# Metropolitan Policy Program The Shape of the Curve: Household Income Distributions in U.S. Cities, 1979-1999 

Alan Berube and Thacher Tiffany

## "Middle-class

## households did

not abandon

American cities
in the last 20
years, but most

## locations lack

the nation's full
spectrum of

## incomes."

## Findings

An analysis of census data on household incomes in the nation's 100 largest cities between 1979 and 1999 shows that:

- A disproportionate number of large-city households occupy the bottom tiers of the national income distribution. One-fourth of households in the 100 largest cities have incomes that, adjusted for regional cost-of-living differences, put them in the bottom fifth of households nationally. By contrast, only one-sixth of large-city households inhabit the nation's top income quintile.

■ The 100 largest cities exhibit six basic household income distribution patterns. Only 13 balanced cities such as Indianapolis mirror the nation's income distribution. Similarly, in just a handful of divided cities, including Washington, D.C., does the number of households at the extremes of the distribution exceed that in the middle. Wealthy households predominate in a few large, suburban-like higher-end cities such as Scottsdale. A larger set of middle-class cities like Colorado Springs have most of their households in the central portions of the distribution. Finally, in low-moderate cities like Memphis, the number of households declines as one moves up the income ladder, but not as steeply as in stressed cities like Cleveland, where households near the bottom outnumber those near the top by at least two to one.
$\square$ The proportion of households with high incomes declined in 79 of the 100 largest cities between 1979 and 1999. Struggling cities in the Northeast and Rust Belt lost high-income households more rapidly than other income groups over the 20-year period, contributing to a proliferation of stressed cities. Meanwhile, the middle-income segment shrank in some of the largest cities even as it grew rapidly in mid-sized cities such as Grand Rapids, Tacoma, and St. Petersburg. Overall, the number of middle-class cities grew from just 13 in 1979 to 29 in 1999.

■ Suburbs' income distribution inverts cities', as more than 25 percent of suburban households occupy the highest-income quintile. Yet the suburbs of the 100 largest cities contain a greater mix of households by income today than in 1979; the relative numbers of high-income households in suburbs declined, while those of low-income and lower-middle-income households rose.

Middle-class households did not abandon all cities over the past 20 years. Still, the majority of cities lack the nation's broad spectrum of incomes. Because a balanced income profile can create better social, fiscal, and political outcomes for places, cities should aim to attract and retain the particular types of households that would contribute to greater income diversity.

## Introduction

The notion of cities as centers of the American melting pot runs through our nation's history and popular consciousness. As much as places where people of different races and ethnicities mix, cities have long been portrayed as bringing the wealthy, the middle class, and the poor together within their borders. ${ }^{1}$

Of course, just because individuals of different means have lived in cities doesn't mean that they have necessarily interacted. Poor Eastern European immigrants reaching Ellis Island at the turn of the 20th century, and blacks moving to the northeast during the "Great Migration," didn't move in next door to J.P. Morgan. Indeed, sharp contrasts between pockets of poverty and wealth characterize most cities.

In fact, over the latter part of the 20th century, the number of extremely poor communities in the U.S. rose dramatically, with most concentrated within central cities. ${ }^{2}$ This trend owed to policies and economic and social forces that confined growing poor, mostly black, populations to urban centers, including: the physical concentration of subsidized housing in the urban core; exclusionary zoning and racial discrimination that impeded the movement of lower-income and minority families into the suburbs; stagnating wages for less-skilled urban workers; and the economic distress accompanying rising rates of single parenthood in inner cities. ${ }^{3}$ The resulting conditions, it is argued, helped prompt the "flight" of many middleand upper-income, mostly white, families to rapidly developing suburbs and beyond. ${ }^{4}$

Still, recent trends have not rendered cities home to the poor alone. While poverty rates in central cities remain higher than those elsewhere, some of the nation's wealthiest households inhabit places like San Francisco's Pacific Heights, Boston's

Beacon Hill, and Manhattan's Upper East Side. ${ }^{5}$ Downtowns across the nation are newly crowded with luxury housing and amenities tailored for higher-income residents. ${ }^{6}$ Meanwhile, the number of extremely poor communities dropped significantly during the 1990s, most dramatically in central cities. ${ }^{7}$

Amid the turbulence at the high and low ends of the scale, however, most observers agree that a steady decline in the size of the urban middle class has occurred in recent decades. As early as 1961, author Jane Jacobs observed: "To be sure, cities are losing their middle-class populations." ${ }^{8}$ In subsequent decades, a growing chorus of urban researchers has echoed this concern. ${ }^{9}$ Without these households, it is argued, struggling city neighborhoods lack positive role models for children; public schools labor to educate an increasingly disadvantaged population; and key middle-income workers like police officers, nurses, and teachers lose connections to the communities they serve. Middleincome earners may form an important part of a city's fiscal base by contributing revenues that the poor cannot, while allowing the city to keep tax rates on wealthier households and businesses competitive with those in surrounding jurisdictions. They may also bolster civic engagement, providing a bridge between the concerns of lower-income and higher-income residents. Finally, the presence of poor and wealthy households, and a lack of middle-income households, may lead to higher prices for all city consumers. ${ }^{10}$

In these ways, a more balanced distribution of households by income likely benefits places and their residents. Indeed, city residents themselves tend to express a preference for such diversity in neighborhood satisfaction surveys. ${ }^{11}$ Still, little research has examined income distributions and income diversity at the city level. Researchers generally prefer to analyze
income inequality across a metropolitan geography. ${ }^{12}$ They argue that because metropolitan areas approximate labor markets, and most income is derived from labor-market activities, one must analyze inequality at that scale.

However, cities-rather than metropolitan areas-remain critical gathering points of economically diverse residents. Moreover, the incomes of city residents crucially affect the fiscal and social health of local jurisdictions. Adding to the interest of city-level income distributions is the question of whether those distributions resemble the nation's. Overall, the income profile of metropolitan areas closely mirrors the national profile, since a majority of the nation's population lives in large metropolitan areas. At the same time, though, the income distribution in large cities could diverge more widely from the national distribution, with greater attendant consequences for those cities.

For these reasons, this analysis focuses on recent trends in the distribution of households by income in cities. Data from the 1980 and 2000 censuses are employed to investigate the changing distribution of household incomes in the nation's 100 largest cities. First, after an explanation of the report's methodology, the inquiry examines the overall distributional pattern in 1999, and identifies common types of income distributions that occur across cities. ${ }^{13}$ It then examines how these distributions changed across the 1980s and 1990s, looking especially at increases and declines in the presence of low-income and highincome households in different types of cities. ${ }^{14}$ Finally, suburban income distribution and household fortunes are compared historically to those of their central cities.

In the end, the discussion asserts that the nation's cities can-and should-provide a suitable living environment for individuals and families from across the income spectrum.

Along the way, the study assesses which cities exhibit this type of diversity, where the gaps exist, and how the obstacles to creating truly mixedincome places differ markedly across urban America.

## Methodology

## About the data

This study measures the distribution of households by income in the 100 largest U.S. cities. We use data on household income collected on the decennial census "long form" and reported on census summary files. In each census, households report their income for the prior year; thus, 1980 census statistics reflect income in 1979, 1990 census statistics reflect 1989 income, and Census 2000 statistics reflect 1999 income. ${ }^{15}$

As with most census "long form" topics, data on household income are available for very small levels of geog-raphy-down to the block group (averaging 1,500 people). Privacy considerations thus obligate the Census Bureau to report these income data categorically. This means that for any given geography, summary file data provide the number of households within pre-determined income ranges. ${ }^{16}$ For 2000, the Census Bureau provides the number of households in each of 16 income categories. Households in the first category had incomes between 0 and 9,999 dollars in 1999, the second between 10,000 and 14,999 , and so on. Income categories, unfortunately, are not the same size across the income spectrum (ranges become wider at higher income levels), or across censuses (1980 had 17 categories, and 1990 had 25).

In the interest of examining places with significant populations that act as economic centers for their regions, we limit our analysis to the 100 largest cities as of 2000. New York City is the largest city with a population of 8 million, and more than 3 million house-
holds. The smallest city, Irving, TX, had 193,000 residents and 76,000 households in 2000. ${ }^{17}$

## Median versus distribution

Why look at the entire distribution of income, rather than a simpler measure like median income, which indicates the "middle" income above and below which 50 percent of households lie? For cities at the extremes, the median certainly reveals much about the distribution. Buffalo, with a median household income of just \$24,500 in 1999, is likely to see its households cluster at the bottom of the distribution. The opposite surely holds in San Jose, where the median was over \$70,000.

For cities between the extremes, though, examining the median alone can obscure important differences between very distinct places. For instance, the median household income in both Atlanta and Oklahoma City ran about $\$ 35,000$ in 1999. But Atlanta had many more households at the extremes- 24 percent earned less than $\$ 15,000$, and 15 percent earned more than $\$ 100,000$. By contrast, the corresponding figures for Oklahoma City were 19 percent and 8 percent. While poverty and wealth are no doubt apparent in both places, Atlanta may resemble a city of haves and have-nots to a much greater degree than Oklahoma City. These differences are apparent only when one examines the full spectrum of households by income.

## Households versus families

Any study on income involves a choice among numerous "units of analysis." That is, a study may examine how income is distributed among people or places; within places, it may examine individuals or groups of individuals. Many studies use per capita incometotal income divided by population-to examine differences across places and across time. ${ }^{18}$ For purposes of examining changes in the distribution of
income in a particular place, per capita measures are not useful, since they average total income across all residents. ${ }^{19}$

Since this study uses census-based income data, a key choice is whether to focus on families or households, since the census provides data for both groupings. Looking at familiesdefined as two or more related people living together-may better control for the diversity of income-earning units. Families typically do not include young singles, senior citizens living alone, or non-related group living situations where individuals may have very different incomes or expenses than other household types. A major disadvantage of looking at families, however, is that doing so excludes a substantial portion of city populations. If we used families in our analysis, we would effectively exclude four out of every 10 households in the 100 largest cities. ${ }^{20}$ Households, on the other hand, include the vast majority of city population. ${ }^{21}$

Because we are interested in establishing general trends in city-dweller incomes, we opt for inclusivity, and focus on households. If we were interested in issues that specifically concerned families, such as how the presence of an urban middle class affects city schools, families might be a more appropriate measure. ${ }^{22}$

## Creating income groups

To provide a consistent measure of how income is distributed across cities and across time, household income data were used to create five "income groups" for each city, in each census year. These income groups reflect the national household income distribution in the given year, so that each income group contains 20 percent of all U.S. households. ${ }^{23}$ By this method income "cutoffs" were established for each group. For instance, in 1999, census data indicate that 20 percent of U.S. households had incomes under $\$ 18,320 .{ }^{24}$ For each of the 100 largest
cities, then, we use the categorical income data to estimate the number and proportion of households with income in the $\$ 0$ to $\$ 18,320$ range (though we make adjustments to these estimates for regional cost differences (see "Accounting for Regional Cost Differences" below). For each city, these figures represent the size of the low-income household population.

We apply the same method to derive the size of the other four income groups-lower-middle income, middleincome, upper-middle income, and high-income-in each large city in 1999. Similarly, we use household income data from the 1980 census to create income groups that reflect the national distribution of household income in that year. Thus, the ceiling for the low-income group in 1979 was \$7,107.

Of course, the allocation of income across groups has shifted over the last two decades, as the highest earners have garnered an increasing share of the nation's income. ${ }^{25}$ Although cities surely shared in this overall trend, the Census Bureau does not report income data in a way that sheds light on equity trends at the city level. For that reason, this study instead assumes that the income distribution of the nation's households can help shape fundamental notions of who is "lowincome" or "middle-income," and the degree to which these groups are overor under-represented in the nation's large cities.

## Interpreting the data

Cities' income distributions were assessed primarily by analyzing the shares of their households that fit within each of the five income brackets. These shares were calculated for the 100 largest cities in the aggregate, and for each of the cities individually. ${ }^{26}$ These data show, for a given year, how a given city's households compare by income to all of the nation's households. Therefore, even if a city's household income distribution
changes over time, the data may reflect little transition if those changes mirrored changes occurring at the national level.

For a city with a perfectly balanced income distribution, by our measures, 20 percent of all households would fall within each of the five income brack-ets-that is, its households' incomes would mirror those earned by all U.S. households. As the proportion of households in any income group trends away from 20 percent (in either a positive or negative direction), it diverges from the nation as a whole. Together, the five income groups' shares must total 100 percent, but in some cities households tend to bunch into a narrow part of the distribution curve.

Consider two examples. In 1999, middle-income households in both Austin, TX and El Paso, TX represented about 20 percent of all households. That is, the size of the middle-income household population in these cities mirrored the size of that group nationally. Yet in other parts of the income distribution, these cities differed significantly. In Austin, no single income group captured more than 22 percent of households, or less than 19 percent of households. By contrast, El Paso had twice as many low-income households (26 percent) as highincome households ( 13 percent) in 1999. These differences among cities, and between large cities and the nation generally, motivate our analysis. ${ }^{27}$

## Accounting for regional cost differences

Wide variations in the prevailing cost of living characterize the nation's largest cities. Any analysis that compares incomes in different areas of the country must somehow account for the large differences in the bundle of goods and services that households with the same income can purchase in, for example, San Francisco, CA, on the one hand, and Birmingham, AL. For
instance, the median San Francisco household in 1999 made \$55,221, while the median Birmingham household made \$26,735 (nationwide, median household income was $\$ 41,994)$. At the same time, vast differences in the cost of housing, insurance, food, and other services characterize each locale. Given these differences, it does not seem appropriate to use the same income range to identify "middle-income" households in these two cities.

Because no standard published indicator reports these regional price differences, this analysis establishes a "metropolitan price index" to adjust for such differences among the 100 cities, and changes in those costs across the two decades. The index reflects fair market rent prices collected and published by the U.S. Department of Housing and Urban Development, and methodology the U.S. Census Bureau has used to derive experimental poverty measures. ${ }^{28}$ We then use this index to adjust the cutoffs for each national income group to the prevailing costs in each city. For example, we consider a San Francisco household middle-income if it made between $\$ 44,102$ and $\$ 67,591$ in 1999, while a Birmingham household only needed to earn between $\$ 31,504$ and $\$ 48,282$ to receive that designation (Table 1). To qualify as "high-income" under our definition, a household must have earned \$30,000 more annually in San Francisco than in Birmingham.

By adjusting for regional price differences, we define a smaller number of households as high-income, and a larger number of households as lowincome, in expensive cities. In inexpensive cities, the reverse pattern holds. Because metropolitan areas are overall more expensive than the national average, and because we examine central cities within metro areas, our aggregate totals for the 100 cities reflect a marginal "high cost" effect. ${ }^{29}$

Table 1. Household Income Ranges by Group, Nation Versus Selected Cities, 1999

| Income Group | Nation | San Francisco, CA (price index $=1.30$ ) | Birmingham, AL (price index $=\mathbf{0 . 9 3}$ ) |
| :--- | ---: | ---: | ---: |
| Low-income | Under $\$ 18,320$ | Under $\$ 23,878$ | Under $\$ 17,057$ |
| Lower-middle-income | $\$ 18,320$ to $\$ 33,835$ | $\$ 23,878$ to $\$ 44,101$ | $\$ 17,057$ to $\$ 31,503$ |
| Middle-income | $\$ 33,836$ to $\$ 51,857$ | $\$ 44,102$ to $\$ 67,591$ | $\$ 31,504$ to $\$ 48,282$ |
| Upper-middle-income | $\$ 51,858$ to $\$ 79,356$ | $\$ 67,592$ to $\$ 103,433$ | $\$ 48,283$ to $\$ 73,885$ |
| High-income | Over $\$ 79,356$ | Over $\$ 103,433$ | Over $\$ 73,885$ |

Source: Authors' calculations of Census 2000 and HUD Fair Market Rent data

## Timing and business cycles

Economists often examine "secular" changes from one peak of the business cycle to the next when they study long-term income trends. This is a useful technique because it compares incomes at similar stages in the overall economy. Examining city-level data using the decennial census, we are limited to analyzing one year each decade. It is thus reassuring that business cycle peaks have correlated almost perfectly with the decennial census during the last two decades, occurring in 1979, 1989, and 2000. ${ }^{30}$ While the data examined here are now about four years old, our interest in city income trends independent of the business cycle make these data useful and compelling. Future enhancements to the American Community Survey may enable researchers to track these city-level trends more closely on an intercensal basis. ${ }^{31}$

## Findings

A. A disproportionate number of large-city households occupy the bottom tiers of the national income distribution.
Low-income individuals who seek close proximity to employment centers and inexpensive housing have always populated cities. Some also argue that the poor are more likely to live in cities because they seek greater access to public transit or more generous welfare policies. ${ }^{32}$ Even in 1967, before

Figure 1. Proportion of Households by Income Category, 100 Largest Cities, 1999


Source: Authors' analysis of Census 2000 data
the significant increases in urban poverty that followed, the Census Bureau recorded a 15 -percent poverty rate in central cities, four percentage points higher than in the nation as a whole. This gap widened by the mid1990s to seven percentage points, before it narrowed slightly in the 1990s.

It may therefore come as no surprise that the nation's largest cities today contain a disproportionate number of households that, judged by national standards, have low incomes. Across the 100 cities in the aggregate, about one-quarter of households occu-
pied the bottom fifth of the national income distribution in 1999 (Figure 1). While the exact dollar amount these households earned varied from city to city (reflecting adjustments for regional price differences), these households' incomes generally fell below about $\$ 19,150$ for the year. ${ }^{33}$ The largest cities also contained an above-average share of lower-middleincome households. These households accounted for 21.5 percent of households overall.

Along with containing more than their share of lower-income households the largest 100 cities also con-

Table 2. Cities with Largest Shares of Households in Low-, Middle-, and High-Income Categories, 1999

| Rank | City | Households in Quintile | Total Households | Share of Households (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Largest Low-Income Shares |  |  |  |  |
| 1 | Miami, FL | 57,208 | 134,344 | 42.6 |
| 2 | Newark, NJ | 37,423 | 91,366 | 41.0 |
| 3 | Buffalo, NY | 45,369 | 122,671 | 37.0 |
| 4 | Cleveland, OH | 69,350 | 190,725 | 36.4 |
| 5 | Rochester, NY | 31,438 | 89,092 | 35.3 |
| 6 | New Orleans, LA | 65,251 | 188,365 | 34.6 |
| 7 | Philadelphia, PA | 198,737 | 590,282 | 33.7 |
| 8 | Birmingham, AL | 32,975 | 98,748 | 33.4 |
| 9 | Detroit, MI | 111,370 | 336,483 | 33.1 |
| 10 | St. Louis, MO | 48,389 | 147,286 | 32.9 |
| Largest Middle-Income Shares |  |  |  |  |
| 1 | Aurora, CO | 25,703 | 105,526 | 24.4 |
| 2 | Virginia Beach, VA | 36,753 | 154,636 | 23.8 |
| 3 | Irving, TX | 18,218 | 76,373 | 23.9 |
| 4 | Santa Ana, CA | 17,009 | 72,993 | 23.3 |
| 5 | Mesa, AZ | 34,566 | 146,700 | 23.6 |
| 6 | Fort Wayne, IN | 19,179 | 83,416 | 23.0 |
| 7 | Des Moines, IA | 18,228 | 80,621 | 22.6 |
| 8 | Garland, TX | 16,819 | 73,279 | 23.0 |
| 9 | Grand Rapids, MI | 16,169 | 73,337 | 22.0 |
| 10 | Jacksonville, FL | 62,476 | 284,660 | 21.9 |
| Largest High-Income Shares |  |  |  |  |
| 1 | Plano, TX | 37,022 | 81,179 | 45.6 |
| 2 | Fremont, CA | 26,626 | 68,303 | 39.0 |
| 3 | Scottsdale, AZ | 31,167 | 90,602 | 34.4 |
| 4 | San Jose, CA | 82,267 | 276,408 | 29.8 |
| 5 | Anchorage, AK | 23,788 | 95,081 | 25.0 |
| 6 | Charlotte, NC | 55,250 | 215,803 | 25.6 |
| 7 | Chesapeake, VA | 16,136 | 69,836 | 23.1 |
| 8 | Arlington, TX | 28,708 | 124,851 | 23.0 |
| 9 | San Francisco, CA | 77,656 | 329,850 | 23.5 |
| 10 | Raleigh, NC | 25,424 | 112,727 | 22.6 |

Source: Authors' analysis of Census 2000 data
tained fewer than their share of highincome households. Such house-holds-which on average made more than $\$ 83,000$ in 1999-accounted for only one-sixth of large-city households (again, compared to one-fifth nationally). In a reverse image of the lowerincome end of the scale,
upper-middle-income households also made up less than a fifth of large-city
households. Although some cities contain highly sought-after housing and neighborhoods, higher-income households are clearly under-represented in large cities.

The 100 largest cities include a wide range of places, however, and their household income profiles reflect this diversity. Table 2 describes the income continuum across the largest
cities. It shows that, in fact, lowerincome households do not concentrate in every city. In Plano, TX, a fast-growing city in the suburbs of Dallas, nearly 46 percent of households occupied the highest-income quintile in 1999. ${ }^{34}$ Miami, however, displayed an exactly opposite pattern, with 43 percent of its households residing in the lowest national quintile.

Table 3. 100 Largest Cities by Household Income Distribution Type, 1999

| Balanced $(\mathrm{n}=13)$ | Divided $(\mathrm{n}=7)$ | Higher-End $(\mathrm{n}=8)$ | Middle-Class$(\mathrm{n}=29)$ |  | Low-Moderate$(\mathrm{n}=29)$ |  | Stressed $(\mathrm{n}=14)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Riverside, CA | Atlanta, GA | Plano, TX | Aurora, CO | Glendale, AZ | Montgomery, AL | Toledo, OH | Louisville, KY |
| San Diego, CA | Baton Rouge, LA | Fremont, CA | Santa Ana, CA | Nashville, TN | Tacoma, WA | Mobile, AL | New Orleans, LA |
| Lexington-Fayette, KY | Washington, DC | Scottsdale, AZ | Garland, TX | St. Paul, MN | Oklahoma City, OK | New York, NY | Detroit, MI |
| Seattle, WA | Los Angeles, CA | San Jose, CA | Irving, TX | Portland, OR | Corpus Christi, TX | Lubbock, TX | Baltimore, MD |
| Bakersfield, CA | San Francisco, CA | Charlotte, NC | Virginia Beach, VA | St. Petersburg, FL | Houston, TX | Memphis, TN | Tucson, AZ |
| Austin, TX | Yonkers, NY | Anchorage, AK | Mesa, AZ | Madison, WI | Sacramento, CA | Spokane, WA | Philadelphia, PA |
| Honolulu, HI | Glendale, CA | Arlington, TX | Des Moines, IA | Fort Worth, TX | Chicago, IL | El Paso, TX | St. Louis, MO |
| Indianapolis, IN |  | Raleigh, NC | Fort Wayne, IN | Kansas City, MO | Oakland, CA | Shreveport, LA | Birmingham, AL |
| Greensboro, NC |  |  | Anaheim, CA | San Antonio, TX | Stockton, CA | Akron, OH | Rochester, NY |
| Omaha, NE |  |  | Lincoln, NE | Albuquerque, NM | Long Beach, CA | Norfolk, VA | Buffalo, NY |
| Phoenix, AZ |  |  | Colorado Springs, CO | Denver, CO | Jersey City, NJ | Pittsburgh, PA | Hialeah, FL |
| Las Vegas, NV |  |  | Grand Rapids, MI | Minneapolis, MN | Tampa, FL | Milwaukee, WI | Cleveland, OH |
| Wichita, KS |  |  | Chesapeake, VA | Dallas, TX | Fresno, CA | Richmond, VA | Newark, NJ |
|  |  |  | Columbus, OH | Tulsa, OK | Boston, MA | Cincinnati, OH | Miami, FL |
|  |  |  | Jacksonville, FL |  | Augusta-Richmond, GA |  |  |

Source: Authors' analysis of Census 2000 data. See text for explanation of city types.

For middle-income households, however, the variance among cities narrows. The leading city for middleincome households, Aurora, CO, has just 24 percent of its households in that segment. By contrast, Miami and Plano count roughly 15 percent of their households in this category. Thus, while middle-income households are slightly under-represented in large cities overall, more cities hover close to the national average for this segment of the distribution than for the others.

As the overall pattern demonstrates, though, city households tend to cluster toward the bottom of the income distribution. Roughly one-third or more of the households in the 10 cities with the largest proportions of low-income households lie in that category. On the other hand, the tenth city on the high-income list registers just 23 percent of its households in the top category. In this way, the aggregate statistics reflect that the large numbers of low-income house-
holds in poorer cities outweigh the presence of high-income households in wealthy cities.

## B. The 100 largest cities exhibit six basic household income distribution patterns.

The 100 largest cities exhibit a wide variety of household incomes, and not all cities follow the average pattern. Miami and Plano remain outliers. But numerous cities share common features that can illuminate where and how certain household types cluster, and how cities have changed in recent decades.

At least six prominent types of city household income profile can be described based on the relative number of households in each part of the income scale.

Four of them simply reflect where the most households reside along the income continuum:

- In balanced cities, the household income distribution largely mirrors
the national distribution. The number of households in any one category does not exceed that in any other by more than 25 percent ${ }^{37}$
- Divided cities have a "u-shaped" income distribution, such that both high-income and low-income households outnumber middle-income households
- Middle-class cities have their largest number of households in one of the three central categories-lower-middle-income, middleincome, or upper-middle-income
- In higher-end cities, more households reside in the top income category than in any other

The remaining cities have their largest number of households in the lowest-income quintile. Notwithstanding the enormous diversity that exists even among these cities, two additional types of city can be discerned:

Figure 2. Proportion of Households by Income Category and City Type, 100 Largest Cities, 1999


Source: Authors' analysis of Census 2000 data. See text for explanation of categories.

- Stressed cities have at least twice as many households in the bottom two categories combined (lower-middle and middle-income) as in the top two categories combined (uppermiddle and high-income).
- Low-moderate cities include those that remain. Their income distribution slopes downward (i.e., each successive income category contains fewer households), but not as steeply as in stressed cities.

Table 3 displays the resulting typology of cities, and Figure 2 displays the overall distribution for each city type. As with any typology, this one pivots on certain numeric thresholds that place similar cities in different categories. For instance, the household income distribution in Oklahoma City, OK closely resembles that in Tulsa, OK (see Appendices A, B, and C for data on all 100 cities). Yet Tulsa is labeled middle-class because it has 700 more lower-middle-income house-
holds than low-income households, while Oklahoma City is labeled lowmoderate because its low-income households outnumber its lower-mid-dle-income households by about 300 . The reader should thus view each category as a continuum, in which the cities at the bottom of one category overlap slightly with those at the top of the next. ${ }^{37}$

At any rate, several observations bear making about the classification system:

A surprising number of cities boast significant middle-income populations.

Despite the perception that relatively few middle-class households reside in cities, it is noteworthy that more than one-quarter of the 100 largest cities contain abundant numbers of middle-tier households. These 29 middle-class cities divide nearly evenly between three regions of the country-the South (11), the Midwest (nine), and the West (nine). As Figure 2 shows, roughly 20 percent or more of these cities' households reside in each of the three middle-income categories. High-income households, by contrast, represent just over one-sixth of all households, the same proportion as in the 100 cities generally.

These cities are by no means homogeneous. They range from those with concentrations of lower-middle-income households, like Dallas, to those with large numbers of upper-middle-income households, like Chesapeake, VA. Yet all place at least one-fifth of their households squarely in the middleincome bracket. Their middleincome orientation may owe to a variety of factors. Many lie in Sunbelt metropolitan areas that have recently attracted significant numbers of families and educated workers. ${ }^{38}$ Several are Midwestern cities like Columbus, Kansas City, and Fort Wayne that have expanded their borders over time through annexation, thereby incorporating more middle-income households. ${ }^{39}$ And other cities like Irving, Mesa, and Glendale are themselves suburban in design and demography, and have emerged as full-fledged cities only in the last 20 or 30 years. ${ }^{40}$

What is more, several other prominent U.S. cities-among them Dallas, Denver, the Twin Cities, and Portland—manage to rank among those with a decent-sized middleincome population even without enjoying such regional or temporal
advantages. These cities' natural amenities and/or robust employment growth seem to have fueled their success in attracting and retaining younger households and families that disproportionately occupy the middle rungs of the distribution.

Relatively few cities hew closely to the national distribution.

Out of the 100 largest cities, only 13 displayed a balanced income distribution. These cities are distinguished by their large geographical size-ten encompass more than 100 square miles-and their locationten sit in the southern or western regions of the U.S. Many of these cities, like Phoenix, Las Vegas, Bakersfield, and Riverside, experienced rapid in-migration in recent years of both higher-income and lowerincome households. At the same time, some used their "elastic" borders to incorporate once-suburban communities within central-city borders, boosting their overall income diversity. ${ }^{41}$

Only seven cities encompass large numbers of both low-income and highincome households.

Among the 100 largest cities, only seven appear to contain larger-thanaverage numbers of both poor and rich households. The broader perception that this is a common feature of cities may be shaped by the fact that these divided cities include some of the nation's largest and most recognizable centers, including Los Angeles, Atlanta, San Francisco, and Washington, D.C. As Figure 2 shows, these cities collectively count only 17 percent of their households in the middle-income category, a smaller proportion than in the other five city types. For the most part, however, their income distribution is more "ski jumpshaped" than "u-shaped" since many more of their households have
low incomes ( 27 percent) than high incomes ( 19 percent). Large demographic and economic disparities by race and ethnicity characterize most of these cities. For example, the incomes and education levels of black households in Atlanta and Washington and Latino households in Los Angeles and San Francisco substantially trail those of their white counterparts, contributing to the large divides in their cities' income distributions. ${ }^{42}$

A few cities-including several "Boom-burbs"-are havens for mostly higherincome residents.

Most of the eight places in the higher-end category are fast-growing cities in the southern and western U.S. In fact, Lang and Simmons identify four of these eight cities as "Boomburbs." ${ }^{43}$ These cities have experienced rapid growth in recent decades but have largely retained their suburban character, thanks in part to the master-planned-community development that has fueled their growth. The wealthy profile of other cities in this categoryincluding San Jose, Charlotte, Raleigh, and Anchorage-owes to their geographically expansive borders and strong economic growth in recent years.

Low-income households predominate in 43 cities, although some cities are better off than others.

The 100 cities' overall downwardsloping income distribution implies that in a large number of these cities low-income households represent the largest group. Because fully 43 cities meet this criterion, it makes sense to distinguish between those cities where the income distribution skews just slightly towards the low end, and those where lowerincome households predominate.

The first group, labeled low-moderate cities, consists of 29 places that include some of the largest in
the nation, such as Houston, Chicago, Boston, and New York. While they still contain a fairly diverse set of households by income-in fact, these cities all boast significant numbers of higherincome households-a good number still confront familiar urban problems associated with a lowerincome profile: above-average poverty, low-performing public schools, slow population growth or decline, and segregated neighborhoods. As do divided cities, these cities contend with significant gaps between white and minority populations, although the magnitude of the separation remains smaller. Overall, a little under half of households in these 29 cities occupy the bottom two income categories. That suggests that the great amounts of wealth held by their highest-income households-rather than any large surplus of such householdsaccounts for popular notions of cities like New York and Boston as high-end havens.

And yet, these low-moderate cities remain much better positioned to address their challenges than the 14 stressed cities. The stressed list includes places struggling with larger problems that include the long-term transition away from a manufacturing-dominated economy, extreme racial segregation, and migration out of the northern U.S. to southern and western states. As Figure 2 shows, more than one in three households in these 14 cities occupies the lowest income category. Northeastern cities on this list-including Newark, Philadelphia, and Rochester—are "hemmed in" by incorporated jurisdictions that forestall their ability to annex suburban territory. At the same time, a number of Sunbelt cities with high rates of black or Hispanic poverty-ranging from Miami (and its neighboring city, Hialeah) and Birmingham to

New Orleans and Tucson-—also fall into this category. ${ }^{44}$

In sum, households in the lowest national income bracket comprise a high concentration of the household count in a plurality of large American cities. Most cities, to be sure, are not without higher-earning households, but a handful of cities in struggling regions of the U.S. face especially daunting challenges associated with very high concentrations of households living on low incomes. At the same time, a significant number of middle-class cities dot the Southeast, Southwest, and Midwest. Many of these cities have expansive borders and include suburban-like development, while others of more traditional design seem to appeal to younger mid-dle-income populations. A few cities show high levels of inequality, or heavy tilt toward upper-income households. Finally, only about one in eight cities resembles the nation as a whole, with roughly equal numbers of households within each segment of the income scale.

## C. The proportion of households

 with high incomes declined in 79 of the 100 largest cities between 1979 and 1999.Far from immutable, the income distribution within America's big cities has shifted during the last 20 years.

At the outset, it bears noting that declines or increases in different parts of the income distribution can occur for a variety of reasons. A rise in a city's share of low-income households, for instance, may owe to that segment either growing faster or shrinking more slowly than other segments, whether thanks to in- or out-migration or other causes. By the same token, economic growth may bolster the earnings of middle-income households, advancing them into the upper-middle-income category. Or for that matter the demographics of aging, through their influence on household
formation patterns, may alter a city's income profile over time. For example, as households age into retirement, their incomes may decrease even though they maintain a comparable standard of living by drawing on accumulated assets. In like fashion, a city may trade lower-income households for higher-income ones as singles form households and combine earnings. ${ }^{45}$

Given the variety of these potential influences on city income distribution, this assessment makes no attempt to identify empirically the various factors at play in particular cities. The discussion does, however, offer some speculation as to why some cities experienced large changes in their income distributions, based on larger demographic, economic, and physical growth trends prevailing over the two decades.

It is not obvious, without a look at the data, whether cities overall have more lower-income, middle-income, or higher-income households than they did 20 years ago. Places like Detroit and Cleveland that lost significant population and decent-paying jobs in recent decades are undoubtedly home to poorer households than before. But fast-growing cities in the South and West may have offset that trend by absorbing more middle- and highincome households. Within metropolitan areas, decentralizing development and exploding exurbs seem to have lured higher-income households farther away from the urban core. Yet low- and moderate-income households populate suburbs in growing numbers, too, especially as immigrants increasingly bypass cities altogether in certain U.S. regions. ${ }^{46}$

Notwithstanding these divergent trends, the income distribution of households in the 100 cities appears to have changed only slightly between 1979 and 1999. ${ }^{47}$ The number of households in each part of the income distribution grew in the 100 largest cities over the 20-year period. Yet because higher-income households

# Table 4. Cities with Fastest Growth and Fastest Decline in High-Income Household Share, 1979-1999 

| Rank | City | -Income <br> seholds, $1979$ | Percentage of Households, 1979 | High-Income Households, 1999 | Percentage of Households, 1999 | Change in HighIncome Share, 1979-1999 | $\begin{array}{r} \text { City Type, } \\ 1979 \\ \hline \end{array}$ | $\begin{array}{r} \text { City Type, } \\ 1999 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fastest Growth |  |  |  |  |  |  |  |  |
| 1 | Atlanta, GA | 22,395 | 13.7\% | 33,261 | 19.8\% | 6.0\% | Stressed | Divided |
| 2 | Fremont, CA | 14,760 | 33.4\% | 26,626 | 39.0\% | 5.6\% | Higher-End | Higher-End |
| 3 | Austin, TX | 19,226 | 14.3\% | 51,698 | 19.5\% | 5.1\% | Low-Moderate | Balanced |
| 4 | Charlotte, NC | 24,575 | 20.7\% | 55,250 | 25.6\% | 4.9\% | Balanced | Higher-End |
| 5 | San Francisco, CA | 56,381 | 18.8\% | 77,656 | 23.5\% | 4.7\% | Low-Moderate | Divided |
| 6 | Tampa, FL | 13,052 | 12.3\% | 20,039 | 16.1\% | 3.7\% | Low-Moderate | Low-Moderate |
| 7 | Boston, MA | 24,999 | 11.4\% | 36,031 | 15.0\% | 3.6\% | Stressed | Low-Moderate |
| 8 | Chesapeake, VA | 7,513 | 20.5\% | 16,136 | 23.1\% | 2.6\% | Middle-Class | Middle-Class |
| 9 | San Diego, CA | 60,623 | 18.9\% | 96,590 | 21.4\% | 2.6\% | Balanced | Balanced |
| 10 | New York, NY | 380,494 | 13.6\% | 483,779 | 16.0\% | 2.4\% | Low-Moderate | Low-Moderate |
| 11 | San Jose, CA | 57,711 | 27.5\% | 82,267 | 29.8\% | 2.3\% | Higher-End | Higher-End |
| 12 | San Antonio, TX | 34,881 | 13.5\% | 63,799 | 15.7\% | 2.3\% | Low-Moderate | Middle-Class |
| 13 | St. Petersburg, FL | 12,103 | 11.6\% | 15,117 | 13.8\% | 2.2\% | Stressed | Middle-Class |
| 14 | Scottsdale, AZ | 11,175 | 32.6\% | 31,167 | 34.4\% | 1.8\% | Higher-End | Higher-End |
| 15 | Oakland, CA | 22,089 | 15.5\% | 26,098 | 17.3\% | 1.8\% | Low-Moderate | Low-Moderate |
| Fastest Decline |  |  |  |  |  |  |  |  |
| 1 | Aurora, CO | 16,417 | 28.0\% | 18,133 | 17.2\% | -10.9\% | Higher-End | Middle-Class |
| 2 | Garland, TX | 13,430 | 29.3\% | 13,823 | 18.9\% | -10.4\% | Middle-Class | Middle-Class |
| 3 | Anchorage, AK | 20,903 | 34.4\% | 23,788 | 25.0\% | -9.3\% | Higher-End | Higher-End |
| 4 | Toledo, OH | 27,060 | 20.3\% | 15,822 | 12.3\% | -8.0\% | Balanced | Low-Moderate |
| 5 | Anaheim, CA | 20,302 | 25.5\% | 17,228 | 17.8\% | -7.7\% | Higher-End | Middle-Class |
| 6 | Milwaukee, WI | 42,140 | 17.4\% | 22,965 | 9.9\% | -7.5\% | Balanced | Low-Moderate |
| 7 | Irving, TX | 10,039 | 25.0\% | 13,392 | 17.5\% | -7.5\% | Higher-End | Middle-Class |
| 8 | Lubbock, TX | 13,200 | 21.6\% | 11,082 | 14.3\% | -7.4\% | Balanced | Low-Moderate |
| 9 | Houston, TX | 150,144 | 24.9\% | 129,118 | 18.0\% | -6.9\% | Higher-End | Low-Moderate |
| 10 | Santa Ana, CA | 12,387 | 19.3\% | 9,392 | 12.9\% | -6.4\% | Middle-Class | Middle-Class |
| 11 | Mobile, AL | 14,842 | 20.7\% | 11,548 | 14.7\% | -6.0\% | Balanced | Low-Moderate |
| 12 | Wichita, KS | 25,836 | 23.4\% | 24,256 | 17.4\% | -6.0\% | Higher-End | Balanced |
| 13 | Tulsa, OK | 33,321 | 23.0\% | 28,418 | 17.1\% | -5.8\% | Higher-End | Middle-Class |
| 14 | Corpus Christi, TX | 16,545 | 21.6\% | 15,560 | 15.8\% | -5.8\% | Balanced | Low-Moderate |
| 15 | Arlington, TX | 16,742 | 28.6\% | 28,708 | 23.0\% | -5.6\% | Higher-End | Higher-End |

Source: Authors' analysis of 1980 and 2000 decennial censuses.
grew at a significantly slower rate than other types, their share of all households in the 100 largest cities declined by three-quarters of a percentage point (Figure 3). ${ }^{48}$

These small changes at the aggregate level, however, have not precluded other more substantial forces that pulled individual cities in countervail-
ing directions over the two decades. The most salient changes emerged along regional lines and by city size:

Most cities saw their shares of households with high incomes decline over the two decades.

Fully 79 of the 100 largest cities saw the share of their households in
the top income quintile decline between 1979 and 1999. Places as diverse as Los Angeles, Indianapolis, Virginia Beach, and Baton Rouge all watched the relative size of their high-income household population shrink.

Given how many cities shared in this pattern, those cities that actu-
ally saw growth in their highincome shares over the 20-year period merit examination (Table 4). Many of these cities are identified with industry sectors that enjoyed considerable success in the 1980 s and 1990 s, including technology and high-end financial services. More generally, nearly all are home to significant concentrations of "knowledge workers" whose income growth in recent decades has propelled them into the high-earner category. Still, they represent a variety of income types, from higherend places like Fremont and Scottsdale to more middle-class places like Minneapolis and TampaSt. Petersburg.

So where did this leave the other 79 cities? The cities experiencing the largest declines over the two decades in their high-income brackets include some that suffered ongoing losses of manufacturing jobs, such as Toledo and Milwaukee (Table 4). Some like Houston, Corpus Christi, Tulsa, and Mobile are located in the "oil patch" that endured a traumatic oil-price bust during the late 1980s. Either way, these economic developments may have slowed income growth for wealthier households, put the brakes on higher-income households' in-migration, or perhaps caused high-income households to relocate. As a result, many formerly higher-end or balanced cities assumed a low-moderate income profile by 1999.

But places like Aurora, Garland, Anchorage, and Irving all figure prominently on this list. All of these cities also had large numbers of high-income households at the beginning of the period. Indeed, of the 20 cities that had the highest proportion of their households in the top income bracket in 1979, fully 17 saw that high-income segment decline over the 20-year period. These declines reflect that

Figure 3. Proportion of Households by Income Category, 100 Largest Cities, 1979-1999


Source: Authors' analysis of 1980 and 2000 decennial censuses
many of these places changed from suburban enclaves into full-fledged cities. In so doing, they acquired a much more diverse income profile, and attracted large middle-income and lower-middle-income populations that transformed their 1979 higher-end designation into a mid-dle-class one by 1999 (Figure 4).

Three-quarters of the 100 largest cities saw their household income distribution tilt toward the low end.

By definition, as one part of the income distribution shrinks, another expands. Consequently, the proportion of households with low incomes grew as the high-income share slipped in most large cities. Some of the largest increases, not surprisingly, occurred in cities like Houston and Mobile where highincome households dwindled most precipitously. Overall, low-income households grew by 21 percent in the 100 largest cities, outpacing the overall household growth rate of just under 18 percent. The share of all households they represented
grew by about two-thirds of a percentage point (Figure 3).

The disproportionate growth in households at the lower end of the distribution largely accounts for an increase in cities with a stressed income profile (Figure 4). Struggling Rust Belt cities like Detroit, Cleveland, Philadelphia, and Baltimore lost large numbers of middleand higher-income households. At the same time, their regions remained highly segregated, as economic and residential decentralization further isolated their central city minority populations from economic opportunity. As a result, such places changed from low-moderate cities in 1979 to stressed cities by 1999. Only three cities-Miami, St. Louis, and Newark—had a stressed designation at both points in time.

Did immigration play a large role in these changes? It may well have contributed to the growth of lowincome households in cities over the 1980s and 1990s, but closer scrutiny reveals a more complicated story. Across the 100 largest cities,

Figure 4. Number of Cities by Household Income Distribution Type, 100 Largest Cities, 1979 and 1999


Source: Authors' analysis of 1980 and 2000 decennial censuses
the foreign-born share of the population increased from under 12 percent in 1980 to over 20 percent in 2000. As immigrants tend to arrive in the U.S. with lower levels of education and skills than their nativeborn counterparts, we might expect that cities with high levels of immigration experienced more rapid increases in low-income households than other cities. ${ }^{49}$ In fact, many cities that experienced especially large increases in the foreign-born
share of their populations, including most in Southern California, as well as Dallas and its suburban cities, did show larger-than-average increases in the percentage of households with low incomes. Yet cities that registered a much smaller-than-average climb-or loss-in foreign-born population, such as Buffalo, Rochester, Toledo, and Lubbock, showed even larger jumps in low-income households. Immigration, in sum, may help
explain the proliferation of lowincome households in certain cities, but it cannot alone account for the fairly consistent rise in the share of households with low incomes in most large cities.

Middle-income households dwindled in big cities and Northeastern cities, but proliferated in other places, especially the Midwest.

The nation's very largest cities experienced the most pronounced declines in the relative numbers of middle-income households. Fully eight of the 10 largest cities saw middle-income households dwindle as a proportion of all households, compared to fewer than half of the other 80 cities (Appendix A). ${ }^{50}$ Among the big cities, declines in the size of the middle-income segment loomed largest in New York and San Diego. Other big cities outside the top 10, including Washington, D.C. and San Francisco, also experienced significant decreases in middleincome households that created or exacerbated their divided household income profiles. The relative decline of the middle-income population in these big coastal cities may have owed to several factors affecting families, including a limited supply of affordable homes, low perceived quality of public schools, or crime.
Yet the middle-income slide did not affect all cities. In fact, several cities emerged as middle-income destinations. The middle-income share of households rose notably in Grand Rapids, MI; Tacoma, WA; and Des Moines, IA, among other places. Figure 4 shows that the number of middle-class cities with concentrations of households in the central part of the income distribution more than doubled between 1979 and 1999. Some of this resulted from higher-end suburbanlike cities such as Aurora, CO and Irving, TX growing and diversifying over the 20 -year period. Other large
cities, however, graduated upwards. San Antonio, Jacksonville, and Columbus had low-moderate distributions in 1979, but gained enough middle-income households over the two decades that households in their center segment dominated by 1999. The ascendancy of the mid-dle-class in these places accompanied, not surprisingly, large increases in the percentages of their populations holding at least a high school diploma. ${ }^{51}$

The divide between the rise and fall of urban middle-income households broke along regional lines as well (Appendix A). All nine cities in the Northeast experienced a drop in the proportion of their households that had middle incomes. Collectively, middle-income households in the nine cities accounted for 17.7 percent of households in 1999, down from 19.4 percent in 1979. Meanwhile, 15 of the 20 Midwestern cities enlarged their middleincome segment. Even cities in that region with fast-declining highincome segments, like Milwaukee, Kansas City, and Wichita, managed to retain-and in some cases attract-a larger middle-income segment over the 20-year period.

In short, the most common income trend affecting large cities over the past 20 years was not middle-class population decline in the middle-class, but the loss of high-income households, paired with disproportionate growth in low-income households in many places. A handful of large cities, especially in the Northeast, did lose mid-dle-income households. At the same time, growth of the middle class in a number of Midwestern and Sun Belt cities somewhat offset those changes. The most worrying developments occurred in Rust Belt cities that already had a lower-income orientation in 1979. Over the subsequent 20 years these centers lost middle- and higherincome households at a rapid pace.

Figure 5. Proportion of Households by Income Category, Suburbs of 100 Largest Cities, 1979-1999


Source: Authors' analysis of 1980 and 2000 decennial censuses

## D. Suburbs' income distribution

 inverts cities', as more than 25 percent of suburban households occupy the highest-income quintile.The suburbs of the largest 100 cities also experienced significant change over the last two decades. ${ }^{52}$

Households living in the 82 suburban areas containing the 100 largest cities invert, in the aggregate, the income structure of their cities. In fact, they tilt to a somewhat greater degree in the higher-income brackets than large-city households do to the lower-income brackets. In 1999, more than one-fourth of households in these suburbs had high incomes, and another 23 percent had upper-middle incomes (Figure 5).

That these suburbs have an upwardsloping household income distribution is not surprising, given that they and their cities together contain more than half the nation's households. As metropolitan areas, they account for the better part of the national income distribution. And yet, higher-income households are over-represented in the nation's largest metropolitan suburbs
to a striking degree. The suburbs of Chicago, Washington, D.C. and Baltimore, San Francisco, Oakland and San Jose, and New York and Newark all count 30 percent or more of their households in the highest-income category. All of these metropolitan areas do contain lower-income, older-suburban jurisdictions close to their urban cores, but for the most part their suburbs remain better-off communities dominated by single-family housing and households containing multiple earners.

Despite their higher-income orientation today, during the 1979-1999 period, most of these suburbs-like their cities-actually saw high-income households decline as a proportion of all households. In 1979, 27 percent of suburban households had high incomes, but that proportion dropped to 25 percent by 1999 . The largest declines were apparent in two types of places. First, the nation's major metropolitan centers-including many of those mentioned above-attracted a more economically diverse group to their suburbs in recent decades than

Table 5. Cities by Income Category Change and Corresponding Suburban Change, 1979-1999

|  | Experiencing Increase in ategory Size | Number in Suburbs <br> Also Experiencing Increase in Category Size | Percentage | Cities <br> Experiencing Decrease in Category Size | Number in Suburbs Also Experiencing Decrease in Category Size | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low-Income | 75 | 41 | 54.7\% | 25 | 20 | 80.0\% |
| Lower-Middle-Income | e 64 | 48 | 75.0\% | 36 | 25 | 69.4\% |
| Middle-Income | 55 | 40 | 72.7\% | 45 | 24 | 53.3\% |
| Upper-Middle-Income | e 33 | 22 | 66.7\% | 67 | 38 | 56.7\% |
| High-Income | 21 | 15 | 71.4\% | 79 | 53 | 67.1\% |

Source: Authors' analysis of 1980 and 2000 decennial census data.
lived there in 1980. The suburbs of Chicago, Washington, D.C., Seattle, Houston, and Denver experienced much faster growth in lower- and mid-dle-income households than highincome households (Appendix C). While these suburbs remain relatively wealthy places today, they include a wider array of household types and racial/ethnic groups than they did a generation ago. ${ }^{53}$

Second, Rust Belt suburbs such as those surrounding Cleveland, Detroit, Milwaukee, Toledo, and Pittsburgh also saw large declines in the proportion of their households with high incomes. While these suburbs still contain above-average shares of households in the top income category, these declines did not necessarily owe to the sort of economically diverse in-migration occurring in other metropolitan centers. Rather, it may be that the fiscal and social stress emerging in suburbs close to their urban cores, combined with increased out-migration from these regions in response to economic restructuring, effectively shifted the distribution of households by income downward.

These Rust Belt trends point to the fact that overall, most suburbs experienced changes in their household income distribution similar to those occurring in their cities over the 1980s and 1990s. Their parallel experiences
reflect evidence of an economic interdependence between cities and suburbs in the 1980s and 1990s. ${ }^{54}$ Table 5 shows that, for each income category, more than half the cities that gained household share in that segment were located in suburbs that also gained share in that segment. Likewise, majorities of cities and suburbs shared in decreases-for instance, among the 79 cities that saw their high-income share decline, 53 were located in suburbs also experiencing a relative decline in that segment. In general, then, it is too simplistic to suggest that middle-income or high-income households abandoned central cities for suburbs over the past decades. The increased mobility of U.S. households, and the maturation of the suburban Baby Boomers over this time period, suggest that relocation is more likely to occur from the suburbs of one metropolitan area to another, rather than from a city to its own suburbs (or vice versa). Instead, it appears that recent city household income trends often reflected broader economic changes occurring at the metropolitan level.

And yet, despite the similar trends playing out in cities and their suburbs over this period, in most metro areas, cities and suburbs remain quite far apart in the mix of household incomes they exhibit. Regional economic trends alone cannot explain why one-third of

St. Louis' households occupy the low-est-income bracket, while its suburbs resemble the national average. Policy choices, racial and ethnic disparities, and the effects of concentrated poverty have all contributed to the low-income profile of cities like St. Louis.

## Discussion

Conventional wisdom holds that U.S. cities lost much of their middle class in recent decades, but this assessment somewhat contradicts that notion. Some large cities did indeed lose disproportionate numbers of middleincome households in the 1980s and 1990s, and today several notable places like Los Angeles, Washington, D.C., San Francisco, and Atlanta have a "missing middle." But over those decades the middle class also expanded in geographically large cities located throughout the Sunbelt and Midwest. Thus, it seems that middleincome households did not abandon urban America so much as shift regions over the past 20 years.

Cities did, however, experience a relative loss of higher-income households over this time period. The trend was by no means exclusive to the central cities-many of their suburbs also
saw high-income households decline as a share of the population-but in cities, those losses exacerbated a household income profile already weighted toward the bottom of the distribution. The perception that cities lost middle-class households, then, may owe in part to the expansive way that Americans define the middle class-specifically, that it contains many households and families who actually have high incomes, but perhaps exhibit lifestyle or consumption patterns also associated with middleincome families. ${ }^{55}$

Whether cities lost middle-income or high-income residents in recent decades, the fact remains that most lack a mix of households reflective of the nation's true income diversity. To the extent that large cities seek to provide a suitable living environment for households across the income spectrum, our findings suggest that no single national urban policy could achieve that goal, given the enormous variety of household income distributions that characterize large cities. ${ }^{56}$ Philadelphia and Phoenix, and Chicago and Charlotte, have witnessed very different changes in their income mix over the past two decades, and start from very different places in the current decade.

City and regional leaders themselves must therefore understand the "shape of the curve" in their own places in order to craft regionally specific responses. In particular, the typology developed here may help urban leaders to identify their income peers, thus facilitating policy learning and exchange. With this in mind, a number of different approaches to achieving a more balanced household mix suggest themselves for cities occupying different segments of the house-hold-income typology.

## Higher-end cities

In one sense, these cities might seem blessed. Their concentrations of upper-income households provide
them the means to offer higher-quality public services, and help them to attract private sector investment in residential and commercial development. At the same time, however, many still contain substantial shares of lower-income households. In places like Charlotte, Raleigh, and San Jose, these households are spatially clustered in neighborhoods within the city's core. And they struggle to afford the higher costs of living in these cities, especially the cost of housing. Across the eight higher-end cities, 52 percent of households with incomes under $\$ 50,000$ in 1999 paid at least 30 percent of their income for rentthe threshold beyond which a household is typically recognized as facing a rent burden. By contrast, only 38 percent of households nationwide at that income level faced such a burden. For these places, then, ensuring that the city's neighborhoods contain an affordable mix of housing-for both renters and homeowners-may be critical for reducing key service-sector workers' cost burdens, and retaining those workers over time.

## Stressed cities

At the other end of the spectrum lie the stressed cities. These cities have been hardest hit by economic transition and metropolitan decentralization over the past two decades. Their higher-income households suburbanized in large numbers, often in search of bigger and better housing than was available in the central city. ${ }^{57}$ Today they (and many of their older suburbs) strain to provide a decent level of public services, from schools to safety to basic infrastructure, even as a cycle of private sector disinvestment continues to afflict their neighborhoods. What is more, most of these cities are "hemmed in" by surrounding jurisdictions, unable to annex close-in suburban development that might enhance their income diversity.

How can these cities surmount such a severe set of obstacles? No simple
answer exists, of course. The idea of consolidation with surrounding counties has attracted recent attention. Louisville completed a merger with surrounding Jefferson County, KY in 2003, and the resulting jurisdiction has a much more balanced income profile than the city as of 1999.. ${ }^{58}$ The city of Buffalo and surrounding Erie County, NY are actively debating a similar step. ${ }^{59}$ Not all of these cities even have the luxury of considering such an option, however.

In considering priorities, stressed cities might first focus on how best to increase the population of higherincome residents who can bolster their heavily eroded fiscal bases. Because their rents tend to be lower, and many of their neighborhoods contain significant levels of vacant and abandoned housing, these cities may be able to attract higher-income households without contributing significantly to problems of housing affordability. ${ }^{60}$ Yet many have significant assets in their downtowns, waterfronts, and historic housing stock that could make them attractive places to live for younger unmarried households (such as those graduating from local universities) and older "empty nester" households. Such strategies may have relevance not only for the 14 cities identified as stressed, but also for the low-moderate cities that could be headed in this direction (e.g., Pittsburgh, Richmond, and Cincinnati).

Indeed, Atlanta and Boston, both of which contended with a stressed profile in 1979 , seem to have succeeded over the past two decades in attracting higher-income households and rebuilding downtown neighborhoods in the process. Their resulting income profiles come with their own set of challenges, of course. And no city should chase after wealthier households to the exclusion of addressing basic public service issues that could improve prospects for the bulk of its population. But by bringing back some of the higher-income households that
departed in droves over the past few decades, stressed cities would surely be better positioned to offer higherquality services within a functioning marketplace that appeals to middleincome households, and provides lower-income households real opportunities to move up the income ladder.

At the same time, these cities should be strong advocates for regional policies that give lower-income households, especially minority households living in highly segregated neighborhoods, access to opportunities beyond inner-city neighborhoods alone. The fact that incomes in Rust Belt suburbs and cities tended to move in the same direction over the 1980s and 1990s suggests that regional collaborationrather than intrametropolitan competi-tion-on housing, economic development, and workforce planning could help grow the tax base in both types of jurisdictions.

## Divided cities

The few divided cities like Atlanta, San Francisco, and Washington, D.C. best fit the perception that big cities are home to the rich and poor, and not much in between. Attracting the mid-dle-class back to these cities, and retaining the middle-class households still there, belong high on their priority list for the many reasons noted in the Introduction.

Some cities have taken specific steps to counter middle-class flight, and to foster a new urban middle class. ${ }^{61}$ California cities including Los Angeles, San Jose, and Oakland, have subsidized housing specifically for public school teachers and public safety workers. ${ }^{62}$ Other cities have focused their efforts on reforming public schools to keep more middleincome families in the city once their children reach school age. Middleclass retention also provided much of the impetus for Mayor Richard Daley's takeover of Chicago's public schools in 1995. ${ }^{63}$ Likewise, Washington, D.C., a city that lost vast num-
bers of middle-income families in the last few decades, is seeking to increase the city's population by 100,000 , a strategy designed to rebuild Washington's middle class and enhance its fiscal position over the long term. ${ }^{64}$

Beyond rebuilding the middle class, however, divided cities face serious challenges in preserving housing affordability for existing low-income and moderate-income residents. Gentrification may be a real concern in these cities. Their concentrations of high-income residents, especially in and around traditionally lower- and middle-income neighborhoods, can place upward pressure on rents and make those neighborhoods unaffordable for households of moderate means. Therefore, alongside strategies to attract and retain middle-income residents, these cities might consider inclusionary zoning, targeted tax relief, and infill strategies to minimize displacement and maximize income diversity. ${ }^{65}$

## Low-moderate cities

Finally, the low-moderate cities seem poised at a transition point. Of the cities that had this profile in 1979, about half had moved to a different part of the income typology by 1999. Detroit, Baltimore, Cleveland, and Birmingham, among other cities, lost large numbers of middle- and upperincome households and consequently became stressed cities. Yet several others, including Columbus, Portland, and both of the Twin Cities, became more middle-class places. In most cases, the latter group achieved the transition by growing the number of households in the middle of the distribution, not simply by attracting highincome households.

To be sure, estimating the degree to which these changes owe to policy choices-as opposed to broader economic and demographic forcesremains impossible. For the most part, the stressed cities were home to man-
ufacturing and other heavy industries that have suffered the greatest job losses over the past two decades. Nonetheless, it bears noting that the cities located within the Portland and Twin Cities regions, home to some of the most active growth management policies in the nation, moved "up" the typology over the 20 years. ${ }^{66}$ Indeed, some have credited Portland's growth management strategies with enhancing that city's greater economic diversity. ${ }^{67}$ Future research should investigate the degree to which such policies made central cities more attractive to middle-income households, or whether they fostered income growth for lower-income households.

With that said, low-moderate cities would particularly benefit from helping more of their lower-income households to climb the income ladder. While national economic conditions like unemployment and inflation exert perhaps the greatest influence on income growth, local and regional policymakers can play a vital role in promoting economic success for lower earners. Investment in education, particularly post-secondary education and training through community colleges, can help to raise earnings for lowerskilled workers over time. ${ }^{68}$ At the same time, improving workers' ability to access new jobs throughout the region can lead to faster earnings growth. ${ }^{69}$ And some cities might tailor strategies to assist particular demographic groups that are overrepresented in the lower-income population, such as immigrants. ${ }^{70}$ The potential benefits of these policies are by no means confined to low-moderate cities; the significant numbers of lower-middle-income households in many middle-class cities would gain from locally tailored strategies to further grow the urban middle class from within. Such strategies are consistent with Jane Jacobs' observation that, in order to truly expand the middle class, cities must consider their people
"...valuable and worth retaining, right where they are, before they become middle class. ${ }^{71}$

## Conclusion

In the end, cities should become informed and strategic in their efforts to provide a suitable living environment for all types of households. A balanced mix of incomes can improve the fiscal, political, and social outcomes of cities and their residents. Large-scale economic forces like globalization and technological innovation, as well as national decisions around monetary and fiscal policy, will undoubtedly continue to play significant roles in shaping the incomes of residents in both cities and suburbs. But by setting the right priorities at the local level, city leaders can position themselves better to attract and retain households that form a truly diverse mix, and to realize the promise of the city as economic melting pot.

## Technical Appendix

This appendix explains the methodology employed in this paper for calculating each group's income range (i.e., low-income, lower-middle-income, etc.) nationally, and for estimating the proportions of city and suburban households occupying each of those categories. It includes an explanation of how and why we derived our metropolitan price index to adjust "cutoffs" for the income quintiles by city.

## National quintiles

We identify income quintile "cutoffs" ("upper limits") using linear interpolation below national household median income, and Pareto interpolation above that amount. We use a combination of approaches because income distributions tend to have even densities below the median and decreasing densities above. ${ }^{72}$ In both cases the variables listed and defined below are used.
$\mathrm{Y}=$ income at percentile of interest
$\mathrm{P}=$ percentile of interest
$\mathrm{a}=$ the income value at the lower limit of the category containing P
b = the income value at the upper limit of the category containing P
$\mathrm{P}_{\mathrm{a}}=$ proportion of the distribution that lies below the lower limit
$\mathrm{P}_{\mathrm{b}}=$ proportion of the distribution that lies below the upper limit

Because they are below the median (by definition) we identify the upper limits for the first and second quintiles using this equation:

$$
Y=\frac{\left(P-P_{a}\right)}{\left(P_{b}-P_{a}\right)} \times(b-a)+a
$$

Because they are above the median we identify the cutoffs (or upper bounds) of the third and fourth quintiles using the set of equations below. ${ }^{73}$ The upper limit for the fifth quintile is, of course, undefined and not relevant for our analysis.

$$
\begin{gathered}
Y=\left(\frac{k}{(1-P)^{\frac{1}{\theta}}}\right) \\
k=\left(\frac{P_{b}-P_{a}}{\left(\frac{1}{a^{\Theta}}-\frac{1}{b^{\Theta}}\right)}\right)^{\frac{1}{\theta}} \\
\Theta=\left(\frac{\log \left(1-P_{a}\right)-\log \left(1-P_{b}\right)}{\log (b)-\log (a)}\right)
\end{gathered}
$$

For example, the first quintile would be calculated using linear interpolation as follows. In 1999 the first income category provided by census, 0 to 10,000 dollars, is 9.5 percent of the population. Adding the second category brings it to only 15.8 percent, but adding the third group puts the total over 20 percent. We know that the first cutoff exists somewhere between 15,000 and 19,999 dollars-the range of the third group. By applying the linear equation above, we can locate the income cutoff within this range. In this example, $P$ is $0.2, a$ is $\$ 15,000$, $b$ is $\$ 19,999, P_{a}$ is 0.16 and $P_{b}$ is 0.22 . Solving for $Y$, the resulting first quintile cutoff (i.e., the 20th percentile) is estimated to be $\$ 18,320$.

The third and fourth quintile cutoffs, because they are above the median, are calculated using the Pareto distribution. We use the same variables to solve first for theta, then for $k$, and use these values to solve for $Y$.

City and suburban income group shares Once the national income quintiles are established, we then investigate the number and share of households within each quintile at the city level. We use the same assumptions about the nature of the income distribution
as when estimating the quintile cutoffs, but in this case we calculate the share of households below a given dollar amount $(P)$ rather than a dollar amount below which a certain share of households lie ( $Y$ ).

As in calculating the national quintile cutoffs, we assume a linear distribution below the median and a Pareto distribution above it. In this case, however, the determination of when to use which method requires a bit more thought. City and suburban median incomes differ, and national quintiles change from place to place because we adjust them for regional cost-of-living differences (see below for methodology).

We calculate median household incomes from the following equation, using theta and $k$ as defined in the previous section (although SF3 provides median household income for cities, we use this method for both cities and suburbs to maintain consistency):

$$
\text { median }=k\left(2^{\frac{1}{\Theta}}\right)
$$

If the quintile of interest is below the median then the following linear equation is used:

$$
P=\frac{(Y-a)}{(b-a)} \times\left(P_{b}-P_{a}\right)+P_{a}
$$

If the quintile of interest is above the median then the following Pareto equation is used:

$$
P=1-\left(\frac{k}{Y}\right)^{\Theta}
$$

Because $P$ in both equations is a percentile (or cumulative share), to arrive at the actual share within the income group we subtract the $P$ value for the previous group from the $P$ in the group of interest. The fifth income
group has a value of 100 for $P$ so its share is calculated by simply subtracting the fourth group's $P$ value from 100. To arrive at the actual number of households within any of these income groups for a particular place, we multiply the share by the total number of households.

In Detroit, for example, median household income in 1999 based on the method above was $\$ 29,544$ (compared to a very similar $\$ 29,536$ from SF3). The national cutoffs for the first and second quintiles in 1999, adjusted for regional price differences, are $\$ 18,578$ and $\$ 34,311$. Therefore, we derive the share of people in the first income group using the linear method, and the share of people in all other groups using the Pareto method. Conversely, in a place like Scottsdale, the high median household income of $\$ 57,769$ obligates us to use linear interpolation for the first, second, and third income groups (all below $\$ 52,587$ ), and the Pareto method is used only for the fourth group.

Although we believe that the use of both linear and Pareto interpolation improves our estimates, compiling the data using linear estimates exclusively indicates that our findings are not particularly sensitive to this methodological choice.

## Metropolitan price index

Our metropolitan price index is based on data collected by the U.S. Department of Housing and Urban Development (HUD) on Fair Market Rents for two-bedroom units. U.S. Census Bureau researchers have used these rents to create a price index that shifts poverty thresholds depending on the state in which a family is located and whether or not it is in a metropolitan area. (See Kathleen Short, "Experimental Poverty Measures: 1999." Current Population Report P60-216 (Census Bureau, 2001)). We used this method to create a metropolitan-level index for 1979, 1989, and 1999. Our calculation is fairly simple:

$$
\text { index }=m / n * 0.33+0.67
$$

where $m$ is the metropolitan fair market rent, and n is the average national fair market rent. HUD does not report an average national rent; we calculate it as a household-weighted average of the rents in every metropolitan area and nonmetropolitan county. (In 1979, only metropolitan FMRs are available, so we use an adjusted weighted average for that year.) We multiply the index by 0.33 because the average household spent 33 percent of its income on housing-related costs in Census 2000. We note that this index thus holds non-housing costs constant. This is a modest assumption given that housing and other costs are correlated, and likely leads our index to understate the difference in prices across metropolitan areas. However, we prefer this method to using privatesector estimates, such as those compiled by ACCRA (www.costofliving. org), since ours is not specific to salaried workers and it relies solely on publicly available data.

To learn more about the Fair Market Rent survey, see www.huduser.org/ datasets/fmr.html. To view values for our metro index in 1979 and 1999, see our website at www.brookings.edu/ metro.

The economic literature is admittedly skeptical as to whether regional cost-of-living adjustments are always appropriate. First, there is no officially recognized governmental index on regional, sub-regional, or metropolitan prices. Second, to a certain degree, consumption patterns adjust to incomes. The median household in Birmingham may choose lower-quality housing than the median household in San Francisco, so that comparing median rents between the two cities would offer a somewhat skewed view of the cities' cost-of-living differential. And third, differences in incomes may reflect real differences in the amenities and quality-of-life available to
households in different places. A San Francisco household making \$40,000, even if it can purchase fewer goods and services than a Birmingham household making that amount, could still achieve a similar level of wellbeing if living in San Francisco provided it with access to higher-quality goods, services, and amenities that compensated it for the consumption gap. Many researchers have coped with these issues by developing "hedonic" pricing models that value the effects of urban amenities (and/or unpleasantness) on wages, rents, or other goods. ${ }^{74}$

While we recognize the empirical and conceptual challenges associated with adjusting for regional price differences, we have chosen to make these adjustments for a few reasons. First, scholars have noted that the magnitude of price differentials across regions suggests that poverty thresholds should be revised to take account of these differences. ${ }^{75}$ While measuring poverty is not exactly analogous to measuring household incomes across the income spectrum, we similarly seek to adjust nationally-calculated thresholds (for income quintiles) for the large price differences that prevail across cities. Second, the particular method we choose to adjust for cost-of-living differences, using HUD Fair Market Rents, is based closely on a method used by a National Academy of Sciences Panel and Census Bureau researchers to derive experimental poverty estimates. ${ }^{76}$ Short further notes that using housing data was among a few methodologies that experts surveyed by the GAO agreed showed at least moderate promise for capturing geographic cost-of-living differences. ${ }^{77}$ Third, our metropolitan index is relatively conservative in its adjustments, multiplying national income quintile cutoffs by a factor of between 0.89 and 1.24 in 1979, and between 0.92 and 1.30 in 1999. By comparison, metropolitan hedonic
model price indices developed by BLS economists for 1988-89 range from 0.7 to $1.8 .^{78}$ The primary effect we observe upon employing our index is a reduction in the number of households in very expensive cities-New York, San Francisco, Boston, Los Angeles-who occupy the highincome category. On practical grounds, we are satisfied that households in these cities earning, say, $\$ 90,000$ are not living a very "highincome" lifestyle. Finally, we hope that by using this index, this analysis will provoke methodological discussion, critique, and needed further inquiry into geographic cost adjustments that might not otherwise occur. (We suspect that an analysis that did not attempt at all to adjust for these geographic differences would attract at least as much criticism on these grounds.)





| L9L'S8I'I | OEt'LSI'I | 9SS'tIZ'I | ZIE $\varepsilon^{\prime} \angle 6 Z^{\prime} I$ | $696^{\prime} \angle \varepsilon \varepsilon^{\prime} I$ |
| :---: | :---: | :---: | :---: | :---: |


976,185

942,260
$\mathbf{3 , 1 7 5 , 7 9 9}$

6
0
0
0
0

Sとt'I98

1,583,481

$n$
$n$
$\pm$
$m$
$n$
Louisville, KY
St. Petersburg, FL
Birmingham, AL
Norfolk, VA
Baton Rouge, LA
Hialeah, FL
Greensboro, NC
Plano, TX
Garland, TX
Montgomery, AL
Shreveport, LA
Augusta-Richmond, GA
Lubbock, TX
Chesapeake, VA
Mobile, AL
Richmond, VA
Irving, TX





| $\bar{\jmath}$ |
| :--- |
|  |
|  |



83,702


16,71
All cities ( $\mathrm{n}=100$ )







Appendix B. Largest Changes in Proportion of Households by Income Category,
100 Largest Cities, 1979-1999

| Low-Income Households | 1979 | 1999 | Change | Largest Declines | 1979 | 1999 | Change |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Largest Increases | 23.1 | 32.3 | 9.2 | St. Petersburg, FL | 28.8 | 23.5 | -5.3 |
| Hialeah, FL | 18.2 | 27.3 | 9.1 | Austin, TX | 24.5 | 19.5 | -4.9 |
| Lubbock, TX | 27.8 | 35.3 | 7.5 | Tampa, FL | 29.3 | 25.6 | -3.7 |
| Rochester, NY | 15.8 | 23.1 | 7.2 | Atlanta, GA | 33.5 | 30.2 | -3.4 |
| Houston, TX | 22.5 | 29.1 | 6.6 | Jacksonville, FL | 22.3 | 19.1 | -3.2 |
| Mobile, AL |  |  |  |  |  |  |  |


| Lower-Middle-Income Households |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Largest Increases | 1979 | 1999 | Change | Largest Declines | 1979 | 1999 | Change |
| Garland, TX | 13.5 | 21.1 | 7.6 | Boston, MA | 24.2 | 20.4 | -3.8 |
| Aurora, CO | 15.0 | 21.4 | 6.4 | San Francisco, CA | 21.5 | 18.3 | -3.2 |
| Irving, TX | 17.7 | 23.4 | 5.7 | Atlanta, GA | 23.2 | 20.4 | -2.8 |
| Anaheim, CA | 18.3 | 23.1 | 4.9 | San Diego, CA | 22.3 | 20.0 | -2.3 |
| Cleveland, OH | 20.3 | 25.1 | 4.7 | Austin, TX | 23.8 | 21.5 | -2.3 |

Middle-Income Households

| Largest Increases | 1979 | 1999 | Change | Largest Declines | 1979 | 1999 | Change |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Aurora, CO | 20.1 | 24.4 | 4.2 | Hialeah, FL | 24.6 | 20.4 | -4.2 |
| Anchorage, AK | 17.3 | 20.7 | 3.5 | Yonkers, NY | 21.0 | 18.0 | -3.1 |
| Tacoma, WA | 18.9 | 22.0 | 3.1 | Miami, FL | 17.8 | 14.8 | -3.0 |
| Garland, TX | 20.3 | 23.0 | 2.6 | Washington, DC | 19.7 | 17.4 | -2.3 |
| Arlington, TX | 19.3 | 21.8 | 2.5 | San Francisco, CA | 19.9 | 17.6 | -2.3 |
|  |  |  |  |  |  |  |  |
| Upper-Middle-Income Households |  |  |  |  |  |  |  |
| Largest Increases | 1979 | 1999 | Change | Largest Declines | 1979 | 1999 | Change |
| Anchorage, AK | 19.8 | 24.0 | 4.2 | Garland, TX | 29.4 | 24.4 | -5.0 |
| St. Petersburg, FL | 14.3 | 17.2 | 2.9 | Milwaukee, WI | 21.4 | 17.1 | -4.3 |
| Boston, MA | 14.2 | 17.0 | 2.7 | Hialeah, FL | 17.6 | 13.6 | -4.0 |
| Austin, TX | 16.8 | 19.2 | 2.5 | Cleveland, OH | 17.2 | 13.3 | -3.9 |
| Chesapeake, VA | 24.5 | 26.6 | 2.1 | Houston, TX | 20.3 | 16.4 | -3.8 |
|  |  |  |  |  |  |  |  |


| High-Income Households | 1979 | 1999 | Change | Largest Declines | 1979 | 1999 | Change |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Largest Increases | 13.7 | 19.8 | 6.0 | Aurora, CO | 28.0 | 17.2 | -10.9 |
| Atlanta, GA | 33.4 | 39.0 | 5.6 | Garland, TX | 29.3 | 18.9 | -10.4 |
| Fremont, CA | 14.3 | 19.5 | 5.1 | Anchorage, AK | 34.4 | 25.0 | -9.3 |
| Austin, TX | 20.7 | 25.6 | 4.9 | Toledo, OH | 20.3 | 12.3 | -8.0 |
| Charlotte, NC | 18.8 | 23.5 | 4.7 | Anaheim, CA | 25.5 | 17.8 | -7.7 |
| San Francisco, CA |  |  |  |  |  |  |  |

Source: Authors' analysis of 1980 and 2000 decennial censuses

Appendix C. Households by Income Category, Suburbs of 100 Largest Cities, 1979-1999
Households, 1999


2,537,966 2,741,778

2,238,791


1,992,050






## 





| $\infty$ |
| :--- |
| 0 |
| $\hat{n}$ |
| $\hat{n}$ |
|  |


Households, 1979

1,311,093
 1,187,059
 $1,028,483$





$0 \infty$
$0-1$
0
0
0



1,179,119



## 



|  |  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  in m <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  | $\angle Z^{\prime} \angle Z$ <br> $\begin{array}{lll}16.42 & 19.45 & 24.54\end{array}$ <br> n i <br> $\infty$ $\infty$ $\infty$ $\infty$ <br> $\ddagger$ <br> $\pm$ <br> $\stackrel{\infty}{\stackrel{n}{n}}$ <br> Midwest suburbs（ $n=19$ ） |  <br>  <br>  ふウ io i in mo <br>  <br>  in o o oin oio in <br>  $\dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim} \dot{\sim}$ <br>  $\dot{\sim} \dot{\sim} \dot{O} \dot{\sigma} \dot{寸} \dot{\sim} \dot{n}$ ーーーーーーヘーー <br>  <br>  <br>  <br>  <br>  웅ㅇ№ o o <br>  $\dot{エ} \dot{\sim}$ <br>  in ón n ni i |  |  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> ทヘヘ̣ニ <br>  <br>  <br>  <br>  <br>  <br> ヘn <br>  <br>  <br>  <br>  <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: |



## Endnotes

1. Hall notes: "It is not just that big cities have more people living in them; it is that they contain so many different kinds of people, different in birthplace and race and social class and wealth, different indeed in every respect that differentiates people at all, living in almost infinitely complex social relationships." Sir Peter Hall, Cities and Civilization (New York: Pantheon, 1998).
2. Paul Jargowsky, Poverty and Place (New York: Russell Sage Foundation, 1997).
3. William Julius Wilson, The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy (University of Chicago Press, 1987); Douglas S. Massey and Nancy A. Denton, American Apartheid: Segregation and the Making of the Underclass (Harvard University Press, 1993).
4. William H. Frey and Elaine Fielding, "Changing Urban Populations: Regional Restructuring, Racial Polarization, and Poverty Concentration." Cityscape 1 (2) (1995): 1-66.
5. Alan Berube and William H. Frey, "A Decade of Mixed Blessings: Urban and Suburban Poverty in Census 2000" (Washington: Brookings Institution, 2002).
6. Haya El Nasser, "Downtowns Make Cities Winners." USA Today, May 27, 2001, p. 3A.
7. Paul Jargowsky, "Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s" (Washington: Brookings Institution, 2003).
8. Jane Jacobs, The Death and Life of Great American Cities (New York: Random House, 1961).
9. Richard C. Leone, "The Fiscal Decline of Older Cities: Causes and Cures." National Tax Journal 29 (3) (1976): 257-260; Helen F. Ladd, "Fiscal Consequences for U.S.

Central Cities of the Changing Urban Form," in A. Summers, P. Cheshire, and L. Senn, Urban Change in the United States and Western Europe (Washington: Urban Institute Press, 1993); Thomas McMahon, Larian Angelo, and John Mollenkopf, "The Disappearing Urban Middle Class." Social Policy 32 (4) (1998): 332-335; Michael Hill, "Is It Too Late for Cities?" The Baltimore Sun, December 8, 2002, p. 1F.
10. David M. Frankel and Eric D. Gould, "The Retail Price of Inequality." Journal of Urban Economics 49 (2001): 219-239; Janet Rothenberg Pack, "Poverty and Urban Public Expenditures." Urban Studies 35 (11): 1995-2019.
11. Sidney Brower, Good Neighborhoods: A Study of In-Town and Suburban Residential Environments (Westport, CT: Prager Publishers).
12. Janice F. Madden, Changes in Income Inequality with U.S. Metropolitan Areas (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2000); Norman Cloutier, "Metropolitan Income Inequality During the 1980s: The Impact of Urban Development, Industrial Mix, and Family Structure." Journal of Regional Science 37(3) (1997): 459-478.
13. Income data in the decennial census are collected for the prior year, so that respondents to Census 2000 reported income for calendar year 1999, and respondents to the 1980 census reported income for 1979.
14. Our analysis does not control for city boundary changes that occurred over the two-decade period. Some of the changes in city household income distributions may result from cities annexing formerly suburban areas and their households. While such changes do not reflect migration or income growth/decline among existing city residents, which are arguably better indicators of a city's economic health, they do tend to positively affect a city's fiscal base, an important motivation for this research. See Janet Rothenberg Pack, Growth and Convergence in Metropolitan America
(Washington: Brookings Institution, 2002), pp. 41-45 for further discussion.
15. The decennial census asks respondents to report on a wide range of income sources, including: earnings, self-employment, passive income (such as interest and dividends), Social Security or Railroad Retirement payments, Supplemental Security Income, public assistance (welfare) payments, pensions, and other regular payments (e.g., child support, VA, unemployment, or alimony). Respondents are not asked to report on their receipt of in-kind payments such as food stamps and housing subsidies, or on tax refunds, which for some lower-income individuals can increase overall income (primarily through the Earned Income Credit).
16. Data from the long form provide better estimates of city-level incomes than census microdata (PUMS) because the latter represent a smaller sample of households, and because the geographies for which microdata are available (PUMAs) do not coincide with municipal boundaries in most cities.
17. By examining the 100 largest cities as of 2000, and looking backward to their income distributions in 1980, our analysis may be somewhat biased towards fastgrowing cities in the South and West that were not the population centers 20 years ago they are today. Plano, TX, for instance, had only 22,000 households in 1980, a far cry from the 81,000 living there in 2000. Still, we prefer this approach to one that analyzes the 100 largest cities as of 1980, a number of which have suffered serious economic decline in recent decades and are no longer among the nation's largest (e.g., Syracuse, NY; Worcester, MA; Kansas City, KS; and Flint, MI). We also could have examined the 100 largest cities as of their respective census years, but a changing set of cities across the period would have limited our ability to track trends in specific places.
18. Pack, Growth and Convergence in Metropolitan America; Kathryn P. Nelson, "Gentrification and Distressed Cities: An Assessment of Trends in Intrametropolitan Migration (University of Wisconsin Press, 1988).
19. While census household income data are not adjusted for household size, as are official poverty figures, we note that average household size in the 100 largest cities in 2000 (2.56 persons) roughly equaled that in the nation as a whole ( 2.59 persons). Individual cities, of course, do deviate more widely from these averages. Most income distribution analyses, however, do not attempt to control for these household or family-size differences across time or place.
20. Nonfamily households are even more prevalent in cities than in the U.S. as a whole; in 2000, 39 percent of households in the 100 largest cities were nonfamilies, compared to 32 percent nationwide. The Census Bureau began reporting household income data in 1967 to provide more comprehensive analysis, and today it considers households its main demographic unit of income analysis. Arthur F. Jones, Jr. and Daniel H. Weinberg, "The Changing Shape of the Nation's Income Distribution." Current Population Report P60-204 (Census Bureau, 2000).
21. People living in group quarters, such as nursing homes or college dormitories, are excluded from household data.
22. In order to ensure that the use of household data did not unduly bias our results, we compiled data for families as well. Both the static distribution and the trends over time for families in large cities resemble those identified for households. The primary difference, not surprisingly, is that fewer middle-income families than households reside in cities.
23. In 2000, about one in five U.S. households lived in one of the 100 largest cities. Thus, how households distribute by income in the 100 cities does influence the overall
distribution of income nationally, but by a small enough amount to render the comparison meaningful. For a similar analysis with family units, see Frankel and Gould, "The Retail Price of Inequality."
24. The other national category cutoffs for 1999 are: lower-middle-income, up to $\$ 33,835$; middle-income, up to $\$ 51,857$; upper-middle-income, up to $\$ 79,356$. These compare closely to Current Population Survey-based estimates for the same year. www.census.gov/hhes/income/ histinc/h01.html (accessed June 14, 2004). Other research examining households by income quintile includes tax analyses published by organizations such as the Congressional Budget Office (CBO, "Effective Federal Tax Rates, 1997 to 2000," 2003) and the Urban-Brookings Tax Policy Center (William G. Gale and Peter R. Orszag, "Should the President's Tax Cuts Be Made Permanent?" Washington: Brookings Institution, 2004), and income analyses published by the Census Bureau (U.S. Census Bureau, "Income in the United States, 2002," 2003).
25. Lawrence Mishel, Jared Bernstein, and Heather Boushey, The State of Working America 2002-03 (Cornell University Press, 2003).
26. Some analyses use percentile measures to understand how relationships among income groups shift over time. For instance, in Los Angeles, the household at the 80th percentile in that city's income distribution made \$115,000 in 1999, and $\$ 77,000$ in 1989. One could examine how this income growth compared to that experienced by households at that city's 20th and 40th percentiles. Our approach, by contrast, applies a uniform set of "quintiles" across all 100 cities (adjusted for regional cost differences) to examine changes in the percentage of households in the five income groups. We feel that this approach better reflects the dynamic nature of income distribution at the city level, as households move across income groups, and in and out of cities themselves.
27. To be sure, a city with an income distribution mirroring the nation's is not necessarily an egalitarian place. Secular growth in income inequality at the national level has meant increases in the incomes of those in the uppermost brackets, even as incomes at the lower end have stalled. One could argue that instead of striving to house representative numbers of households at all income levels, cities should aim to increase, through attraction or retention strategies, the number of households earning at least a middle income. While we would applaud such an outcome, especially if it reflects economic mobility for lowerearning households, we nonetheless remain interested in the degree to which cities remain centers of income diversity and house residents from across the income spectrum. This requires us to find some objective way to measure income diversity, for which we turn to national census figures. (One could also compare each city to the 100-city aggregate, rather than a national aggregate; however, this might imply that large cities themselves represent a more optimal mix of household incomes than national averages. As the present analysis demonstrates, the aggregate income profile of the 100 largest cities differs quite sharply from that of the nation as a whole-and in a negative direction.) In addition, while the top fifth of earners has enjoyed greater income growth nationally than other groups in recent decades, the even more extraordinary increases enjoyed by the very highest-income households (e.g., the top 1 percent) do not distort our comparisons to the nation, since they are merely part of the broader top income quintile. See Mishel, Bernstein, and Boushey, The State of Working America 2002-03.
28. See the Technical Appendix for a detailed explanation of how we derived this index, and our rationale for using it.
29. The average fair market rent in the 100 largest cities in 1999 was $\$ 636$, compared to the national average of $\$ 608$. So on the whole, we adjust income quintile cutoffs slightly upwards from where they occur
nationally. At the same time, exactly half of the 100 largest cities had a metropolitan price index under 1.00 in 1999, so the income cutoffs shift lower in 50 cities. Note that our method assumes that the relative fair market rents among cities mirror those among their metro areas.
30. The National Bureau of Economic Research, the group that dates recessions, identifies January 1980, July 1990, and March 2001 as the peak quarters for the last three business cycles. Because GDP began to decline in these years, the ideal peak-to-peak year for income is prior to each of these dates-1979, 1989, and 2000. For more information see www.nber.org/cycles/cyclesmain.html
31. We experimented with tracking recent changes in household incomes for the 64 large cities that appear in the Census 2000 Supplementary Survey and the 2002 American Community Survey. However, large differences between the results from these two surveys (which employ very similar survey methodologies), and between these surveys and Census 2000, in the number of overall households counted, and the median incomes of those households, suggested that city-level estimates had too high a degree of error to include in this analysis.
32. Edward L. Glaeser, Matthew E. Kahn, and Jordan Rappaport, "Why Do the Poor Live in Cities?" Working Paper 7636 (Cambridge, MA: National Bureau of Economic Research, 2000).
33. This figure represents the national ceiling for the low-income quintile in 1999 $(\$ 18,320)$ multiplied by the householdweighted average of the cost index for the 100 largest cities (1.045).
34. While many urban scholars might not consider Plano to be much of a "city," its rapid growth over the past four decades has catapulted it to the ranks of the 78th-largest city in the U.S., ahead of well-recognized places like Akron, OH; Montgomery, AL; and Richmond, VA. Robert Lang and

Patrick Simmons identify Plano as the sec-ond-fastest-growing "Boomburb" in the nation. Arlington, Garland, and Irving, all among the top 100 cities, also qualify as "Boomburbs" in the Dallas region and typify the fast-growing, geographically large, suburban-style cities that occur throughout the South and Southwest. Robert E. Lang and Patrick A. Simmons, "Boomburbs: The Emergence of Large, Fast-Growing Suburban Cities." In Bruce Katz and Robert E. Lang, eds., Redefining Urban and Suburban America: Evidence from Census 2000 (Washington: Brookings Institution, 2003).
35. By definition, then, no category contains fewer than 17.8 percent of the city's households, and none contains more than 22.2 percent.
36. Cities are ordered within each category by the size of the relevant income category, and how closely they resemble adjoining categories. For example, Aurora, CO is ordered first among middle-class cities because it has the largest middle-income segment as a proportion of all households. Montgomery, AL is first among low-moderate cities because its low-income category is only slightly larger than its lower-middleincome category. Note also that some cities occupying the same category have somewhat different income profiles. For example, compared to Minneapolis, Aurora has very few low-income households. But both qualify as middle-class cities because one of their middle-income categories predominates.
37. Cities are ordered within each category by the size of the relevant income category, and how closely they resemble adjoining categories. For example, Aurora, CO is ordered first among middle-class cities because it has the largest middle-income segment as a proportion of all households. Montgomery, AL is first among low-moderate cities because its low-income category is only slightly larger than its lower-middleincome category. Note also that some cities occupying the same category have somewhat different income profiles. For example, compared to Minneapolis, Aurora has
very few low-income households. But both qualify as middle-class cities because one of their middle-income categories predominates.
38. William H. Frey, "Metropolitan Magnets for International and Domestic Migrants" (Washington: Brookings Institution, 2003).
39. Two southern cities, Nashville and Jacksonville, are consolidated with their counties and rank among the largest cities in the U.S. geographically.
40. A couple of cities in the middle-class category, including Santa Ana and Anaheim, may reside there thanks to their larger-than-average households; on a per-person basis, they might look more like low-moderate cities.
41. David Rusk, Cities Without Suburbs: A Census 2000 Update (Baltimore: Woodrow Wilson Center Press, 2003).
42. Brookings Institution Center on Urban and Metropolitan Policy, Living Cities Databook Series (Washington: Brookings Institution, 2003).
43. Lang and Simmons, "Boomburbs." The Boomburbs in this category include Arlington, TX; Fremont, CA; Plano, TX; and Scottsdale, AZ. Several others figure prominently in the middle-class category.
44. Louisville resides in this category based on its 1999 household income characteristics, but pursuant to the city's consolidation with surrounding Jefferson County, KY in 2003, the Regional City of Louisville likely has a much more diverse income profile. Brookings Institution Center on Urban and Metropolitan Policy, "Beyond Merger: A Competitive Vision for the Regional City of Louisville" (Brookings Institution, 2002).
45. See Madden, "Change in Income Inequality within U.S. Metropolitan Areas," for further discussion on the role of household formation trends on metropolitan-level income inequality in the 1980s.
46. Paul Jargowsky, "Stunning Progress, Hidden Problems"; Berube and Frey, "A Decade of Mixed Blessings"; Audrey Singer, "The Rise of New Immigrant Gateways" (Washington: Brookings Institution, 2004).
47. We focus primarily on the aggregate 20year trend because large shifts in the income distribution in a few very large cities in both the 1980s and 1990s tend to skew the decade-by-decade results for all 100 cities.
48. Had the number of high-income households increased at the same rate as all other households in large cities during the 1980 s and 1990 s, the 100 cities combined would have had an additional 194,000 high-income households in 1999.
49. Philip Martin and Elizabeth Midgley, "Immigration to the United States: Shaping and Reshaping America." Population Bulletin 58 (2) (2003).
50. The correlations between city population and change in lower-middle-income and middle-income household shares (larger cities experienced larger losses) are much stronger than those for the other three income groups.
51. Among adults age 25 and over, the percentage holding a high school diploma rose from 66 percent to 82 percent in Jacksonville, from 69 percent to 84 percent in Columbus, and from 59 percent to 75 percent in San Antonio, between 1980 and 2000.
52. For purposes of this analysis, suburbs comprise the remainder of the metropolitan areas (MSAs and PMSAs) containing the 100 largest cities after those cities are netted out. We use the metro areas as they were defined by OMB in 1999 (for Census 2000) to analyze income information from both the 1980 and 2000 decennial censuses. Thus, our analysis of income in suburbs in 1979 may include households living in counties not then considered part of metropolitan areas. Holding the bound-
aries of these metro areas constant, however, avoids spurious results that might stem from the redefinition of metro areas by OMB, rather than from real change in household income composition over time. Overall, the analysis includes the 81 suburban areas containing the 100 largest cities. The city of Anchorage, AK is coincident with its metropolitan area, and therefore is not associated with any suburbs. We adjust income "cutoffs" for regional cost differences here in the same way as for cities, since our cost index is a metropolitan-level measure.
53. William H. Frey and Alan Berube, "City Families, Suburban Singles: An Emerging Household Story from Census 2000" (Washington: Brookings Institution, 2002); William H. Frey, "Melting Pot Suburbs: A Census 2000 Study of Suburban Diversity" (Washington: Brookings Institution, 2001); Singer, "The Rise of New Immigrant Gateways."
54. See, e.g., Richard Voith, "Do Suburbs Need Cities?" Federal Reserve Bank of Philadelphia Working Paper 93-27/R (1994).
55. House Republicans reportedly seek to extend the child tax credit in 2004 to families with incomes up to $\$ 300,000$ because it would "bring tax relief to families that do not consider themselves rich." Jonathan Weisman, "House Votes to Keep Tax Credit for Children." Washington Post, May 21, 2004, p.
A3. In general, income is not the only determinant of "middle-class" status Chris Baker, "What Is Middle Class?" The Washington Times, November 30, 2003; p. Al.
56. With that said, the fact that large cities overall contain disproportionate numbers of low-income households suggests that policies to maintain high levels of employment economy-wide, which lead to rising wages and incomes for low earners, would benefit cities disproportionately. Jared Bernstein and Dean Baker, "The Benefits of Full Employment: When Markets Work for People" (Washington: Economic Policy Institute, 2003).
57. Thomas Bier, "Moving Up, Filtering Down: Metropolitan Housing Dynamics and Public Policy" (Washington: Brookings Institution, 2001).
58. Brookings Institution Center on Urban and Metropolitan Policy, "Beyond Merger."
59. Robert J. McCarthy, "Consolidation Panel Faces Difficult Task." The Buffalo News, May 15, 2004, p. Bl.
60. Existing housing affordability problems in these places seem to stem largely from the very low incomes earned by residents, and not from escalating rents or house prices. See, e.g., Brookings Institution Center on Urban and Metropolitan Policy, "Baltimore in Focus: A Profile from Census 2000" (Washington: Brookings Institution, 2003).
61. Researchers in Atlanta recognize their city's bifurcated income distribution in a 1997 report, and recommend several policy options for attracting and retaining middleclass residents. Research Atlanta, "A Population Profile of the City of Atlanta: Trends, Causes and Options," 1997. For additional background on these strategies, see David P. Varady, "Middle-Income Housing Programmes in American Cities." Urban Studies 31 (8) (1994): 1345-1366.
62. Office of the Legislative Analyst, "Teacher Housing Initiatives." San Francisco Board of Supervisors, 2003.
63. John Kass, "Daley Gets Behind Plan to Cut City School Board." Chicago Tribune, April 1, 1995, p. 5.
64. Alice M. Rivlin and others, "Revitalizing Washington's Neighborhoods: A Vision Takes Shape" (Washington: Brookings Institution, 2003).
65. Maureen Kennedy and Paul Leonard, "Dealing with Neighborhood Change: A Primer on Gentrification and Policy Choices" (Washington: Brookings Institution, 2001).
66. For further information on these policies, see Arthur C. Nelson and others, "The Link Between Growth Management and Housing Affordability: The Academic Evidence" (Washington: Brookings Institution, 2002); and Ted Mondale and William Fulton, "Managing Metropolitan Growth: Reflections on the Twin Cities Experience" (Washington: Brookings Institution, 2003).
67. Betsy Hammond, "Income Groups Intermingle." The Oregonian, May 15, 2002, p. Al.
68. Brookings Institution Center on Urban and Metropolitan Policy, "Growing the Middle Class: Connecting All Miami-Dade Residents to Economic Opportunity" (Washington: Brookings Institution, 2004).
69. Fredrik Andersson, Harry J. Holzer, and Julia I. Lane, "Worker Advancement in the Low-Wage Labor Market: The Importance of 'Good Jobs"' (Washington: Brookings Institution, 2003).
70. Jonathan Bowles and Joel Kotkin, "Engine Failure" (New York: Center for an Urban Future, 2003).
71. Jacobs, The Death and Life of Great American Cities.
72. Herman P. Miller, Income Distribution in the United States (Department of Commerce, 1966).
73. The equations used for Pareto estimation are derived from a technical document prepared for the Lewis Mumford Center by Brian J. Stults, available at mumford. dyndns.org/cen2000/CityProfiles/ Profiles/MHHINote.htm (accessed May 2004).
74. See, e.g., Glenn C. Blomquist, Mark C. Berger, and John P. Hoehn, "New Estimates of Quality of Life in Urban Areas." American Economic Review 78 (1) (1998): 89-107.
75. Patricia Ruggles, Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy (Washington: Urban Institute Press, 1990); Constance F. Citro and Robert T. Michael, eds., Measuring Poverty: A New Approach (National Academy Press, 1995). The need to adjust these thresholds across geographical areas is also reflected in the growing literature on "family self-sufficiency" budgets. See Chauna Brocht, "EPI Issue Guide: Poverty and Family Budgets" (Washington: Economic Policy Institute, 2001).
76. Citro and Michael, Measuring Poverty; Kathleen Short and Thesia Garner, "A Decade of Experimental Poverty Thresholds: 1990 to 2000." Prepared for the Annual Meeting of the Western Economic Association, Seattle, WA, July 2, 2002.
77. Kathleen Short, "Where We Live: Geographic Differences in Poverty Thresholds" (U.S. Census Bureau, 2001).
78. Mary Kokoski, Patrick Cardiff, and Brent Moulton, "Interarea Price Indices for Consumer Goods and Services: An Hedonic Approach Using CPI Data." BLS Working Paper 256 (July 1994). BLS subsequently updated these indices with 1995 data, reducing the spread from least expensive to most expensive metro area to approximately the range reflected in our index. "Interarea Comparisons of Compensation and Prices," in Report on the American Workforce (BLS, 1997).

## References

Andersson, Fredrik, Harry J. Holzer, and Julia I. Lane. 2003. "Worker Advancement in the Low-Wage Labor Market: The Importance of 'Good Jobs."' Washington: Brookings Institution.

Baker, Chris. 2003. "What Is Middle Class?" The Washington Times, November 30, p. A1.

Berube, Alan, and William H. Frey. 2002. "A Decade of Mixed Blessings: Urban and Suburban Poverty in Census 2000." Washington: Brookings Institution.

Bowles, Jonathan, and Joel Kotkin. 2003. "Engine Failure." New York: Center for an Urban Future.

Brookings Institution Center on Urban and Metropolitan Policy. 2004. "Growing the Middle Class: Connecting All Miami-Dade Residents to Economic Opportunity." Washington.

Cloutier, Norman. 1997. "Metropolitan Income Inequality During the 1980s: The Impact of Urban Development, Industrial Mix, and Family Structure." Journal of Regional Science 37 (3): 459-478.

Frankel, David M., and Eric D. Gould. 2001. "The Retail Price of Inequality." Journal of Urban Economics 49: 219-239.

Frey, William H. 2003. "Metropolitan Magnets for International and Domestic Migrants." Washington: Brookings Institution.

Glaeser, Edward L., Matthew E. Kahn, and Jordan Rappaport. 2000. "Why Do the Poor Live in Cities?" Working Paper 7636. Cambridge, MA: National Bureau of Economic Research.

Jones, Jr., Arthur F., and Daniel H. Weinberg. 2000. "The Changing Shape of the Nation's Income Distribution." Census Bureau Current Population Report P60-204.

Kennedy, Maureen, and Paul Leonard. 2001. "Dealing with Neighborhood Change: A Primer on Gentrification and Policy Choices." Washington: Brookings Institution.

Lang, Robert E., and Patrick A. Simmons. 2003. "Boomburbs': The Emergence of Large, Fast-Growing Suburban Cities." In Bruce Katz and Robert E. Lang, eds., Redefining Urban and Suburban America: Evidence from Census 2000. Washington: Brookings Institution.

Leone, Richard C. 1976. "The Fiscal Decline of Older Cities: Causes and Cures." National Tax Journal 29 (3): 257-260.

Madden, Janice F. 2000. Changes in Income Inequality with U.S. Metropolitan Areas. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

McMahon, Thomas, Larian Angelo, and John Mollenkopf. 1998. "The Disappearing Urban Middle Class." Social Policy 32 (4): 322-335.

Miller, Herman P. 1966. Income Distribution in the United States. Department of Commerce.

Mishel, Lawrence, Jared Bernstein, and Heather Boushey. 2003. The State of Working America 2002-03. Cornell University Press.

Pack, Janet Rothenberg. 2002. Growth and Convergence in Metropolitan America. Washington: Brookings Institution.

Rivlin, Alice M., and others. 2003. "Revitalizing Washington's Neighborhoods: A Vision Takes Shape." Washington: Brookings Institution.

Short, Kathleen. 2001. "Experimental Poverty Measures: 1999." Current Population Report P60-216. Census Bureau.

## Acknowledgments:

The authors thank Jared Bernstein, Matthew Fellowes, William Frey, Amy Liu, Janet Pack, Kathleen Short, Audrey Singer, and Rebecca Sohmer for advice and comments, and Mark Muro for his editorial and substantive contributions.

## For More Information:

Alan Berube
Fellow
The Brookings Institution Metropolitan Policy Program
(202) 797-6075
aberube@brookings.edu

## For General Information:

The Brookings Institution Metropolitan Policy Program
(202) 797-6139
www.brookings.edu/metro

## About the Living Cities Census Series

Census 2000 provides a unique opportunity to define the shape of urban and metropolitan policy for the coming decade. With support from Living Cities: The National Community Development Initiative, the Brookings Institution Metropolitan Policy Program has been producing the Living Cities Census Series, a major three-year effort to illustrate how urban and suburban America has changed in the last two decades. As a part of this effort, Brookings is conducting comparative analyses of the major social, economic, and demographic trends for U.S. metropolitan areas, as well as a special effort to provide census information and analysis in a manner that is tailored to the cities involved in the Living Cities initiative.

Living Cities: The National Community Development Initiative is a partnership of leading foundations, financial institutions, nonprofit organizations, and the federal government that is committed to improving the vitality of cities and urban communities. Living Cities funds the work of community development corporations in 23 cities and uses the lessons of that work to engage in national research and policy development. Visit Living Cities on the web at www.livingcities.org


55 West 125th Street, 11th Floor • New York, New York 10027
Tel: 646-442-2200 • Fax: 646-442-2239 www.livingcities.org

The Brookings Institution
1775 Massachusetts Avenue, NW • Washington D.C. 20036-2188
Tel: 202-797-6000 • Fax: 202-797-6004
www.brookings.edu


Metropolitan Policy Program
Direct: 202-797-6i39 • Fax/direct: 202-797-2965
www.brookings.edu/metro

