could be evidence of increasing welfare across the economy. Households no longer have to incur the costs of relocation to find suitable locations for themselves. Deepening family and social capital, especially in

FIGURE 5

## Sunbelt Cities Boom

Metros in the West and South have seen much bigger growth in population. Percent change, 1990–2018



Source: U.S. Census Bureau.

once high-turnover locations, could have a wide range of benefits individually and socially. So maybe policymakers shouldn't do anything about the decline in mobility.

However, these individually optimal decisions could have negative aggregate consequences. For instance, workers may choose less-productive jobs in their home city so they can be near family, which would be optimal for them but would reduce their labor market output. If such cases are pervasive, it could add up to a knock on aggregate productivity.

It is notable that the migration decline out of high-turnover places has not been seen in older cities developed in previous industrial transitions. Indeed, most examples of struggling labor markets, such as postindustrial cities in the Northeast and Midwest, show no trend at all. To some observers, there is a natural inclination to presume the migration decline as one more force pummeling already-beleaguered cities, but as we have seen, this is not actually how the trend plays out. Those places (as well as some older cities with strong labor markets) show little mobility, and little mobility change, because they already had well-established populations.

In many of these cases, in light of the advantages of personal place attachments, the ideal policy response would not be an incentive to move but rather an enhancement to the productivity in the local job market. Such place-based policies become more appropriate as an economy becomes more locally tied.

Would such place-based policies be sufficient? Or should we also encourage the population shifts America once experienced?

There are two perspectives on this question. One is that the expansion of population across the continent was simply a phase in the life cycle of American development. Unsettled land was available, new technologies made it productive and habitable, and then the land filled with settlement and fixed investment until regions converged to an equilibrium size. Maybe there was nothing uniquely American about high mobility (besides, perhaps, open land) and no reason to desire it now. The wagons reached the coast, and there were no more Californias to settle. In this case, there is no problem for policy to fix.

The second perspective is that population change is unduly restricted by policy failures that create

congestion in desirable, productive places. Regulations that make it hard to build new homes increase costs and prevent cities, especially those offering high incomes or many amenities, from adding new residents.<sup>12</sup> Suboptimal urban planning could lead cities to be overly congested and below capacity. This is the more pessimistic perspective, suggesting that restrictions on population growth restrain productivity growth and exacerbate inequalities by prohibiting access to the best spaces. In this case, policy (or perhaps the removal thereof) has more scope to improve welfare. But the goal of these policies is not to encourage people to move more frequently per se but rather to enable desirable cities to accommodate more residents.

These two perspectives are not mutually exclusive, and the reality likely combines the two. The regional transition is mostly complete (subject to the caveat that there is always potential for new shocks), and the new trend in population growth is in the expansion of existing cities (especially those away from the coasts) across various regions. This should assuage the fears raised by the interregional migration decline, and there is really no clear role for policy here anyway. The real question is whether this natural new phase of population growth is producing the optimal distribution of population across cities, especially across cities within each region.

This issue needs to be analyzed carefully. There is nothing inherently good or bad about rates of population growth being similar; indeed, they should be different if some places are better than others. To the extent that there are market failures inhibiting population growth in some places, however, there is a need for a policy intervention. If housing regulations are the result of rent-seeking on the part of current residents, or if additional population would enhance worker productivity, or if poor urban planning leads to unproductive (and unenjoyable) travel congestion, then a "benevolent social planner" would design the infrastructure (physical and legal) to accommodate more people. In many cases, local interests may oppose this (for individually rational reasons), but such "growth positive" policy may nonetheless benefit society. If we are out of Californias—if, that is, there are fewer new places to settle—we must manage the urban frontier with great care. 

## Notes

**1** See Molloy, Smith, and Wozniak (2011) and Kaplan and Schulhofer-Wohl (2017).

**2** The cities with the largest declines have, if anything, aged less than those with smaller or negligible declines.

**3** Local industrial booms generated some off-path geographic patterns. For example, Detroit grew later than Chicago—the automobile industry took off in the early 20th century, after Chicago was well established—and San Francisco grew as a gold rush town before most of the rest of California was populated. However, the common pattern was explosive growth as each city was established and then tapering growth as the city matured.

**4** Compared with the middle 20th century, domestic natural increase in population has slowed, and a greater share of new population comprises arrivals from foreign countries. Thus, while local population change in the middle 20th century consisted of relocating Americans born in this country, in the late 20th and early 21st centuries local population change substantially consists of immigration from abroad.

**5** Return rates are also high. Those living away from their birthplace are far more likely to return there than are other similar people. This is evidence that initial locations are “special places” to most people. If not for this evidence, the observed inclination to stay put could merely be the result of those people having a stronger distaste for moving (anywhere, ever).

**6** See Partridge et al. (2012).

**7** See Kaplan and Schulhofer-Wohl (2017).

**8** See, for example, Gyourko et al. (2013) and Ganong and Shoag (2017). Partridge et al. (2012), in raising the prospect of a new “long-run spatial equilibrium,” found evidence of a reduced population response to observed regional differences in labor markets or amenities.

**9** Among new technological advances, telecommuting may be a contributing factor to a migration decline because it detaches residence from workplace, and job relocation is frequently a reason for relocation. Although rates of telecommuting have increased, it is still a relatively rare form of commuting; by census estimates, 5.3 percent of employed persons “worked from home” in 2018, up from 3.3 percent in 2000 (2018 American Community Survey and 2000 U.S. Census, respectively). Besides, telecommuting cannot sufficiently explain migration trends across regions or among occupations with limited scope for working from home.

**10** This pattern holds within slower-growing regions as well. For example, in the mid-Atlantic, Monmouth, NJ, is growing at about the national rate but decidedly above the rates of nearby New York City and Philadelphia.

**11** It would be naïve to assume that nothing will ever change. Climate change, as one prominent example, could produce new dramatic shocks to habitability, causing a new phase of shifts in population that renders the population weakly attached all over again.

**12** See, for example, Glaeser and Gyourko (2003), Glaeser (2017), Ganong and Shoag (2017), Herkenhoff, Ohanian, and Prescott (2018), Hsieh and Moretti (2019).

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