



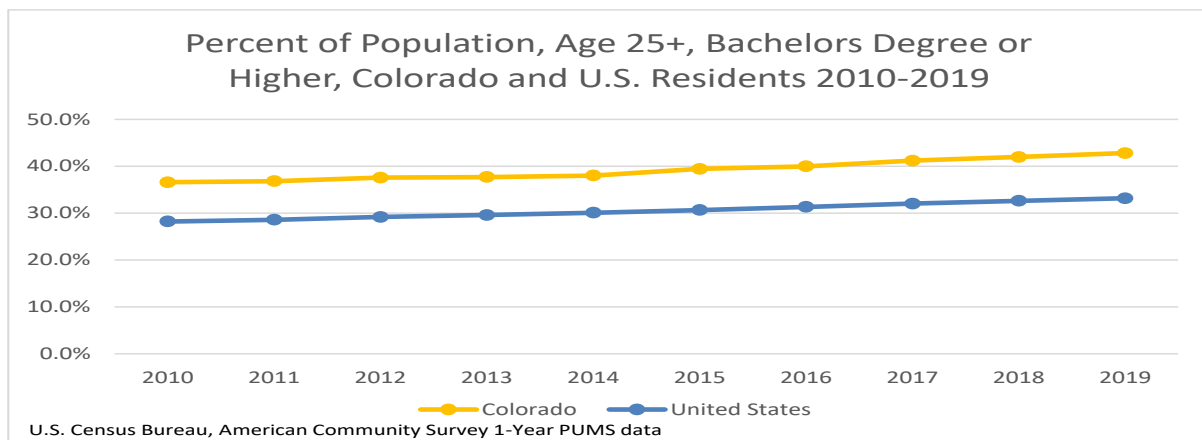
Changes in Colorado’s Educational Attainment, 2010 to 2019

Educational attainment, measured here as the percent of people age 25 and older with a bachelor's degree or higher, has increased in Colorado by approximately 40 percent between 2010 and 2019. The increase in the number and percentage of Colorado residents varies by race and ethnicity and by place of birth among Colorado adults. This brief analysis highlights differences in educational attainment between 2010 and 2019 using the American Community Survey 1-Year Public Use Microdata Sample (PUMS) by race and ethnicity and compares educational outcomes by place of birth.

Previous analyses of Colorado's educational attainment highlighted differences associated with place of birth. The overall level of educational attainment varied by where someone was born and that the percentage of Colorado residents born in Colorado with at least a Bachelor's Degree was lower than that of other residents of Colorado. The previous paper's conclusion highlighted that this difference is due to the positive relationship between migration and educational attainment rather than solely due to Colorado's education system characteristics. The current analysis expands on this observation by looking at Colorado's population by race and ethnicity and considering a decade's worth of increased educational attainment compared to educational attainment in the United States.

Educational attainment in Colorado has exceeded that of the United States as a whole for the entire period between 2010 and 2019 (see Figure 1). The percentage of Coloradans with a least a bachelor's degree increased from 36.6 percent in 2010 to 42.8 percent in 2019, ranking Colorado second among states. For the United States, educational attainment grew from 28.2 percent in 2010 to 33.2 percent in 2019. According to the Current Population Survey, educational attainment in Colorado has been higher than that of the United States since at least 1992.¹

Figure 1 Percent of Population, Age 25+ with a Bachelor's Degree or Higher, Colorado and U.S. Residents 2010-2019



¹ See <https://www.census.gov/topics/education/educational-attainment.html>

Figures 2 and 3 show the difference and percentage change in educational attainment among Colorado residents for adults age 25 and older between 2010 and 2019. Over this period, the total population increased by 19.5 percent, while the percentage of adults with a bachelor's degree or higher increased by 39.8 percent (see Figure 3). The total population age 25 or older increased by 649,018 people. Those with a Bachelor Degree or higher increased by 484,710 indicating that 75% of the increase in the population age 25 or older had a bachelor's degree or higher.

Figure 2 Growth in Educational Attainment, Colorado Residents 2010 and 2019

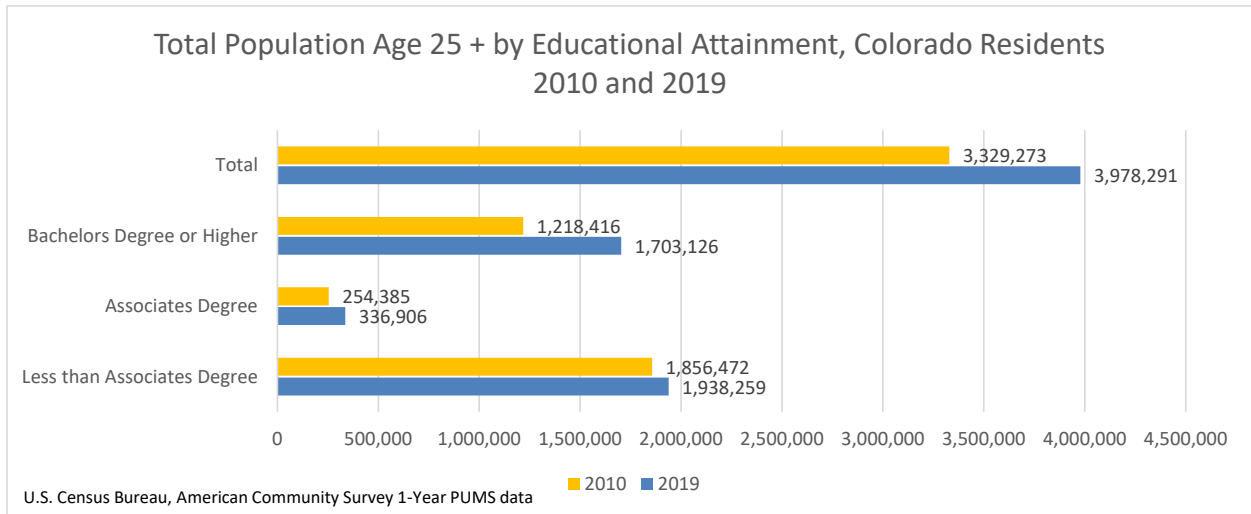
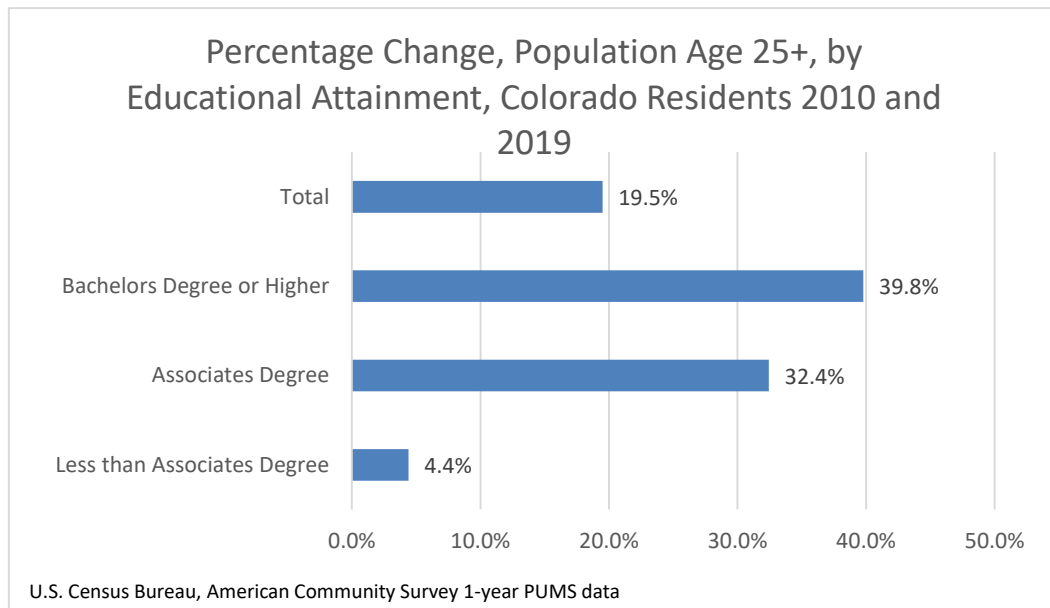


Figure 3 Percentage Change, Population Age 25+, by Educational Attainment, Colorado Residents 2010 and 2019



Educational Attainment by Place of Birth

One important characteristic of Colorado's population is the percentage of adults born in another state or country. The majority of current Colorado residents were born in another state. Between 2010 and 2019, the proportion of current Colorado residents who were Colorado-born versus those born in another state or born in another country has remained fairly constant (see Table 1).

Table 1 Percentage of Population Age 25+ by Place of Birth, Colorado Residents 2010 and 2019

	2010		2019		Percentage Growth 2010-2019
	Number	Percentage	Number	Percentage	
Born In Colorado	987,426	29.7%	1,188,524	29.9%	20.4%
Born in Another State	1,897,486	57.0%	2,264,090	56.9%	19.3%
Foreign Born	444,361	13.4%	525,677	13.2%	18.3%
Total	3,329,273	100.1%	3,978,291	100.1%	19.5%

For Colorado residents, the group with the highest percentage with at least a bachelor's degree were born in another state. Figure 4 summarizes the percentage of people with at least a bachelor's degree by place of birth for Colorado and the United States. In 2019, the percentage with a bachelor's degree or greater born in Colorado and born in another country was about equal. For the United States population, we see a similar pattern, i.e., people living in a different state than their birth state have the highest percentage with at least a bachelor's degree. The foreign-born population has a higher percentage with at least a bachelor's degree, while people who live in the state they were born in have a lower percentage with at least a bachelor's degree. For people who were born in Colorado and now live in another state, 39.6 percent have at least a bachelor's degree, which is very similar to the average for the United States of 40.6 percent for people who live in a different state than birth. (See Figure 5).

Historically the difference in Colorado's educational attainment by place of birth was called the Colorado Paradox – referring to Colorado's high rank in bachelor's degree or higher yet lower attainment by people born in Colorado. However, research indicates a strong positive relationship between educational attainment and migration. This is seen in Figure 4, where for the United States and Colorado, a lower share of people living in their birth state have a bachelor's degree or higher. When comparing Colorado's attainment to the United States' average, Colorado residents have a higher share with a bachelor's degree or higher regardless of their place of birth.

Figure 4 Educational Attainment by Place of Birth, Colorado and U.S. Residents, 2010 and 2019

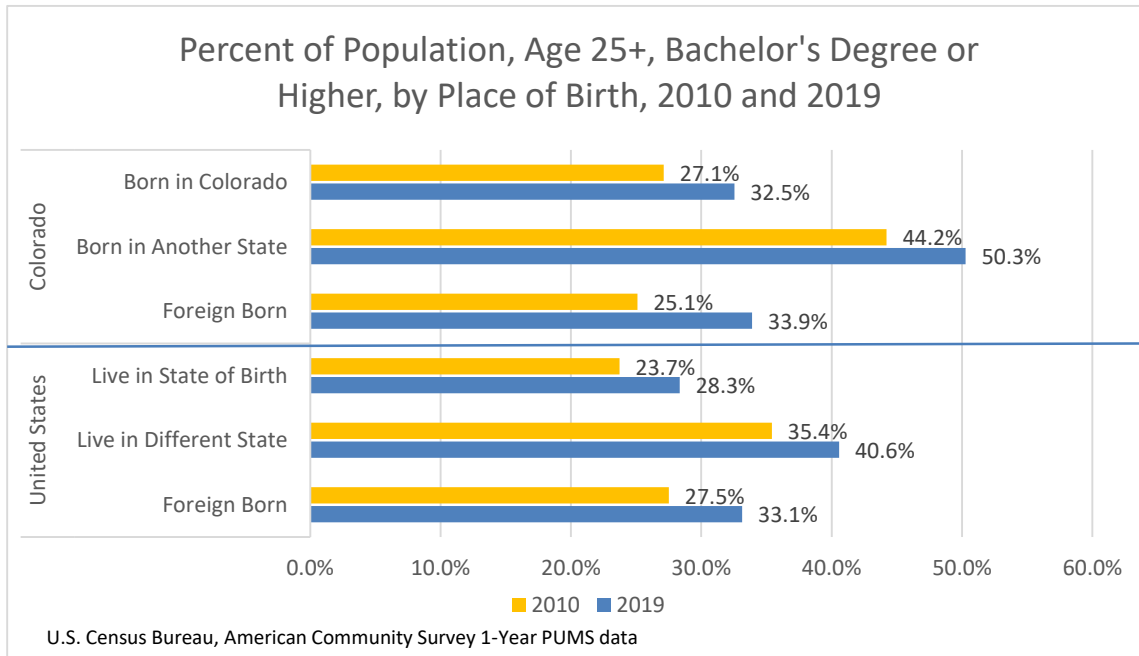
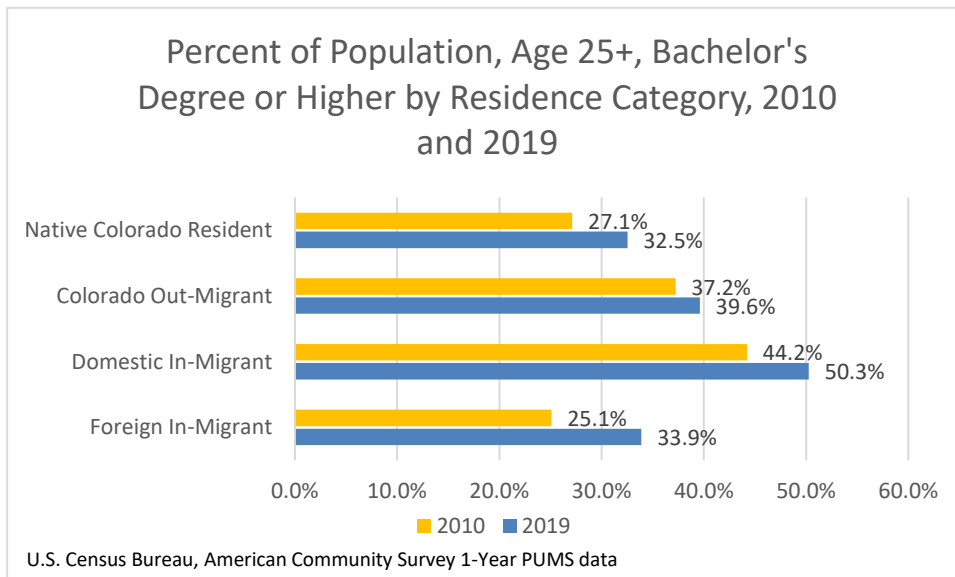


Figure 5 includes a comparison with "Colorado Out-Migrants". This category refers to people born in Colorado but currently living in another state. A higher percentage of Colorado out-migrants have at least a bachelor's degree than those born and living in Colorado, following the same pattern.

Figure 5 Educational Attainment by Residence Category, 2010 and 2019



Between 2010 and 2019, the percentage of current Coloradans and those born in Colorado who have left, with at least a bachelor's degree increased regardless of the place of birth. While the absolute level

of educational attainment differed across these residence categories, the increase among Colorado-born residents (20%) and foreign-born immigrants (35%) was higher than for other groups.

Educational Attainment by Race and Ethnicity, 2010 and 2019

Educational attainment in Colorado varies by race and ethnicity and is also changing as Colorado's population becomes more racially and ethnically diverse. Between 2010 and 2019, the percentage of adults identifying as "White -non-Hispanic " fell by nearly three percentage points, while the percentage of adults identifying as "Hispanic" or "Other People of Color" increased by approximately 1.4 percentage points each.

The race and ethnicity categories used in this analysis follow the categories used by the United States Census Bureau, see Table 2. These categories identify one ethnic group ("Hispanic") and five non-Hispanic (NH) race categories. While people who identify as Hispanic can also identify as any race, in this analysis, people who identify as Hispanics are treated as a single category.

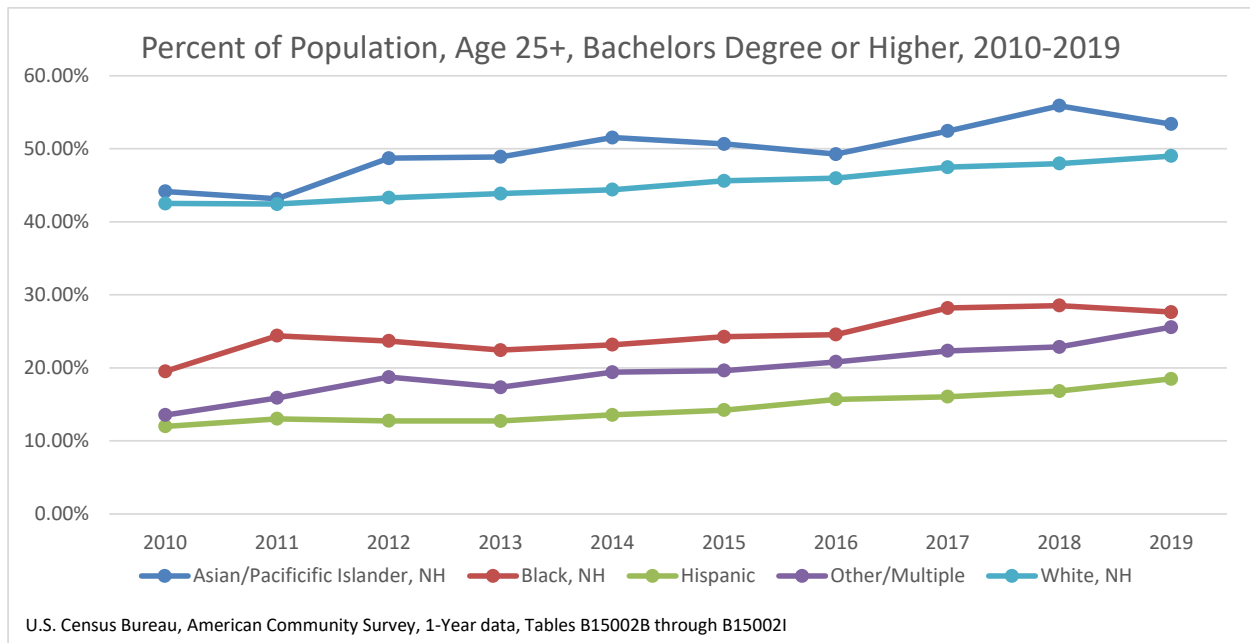
Table 2 Detailed and Combined Race and Ethnicity Categories. Age 25+, 2010 and 2019

	2010		2019		Change 2010-2019	
	Number	Percent	Number	Percent	Number	Percent
Detailed Categories						
Hispanic	551,255	16.6%	710,421	17.9%	159,166	28.9%
White, NH	2,500,976	75.1%	2,881,593	72.4%	380,617	15.2%
Black, NH	118,200	3.6%	149,695	3.8%	31,495	26.6%
Asian, NH	87,634	2.6%	133,138	3.4%	45,504	51.9%
American Indian/Alaskan Native, NH	17,617	0.5%	21,593	0.5%	3,976	22.6%
Pacific Islander/Native Hawaiian, NH	3,267	0.1%	5,016	0.1%	1,749	53.5%
Other	2,985	0.1%	4,246	0.1%	1,261	42.2%
Multiple Races	47,339	1.4%	72,589	1.8%	25,250	53.3%
Total	3,329,273	100.0%	3,978,291	100.0%	649,018	19.5%
Combined Categories						
Hispanic	551,255	16.6%	710,421	17.9%	159,166	28.9%
White, NH	2,500,976	75.1%	2,881,593	72.4%	380,617	15.2%
Other People of Color	277,042	8.3%	386,277	9.7%	109,235	39.4%
Total	3,329,273	100.0%	3,978,291	100.0%	649,018	19.5%

Since 2010 all race and ethnic groups have experienced an increase in the share of the population with a bachelor's degree or higher. Figure 6, taken from the full American Community Survey dataset, shows the annual trend in educational attainment for each major race and ethnic group between 2010 and 2019. Although improvements have been achieved by all race and ethnic groups, a significant gap still exists in educational attainment by race and ethnicity. Colorado ranks 2nd in the nation for the share of

the population with a bachelor’s degree or greater yet 23rd in the nation for its Hispanic population, which is Colorado’s largest non-white ethnic group. This ranking improved to from 33rd to 23rd between 2010 and 2019. However, the difference in the percent of the population with a bachelor’s degree or higher between Colorado’s Hispanic and white non-Hispanic (two largest race and ethnic groups) is the second largest in the country, a 30 point difference. Addressing this gap will be important for the future economic prosperity of Colorado especially since the Hispanic population is forecast to be the largest growing group in the state.

Figure 6 Percent of Population, Age 25+ with Bachelor's Degree or Higher by Race and Ethnicity



The gains in educational attainment have varied by race and ethnicity. Figure 7 shows the total change in people over age 25 with at least a bachelor's degree. All groups represented in this figure show an increase. Figure 8, shows that the non-white populations increased their educational attainment by a greater degree than Colorado's white non-Hispanic population. Educational attainment for white non-Hispanic adults increased by 32.4 percent, while the other groups nearly doubled. For Hispanics, the percentage of adults with at least a bachelor's degree increased by 96.4 percent. For "Other People of Color," the percentage increased by 91.2 percent. Colorado's increases in attainment were greater than those for the U.S. as a whole. For the United States, the percentage of people identifying as Hispanic increased by 71.7 percent; for "Other People of Color," the increase was 50.0 percent. For white non-Hispanics, the increase was 21.1 percent.

Educational attainment by race and ethnicity and changes between 2010 and 2019 also vary by place of birth. Figures 9, 10, and 11 show educational attainment for each race and ethnic group by place of birth. For people identifying as white -non-Hispanic the percentage with at least a bachelor's degree increased about six percentage points between 2010 and 2019, regardless of where they were born. For people identifying as Hispanic, the largest percentage point increase between 2010 and 2019 was approximately eight percentage points among people born in another state compared to Hispanics born

in Colorado, increasing by four percentage points. The largest increase for “Other People of Color” was among the foreign-born population, 12.7 percent, versus less than ten percent for people born in Colorado or those born in another state.

Figure 7 Population Age 25+ with a Bachelor's Degree or Higher, by Race and Ethnicity, Colorado Residents 2010 and 2019

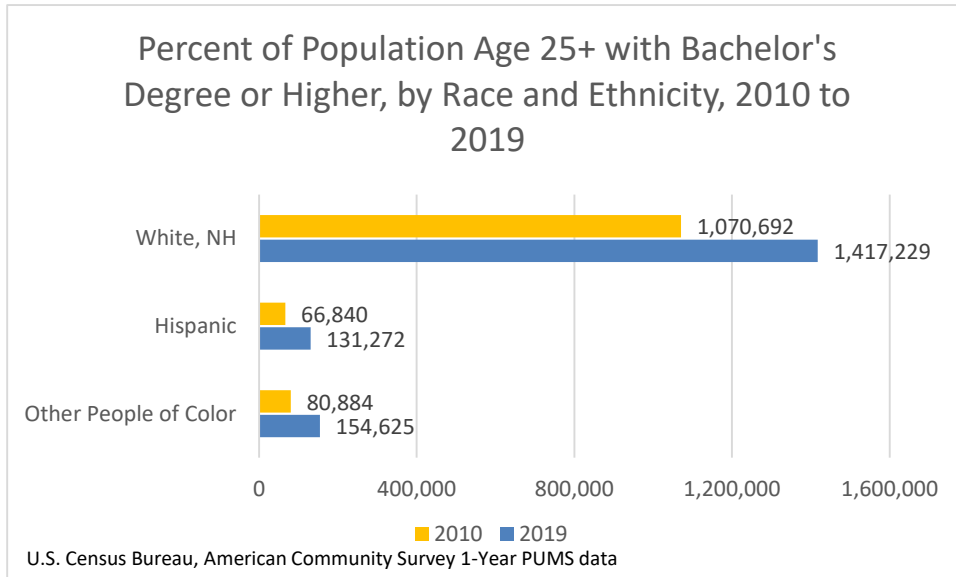


Figure 8 Percent Change, Population Age 25+ with a Bachelor's Degree or Higher, by Race and Ethnicity, Colorado Residents 2010 and 2019

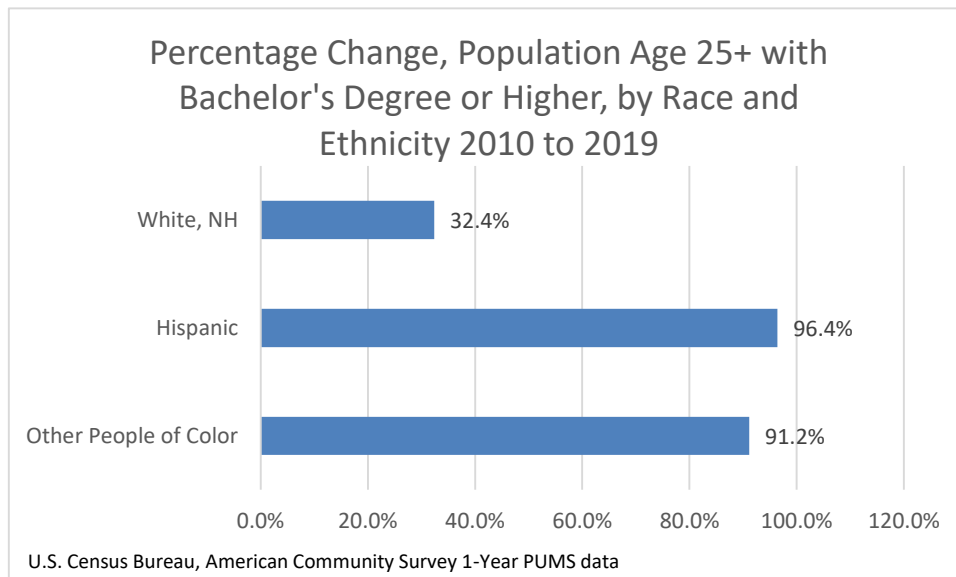


Figure 9 Percent of Population, Age 25+ Bachelor's Degree or Higher, White- Non Hispanic, by Place of Birth, Colorado Residents 2010-2019

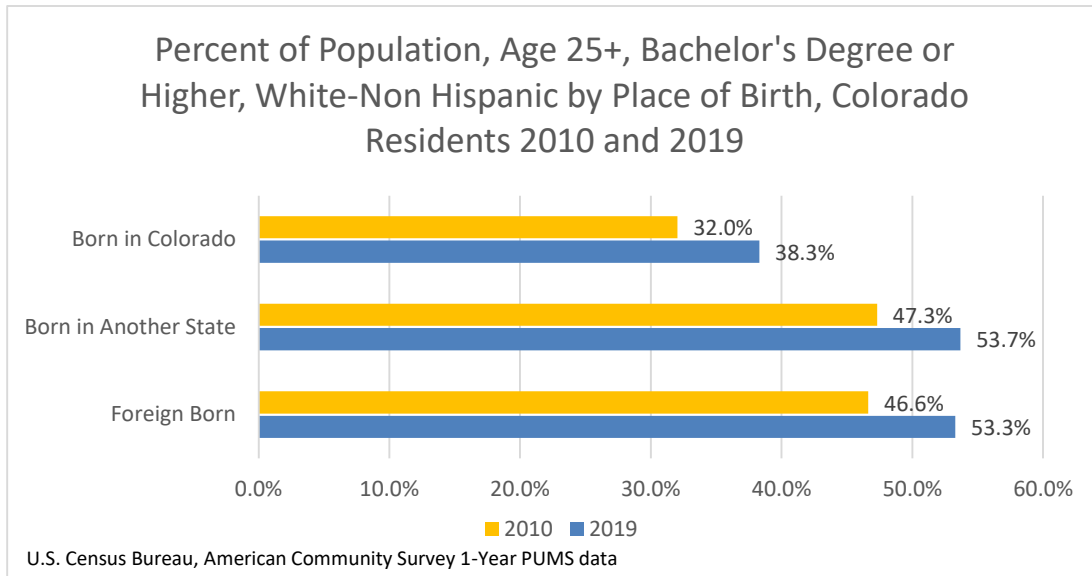


Figure 10 Percent of Population, Age 25+ Bachelor's Degree or Higher, Hispanic, by Place of Birth, Colorado Residents 2010-2019

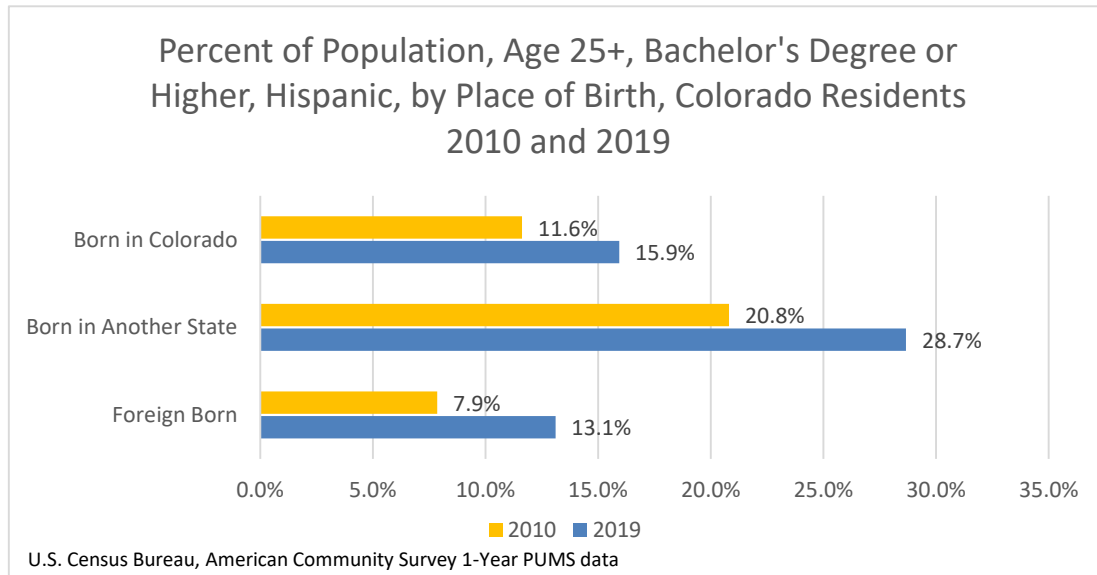
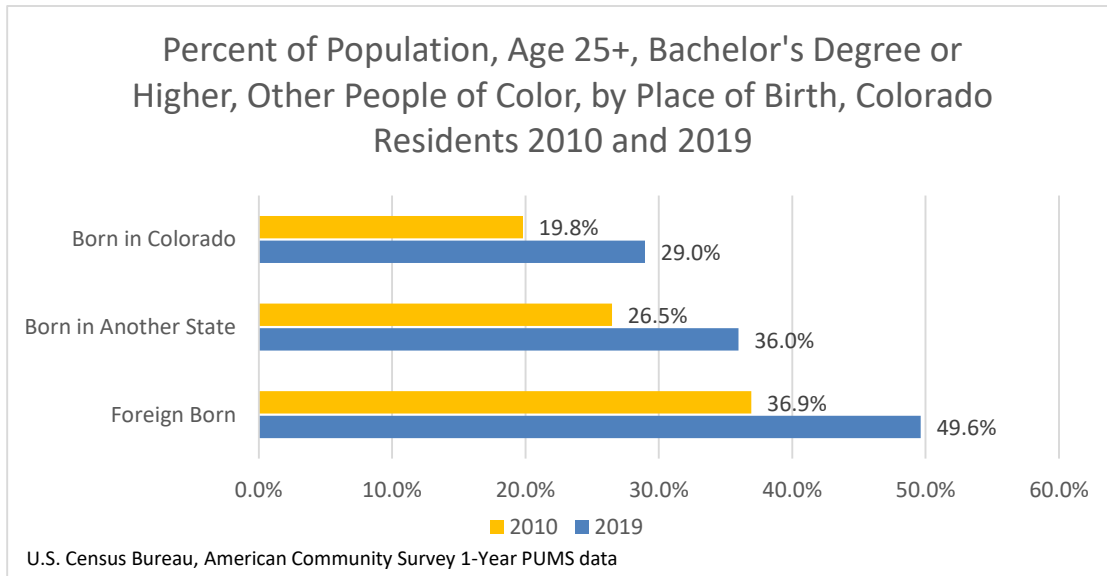


Figure 11 Percent of Population, Age 25+ Bachelor's Degree or Higher, by Place of Birth, Other People of Color, Colorado Residents 2010-2019



Conclusion

Educational attainment is increasing in Colorado. Between 2010 and 2019, the percentage of Colorado residents with at least a bachelor's degree increased from 36.6 percent to 42.8 percent and ranks second in the United States. The total number of residents 25+ with at least a bachelor's degree increased by approximately forty percent or by 485,000 people. Colorado's total population 25 and older increased by 19%, indicating that educational attainment is growing faster than the population. Within this increase, the educational attainment of people identifying as Hispanic and "Other People of Color" effectively doubled.

The majority of Colorado's adult population was born in another state. In 2019, half of these residents held at least a bachelor's degree, compared to about 33 percent of residents born in Colorado and 34 percent of those who are foreign-born. Among people identifying as Hispanic, 28.7 percent born in another state held at least a bachelor's degree, compared to 15.9 percent born in Colorado.

Data and research suggest that differences in educational attainment by place of birth, the heart of the "Colorado Paradox", are due to the positive correlation between educational attainment and mobility. In 2019, half of Colorado residents born in another state had at least a bachelor's degree. This pattern is consistent with the United States as a whole; people living in a different state have higher educational attainment than those living in their state of birth. People with at least a bachelor's degree are mobile and can move to pursue employment and other opportunities. The results in Figure 5 suggest that the "Colorado Paradox" is more a sign of a dynamic Colorado economy that can attract highly educated people, than a persistent problem of Colorado's education system. Interestingly, between 2010 and 2019, the proportion of those born in Colorado holding at least a bachelor's degree increased by nearly twenty percent, more than the growth in bachelor's degree or greater from in-migration from other states.

In 2019, 18.5 percent of Colorado's Hispanic population over age 25 held at least a bachelor's degree compared to 17.5 percent of the U.S. States Hispanic population. Colorado ranks 23rd in the nation in terms of educational attainment among people identifying as Hispanic compared to 2nd in the US for the total population, illustrating the continued gap in attainment by race and ethnicity. Addressing this gap will be critical for Colorado's continued productivity.

Across the board, Colorado has seen an increase in the population with a Bachelor's degree or higher regardless of race or ethnicity and regardless of place of birth. However, significant gaps still exist by place of birth as well as by race and ethnicity.