



MEMO

To: Jill Hawley, Associate Commissioner of Achievement and Strategy
From: Bob Palaich, Robert Reichardt, and Sarah Wool
RE: “Keeping Up With the Kids: Increasing Minority Teacher Representation in Colorado”
Date: February 5, 2015

On January 21, 2015, Augenblick, Palaich and Associates (APA) presented findings from its report on minority teachers, “Keeping Up with the Kids: Increasing Minority Teacher Representation in Colorado,” to a joint meeting of Colorado’s House and Senate education committees. Following this PowerPoint presentation, APA and Colorado Department of Education (CDE) received several requests for additional coverage of the report findings. Specifically, APA and CDE received requests for data and data visualizations covering the different stages of minority teacher recruitment and retention. In response to these requests, APA created this document to capture basic demographic information from various stages of the minority teacher recruitment and retention pipeline.

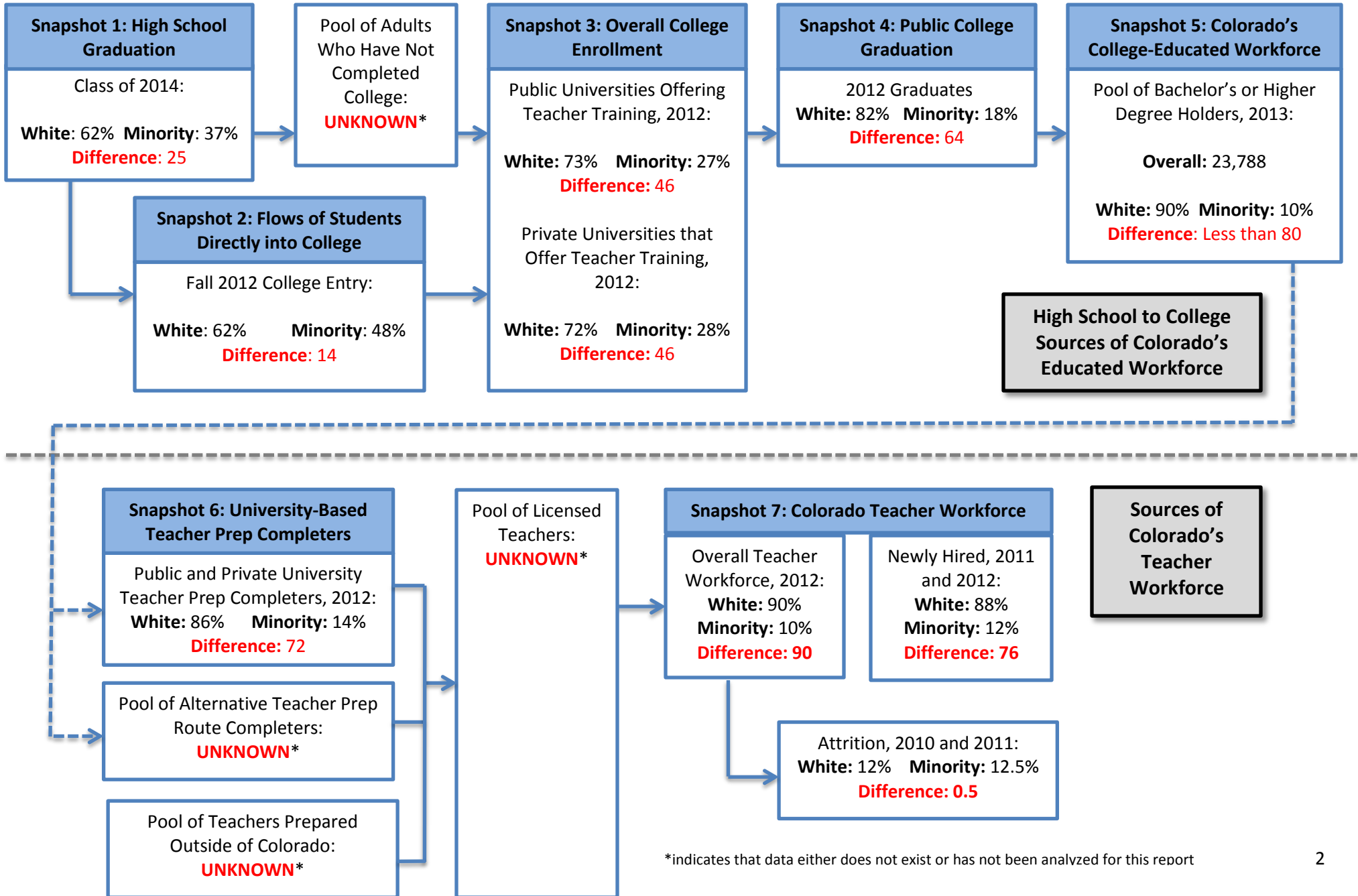
This document has three sections. The first section, on the next page, is a summary graphic illustrating the overall teacher pipeline and various pools of people within the pipeline. The second section is a short summary tables of the known pools and flows of people through the teacher pipeline. The final section includes seven snapshots of the teacher pipeline:

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This memo focuses on the most recent data available. It uses the terms “post-secondary,” “college,” and “university” interchangeably to describe post-secondary institutions.

Caveats: It is important to note that, while the stages of minority teacher pipeline are part of a larger pipeline, APA has neither a complete description of the all of the stages of the larger pipeline nor a complete description of the flow between stages. Furthermore, for certain stages, data points are spotty or missing. For example, a number of students in college choose not to report race/ethnicity. This makes it difficult to accurately track minority enrollment in colleges and universities. In cases like these, APA aims to describe the data that is available while being clear about the data that is not available.

**Figure 1: Keeping Up With the Kids: Increasing Minority Teacher Representation in Colorado:
Overview of Pools Within the Pipeline**



Interpreting Figure 1: Figure 1 shows the various pools of people within the teacher pipeline and illustrates the flows between those pools. The figure uses measures to describe the proportions of various races/ethnicities within each of the pools.

Interpreting Table 1: The pools shown above are also described in Table 1. Table 1 presents additional details and caveats to keep in mind when interpreting and using these data points.

Table 1: Pools of People within the Teacher Pipeline

	What is included / missing from our data	White Share	Minority share	Difference (percentage points)
K-12 Enrollment, See “Keeping Up With the Kids”	Only covers public schools	57%	43%	14
High School Graduates, See Snapshot 1	Only covers public schools	62%	37%	25
Enrollment in Public Universities That Have Teacher Preparation Programs, See Snapshot 3	9% of students do not report race; this report assumes they have the same racial/ethnic demographics as students who do report.	73%	27%	46
Enrollment in Private Universities That Have Teacher Preparation Programs, See Snapshot 3	About 16% do not report race; this report assumes they have the same racial/ethnic demographics as students who do report.	72%	28%	46
Public University Bachelor’s Graduates, See Snapshot 6	Only includes 2012 data, only includes data from in-state institutions that have teacher preparation programs	82%	18%	64
Public and Private University-Based Teacher Preparation Completers, See Snapshot 6	Only includes students who completed programs in 2012; does not include students who completed alternative routes	86%	14%	72
Alternative Route Completers	Unknown	Unknown	Unknown	Unknown
Pool of Licensed Teachers	Unknown	Unknown	Unknown	Unknown
Newly Hired Teachers, See Snapshot 7	Combines teachers hired in 2011 and 2012	88%	12%	76
Overall Teacher Workforce, See Snapshot 7	Only includes 2012 data	90%	10%	80
Teachers Quits, See Snapshot 7	Combines 2010 and 2011 quits	88%	12%	76

Interpreting Table 2: Table 2 provides summary data on the flows, or movements, of individuals through the system. Rates are used to describe these movements. These rates show the proportions of people of a given race who move from one pool to another.

Table 2: Flows within the Teacher Pipeline

Stage	Caveats or Missing Information	White rate	Minority rate	Difference (percentage points)
High School Graduation Rate, See Snapshot 1	Only includes four-year graduation rates for the class of 2014	83%	69%	14
High School to College Rate, See Snapshot 2	Only includes fall 2012 college entrants; only counts those students who go directly from high school to college	63%	47%	16
College Graduation Rate, See Snapshot 6	Only includes six-year graduation rates for the fall 2007 entering class; only counts Colorado's public higher education institutions; does not include private institutions within Colorado; does not account for movement of graduates into Colorado from other states	62%	48%	14
Rate of Hiring Prepared Teachers	Unknown: APA does not know the racial/ethnic makeup of the pool of licensed teachers, and therefore cannot calculate the rate at which teachers from different minority sub-populations are hired	Unknown	Unknown	Unknown
Attrition Rate of Teachers, See Snapshot 7	Combines 2010 and 2011 rates. Attrition rate of new teachers is higher.	12.0%	12.5%	0.5

The remaining section contains more descriptive snapshots of different sections within the teacher pipeline. These snapshots provide detail where detail is available. There are several important parts of the pipeline that are not described here due to lack of data.

Snapshot 1: High School Graduation

Overview: The 2014 high school four-year graduation rates are shown in Table 3 below. For every 100 students who enter 9th grade, 77 graduate from high school four years later. The rate of completion within four years is highest for Asians (85 percent) and lowest for American Indians (61 percent) and Black students (69 percent). If all minority (non-white) sub-populations are considered together, then the minority graduation rate is 69 percent.

Table 3: Colorado’s Four-Year High School Graduation Rates, 2014

	9 th graders in fall 2010	Race/ Ethnicity of 9 th graders	Graduates in 2014	Race/ Ethnicity of Graduates	Graduation rate
American Indian or Alaska Native	535	1%	325	1%	61%
Asian and Pacific Islander (PI)	1987	3%	1683	4%	85%
Black	3133	5%	2163	5%	69%
Hispanic or Latino	18182	30%	12124	26%	67%
Native Hawaiian or Other PI	158	0%	116	0%	73%
Two or More Races	1872	3%	1492	3%	80%
White	35573	58%	29583	62%	83%
TOTAL	61440	100%	47486	100%	77%

Source: CDE at: <http://www.cde.state.co.us/cdereval/gradcurrent>

The differences in graduation rates between races suggest that there are opportunities to increase graduation rates for minority students, narrowing the gap that currently exists between students of color and their white peers. If Colorado increased the graduation rates of Black, American Indian, and Hispanic students to the statewide average (77 percent), then Colorado would have produced 2,276 more minority high school graduates in 2014.

Caveats: This is the four-year public high school graduation rate. It only accounts for public schools; it does not include graduates from private high schools. Longer-term graduation rates would show higher percentages of students, across races/ethnicities, completing high school. For example, the seven-year graduation rate would show graduation rates of about three percentage points higher.

Snapshot 2: Flow of Students Directly into College

Overview: Table 2 shows the 2012 flow of students from high school into college, as calculated by Colorado Department of Education (CDHE). The table shows the proportion of spring 2012 high school graduates who enrolled in postsecondary institutions in fall 2012. This proportion includes students who enrolled in two-year, four-year, and out-of-state institutions.

Rates of enrollment reveal large differences between races/ethnicities: Blacks enroll in college at a rate 11 percentage points lower than that of whites; Hispanics enroll at a rate 20 percentage points lower than that of whites; American Indians enroll at a rate 22 percentage points lower than that of whites.

Table 4: Colorado’s High School Graduate College-Going Rates, 2012

	Rate of Enrollment in College (in- and out-of-state)
American Indian	40%
Asian	71%
Black	52%
Hawaiian and PI	58%
Hispanic	42%
Two or more	62%
White	63%
TOTAL	57%

Source: CDHE at:

http://higher.ed.colorado.gov/Publications/Reports/Legislative/PostSecondary/2014_Postsecondary_Progress_rel20140505.pdf

Of 2012 Colorado high school graduates, minority graduates went on to two- or four-year colleges at a rate of 47 percent.¹

Among high school graduates of all racial/ethnic groups who went directly to college, 78 percent enrolled in in-state colleges, while 22 percent enrolled in out-of-state colleges. Seventy-two percent enrolled in four-year programs, while 28 percent enrolled in two-year programs.² White students were more likely than minority students to choose out-of-state colleges; twenty-five percent of white students that went to college left Colorado for out-of-state schools. Of the minority sub-populations attending college, Hispanics had the highest rate of choosing in-state schools, at 88.3 percent.³

Caveats: The CDHE data reported here uses a slightly different base count of high school graduates that includes more people than just the four-year high school graduates reported on in Table 1. CDHE’s calculations of college enrollment rates only include students who enroll in college directly from high school. These calculations do not provide information on incoming college students’ programs or areas

¹http://higher.ed.colorado.gov/Publications/Reports/Legislative/PostSecondary/2014_Postsecondary_Progress_rel20140505.pdf, p. 9.

² Ibid, p. 14.

³ Ibid, p. 12-13.

of study. Finally, there is no information available on how many college-going students, minority or non-minority, have enrolled in teacher preparation programs.

Snapshot 3: Overall College Enrollment

Overview: College enrollment includes students who go to college directly from high school as well as students who enroll later in life. If the races/ethnicities of all college students were the same as the races/ethnicities of students who go directly from high school to college (as discussed in Table 4 above), then the diversity of colleges in Colorado would increase, as shown in Table 5.

The first column of Table 5 shows the races/ethnicities of students graduating high school in 2012 and going directly to college: Thirty-one percent of this group was non-white. This first column includes students who went to both two- and four-year colleges, and students who went to both public and private institutions. The two rightmost columns show total enrollment in public and private institutions that prepare teachers: This data assumes that students with unknown or unreported races/ethnicities have same demographics as the students with reported races/ethnicities. The overall minority enrollment in the institutions covered in Table 5 is four to five percentage points lower than it would be if enrollment in these institutions reflected the diversity of high school students who went directly from high school to college.

Table 5: The Share of Minority College Students Minority Enrolled Right After High School is Higher Than the Minority Share of Total Enrollment in Colorado’s Institutions That Train Teachers, 2012*

	Race/Ethnicity of College Enrollment Directly After High school	Total Enrollment (Public)	Total Enrollment (Private)
American Indian	1%	1%	1%
Asian & PI	4%	4%	3%
Black or African- American	5%	4%	8%
Hawaiian and PI	0%	0%	0%
Hispanic	18%	15%	12%
Two or more	3%	4%	4%
White	69%	73%	72%
TOTAL	29,618	142,626	35,582

***Assumes that Unreported Races/Ethnicities Are Distributed the Same As Reported**

Source: High School To College Data: CDHE:

http://highered.colorado.gov/Publications/Reports/Legislative/PostSecondary/2014_Post_secondary_Progress_rel20140505.pdf

Public Enrollment Data: CDHE: <http://highered.colorado.gov/Data/Search.aspx>

Private Enrollment Data: IPEDS: <http://nces.ed.gov/ipeds/datacenter/InstitutionList.aspx>

The differences in minority enrollment are a product of 1) higher college dropout rates for minorities and 2) lower enrollment rates for minority students who wait a year or more to enroll in college after high school. APA does not have enough data to describe how these two factors cause imbalances in total enrollment numbers.

The majority of students in public institutions are relatively recent high school graduates: Forty percent of enrolled students are under 20, 31 percent are 21 to 24, and 29 percent are over 24 years old.

The remaining analysis has two parts. The first analysis section provides detail on the races/ethnicities of students enrolled in public universities in Colorado—the source of 82 percent of the teachers trained in Colorado higher education institutions. CDHE provides detailed data on enrollment in these institutions. The second analysis section covers private colleges and universities with teacher preparation programs. The data in this second section comes from the federal IPEDS data system.

Table 6 below shows enrollment (undergraduate and graduate) in public universities in Colorado. There are significant differences in the shares of minority students by college, ranging from 45 percent minority students at CSU – Pueblo to 18 percent minority students at CSU. Because of its overall size, Metropolitan State University of Denver (Metro State) has the highest actual numbers of Black and Hispanic students. The University of Colorado Denver (UCD) has the highest number of Asian students.

Table 6: Enrollment by (Known) Race in Colorado’s Public Universities with Teacher Preparation Programs, 2012*

	Asian	Black	Hawaiian or PI	Hispanic	2 or More	Native American	White, non-Hispanic	Grand Total
Adams State University	1%	7%	0%	27%	4%	1%	59%	3,066
Colorado Mesa University	1%	2%	1%	15%	4%	1%	76%	9,633
Colorado State University	2%	2%	0%	10%	4%	0%	82%	27,400
Colorado State University - Pueblo	2%	8%	0%	32%	3%	1%	55%	4,677
Fort Lewis College	1%	1%	0%	10%	6%	23%	60%	4,019
Metro State	4%	6%	0%	22%	4%	1%	64%	22,190
University of Colorado Boulder	5%	2%	0%	10%	4%	0%	79%	30,159
University of Colorado CS	3%	4%	0%	14%	6%	1%	72%	10,618
University of Colorado Denver	10%	5%	0%	14%	3%	1%	67%	17,963
University of Northern Colorado	2%	4%	0%	18%	4%	0%	72%	10,814
Western State Colorado University	1%	3%	0%	10%	3%	0%	82%	2,087
TOTAL	4%	4%	0%	15%	4%	1%	73%	142,626

***Assumes that Unreported Races/Ethnicities Are Distributed the Same As Reported**

Source: CDHE <http://higher.ed.colorado.gov/Data/Search.aspx>

Table 7 provides detail on 2012 enrollment in private universities in Colorado that offer teacher preparation programs. Because of some institutions’ relatively high proportions of students with unknown races/ethnicities, Table 5 provides detail on unknown race/ethnicity students. There is significant variation in enrollment between institutions. Jones International University and the University of Phoenix – Colorado both have high proportions of students with unknown races/ethnicities.

If we assume that the unknown students have the same races/ethnicities as students who report their races/ethnicities, then 72 percent of the students in private institutions are white and 28 percent are minority. This is almost the same as in Colorado’s public institutions.

Table 7: Enrollment by Race in Colorado’s Private Universities with Teacher Preparation Programs, 2012

	Asian	Black	Hawaiian or PI	Hispanic	2 or more	White	Native Am.	Unknown	TOTAL
Colorado Christian University	1%	6%	0%	9%	2%	52%	1%	29%	5,368
Denver Seminary	3%	4%	0%	4%	0%	76%	0%	12%	990
Jones International University	1%	33%	0%	3%	16%	27%	1%	18%	2,782
Regis University	4%	6%	0%	14%	2%	63%	1%	10%	9,722
Colorado College	4%	2%	0%	9%	8%	69%	0%	8%	2,061
Rocky Mtn Coll of Art & Design	3%	5%	0%	9%	2%	63%	1%	17%	775
University of Denver	3%	3%	0%	8%	3%	68%	0%	13%	11,778
Univ of Phoenix – Colorado	1%	7%	1%	12%	2%	41%	0%	35%	2,106
TOTAL	3%	7%	0%	10%	4%	60%	1%	16%	35,582

Source: <http://nces.ed.gov/ipeds/datacenter/InstitutionByName.aspx>

Caveats: Many college students choose not to report race/ethnicity, so it is difficult to determine accurate numbers for minority students within undergraduate student bodies. Within public universities that train teachers, nine percent of students do not report race/ethnicity. Within private universities that train teachers, about 16 percent of student do not report race/ethnicity. Thus, for this report, APA assumes that these unknown race/ethnicity students have the same demographics as students who do report race/ethnicity.

Snapshot 4: Public College Graduation

Overview: A bachelor’s degree is essentially the minimum education requirement to becoming a teacher. CDHE provides information on the six-year cohort graduation rates of Colorado’s public universities with teacher preparation programs. The most recent data is for the class that entered universities in 2007. This data is shown in Table 14.

State-wide, the minority graduation rate is 10 percentage points lower than the overall graduation rate. Graduation rates vary significantly by institution, from a low of 29 percent at Adams State to a high of 71 percent at University of Colorado – Boulder. The minority graduation rates within institutions are consistently lower than the overall graduation rates. Minority graduation rates tend to be four to five percentage points lower than overall rates.

Table 8: 6-Year Bachelor’s Degree Graduation Rates, 2007 Cohort

	Overall	Minority
Metropolitan State University of Denver	31%	25%
University Colorado – Boulder	71%	67%
University of Colorado – Colorado Springs	53%	46%
University of Colorado – Denver	49%	45%
University of Northern Colorado	55%	42%
Western State Colorado University	54%	30%
Adams State University	29%	25%
Colorado Mesa University	39%	35%
Colorado State University	70%	66%
Colorado State University – Pueblo	38%	31%
Fort Lewis College	45%	35%
All Institutions	58%	48%

Source: CDHE:

http://higher.ed.colorado.gov/Publications/Reports/Enrollment/FY2013/2013_GradRates.pdf

Additional statewide detail on graduation rates of the 2007 cohort by race/ethnicity are shown in Table 9. The graduation rates for white and Asian students are around 60 percent, while the graduation rates for Blacks, Hispanics and Native Americans are closer to 43 percent.

Table 9: Six-Year Bachelor’s Degree Graduation Rates At Colorado Institutions That Train Teachers, 2007 Cohort

	Fall 2007 Entering Class	Graduated within 6 years	Graduation Rates
Asian and PI	950	572	60%
Black or African American, non-Hispanic	607	253	42%
Native American or Alaskan Native	389	159	41%
Hispanic	1,862	847	45%
White, non-Hispanic	14,391	8,908	62%
Non-Resident Alien	194	79	41%
Unknown Ethnicity	684	220	32%
Total	19,077	11,038	58%
Minority (non-white)	3,808	1,831	48%

Source: CDHE:

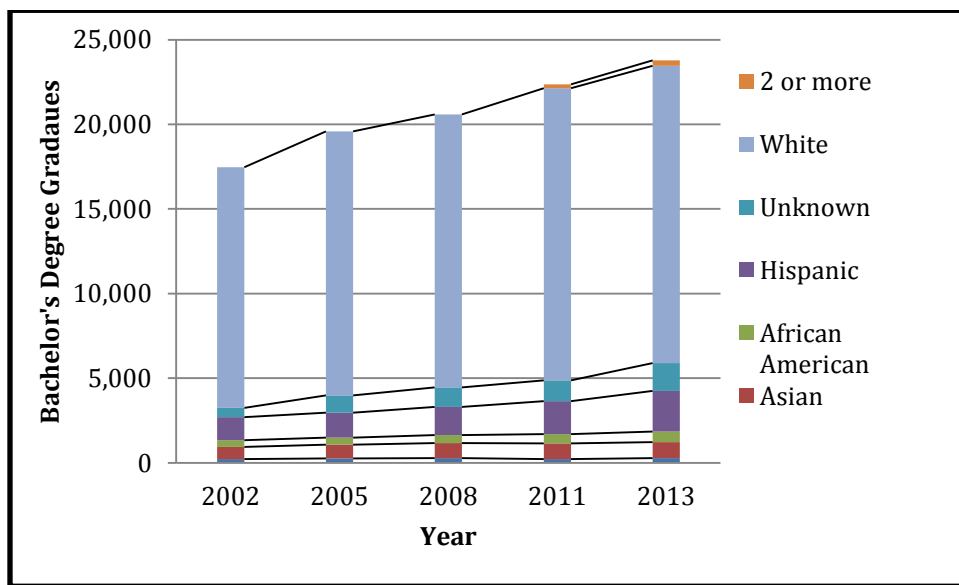
http://higher.ed.colorado.gov/Publications/Reports/Enrollment/FY2013/2013_GradRates.pdf

Caveats: This analysis uses six-year graduation rates for the class of students who entered college in fall 2007. The analysis only counts Colorado public higher education institutions, and does not include private institutions within Colorado. The analysis does not include movement of college graduates into Colorado from other states.

Snapshot 5: Colorado's College-Educated Workforce

Overview: In the “Keeping Up With the Kids” report, APA provides additional detail on the races/ethnicities of bachelor’s degree graduates. As noted in Snapshot 6 above, a bachelor’s degree is essentially the minimum education requirement for most teaching jobs. The graph below, taken from the original “Keeping Up With the Kids” report, shows the races/ethnicities of all new bachelor’s degree graduates from Colorado’s public colleges and universities. Over the period from 2002 to 2013, the overall number of bachelor’s degree graduates increased from 17,456 to 23,788. As illustrated in earlier charts, there were a number of graduates with unknown races/ethnicities. Of those graduates with known races/ethnicities, the proportion of minority graduates has increased from 16 percent in 2002 to 21 percent in 2013.

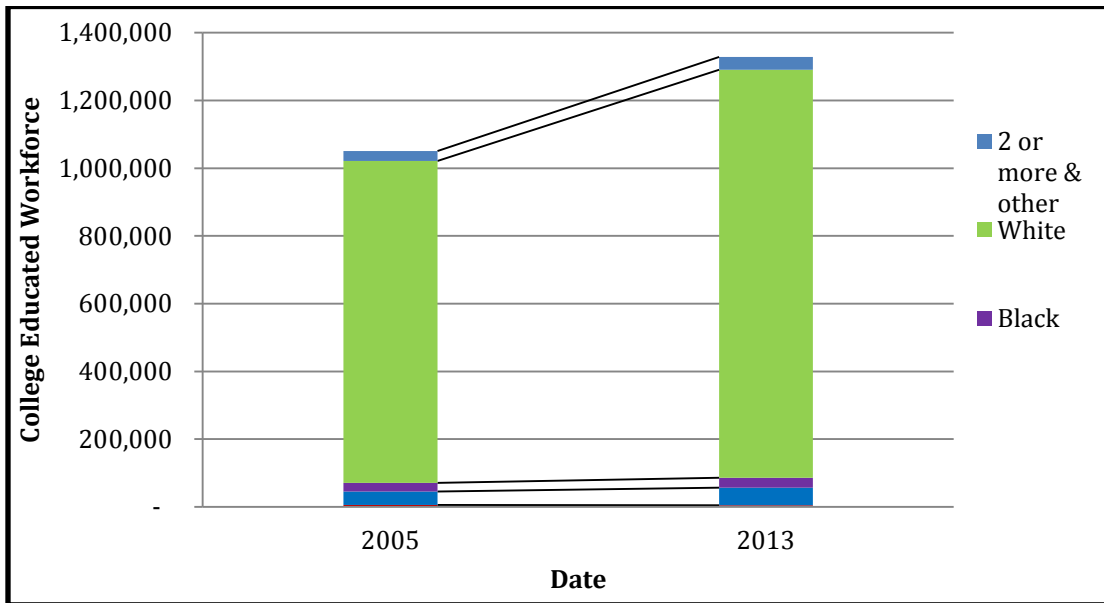
Figure 2: The Number of Minority Bachelor’s Degree Graduates from Colorado’s Public Colleges and Universities is Increasing, 2002-2013



Source: CDHE: <http://highered.colorado.gov/Data/Search.aspx>

The recent graduate data does not reflect the entire possible teacher workforce. In the American Community Survey, the U.S. Census Bureau provides information on Colorado’s college-educated workforce. Figure 3 shows Colorado’s college-educated workforce by race in 2005 and 2013. Census data reports the Hispanic ethnicity as a category separate from racial groups (e.g., white, Asian, Black and Native American): Ethnic Hispanics are described in Figure 4 below.

Figure 3: Colorado's College-Educated Workforce is Largely White



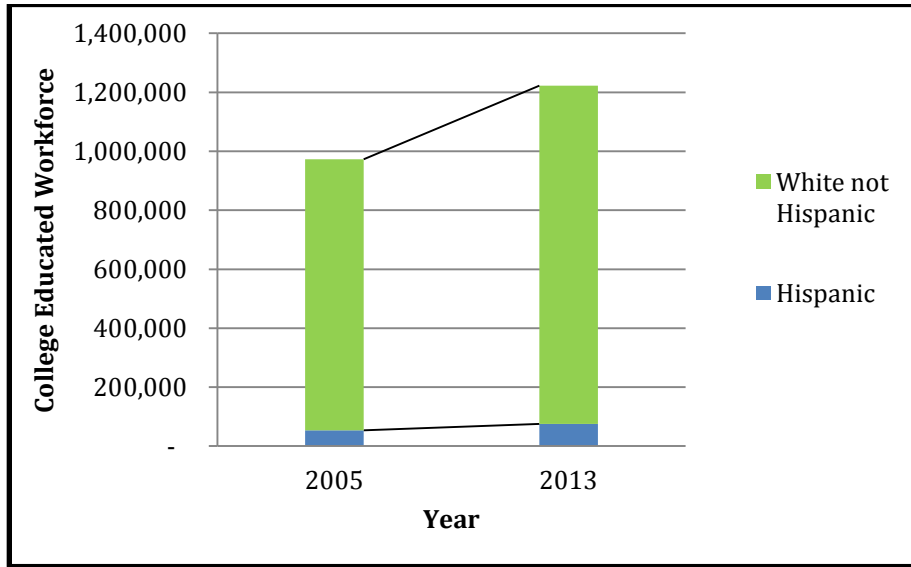
Source: U.S. Census Bureau, American Community Survey: <http://www.census.gov/acs/www/>

When looking at race, the college-educated workforce is largely white: More than 90 percent of Bachelor's degree holders in Colorado identify as white; four percent are Asian or Pacific Islander; three percent are two or more races or other; two percent are black; and less than one percent are Native American.

Between 2005 and 2013, the number of white, college-educated workers in Colorado grew by about 50,000 per year—a rate of five percent per year. Over the same time period, the number of Asian and Pacific Islander workers with college degrees also grew by about five percent per year. The growth rate for Blacks was about three percent per year, and the number of Native American workers with college degrees went down by about two percent per year.

Within the Census data, ethnic Hispanics can be any race (e.g. African-American, Native American, white, etc.) Figure 4 below shows the college-educated Hispanic population compared to the college-educated white population within Colorado in 2005 and 2013. The number of college-educated Hispanics is small when compared to the number of college-educated whites—75,000 Hispanics compared to 1,147,000 whites in 2013. However, the growth rate of Hispanic college-educated workers between 2005 and 2013 was the fastest of any racial/ethnic group, at seven percent growth per year. Overall, Hispanics make up about six percent of the total college-educated workforce in Colorado.

Figure 4: Hispanics Make up A Growing Share of College-Educated Workers



Source: U.S. Census Bureau, American Community Survey: <http://www.census.gov/acs/www/>

The high yearly growth rate in Hispanic college-educated workers is likely a reflection of the rapidly expanding Hispanic student populations at the K-12 level. The growth in the Hispanic student population is already manifesting itself in higher enrollment numbers at Colorado’s colleges and universities,⁴ and will have important implications for Colorado’s college-educated workforce down the road.

Overall, Colorado attracts college-educated workers. While data on the races/ethnicities of people moving to Colorado is limited, it appears that many of the people who move to Colorado are white.

Caveats: When considering the overall flow of teacher recruitment and retention, data provides an incomplete picture of the teacher pipeline in Colorado. Though APA can estimate how many potential hires come from in-state, out-of-state, and/or alternative routes, many data points are missing. Tracking how many minority teachers are hired and how many are retained is also difficult.

⁴ Robles, Yesenia. 2014. Colorado colleges seeing more Hispanic and minority enrollment. Denver Post. September 17, 2014. http://www.denverpost.com/news/ci_26548588/colorado-colleges-seeing-more-hispanic-and-minority-enrollment.

Snapshot 6: Teacher Preparation Program Completers and Other Graduates

Overview: There are two main tracks for teacher preparation in Colorado: University-based routes and alternative routes. This section provides data on students in university-based routes during the 2011-12 school year, compared to overall populations of university graduates. University routes include both graduate and undergraduate programs, as well as programs that do not award degrees. This data does not include alternative route programs at universities.

In the 2011-12 school year, 2,406 people completed initial licensure at university-based teacher preparation programs. Of those 2,406 completers, 1,963 were trained at public institutions.

The race/ethnicity data for students at Colorado’s public institutions is incomplete: About 11 percent of students either did not report their race/ethnicity or are foreign students (non-resident aliens). This analysis focuses on students who did report race/ethnicity: Essentially, this analysis assumes that the demographics of students who do not report race/ethnicity are similar to those of students who do report race/ethnicity. Table 10 below shows the races/ethnicities of teacher preparation completers and graduates from Colorado’s public institutions with teacher preparation programs for the 2011-2012 school year (the most recent year with available data). Graduates include those who completed undergraduate and graduate degrees. Table 10 shows that about 14 percent of completers were minorities, while about 18 percent of overall graduates were minorities.

Table 10: Races/Ethnicities of Public University Prepared Graduates and Teacher Preparation Program Completers, 2012*

	Hispanic	Native American	Asian or PI	Black	White	Two or More	Total (known)
Teacher Prep Completers	6%	1%	1%	1%	86%	4%	1,761
Graduates	9%	1%	4%	3%	82%	1%	28,453

***Assumes that Unreported Races/Ethnicities Are Distributed the Same As Reported**

Source: APA analysis of Colorado Department of Higher Education Data

When a university has a higher number of minority graduates than minority teacher preparation program completers, it indicates an opportunity to recruit more minority students to teacher preparation programs.

Since CDHE has historically only collected enrollment data from Colorado’s public universities, Table 10 is limited to public institutions. From 2011 to 2012, 82 percent of completers were prepared at public universities in Colorado; 18 percent of completers attended private institutions.

One way to identify opportunities for minority teacher recruitment is to compare the races/ethnicities of graduates to the races/ethnicities of teacher preparation program completers, as shown in Table 11. Each cell in Table 11 shows the proportion of completers from a given race/ethnicity minus the proportion of graduates of that race/ethnicity, by public college/university. A negative number indicates that the share of completers for a given race/ethnicity is smaller than the share of graduates, thus creating a negative difference.

Overall, the table shows that the share of teacher preparation program completers who are white or who identify as two or more races is higher than the share of graduates. Furthermore, the share of Hispanic, Asian, and Black teacher preparation program completers is smaller than the share of

graduates from those racial/ethnic groups. In other words, there is an opportunity to increase the share of Hispanic, Asian and Black teacher preparation completers.

Table 11: Differences in the Races/Ethnicities of Graduates Versus Teacher Preparation Program Completers at Public Universities, 2012*

	Hispanic	Native American	Asian or PI	Black	White	Two or More
Adams State University	-7%	3%	2%	-1%	3%	0%
Colorado Mesa University	-5%	-1%	2%	-1%	3%	3%
Colorado State University	-5%	0%	-2%	-1%	5%	3%
Colorado State University - Pueblo	-3%	-1%	-1%	-4%	10%	0%
Fort Lewis College	-6%	-5%	0%	0%	9%	1%
Metropolitan State University of Denver	-10%	0%	-3%	-2%	12%	2%
University of Colorado Boulder	1%	-1%	-4%	-2%	5%	1%
University of Colorado CS	-7%	0%	-5%	-4%	16%	0%
University of Colorado Denver	0%	-1%	-5%	-4%	8%	2%
University of Northern Colorado	-4%	1%	0%	-1%	-1%	6%
Western State Colorado University	-3%	0%	0%	3%	-3%	3%
TOTAL	-3%	0%	-3%	-1%	4%	3%

***A Negative Number Indicates That the Share of Teacher Preparation Completers is Smaller Than the Share of Graduates**

Source: APA Analysis of CDHE SURDS Data and Public CDHE Data

Table 12 below provides additional detail on the races/ethnicities of teacher preparation program completers, by school. Table 10 includes data for both public and private university-based programs. The rightmost two columns show the total number of teacher preparation program completers with known races/ethnicities and the total number of completers combining both known and unknown races/ethnicities.

Table 12 illustrates that Colorado’s largest teacher preparation programs are at the University of Northern Colorado (UNC, producing 606 teachers, or about 25 percent of all university-based completers) and the Metropolitan State University of Denver (Metro, producing 414 teachers, or about 17 percent of all university-based completers). Teacher preparation programs with the largest shares of minority completers are at Adams State University, Colorado State University – Pueblo (CSU – Pueblo), and Rocky Mountain College of Art (RMCAD). However, because of differences in total enrollments, the two largest programs—UNC and Metro—produce the highest actual numbers of minority graduates.

Table 12: Races/Ethnicities of University-Based Teacher Preparation Program Completers, 2012

	Hispanic	Native American	Asian or PI	Black	White	Two or More	Total (known)	Total (known and unknown)
Adams State University	20%	3%	2%	2%	74%	0%	61	64
Colorado Christian University	0%	0%	0%	0%	100%	0%	12	18
Colorado College	0%	0%	4%	0%	83%	13%	23	23
Colorado Mesa University	3%	0%	3%	0%	90%	3%	63	65
Colorado State University	3%	0%	0%	1%	91%	5%	226	233
Colorado State University - Pueblo	21%	1%	1%	2%	74%	0%	81	84
Fort Lewis College	0%	14%	0%	0%	81%	5%	21	21
Jones International University	6%	3%	0%	0%	88%	3%	32	38
Metropolitan State University of Denver	5%	1%	1%	2%	86%	4%	390	414
Regis University	0%	0%	3%	2%	94%	2%	66	73
Regis University (Resubmission)	23%	0%	8%	0%	69%	0%	13	14
Rocky Mtn. Coll. Art & Design	11%	0%	11%	11%	67%	0%	9	10
University of Colorado Boulder	7%	0%	2%	0%	89%	1%	177	187
University of Colorado – CS	2%	0%	0%	0%	98%	0%	43	45
University of Colorado Denver	8%	0%	3%	0%	87%	2%	167	190
University of Denver	3%	2%	3%	4%	80%	8%	138	141
University of Northern Colorado	5%	1%	1%	1%	84%	8%	496	606
University of Phoenix	7%	0%	0%	7%	86%	0%	56	126
Western State Colorado University	0%	0%	0%	3%	94%	3%	36	54
TOTAL	6%	1%	1%	2%	86%	4%	2110	2,406

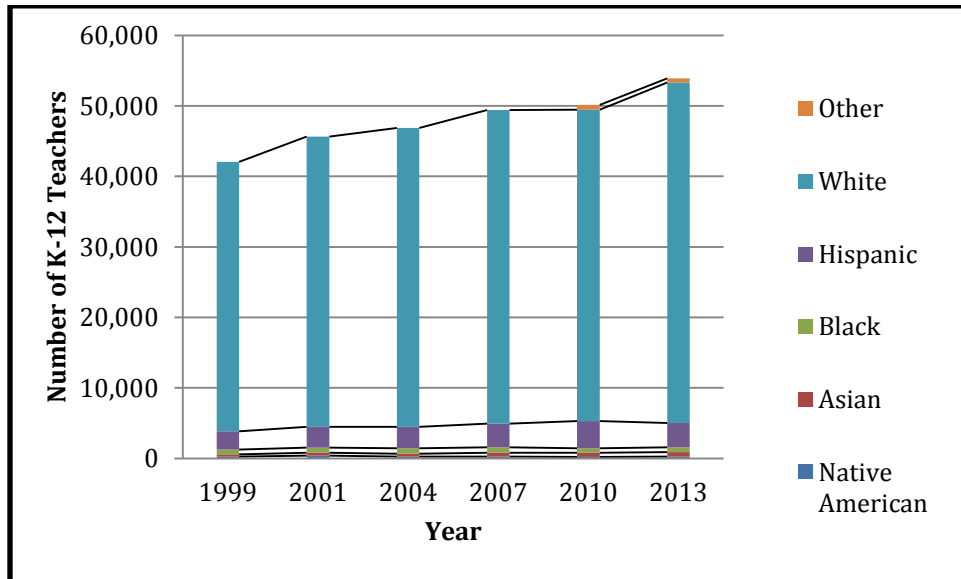
Source: APA analysis of CDHE-provided Teacher Preparation File

Caveats: APA is only able to report on 2012 data, and only on in-state institutions that prepare teachers. The number of graduates and teacher preparation program completers in 2012 does not account for individuals taking and completing alternative routes to teaching. The number of alternative route completers is unknown, as is the pool of licensed teachers.

Snapshot 7: Colorado’s Teacher Workforce

Overview: As was reported in “Keeping Up With the Kids,” diversity within Colorado’s teacher workforce has changed very little over the past 14 years (see Figure 5).

Figure 5: Colorado’s Teacher Workforce Has Grown Over the Past 14 Years, But Is Not More Diverse



Source: CDE, Staff Statistics: <http://www.cde.state.co.us/cdereval/staffcurrent>

Detail on the races/ethnicities of teachers is provided in Table 13 which shows that 10 percent of the teacher workforce is minority, with the largest minority group being Hispanics (six percent of the total).

Table 13: Race/Ethnicity of Colorado Teachers in 2013

	Native American	Asian	Black	Hispanic	White	2 or More
2013	0%	1%	1%	6%	90%	1%

Source: CDE Staff Data, available at: <http://www.cde.state.co.us/cdereval/staffcurrent>

At the same time, APA showed in “Keeping Up With the Kids” that the race/ethnicity of new teachers hired by districts in 2011 and 2012 have slightly more racial/ethnic diversity than the overall workforce (see Table 14). About 12 percent of newly hired teachers are minority, with the largest differences being one percentage point increases in the share of newly hired Black and Hispanic teachers.

Table 14: In 2011 and 2012, Newly-Hired Novice Teachers are Similar to the Existing Workforce

	Native American	Asian	Black	Hispanic	White	2 or More	Total
Educated Outside Colorado	13	79	111	346	5,453	84	6,086
Educated in Colorado	23	82	114	490	4,892	75	5,676
Total Hires	36	161	225	836	10,345	159	11,762
Percent of total hires	0%	1%	2%	7%	88%	1%	100%

Source: APA analysis of CDE HR data

Table 15 adds more detail on teacher attrition rates for the overall teacher workforce and for novice teachers (those in their first three years). Attrition is defined as working as a teacher in a given year but not working as a teacher in the next year.

Some minority groups have higher attrition rates than whites, but this is not true of all minority sub-populations. The average attrition rate for teachers is the same as the attrition rate for white teachers: about 12 percent. There are higher overall attrition rates for teachers who identify as Native American, Asian, Black, or two or more races. If all minority groups are added together, the minority attrition rate is half a percentage point higher than the white attrition rate.

The attrition rate for novice teachers is about five percentage points higher than the overall teacher attrition rate. As with the overall rates, the Hispanic and white novice teacher attrition rates are similar to or, or lower than, the average novice teacher attrition rate. The other racial/ethnic groups have attrition rates that are higher than the novice teacher average attrition rate. If all minority groups are added together, the white and minority attrition rates are roughly the same.

Table 15: Attrition for All Teachers and Novice Teachers (3 Years Experience or Less), 2010 and 2011

	Native American	Asian	Black	Hispanic	White	Two or more	Average
Overall Teacher Attrition	13%	13%	15%	11%	12%	13%	12%
Novice Teacher Attrition	18%	21%	20%	17%	18%	20%	18%

Source: APA analysis of CDE Human Resources Data

Caveats: This analysis combines 2010 and 2011 rates of attrition. The rate of attrition for new teachers is higher than the rate of attrition for teachers with more experience.