



**NCHEMS**

As America Becomes More Diverse:  
The Impact of State Higher Education Inequality

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## **As America Becomes More Diverse: The Impact of State Higher Education Inequality**

In America, values of social justice and equal opportunity should be sufficient reason to drive us toward equality in higher education. But there also are economic reasons to address this issue. This report focuses largely on the latter and clearly exposes our failures and the pressing need to improve.

With few exceptions, it is now critical for individuals to attain some level of education beyond high school in order to experience a middle-class lifestyle and for the states in which they live to compete in the global economy. Increased educational attainment results in higher personal income, a better-skilled and more adaptable workforce, fewer demands on social services, higher levels of community involvement, and better decisions regarding healthcare and personal finance (National Center for Public Policy and Higher Education, 2004). At a time when higher education is increasingly important, some visible race/ethnic groups are consistently in the “have not” category of our society.

For many states, raising educational attainment levels depends upon their ability to address the education needs of particular race/ethnic populations. This is especially true in states where the populations with the lowest current levels of educational attainment are also those that are growing at the fastest rates. The attainment of college-level degrees among adults has increased in all states over the past two decades. However, considerable disparities in college attainment among certain race/ethnic groups of the population persist—and in most states these gaps are widening.

Given these conditions, it is highly improbable that “business as usual” will get us where we need to be. State policymakers not only must become more aware of these disparities but they also must understand what is likely to happen if they are not addressed. They must grasp the social and economic impacts of ignoring the problem.

Several key trends emphasize the importance of addressing higher education inequality:

- The U.S. population is becoming increasingly diverse. By the year 2020, the U.S. Census Bureau projects a 77% increase in the number of Hispanics, a 32% increase in African-Americans, a 69% increase in Asians, a 26% increase in Native Americans, and less than a one percentage point increase in the White population. The majority of the growth (in numbers) will occur among the populations that are the least educated.
- The U.S. has lost its leadership role as the most highly educated nation in the world. We are losing ground to several countries, particularly with respect to our younger population which represents the future workforce.
- History (from 1980 to 2000) shows that the educational attainment gaps between Whites and Hispanics, African-Americans, and Native Americans are widening. If these educational disparities are not addressed, anticipated demographic shifts will have a major impact on the educational attainment of the U.S. population.

- Minorities (Hispanics, African-Americans, Native-Americans, and Asians) earn substantially less than Whites at equivalent levels of education. These disparities, if unaddressed, will have a substantial impact on total personal income of the U.S.
- Hispanics, African-Americans, and Native Americans are underrepresented at each stage of the educational pipeline—indicating that most state systems of higher education are doing a poor job addressing these disparities.

At a time when many states are becoming increasingly diverse, the need for more complete and useful measures of educational equality among ethnic and gender groups is critical. This study—funded by the Lumina Foundation for Education—examines disparities in educational attainment among race/ethnic and gender groups in the U.S. and within each state, addresses how well states are serving these populations in higher education, and presents projections of each state’s likely future if interventions are not successful and current attainment levels are applied to projected population mixes. This research builds on work recently completed by Derek Price and Jill Wohlford entitled “Race, Ethnic and Gender Inequality in Educational Attainment: A Fifty State Analysis, 1960-2000,” which will soon be published as a chapter of a book entitled *Higher Education and the Color Line*.

The analysis presented here has three general components:

- 1) **Descriptive measures** of educational attainment and income equity (by race and gender) for each of the states. Educational attainment measures are benchmarked against the educational attainment of the top country, not just the best U.S. state performance. This emphasizes that nearly all states have work to do for all their citizens.
- 2) **Diagnostic measures** to identify where in the educational pipeline interventions designed to enhance educational attainment might best be focused.
- 3) **A future component** consisting of projections of each state’s likely future if interventions are not successful and current attainment levels are applied to projected population mixes.

A complete description of the methodology and data sources is located in Appendix A.

The U.S. as a whole is examined in the main body of this report; but since most important decisions regarding higher education policy are made at the state level, data are available at <http://www.higheredinfo.org/raceethnicity/> for the 10 states that are impacted the most. Data for other states can be provided on request.

We urge state policymakers to consider the following questions when reviewing this report and the more specific information provided for their states.

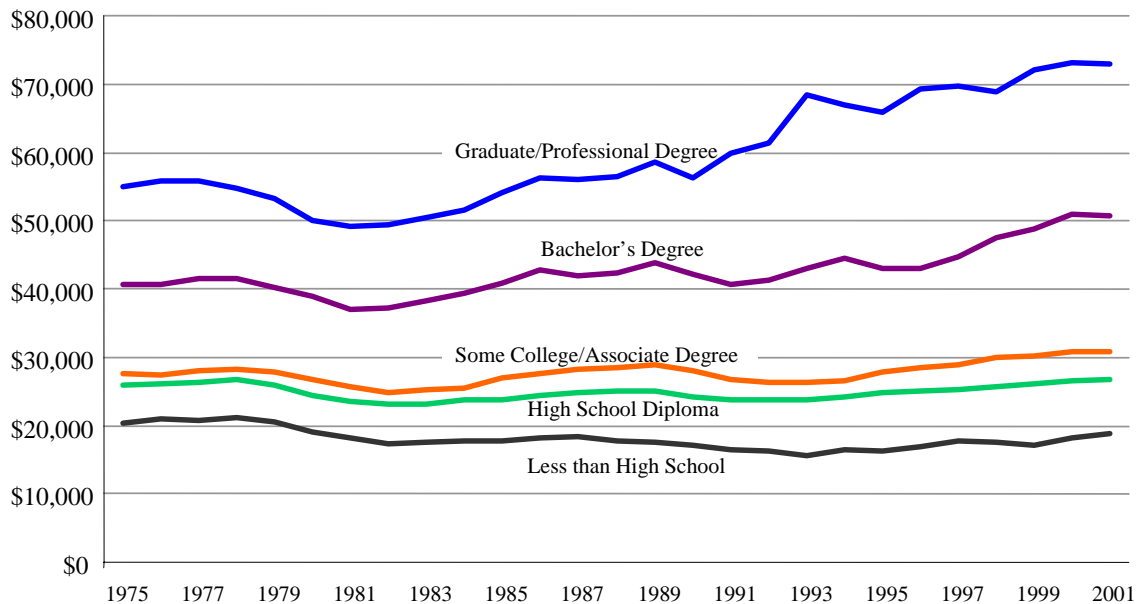
- How educated is the adult population and workforce in my state?
- How does my state compare to the national average, the most educated states, and the most educated countries?

- What disparities are present in my state with respect to educational attainment, participation and completion in higher education, and personal income by gender and race/ethnicity?
- How is the demographic composition of my state expected to change?
- How will expected changes in demography—given current disparities in education and personal income—affect the overall educational attainment, personal income, and tax base of my state?

### The Changing Demands of the Workforce

The U.S. economy is rewarding college graduates at higher rates than ever before. From 1975 to 2001 the median earnings (in constant 2001 dollars) for workers with a bachelor’s degree or higher rose substantially. At the same time, workers with a high school diploma experienced no real increase in income and those with less than a high school diploma lost ground (Figure 1). Over this time period, the gap in earnings between a college educated worker and one who does not complete college has grown dramatically.

**FIGURE 1.**  
 Mean Earnings by Degree Level  
 (Adjusted to 2001 Dollars Using the Consumer Price Index)



Source: U.S. Census Bureau, Bureau of Labor Statistics

Knowledge-based employment is growing at a faster rate and in larger numbers than any other segment of employment. In their analysis of the U.S. Census Bureau’s Current Population

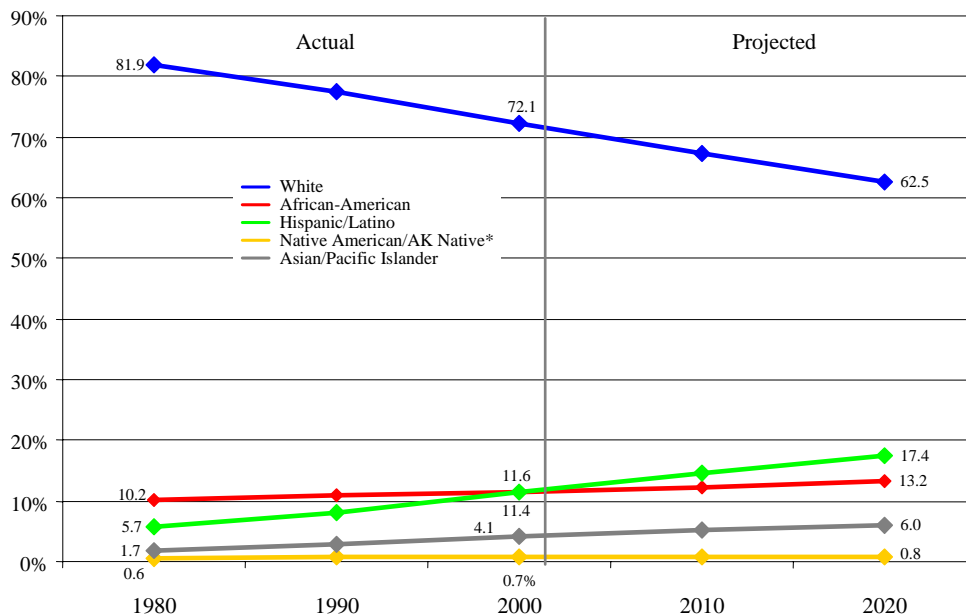


Survey data from 1959 to 1997, Carnevale, et al. (2001) found that more than two-thirds of workers in growing, well-paying jobs have at least some level of postsecondary education. In recent years, the largest growth—and by far the largest segment of the workforce—is “office” related. There has been a major decline in factory and farm employment—jobs that most often do not require postsecondary education (Carnevale, et al., 2001). African-Americans and Hispanics have gained ground in the shares of workers with some form of education beyond high school but still lag substantially behind the shares represented by Whites. With widening disparities in educational attainment and underrepresentation of African-Americans and Hispanics in higher education, it will be difficult to achieve equitable race/ethnic representation in the knowledge-based sector of employment.

## The U.S. Population

The population is becoming increasingly diverse. In the two decades from 1980 to 2000, the proportion of working-age population (aged 25 to 64) represented by Whites dropped from 82% to 72% (Figure 2). Hispanic representation grew from 6% to 11%, African-Americans from 11% to 12%, Asians and Pacific Islanders from 2% to 4%, and Native Americans and Alaskans remained below 1%. In the year 2020, the U.S. Census Bureau projects the working-age population to be 63% White, 17% Hispanic, 13% African-American, 6% Asian, and less than 1% Native American.

**FIGURE 2.**  
Shares of U.S. Population Aged 25-64 by Race/Ethnicity, 1980-2020

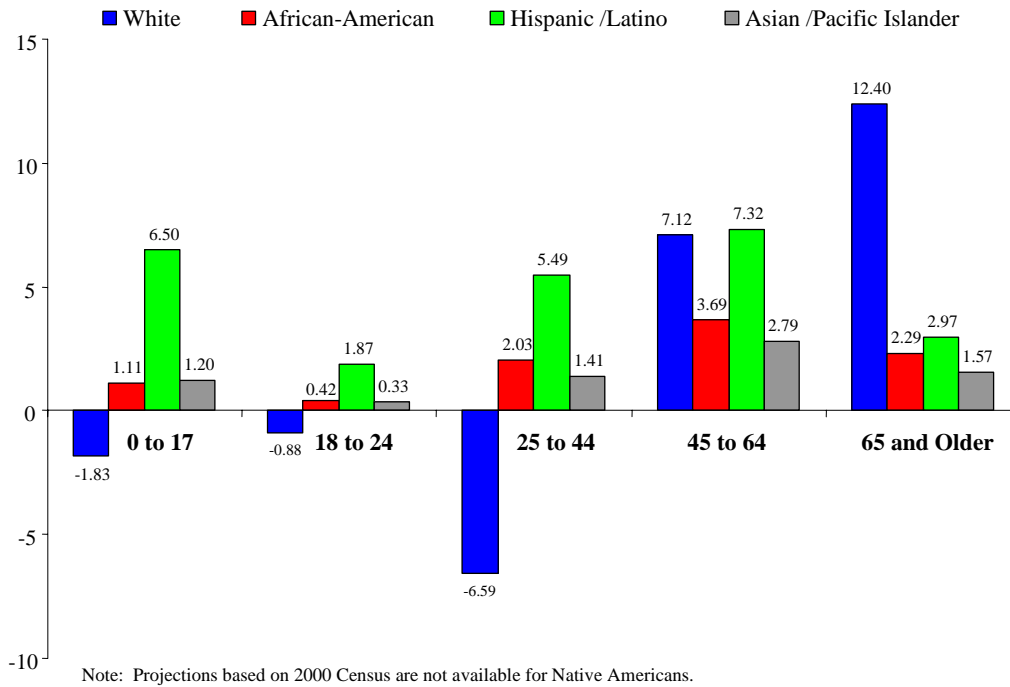


\* Native American/AK Native Projections Based on 1990 Census

Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 1980, 1990, and 2000 Census) and U.S. Population Projections Based on 2000 Census

Figure 3 shows population growth projected from 2000 to 2020 by age and race/ethnicity. The White population is getting older and all of the growth expected in the younger population (aged 0 to 44) will be minorities—mostly in the Hispanic population. These expected changes will have major ramifications on educational attainment and personal income—and particularly so in several states.

**FIGURE 3.**  
 Projected Change in U.S. Population by Age and Race/Ethnicity, 2000-20 (In Millions)



Despite increasing levels of diversity in nearly all states, the biggest challenges in dealing with inequality face a relatively small number of states. In 2000, for example, two-thirds of the nation’s Hispanic population resided in only four states (California, Texas, Florida, and New York) and 90% resided in 16 states—one-third of the states (Figure 4). African-Americans and Asian/Pacific Islanders are less concentrated—with 90% of them residing in 20 states. Native Americans are even less concentrated. Despite projected growth in these minority populations in nearly all states, the concentration within the same limited number of states will remain relatively stable—with roughly the same number of states accounting for 90% of each race/ethnic population. States with diverse populations represent a large proportion of the U.S. population and cannot be ignored in our pursuits to improve higher education inequality.

**FIGURE 4.**  
Cumulative Percentages in the U.S. Population for  
Minority Populations by State, 2000

<u>Hispanic/Latino</u>		<u>African-Americans</u>		<u>Native Americans</u>		<u>Asians</u>	
California	30.4%	New York	8.6%	Oklahoma	11.4%	California	35.5%
Texas	48.9%	Texas	15.7%	California	21.2%	New York	45.8%
New York	57.7%	Georgia	22.7%	Arizona	31.0%	Texas	51.4%
Florida	66.2%	California	29.4%	New Mexico	37.9%	Hawaii	56.8%
Illinois	70.5%	Florida	35.9%	North Carolina	42.7%	New Jersey	61.6%
New Jersey	74.0%	Illinois	41.3%	Washington	46.8%	Illinois	65.8%
Arizona	77.4%	North Carolina	46.4%	Alaska	50.8%	Washington	69.0%
New Mexico	79.6%	Maryland	51.1%	Texas	54.7%	Florida	71.8%
Colorado	81.6%	Virginia	55.3%	New York	57.6%	Virginia	74.4%
Georgia	82.9%	Michigan	59.3%	Michigan	60.4%	Massachusetts	76.6%
Massachusetts	84.1%	Louisiana	63.3%	Florida	63.0%	Maryland	78.7%
Washington	85.2%	Ohio	67.0%	Minnesota	65.4%	Pennsylvania	80.7%
Nevada	86.3%	South Carolina	70.4%	South Dakota	67.7%	Georgia	82.5%
Pennsylvania	87.4%	Pennsylvania	73.9%	Montana	69.9%	Michigan	84.1%
North Carolina	88.5%	New Jersey	77.2%	Wisconsin	72.1%	Ohio	85.5%
Virginia	89.5%	Alabama	80.5%	Oregon	74.0%	North Carolina	86.6%
Connecticut	90.4%	Mississippi	83.2%	Colorado	75.5%	Minnesota	87.6%
Michigan	91.3%	Tennessee	85.9%	Ohio	76.9%	Oregon	88.6%
Oregon	92.0%	Missouri	87.7%	Missouri	78.1%	Arizona	89.6%
Maryland	92.7%	Indiana	89.1%	North Dakota	79.4%	Nevada	90.6%
Ohio	93.3%	Arkansas	90.3%	Nevada	80.6%	Colorado	91.5%
Indiana	93.9%	District of Columbia	91.3%	Alabama	81.7%	Connecticut	92.3%
Utah	94.4%	Massachusetts	92.3%	Illinois	82.9%	Missouri	93.0%
Wisconsin	94.9%	Connecticut	93.2%	Virginia	84.0%	Wisconsin	93.6%
Kansas	95.4%	Kentucky	94.0%	Utah	85.1%	Tennessee	94.1%
Oklahoma	95.9%	Wisconsin	94.8%	Georgia	86.3%	Indiana	94.7%
Minnesota	96.2%	Oklahoma	95.6%	Kansas	87.3%	Louisiana	95.2%
Louisiana	96.6%	Washington	96.1%	Louisiana	88.4%	Oklahoma	95.7%
Tennessee	96.9%	Colorado	96.6%	Pennsylvania	89.3%	Utah	96.1%
Missouri	97.2%	Minnesota	97.1%	Maryland	90.2%	Kansas	96.5%
South Carolina	97.5%	Arizona	97.5%	Tennessee	91.0%	South Carolina	96.9%
Idaho	97.8%	Delaware	98.0%	Arkansas	91.8%	Alabama	97.2%
Nebraska	98.0%	Kansas	98.4%	Indiana	92.6%	Iowa	97.5%
Rhode Island	98.2%	Nevada	98.8%	Idaho	93.4%	Kentucky	97.8%
Arkansas	98.5%	Nebraska	99.0%	South Carolina	94.1%	Alaska	98.1%
Hawaii	98.7%	Iowa	99.2%	Massachusetts	94.9%	Arkansas	98.3%
Alabama	98.9%	Oregon	99.3%	New Jersey	95.6%	Nebraska	98.5%
Iowa	99.1%	West Virginia	99.5%	Nebraska	96.2%	Rhode Island	98.7%
Kentucky	99.3%	Rhode Island	99.6%	Kentucky	96.7%	New Mexico	98.8%
District of Columbia	99.4%	New Mexico	99.7%	Mississippi	97.2%	Mississippi	99.0%
Mississippi	99.5%	Hawaii	99.8%	Wyoming	97.7%	Delaware	99.2%
Delaware	99.6%	Alaska	99.9%	Maine	98.1%	District of Columbia	99.4%
Wyoming	99.7%	Utah	99.9%	Connecticut	98.6%	New Hampshire	99.5%
Alaska	99.8%	New Hampshire	99.9%	Iowa	98.9%	Idaho	99.6%
New Hampshire	99.8%	Maine	99.9%	West Virginia	99.1%	West Virginia	99.7%
Montana	99.9%	South Dakota	100.0%	Rhode Island	99.3%	Maine	99.8%
West Virginia	99.9%	Idaho	100.0%	Hawaii	99.5%	South Dakota	99.8%
Maine	99.9%	Wyoming	100.0%	Delaware	99.6%	Montana	99.9%
South Dakota	100.0%	North Dakota	100.0%	New Hampshire	99.8%	Vermont	99.9%
North Dakota	100.0%	Vermont	100.0%	Vermont	99.9%	North Dakota	100.0%
Vermont	100.0%	Montana	100.0%	District of Columbia	100.0%	Wyoming	100.0%

Source: U.S. Census Bureau, 2000 Census

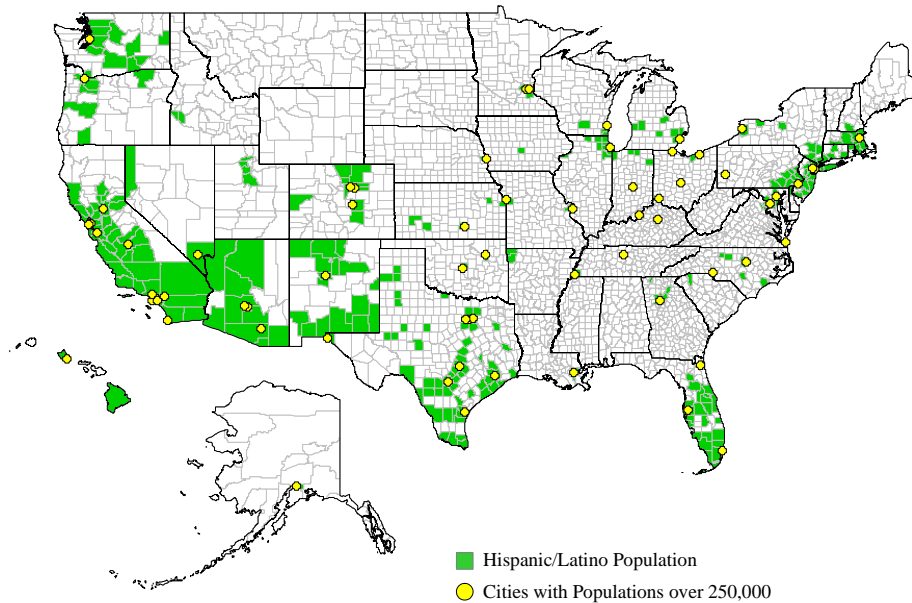
States accounting for 90% of the race/ethnic population in the U.S.

Figures 5 to 8 illustrate these patterns in more detail by showing data at the county level. Some states have very few minority residents and in some minorities are located almost exclusively in major population centers. The majority of Hispanics reside in the western states, Texas, Florida, and the highly populated areas of the northeast. African-Americans are predominately located in the southeast, urban areas of northern states like Illinois and Michigan, and in or near large cities across the U.S. These figures highlight the importance of a few key states in addressing higher education inequality among certain race/ethnic groups.

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**FIGURE 5.**  
Counties Where the Majority of Hispanics/Latinos Reside\* and  
Cities with Total Populations Over 250,000



\*Counties that comprise 90% of all Hispanics/Latinos.

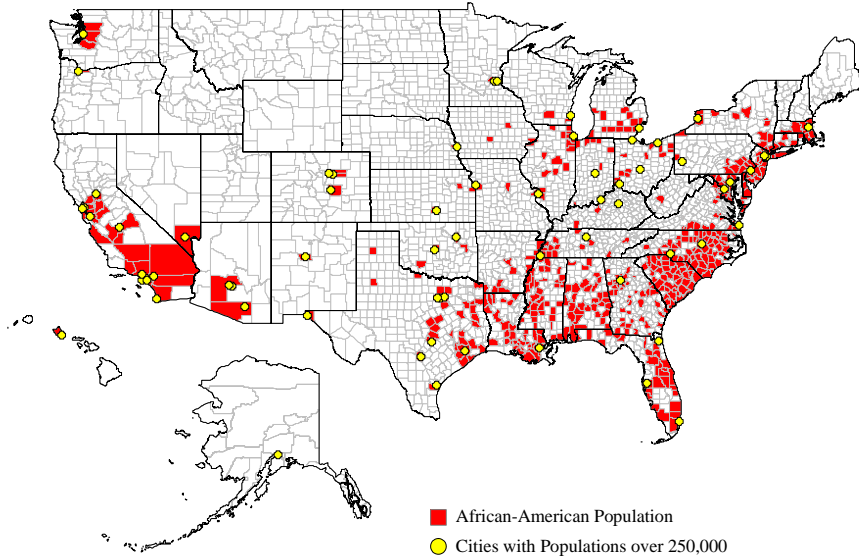
Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

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**FIGURE 6.**  
Counties Where the Majority of African-Americans Reside\* and  
Cities with Total Populations Over 250,000



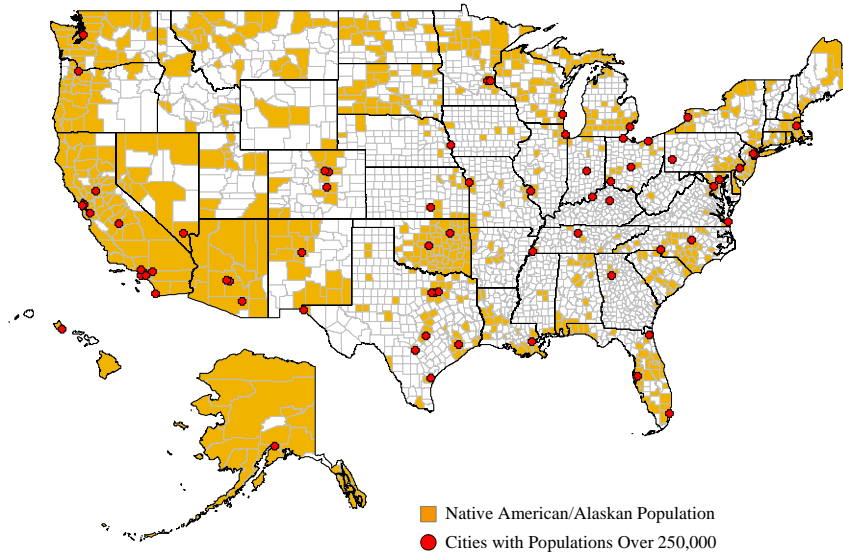
\*Counties that comprise 90% of all African-Americans.

Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

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**FIGURE 7.**  
Counties Where the Majority of Native Americans/Alaskans Reside\* and  
Cities with Total Populations Over 250,000



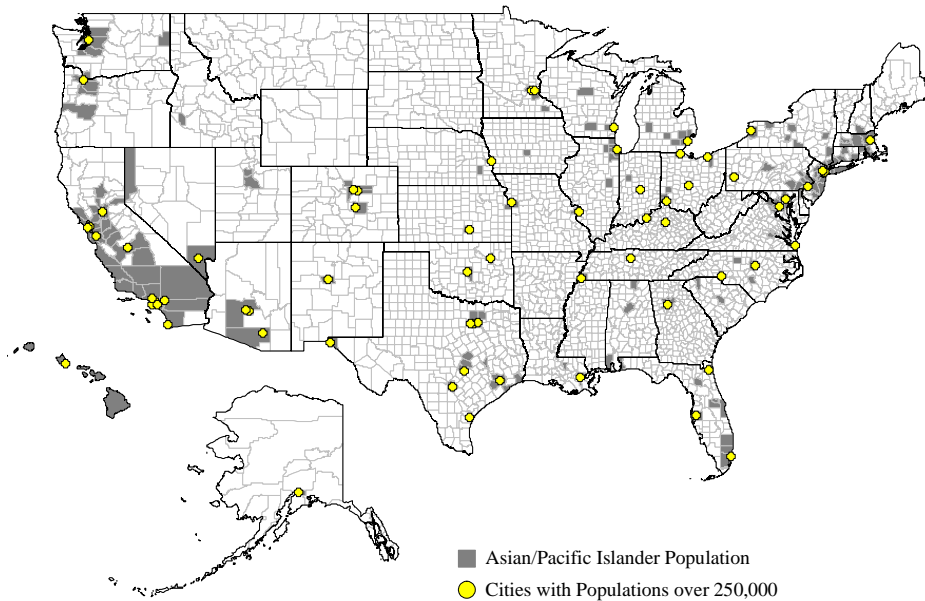
\*Counties that comprise 90% of all Native-Americans/Alaskans.

Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

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**FIGURE 8.**  
Counties Where the Majority of Asians/Pacific Islanders Reside\* and  
Cities with Total Populations Over 250,000



\*Counties that comprise 90% of all Asians/Pacific Islanders.

Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

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Despite this concentration of minorities in the largest states, some smaller states have relatively high proportions of minorities (Figure 9). What is less evident from the maps (Figures 5-8), for example, is that Delaware has a sizable African-American population, the Dakota's have relatively high proportions of Native Americans, and a fairly large proportion of Hispanics reside in Utah. The ability of these states to address the educational needs of their minority populations is critical for creating a better-educated workforce and maintaining or increasing their standing relative to other states with respect to educational attainment and personal income.

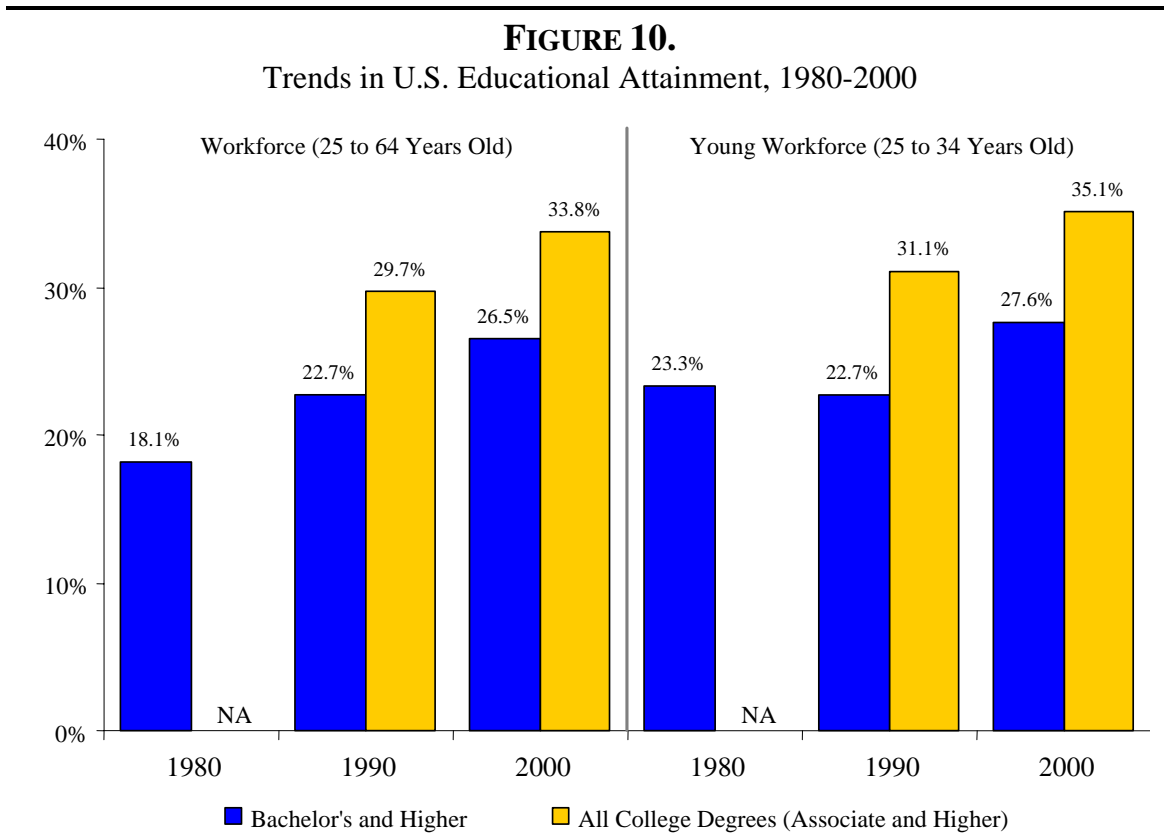
**FIGURE 9.**  
Percentage of Population Aged 25-64 by Race/Ethnicity, 2000

State	White	African-American	Hispanic/Latino	Native American/AK Native	Asian/Pacific Islander
Alabama	72.6%	23.6%	1.5%	0.5%	0.8%
Alaska	72.7%	3.3%	3.5%	12.2%	4.7%
Arizona	67.5%	3.0%	21.9%	4.0%	2.3%
Arkansas	80.7%	13.8%	2.8%	0.6%	0.9%
California	50.0%	6.4%	28.4%	0.6%	12.0%
Colorado	77.3%	3.6%	14.5%	0.7%	2.4%
Connecticut	78.9%	8.2%	8.4%	0.2%	2.7%
Delaware	73.9%	18.0%	4.2%	0.4%	2.5%
District of Columbia	31.5%	55.5%	7.6%	0.2%	2.9%
Florida	65.6%	13.2%	17.2%	0.3%	2.0%
Georgia	64.9%	26.7%	4.7%	0.3%	2.4%
Hawaii	26.6%	1.9%	5.7%	0.3%	50.6%
Idaho	89.3%	0.4%	6.6%	1.3%	1.1%
Illinois	69.9%	14.0%	10.9%	0.2%	3.9%
Indiana	86.9%	7.8%	3.1%	0.3%	1.1%
Iowa	93.6%	1.9%	2.3%	0.2%	1.3%
Kansas	84.4%	5.4%	6.0%	0.9%	1.9%
Kentucky	90.1%	6.8%	1.2%	0.3%	0.8%
Louisiana	65.3%	29.4%	2.5%	0.5%	1.4%
Maine	96.8%	0.4%	0.7%	0.6%	0.7%
Maryland	62.9%	27.0%	4.0%	0.3%	4.3%
Massachusetts	83.2%	4.7%	5.8%	0.2%	3.9%
Michigan	80.0%	13.2%	2.8%	0.6%	1.9%
Minnesota	90.2%	3.0%	2.4%	1.0%	2.5%
Mississippi	64.1%	32.9%	1.3%	0.4%	0.8%
Missouri	84.7%	10.3%	1.9%	0.5%	1.4%
Montana	91.0%	0.2%	1.6%	5.2%	0.6%
Nebraska	88.4%	3.8%	4.8%	0.7%	1.4%
Nevada	68.3%	6.3%	16.7%	1.2%	5.3%
New Hampshire	95.5%	0.6%	1.5%	0.2%	1.2%
New Jersey	66.5%	12.4%	12.8%	0.2%	6.4%
New Mexico	49.1%	1.6%	38.7%	7.9%	1.2%
New York	62.7%	14.2%	14.4%	0.3%	6.1%
North Carolina	72.4%	20.0%	4.0%	1.2%	1.5%
North Dakota	93.0%	0.5%	0.9%	4.1%	0.8%
Ohio	85.1%	10.5%	1.7%	0.2%	1.4%
Oklahoma	76.7%	7.0%	4.2%	6.8%	1.5%
Oregon	85.3%	1.5%	6.6%	1.1%	3.3%
Pennsylvania	85.3%	9.1%	2.8%	0.2%	1.9%
Rhode Island	84.4%	3.6%	7.2%	0.4%	2.1%
South Carolina	68.5%	27.3%	2.1%	0.4%	1.0%
South Dakota	89.8%	0.7%	1.1%	6.6%	0.8%
Tennessee	81.1%	14.8%	1.8%	0.3%	1.1%
Texas	55.6%	11.1%	28.6%	0.4%	3.1%
Utah	85.7%	0.7%	8.6%	1.2%	2.6%
Vermont	96.6%	0.4%	0.7%	0.5%	0.8%
Virginia	71.6%	18.2%	4.4%	0.3%	4.1%
Washington	80.8%	3.1%	6.1%	1.4%	6.1%
West Virginia	94.9%	2.8%	0.6%	0.2%	0.6%
Wisconsin	89.3%	4.9%	3.0%	0.8%	1.3%
Wyoming	89.9%	0.6%	5.1%	2.1%	0.8%
U.S.	71.0%	11.4%	11.2%	0.7%	4.1%

Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 2000 Census)

## Educational Attainment in the U.S.

The educational attainment of the U.S. adult population steadily increased from 1980 to 2000 for both the workforce aged 25 to 64 and for a subset of this group—the younger workforce aged 25 to 34 (Figure 10).

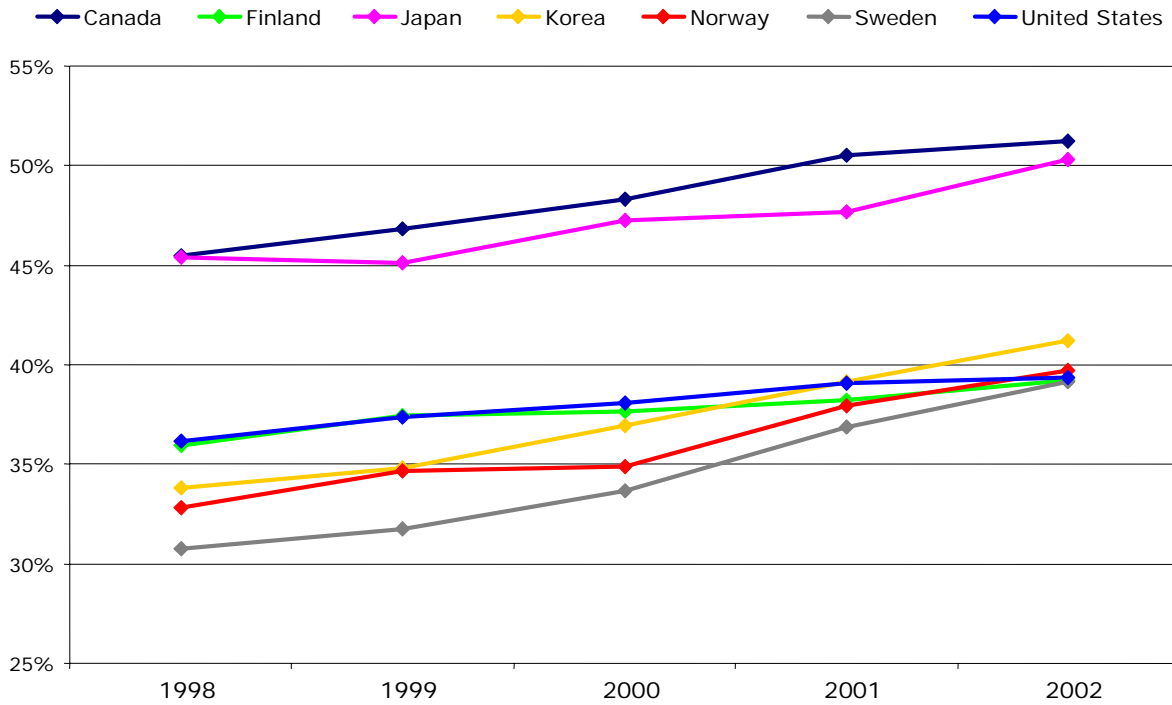


Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 1980, 1990, and 2000 Census)

While this trend is positive, the U.S. no longer leads the world in the percentage of its population with college degrees. For the workforce population aged 25 to 64, Canada leads the U.S. in the percentage with an associates degree or higher (43% vs. 38%). And the U.S. currently ranks fifth in the percentage of the younger population (aged 25 to 34) with college degrees—a population that represents the future workforce in America (Figure 11). In recent years, Korea and Norway have surpassed the U.S. As global competition heats up, the U.S. is falling behind with respect to educational attainment.



**FIGURE 11.**  
Trends in Educational Attainment of U.S. Population  
Relative to the Most Educated Countries—Percent of  
Young Workforce (Aged 25-34) with an Associate Degree or Higher

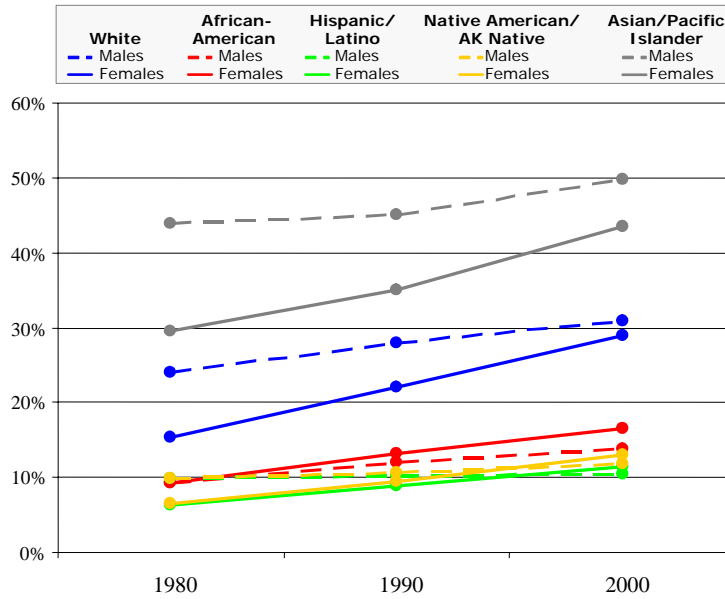


Source: Organisation for Economic Co-operation and Development (OECD)

One reason that the U.S. is losing ground is our nation's inability to raise the educational attainment of our minority populations to nearly the rates of whites. Figures 12 to 15 display recent trends in U.S. educational attainment by gender and race/ethnicity for 25- to 64-year-olds and for 25- to 34-year-olds.

**FIGURE 12.**

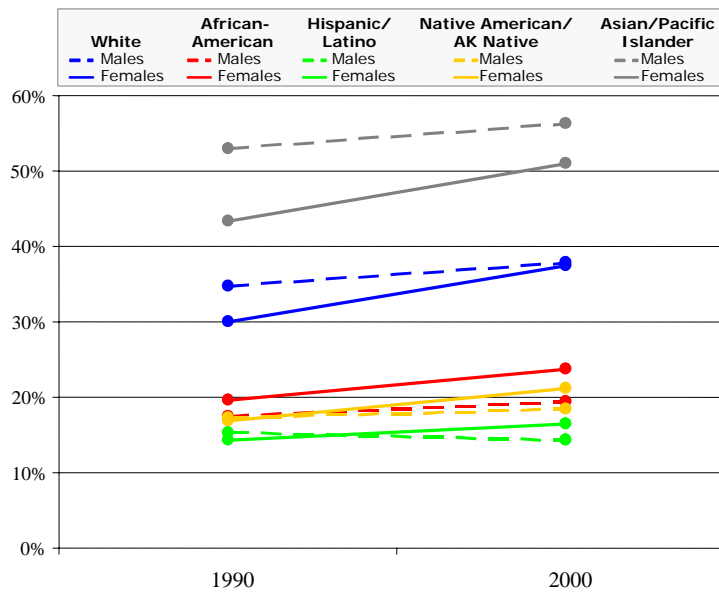
Percent of U.S. Population Aged 25-64 with a Bachelor's Degree or Higher by Gender and Race/Ethnicity, 1980-2000



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 1980, 1990, and 2000 Census)

**FIGURE 13.**

Percent of U.S. Population Aged 25-64 with an Associate Degree or Higher by Gender and Race/Ethnicity, 1990-2000

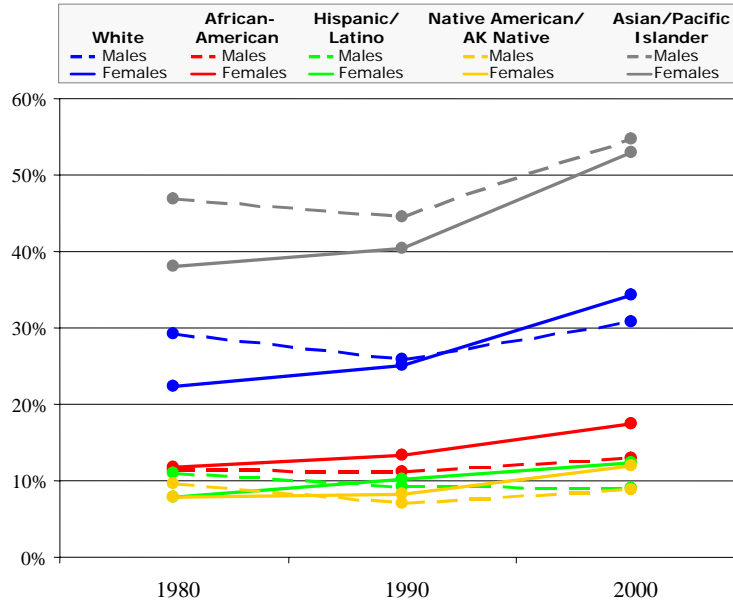


Note: Data not available for 1980.

Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 1990 and 2000 Census)

**FIGURE 14.**

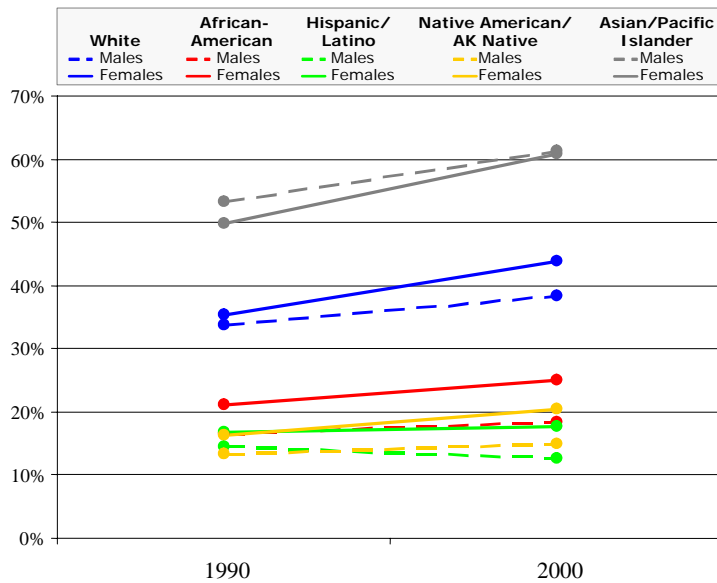
Percent of U.S. Population Aged 25-34 with a Bachelor's Degree or Higher by Gender and Race/Ethnicity, 1980-2000



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 1980, 1990, and 2000 Census)

**FIGURE 15.**

Percent of U.S. Population Aged 25-34 with an Associate Degree or Higher by Gender and Race/Ethnicity, 1990-2000

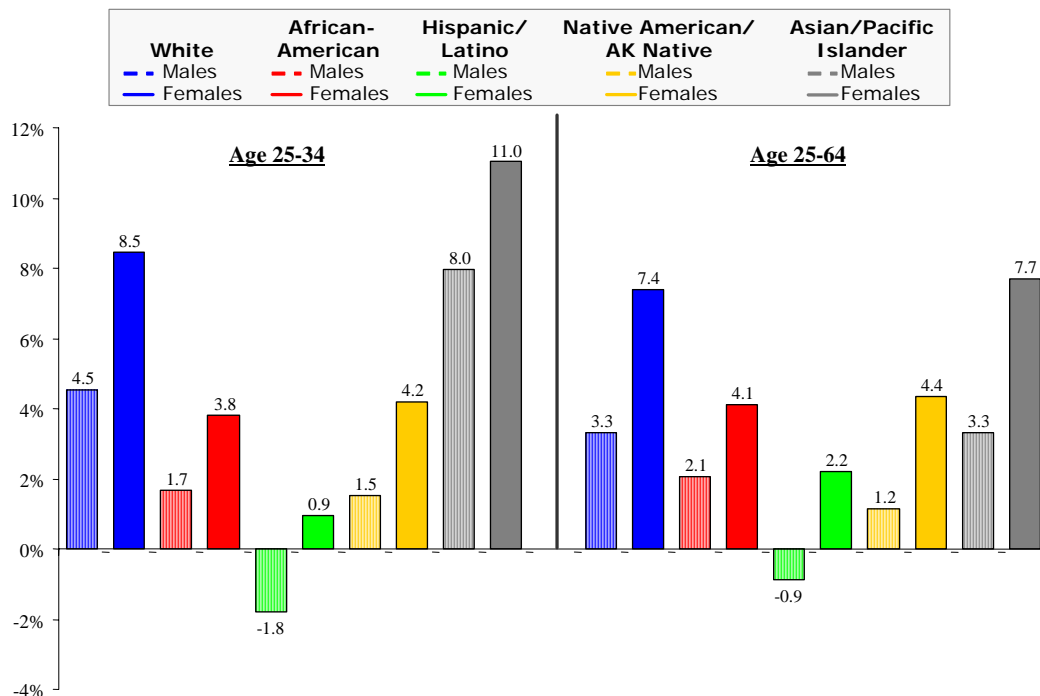


Note: Data not available for 1980.  
Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 1990 and 2000 Census)

The following can be concluded from these analyses:

- Despite improvement over time for nearly all race/ethnic populations, the gap between Whites and Hispanics, African-Americans and Native Americans is widening.
- In nearly all race/ethnic populations, females meet or surpass the educational attainment of males.
- Trends in educational attainment for the younger population (aged 25 to 34) present a big challenge for improving the attainment of less-educated minority populations.
- In the decade from 1990 to 2000, Hispanics, African-Americans, and Native Americans made the least progress and the gap between their attainment and that of Whites widened.
- The most alarming trends occurred among Hispanic, African-American, and Native-American males – with Hispanic males actually declining in educational attainment (see Figure 16).

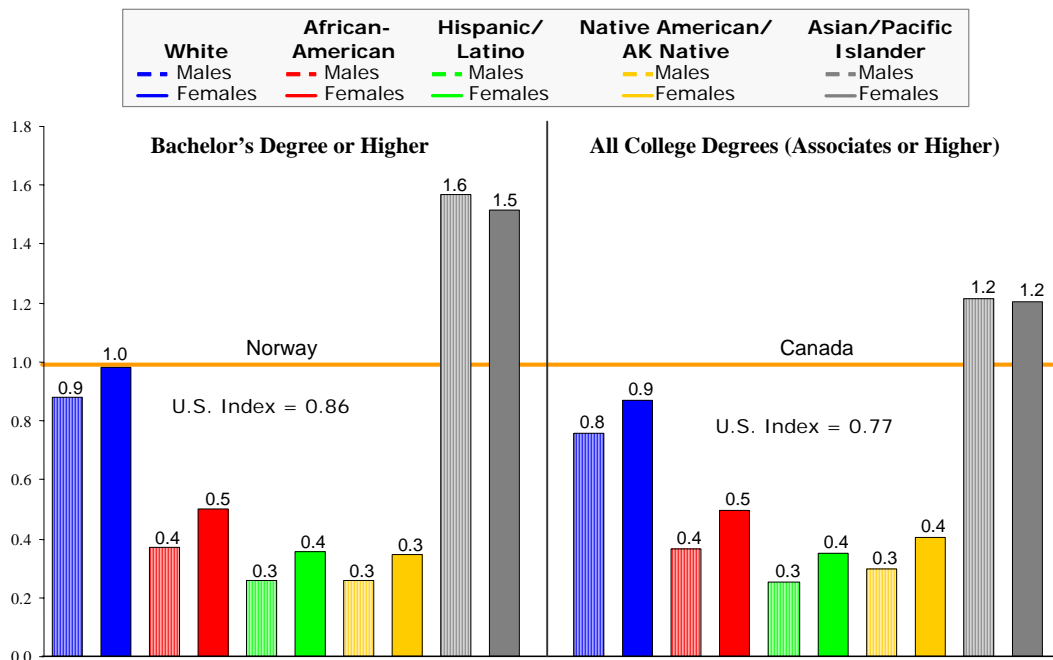
**FIGURE 16.**  
Change in Percentage of Adults with a College Degree—  
Associate and Higher, 1990-2000



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 1990 and 2000 Census)

These disparities in educational attainment are even more evident if we think of equality in international terms. As noted earlier, the young population in the U.S. is not as well-positioned as several other countries to compete for high-skilled jobs. Hispanics, African-Americans, and Native Americans in the U.S. are struggling to compete at all. Figure 17 shows educational attainment levels in the U.S. by race/ethnicity relative to the top performing countries. The indices shown (1.0 = the same educational attainment as the top country) indicate that Asians are the only ethnic group that exceeds the educational attainment of the top countries, with Whites slightly below. Hispanics, African-Americans, and Native Americans have index scores that are not even halfway to achieving parity. These indices are available for each state in the state profiles located in Appendix B.

**FIGURE 17.**  
Educational Attainment in U.S. of Young Workforce (Aged 25-34)  
Indexed to the Most Educated Country, 2000



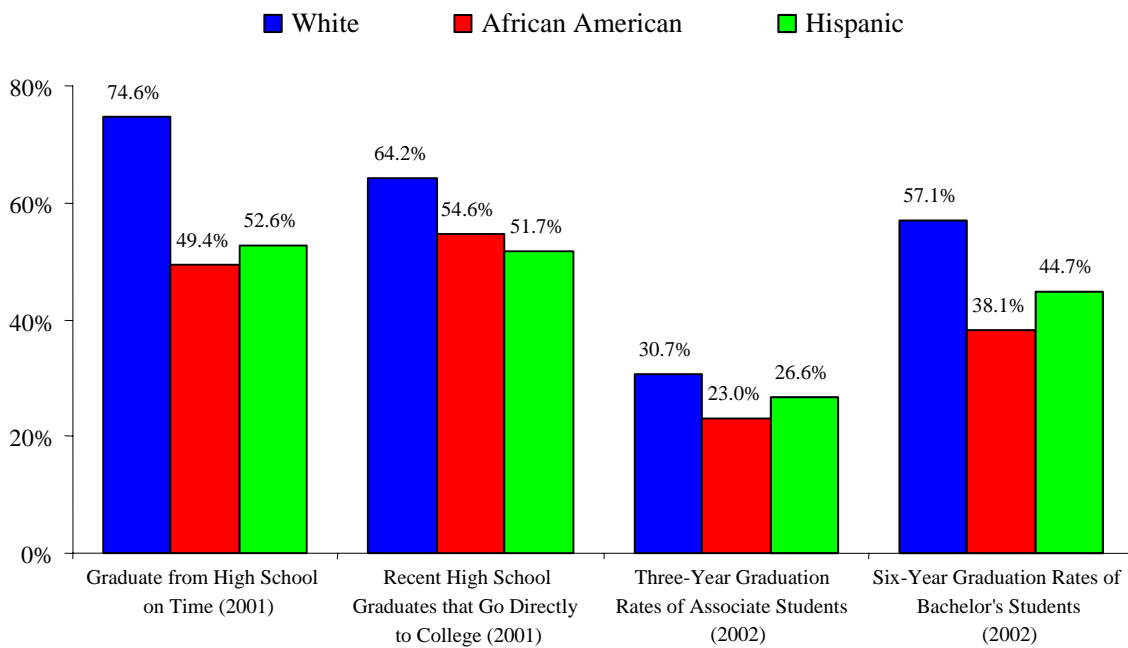
Note: The educational attainment data by race/ethnicity are from the 2000 U.S. Census and the educational attainment data by country reflect data reported to OECD in 2001.  
Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 2000 Census); Organisation for Economic Co-operation and Development (OECD)

### Higher Education Participation and Completion

Given the enormous race/ethnic disparities in educational attainment in the U.S., one would hope that the same degree of inequality does not exist for current participation and success in higher education. Otherwise, we are not addressing the problem. While the states bear most of the responsibility for educating their residents, it is nonetheless important to see how well different populations in the U.S. are participating and persisting in higher education. One way to gauge

the performance of different populations is to determine how well they progress through the series of transitions that lead from high school to college completion. Even though it is not possible to track individual students at the national level, we can combine a number of measures to determine how well particular race/ethnic populations are persisting to a college degree—and what happens along the way. Figure 18 displays by race/ethnicity a combination of measures that show the percent of 9<sup>th</sup> graders who graduate from high school within four years, go directly to college the following fall, and graduate within 150% of program time (three years for an associate degree and six years for a bachelor’s degree). On each of these measures, the rates of persistence and completion for African-Americans and Hispanics are substantially lower than the rates for Whites. Data are not available for Asians and Native Americans. The most disturbing finding is that only half of African-American and Hispanic 9<sup>th</sup> graders are even eligible to enter college after four years because they have not completed high school. With so much attention given to indicators of college preparation like standardized test scores, rigorous course-taking, and dual enrollment—all of which are important—the single largest barrier to college entrance for African-Americans and Hispanics is high school completion. The same is likely true for Native Americans.

**FIGURE 18.**  
Transition and Completion Measures from High School to College

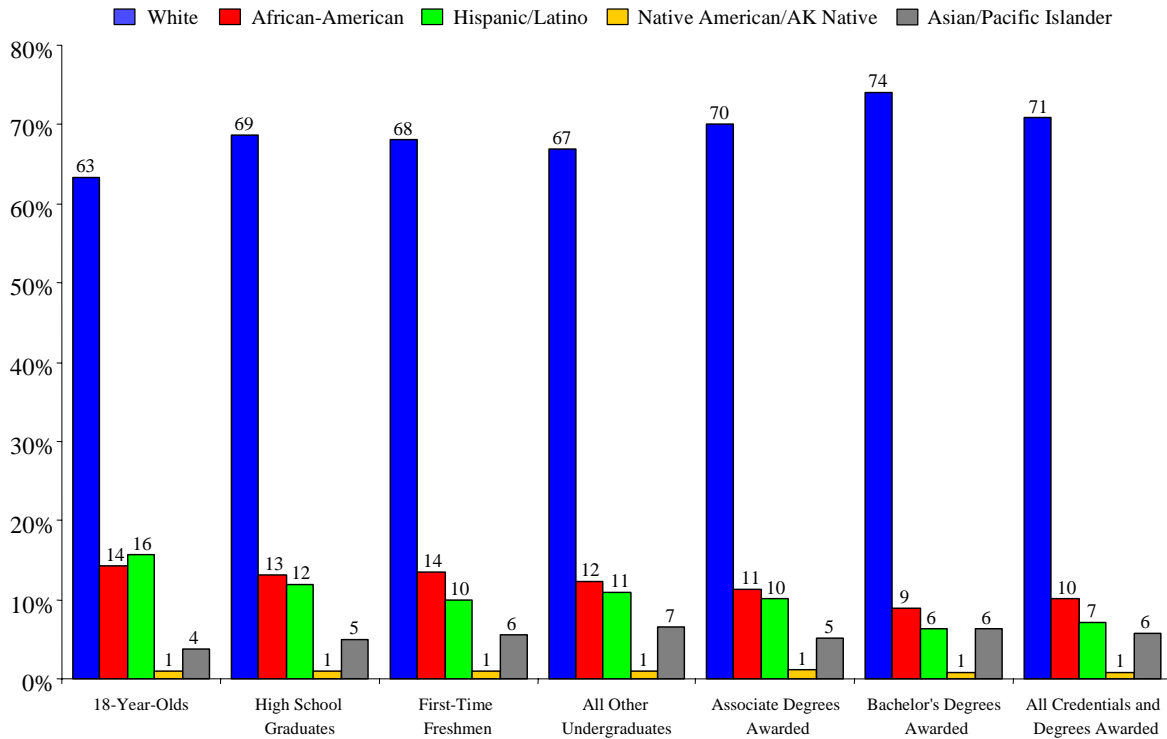


Note: Data not available for Native Americans and Asians  
Source: National Center for Education Statistics

Figure 19 shows the results of a different analysis that yields the same conclusion. At each stage of the education pipeline, Whites and Asians represent greater and greater proportions of those who participate in and complete higher education, while Hispanics and African-Americans fall out at increasingly greater percentages along the way. Sixteen percent of all 18-year-olds in the

U.S. are Hispanic and only 7% of the college degrees in the U.S. are awarded to Hispanics. African Americans represent 14% of 18-year-olds and only 10% of the college degrees awarded. Since Native Americans represent such a small proportion of the U.S. population (approximately 1%), they are not very susceptible to these types of measures.

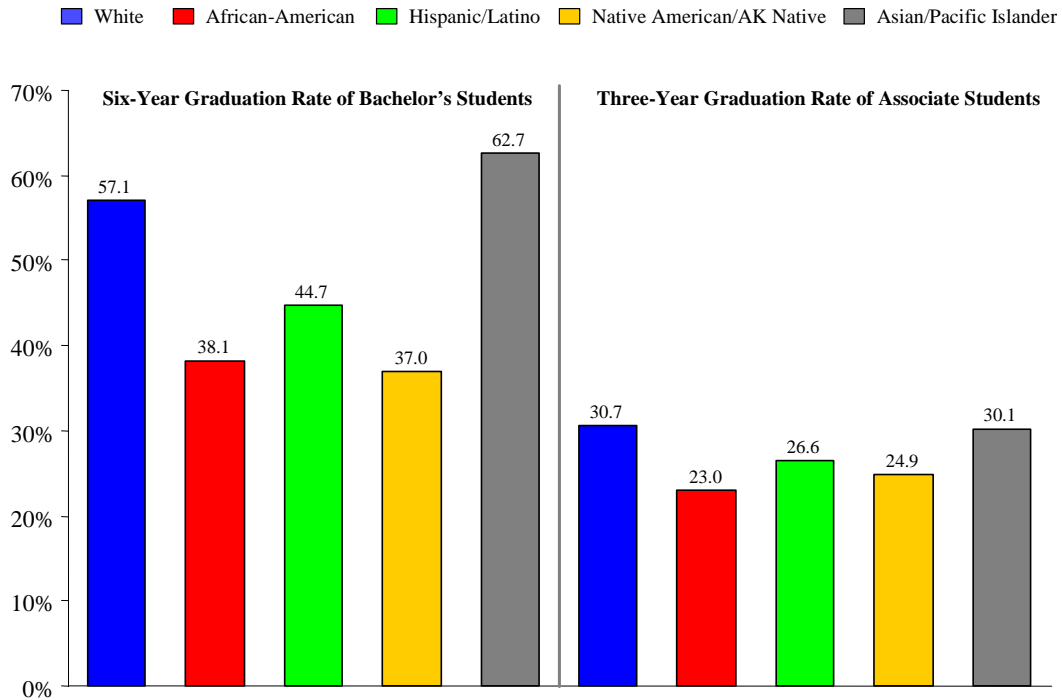
**FIGURE 19.**  
Race/Ethnic Representation at Each Stage of Education, 2002



Sources: U.S. Census Bureau; Western Interstate Commission for Higher Education; National Center for Education Statistics

Similar race/ethnic disparities also are also present in the percentage of first-time college freshmen who graduate within 150% of program time (Figure 20). Whites and Asians persist to a degree at far greater rates than Hispanics, African-Americans, and Native Americans, especially at the baccalaureate level.

**FIGURE 20.**  
**Percent of Degree-Seeking First-Time Full-Time Freshmen Graduating  
 Within 150% of Program Time by Race/Ethnicity, 2002**



Source: National Center for Education Statistics, IPEDS Graduation Rate Survey 2002

In sum, poor higher education participation and completion rates among the populations with the lowest higher education attainment levels and the fastest growing segments of our population suggest a growing national challenge.

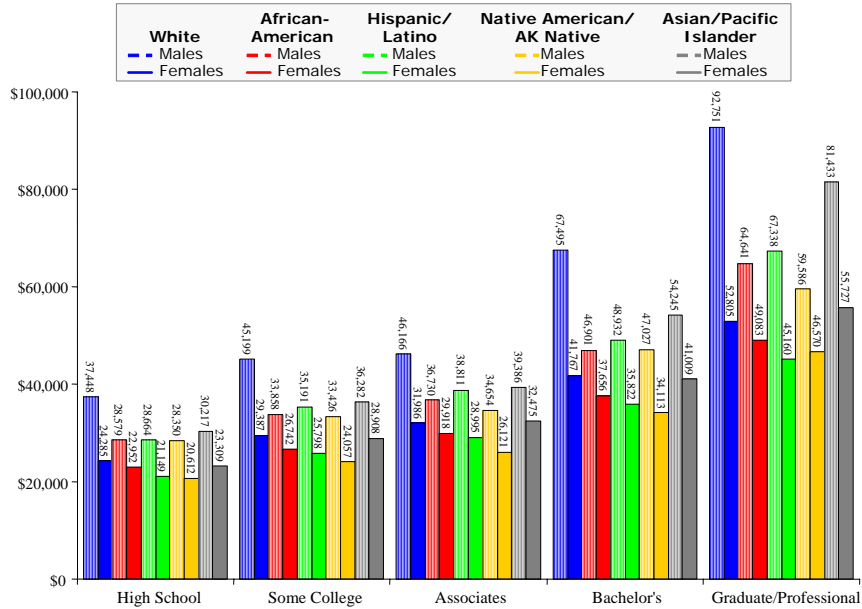
### **Personal Incomes and Earnings in the U.S.**

Diversification of the U.S. population will have a compounding effect on total personal income in the U.S.—a measure often associated with the wealth of a population. Together with the likelihood of replacing many current occupants of the workforce with less-educated minorities, minorities earn substantially less than Whites even at the same levels of educational attainment. Figure 21 shows average annual earnings for workers aged 25 to 64 (who worked 35 hours or more per week) by education and race/ethnicity. Whites earn more at each level of education, and gaps between White earnings and those of other race/ethnic groups widen as education levels rise. Across all education levels, and within each race/ethnic population, females earn substantially less than males. Similar patterns exist for workers aged 25 to 34 indicating that income inequality is not getting better with more recent generations of workers (Figure 22).



**FIGURE 21.**

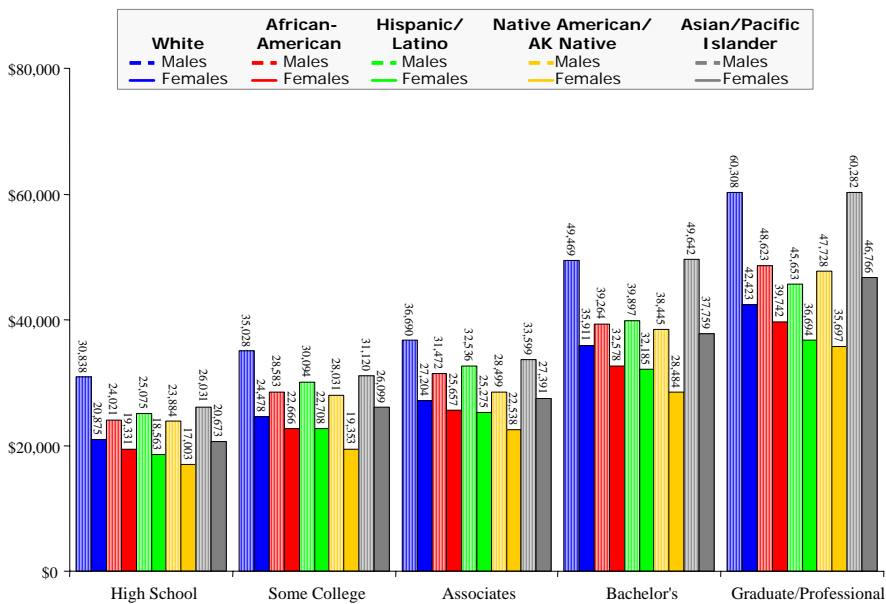
Average Annual Earnings by Race/Ethnicity and Gender, 1999—  
25- to 64-Year-Olds Working 35 or More Hours Per Week



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census)

**FIGURE 22.**

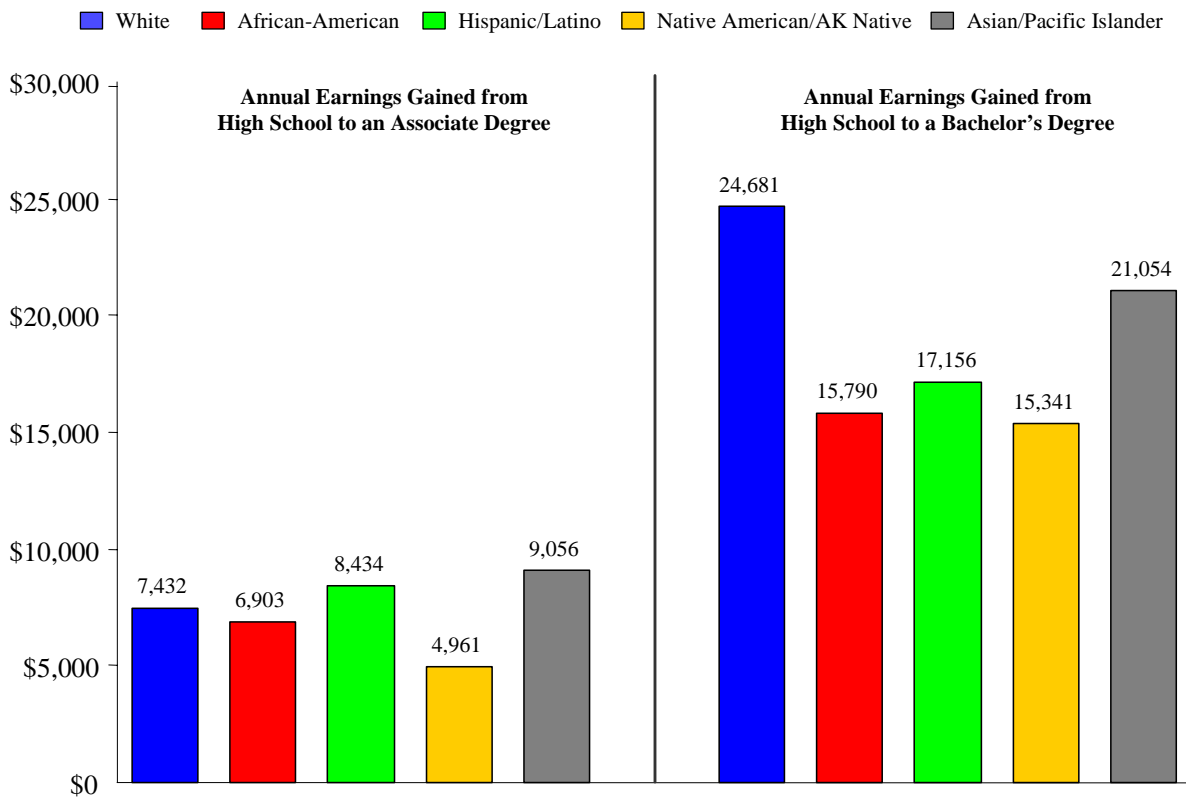
Average Annual Earnings by Race/Ethnicity and Gender, 1999—  
25- to 34-Year-Olds Working 35 or More Hours Per Week



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census)

It is also useful to examine relative increases in annual income for each race/ethnic population if members of these groups complete college compared to what they earn with just a high school diploma (Figure 23). Because Whites earn more than any other race/ethnic group with a high school diploma, the return on an associate degree is greater for Asians and Hispanics. Native Americans experience the least monetary gain from earning an associate degree—\$4,000 less annually than the highest race/ethnic group. At the bachelor’s level, Whites experience a far greater return than any of their minority counterparts. Gains experienced by African-Americans, Hispanics, and Native Americans from high school to bachelor’s completion are roughly two-thirds of that experienced by Whites.

**FIGURE 23.**  
Difference in Earnings Between a High School Diploma and a College Degree, 1999—  
25- to 64-Year-Olds Working 35 or More Hours Per Week



Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census)

Although average earnings by degree level may differ from state to state, patterns of disparities in personal income by race/ethnicity and gender are consistent across states. The disturbing problem of income inequality is not a direct responsibility of state education systems and more a problem of social justice and the disparities experienced in the workforce. But it is nonetheless important as we assess the potential impact of changing demographics in the U.S.

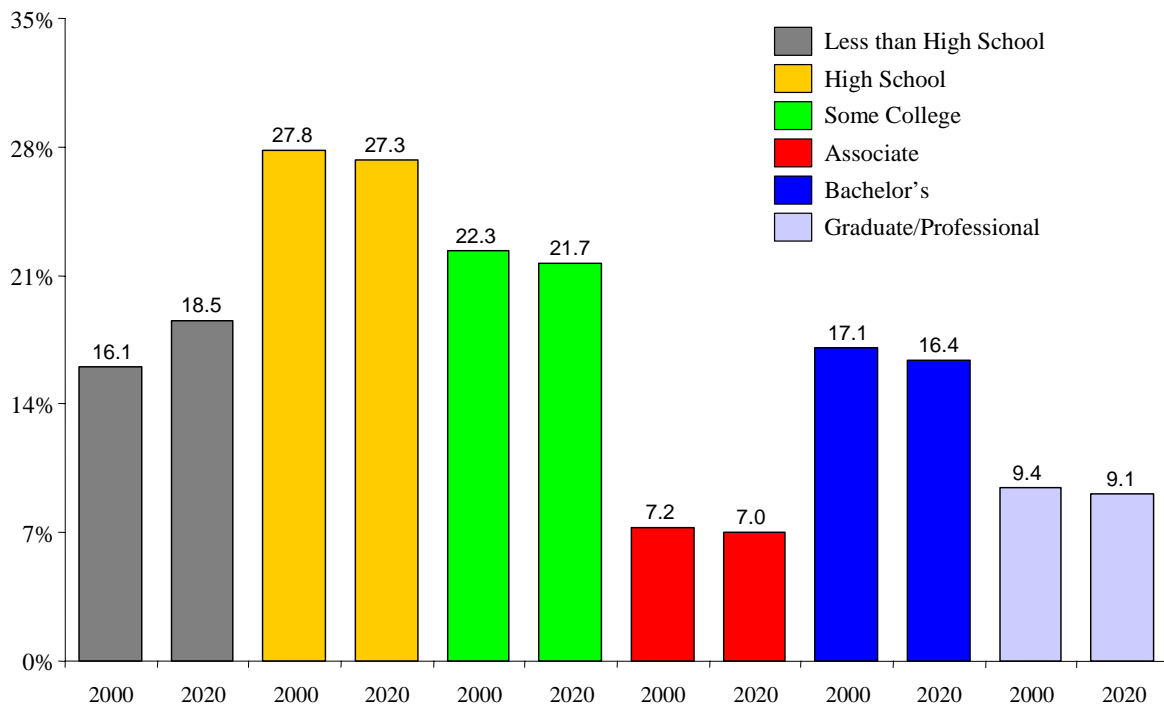
## The Impact of Changing Demographics

Given current disparities in educational attainment, participation and completion in higher education, and personal income, how will changing demographics impact the nation's workforce? This analysis does not claim to provide a precise answer but simply applies current disparities in education and income to projected changes in the population from 2000 to 2020. Substantial growth in the least-educated segments of our population combined with income disadvantages for the same populations will not lead us toward a brighter future, either economically or socially. If these problems are left unaddressed, the result is a less educated workforce and a decline in per capita personal income.

Projected changes in the population by race/ethnicity from 2000 to 2020 will generate a substantial increase in the percentage of adults (aged 25 to 64) with less than a high school diploma and declines at each educational attainment level from the high school diploma to a graduate degree (Figure 24). This will yield an additional seven million adults with less than a high school diploma and nearly five million adults with just a high school diploma (Figure 25).

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**FIGURE 24.**  
Percent Changes in Educational Attainment, 2000-2020  
As a Result of Projected Changes in Race/Ethnicity (25- to 64-Year-Olds)



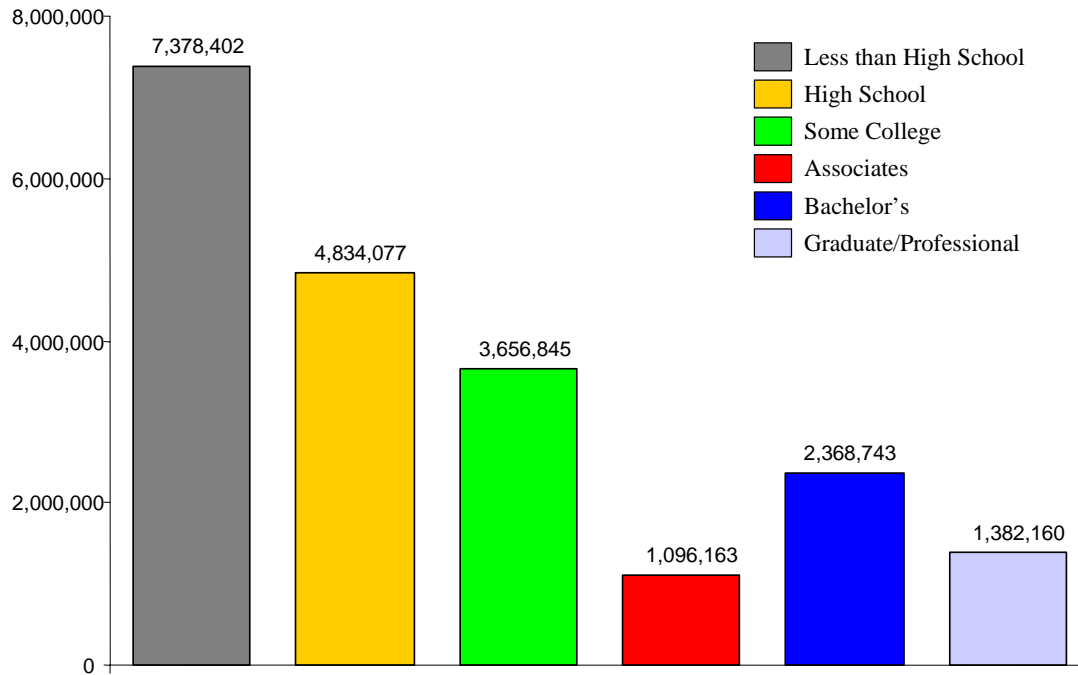
Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census) and U.S. Population Projections

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**FIGURE 25.**

Changes in Numbers of Various Educational Attainment Levels, 2000-20  
As a Result of Projected Changes in Race/Ethnicity (25- to 64-Year-Olds)



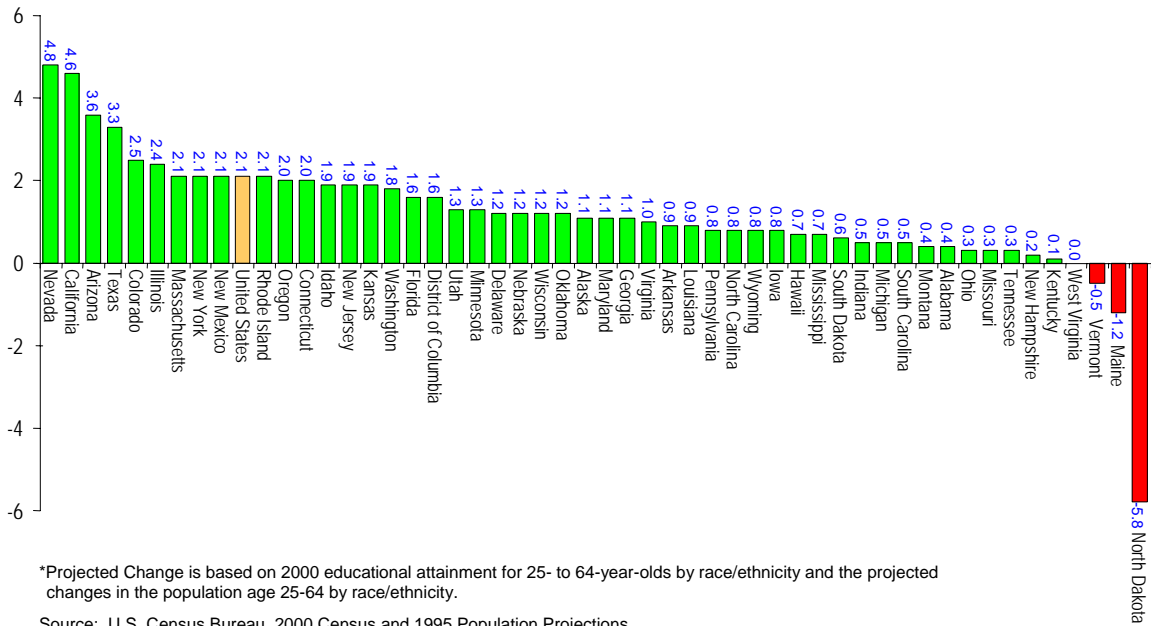
Source: U.S. Census Bureau, Public Use Microdata Samples (Based on 2000 Census) and U.S. Population Projections

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Nearly all states will experience an increase in the percentage of their populations (aged 25 to 64) with less than a high school diploma (Figure 26)—a phenomenon largely attributable to high rates of immigration. Nevada, California, Arizona, and Texas will experience the largest increases. States that are experiencing the greatest changes in educational attainment are those that are experiencing the greatest change in the numbers of minorities. North Dakota, Maine, and Vermont are the only states that will experience declines. Without intervention, these disparities will also lead to opposing trends in the percentage of the workforce that is college educated (Figure 27). New Mexico stands to lose the most ground here, followed by California, Arizona, and Nevada.

**FIGURE 26.**

Projected Change\* in Percentage of Population Aged 25-64 with Less than a High School Diploma, 2000-20

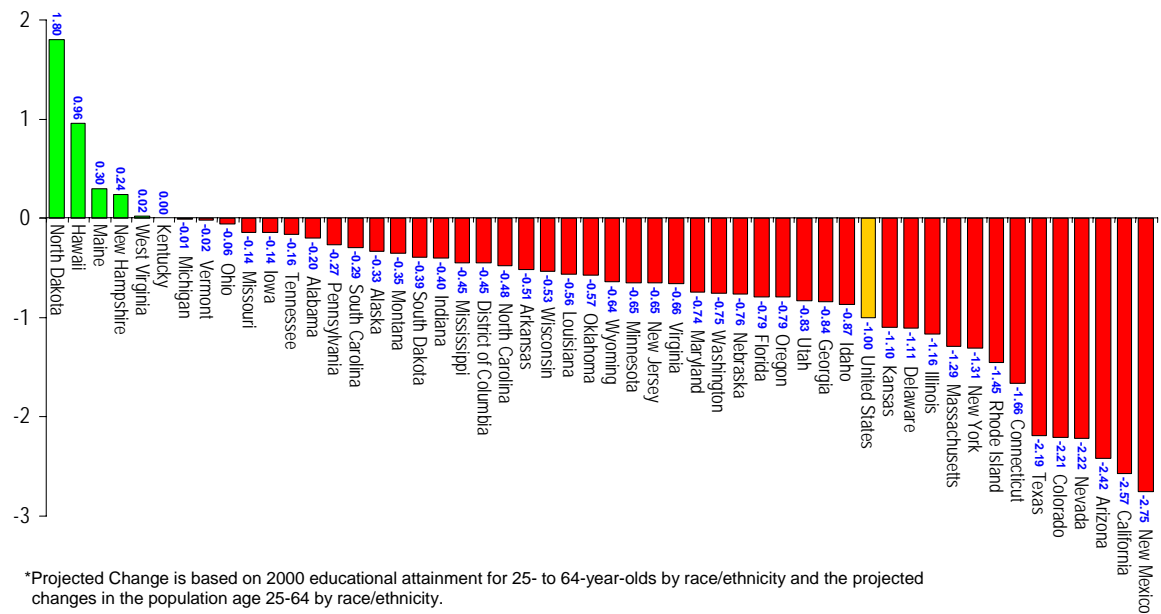


\*Projected Change is based on 2000 educational attainment for 25- to 64-year-olds by race/ethnicity and the projected changes in the population age 25-64 by race/ethnicity.

Source: U.S. Census Bureau, 2000 Census and 1995 Population Projections

**FIGURE 27.**

Projected Change\* in Percentage of Population Aged 25-64 with an Associate Degree or Higher, 2000-20

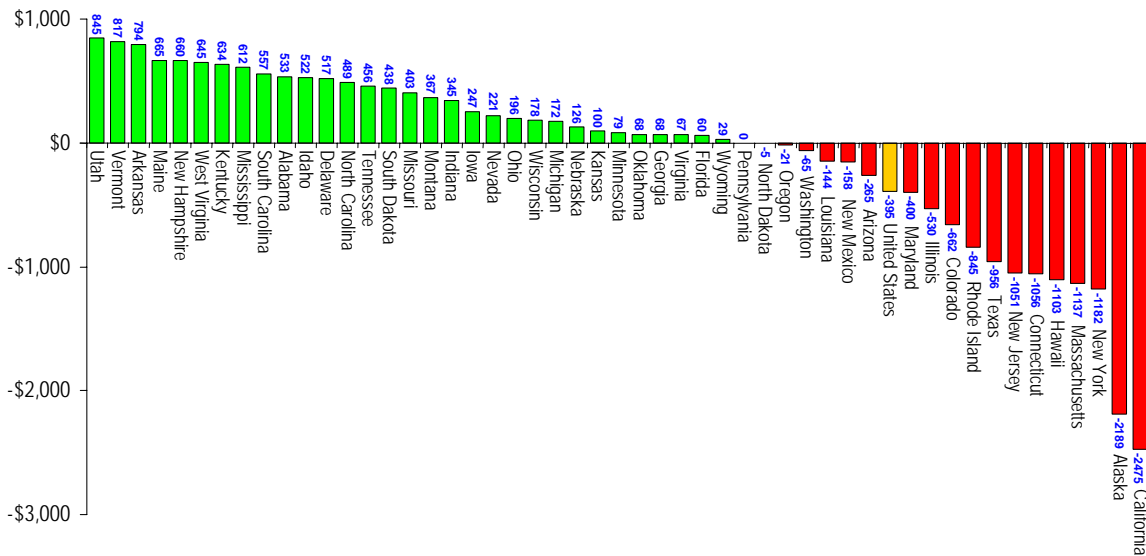


\*Projected Change is based on 2000 educational attainment for 25- to 64-year-olds by race/ethnicity and the projected changes in the population age 25-64 by race/ethnicity.

Source: U.S. Census Bureau, 2000 Census and 1995 Population Projections

If these changes occur as projected, average U.S. personal income will decline from \$21,600 to \$21,200 (in 1999 dollars). This will result in a corresponding decline in the nation’s tax base. This phenomenon is also true for roughly half the states, including many with the highest current personal incomes per capita like Connecticut, Massachusetts, Colorado, and California (Figure 28).

**FIGURE 28.**  
 Projected Change\* in Personal Income Per Capita, 2000-20  
 (In 2000 Dollars)

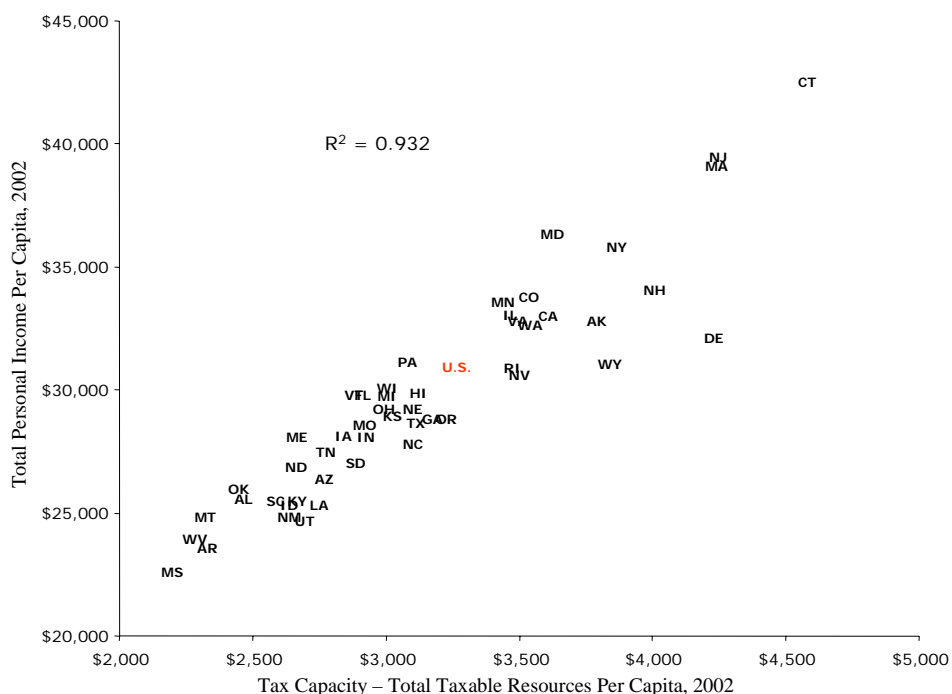


\*Projected change in personal income is based on the annual personal income by age group (15 years and older) and race/ethnicity in 2000 and the population projections by age group and race/ethnicity in 2020.

Source: U.S. Census Bureau, 2000 Census and 1995 population projections

With the exception of regressive taxes like those on alcohol or tobacco, nearly all state tax revenues are income-driven (e.g., income, sales, and property taxes). Figure 29 shows the relationship between states’ personal income per capita and their total taxable resources. With an extremely high correlation of 0.93, one can reasonably assume that as personal income falls in states, so will their taxable resources. Personal income and its relation to taxable resources is especially important now, when state budget situations have become increasingly fragile due to economic downturns and increases in health care and corrections costs. Declines in personal incomes at the state level will also have an impact on the federal tax base.

**FIGURE 29.**  
**Personal Income Per Capita Relative to**  
**Total State Taxable Resources\* Per Capita, 2002**



\* Gross state product plus dividend income, monetary interest, select social insurance transfers, capital gains, and commuter income—residents from outside state borders (excluding employee and employer contributions to social insurance, federal indirect business taxes, and surpluses/deficits from federal civilian enterprises)

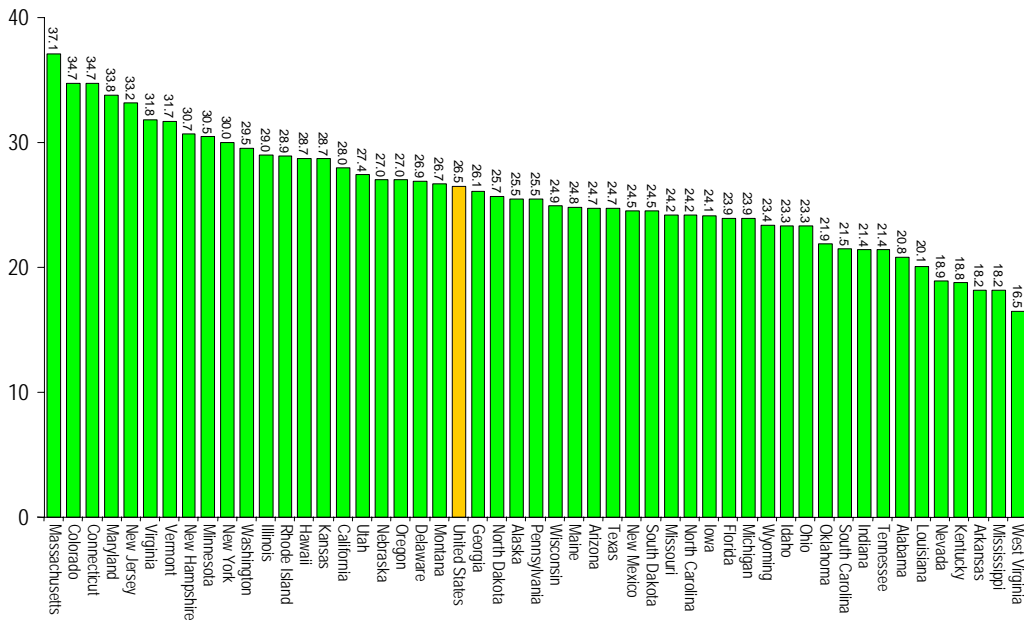
It is important to note that the overall impact on the U.S. will be driven primarily by a small number of states with large and very diverse populations. These include (but are not limited to) California, Texas, Florida, and New York, whose populations are not only more diverse than most states but are expected to change most dramatically. But changing demographics will also have a major impact inside several states that do not make up a large proportion of the U.S. population. Again, the state profiles in Appendix B show the likely within-state changes in educational attainment and personal income if current inequities are not addressed.

**The Role of States in Addressing Higher Education Inequality**

The federal government enacts policies affecting the education of U.S. residents such the Pell Grant student aid program and “No Child Left Behind”. But much policymaking that addresses higher education inequality occurs at the state level. In all states, policymakers are concerned about educational attainment. In some, their concern is not centered on raising the educational attainment of minorities but of the entire adult population. In 2000, the percent of adults (aged 25 to 64) with a bachelor’s degree or higher ranged from 37.1% in Massachusetts to 16.5% in West Virginia and the range defined by the same two states for the percentage of adults with any college-level degree was from 45.3% to 21.7% (Figures 30 and 31).

**FIGURE 30.**

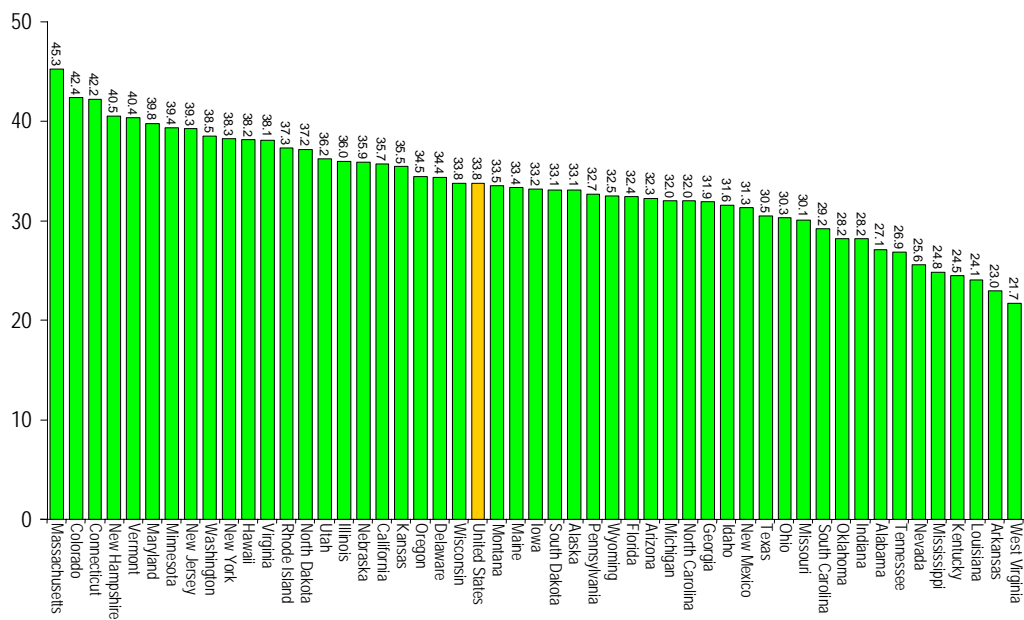
Percent of Adults Aged 25-64 with a Bachelor's Degree or Higher, 2000



Source: U.S. Census Bureau, 2000 Census

**FIGURE 31.**

Percent of Adults Aged 25-64 with an Associate Degree or Higher, 2000



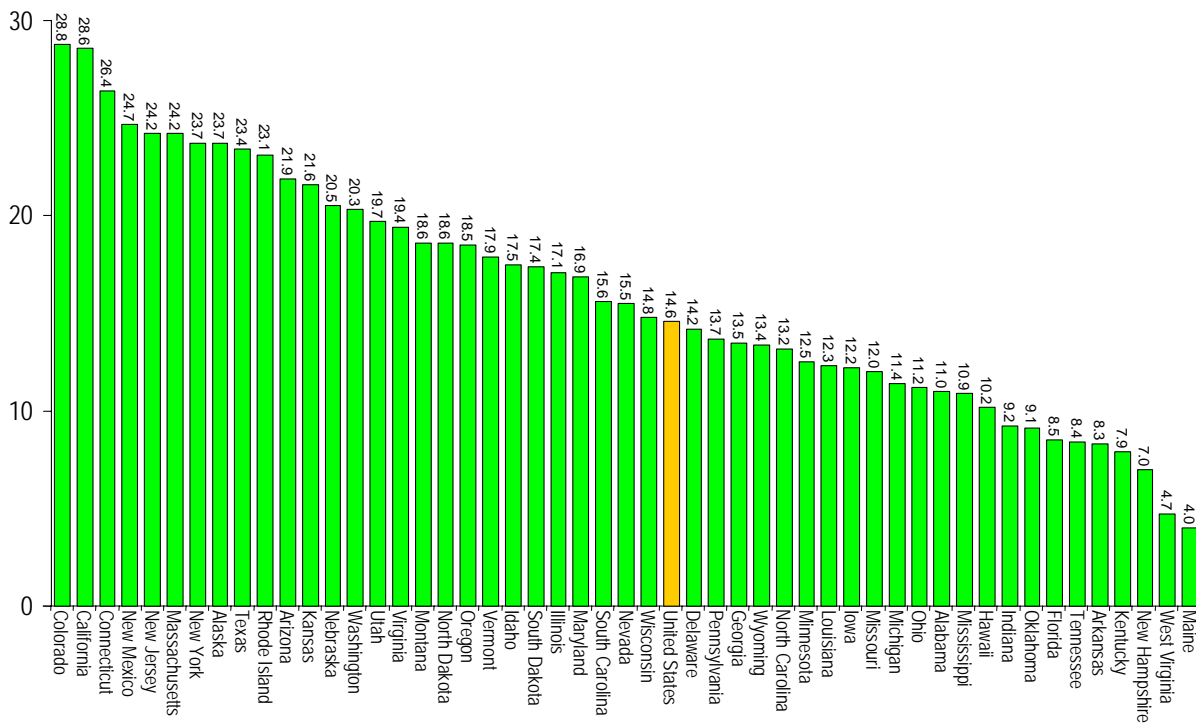
Source: U.S. Census Bureau, 2000 Census



In some states, differences in the education levels of Whites and the largest minority population can be staggering (Figures 32 and 33). In Colorado, 39.6% of Whites aged 25 to 64 have earned a bachelor’s degree or higher compared to only 10.8% among Hispanics—a gap of 28.8 percentage points. Similar gaps between Whites and Hispanics exist in California, Connecticut, and New Mexico where the Hispanic population accounts for nearly all of the projected growth in the working-age population from 2000 to 2020. States with relatively small gaps have either very poor educational attainment rates for Whites (e.g., West Virginia, Kentucky, and Arkansas) or very few minorities (e.g., Vermont, Maine, and New Hampshire). In states like West Virginia, Arkansas, Louisiana, and Kentucky—whose workforces must compete both nationally and internationally—the term “inequality” can be applied to the White population as well. These states, with relatively stagnant population changes, are less likely to attract highly-educated Whites and therefore must focus even more on raising the attainment levels of their own residents.

**FIGURE 32.**

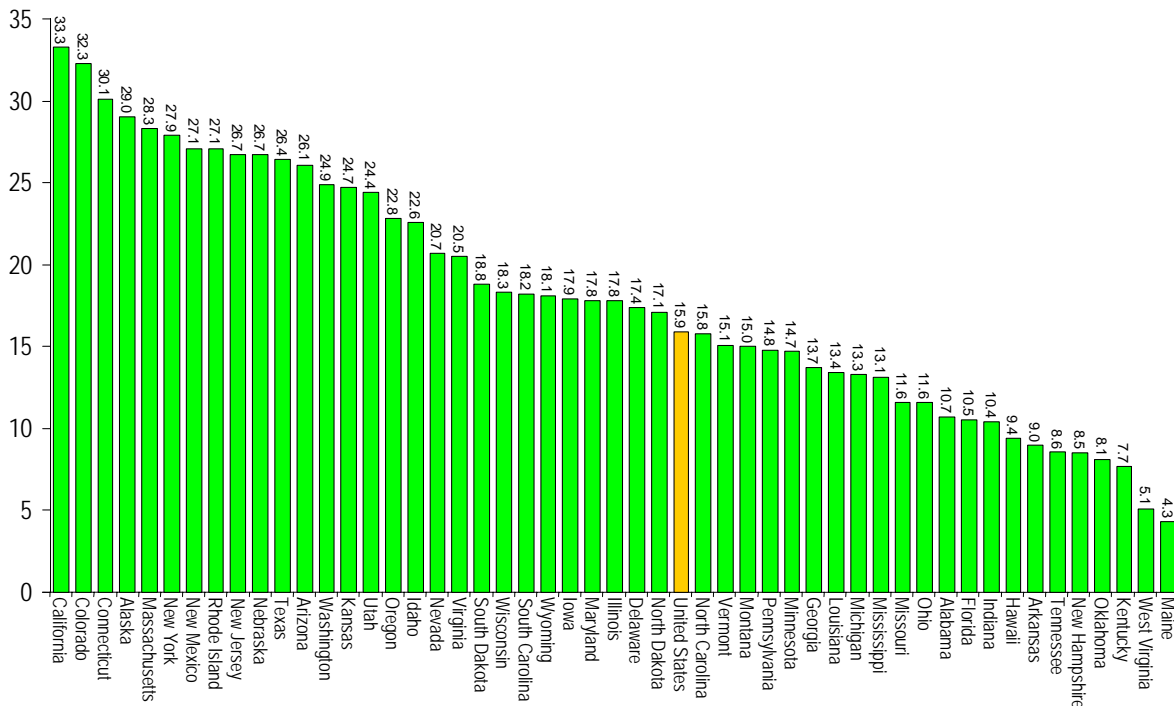
Difference Between Whites and Next Largest Race/Ethnic Group in Percentage of Adults Aged 25-64 with a Bachelor’s Degree or Higher, 2000



Source: U.S. Census Bureau's Public Use Microdata Samples, Based on 2000 Census

**FIGURE 33.**

Difference Between Whites and Next Largest Race/Ethnic Group in Percentage of Adults Aged 25-64 with an Associate Degree or Higher, 2000



Source: U.S. Census Bureau's Public Use Microdata Samples, Based on 2000 Census

How do underrepresented populations fare from state to state? Figure 34 shows the percentage of working age adults with a college degree for each race/ethnic population by state. The data are provided only for states with sizable minority populations. Variations in race/ethnic educational attainment across states are considerable. African-Americans are twice as likely to have a college degree in California than they are in Louisiana (27.3% vs. 14.7%). Hispanics in Florida are nearly three times more likely to have earned a college degree than their counterparts in Nevada (26.0% vs. 8.9%). Percentages for Native Americans range from 22.3% in Washington to 9.5% in Alaska. Sadly enough, even in states where African-Americans, Hispanics, and Native Americans are the most educated, their levels of educational attainment fall short of that of nearly all states' White populations.

Disparities in educational attainment vary within states as much as they do across states. County-level data reveal vast disparities by county in educational attainment, personal income, poverty, etc. And again, the concentrations of minorities in most states are often limited to a small number of counties.

**FIGURE 34.**  
**Percentage of Adults Aged 25-64 with a College Degree (Associate and Higher)**  
**By Race/Ethnicity, 2000**

White	
Colorado	48.0%
Hawaii	47.9%
Massachusetts	47.8%
Connecticut	46.5%
California	45.7%
New York	45.3%
Maryland	44.6%
New Mexico	44.2%
New Jersey	43.8%
Virginia	42.0%
Illinois	40.6%
Washington	40.5%
New Hampshire	40.5%
Minnesota	40.5%
Vermont	40.4%
Rhode Island	40.0%
Texas	39.5%
Arizona	39.3%
Delaware	38.5%
Alaska	38.5%
Utah	38.1%
North Dakota	38.1%
Nebraska	38.0%
Kansas	37.8%
U.S.	37.7%
Florida	36.5%
Georgia	36.2%
Oregon	36.0%
North Carolina	35.8%
Wisconsin	35.3%
South Dakota	34.6%
Montana	34.5%
South Carolina	34.4%
Pennsylvania	34.2%
Maine	34.1%
Michigan	33.7%
Iowa	33.6%
Wyoming	33.4%
Idaho	32.7%
Missouri	31.4%
Ohio	31.2%
Oklahoma	29.9%
Nevada	29.6%
Alabama	29.6%
Mississippi	29.3%
Indiana	28.9%
Louisiana	28.2%
Tennessee	28.2%
Arkansas	24.7%
Kentucky	24.6%
West Virginia	21.8%

African-American	
California	27.3%
Maryland	26.8%
New York	25.4%
Kansas	24.2%
New Jersey	23.5%
Illinois	22.8%
Texas	22.7%
Georgia	22.5%
Oklahoma	21.8%
U.S.	21.7%
Virginia	21.5%
Connecticut	21.1%
Delaware	21.0%
Michigan	20.4%
North Carolina	20.0%
Missouri	19.8%
Florida	19.8%
Ohio	19.6%
Tennessee	19.6%
Pennsylvania	19.4%
Alabama	18.9%
Nevada	18.7%
Indiana	18.5%
Kentucky	17.0%
South Carolina	16.2%
Mississippi	16.2%
Arkansas	15.7%
Louisiana	14.7%

Hispanic/Latino	
Florida	26.0%
Hawaii	22.5%
Massachusetts	19.5%
New York	17.5%
New Mexico	17.1%
New Jersey	17.0%
Connecticut	16.4%
Colorado	15.7%
Washington	15.6%
U.S.	15.4%
Wyoming	15.3%
Utah	13.7%
Oregon	13.2%
Arizona	13.1%
Kansas	13.1%
Texas	13.1%
Illinois	13.0%
Rhode Island	13.0%
California	12.4%
Idaho	10.1%
Nevada	8.9%

Asian/Pacific Islander	
New Jersey	69.8%
Illinois	66.9%
Maryland	62.4%
Massachusetts	58.2%
Virginia	57.5%
Texas	56.0%
California	53.6%
U.S.	53.6%
Oregon	49.2%
New York	48.7%
Washington	47.3%
Hawaii	38.6%
Nevada	37.1%
Alaska	28.5%

Native American/AK Native	
Washington	22.3%
Oregon	22.0%
North Dakota	21.0%
Oklahoma	20.5%
U.S.	19.9%
Montana	19.5%
Idaho	18.6%
Minnesota	18.3%
Utah	18.2%
Nevada	18.2%
North Carolina	16.8%
New Mexico	16.5%
South Dakota	15.8%
Wyoming	13.6%
Arizona	13.6%
Alaska	9.5%

Note: For each race/ethnic population, the tables include states where African-Americans are at least 5% of the population, Hispanics 5%, Asian 3%, and Native-Americans 1%.

Source: U.S. Census Bureau, Public Use Microdata Samples (Based on the 2000 Census)

Country of origin is a very important factor in all of these analyses—particularly among the Hispanic population. In their study of California and the U.S., Vernez, et. al. (Rand, 2003) found that educational attainment, and higher education persistence and completion rates, varied dramatically within the Hispanic population. Mexicans were the least likely to attain a college degree, compared to other Hispanics, and were more likely to fall through the cracks in the state’s education system. They also found substantial differences in recent immigrants versus native-born Hispanics—with the native-born group performing much better across the board. Primary countries of origin and the proportion of recent immigrants for Hispanics vary greatly from state to state. For example, in California and Texas the majority of Hispanics are from Mexico, in Florida the majority are from Cuba, and in New York the majority are from Puerto Rico (U.S. Census, 2000). These countries/states of origin have very different levels of educational attainment and, therefore, the educational challenges faced by immigrants into the U.S. from each of them vary dramatically.

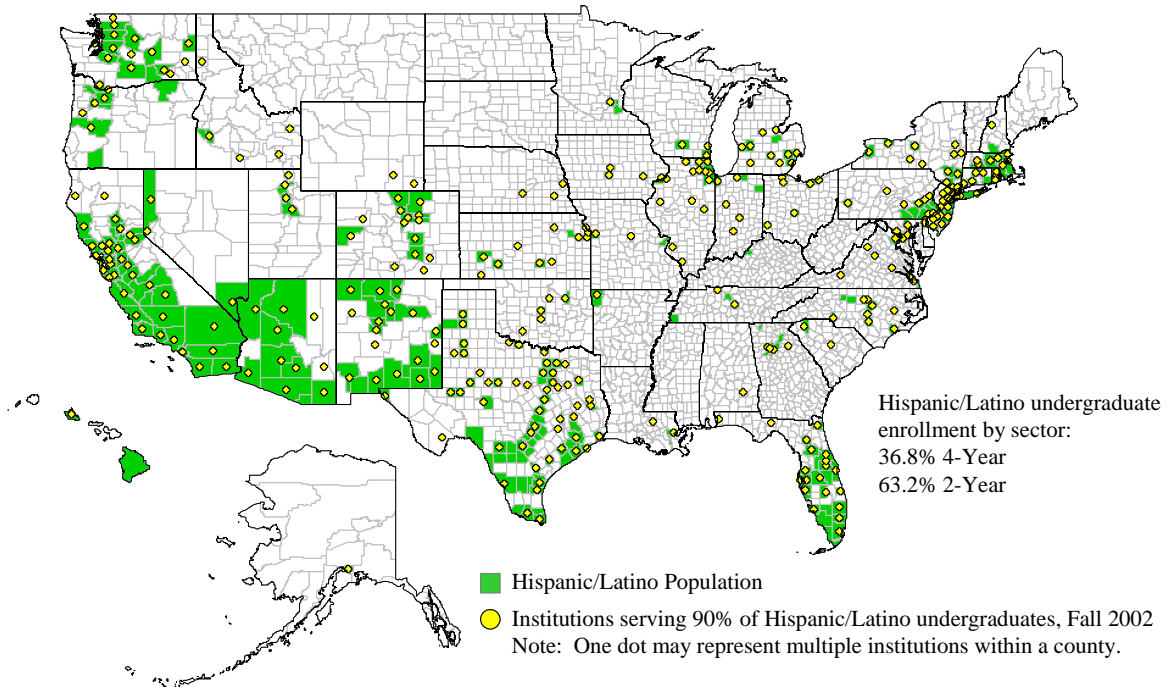
States can address higher education opportunity and access for underrepresented minorities in many ways. Some of the most promising include well-targeted student financial aid programs, statewide planning and accountability programs that make service to minorities a priority, funding allocations that provide incentives for serving minorities, and involvement in P-16 efforts to improve high school completion and college preparation. It is important to note that equal access has many different meanings (all of which are critical to the success of underrepresented populations). Some of the most prominent are:

- Geographic access—Is there a postsecondary institution within reasonable community distance from every resident in the state?
- Access by Degree-Level—Is there access (either physical or virtual) to all degree-levels?
- Affordability—Is higher education affordable (at both two-year and four-year colleges) to all residents in the state?
- Preparation—Are students adequately prepared (including high school graduation) to enter postsecondary education?

State-level policymaking plays the most vital role in providing access to underserved populations. We are all aware of traditional students who pack their bags, load up their cars, and head across the country to attend college. But the reality is that most students attend college very close to home. This is especially true for the increasing numbers who are working to support their college attendance and for non-traditional-age students who are turning to college later in their lives. It also is especially true for Hispanics. Figure 35 shows the overlap between the geographic locations of Hispanics and the postsecondary institutions they attend. Hispanics also attend community colleges (63%) at much higher rates than do other race/ethnic populations (Native Americans 54%, African-Americans 51%, Asians 48%, and Whites 43%).

**FIGURE 35.**

Counties Where the Majority of Hispanics/Latinos Reside\* and  
Institutions that Serve 90% of Hispanic/Latino Undergraduates



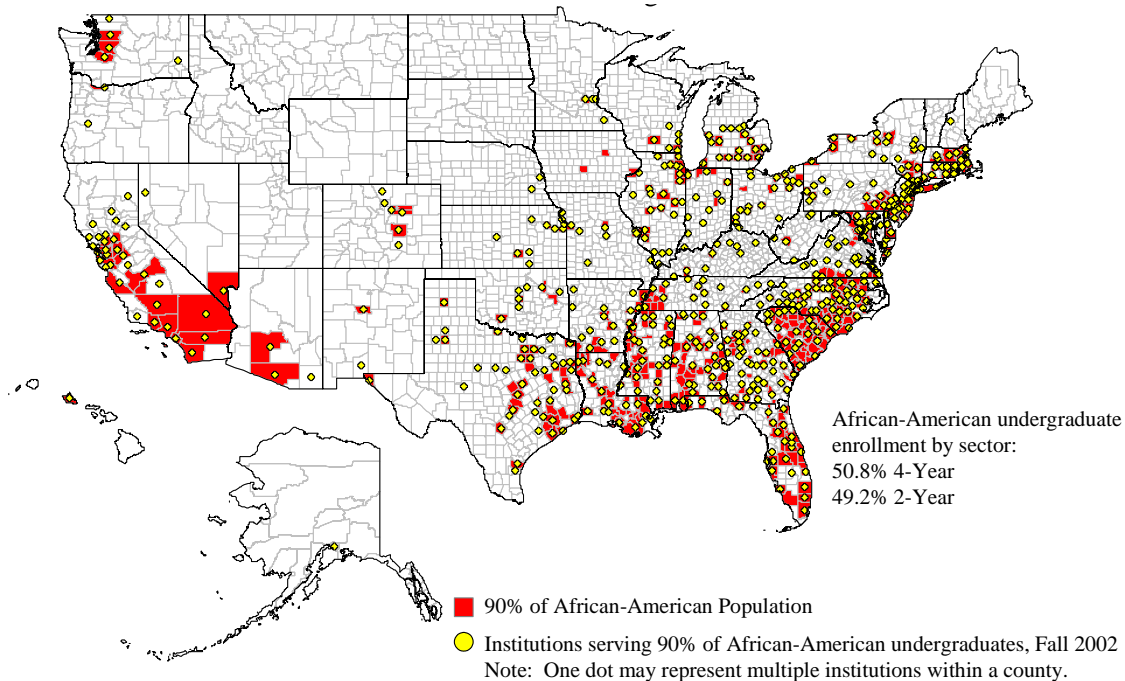
\*Counties that comprise 90% of all Hispanics/Latinos.

Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

To a lesser degree, the same is true for African-Americans (Figure 36). College attendance patterns for Asians and Native Americans are more dispersed (and therefore not shown).

**FIGURE 36.**

Counties Where the Majority of African-Americans Reside\* and Institutions that Serve 90% of African-American Undergraduates



\*Counties that comprise 90% of all African-Americans.

Source: U.S. Census Bureau, 2000 Census; NCES, IPEDS Fall 2002 Enrollments

Geographic access in its most general interpretation is not a problem in most states. If one were to draw a circle 30-45 miles in diameter around every higher education institution in America, there would be very little land left uncovered (with the possible exception of some desert regions of the west). The more important issues for underrepresented populations are access to particular programs, access to both two- and four-year degree programs, and the selectivity of nearby institutions. Some general examples of geographic barriers to access and opportunity typical of underserved populations include:

- An undersized community and technical college system. These open-door institutions are crucial in serving underrepresented minorities who are often more place-bound and less prepared to enter selective four-year institutions.
- Comprehensive four-year institutions (whose missions have historically been to serve a poorer region of the state) that raise their admissions standards when no other postsecondary options are nearby.
- The provision of access to open-door two-year institutions with little or no opportunity to transfer to four-institutions—or transfer options are limited to a small number of four-year programs.

African-Americans, Hispanics, and Native Americans tend to be both disproportionately low-income and underserved by higher education. Therefore, affordability is another key state-level issue affecting their access and success in higher education. Well-targeted need-based financial aid programs are essential. Rising tuition and fee levels along with inadequate state financial aid targeted to low-income residents results in diminished access for these underserved populations.

Another barrier to equal opportunity and access is college preparation. In states with high percentages of underserved African-Americans and Hispanics, large segments of college-age minority populations are not prepared to enter college. Disparities in the quality of K-12 schooling, lack of rigorous course-taking, low standardized test scores, low pass rates on high school exit exams, and the low rates of high school completion diminish the chances of these populations entering postsecondary institutions. States that do a poor job serving them in higher education must work equally hard on issues of elementary and secondary education inequality.

These large disparities among race/ethnic groups persist at a time when the purchasing power of Federal Pell Grant aid to low-income students is declining, state grant aid is increasingly merit-based rather than need-based, and the costs of attending college are rising dramatically (National Center for Public Policy and Higher Education, 2003). Nationally, the “chance for college for low income students”—a statistic created by Tom Mortenson of *Postsecondary Opportunity*—rose dramatically from 1993 to 1999 (from 20% to 27.5%) but has declined in recent years (to 24.0% in 2002). The same trend is true in most states. While no causal relationship has been identified, the inability of state and federal student aid to keep pace with the cost of attending colleges and universities very likely has a bearing on the opportunity to attend college for low-income families and students (a group which includes relatively high proportions of underrepresented minorities).

With the federal budget deficit at an all-time high and states struggling to fund growth in the least discretionary components of their budgets (e.g., Medicare and Medicaid, and corrections), the outlook for increased student aid to low-income families and minorities is grim. Under these circumstances, it is increasingly important that state grant aid programs are carefully targeted at those who need it most and who would not attend postsecondary education without it.

Most Americans are aware of disparities in our society. One does not need statistics when it is plain to see that most residents living in the poorest sections of town are often of a certain race/ethnicity. What are far less understood are the compounding social and economic effects that we are likely to experience if current disparities continue and the nation’s least-educated populations continue to grow at faster rates than the rest.

Education is the most effective intervention available for improving our social and economic future. And given the changing nature of our economy, a high school education is not enough. Addressing race/ethnic inequalities in higher education will require persistent and meaningful efforts by states to provide postsecondary access and opportunity to steadily growing numbers of undereducated and underrepresented minorities.

## Resources

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<http://www.census.gov>.



## **APPENDIX A**

### **Methodology: U.S. and State-Level Measures and Indices for Higher Education Inequality**

# Methodology: U.S. and State-Level Measures and Indices for Higher Education Inequality

The analytic work consists of three general components:

- 1) **Descriptive measures** of educational attainment and income equity (by race and gender) for each of the states. Educational attainment measures are benchmarked against the educational attainment of the top country, not just best U.S. performance. This emphasizes that nearly all states have work to do for all their citizens.
- 2) **Diagnostic measures** to identify where in the educational pipeline interventions designed to enhance educational attainment might best be focused.
- 3) **A future component** consisting of projections of each state's likely future if interventions are not successful and current attainment levels are applied to projected population mixes.

## 1. Descriptive Measures

- *Trends in states' attainment levels of males and females, by race/ethnic group from 1980 to 2000.* The race/ethnic groups include Whites, African-Americans, Hispanics/Latinos, Native Americans/Alaskan Natives, and Asian/Pacific Islanders. The same demographic subgroups are used throughout the study.
- *Indices for benchmarking states to the most educated countries.* Indices are provided for the above race/ethnic and gender groups within each state. They are calculated by dividing the educational attainment percentage of a given race/ethnic and gender group into the percentage of the most educated country (100 = parity or equity). For several reasons—especially the message it sends about overall U.S. performance—we used data from the Organisation of Economic Co-operation and Development (OECD) for the most educated foreign countries as an external benchmark.
  - The above analyses account for bachelor's degree attainment and above and a combination of all degrees (associate and above) and are calculated for meaningful age groups (25 to 34 and 25 to 64) so states can gain a better sense of how the inequities affect their workforce—and to see shorter-term effects.
  - The above analyses were conducted using the U.S. Census Bureau's Public Use Microdata Sample Files (5% samples for each state) based on the 1980, 1990, and 2000 U.S. Census.
- *Personal Income Per Capita.* In the state profiles, trends in state personal income per capita relative to the U.S. average are provided from 1960 to 2000 (Using the U.S. Census Bureau's *Current Population Survey*). For the U.S., data are provided that show the disparities in annual personal income by race/ethnicity and gender. The

data are presented for 25- to 64-year-olds. These analyses are conducted using the U.S. Census Bureau's 2000 Public Use Microdata Sample Files (5% samples for each state).

## **2. Diagnostic Measures**

- *The representation of race/ethnic populations at each stage in the educational pipeline.* These measures are like those reported on [www.higheredinfo.org](http://www.higheredinfo.org), which reports the percentages of African-Americans and Hispanics in each state who are 18 years old, high school graduates, first-time college freshmen, all undergraduates, and college completers. These data provide a good sense of how race/ethnic groups are represented at each stage of the educational pipeline with respect to the size of their base populations and the representation of other populations. Gender was excluded because data are not available for some of the measures.

The above analyses were conducted using population data from the U.S. Census Bureau, high school graduation data from the Western Interstate Commission for Higher Education (WICHE), and enrollment and completion data from the National Center for Education Statistics (NCES) IPEDS Fall Enrollment and Completion Surveys.

- *Graduation rates by race/ethnicity.* These data reflect the percentage of first-time, full-time, degree-seeking freshmen who graduate within 150% of program time—three years for associate students and six years for bachelor's students. The rates are calculated by dividing the number of completions into the sum of beginning cohorts within each state for all Title IV degree-granting institutions. These data are provided by NCES as part of the IPEDS Graduation Rate Survey collection. 2002 is the first year NCES provided the data by race/ethnicity.

## **3. Projected Trends of Equity into the Future (2020)**

- *Projected population growth by age and race/ethnicity.* The U.S. Census Bureau provides population projections by state, age, and race/ethnicity. The Interim Projections (based on the 2000 Census) were used for the U.S. analyses. The U.S. Census Bureau's state-level projections were completed in 1997 and have not been updated to reflect the 2000 Census. The updated projections will not be available until 2005. To partially address this problem, we calculated the projected percentage growth from 2000 to 2020 by age and race/ethnicity and applied these percentages to the actual 2000 census numbers. The most notable limitation in using these early projections is that they underestimate the growth of the Hispanic population in many states. Therefore, the projections used throughout this study are almost certainly conservative.
- *Projected change in educational attainment as a result of population changes.* Change in educational attainment was calculated by applying the educational disparities reflected in the 2000 Census data to the projected population in 2020 (by age and race/ethnicity). For example, states that will experience substantial growth in

undereducated populations, while experiencing little or no growth in well-educated populations, will likely experience an overall decline in the percentage of adults with a college degree—unless race/ethnic inequalities are addressed. The expected changes in educational attainment are calculated for 25- to 64-year-olds (excluding retirement ages).

- *Projected changes in personal income per capita as a result of population changes.* Like educational attainment, sizable disparities in personal income exist among different race/ethnic populations, even within the same levels of education attainment. Change in personal income was calculated by applying the income disparities reflected in the 2000 Census data to the projected population in 2020 (by age and race/ethnicity). To arrive at more accurate projections of state personal income, the income disparities (in 2000) by race/ethnicity within several age groups (15-24, 25-34, 35-44, 45-54, 55-64, and 65 and older) were applied to projected population changes by race/ethnicity within the same age groups. In the case of personal income, it was necessary to include all of the ages that are used to calculate personal income per capita (aged 15 and older).

The above analyses were conducted using the U.S. Census Bureau's 2000 Public Use Microdata Sample Files (5% samples for each state) based on the 2000 U.S. Census.