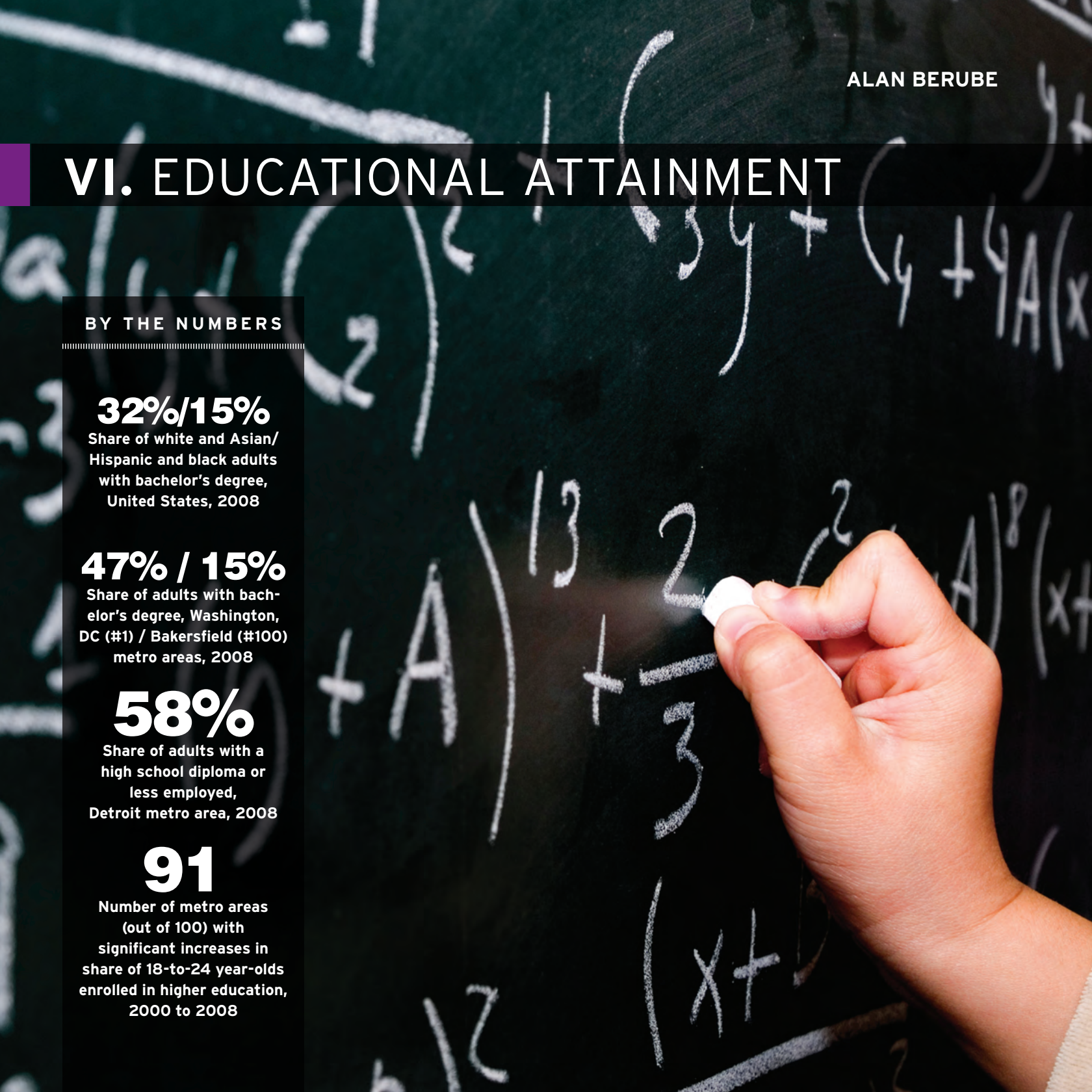
ALAN BERUBE

VI. EDUCATIONAL ATTAINMENT



BY THE NUMBERS

32%/15%
Share of white and Asian/ Hispanic and black adults with bachelor's degree, United States, 2008

47% / 15%
Share of adults with bachelor's degree, Washington, DC (#1) / Bakersfield (#100) metro areas, 2008

58%
Share of adults with a high school diploma or less employed, Detroit metro area, 2008

91
Number of metro areas (out of 100) with significant increases in share of 18-to-24 year-olds enrolled in higher education, 2000 to 2008

OVERVIEW

- **Americans are growing more educated, but progress appears to be slowing among younger adults.** While the share of U.S. adults holding a four-year college degree rose from 24 percent to 28 percent from 2000 to 2008, a lower share of 25-to-34 year-olds than 35-to-44 year-olds held a four-year college degree in 2008, a reversal from the pattern in 2000. Nearly a quarter of those younger adults have completed some college, but not a degree.

- **Smart metropolitan areas are getting smarter, faster.** Already highly-educated metro areas such as Boston, New York, San Diego, and San Francisco ranked among the top gainers of college graduates in the 2000s. Thirty-four percentage points separated the top- (Washington, D.C.) and bottom-ranked (Bakersfield) large metro areas on college degree attainment in 2008, up from 26 points in 1990.

- **In every large metro area, educational attainment for whites exceeds that for both blacks and Latinos.** Educational disparities by race and ethnicity evident at the national level are uniformly present in large metropolitan areas, where overall, 36 percent of white adults possess college degrees, versus 19 percent of blacks and 14 percent of Hispanics. Some metro areas in the West register higher degree-earning rates for African Americans, as do some in the Midwest, Northeast, and Florida for Latinos.

- **Residents of older suburbs are more highly educated than other metropolitan residents.** In Cambridge, MA; Arlington, VA; Bellevue, WA; and Sunnyvale, CA, more than half of adults have a four-year college degree, as do 36 percent of residents across all high-density suburbs. As a group, primary cities lost some of their share of college-educated residents to suburbs over the 2000s, reflecting in part the suburbanization of the large, highly-educated baby boomer generation.

- **Throughout the country, more young people are going to college or graduate school.** Among the 100 largest metro areas, 91 experienced a significant increase in the share of their young adults enrolled in higher education between 2000 and 2008. Some of the largest increases occurred in older industrial metro areas of the Northeast and Midwest, suggesting that young people in these struggling economies increasingly recognize the need for a post-secondary degree to succeed in the labor market.

There are worrisome signs that younger Americans are not making the same level of progress on educational attainment as older generations.

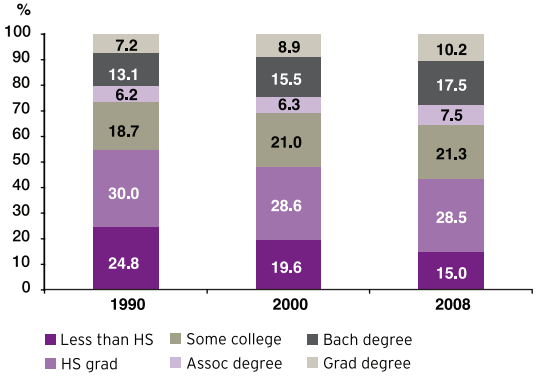
NATIONAL AND REGIONAL TRENDS

The United States is one of the most highly educated nations in the world. The Organisation for Economic Cooperation and Development (OECD) places the United States second among 29 developed economies in the proportion of its working-age population with a high school diploma and third among 30 in the proportion with a post-secondary degree.[1]

On this front, the nation made continued gains over the past two decades. The share of adults with at least a high school diploma rose from 75 percent

Figure 1. U.S. Adults Have Become More Highly Educated Over the Past Two Decades

Share of Population Age 25 and Over, by Highest Level of Attainment



Source: Brookings analysis of 1990 Census, Census 2000, and 2008 American Community Survey data

in 1990 to 85 percent in 2008 (Figure 1). Similar progress was evident for post-secondary degrees, which 35 percent of adults possessed in 2008, up from 26 percent in 1990. These gains have been uneven across regions, however. The Northeast is now the most highly educated region, with just short of 40 percent of its adults holding some form of post-secondary degree, a trait shared by fewer than one-third of Southern adults.

Even more significant than these regional differences are deep and abiding attainment differences by race and ethnicity across the United States (Table 1). Only 61 percent of Hispanic adults have a high school diploma, reflecting both recent low-skilled immigration as well as below-average completion rates for native-born Hispanics. And while that

Table 1. Large Disparities by Race/Ethnicity, and Emerging Disparities by Age, Underlie Educational Attainment in America

Educational Attainment by Race/Ethnicity, Nativity, and Age, United States, 2000 and 2008

	High school diploma or more		*Some college*		*Associate's degree*		*Bachelor's degree*	
	2000	**2008**	**2000**	**2008**	**2000**	**2008**	**2000**	**2008**
Race/Ethnicity								
White	85.5	90.1	21.9	22.1	6.6	7.9	27.0	30.7
Black	72.3	80.7	22.5	24.3	5.8	7.4	14.3	17.5
Asian	80.4	85.1	14.0	12.8	6.6	6.6	44.1	49.7
Hispanic	52.4	60.8	15.6	16.6	4.3	5.3	10.4	12.9
Nativity								
Native-born	83.3	88.3	22.3	22.9	6.5	7.9	24.4	27.8
Foreign-born	61.9	67.5	13.6	13.0	5.1	5.5	23.8	27.1
Age								
25 to 34	83.9	86.4	23.1	23.5	7.5	8.3	27.5	29.5
35 to 44	85.0	87.3	22.6	21.4	8.1	8.7	25.9	30.8
45 to 64	83.2	87.6	21.7	21.9	6.4	8.2	26.4	28.9
65 and over	65.5	75.7	15.7	17.5	2.5	3.9	15.4	20.0

Source: Brookings analysis of Census 2000 and 2008 American Community Survey data

rate increased by more than 8 percentage points since 2000, the share of Hispanics with any sort of post-secondary degree increased by less than half that margin. Meanwhile, black adults posted above-average gains in high school diploma attainment during the 2000s, but below-average gains in college degree completion. Today, just 13 percent of Hispanics and 18 percent of African Americans hold a four-year college degree, compared to 31 percent of whites, and 50 percent of Asians.

Finally, there are worrisome signs that younger Americans are not making the same level of progress on educational attainment as older generations, which could threaten continued upward progress in U.S. living standards. Over time, the United States has become more educated as younger adults gained credentials to access fields with growing educational requirements, replacing older workers who were aging out of industries and occupations that on average required less education. Now, however, a gap is beginning to open in which younger adults are posting lower levels of attainment than some older groups. In 2000, 25-to-34 year-olds actually had a slightly higher (28 percent) rate of bachelor's degree attainment than 35-to-44 year-olds (26 percent) (Table 1). But by 2008, 29 percent of 25-to-34 year-olds held a degree, compared to 31 percent of 35-to-44 year-olds. A rising share of the 25-to-34 year-old group—24 percent by 2008—indicated that they had completed some college, but had not obtained a degree, a troubling trend that is drawing increased attention in higher education.[2]

METROPOLITAN TRENDS

College Degree Attainment in 2008

Recent trends may be 'locking in' longstanding attainment differences across metropolitan areas rather than narrowing the gaps.

Considerable disparities exist across U.S. metropolitan labor markets in the educational attainment of their residents, due to differences in their underlying economic and demographic structures, migration patterns, and historical and cultural mores that affect the real and perceived return to education. As this section explores, however, recent trends may be "locking in" longstanding attainment differences across metropolitan areas rather than narrowing the gaps.[3]

Ranking all 100 metropolitan areas on the share of their population with a bachelor's degree shows that the top (Washington, DC) and bottom (Bakersfield, CA) metro areas are separated by a factor of three (Table 2). Most metro areas at the top of the list are hubs for professional services and scientific/technical industries, including Bridgeport, San Jose, San Francisco, Boston, and Raleigh.[4]

The metro areas with the lowest college attainment rates include ones in California's Central Valley, along the Texas border, and in older industrial centers of the Northeast, Midwest, and Southeast. These regions have historically been home to industries such as manufacturing, agriculture, and shipping, for which a college degree was not a prerequisite to obtaining a good-paying job. Some of these areas, such as Scranton, Modesto, or Riverside may benefit from their proximity to more productive, higher-cost markets, which during the 2000s helped them attract firms and households seeking lower costs. However, the relatively low education levels of adults in these metropolitan areas pose an important barrier to their growing more productive industries, achieving greater economic diversity, and boosting the local standard of living.

Table 2. Higher Educational Attainment Levels Vary Widely Across Metropolitan Areas

Metro Areas Ranked by Proportion of Adults Age 25 and Over with a Bachelor's Degree, 2008

Highest Rates				*Lowest Rates*			
Rank 2008	**Rank 1990**	**Metro Area**		**Rank 2008**	**Rank 1990**	**Metro Area**	
1	1	Washington-Arlington-Alexandria, DC-VA-MD-WV	46.8	91	94	Scranton, PA	21.0
2	2	Bridgeport, CT	43.8	92	91	El Paso, TX	19.6
3	4	San Jose-Sunnyvale-Santa Clara, CA	43.5	93	97	Youngstown, OH-PA	19.1
4	3	San Francisco-Oakland-Fremont, CA	43.4	94	92	Riverside-San Bernardino-Ontario, CA	19.0
5	7	Boston-Cambridge, MA-NH	41.9	95	87	Fresno, CA	18.9
6	8	Raleigh, NC	41.5	96	99	Lakeland, FL	18.7
7	5	Madison, WI	39.8	97	96	Stockton, CA	15.6
8	6	Austin, TX	38.2	98	100	McAllen, TX	15.1
9	11	Minneapolis-St. Paul, MN-WI	37.6	99	98	Modesto, CA	15.1
10	9	Denver-Aurora, CO	37.5	100	95	Bakersfield, CA	14.7

Source: Brookings analysis of 1990 Census and 2008 American Community Survey data

Changes in Attainment in the 2000s

Notwithstanding the differences in 2008, adults nearly all 100 metropolitan areas achieved increases over the 2000 to 2008 period in their college degree attainment rates. The magnitude of those increases, however, varied widely, from a more than 6 percentage-point increase in Worcester to a less than 1 percentage-point increase in New Orleans and Albuquerque (Table 3).

In general, two types of metro areas made significant gains: large, coastal regions with high value-added economies (e.g., Boston), and mid-sized markets that have made a transition away from manufacturing toward higher education and health care industries (e.g., Pittsburgh, Baltimore). Those metro areas nearer the bottom of the list include many that attracted large numbers of less-educated immigrants from Latin America throughout the decade to fill jobs in their growing housing sectors. Regions such as Phoenix and California's Central Valley all grew at rapid rates prior to the housing crash due in part to the new construction built by these immigrant laborers.[5]

These recent changes in educational attainment at the metropolitan level reflect a striking "path dependency" to this attribute. That is, metro areas with higher levels of college degree attainment in the first place have tended to make greater gains than those starting out with lower educational levels. Indeed, 9 of the 10 metro areas with the highest rates of college degree attainment in 2008 also ranked among the top 10 in 1990, and 9 of the 10 at the bottom of the list in 2008 were also there in 1990 (Table 2).[6] Meanwhile, the distance from the top to the bottom of the attainment distribution has grown; 34 percentage points separated the top-ranked and bottom-ranked metro areas on this indicator in 2008, up from 26 in 1990. This pattern is not immutable—indeed, initially low-ranked areas like Louisville and Las Vegas managed to post above-

Table 3. Growth in College Degree Attainment Varied Widely Among Metro Areas in the 2000s
Metro Areas Ranked by Change in Proportion of Adults Age 25 and Over with a Bachelor's Degree, 2000-2008

	Highest Growth			*Lowest Growth*	
Rank	**Metro Area**		**Rank**	**Metro Area**	
1	Worcester, MA	6.1	91	Austin, TX	1.5
2	Miami-Fort Lauderdale-Pompano Beach, FL	5.4	92	Tucson, AZ	1.5
3	Pittsburgh, PA	5.3	93	Phoenix-Mesa-Scottsdale, AZ	1.4
4	Indianapolis, IN	5.3	94	Fresno, CA	1.3
5	Baltimore, MD	5.1	95	Bakersfield, CA	1.1
6	New Haven, CT	5.0	96	Stockton, CA	1.1
7	Akron, OH	5.0	97	Modesto, CA*	1.1
8	Boston-Cambridge, MA-NH	5.0	98	Dallas-Fort Worth-Arlington, TX	1.1
9	Cape Coral, FL	5.0	99	Albuquerque, NM*	0.9
10	Des Moines, IA	5.0	100	New Orleans, LA	0.7

**Change not statistically significant at 90 percent confidence level*
Source: Brookings analysis of Census 2000 and 2008 American Community Survey data

average gains in their shares of college-educated adults—but nevertheless indicates that gains in the "war for talent" among U.S. metro areas are accruing disproportionately to already better-educated places.

Slowing Attainment Growth

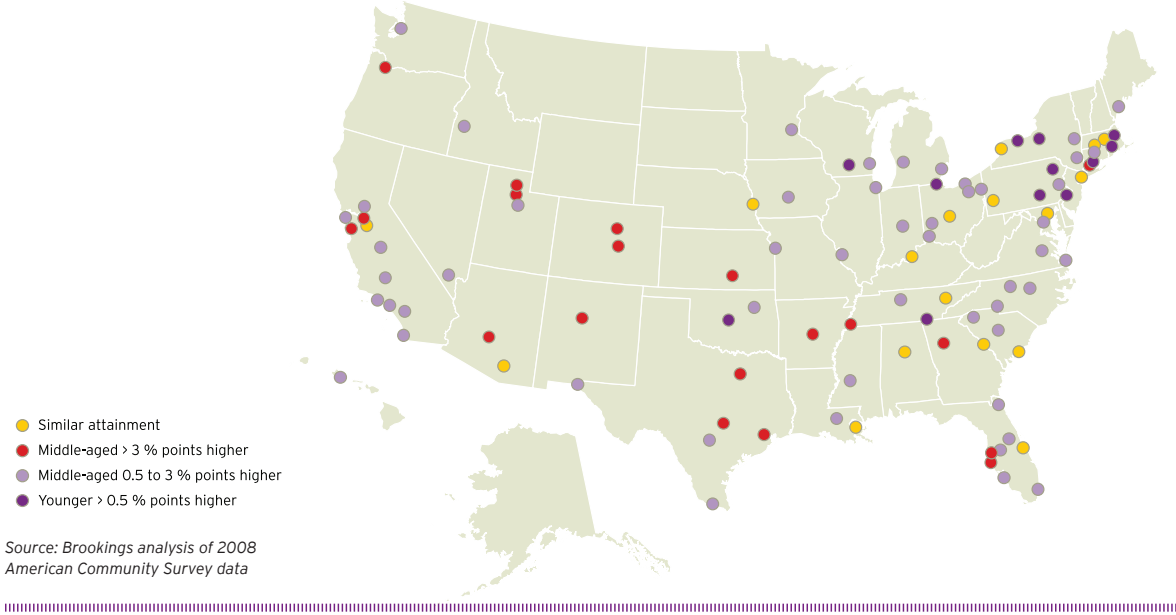
Another dynamic contributing to the gap among metro areas is the rate at which younger adults are earning college degrees compared to their predecessors. As noted above, progress has slowed on this indicator at the national level, but outcomes at the metropolitan level remain diverse. There are 30 metropolitan areas in which degree-earning rates for 25-to-34 year-olds exceed (by at least half a percentage point) those for 35-to-44 year-olds (Map 1). Many lie in the Northeast, including several with a strong university presence (e.g., New Haven, Boston, Syracuse, Pittsburgh) that helps attract graduate students, or leads these regions to retain recent bachelor's degree earners. Yet there are many more metro areas where younger adults lag the previous cohort in attainment, with serious gaps evident in several Sun Belt metro areas that already possess below-average attainment levels.[7] Even the gaps in metro areas with fairly well-educated populations overall, such as Atlanta and Portland (OR), may raise concerns about their future economic trajectory.

Racial and Ethnic Outcomes

At the metro-area level, the wide racial/ethnic disparities that characterize educational attainment nationally are replicated across the board. In each of the 100 largest metro areas, white college degree attainment exceeds that for blacks and Hispanics. Across all 100, 50 percent of Asian adults and 36 percent of white adults hold a four-year degree, compared to just 20 percent of blacks and 14 percent of Hispanics.

Among these demographic subgroups, educational attainment levels vary greatly across

Map 1. In Many Metro Areas, Middle-Aged Workers Are More Highly Educated Than Younger Ones
Share of 35-to-44 Year-Old Adults versus 25-to-34 Year-Old Adults with Bachelor's Degrees, by Metro Area, 2008



Source: Brookings analysis of 2008 American Community Survey data

metropolitan America. College degree-earning rates among blacks are relatively high in several of the high-tech metro areas that perform well overall (Map 2a), with Atlanta posting the second-highest rate for blacks. Also ranking high are a handful of Western metro areas, including Phoenix, San Diego, Los Angeles, and Portland, where the history of racial segregation is not quite as severe as in the East. Metro areas with the highest educational levels for Hispanics, by contrast, lie largely east of the Mississippi, and include Midwestern (St. Louis, Columbus, Minneapolis), Northeastern (Baltimore, Rochester, Boston), and Southern (Miami, Jacksonville, New Orleans) locations (Map 2b). With a couple exceptions, these metropolitan areas tend to have relatively small Hispanic populations.[8] Yet even the college degree attainment rates for minorities in these metropolitan areas lag the average for whites across all metro areas (36 percent).

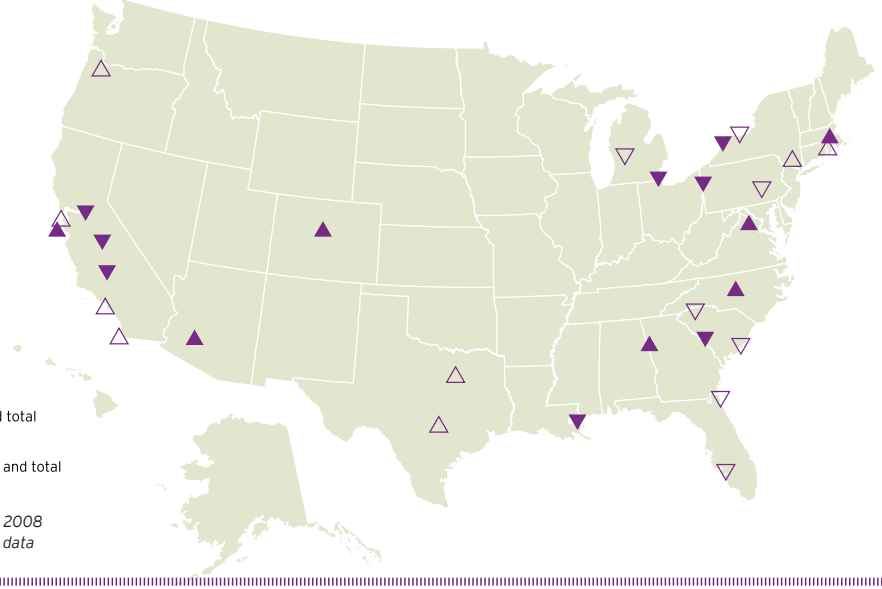
Metro areas at the bottom of the educational attainment list for blacks and Hispanics are also quite distinct from one another. Manufacturing areas of the Midwest and South figure prominently among the regions with low educational levels for blacks, while 11 of the bottom 15 for Hispanics are Western locations that have experienced significant immigration of less-skilled workers from Latin America to fill construction, agricultural, and lower-level service-sector jobs.

Employment Levels by Educational Attainment

As the Great Recession has demonstrated, there are clear linkages between educational attainment and employment prospects.[9] While we do not yet know how the downturn affected workers

Map 2a. College-Degree-Earning Rates for Blacks are Relatively High in Many Western Metro Areas, and Low in the Manufacturing Belt

Top and Bottom Metro Areas on Share of Blacks/African Americans Age 25 and Over with Bachelor's Degree, 2008

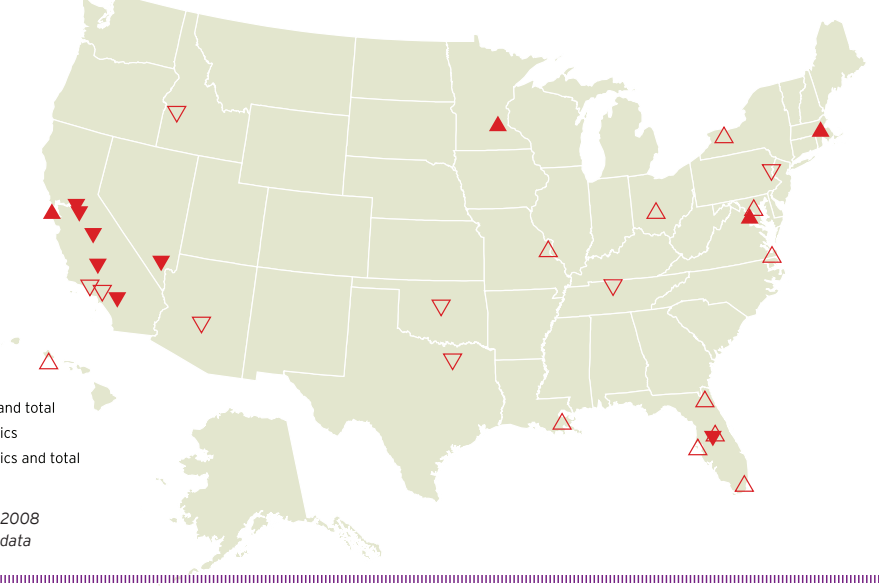


△ Top 15 metros for blacks
▲ Top 15 metros for blacks and total
▽ Bottom 15 metros for blacks
▼ Bottom 15 metros for blacks and total

Source: Brookings analysis of 2008 American Community Survey data

Map 2b. College-Degree-Earning Rates for Latinos are Relatively High in a Diverse Set of Metros, and Low in Some Southern and Western Metros

Top and Bottom Metro Areas on Share of Latinos Age 25 and Over with Bachelor's Degree, 2008



△ Top 15 metros for Hispanics
▲ Top 15 metros for Hispanics and total
▽ Bottom 15 metros for Hispanics
▼ Bottom 15 metros for Hispanics and total

Source: Brookings analysis of 2008 American Community Survey data

Table 4. Adults with No More than a High School Diploma Are Employed at Very Low Levels in Some Metro Areas
Metro Areas Ranked by Proportion of Adults Age 25 and Over with a High School Diploma or Less Employed in 2008

	Highest Rates			*Lowest Rates*	
Rank	**Metro Area**		**Rank**	**Metro Area**	
1	Des Moines, IA	76.0	91	Jackson, MS	61.2
2	Omaha, NE-IA	74.6	92	Modesto, CA	60.9
3	Madison, WI	74.4	93	El Paso, TX	60.7
4	Washington-Arlington-Alexandria, DC-VA-MD-WV	74.3	94	Augusta-Richmond County, GA-SC	60.7
5	Minneapolis-St. Paul, MN-WI	74.2	95	Greenville, SC	60.5
6	Salt Lake City, UT	74.0	96	Stockton, CA	59.9
7	Ogden, UT	74.0	97	McAllen, TX	59.1
8	Denver-Aurora, CO	73.9	98	Fresno, CA	58.9
9	Harrisburg, PA	73.7	99	Detroit-Warren, MI	57.6
10	Viginia Beach-Norfolk-Newport News VA-NC	72.1	100	Bakersfield, CA	55.1

Source: Brookings analysis of Census 2000 and 2008 American Community Survey data

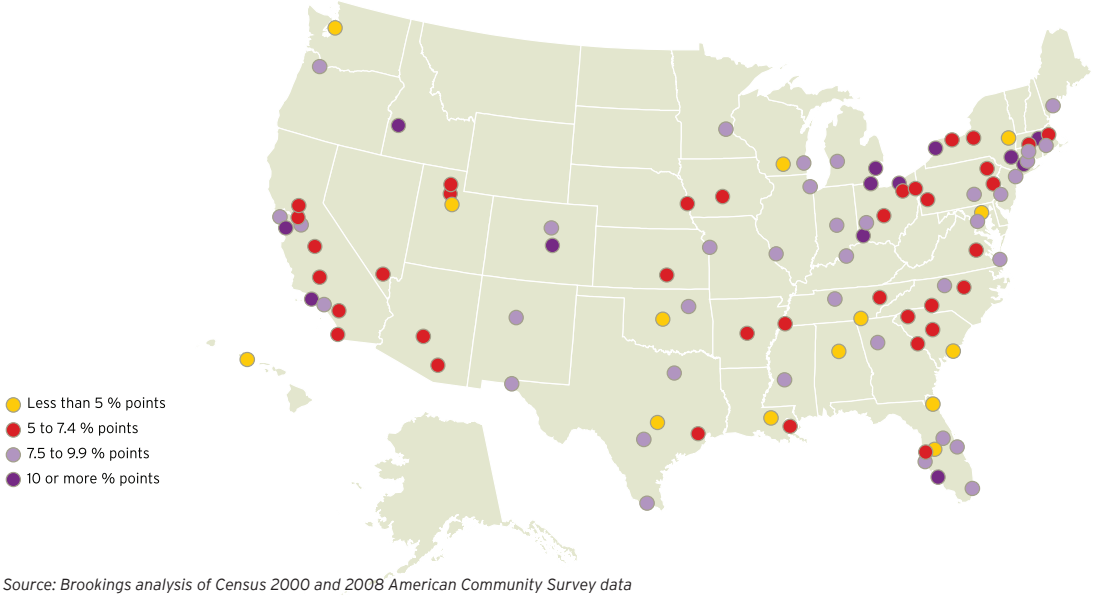
at the metropolitan level, even before the worst of the recession set in, there were marked differences among metro areas in employment rates for less-educated workers. For the college-educated, employment rates were fairly consistent, with 97 of 100 metro areas posting rates between 80 and 90 percent. For those with no more than a high school diploma, however, prospects varied enormously (Table 4). In some metro areas, particularly those in the country's mid-section, 70 percent or more of these adults were in work in 2008. Yet at the same time, many metropolitan areas posted much lower employment rates for this group. They include several manufacturing-oriented metro areas and a mix of those in the Southeast, California's Central Valley, and Detroit, regions with substantial numbers of African American adults who lack a college degree. The hard times these economies encountered in 2009 are only likely to exacerbate the serious labor market challenges facing this group.

Rising Enrollment Nationwide

Perhaps in view of the increasing returns to higher education in America, the 2000s saw widespread increases in college and graduate school enrollment among young adults. Nationally, 41 percent of 18 to 24 year-olds were enrolled in higher education in 2008, up from 34 percent in 2000. Metropolitan areas throughout New England and upstate New York all had more than half of their young adults enrolled in 2008. Gains over the decade were particularly rapid in a number of older industrial metro areas in the Great Lakes region, including Toledo, Detroit, Cleveland, and St. Louis, where enrollment rates were up 10 percentage points or more (Map 3). It may be that the loss of manufacturing jobs over the course of the decade, many of which had not required a bachelor's degree, spurred more young people in these regions to pursue higher education. Whether they will stay in these regions to pursue job opportunities after earning degrees remains to be seen. Most metro areas posting small gains already

Map 3. Enrollment in Higher Education Rose Everywhere in the 2000s, Especially the Northeast and Midwest

Change in Share of 18-to-24 year-olds Enrolled in College or Graduate School, 2000 to 2008



Source: Brookings analysis of Census 2000 and 2008 American Community Survey data

had significant student bodies, such as Baton Rouge (LSU), Madison (University of Wisconsin), Austin (University of Texas), and Provo (BYU).[10]

CITY AND SUBURBAN TRENDS

Some have posited that big cities, in particular, play an increasing role in attracting and retaining the most educated workers, especially younger individuals.[11] Across all metropolitan areas, however, college-educated adults are actually slightly less likely to live in cities than the population as a whole (Table 5). Cities with outsized proportions of their metro areas' highly educated workers include mainly southern and western locales like Charleston, Little Rock, and Seattle, as well as cities with rural, lower-income suburbs like McAllen and Bakersfield. Selective outmigration from cities in the nation's manufacturing belt over several decades has left places such as Detroit, Hartford, and Cleveland with college degree attainment rates less than half those in their suburbs.

Moreover, most metro areas saw further movement of college degree holders away from big cities, toward suburbs, during this decade. A few large cities like New York, Boston, and Washington posted a small edge over their suburbs in gaining college-educated adults from 2000 to 2008. But many more, such as Omaha, Tulsa, and Baton Rouge sustained significant losses in their share of metropolitan college graduates. This trend may indicate some degree of out-migration of the highly educated from cities, but probably owes at least as much to the aging of

Table 5. The Proportion of College-Educated Adults Living In Cities Dropped Slightly in the 2000s
Relative Likelihood of Adults with Bachelor's Degree to Live in Primary Cities in 2008, and Change in Proportion Living in Primary Cities, 2000-2008

	Relative likelihood of college-educated to live in cities, 2008					*Change in relative likelihood of college-educated to live in cities, 2000 to 2008*			
Rank	Metro Area	Share of College Educated in City(ies)	Share of All Adults in City(ies)	Ratio*	Rank	Metro Area	Share of College Educated in City(ies), 2000	Share of College Educated in City(ies) 2008	Change, 2000-08
1	McAllen, TX	35.5	19.1	185.5	1	Bakersfield, CA	53.0	55.2	2.2
2	Charleston, SC	26.6	17.3	153.8	2	Sacramento-Roseville, CA	25.7	27.5	1.8
3	Little Rock, AR	41.9	28.3	147.7	3	Cape Coral, FL	18.6	20.3	1.7
4	Bakersfield, CA	55.2	39.8	138.7	4	New York-Newark, NY-NJ-PA	39.7	41.3	1.6
5	Seattle-Tacoma-Bellevue, WA	37.9	27.9	135.9	5	St. Louis, MO-IL	9.7	11.1	1.5
91	Allentown, PA-NJ	7.1	12.6	56.4	91	Jackson, MS	36.7	29.0	-7.7
92	Youngstown, OH-PA	6.0	11.2	53.7	92	Omaha, NE-IA	54.0	45.8	-8.1
93	Cleveland, OH	9.1	18.5	49.3	93	Tulsa, OK	57.9	49.0	-8.9
94	Hartford, CT	3.8	8.5	44.9	94	Baton Rouge, LA	43.2	33.7	-9.4
95	Detroit-Warren, MI	8.5	19.6	43.3	95	New Orleans, LA	40.6	29.8	-10.8
	All metro areas	**30.4**	**31.1**	**97.8**		**All metro areas**	**31.5**	**30.4**	**-1.1**

Results include 95 metros with primary city(ies) represented in 2008 ACS estimates
**ratio of share of college-educated in city(ies) to share of total adult population in cities; 100 = parity*
Source: Brookings analysis of Census 2000 and 2008 American Community Survey data

Across all metropolitan areas, college-educated adults are actually slightly less likely to live in cities than the population as a whole.

highly suburbanized boomers, who account for an increasing share of the nation's college-educated population.

These highly educated suburbanites live disproportionately in the high-density suburbs that surround primary cities in most metropolitan areas. Overall, 36 percent of adults in these suburbs hold a bachelor's degree, versus 31 percent in mature suburbs, 28 percent in emerging suburbs, and 19 percent in exurbs. Inner suburban cities like Cambridge (MA), Arlington (VA), Bellevue (WA), and Sunnyvale (CA) exemplify the highly educated, high-income locales that abut central cities in many metro areas. In those cities, more than half of all adults hold a four-year degree.

LOOKING AHEAD

There is fairly broad recognition that the U.S. economy—and its constituent metropolitan economies—remain on an inexorable path toward higher demand for education. Technological progress and the rise of developing economies will, on balance, further shift job growth in the United States and its regions toward service-related industries that require higher-order skills, and place added value within industries on occupations and tasks that utilize such skills. Rising enrollments in higher education suggest that young people recognize this reality as well.

If anything, the deep economic downturn of 2009 magnified the educational challenge for the nation and its metropolitan labor markets. Less-educated workers, as well as the metro areas in which they are most concentrated, have borne the brunt of the significant rise in unemployment. Many of the jobs that they occupied—in sectors such as manufacturing, construction, and retail—have likely disappeared for a considerable length of time, if not permanently. Amid the worst labor market in a generation, more and more adults are going to college. The share of individuals aged 18 to 24 enrolled in school hit an all-time high in October 2008, and statistics from September 2009 indicate that it rose even further in the subsequent year, particularly in lower-cost community colleges.[12]

What might be the longer-run impact of the Great Recession on the educational profile of metropolitan areas? Trends from the past decade, along with the regionally disparate character of the recession, suggest that regional differences in educational attainment could further widen across at least three types of metro areas.

First are the highly-educated, mostly coastal metropolitan areas that were making rapid gains in college degree attainment prior to the downturn. Metro areas like Washington, D.C., New York, Boston, and the San Francisco Bay area have, in general, been less affected by the recession than other metro areas. Some of their better performance can be attributed to their higher educational levels, which research has suggested allow workers to transition more easily from declining to growing sectors.[13] If, as some expect, professional, health, and educational services continue to become a more important source of U.S. exports, these metro areas are likely to grow and attract even more highly educated workers and the firms that employ them.[14]

If anything, the deep economic downturn of 2009 magnified the educational challenge for the nation and its metropolitan labor markets.

Second are Sun Belt destinations in Florida, the Intermountain West, and inland California suffering a "housing hangover" in the wake of overbuilding and speculative lending during the early and middle years of the decade. With outsized shares of their economies concentrated in housing-related activities (e.g., construction and real estate) before the bubble burst, they may take some time to find a more stable equilibrium. Most face the added obstacle of low educational attainment among their adult populations, which resulted in part from rapid immigration (until the recession hit) of less-educated workers from Mexico and Latin America. Fortunately, many of these places still have in-demand amenities like mild weather that will probably attract more residents over the long haul. However, growing their base of educated workers will be critical to efforts to move these metropolitan economies up the value chain. Strategies to promote flexible economic opportunities for well-educated boomer residents and in-migrants, and better educate and retain young people who already live in these metropolitan areas—especially Latino minorities—could help improve their long-run outlook.

Third are the metropolitan areas of the

manufacturing belt. In the wake of the Great Recession, employment levels in many of these areas may be permanently lower, especially for workers who possess no more than a high school education. Recognizing this, states like Michigan are putting considerable resources into post-secondary education and training for displaced workers. Yet these workers and others who are coming of age in the Great Lakes region with high levels of education may nevertheless continue to leave to pursue opportunities elsewhere. Younger college-educated adults from these metro areas may be attracted to large labor markets with diverse job opportunities, not just on the coasts but also in Midwestern locations like Chicago and Minneapolis-St. Paul. Mid-career workers who have some post-secondary education and flexible skills may depart for economically healthier climes in Texas and parts of the Southeast. Such migration dynamics would probably leave these workers better off, but could further disadvantage the metro areas left behind—and their large numbers of less-educated African American residents—as they struggle to adapt to a knowledge-fueled economy.

In sum, educational inequalities among metropolitan areas seem likely to grow in the years ahead, absent more deliberate public policies to upgrade educational achievement and attainment in lagging corners of the country, and for the demographic groups that live there. ■

ENDNOTES

1. Education at a Glance 2009: OECD Indicators.
2. William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public Universities* (Princeton University Press, 2009).
3. The section focuses primarily on four-year college degree attainment, the level at which these distinctions are most evident.
4. These regions and others near the top also boast very high proportions of adults holding graduate degrees; for instance, nearly half of all college graduates in the Washington region have such a degree.
5. See the Immigration chapter for further metropolitan-level analysis of immigrant educational attainment in the 2000s.
6. A simple linear regression of the trend from 1990 to 2008 suggests that a metropolitan area with a college degree attainment rate one standard deviation above the mean in 1990 experienced a rise in that rate 2.3 percentage points higher than a metropolitan area with a rate one standard deviation below the mean in 1990.
7. Colorado Springs and Virginia Beach rank near the bottom of the list due in part to the presence of major military bases, which tend to inflate the number of young adults in these areas who lack a college degree, relative to the 35 to 44 year-old group.
8. The Latino population in these metropolitan areas is also characterized by a smaller share of Mexican-born members than in metro areas with a less highly educated Latino population.

9. Between December 2007 and November 2009, unemployment rates increased by: 2.7 percentage points for workers with a four-year degree; 5.3 percentage points for workers with some college or an associate's degree; 5.7 percentage points for workers with only a high school diploma; and 7.4 percentage points for workers without a high school diploma.
10. The data do not reflect a significant change in enrollment during the first year of the Great Recession (from 2007 to 2008), but as noted later, reports from 2009 suggest surging enrollment in response to a terrible labor market for young people.
11. See, e.g., Richard Florida, *The Rise of the Creative Class: And How It's Transforming Work. Leisure, Community and Everyday Life* (New York: Basic Books, 2002); Joseph Cortright, "The Young and Restless in a Knowledge Economy" (Chicago: CEOs for Cities, 2005).
12. Richard Fry, "College Enrollment Hits All-Time High, Fueled by Community College Surge" (Washington: Pew Research Center, 2009).
13. Jonathan Rothwell, "College Education: Metros' Anti-Recession Vaccine?" *The Avenue*, December 30, 2009 [online at **www.tnr.com/blogs/the-avenue**]
14. Moreover, the greater size of these areas has been found to increase productivity and raise wages for educated workers. Edward L. Glaeser and Albert Saiz, "The Rise of the Skilled City," Brookings-Wharton Papers on Urban Affairs 5(2004): 47–94.

Educational inequalities among metropolitan areas seem likely to grow in the years ahead, absent more deliberate public policies to upgrade educational achievement and attainment.