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# Keeping Up with the Kids: Increasing Minority Teacher Representation in Colorado

Prepared for  
Colorado Department of Education

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## **Keeping Up with the Kids: Increasing Minority Teacher Representation in Colorado**

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## **Executive Summary**

A major challenge in the U.S. education system, including Colorado's education system, is the mismatch between the racial and ethnic diversity of the nation's overall student population and that of the teacher workforce. In Colorado, during the 2012-13 school year, the proportion of minority students was 43% and the proportion of minority teachers was 10%.<sup>1</sup>

During the 2011-2012 school year, 48% of the nation's public elementary and secondary students were minorities, increasing to 50% by the 2013-2014 school year (see Figure 3). Most recent national data for public school teachers, from the 2011-2012 school year, reports that only 18.1% of teachers are minorities.<sup>2</sup>

Colorado House Bill 14-1175 required the Colorado Department of Education (CDE) to study and develop strategies to increase and improve the recruitment, preparation, development, and retention of high-quality minority teachers in elementary and secondary schools across the state. Through a competitive request for proposals process, CDE selected Augenblick, Palaich and Associates (APA) to prepare this report in response to HB 14-1175. We used a mixed-methods approach to evaluate minority teacher recruitment and retention, starting with a set of initial research questions to guide data collection, review, and analysis. Our final report synthesizes themes from demographic data, quantitative data, qualitative interview data, and policy data to create recommendations for different key parties in Colorado. The challenge of increasing minority teachers in Colorado involves both the recruitment and retention phases of teaching, and we analyze both of those phases in this study.

Administrators at school districts and teacher preparation programs across Colorado reported during interviews that they face critical shortages of teacher candidates of color and teachers of color. Colorado district administrators and teacher educators who were interviewed for this analysis shared a belief that increasing teacher diversity enhances students' relationships to and connections with teachers, which in turn is part of narrowing the achievement gap. However, both literature review data and interview data revealed a number of barriers to recruiting and retaining minority teachers, which include: negative perceptions of the teaching profession among minorities; low teacher salaries; barriers for minority students in attending and completing college; financial barriers associated with college; licensure tests; issues of cultural competence; and relocation.

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<sup>1</sup> For data on teacher demographics in Colorado see: Colorado Department of Education, Staff Statistics <http://www.cde.state.co.us/cdereval/staffcurrent>. Data on student demographics in Colorado are available from Source: Colorado Department of Education, student enrollment data: <http://www.cde.state.co.us/cdereval/pupilcurrent>.

<sup>2</sup> National teacher data from the U.S. Department of Education, National Center for Education Statistics, *Characteristics of Public and Private Elementary and Secondary School Teachers in the United States: Results From the 2011-12 Schools and Staffing Survey* (NCES 2013). Information on student enrollment from the Source: National Center for Education Statistics, *The Condition of Education* (2014): [http://nces.ed.gov/programs/coe/indicator\\_cge.asp](http://nces.ed.gov/programs/coe/indicator_cge.asp)

There is room to improve Colorado's current recruitment strategies. To be effective, recruitment strategies must be tailored to fit the context where minority teachers live, are prepared, and work—taking into account geographic area, population demographics, local culture, and lived experiences of minorities—since there is no single backdrop to minority teacher recruitment and retention, and no monolithic minority community. Some effective strategies include: a focus on context—geographic area, population demographics, local culture, and lived experiences of minorities—since there is no single backdrop to minority teacher recruitment and retention, and no monolithic minority community; recruitment of minority candidates already living and working in a community; intentional and focused recruitment in nontraditional areas, or from nontraditional social and professional pools like church groups, local businesses, chambers of commerce, and other community organizations; support for minority candidates' cultures, and for cultural competency in general, within districts and teacher preparation programs; a focus on teaching as a way to give back to the community, particularly for minority teachers who may have a strong sense of humanistic commitment; and implementation of programs at each stage in people's careers (early outreach / grow your own programs, recruitment within college, and recruitment of recent graduates and mid-career switchers).

While at least half of Colorado teachers are trained outside of the state, in-state programs—both traditional and alternative—are larger sources of new minority teachers. New hires to school districts in Colorado include a slightly higher proportion of minorities than the state's overall teacher population: 12% of new hires are minorities compared to 10% of all teachers. The data on the race/ethnicity of new college graduates in Colorado is incomplete. However, public and private university-based teacher preparation program graduates appear to include an even higher percentage of minorities (14%) than new hires into Colorado's teacher workforce. And it appears that 21% of new bachelor's degree graduates are minorities. Thus, there is an expanding possible pool of new minorities that could be entering the classroom.

Once minority teachers are trained and placed in classrooms, the focus shifts to retention. Factors like student and teacher characteristics, job structure, and working conditions all influence rates of retention. Our research found a number of strategies for retention, including: higher salaries and incentives; effective principals and school leadership; comprehensive mentoring and induction programs; networks of teacher collaboration and support; increased classroom autonomy; better facilities and education resources; and support of, or positive reinforcement for, teachers' humanistic commitments.

Three major strategies, or themes, emerged from data analyzed for this report. First, there are shared minority teacher recruitment and retention goals across school districts and teacher preparation programs, but limited capacity to address these goals. While there are examples of successes in Colorado and across the nation, many district employees and teacher preparation administrators still need more capacity in terms of support, resources, knowledge, and skills to deal with this critical issue.

Second, programs must fit with contexts. Local efforts to address minority recruitment and retention are occurring in very different contexts across the state. Different communities within Colorado have very

different minority populations. Equally important, these communities have different strengths and concerns to consider when addressing the dearth of minority teachers. For example, some communities have minority populations who value living and working near their families and hometowns and who might be reluctant to leave their communities for colleges, universities, or teacher preparation programs. Other communities have easy access to teacher preparation programs. Some of the larger school districts have resources to support extensive recruitment to teacher preparation programs.

Third, relationships are key. Relationships—between education institutions and minority communities, between minority and majority educators, between mentors and minority novices as well as prospective teachers—are key to recruiting and retaining teachers. Relationships are a key concept to consider when developing pipeline strategies. Relationships signal long-term engagement to supporting minority communities in Colorado. A focus on relationships also promotes cultural awareness, sensitivity, encouragement, and continued support among education professionals.

Taken together, this means there is no single, statewide solution to the challenge of recruiting and retaining minority teachers. Instead, there are multiple possible solutions, tailored to fit the assets and needs of different communities and different parts of the state. The role of the state is to help communities organize and build capacity to recruit and retain minority teachers, and to evaluate recruitment and retention efforts to learn from successes and challenges. In order to accomplish these goals of organization, capacity-building, and continued evaluation, we make these recommendations:

***Recommendations for the Legislature:*** The legislature has a key role in providing incentives and long-term capacity-building support for minority teacher recruitment and retention. We recommend the legislature create and authorize a multi-million dollar per year program that consists of a set of five to ten multi-year grants. These grants would be available to individual and consortia of districts, teacher preparation institutions, and non-profit organizations to increase the recruitment and retention of effective minority teachers. The grantees should conduct programs that best meet their needs and context. Below is a list of program options.

- Create Regional Minority Teacher Recruitment Alliances, responsible for developing minority teacher recruitment plans for their respective member districts.
- Develop financial incentives, such as bonuses or loan forgiveness, for minority teachers.
- Develop and grow Teacher Cadet programs focused on minority students.
- Create minority teacher induction programs between districts and teacher preparation programs.
- Provide principal, school staff and district administrator training and support on cultural competence and minority teacher recruitment and retention.
- Create financial supports for paraprofessionals attaining their teaching licenses.
- Forge partnerships between Minority Serving Institutions (MSIs) and local districts in Colorado to enhance the minority teacher pipeline.
- Provide additional funding for mid-career recruitment programs focused on attracting minorities into the classroom.

- Support centers within teacher preparation programs to assist with minority teacher recruitment, advocacy, and support.

After the proposals process, recipients awarded grant funding could determine how to best use resources based on their local context and needs. Grants should strengthen the recruitment and training of teachers of color through both traditional and alternative routes. The grant program should also be structured to help grow the capacity of districts that do not currently have experience with grant competitions or human resources innovations (e.g. smaller, poorer, more rural districts).

Building capacity will require monetary resources, but with specific expectations for how these resources will be used. Put differently, these grant efforts should not just passively exist; they must accomplish measurable progress. To this aim, the legislature must require collection of data on progress, provide for periodic evaluation of grant-funded programs, and reporting so that program successes and pitfalls can be shared within the education community.

As school districts, teacher preparation programs and non-profits would propose projects to create and strengthen minority teacher pipelines, data collection will be key to evaluating and learning from recruitment and retention programs to help determine how resources are best allocated. Some data collection will require legislative mandates so that all of the appropriate data is collected and can be shared across state departments.

Any efforts to improve minority teacher recruitment and retention should flow out of an underlying theory of action, with four components: identification of potential teachers to recruit or current teachers to retain; engagement with potential teachers to recruit or current teachers to retain; support for potential and current teachers to help them enter or remain in the profession; and outcomes in terms of increasing the number of minority teachers. Each proposal should describe the process for accomplishing each of the four components above, as well as the challenges and supports to the implementation of those components. Evaluations for each program should be tailored to support implementation needs and to gather program-specific evidence of impact. Along with this specificity, evaluations should also examine the implementation of each program component listed above.

At the same time that program should include these components, programs should also be monitored through a set of indicators, or evaluation and measurement questions to track progress. Shared indicators of success will strengthen our ability to identify and learn from successful programs. To develop these indicators, we recommend creating a Board for Investing in Colorado Educators (BICE): a consortium or collaborative group of educators and leaders to guide the broader recommendations and the implementation of this report.

In structure and design, BICE would mirror consortiums in other states, like the Oregon Education Investment Board (OEIB). The OEIB ensures that Oregon's legislatively adopted "Equity Lens," is used with fidelity. The lens, as described by an OEIB member interviewed for this report, is a "guiding premise for examining every aspect of education, and for engaging others in discussion of data disaggregated by

race, ethnicity, gender, and economic level.” In Colorado, BICE could host discussions prior to the release of a grant-related RFP, and provide support districts or programs that do not regularly participate in competitive grant programs.

BICE should determine how to create competition for developing a minority teacher pipeline, deciding what an effective grant application looks like, contains, or involves. BICE would also set up specific measures of progress. We suggest the following indicators as starting points:

1. How many people were identified as potential teachers or current teachers to be retained?
2. How many people were engaged in the process of learning about the program to recruit or retain teachers?
3. How many people entered the program?
4. What supports did people receive?
5. Did all program participants receive the same supports, or did supports vary by person? If the supports varied by person, why and how did they vary?
6. How many people successfully completed the program?
7. How many minorities who participated in the program entered teaching or were retained in teaching?

Indicators of progress could also focus on how many minority teachers are staying in classrooms beyond their first three years of teaching, demonstrating a high likelihood to stay in the teaching profession long-term. As part of this work BICE should create and issue a yearly educator equity scorecard (that includes minority teacher preparation, recruitment and retention statistics, highlights successful program and important next steps for addressing this issue.

***Recommendations for Administrative Support:*** The recommendations for administrative support are threefold. First, CDE should conduct an expert examination of the teacher licensure test results. This examination could identify whether there are differences in pass rates by race/ethnicity, and whether the tests, or aspects of the tests, are barriers for minority teacher candidates. If there are significant differences in pass rates between racial/ethnic groups, then CDE should review the tests for cultural bias, validity, and reliability as indicators of teacher preparation and success. And if the tests are deemed valid, reliable predictors of educator effectiveness, and if there are still disparities in pass rates between racial/ethnic groups, then the focus should shift to helping minority candidates understand and effectively prepare for the tests. This preparation could take the form of classes, coaching, tutoring, or other study strategies.

Second, CDE can either help broker and facilitate programs or hire a contractor to respond to the legislation-authorized incentive programs for minority teacher recruitment. For example, CDE could help develop a resource center within the state to help build district capacity to recruit and retain minority teachers; help districts collaborate and share resources; support minority teachers as they seek workplaces that are a good fit to their needs and expectations; and communicate the importance of diversity. A resource center could also include a clearinghouse to distribute information—a place for districts or preparation programs to turn with questions about any part of the minority teacher recruitment and retention pipeline.

Third, Colorado must improve its data collection to ensure it has the capacity to fully describe the teacher preparation pipeline and workforce. For all of the current and new programs that support people through the teacher pipeline, there must be clear plans and procedures for data collection on who is in the pipeline and whether they are retained in the pipeline. The consortia developing plans for the pipeline should create data collection plans and get legislative permission to share data as needed.

***Recommendations for the Teacher Preparation Community:*** Teacher preparation programs must respond to legislation-authorized grant programs. Equally important, teacher preparation programs can continue to be a proactive part the solution to the challenge of increasing the proportion of minority teachers in Colorado. Teacher preparation programs can continue and expanding efforts to be welcoming, culturally sensitive places where all candidates feel supported. Furthermore, preparation programs can expand connections with surrounding communities, community colleges, and districts to create networks of relationships where candidates of color can excel.

***Recommendations for School Districts:*** Districts play a major role in recruiting students of color to teacher assistant roles, teacher cadet programs, and other grow-your-own pathways to teaching. Districts should build on existing resources that include creating and sustaining highly supportive licensure programs for paraprofessionals and other classified staff. All districts need to evaluate and improve their efforts at minority teacher recruitment and retention. Districts should also consider how to best educate all staff—minority and nonminority—in issues of diversity and cultural competence.

In the long run, school districts play a central role in preparing and supporting minority students as they enter higher education. In other words, districts play a central role in preparing their own workforce. Therefore long-term efforts to increase the number of minority students who succeed in college, and believe teaching is a good career after they graduate, are central to changing the demographics of Colorado's teacher workforce.

***Recommendations for the Minority Community:*** Efforts to address minority teacher recruitment and retention should involve various members and groups from the minority community (e.g. NAACP Denver, the Department of Africana Studies at Metro State University Denver, CLLARO, Colorado Latino Forum, etc.) in problem-solving conversations and recommendations. Minority groups can help connect interested potential teachers with preparation and pipeline opportunities, and can help new minority teachers—whether new to Colorado or to the teaching profession—feel welcomed and connected to Colorado.

***Recommendations for all Stakeholders:*** Minority teacher recruitment and retention is a change in culture, a set of technical policy challenges, and a political challenge. Above we have outlined the technical and policy recommendations. But there is also a political challenge of sustaining public policy efforts around this issue. Key to the implementation and success of these efforts are sustained partnerships among stakeholders. These partnerships need to advocate for and support efforts to improve minority teacher recruitment and retention.

## **Introduction**

A major challenge in the U.S. education system, including Colorado's education system, is the mismatch between the diversity of the overall student population and that of the teacher workforce. During the 2012-2013 school year, Colorado's proportion of minority students was 43% while the proportion of minority teachers was about 10% (see Figure 2 and Figure 4). This is not only a challenge in Colorado: In 2011-12, 48% of the nation's public elementary and secondary students were minorities, increasing to 50% by the 2013-2014 school year (see Figure 3). Most recent data for public school teachers, from the 2011-2012 school year, reports that only 18.1% of teachers are minorities.<sup>3</sup>

Colorado House Bill 14-1175 required the Colorado Department of Education (CDE) to study and develop strategies to increase and improve the recruitment, preparation, development, and retention of high-quality minority teachers in elementary and secondary schools across the state. In response to HB 14-1175, CDE released a public request for proposals during the summer of 2014. Augenblick, Palaich and Associates (APA)<sup>4</sup> was awarded a contract to complete this mixed-method study in August 2014.

This report discusses minority teacher recruitment, minority teacher retention, and policy recommendations to strengthen Colorado's recruitment and retention pipeline. The report uses state and national data to identify minority teacher recruitment and retention issues. It integrates individual experiences, described in interviews, with supporting information from broader literature. Barriers to increasing minority teacher representation in Colorado classrooms are identified and followed with discussions of effective local and national recruitment and retention strategies.

The recruitment section of this report covers barriers to minority teacher recruitment as well as researched best practices for drawing candidates of color to the teaching profession. Discussions of retention also include acknowledgements of barriers followed with proven strategies for reducing rates of minority teacher attrition. The report also includes a brief discussion of efforts to diversify the teacher workforce in two states outside of Colorado, Connecticut and Oregon. Research from these states is meant to provide context for Colorado's recruitment and retention pipeline, and to offer examples of successful efforts and lessons learned in other states. The report concludes with a series of recommendations for district- and state-level leaders.

## **Methods**

APA used a mixed-methods approach to this project, integrating data from multiple sources to create a comprehensive picture of minority teacher recruitment and retention issues and potential solutions. For

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<sup>3</sup> U.S. Department of Education, National Center for Education Statistics, *Characteristics of Public and Private Elementary and Secondary School Teachers in the United States: Results From the 2011-12 Schools and Staffing Survey* (NCES 2013).

<sup>4</sup> APA is a Denver-based education policy and research firm with over 30 years experience using analysis to support improved policy and practice at the local, state and national levels.

the purposes of this study, we define “minority” as a racial or ethnic minority, i.e. non-white.<sup>5</sup> Additional detail on research questions and methodology are included in Appendix I.

The central research questions for this study were created through consultation with CDE and other stakeholders, and are:

1. What are the trends in minority teacher and minority student representation in the classroom?
2. What are the causes of differences between teacher and student demographics?
3. What are the best or most promising practices used in other states, at the local level, and at the national level, for recruiting minorities to the teaching profession?

The next sections provide a brief overview of the data sources used for this study. Additional information on data and methods can be found in Appendix I.

#### ***Demographic Data Sources***

Demographic data describing the student, college-going and adult populations on Colorado comes from multiple sources. Public data retrieved from CDE, used to describe Colorado’s K-12 student population and teacher population, is available at: [www.cde.state.co.us/cdereval](http://www.cde.state.co.us/cdereval). CDE also provided the research team with restricted data from the 2010-2013 Human Resources data set. APA used this data to provide detailed descriptions of flows in and out of the teacher workforce. APA used public data from the Colorado Department of Higher Education (CDHE) to describe our college student population. This public data is available at [highered.colorado.gov/data/research/](http://highered.colorado.gov/data/research/). APA used restricted data from CDHE’s student unit record data system (SURDS) from 2011-2013 to describe students studying education in Colorado’s public higher education institutions.

The data provides an incomplete picture of the teacher pipeline in Colorado and CDE and CDHE must continue to work to improve data on people entering and within the teaching profession.. Over the past 15 years there have been some improvements to the data, in particular CDHE data that captures who enters teacher preparation programs at colleges and universities and efforts to build the capacity to track teachers from their university training into schools and districts. However, the quality of some data has declined. First the Human Resources data collected in 2014 did not have accurate descriptions of the race ethnicity of teachers. Second, there is no current data around participants in alternative teacher preparation programs. This is a decline in the available data from when alternative programs were studied by Bassett et al. in 2004. Efforts to improve data must include accurate information on teacher race/ethnicity and on those in alternative teacher preparation programs.

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<sup>5</sup> Over the period being described (1995 through 2013) the race and ethnic categories used by government agencies have evolved. The non-white group includes black (we use “African-American” interchangeably with “black”), Asian (in combination with Native Hawaiians and Pacific Islanders (PI), Native American and Alaska Native, Hispanic, and after 2008 the group of two or more races prevalent in the data analyzed for this report. Hispanic is an ethnic group rather than race, representing people of Cuban, Mexican, Puerto Rican, South or Central American (except for Brazil), or other Spanish culture or origin regardless of race. Data in this report from education agencies treat Hispanic as a unique and separate race/ethnic group. Census data in this report does not treat Hispanic as a separate race/ethnic group.

APA used census data from the American Community Survey to describe the college educated population, youth (under 18), and location. Census data used to make maps of the state came from the Colorado Demographers Office, which is part of the Department of Local Affairs.<sup>6</sup> Data on the education level of the workforce was downloaded directly from the Census Bureau.<sup>7</sup>

### ***Literature Review***

Given the rapid development of recruitment and retention programs as well as new developments in educator research, the literature was focused on recent literature (within the past five years). Searches were made within academic databases as well as non-academic sources to describe programs using keywords “minority teacher,” “minority teacher recruitment,” and “minority teacher retention.” We also consulted stakeholders to ensure we accessed literature on the minority experience.

### ***Qualitative Data Collection***

The research team gathered qualitative data from districts and teacher preparation programs that are successful or identified by CDE as engaged in recruiting and retaining students and teachers of color. We also spoke current and potential teachers, as well as professionals working two other states with ongoing programs to increase the number of minority teachers. Data was collected from 67 people—52 individual interviews and several focus groups as shown in Table 1. Additional information on the data collection methodology is in Appendix I.

**Table 1: Interview Sample**

	District Employees	Teacher Preparation Programs	Teachers (Current and Former)	Prospective Teachers	Out of State Task Forces, State Board Members
<b>Total number of participants</b>	19	22	16	8	3

### ***Interviews Overview***

The interview and focus group protocols were developed based on key issues identified in the literature and feedback from CDE staff on key issues important to this inquiry. The protocols can be found in Appendix I.

Interview data from districts was collected from 21 interviewees in 14 districts. APA identified successful districts using a longitudinal analysis between 2000 and 2010 using public CDE data on district staff. The final sample was created to ensure we contacted successful districts throughout the state, representing all locales within the state and representing the range of enrollment in Colorado’s districts from under 1,200 through over 25,000 students.

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<sup>6</sup> Colorado Demographer: <http://www.colorado.gov/cs/Satellite/DOLA-Main/CBON/1251590805419>

<sup>7</sup> U.S. Census Bureau, American Community Survey: <http://www.census.gov/acs/www/>

Interview data from teacher preparation programs was collected from 22 interviewees from nine different teacher preparation programs. These programs represented both traditional university based programs and alternative teacher preparation programs. These programs are from throughout the state including the Western Slope, Southern Colorado, the Front Range, and Northern Colorado.

### ***Other State Interviews***

To situate our findings and recommendations in a broader context, APA chose to study minority teacher recruitment and retention in Connecticut and Oregon identified through our literature review as making statewide efforts to improve minority teacher recruitment and retention.

APA conducted research in these comparison states as a protective and prescriptive measure for Colorado's own efforts—protective in that it ensures we can learn from outside states' mistakes and challenges, and prescriptive in that it ensures we take note of outside states' greatest successes. In our interviews with individuals in Connecticut and Oregon, we focused on lessons learned and best practices for legislation implementation. We interviewed two people from Connecticut and two from Oregon and reviewed public information on their efforts.

### ***This Study***

Across Colorado, district and teacher preparation administrators report critical shortages of teacher candidates and teachers of color. Colorado district administrators and teacher educators who were interviewed for this analysis shared a belief that increasing teacher diversity enhances students' relationships and connections with teachers, which in turn is part of narrowing the achievement gap. However, there are a number of barriers to recruiting and retaining minority teachers, including: negative perceptions of the teaching profession among minorities, low teacher salaries, barriers to minorities in attending and completing college, financial barriers associated with college, licensure tests, issues of cultural competence, and relocation.

Three key themes emerged from all of the data analyzed for this report:

- 1) ***There are shared goals, but limited capacity.*** There is a common desire across communities to address minority teacher recruitment and retention issues. While there are examples of successes in Colorado and across the nation, many district employees and teacher preparation administrators still need additional capacity in terms of support, resources, knowledge and skills to deal with this critical issue.
- 2) ***Fit with context.*** Local efforts to address minority recruitment and retention are occurring in very different contexts across the state. Different communities within the state have very different minority populations. Equally important, these communities have different strengths and concerns to consider when addressing the problem. For example, some communities have minority populations who value living and working near their families and hometowns. Other communities have easy access to teacher preparation programs. Some of the larger school districts have access to resources to support extensive recruitment and teacher preparation programs, while many smaller districts have very small recruitment budgets.

- 3) ***Relationships are key.*** Relationships—between education institutions and minority communities, between minority and majority educators, between mentors and minority novice as well as prospective teachers—are key to recruiting and retaining teachers. Relationships are a key concept to consider when developing strategies. Relationships signal long-term engagement to supporting minority communities in Colorado. A focus on relationships also promotes cultural awareness, sensitivity, encouragement, and continued support among education professionals.

Taken together, this means there is no single, uniform statewide solution to this challenge. Instead, using multiple programs tailored to meet the assets and needs of different communities and regions will likely be more effective. The role of the state is to help communities organize and build capacity to recruit and retain minority teachers as well as evaluate recruitment and retention efforts to learn from successes and challenges.

### **The Need for and Value of Having Minority Teachers in the Classroom**

Many district and teacher preparation administrators feel that the hiring of more minority teachers is a moral imperative. Without exception, the hiring goal of district administrators is to achieve representational equity in every position in their district. But before this goal can be achieved, districts need candidates who mirror their student populations. In addition to this need for teacher candidates of color, there is a need for culturally and linguistically diverse teacher candidates. For example, many districts need teacher candidates who can teach English as a Second Language (ESL) for English Language Learner (ELL) students. Such ESL teacher candidates are often Latino/a native Spanish speakers, so recruiting these types of linguistically diverse candidates can also be a strategy for bringing in more candidates of color.

In interviews with district employees, respondents uniformly emphasized the importance of student access to, and relationships with, positive role models who look like them. Interviewees shared the belief that increasing teacher diversity would necessarily enhance student-teacher relationships and connections. Many argued that employing more teachers of color can contribute to narrowing the achievement gap.

A more diverse pool of teachers may contribute to an increase in the following positive outcomes:

- 1) ***Role Models:*** All interview respondents expressed the importance of student access to, and relationships with, positive role models who look like them. In an increasingly diverse society, minority teachers can serve as role models for both minority and white students.<sup>8</sup> It is crucial for all children to have access to role models from a variety of backgrounds in order to successfully navigate their way in an increasingly diverse world—to gain cultural consciousness and understanding of a wide array of experiences. Furthermore, districts with diverse teacher representation can provide students with a model of a diverse professional world:

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<sup>8</sup> Bireda, Saba and Robin Chait. 2011. Increasing Teacher Diversity: Strategies to Improve the Teacher Workforce. Center for American Progress.

*"We have a broader societal interest in preparing students to interact in diverse work places and we want our district to affect that." (District Administrator)*

*"A diverse working environment adds complexity to your organization. It deepens perspectives and thought. We need to have people of color to add richness to the experience. Diversity represents who we are as a nation." (District Administrator)*

Students can relate to teachers who come from the same type of cultural background as they do. When a student sees a mirror of him or herself in a teacher, that mirroring can be a major boon for motivation and learning. One interviewee, a teacher, explained:

*"I love seeing students of color get excited when they see an African-American teacher. I feel rewarded when I can impart something into kids' lives, leaving them with something learned about structure, discipline, and socially acceptable behavior." (Teacher)*

- 2) **Cultural Competence:** Minority teachers may, in general, possess greater understanding of minority students' life experiences and cultural backgrounds. This may be an invaluable teaching and learning tool.<sup>9</sup> Administrators expressed views that if districts can build the overall cultural competency of their organizations, then this will improve their ability to eliminate barriers to success for both students and teachers of color. This argument is supported by recent research showing the positive impacts minority teachers have on standardized test scores, attendance, retention, advanced-level course enrollment, and college-going rates for minority students.<sup>10</sup>
- 3) **Humanistic commitment:** Minority teachers often enter teaching out of humanistic concern and commitment to working with poor and disadvantaged students.<sup>11</sup> One interviewee, a Latina former teacher, noted how her perception that the "system was broken" for Latinos provided an impetus to view education from a political perspective, with a keen eye on who has power and who does not. This perspective was reinforced when she took a course on minority politics, starting her on a path to become a teacher for disadvantaged students. While research suggests that minority teachers often feel humanistic commitments to teaching, this does not suggest that white teachers lack these motivations; it simply means that minority teachers may be more likely to seek and accept jobs at schools serving predominantly minority students, often in low-income, urban areas. These schools are often "hard-to-staff" and face chronic teacher shortages. One Colorado district administrator said that their district was working hard to attract teachers to high poverty schools and that teachers of color are hearing the call and serving in turnaround schools. However, it is hard to work in these schools:

*"The work is really hard and incentives are too low. We are pushing hard on increasing the incentives. We really need to look at how districts staff those high needs schools and provide the right supports for teachers." (District Administrator)*

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<sup>9</sup> Ibid.

<sup>10</sup> Villegas, Anna Marie and Jacqueline Jordan Irvine. 2010. Diversifying the Teaching Force: An Examination of Major Arguments. *The Urban Review* 42(3): 175-192.

<sup>11</sup> Achinstein, B., R.T. Ogawa, D. Sexton, and C. Freitas. 2010. Retaining Teachers of Color: A Pressing Problem and a Potential Strategy for "Hard-to-Staff" Schools. *Review of Educational Research* 80(1): 71-107.

Citing these benefits of a diverse teacher workforce, many of those interviewed argued that employing more minority teachers will create improved access and outcomes for minority students.<sup>12</sup> Colorado administrators and teacher educators shared a belief that increasing teacher diversity enhances students' relationships and connections with teachers, which they feel contributes to narrowing the achievement gap.

### **Cultural Consciousness**

In gathering research and creating and implementing recommendations, it is imperative to acknowledge the various cultural contexts of this study. In other words, this report has different implications depending on the audience and the context. These research implications may seem less immediate to a white policymaker than to a Navajo schoolteacher, or less personal to an employee within a large district than to a one-person team trying to bring diverse teachers to a rural district. But the reality is that this issue holds deep implications for all residents of our increasingly diverse state.

In completing this report, the research team worked to recognize its own privilege and bias, and to avoid treating minorities as monolithic groups.<sup>13</sup> As Garcia, Young, and Pimentel explain in their collectively edited volume, *From Uncle Tom's Cabin to The Help: Critical Perspectives on White-Authored Narratives of Black Life*, individual stories must be honored:

*"[Communities of color have a] right and responsibility as persons and a people to speak our own special cultural truth—the truth of our lives, work, struggles, hope, pain, and oppression and all the other experiences, initiatives, and aspirations—that makes us who we are and are constantly becoming as we strive to come into the fullness of ourselves."*<sup>14</sup>

Furthermore, as the authors of this study are predominately white, the research team acknowledges a lack of understanding of certain narratives, nuances, and lived experiences of minority individuals. To help account for this gap in understanding, we collaborated with stakeholders from Community Organizations Aligning Together (COAT) to gather firsthand stories from communities of color. COAT representatives conducted these interviews, which have subsequently been incorporated into this report.

Even with these individual-lived experiences embedded in the research, larger systematic factors are at play in the discussion of minority teacher recruitment and retention. In discussing the current teaching landscape and making recommendations, the research team has tried to be mindful of structural problems of race and racism throughout this study.<sup>15</sup>

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<sup>12</sup> Ingersoll, R.M. and May, H. (2011). Recruitment, Retention and the Minority Teacher Shortage. Consortium for Policy Research in Education. CPRE Research Report #RR-69.

<sup>13</sup> Garcia, C., V.A. Young, and C. Pimentel. *From Uncle Tom's Cabin to The Help: Critical Perspectives on White-Authored Narratives of Black Life*. New York: Palgrave Macmillan, 2014, pp. 153

<sup>14</sup> Ibid, pp. 237.

<sup>15</sup> Ibid, pp. 8.

There are a number of programs and publications in existence to help guide cultural consciousness in education. The research team found Teaching Tolerance, a project of the Southern Poverty Law Center, to be an extremely useful resource in our work on this project.<sup>16</sup>

## Trends in the Teaching Force and Student Population

There are several large trends affecting Colorado's overall teacher workforce. These trends, which are mirrored in the national teacher workforce, help set the context for this study.<sup>17</sup> The teacher workforce shows, generally:

- **An Increase in Size:**

**Colorado:** The Colorado teacher workforce has grown 17% from 1999 to 2013, expanding by over 10,000 teachers to 50,534 in 2013 (see Figure 2).<sup>18</sup> During the same period, the Colorado student population expanded by 18% to 877,000 (see Figure 4).

**Nationally:** The national teaching force has also grown considerably in size, expanding by 13% from 2000 to 2013. At the same time, the national student population has grown by 5%.

Immediately following the economic downturn of 2008, there was a slight decrease in the number of teachers, likely due to layoffs and hiring freezes.<sup>19</sup>

- **Changes in Age:**

**Colorado:** The teaching force in Colorado has become younger, as shown in Figure 1. In 2000, the largest number of teachers belonged to the 50–54 age group. In 2013, the largest number of teachers were in the 30–34 age group.<sup>20</sup>

**Nationally:** The increase in the proportion of older teachers is largely over and may be reversing. For example, the modal, or most common, age of a teacher in 1987 was 41. By 2008, the modal age had risen to 55, but since 2008 it has dropped to 30 due to a large influx of young new teachers.<sup>21</sup>:

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<sup>16</sup> Learning Point Associates. Quality Teaching in At-Risk Schools: Key Issues.

[http://www.tolerance.org/tsdi/sites/tolerance.org.tsdi/files/assets/general/Recruiting\\_Minority\\_Teachers.pdf](http://www.tolerance.org/tsdi/sites/tolerance.org.tsdi/files/assets/general/Recruiting_Minority_Teachers.pdf)

<sup>17</sup> Ingersoll, R., Merrill, L., & Stuckey, D. (2014).

<sup>18</sup> <http://www.cde.state.co.us/cdereval/staffcurrent>

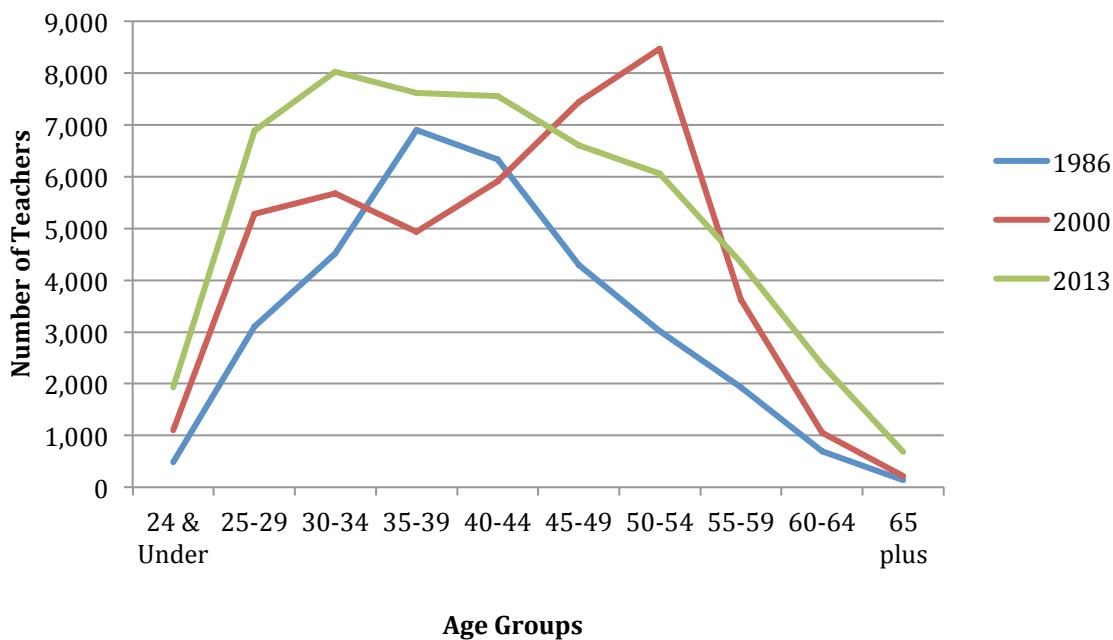
<sup>19</sup> U.S. Department of Education, National Center for Education Statistics. Projections of Education Statistics to 2021. [http://nces.ed.gov/programs/projections/projections2021/tables/table\\_16.asp](http://nces.ed.gov/programs/projections/projections2021/tables/table_16.asp); National Center for Education Statistics. Digest of Education Statistics. Enrollment and percentage distribution of enrollment in public elementary and secondary schools, by race/ethnicity and region: Selected years, fall 1995 through fall 2023.

[http://nces.ed.gov/programs/digest/d13/tables/dt13\\_203.50.asp](http://nces.ed.gov/programs/digest/d13/tables/dt13_203.50.asp)

<sup>20</sup> <http://www.cde.state.co.us/cdereval/staffcurrent>

<sup>21</sup> Ingersoll, R., Merrill, L., & Stuckey, D. (2014).

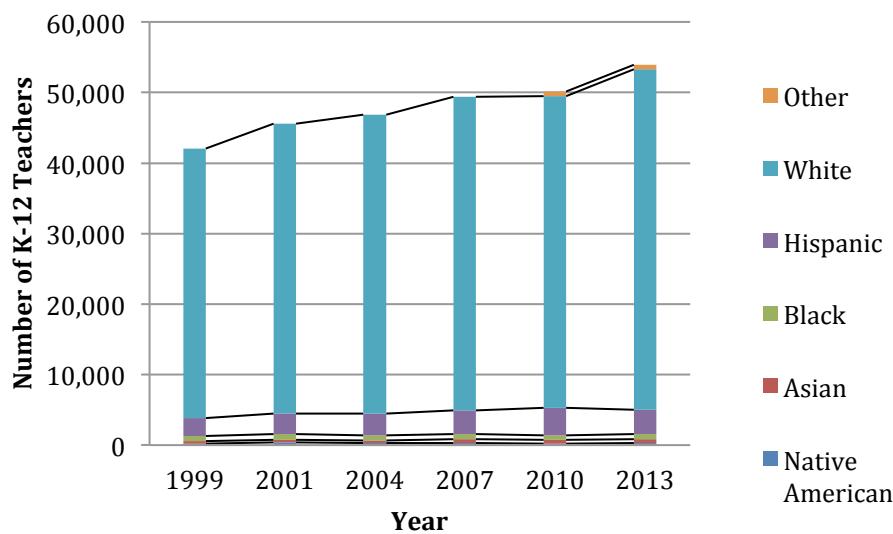
**Figure 1: Colorado's Teacher Workforce is Younger Now Than in the Past**



Source: Colorado Department of Education, Staff Statistics,  
<http://www.cde.state.co.us/cdereval/staffcurrent>

- **National growth in teacher workforce racial/ethnic diversity, while teacher diversity in Colorado remains static:**  
**Colorado:** The percentage of minority teachers in Colorado has remained low around 10% since 1999. The number of white, Hispanic, and Asian teachers has trended up over the past 15 years and remained fairly constant in share of workforce at about 90%, 7%, and 1%, respectively. The number of Black and Native American teachers has remained steady at approximately 700 (about 1% of total) and 250 (less than 1% of total), respectively. Over this period the share of black and Native American teachers in the Colorado workforce has declined.  
**Nationally:** The national teaching workforce has become more diverse. The proportion of minority teachers has risen from 12.4% in 1987–88 to 17.3% in 2011–12. Along with the expansion in size of the overall teaching force, the total number of minority teachers increased from 325,000 in 1987–88 to 666,000 in 2011–12. This growth outpaced the increase in minority students and was more than twice the growth of white teachers.

**Figure 2: Colorado's Teacher Workforce Has Grown Over the Past 14 Years, But is Not More Diverse**



Source: Colorado Department of Education, Staff Statistics  
<http://www.cde.state.co.us/cdereval/staffcurrent>

- **National growth in teacher attrition, while teacher attrition in Colorado remains stable:**  
**Colorado:** CDE data shows teacher attrition in Colorado has remained fairly stable since 2001.<sup>22</sup> APA's analysis of restricted CDE data shows differences in minority teacher attrition rates in 2010 and 2011 by race/ethnicity: White and Hispanic teachers' attrition rate was 11%, while attrition for Native Americans, Asians and those claiming two or more races was 13%. Attrition rate for blacks was 15%. Across all racial/ethnic groups, teachers in their first five years are much more likely to quit the teaching profession (18% attrition rate) than teachers who have completed five years in the classroom (10% attrition rate). Between 2010 and 2012, some racial groups—Asians, black, and teachers with two or more races—had higher numbers of teachers still in their first three years of teaching (i.e. higher representations of novice teachers), and thus had higher attrition rates.
- **Nationally:** The national workforce is less stable. Overall, the attrition rate for teachers rose by 41%, from 6.4% in 1988–89 to 9% in 2008–09. However, nationally attrition rates are not equal across types of schools or teachers. Urban schools serving high-poverty areas with high-minority (>75%) student populations have the highest rates of attrition. Also, minority teachers have higher rates of attrition than white teachers, and this is likely due to the fact that they are primarily staffing schools with the toughest working conditions, and thus, the highest rates of attrition. Also, there are higher rates of attrition for beginning teachers: About 41% of new teachers leave the profession within five years<sup>23</sup>.

Overall, while the national teacher workforce has diversified, Colorado's has remained unchanged at 90% white. This may be a factor of the race/ethnicity of college graduates moving to Colorado. We know

<sup>22</sup>Source Colorado Department of Education, Staff Statistics <http://www.cde.state.co.us/cdereval/staffcurrent>

<sup>23</sup> Perda, D. 2013. Transitions into and out of teaching: A longitudinal analysis of early career teachers turnover. PhD Dissertation. University of Pennsylvania (cited in Ingersoll, Merrill, and Stuckey 2014).

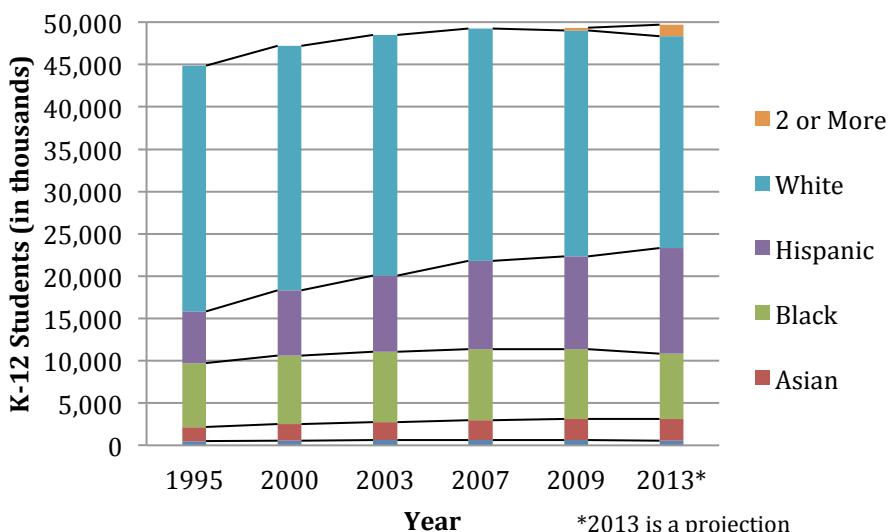
the share of college graduates in Colorado is increasing (see Figure 9) as people move to Colorado.<sup>24</sup> It is probable that the large majority of those migrants are white reducing the share of minority college educated workers available to work as teachers in Colorado.

Low retention rates for minority teachers and beginning teachers are equally important in discussions of strategies for addressing the minority teacher shortage, as these low retention rates can undermine gains made in minority teacher recruitment. Consequently, it is critical that any approach to address the minority teacher shortage includes both recruitment and retention programs.

### Trends in Student Diversity

Nationally, the public school K-12 student population has become more diverse, as shown in Figure 3. In 2013, 50% of students were non-white. (In Colorado during the 2012-13 school year, the proportion of minority students was slightly lower at 43.) The largest national change is in the Hispanic share of the population, which has increased by 11 percentage points from 14% of students in 1995 to 25% in 2013. Other groups have remained fairly constant. However, the new category of two or more races has grown quickly since being introduced nationally in 2008.

**Figure 3: Nationally, the Percentage of Minority Students Has Grown to 50%**



Source: National Center for Education Statistics: [http://nces.ed.gov/programs/coe/indicator\\_cge.asp](http://nces.ed.gov/programs/coe/indicator_cge.asp)

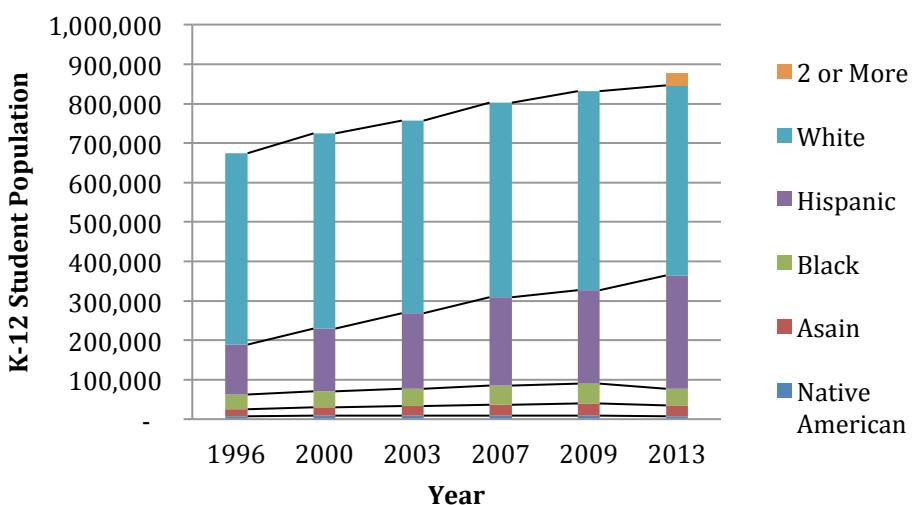
Nationally, changes in student diversity differed by region. The proportions of Hispanic and Asian students in the western states (including Colorado) are larger than other regions. And in the western

<sup>24</sup> Coright, J. 2014. The Young and the Restless and the Nation's Cities. City Observatory. Available at <http://cityobservatory.org/wp-content/uploads/2014/10/YNR-Report-Final.pdf>

United States, the share of white students dropped the most between 2001 and 2011, now accounting for less than 50% of K-12 students.<sup>25</sup>

The percentage of minority students in Colorado has expanded from 30% of the overall student population in 1999 to about 43% in 2013.<sup>26</sup> Most of this growth has come from increasing numbers of Hispanic students, who now make up 34% of the student population, up from 19% in 1996. During the same period, the share of white students has dropped from 72% to 57%.

**Figure 4: Between 1996 and 2013 the Proportion of Minority Students in Colorado has Grown from 30% to 43%**



Source: Colorado Department of Education, student enrollment data:  
<http://www.cde.state.co.us/cdereval/pupilcurrent>

Within Colorado, student diversity differs by region. Several maps from Colorado's state demographer help illustrate this diversity. Additional maps can be found in Appendix II.

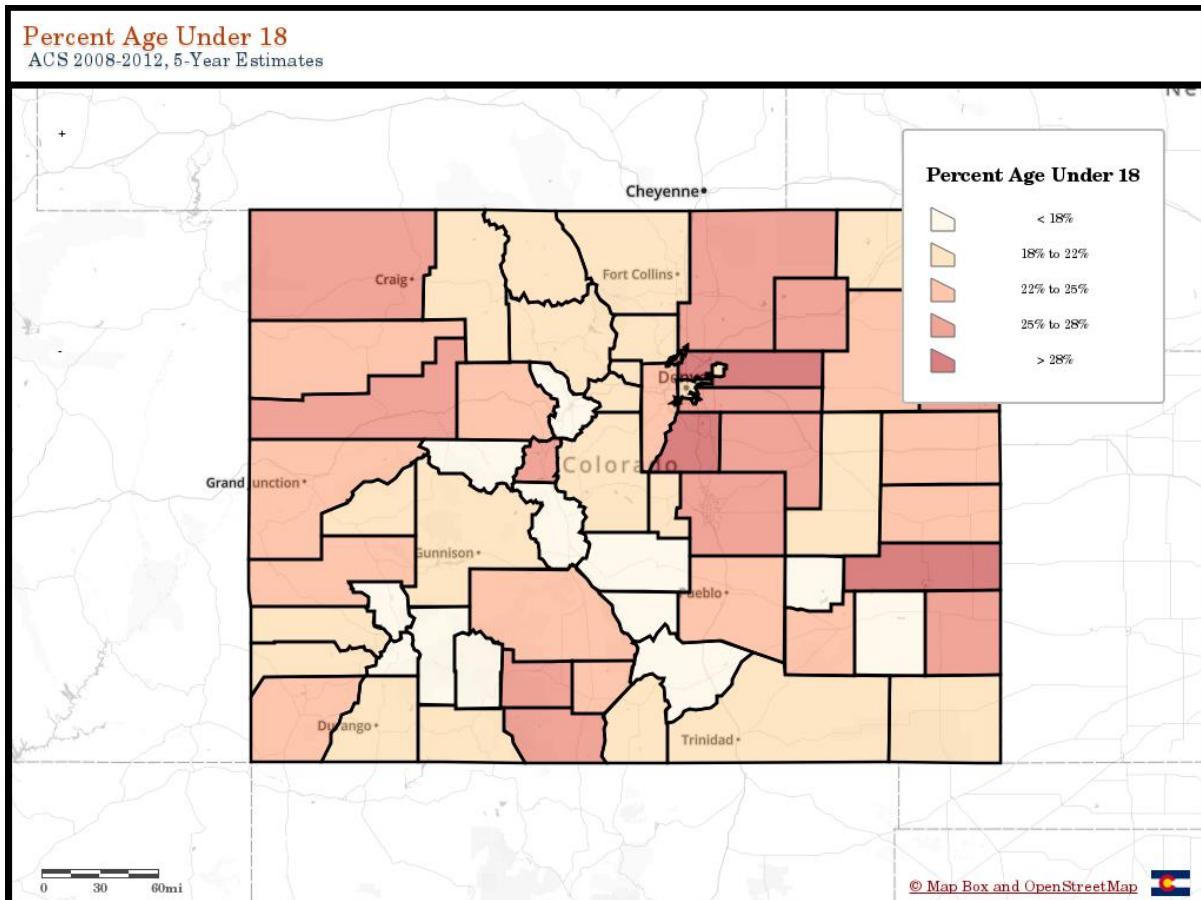
First, the school age population is not evenly distributed throughout the state, as shown in Figure 5. Counties in the Front Range, Western Slope, and San Luis Valley have higher concentrations of children under 18, according to the Census Bureau's American Community Survey. At the same time, counties in Colorado's central mountains generally have smaller proportions of youth.

<sup>25</sup> Source: U.S. Department of Education, National Center for Education Statistics. The Condition of Education. Participation in Education: Racial/Ethnic Enrollment in Public Schools.

[http://nces.ed.gov/programs/coe/indicator\\_cge.asp](http://nces.ed.gov/programs/coe/indicator_cge.asp)

<sup>26</sup> Source: Colorado Department of Education, Colorado Education Statistics: <http://www.cde.state.co.us/cdereval>

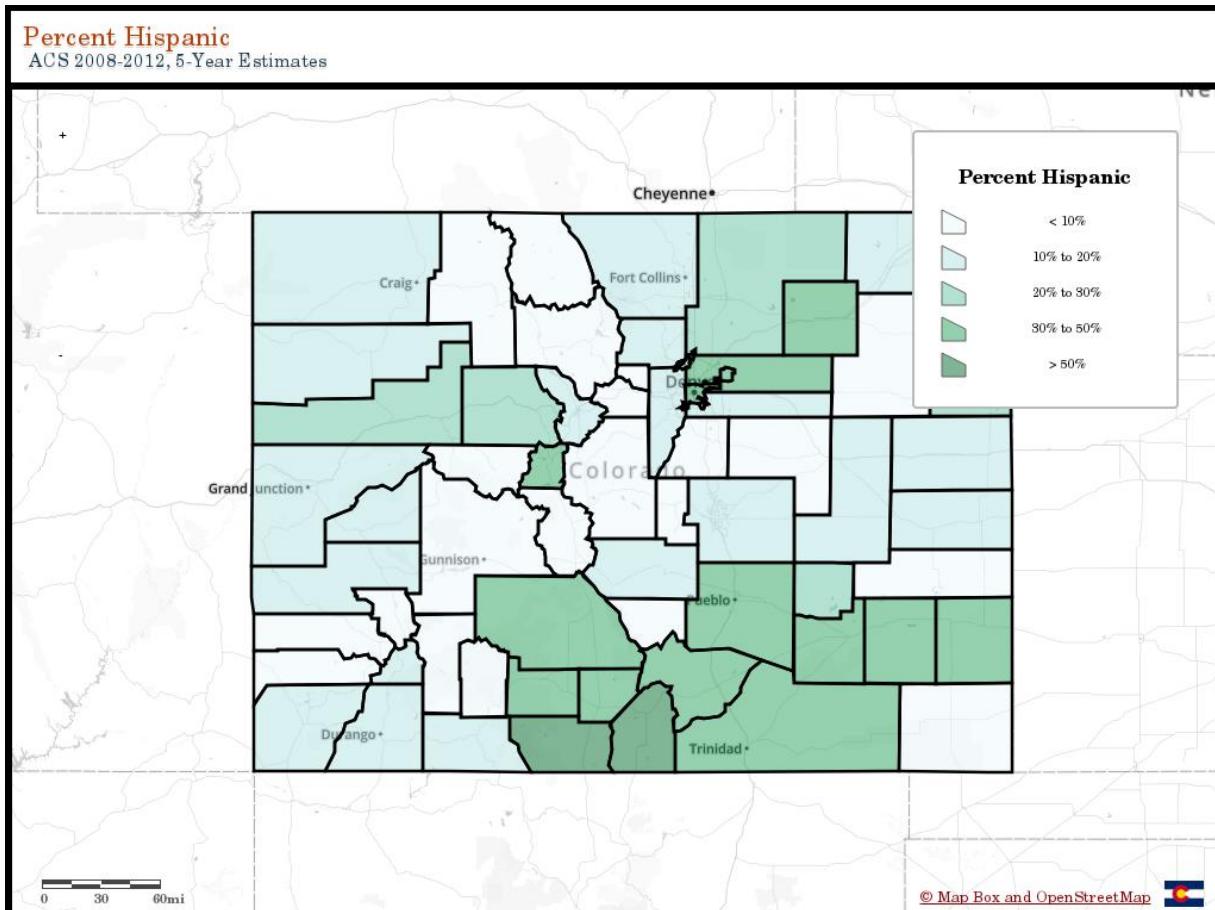
**Figure 5: Youth Population is not Evenly Distributed Throughout Colorado**



Source: American Community Survey (ACS) data provided by the Colorado Department of Local Affairs. Available at: <http://dola.colorado.gov/gis-cms/content/map-gallery>

Colorado's fastest growing minority population is Hispanics. The Hispanic population is concentrated in several groups of counties throughout the state, as shown in Figure 6. There are concentrations of Hispanics at 30% or more in the San Luis Valley and other South Central counties as well as along the northern Front Range. Several mountain and western counties along I-70 have concentrations at 20% or more. At the same time Hispanics make up less than 20% of the population in many counties in the Central Mountains, Western Slope and Eastern Plains.

**Figure 6: The Proportion of Hispanics Varies Greatly by County**



Source: American Community Survey (ACS) data provided by the Colorado Department of Local Affairs. Available at: <http://dola.colorado.gov/gis-cms/content/map-gallery>

Maps found in Appendix II show that the black population in Colorado has its highest concentrations in Denver, Arapahoe, Fremont, and Otero counties. There are very low concentrations of African-Americans in most of the Western Slope, Central Mountains, and San Luis Valley. Colorado's Asian population is more highly concentrated in the Denver Metro Area, North Central counties, and in pockets throughout the state. The Native American population is centered in the southwestern corner of the state.

This demographic data makes clear that the student population in Colorado is changing and the racial and ethnic makeup of the student and general population varies significantly across the state. That is, the racial/ethnic groups present in Colorado schools and neighborhoods are very different in different parts of the state. Neighborhoods in the San Luis valley can easily be made up of over 50% Hispanics, with very few black or Asian families. At the same time, a neighborhood in Arapahoe County can have relatively high proportions of African-Americans, Asians and Hispanics. To the extent that recruiting

teachers from different racial and ethnic groups requires different strategies, these strategies will need to vary by location.

### **Increasing Teacher Diversity in Colorado is Both a Recruitment and Retention Problem**

A key question in efforts to change teacher diversity is whether to focus on recruitment or retention.

Influential research in 2001 argued that retention was a significant challenge to increasing the quality of the teacher workforce.<sup>27</sup>

As part of this study, APA analyzed the 2011 flow of teachers in and out of districts. In that year, Colorado saw small increases in the proportions of Asian and black teachers and decreases in proportions of Native American teachers, Hispanic teachers, and teachers listing two or more ethnicities. Obviously, an increase in the number of teachers from any one group shows that there was more recruitment than attrition in that group.

However, the key question is how rates of minority teacher retention and recruitment in Colorado differed from the average rates of teacher retention and recruitment for all groups. That is, you could have an increase in the share of teachers from one group because of higher-than-average recruitment, or because of higher-than-average retention. Figure 7 shows that groups with declines in the general number of teachers had both lower recruitment and lower retention. Groups with increases in overall numbers had both higher recruitment and higher retention.

**Figure 7: Sources of Change in the 2011 Teacher Workforce**

	Native American	Asian	Black	Hispanic	Two or more
Overall Change	Decrease	Increase	Increase	Decrease	Decrease
Recruitment	Less than average	Higher than average	Higher than average	Less than Average	Average
Retention	Less than Average	Average	Higher than average	Less than Average	Less than Average

Source: APA analysis of CDE HR data

This indicates that overall changes in the minority teacher population in Colorado are driven by both recruitment and retention. Thus, strategies to address both recruitment and retention are critical.

### **Where Do Colorado's New Minority Teachers Come From?**

When looking at recruitment, a key question is: Where do new minority teachers come from? For Colorado, the most complete data on this issue comes from CDE Human Resources (HR) data. For teachers who were awarded a degree in Colorado, this data describes where they received their highest

<sup>27</sup> Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Education Research Journal*, 38(3), 499-534.

degree (not necessarily their teacher preparation) by institution. For teachers who were awarded degrees outside of Colorado, the data lists the state where they received their highest degree by state.

Table 2 shows the results of analysis of newly hired, novice (less than three years of experience) teachers who started work in 2012 and 2013. “Hired” indicates that these teachers had not taught in the prior year. Over that period from 2012-2013, 11,762 novices were hired. The share of teachers from minority racial/ethnic groups is about 12%, which is slightly higher than the minority representation in the existing teacher workforce.

**Table 2: In 2011 and 2012, Newly-Hired Novice Teachers in Colorado are Similar to the Existing Workforce**

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

Source: APA analysis of CDE HR data

As found in historic analysis (2006), about half of these new teachers in Colorado received their higher education outside of Colorado.<sup>28</sup> However, for most minority teacher groups, slightly more than half of the new teachers were educated within Colorado. In other words, the data suggest that slightly more minority teachers are recruited from within Colorado than from out of state.

Generally, data shows that the states educating larger numbers of teachers are also educating larger numbers of minority teachers. For example, the top two states where teachers are educated outside of Colorado are California (518) and Texas (376). California was also the top state for educating new, out-of-state Asian (15), black (12), Hispanic (64), and two or more races (9) teachers. Texas was the largest educator for out-of-state Native Americans (4), and number two for Asians (9) and Hispanics (49). Oklahoma was the number two source of Native Americans (3), and Missouri (10) was the number two source of African-American teachers.

#### In-State Sources of New Teachers

In 2011 and 2012, within Colorado, the University of Northern Colorado (UNC, 1,148) educated the highest number of teachers followed by Colorado State University (CSU, 740) and Metropolitan State University of Denver (Metro, 637). UNC was the largest educator of Hispanic teachers (96), and second largest educator of black (15) and Native American (4) teachers. Metro was the largest educator of Native American teachers (5) and black teachers (18), and second largest educator of Hispanic teachers (91). The University of Phoenix tied with UNC as the second largest preparer of new African-American

<sup>28</sup> Reichardt, R., Paone, J. & V. Badolato (2006). *Shining the Light: The State of Teaching In Colorado*. Denver, CO: Alliance for Quality Teaching

teachers. University of Colorado Boulder and University of Denver were the largest educators of Asians at 22 and 15, respectively.

Colorado Department of Higher Education (CDHE) provided data on the public and private university-based teacher preparation programs in Colorado. This data provided information on individuals who had completed initial teacher licensure between summer of 2011 and spring 2013 (a 2 year period). During this period 4,686 teachers were recommended for initial licensure. A large number of teachers did not report their race/ethnicity (627). However, teachers who did report race/ethnicity had a slightly higher representation of minority teachers than the current workforce.

**Table 3: New University Prepared Teachers have A Slightly Higher Proportion of Minorities Than the Current Workforce (Summer 2011 – Spring 2013)**

	Unknown and Resident Alien	Native American	Asian and Pacific Islander	Black	Hispanic	Two or more	White	Total
<b>Total</b>	627	26	70	76	289	199	3,491	4,686
<b>Percent among respondents providing race/ ethnicity</b>		1%	2%	2%	7%	5%	86%	
<b>Current Teacher Workforce</b>		0%	1%	1%	6%	1%	90%	

Source: APA analysis of CDHE SURDS data

The data in Table 4 includes information on university-based alternative programs at the University of Denver, Western State Colorado University and University of Colorado, Colorado Springs. These programs are small, training only 92 teachers, which is less than 2% of total teachers prepared at colleges and universities. However, graduates from these programs were more likely than traditional program graduates to be Hispanic (11%), Asian (7%) and black (5%). Alternative program graduates were also more likely to be minority than the overall populations at their universities.

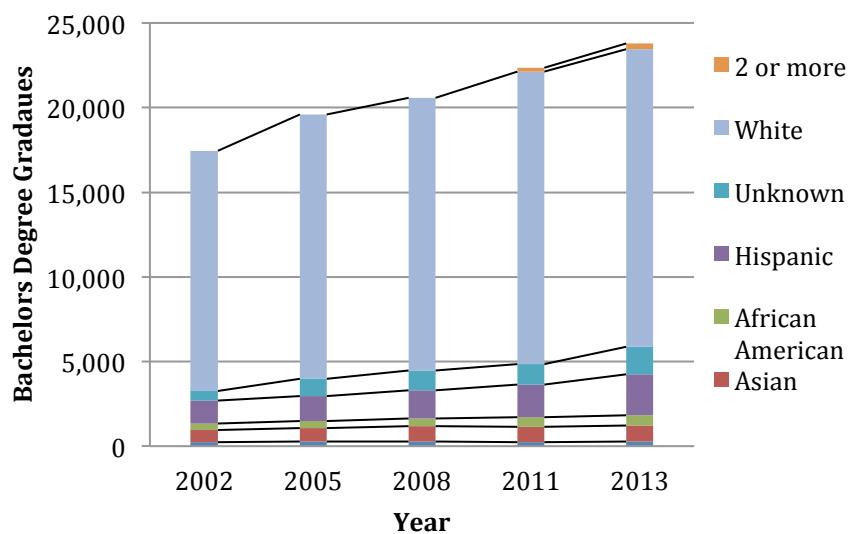
We do not have good data on teachers prepared in alternative teacher preparation programs that are *not* operated by colleges or universities. However, the literature and our Colorado interviews suggest they also are a good source of minority teachers. Many district and teacher preparation administrators gave alternative and teacher residency programs (such as Public Education and Business Coalition's Boettcher Teacher Residency or Denver Public Schools' Denver Teacher Residency) high praise for recruiting candidates of color and for their wide range of partnerships with school districts, universities, and community organizations.

#### **Graduates of Colorado's Public Colleges and Universities**

Figure 8 shows the race/ethnicity of all new bachelor's degree graduates from Colorado public colleges and universities. Over the period from 2002 to 2013, the overall number of graduates increased from 17,456 to 23,788. As with the preparation program completers, there are a large number of graduates with unknown races/ethnicities. Of those with known races/ethnicities, the proportion of minority

graduates has increased from 16% in 2002 to 21% in 2013. The share of minorities in the known population of bachelor's degree graduates is larger (21%) than the share of minorities in the university-prepared teachers (14%). Hispanics make up 11%, Asians 4%, African-Americans 3% and Native Americans 1% of the of bachelor's degree graduates with known races/ethnicities. There is room to increase the number of minority teacher graduates, especially based on the numbers of students of color who complete degrees in Colorado's bachelor's degree granting institutions of higher education. The statistics shown in Figure 8 represent graduates across all academic majors.

**Figure 8: The Number of Minority Bachelor's Degree Graduates from Colorado's Public Colleges and Universities is Increasing**



Source: Colorado Department of Higher Education: <http://highered.colorado.gov/Data/Search.aspx>

New hires to school districts in Colorado have a slightly higher proportion of minorities than the overall teacher population: 12% compared to 10%. While the majority of new hires received their highest degree outside of Colorado, the minority new hires were slightly more likely to have been educated within Colorado. University-based teacher preparation programs (both public and private) have an even higher proportion of minority graduates (14%) than new hires into Colorado's teacher workforce. The population of new bachelor's degree recipients from Colorado public institutions appears to have the an even larger proportion of minorities (21%). However, this final conclusion is tentative given that the data sets from Colorado colleges and universities contain large numbers of people with unidentified races/ethnicities. Taken together, the data suggests there is room for growth in the preparation and recruitment of new teachers from Colorado.

### **Perceived Barriers to Recruiting Minority Teachers in Colorado**

There are a wide range of barriers that district and teacher preparation program administrators reported in recruiting students and teachers of color. However, there are a few themes that we heard across all interview respondents:

- Negative perceptions of the teaching profession among minorities
- Low teacher salaries
- Barriers for minority students in attending and completing college
- Financial barriers associated with college
- Licensure tests
- Issues of cultural competence
- Relocation

**Negative Perceptions of the Teaching Profession Among Minorities:** From 2010 to 2012, enrollment in undergraduate teacher education programs declined by nearly 11%, and enrollment in graduate education programs dropped by more than 12%.<sup>29</sup> Interview respondents talked at length about the reasons for this trend.

Nearly all interviewees said that American society no longer respects the teaching profession overall. Students of color who attend four-year colleges are not choosing education as a pathway. Rather, they have many opportunities to enter fields other than education, where salaries are higher and professionals command greater respect. Students, especially students skilled in math and science, are often counseled away from the teaching profession by family members and even by professors. Top students are encouraged to go into law, medicine, or engineering.

*"We talk to Native American leaders about the possibility of their top students going into education, and they look at us like we are crazy." (Teacher Preparation Program Administrator)*

*"If I had a minority student who was really good in math and science, I wouldn't say teach; I would say go do something with math." (District Administrator)*

*"If you go to any job fair for education, for every 100 people at the fair, there are only a few minority candidates. Minorities are not going into the field [of education], and people are fighting over the few who are. So candidates aren't resistant to [this district]; candidates are just resistant to the field." (District Administrator)*

Some minority families counsel their children away from teaching, particularly those with first generation students. As a district staff person described it, parents want more for their college-going children than they had themselves. A teacher preparation program administrator commented that, in her community, students from migrant backgrounds often have parents who want their children to go to school to have high paying jobs so they don't have to work as hard as their parents did. She further commented:

*"Then the [teaching] profession is saying, 'Can you work for a lot less than you wanted to with a B.A. or Master's, and work more hours, maybe 50-70 per week?' It is hard to be competitive if we don't recognize that teachers need quality of life. Not everyone is out*

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<sup>29</sup> Koenig, Rebecca. Education Programs, Once Popular, Take a Nosedive. Chronicle of Higher Education. October 10, 2014. <http://chronicle.com/article/Education-Degree-Programs/149277/>

*there to be a martyr; if we want high quality we need to treat teachers as high quality.”*  
*(Teacher Preparation Program Administrator)*

**Low Teacher Salaries:** When asked about barriers, nearly everyone we interviewed stated that teacher salaries are a central barrier. Multiple respondents said that either 1) poorly-funded districts cannot compete with other districts or that 2) Colorado cannot compete with other states' teacher salaries. Administrators explained that teachers themselves complain to students about their poor salaries and long hours. Interviewees in a Southern Colorado district explained:

*“Our district isn’t seeing minorities applying, and low teacher pay is the main reason. Colorado is one of the lowest states in the nation for teacher pay, and the district finds it challenging to offer competitive teacher salaries.”* (District Administrator)

This perception that Colorado has low salaries is supported by data on 2012-13 average starting salaries from the National Education Association, shown in Table 4. Colorado salaries are lower than all but one of the top five states for educating Colorado teachers. The only exception is Arizona, which has lower average starting salaries than Colorado. However, Colorado's starting salaries are similar to neighboring states, with the exception of Wyoming. Wyoming's starting salaries are 6th in the nation, while Colorado's are 40th.

**Table 4: The 2012-13 Starting Salary in Colorado is Lower than in States that Educate Many Colorado Teachers**

Neighboring States		States Educating Colorado Educators	
<b>Colorado</b>		\$32,126	
Wyoming	\$43,269	California*	\$ 41,259
Kansas	\$33,386	Texas	\$ 38,091
Utah	\$33,081	Illinois	\$ 37,166
New Mexico	\$31,960	Michigan	\$ 35,901
Nebraska	\$30,844	Arizona	\$ 31,874

Source: National Education Association: <http://www.nea.org/home/2012-2013-average-starting-teacher-salary.html>. Note California salaries are from 2011-12

**Barriers for Minority Students in Attending and Completing College:** A common theme across all groups interviewed is that many of their students of color have had poor K-12 experiences. All groups reported that students of color often do not see themselves as college material. Nearly all of the students of color interviewed said they grew up in schools with very few minority teachers. In high school, a few of these students finally had a teacher who looked like them and it was a great relief. They reported finally feeling like they could communicate with someone who understood them. Several students did not feel welcome or comfortable in college until they enrolled in a program or where they could associate with other students of color. Only then did they begin to feel more welcomed, both in school and in their program.

Many first generation students have families and friends who do not know how to support them in their education. Many families are not able to financially support their child through college.

Students of color described these barriers. One student who came from a Spanish-speaking home said she did not have any teacher supports or role models during public school and she was not prepared for college, nor did she understand that she could have a career. She added that there was no one who motivated her in school, and in fact, her family wanted her to get a GED and get a job. Conversely, one student reported that her mother pushed education as a career option, and she wanted to teach because many of her family members are teachers. Other respondents who work with paraprofessionals pointed out that, even with years of experience in the classroom, paraprofessionals may not even think about becoming teachers since they assume they will not be successful in a college setting.

***Financial Barriers Associated with College:*** Many students, particularly minority students, face enormous financial barriers due to the high costs of college education. All of the teacher focus group participants reported facing financial barriers at one time or another throughout their educational experiences and in their teaching careers. Additionally, programs that normally support students of color— incentive scholarships, work study programs, and summer bridge programs—often experience funding cuts.<sup>30</sup>

Some interviewees in teacher preparation programs hear anecdotally that some minority cultures are less comfortable in taking on the burden of student loans. Minority student groups may also face the challenge of balancing work and family responsibilities and encounter financial barriers as a result. Some minority students have reported that their peers and professors do not understand the depth of these challenges.

***Licensure Tests:*** Interviewees reported that the PLACE and Praxis pass rate for minority students in Colorado is often lower than that of white students. Research supports this finding.<sup>31</sup> A national analysis of more than 300,000 Praxis test-takers who completed the paper-based test between November 2005 and November 2009 found a 41.4% pass rate gap between African-American and Caucasian test-takers in math and a 40.8% pass rate gap between African-American and Caucasian test-takers in reading.<sup>32</sup> Another example came from interviewees from Fort Lewis College who reported the Native American licensure test pass rate is half that of Anglo students. And administrators find that if Native American students do not pass the test, they change their major. If they are close to passing, the school will let them student teach in the hopes they will soon pass the exam.

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<sup>30</sup> College Board. 2014. Trends in Student Aid. <http://trends.collegeboard.org/student-aid>

<sup>31</sup> Gitomer, D.H. and Y. Qi. 2010. Recent Trends in Mean Scores and Characteristics of Test-Takers on Praxis II Licensure Tests. U.S. Department of Education Office of Planning, Evaluation and Policy Development Policy and Program Studies Service.

<sup>32</sup> Tyler, L. (2011). *Toward Increasing Teacher Diversity: Targeting Support and Intervention for Teacher Licensure Candidates*. New Jersey: Educational Testing Service.

Student interviewees supported what we heard from districts and administrators. Many students said that the exams for various endorsements were a major barrier to entering teaching. Those interviewed asked for additional mentoring or tutoring. We recommend Colorado assess whether licensure tests are a barrier for minority teachers in Colorado and the value of those tests to educator effectiveness.

**Issues of Cultural Competence:** Many administrators and students and teachers of color commented on the need to address issues of race directly. Respondents at all levels reported that a lack of understanding of diverse cultures and backgrounds is challenging for both minority college students and teachers in the field. Citing these lags in both minority representation and cultural understanding, respondents described feeling isolated within institutions and schools. This is particularly true for African-American students and teachers, who tend to have many fewer peers in colleges and on school staffs who look like them. Several teachers we interviewed reiterated that there were few people of color to serve as role models for them during their undergraduate work or within their careers. Even as they became teachers, there were still few minority peers, mentors and administrators. Minority teachers reported that a lack of emotional support is one factor that might cause them to leave the profession.

Some interview respondents alluded to a lack of sensitivity from hiring teams, and described the hiring process as challenging for potential candidates. For example, a respondent said:

*"You don't have one-on-one hiring; you have maybe three or four teachers and administrators on a hiring committee. This can be very intimidating, especially when none of them looks like you!" (District Administrator)*

**Relocation:** Teachers shared the perception that Colorado was "white, cold, and conservative," and that many minority populations tended to want to stay close to home where they could feel supported. This perception was also echoed in interviews with district administrators. A teacher explained:

*"I wanted to go back to school to become a teacher, but I was pregnant and I felt it was very important to stay near my mother so my future child would be around family. I went for [a nearby program] so my mom could take care of the kids while I was in class." (Teacher)*

People of color are often closely connected to family and community, and resist relocating, particularly if the relocation is in an area they believe has little diversity.

## **What Does the Pool of Possible Colorado Teachers Look Like?**

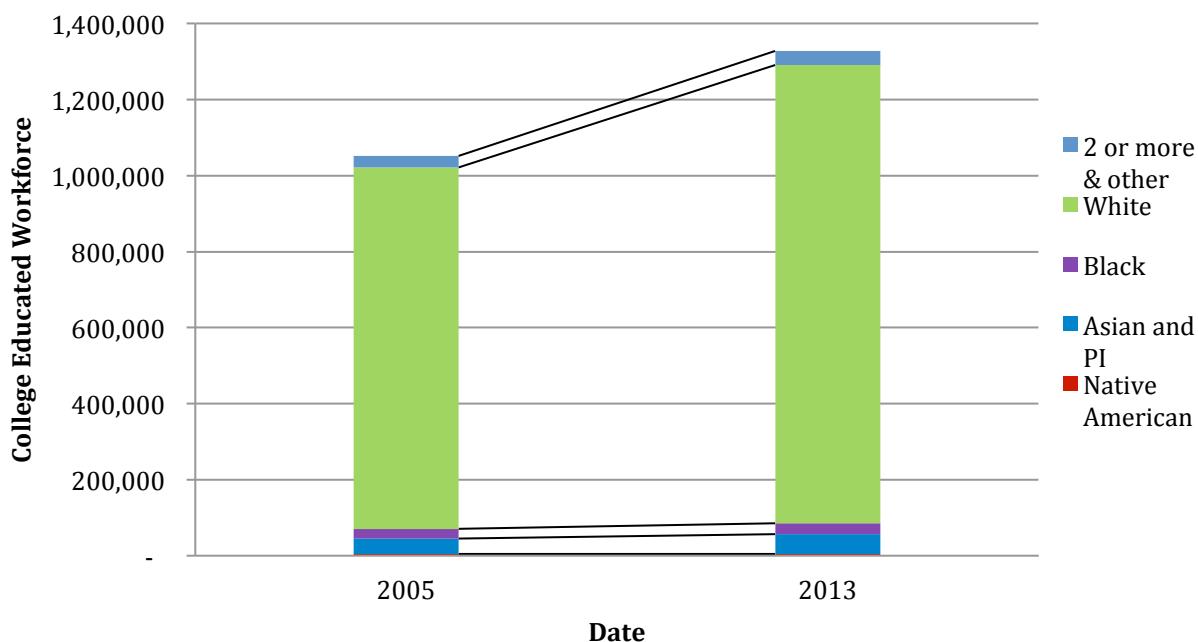
Another issue is the number of people, minority and nonminority, available for Colorado's teacher workforce. Generally, to be a teacher one needs a Bachelor's degree (though there are exceptions for some career and technical education positions). Therefore, this analysis looks at changes in Colorado's college-educated workforce (ages 25 and over).<sup>33</sup>

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<sup>33</sup> Data on college education levels in Colorado by race/ethnicity come from the Census Bureau, American Community Survey (2005 and 2013,). As noted earlier, this data is not directly comparable with other data sets

Figure 9 shows Colorado's college-educated workforce by race in 2005 and 2013. Census data reports ethnic Hispanics separately from race data: ethnic Hispanics are described in Figure 10. This data show several things. First, when looking at race, the college-educated workforce is largely white: Over 90% of Bachelor's degree holders in Colorado identify as white, 4% are Asian or Pacific Islander, 3% are two or more races or other, and 2% are black. Less than 1% are Native American. From 2005 to 2013, the number of white, college-educated workers in Colorado grew by about 50,000 a year, or at a rate of 5% year. Over the same period, the number of Asians and Pacific Islander workers with college degrees also grew by about 5% a year. The growth rate for blacks was about 3% a year and the number of Native American workers with college degrees went down by about 2% a year.

**Figure 9: Colorado's College Educated Workforce is Largely White**



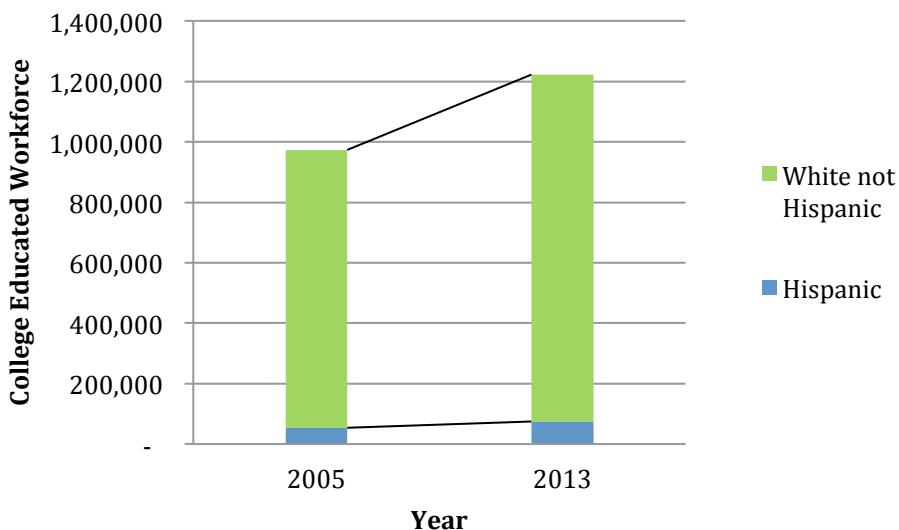
Source: U.S. Census Bureau, American Community Survey: <http://www.census.gov/acs/www/>

As noted earlier, within the Census data, ethnic Hispanics can be of any race (e.g. African-American, Native American, white, etc. Figure 10 shows the college educated Hispanic population compared to whites only in Colorado in 2005 and 2013. The number of college educated Hispanics is small when compared to whites only: 75,000 compared to 1,147,000 whites in 2013. However, the 7% growth rate of Hispanic college educated workers between 2005 and 2013 was the fastest of any racial and ethnic group. Overall, Hispanics make up about 6% of the total college educated workforce.

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because race data (white, African-American, Asian, Native American) is collected separately from ethnicity data (i.e., Hispanic). With the Census data, ethnic Hispanics are counted among multiple race groups.

**Figure 10: Hispanics Make up A Growing Share of College Educated Workers**



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

This is likely a reflection of the rapidly expanding Hispanic student populations at the K-12 level described above. The growth in the Hispanic student population is already manifesting itself in higher enrollment numbers at the state's colleges and universities,<sup>34</sup> and will have important implications down the road in terms of the state's college-educated workforce.

Overall, Colorado attracts college-educated workers. While data on the race/ethnicity of migrants is limited, it appears that many of those migrants are white. This reinforces the value of focusing minority recruitment strategies locally.<sup>35</sup>

### Recruitment Strategies

Recruiting minorities to the teaching profession is an important endeavor. Different recruitment strategies can be applied to different stages of the teacher pipeline. For traditional certification through college teacher education programs, *early outreach* is key. This type of outreach focuses on students who are either not yet in college, or are in college but have yet to commit to a university-level teaching degree program. Recruiting and retaining minority students who are already in teacher preparation programs requires different types of outreach. Strategies for recruitment should address each of the barriers to recruitment listed above: negative perceptions of the teaching profession among minorities, low teacher salaries, barriers for minority students in attending and completing college, financial barriers associated with college, licensure tests, issues of cultural competence, and relocation. Thus,

<sup>34</sup> 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](http://www.denverpost.com/news/ci_26548588/colorado-colleges-seeing-more-hispanic-and-minority-enrollment).

<sup>35</sup> Coright, J. 2014. The Young and the Restless and the Nation's Cities. City Observatory. Available at <http://cityobservatory.org/wp-content/uploads/2014/10/YNR-Report-Final.pdf>

within this section, discussion of recruitment strategies will include assessments of how these strategies are responding to, or not responding to, the barriers noted in the previous section. The recruitment strategies listed here do the best job of responding to issues like negative perceptions of the teaching profession among minorities and issues of cultural competence. There are few strategies, however, targeted at barriers like low teacher salaries, financial barriers associated with college, and licensure tests. Recruitment strategies can be grouped as follows:

- Fit with context—geographic area, population demographics, local culture, and lived experiences of minorities
- Recruitment of minority candidates already living and working in a community
- Intentional and focused recruitment in nontraditional areas
- Support for minority candidates' cultures
- Focus on teaching as a way to give back to the community
- Implementation of programs at each stage in people's careers
  - Early outreach / grow your own
  - Recruitment within college
  - Recruitment of recent graduates and mid-career switchers

***Fit with Context—Geographic Area, Population Demographics, Local Culture, and Lived Experiences of Minorities:*** Every district administrator interviewed for this report cited a primary goal: to hire highly qualified teachers, and within that group, minority teachers. Beyond this overarching goal, we found that recruitment goals often varied by location. For example, in one district in the southwestern corner of the state, Native Americans make up nearly one-third of the population. Therefore, the district prioritizes hiring Native American teachers, then Hispanic teachers.

Few school districts have formal, minority-specific teacher recruitment plans. Districts' hiring processes are usually decentralized, so teachers are hired by specific school buildings rather than by district administrators. Only the bigger districts have data systems to inform them about the impact of their recruitment and retention strategies. Some of the smaller districts reported they know this information anecdotally.

Context—geographic location, population demographics, local culture, and lived experiences of minorities—is a key factor in recruitment. Some district recruitment strategies are based on size, which is usually associated with resources and geographic location. Simply put, respondents reported that larger districts are better resourced than smaller districts. Large districts are typically located in urban areas, with higher numbers of potential candidates to access and higher budgets to support a variety of recruitment strategies. Larger districts are often more attractive to potential candidates simply based on size and access to urban experiences and opportunities.

Demographic factors have an impact as well. For example, Fountain Fort Carson School District 8 is an outlying district with direct hiring pipeline in the military population. Fountain's ability to tap into the military population is a boon for the district, but it also means that many of the area's teachers only stay in classrooms for the length of their spouses' tours in Fountain. Ignacio, another example district, has a

high Native American and Hispanic population and finds it extremely difficult to hire teachers because of highly remote location. A district administrator in Ignacio explained:

*"So few teachers come here, we need to hire whoever we can get. Our population is very small, and people want to go to the big city." (District Administrator)*

Small communities whose populations are largely white find that efforts spent recruiting minority teachers, especially campus visits and job fairs, are often wasted. From experience, they reported that minority teachers are not interested in moving to small, non-diverse, relatively isolated communities.

Recruitment strategies focusing on context help address the barriers for minority students in attending and completing college, as well as the barriers of relocation. While districts across contexts understand the value of hiring and keeping minority teachers, districts could do a better job of implementing specific plans to address recruitment barriers. For example, administrators in non-urban areas could strengthen communication and outreach tactics by making sure hiring fair and publicity materials included specific information about relocation—about the cultural supports and social resources available to newcomers, particularly minority newcomers, in the local communities. Minority candidates should understand the benefits of living in certain districts and should have an idea of the available resources in different districts.

***Recruitment of Minority Candidates Already Living and Working in a Community:*** Recruiting people already living and working in a community leads to a higher likelihood that teachers will truly understand the district students and the specific challenges those students face. One Native American teacher described how her experiences growing up in her community have informed and strengthened her interactions with the children she now teaches there:

*"A lot of kids were fearful of Anglo teachers. Anglos didn't really know Navajo backgrounds, and thought 'How come [Navajo kids] don't look at us, how come they disrespect us?' With more Navajo teachers [like me], kids are more responsive and they participate more." (Teacher)*

She adds that her own education experiences have intensified her drive to teach in her community:

*"Growing up, I encountered a lot of discrimination in school. Classmates and parents didn't speak up to Anglo teachers, because they thought Anglo teachers were right all the time. Anglo teachers would make racist remarks to me and even laugh at me. Now, as a teacher, I want my students to remember me and know they had a teacher [in this town] who believed in them. I want to inspire them, challenge them, show them they can speak up and not be judged. [...] No one did that for me; no one ever really cared about me." (Teacher)*

This recruitment strategy directly addresses the recruitment barrier of relocation by taking the barrier out of the equation. It also plays on humanistic commitments to teaching, helping teachers find meaningful and rewarding experiences in communities that already matter to them.

**Intentional and Focused Recruitment in Nontraditional Areas:** Many districts reported intentional and focused recruitment in nontraditional sources as a highly successful strategy to recruit teachers of color. For example, some district administrators are building relationships with churches, local businesses, chambers of commerce, and other community organizations. Interviewees reported talking with their communities about what is needed in the district and directly asking if community organizations can help identify potential teachers. Some human resources departments have built networks through events and meetings such as a Latino Community Luncheon, the National Alliance of Black School Educators and similar associations.

For those administrators who attend in and out of state hiring fairs, following up with potential candidates to create personal relationships is highly effective.

*“If you tell candidates you really want them, that is more important at times than [what we can offer in terms of] salary; we need to be more aggressive and tell candidates we want them to come teach for us!” (District Administrator)*

Minority teachers are in high demand and often receive multiple contract offers. Recruiters interviewed for this project believed it is not the contract offer that necessarily “lands” minority candidates so much as the personal recognitions and relationships a district can offer.

Recruitment strategies based on intentional and focused recruitment in nontraditional areas help address recruitment barriers related to negative perceptions of the teaching profession among minorities and issues of cultural competence. When candidates see that the teaching profession is eager to have them, will support them, and will be sensitive to their needs, then they are much more likely to feel excited about taking a job in the classroom.

**Support for Minority Candidates’ Cultures:** Some districts reported it is effective to support an individual’s culture, to introduce potential candidates to other people of color, and to have someone to introduce them to local community resources. This recruitment strategy, meant to respond to recruitment barriers around cultural competence, could use more specific guidelines and recommendations. A consortia group could help develop a list of indicators, or recommendations, of cultural competence and cultural competence best practices. Districts could also focus more stringently on cultural competence training and professional development for school and administrative staff.

**Focus on Teaching as a Way to Give Back to the Community:** Minority teachers also talked about their profession as a way to give back to their communities—to help all students, but especially minority students. This is part of the humanistic commitment minority teachers can bring to the profession.<sup>36</sup> One Latina explained that her mother had taught poor indigenous children in Mexico, inspiring her to teach in Denver’s communities of color. Another respondent said her interest in teaching came as result of the trauma and rejection she felt as a second grader when her teacher demonstrated a lack of

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<sup>36</sup> Achinstein, B., R.T. Ogawa, D. Sexton, and C. Freitas. 2010. Retaining Teachers of Color: A Pressing Problem and a Potential Strategy for “Hard-to-Staff” Schools. *Review of Educational Research* 80(1): 71-107.

sensitivity towards the interviewee's difficulty with reading. This rejection became an inspiration for her, as she vowed to one day become a teacher and show more sensitivity to the needs of children like her.

Administrators and minority teachers reported that minority teachers tend to stay close to home, where they have family and where there are other minorities. This is especially true of first generation students. We heard that students who graduate from districts and enter teaching often return to teach in their home districts, even if they had gone elsewhere to get their degrees.

This recruitment strategy directly addresses the recruitment barrier of negative perceptions of the teaching among minorities, highlighting some of the most beneficial and personally rewarding aspects of the profession.

***Implementation of Programs at Each Stage in People's Careers:*** Teachers can be recruited at different stages of their careers. Different stages of recruitment strategies include:

- Early outreach / grow your own programs
- Recruitment within college
- Recruitment of recent graduates and mid-career switchers

#### **Early Outreach / Grow Your Own Programs**

School district administrators reported that early outreach strategies and programs are the most successful in recruiting teachers of color. The early outreach approach is intended to create a pipeline of students interested in teaching and to improve teacher retention in low-income and hard-to-staff schools. Interview respondents offered numerous examples of these programs and reasons for their success .

Early outreach programs focus on the beginning of the pipeline for high school students or later in the pipeline for beginning college students who are still in the process of making their first career decisions. University programs designed to recruit minority teachers typically provide scholarships, mentoring and other support services to minorities in their teacher preparation programs.<sup>37</sup> Several of these early outreach programs and efforts are described below, including Teacher Cadet; Today's Students, Tomorrow's Teachers (TSTT); and community college outreach and outreach within four-year colleges and universities.

***Teacher Cadet Programs.*** The goal of a teacher cadet/early outreach program is to encourage middle and high school-aged students to consider careers in teaching.<sup>38</sup> Teacher Cadet Programs have been in

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<sup>37</sup> Martin, Jessica. 2011. Best Practices in Minority Teacher Recruitment. Connecticut RESC Alliance.

[http://www.crecnow.info/RESCMTR/docs/national\\_best\\_practices\\_in\\_minority\\_teacher\\_recruitment.pdf](http://www.crecnow.info/RESCMTR/docs/national_best_practices_in_minority_teacher_recruitment.pdf)

<sup>38</sup> Ibid.

existence around the country since the 1980s. Many of these programs are based on a model created in South Carolina as a part of the Center for Educator Recruitment, Retention, and Advancement (CERRA).<sup>39</sup> The South Carolina program has participation from 2,457 students from 157 schools across the state during the 2009–10 school year. For the 2010–11 school year, the program reported that 31% of the participants were minorities. The Teacher Cadet website states that programs are now operating in 34 states including Colorado.

Colorado's Teacher Cadet Program (TCP) grew out of this South Carolina model, where initial program organizers saw a need to give high school students baseline experience in the education profession. They hoped students with this experience would have a better understanding of teaching before investing time and money in the field, and would therefore be less likely to give up or leave the profession. An interviewee in Colorado explains:

*"A lot of teachers come into the field, get disheartened, and leave; that's what we want to avoid."*  
*(Program Administrator)*

Colorado's Teacher Cadet Program has been in existence for the past 12 years, and there are now 25 active Teacher Cadet Programs across the state. Individual branches of the program depend on local leadership, using the Teacher Cadet model. Colorado's Teacher Cadet Program also has an overall director. The program is designed as an honors-level course targeted at juniors and seniors in high school. Students need a GPA of 3.0 or higher to enter and college-level writing is expected in the program. The program is two years, split between one year of Teacher Cadet I (TCI) and one year of Teacher Cadet II (TCII). Students learn basic principles of teaching, education theories, and classroom management techniques.

Many of these programs specifically target minority students and provide support through college-credit elective coursework, job shadowing and internship opportunities, mentoring, and SAT prep. However, not all Teacher Cadet programs within Colorado are specifically focused on minority teacher recruitment. Students can often apply to partner colleges and universities and can receive scholarships when they enroll in teacher education programs. Colorado's Teacher Cadet Program is currently articulated with a handful of the state's universities and colleges, and is "building articulations all the time." At the time of this report, the strongest partnership is between the Littleton Schools Ames Facility Teacher Cadet Program and Colorado State University, Pueblo. Other colleges and universities involved in existing and in-progress partnerships with local Teacher Cadet programs include the University of Northern Colorado (UNC); Red Rocks Community College; Colorado State University, Fort Collins; Metro State University; and Western State Colorado University. Funding for these programs in Colorado has not been consistent, an interviewee explains:

*"We are trying to rebuild momentum and build more partnerships in the next few years to have a strong presence, especially at schools with great education programs."* (Teacher Preparation Program Administrator)

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<sup>39</sup> Ibid.

Little information is available on the rate of entry into the teaching profession for those who complete the program. Within Colorado districts, recruitment programs at the beginning of the pipeline, like the Teacher Cadet Program, are regarded as successful in terms of getting candidates early, but not necessarily focused on recruiting of candidates of color.

There are two key sets of relationships in many of these early outreach programs. First, the relationships of trusted advisors and recruiters with young adults as they contemplate investing in teaching as a career. Another set of relationships is between institutions: high schools and colleges and between community colleges and four year institutions. These relationships help these young adults as they transition through the education system, often as the first generation in their family to attend college. Many of the pipeline programs described above depend on grant funding to support their efforts. This is not a strong business model for building the long-lasting relationships that support the success of these programs.

***Today's Students, Tomorrow's Teachers (TSTT).*** TSTT is a teacher cadet program that started in New York in the mid-1990s and has since spread to Connecticut and Virginia (70 schools in total).<sup>40</sup> The program targets diverse 9th grade students to build college-readiness skills and to introduce students to the teaching profession throughout high school. Funded through corporate and private funders, the program offers participants the chance to receive a 50% scholarship if they are accepted to one of the program's 22 partner colleges and universities. Support continues through college, with career development workshops and assistance in job placement. Since the program started, 47% of participants have been black and 32% have been Hispanic/Latino. As of 2013, there were 110 TSTT alumni teachers, and the program claims that 90% of its participants have been placed in schools and are still teaching after five years.<sup>41</sup> Although it is not part of TSTT's explicitly stated mission or goal, many of the teachers are working in the districts from which they graduated. TSTT's 2011 annual report highlighted 10 alumni teachers, most of whom were teaching in their home school districts, with some teaching in the same schools from which they graduated.

**Recruitment Within College:** Administrators at Colorado teacher preparation programs explained that they often focus recruitment efforts on similar states such as New Mexico, Arizona, and Texas. Universities can hold campus events such as a "Hispanic Recruitment Day" and preparation programs advertise through flyers and campus fairs. Administrators interviewed for this study stated, however, that they must go beyond these traditional methods to seriously recruit students of color.

Schools and colleges of education normally participate in multiple recruitment efforts on and off campus. The schools collaborate with offices of admissions that then partner with high schools and two-year colleges. Normally, schools of education are not in direct contact with students prior to entering teacher education; it is really the high schools, counselors and teachers that do the work of recruiting students. Teacher preparation program administrators have found it very effective to work directly with

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<sup>40</sup> Ibid.

<sup>41</sup> Today's Teachers, Tomorrow's Students. (2010). 2010 Annual Report.

high school counselors to promote teacher education programs. High schools and colleges have a shared role in increasing the minority teacher population.

As mentioned earlier, location can also be an important component of this relationship. The Center for Urban Education at the University of Northern Colorado (UNC) Lowry Campus (on the border of Aurora and DPS school districts) attracts higher number of people of color than the teacher candidate pool at UNC in Greeley. Being close to a teacher preparation institution can be an asset for districts. School districts have an advantage when located near a higher education institution with a diverse student population, or near an institution with a strong program that focuses on supporting diverse students. For example, the Greeley School District works with UNC's Cumbres program, and guarantees students a job in the district. The intent, of course, is to create a pipeline through high school and to give students a job during and after college. The district has a Teacher Cadet Program as well, and tries to recruit Teacher Cadet students into UNC's Cumbres Teacher Education program.

Below is some additional information on Colorado-based efforts that provide valuable examples of what is possible in Colorado as well as lessons for other programs. These programs include:

- Community College Outreach
- Navajo Teacher Education at Fort Lewis College
- Center for Urban Education, University of Northern Colorado (UNC, Lowry Campus)
- Cumbres, University of Northern Colorado (UNC)
- NxtGEN Project, University of Colorado Denver (UCD)
- Minority-Serving Institutions

**Community College Outreach.** Community colleges are another promising source of potential recruits into the minority teacher pipeline. Many students begin paths to university degrees at community colleges, which tend to serve a higher percentage of minority students and first generation students than traditional four-year schools.<sup>42</sup> While community colleges offer two-year education programs, there are often obstacles to directly transferring credits into a four-year university program. Within Colorado, the higher education system has developed guaranteed transfer pathways (gtPathways), using a general education curriculum that forms the core of most Bachelor's degrees and is guaranteed to transfer between all public colleges and universities.<sup>43</sup>

Even with gtPathways, the transition from community college to a traditional university can be an obstacle in the teacher pipeline. An example of a successful partnership created between a university-level education program and a community college is Project Teach! at Rio Hondo Community College in Whittier, California. The program created a seamless track between Rio Hondo and four-year teacher preparation programs at Whittier College and California State, Fullerton.<sup>44</sup>

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<sup>42</sup> Martin 2011.

<sup>43</sup> For more information see CDHE: <http://highered.colorado.gov/academics/transfers/students.html>

<sup>44</sup> Martin 2011.

There are opportunities to recruit minorities from Colorado community colleges into teaching. Five of Colorado's community colleges are recognized as Hispanic Serving Institutions (HSIs); meaning at least 25% of the undergraduate enrollment of full-time students is Hispanic. The five HSI community colleges in Colorado are Aims Community College, Community College of Denver, Otero Junior College, Pueblo Community College, and Trinidad State Junior College.<sup>45</sup>

**Navajo Teacher Education at Fort Lewis College.** A higher education tribal liaison asked Fort Lewis to "bring a teacher education program to us, because we need better teachers for the Navajo Nation." Fort Lewis picked a handful of schools in the Four Corners region for a Saturday series of courses that lasted two years, enrolling a number of Native American paraprofessionals from those schools. Nearly 1,500 paraprofessionals participated in this program over 18 years, with some assistance through Navajo scholarships. Many of the students were middle-aged women and about 50 percent of students completed the program and became teachers in Navajo schools. The general philosophy of bringing the program to a targeted population, with a structure that simplified student participation with its schedule (number of days, program length), was highly successful. This program no longer operates, because the two people who ran the program retired after 35 years.

**Center for Urban Education, University of Northern Colorado (UNC, Lowry Campus).** The Center is a four-year teacher-preparation program. The Center recruits people to become paraprofessionals within the program, sometimes also recruiting paraprofessionals who are already working in classrooms. Over the course of four years, students spend four hours each morning, five days a week, working as classroom paraprofessionals. This adds up to 3,000 hours of paraprofessional experience, making students prepared and confident to be successful in urban classrooms. An interviewee from the program explained that it is a stated purpose of the program to recruit and support teachers of color to be successful in urban classrooms. This respondent also acknowledged that success in urban classrooms in the Denver Metro Area depends on being knowledgeable about working with diverse populations who come from poverty, who are linguistically diverse, and who face other related issues. There are three majors within the program—Elementary, Special Education, and Early Childhood. All elementary majors get a Second Language Acquisition, or ESL Endorsement, along with their elementary major.

The program follows the same curriculum as UNC Greeley, but the delivery format is very different. Students are matched with mentors and they work directly with classroom teachers. They complete their student teaching in the same schools where they work as paraprofessionals. Since it is challenging for working paraprofessionals to juggle four different courses at once, each course is offered for five weeks at a time. There is some flexibility for students who cannot complete the program in four years. (This is a typical concern, since many students are non-traditional.) The program provides necessary supports so the Center can work on students' academic proficiencies and teaching skills simultaneously. Ninety to 93% of participants graduate from the program in four years and 35 to 40% of these graduates are teachers of color. There have been about 40 graduates in the last ten years. Once participants have graduated, little data exists on retention in classrooms and success after completing the program.

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<sup>45</sup> Hispanic Association of Colleges and Universities. <http://www.hacu.net/hacu/default.asp>

Anecdotal information indicated high rates of retention and teacher success. (The program has had some support from foundations that have provided resources for students to pay tuition. These foundations have independently collected evidence on retention rates for some of these scholarship-recipient graduates, but this data does not cover all students.) These characteristics of the program support a high completion rate and encourage a high teaching retention rate in the field:

- The Center is small; it has been around for 14 years, and graduates about 40 teachers per year. Since the first class graduated in 2004 (after starting in 2000), there have been roughly 400 graduates overall. Students become fully licensed teachers. In many cases, they stay in the school or district where they did their paraprofessional work, but this is not a requirement. Because of the small size of the program, the faculty can get to know students well. The Center becomes a “home.”
- Students have extensive classroom experience; all candidates work as paraprofessionals during the mornings and attend classes in the afternoons.
- Students work alongside teachers for four years: *“We hear regularly from graduates who, compared to other first year teachers, have much more maturity about what teaching really is.”* (Program Administrator)
- The entire apprenticeship develops teaching skills and overall disposition about teaching, so that by the time students leave the program, they have reached levels of professional maturity on par with traditional pathway teaching professionals.

**Cumbres, University of Northern Colorado (UNC):** The Cumbres Teacher Preparation Program at the University of Northern Colorado recruits, supports, and mentors undergraduate students who pursue a degree in education (Early Childhood, Elementary, Secondary or Special Education) and who also declare an endorsement in English as a Second Language (ESL). The majority of students are minority first generation college students. Each student receives a \$1,500 grant each year.

Cumbres uses a cohort concept, in which an identified group of teacher education students begin together as freshmen and take a cluster of courses each year that prepares them not only for their area of primary teacher certification, but also for an endorsement in ESL. What sets these teacher education students apart is that they are being specifically trained to teach public school children who are bilingual in English and Spanish or children whose primary language is not English.

The Cumbres program is purposefully designed to foster a sense of community, academic and social support, and leadership development for education majors with an ESL endorsement. This program illustrates the importance of connecting with second language coordinators in school districts and with HR administrators interested in hiring teachers with an ESL endorsement. When the students graduate, they are guaranteed jobs in the district. The program started in 1996. As of December 2014, there have been 293 graduates. A staff member at the Cumbres program explained that there is no clear information available right now as to how many students actually accepted teaching positions, or on how many of them are still teaching.

**NxtGEN Project, University of Colorado Denver (UCD).** In 2014, the School of Education and Human Development (SEHD) at the University of Colorado, Denver, received a substantial federal grant under

the U.S. Department of Education, Teacher Partnership Quality Grant program, called the NxTGEN project. The focus of this program is to recruit, support and retain teachers of color—both in Denver Metro communities and in rural areas. Partners include the San Luis BOCES, Denver Public Schools, South Central BOCES and Mesa Valley Schools. This program began implementation in the fall of 2014.

**Minority-Serving Institutions.** Recruitment at Minority Serving Institutions (MSIs) is a logical resource for finding minority candidates. There are more than 320 colleges and universities across the country designated as MSIs and these schools educate nearly a third of the nation's students of color and nearly half of the nation's teachers of color.<sup>46</sup> During our interviews, districts reported little success in recruiting teachers of color using out of state recruitment efforts, which speaks to the value of focusing on local MSIs.

Besides the five community colleges listed above, the four-year MSIs in Colorado are Adams State University (Hispanic-serving); CSU Pueblo (Hispanic-serving); Fort Lewis College (Native American-serving); and Metro (Hispanic-serving).<sup>47</sup>

As noted earlier, Metro is the third-leading source of education for new teachers in state, accounting for 637, or about 5%, of the 11,762 novice teachers hired in 2012 and 2013.<sup>48</sup> Also, while many of the larger state institutions (such as the UNC and CSU) accounted for greater numbers of new teachers educated in the state, teachers graduating from Metro were much more likely to be minorities. Metro was the largest educator of Native American teachers (5) and black teachers (18) and the second largest educator of Hispanic teachers (91) hired in 2012 and 2013.

The Alliance for Equity in Higher Education released a set of recommendations for increasing the diversity of the nation's teacher workforce. Partnerships between districts and states with MSIs were considered an indispensable part of the overall strategy.<sup>49</sup> The Alliance noted, "The students served by these institutions encounter similar obstacles to educational access and attainment, and MSIs recognize the important role that teachers of color play in overcoming low levels of educational attainment in their communities."<sup>50</sup>

**Recruit Recent Graduates and Mid-Career Switchers:** The next section describes programs focused on students who are near completion or who have completed their college education. These programs offer pathways for adults to become certified and prepared to enter teaching. Some strategies are focused on people who have graduated from college, but who did not receive teaching-specific degrees.

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<sup>46</sup> MSIs include historically Black colleges and universities (HBCU), Black-serving non-HBCUs, Hispanic-serving institutions, Asian-serving Institutions, and American Indian-serving institutions.

<sup>47</sup> Southern Education Foundation. Complete List of Public Minority-Serving Institutions by State: <http://www.southerneducation.org/SEF/media/Photos/MSIs-by-state.pdf>

<sup>48</sup> Colorado Department of Education (CDE) human resources (HR) data.

<sup>49</sup> Alliance for Equity in Higher Education. (2000, September.) Educating the emerging minority: The role of minority-serving colleges and universities in confronting America's teacher crisis. Washington, DC: The Institute for Higher Education Policy.

<sup>50</sup> Ibid.

Finally, there are recruitment programs for *mid-career switchers* – individuals who have experience working in other fields, but who have made the decision to enter the classroom. Recruitment strategies aimed at these nontraditional candidates do not encounter the barriers of recruiting minorities to college or paying for college. Instead, these strategies can focus on finding candidates with interest in teaching and, in the case of many mid-career switchers, subject-area knowledge.

**Alternative Certification.** In interviews conducted for this study, many district administrators reported that a large number of their minority teachers have come through alternative teacher licensing programs. Some administrators who attend job fairs on college campuses encourage students to take these types of alternative routes. These programs are effective for recruiting individuals who have college degrees but lack backgrounds in teaching.

Alternative certification describes a wide array of programs that generally cater to people who have completed a Bachelor's degree. These programs have evidence of increasing minority teacher recruitment.<sup>51</sup> Colorado is a state leader in creating alternative routes and has a significant number of different programs. These preparation routes include: teacher residencies; the Public Education and Business Coalition (PEBC) Boettcher Teacher Residency; Denver Teach Today/Denver Teacher Residency, Denver Public Schools (DPS); Teach for America (TFA); a range of university-sponsored programs, e.g. the PAR<sup>2</sup>A Center at the University of Colorado Denver (UCD); Troops to Teachers (TTT); and other types of teacher residencies and district/Boards of Cooperative Educational Services (BOCES)-developed programs. Alternative program participants may be recent college graduates or mid-career switchers. Career changers bring the advantages of real world experience and maturity to the classroom. Alternative programs are often a tool for addressing shortages in math and science teachers.

Alternative certification programs effectively reduce the cost of entering the profession by allowing participants to hold full-time employment while receiving an alternative education in teaching.<sup>52</sup> Data from the National Center for Education Information shows that the number of teachers certified through alternative routes has expanded dramatically over the past decade with a little over 12,000 teachers receiving alternative certification in 1998–99 and about 59,000 teachers using alternative routes in 2008–09.<sup>53</sup>

The next sections describe Colorado's alternative routes, including: the Boettcher teacher residencies, two Denver Public Schools' alternative routes, the PAR<sup>2</sup>A Center and TFA. These programs are not exclusively focused on recruiting minority teachers, although this can be a program focus. The purpose of these descriptions is to highlight some of the available tools within Colorado to address the minority teacher recruitment challenge.

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<sup>51</sup> Nadler, Daniel and Paul E. Peterson. 2009. What Happens when States Have Genuine Alternative Certification? We Get More Minority Teachers and Test Scores Rise; Education Digest: Essential Readings Condensed for Quick Review, v75 n1 p57-60 Sep 2009

<sup>52</sup> Reichardt, R. 2002. Alternative Teacher Education: Trends and Implications in Policies and Practices. Western Interstate Commission for Higher Education.

<sup>53</sup> Feistritzer, C.E. 2011. Profile of Teachers in the U.S. 2011. National Center of Education Information.

**Alternative Certification: Teach for America.** Founded in 1990, the nonprofit Teach for America recruits, selects and places high-achieving individuals in high-needs urban and rural classrooms with a commitment to remain in the classroom for two years.<sup>54</sup> Once corps members are accepted, they receive five weeks of training.<sup>55</sup> They are then placed in a school and are paid directly by the school district, generally receiving the same salary and benefits as other first year teachers. In addition, TFA gives corps members other financial benefits including education awards to offset previous educational expenses or to pay for further education.

Today, there are 8,200 TFA corps members in 125 districts across the country. Entry into TFA is highly competitive, with the acceptance rate averaging below 15%. The program is also highly diverse—half of the 2014 corps members are minorities. Nearly half of the 2014 corps members received Pell Grants in college and 34% were the first in their family to attend college.<sup>56</sup> Roughly 80% of the students with TFA teachers qualify for free or reduced-price lunch and more than 90% are African American or Hispanic.<sup>57</sup>

In 2013, TFA served both the Denver and Colorado Springs metro areas.<sup>58</sup> TFA has also identified Pueblo as a district to support and serve, noting low diversity in its teacher pool. The recruitment plan for TFA in Pueblo includes traveling to local colleges near Pueblo, speaking to student organization groups, and reaching out to students in Social Work programs and Black Studies programs to broaden the scope of people who would be interested in teaching.

About 44% of TFA graduates remain in their initial placements for a third year after their initial two year commitment about 60% overall teach for a third year, although not in their initial placements. Within five years, all but 15% have left their original placements.<sup>59</sup> However, there is also evidence that even during their shorter tenure, TFA teachers are more effective than the average mathematics teacher in the same school.<sup>60</sup>

**Alternative Certification: Teacher Residencies.** Teacher residencies provide comprehensive approaches to recruitment, preparation, placement, and induction of committed recent college graduates and mid-

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<sup>54</sup> Dobbie, W. (2011). Teacher Characteristics and Student Achievement: Evidence from Teach For America. Harvard University. Cambridge, MA.

<sup>55</sup> Donaldson, M. and S.M. Johnson. 2010. The Price of Misassignment : The Role of Teaching Assignments in Teach For America Teachers' Exit From Low-Income Schools and the Teaching Profession. *Educational Evaluation and Policy Analysis* 32(2): 299–323.

<sup>56</sup> <http://www.teachforamerica.org/why-teach-for-america/the-corps/who-we-look-for/the-importance-of-diversity>

<sup>57</sup> Ibid.

<sup>58</sup> Teach for America: <http://www.teachforamerica.org/where-we-work/colorado>

<sup>59</sup> Donaldson and Johnson 2010.

<sup>60</sup> Clark, Melissa A., Hanley S. Chiang, Tim Silva, Sheena McConnell, Kathy Sonnenfeld, Anastasia Erbe, and Michael Puma. (2013). The Effectiveness of Secondary Math Teachers from Teach For America and the Teaching Fellows Programs (NCEE 2013-4015). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, available at: <http://ies.ed.gov/ncee/pubs/20134015/pdf/20134015.pdf>

career switchers in urban school districts.<sup>61</sup> Similar to medical residency programs that combine professional coursework with clinical experience, teacher residencies are based on the idea that new teachers should have a guided experience with a trained mentor in an urban classroom, while taking Master's-level coursework. "Residents" are grouped together to form a cohort within the district to provide additional support and collaboration and also receive mentoring support for up to three years after their "residency" year(s) is finished. These programs are relatively new and research is ongoing, but one advocacy group (Urban Teacher Residency United or UTRU) representing a network of Urban Teacher Residencies across the country reports that there are currently (2013–14 school year) 630 residents training at 175 schools.<sup>62</sup> Of this total, 34% are minorities and one third are teaching STEM subjects. UTRU also reports a retention rate of 83% after three years and 82% after five years, much higher rates than the national average.

There are several teacher residency programs in Colorado, including the Boettcher Teacher Residency and the Denver Teacher Residency.

***Alternative Certification: Teacher Residencies: Public Education & Business Coalition (PEBC) Boettcher Teacher Residency.*** Boettcher is one of the original teacher residency programs in the nation, with a five-year service contract to develop teachers who are well prepared to serve in high-needs schools. Boettcher residents earn a Master's degree from Adams State University, which is a designated Hispanic Serving Institution, attracting teachers of color who want to settle in Denver, the San Luis or San Juan Valley areas, or Southeast Colorado. This program recently won a received a substantial federal grant under the U.S. Department of Education, Teacher Partnership Quality Grant program similar to the NxtGEN program described above.

Residents work in a number of metro area districts. The program also has a cohort in the San Luis Valley and a new cohort in the Durango area. In each of these areas, it is a consortium of districts that work together. Residents have a five-year service agreement:

- Year 1: Residency Year: Candidates work with mentor teachers in a classroom four days a week and attend a weekly seminar with their cohort. At the end of first year, they receive a Master of Arts in Education with an emphasis in Urban Education and Culturally Linguistically Diverse Education (through Adams State); they are eligible for a Colorado Initial License.
- Years 2-3: Induction – full time in classroom with a partnering district
- Years 4-5: Residents teach in their own classroom and complete their five-year service agreement

The program's most successful minority recruitment strategy is recruiting students from Adams State, which serves as a pipeline of undergraduates who can then earn a Master's degree from the same

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<sup>61</sup> Berry et al. 2008. Creating and Sustaining Urban Teacher Residencies: A New Way to Recruit, Prepare, and Retain Effective Teachers in High-Needs Districts. The Aspen Institute.

<sup>62</sup> Urban Teacher Residency United. 2014. Measuring UTRU Network Program Impact 2014. [http://www.utrunitied.org/EE\\_assets/docs/UTRU\\_Measuring\\_Impact\\_2014\\_Final\\_4-10-14.pdf](http://www.utrunitied.org/EE_assets/docs/UTRU_Measuring_Impact_2014_Final_4-10-14.pdf)

institution. These students tend to return to their communities after their five years of teaching, especially if they are from rural areas near Adams State.

Boettcher plans to develop a program for high school juniors and seniors to shadow teachers and will offer some scholarships to high school students to attend Adams State, creating a pipeline to teaching.

***Alternative Certification: Teacher Residencies: Denver Teach Today/Denver Teacher Residency, Denver Public Schools (DPS).*** Denver Public Schools operates its own teacher preparation programs, often in collaboration with a local university. These programs give the district more control over who is recruited for their classrooms and how they are trained.

Denver Teach Today (DTT) is an alternative route to licensure and is a DPS initiative to recruit and train teachers primarily in the subject areas of secondary math, special education and Elementary Bilingual Education in Spanish/ELA-5. It is a one-year pathway to state licensure. Candidates must be fluent in Spanish if applying for the Elementary Bilingual Education in Spanish endorsement. Candidates participate in an intensive preparation program the summer before their first year in the classroom that includes five-six weeks of professional development and teaching DPS students. Candidates receive direct coaching and support while learning how to plan, deliver instruction and manage students. The second half of the summer includes self-directed coursework and attendance at the DPS New Educator Institute. During the school year, candidates are assigned mentors, peer observers and teacher effectiveness coaches.

Denver Teacher Residency (DTR) is also a DPS teacher training program, meant to prepare candidates to teach in DPS. DTR is based on the UTRU model described above. DTR partners with the University of Denver's Morgridge College of Education (DU) to grant residents who complete the program an MA in Curriculum and Instruction with an emphasis on linguistically diverse learners. Following their residency year, they obtain a teaching job in Denver's highest-needs public schools. Four days a week are spent in a DPS classroom with a mentor teacher; one day is spent with fellow residents in DU's master's degree seminar. One Saturday per month and one weekday evening per week are spent in the DU master's seminar.

***Alternative Certification: Teacher Residencies: The PAR<sup>2</sup>A Center, University of Colorado Denver (UCD).*** In the PAR<sup>2</sup>A Center, participants receive a variety of supports, such as advising, tuition assistance, mentoring in school districts and induction. The program started in 1999, with the first class graduating in 2004. Over the last 15 years, the program has graduated 349 students, mostly non-traditional, and primarily Spanish-speaking, students.

An example of programs at the Center is the Transition of Paraprofessionals to Special Education Teachers through Alternative Licensure Program. This program is a project of the Paraprofessional Resource and Research Center, with the goal to transition paraprofessionals into hard to fill teaching positions in special education. Grant funding for this program is near its end. This is an example of a "Grow-Your-Own" program, where a district partners with a teacher education program to train and

prepare paraprofessionals already in the school district to become full-time teachers.<sup>63</sup> These programs have the advantage of drawing from people who are already living and working in the school district and who therefore understand the population of students and the particular challenges those students face. Programs at the PAR<sup>2</sup>A Center are often grant-funded, which can impact long-term program sustainability.

The PAR<sup>2</sup>A Center is now starting to collect diversity information, focused on minorities. All federally funded projects require the program to keep information on where students are placed, but that information could not be shared with APA for this report. The program did report that its teacher retention rates have been anywhere from 85 to 95%. Program staff attributed this success to the fact that the program goes to rural areas and focuses on local talent.

**Alternative Certification: Troops-to-Teachers.** The Troops to Teachers (TTT) program started in 1994 as a way to recruit and support military veterans who wanted to transition into a second career in teaching.<sup>64</sup> TTT does not train veterans to be teachers. Instead, veterans go through local preparation programs.

One of the primary goals of the program was to place the program participants in high-poverty, high-needs schools. Applicants are required to have a baccalaureate or advanced degree and individuals with educational or military experience in science, math, special education, or vocational subjects are given selection priority. Once accepted into the program, TTT participants receive a \$5,000 stipend for certification expenses, which can be used for university-level master's degree programs or shorter-term alternative certification pathways. Participants also receive a \$5,000-\$10,000 bonus to commit to teaching in high needs public schools. In addition, TTT teachers may receive bonuses for teaching in high needs areas such as math, science, special education, or foreign languages.

Since 1994, more than 17,000 active duty military veterans had transitioned into teaching through the program.<sup>65</sup> Forty percent of TTT teachers have been minorities and 84% of TTT teachers' first teaching assignments were in high-poverty and/or high-minority schools. In that same time period, TTT has placed 785 teachers in Colorado. Of those, 233 were minorities (30%). There are currently 104 Troops to Teachers participants teaching in Colorado. Of those, 35 are minorities (33%). In Colorado, TTT teachers are also more likely to be found in high needs schools. There are currently 73 Troops to Teachers participants teaching in low-income schools (70%). Since 1994, Troops to Teachers has placed 478 participants into low-income schools (61%).<sup>66</sup>

Not only do large numbers of TTT teachers continue to work in low-income, high minority schools, many also plan to remain in the teaching profession. In a national survey of current TTT teachers completed in

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<sup>63</sup> Bireda, Saba and Robin Chait. 2011.

<sup>64</sup> Owings, W.A., L.S. Kaplan, I. Khrabrova, and S. Chappell. 2014. Troops to Teachers Grant Study 4: Technical Report. Center for Educational Partnerships. University of California, Irvine.

<sup>65</sup> Owings, W.A., L.S. Kaplan, I. Khrabrova, and S. Chappell. 2014.

<sup>66</sup> Personal Communication, Meghan Stidd, Associate Regional Director, Mountain Pacific Troops to Teachers

early 2014, 74% said that they plan to remain in the teaching profession “as long as possible or until they retired.”<sup>67</sup> These teachers are also helping to fill positions in high needs subject areas, with 43% teaching math, science, special education, foreign languages, or career/technical education. In 2005, over 90% of administrators surveyed across the nation rated their TTT teachers as “More Effective” in instructional and classroom management practices than were traditionally prepared teachers with similar years of teaching experience.

**Selecting the Right Teachers:** Now that we have discussed the implementation of programs at each stage in people’s careers, including specific examples, it is clear that there are many different programs and practices for recruiting and preparing teachers. But once teachers have been recruited and prepared, the focus shifts to another critical component of the minority teacher pipeline: selecting the right teachers through effective hiring practices. Research shows that creating a purposeful hiring process is an essential ingredient in building a quality teacher workforce. Goldhaber and colleagues conducted a study in Spokane, Washington of the linkage between a teacher hiring protocol scoring system and teacher effectiveness and retention.<sup>68</sup> Spokane’s selection system used a scoring system that included evidence from testing scores, letters of recommendation, courses, training, and interviews covering areas such as classroom management, instructional skills, interpersonal skills and cultural competencies. They found that teachers with higher scores on the selection rubric were more effective (as measured by value-added on student testing) and that teachers hired by the district were more effective than applicants who ended up employed by a different school district in Washington. Hired applicants were also less likely to leave the district.<sup>69</sup>

Similarly, Ebmeier and Ng tested a specially tailored interview protocol designed to assess attitudes and predispositions deemed essential to teachers’ effectiveness in certain low retention environments like urban schools.<sup>70</sup> The protocol was based on research on effective employment interview techniques, effective general teaching practices, and sound teaching strategies in urban schools. By comparing the interview scores of teachers with a range of effectiveness ratings, the researchers found that a significant amount of variance in teachers’ effectiveness ratings could be predicted from their scores on the interview instrument.

Finally, selective hiring has been a hallmark of the Teach for America program. In a study of admissions records for TFA, Dobbie found that a teacher’s scores on hiring measures such as prior achievement, leadership experience, and perseverance were associated with student gains in math. Leadership

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<sup>67</sup> Ibid.

<sup>68</sup> Goldhaber, D., Grout, C., and Huntington-Klein, N. (2014). Screen Twice, Cut Once: Assessing the Predictive Validity of Teacher Selection Tools. CEDR Working Paper 2014-9. University of Washington, Seattle, WA.

<sup>69</sup> Ibid.

<sup>70</sup> Ebmeier, H. and J. Ng. 2005. Development and Field Test of an Employment Selection Instrument for Teachers in Urban School Districts. *Journal of Personnel Evaluation in Education* 18(3): 201-218.

experience and commitment to the TFA mission were associated with student gains in English. The TFA admissions measures are also associated with improved classroom behavior.<sup>71</sup>

### ***The Components of Successful Recruitment of Minority Teachers***

What the successful programs described above have all shared is a commitment to creating partnerships and connections between the schools and districts with the greatest need and the institutions and programs that can help fill that need. They have also shared a recognition that the solution to the problem of too few minority teachers has to match the situation. That means that sometimes the best solution is also the easiest, such as training paraprofessionals to teach from directly within the target school or district. The following list of common components of the most successful recruitment programs is based on a review of successful minority recruitment programs in the literature and themes identified within Colorado programs:<sup>72</sup>

- A focus on building relationships with community partners and organizations and between districts and teacher preparation programs
- A nontraditional talent pool—consisting of first generation college-goers, teacher assistants, substitute teachers without certification, provisionally certified teachers, and career changers
  - Often requires course schedules that fit the needs of working adults and additional academic supports
- Recognition of the institutional barriers to first-generation college or university students:
  - Financial
  - Socioeconomic and cultural—the higher education experience can seem sterile and unwelcoming
  - Lack of family experience in higher education (which may create a barrier, or a lack of mentorship, as students try to navigate certain systems like college applications, admissions, cultural assimilation, professional and career decisions, etc.)
  - Lack of adequate college preparation from high school
- Support for students that struggle with certification exams. This could include:
  - Non-traditional certification criteria such as performance evaluations and individual portfolios
  - Assistance preparing for exams
- Modified course offerings with an emphasis on urban education, multicultural education, working with linguistically diverse populations, special education, and science and mathematics
- Financial incentives such as scholarships, loan forgiveness, teaching assistantships, and stipends as well as creative housing plans
- A value-added philosophy for teaching in which importance is given to the addition of a multicultural background and urban school experiences

Creating the right balance of incentives, support systems, and training/mentoring is challenging, but the programs listed above are proof that minority teacher recruitment can be successful when there is the

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<sup>71</sup> Dobbie, W. (2011). Teacher Characteristics and Student Achievement: Evidence from Teach For America. Harvard University. Cambridge, MA.

<sup>72</sup> Torres, J., Santos, J., Peck, N.L., & Cortes, L. (2004). *Minority teacher recruitment, development, and retention*. Providence, RI: The Education Alliance at Brown University.

right commitment, resources, and capacities to find the right people and place them in the right learning environment.

### Perceived Barriers to Teacher Retention

While the recruitment end of the minority teacher pipeline has shown a remarkable degree of success in assisting minority students in being trained and hired as teachers over the last few decades, these gains have been undermined by an inability to retain minority teachers. These recruitment successes and retention issues can be seen primarily on the national scale, where there has been an increase in the percentage of minority teachers but also a dramatic decrease in retention of minority teachers, which undermines recruitment gains. In Colorado, our analysis for this report shows higher attrition rates for black teachers in 2010 and 2011 than for white teachers.

Nationally, in the two decades from the late 1980s to the late 2000s, the annual rate of minority teacher attrition increased by 28% and has been 24% higher than the attrition in white teachers.<sup>73</sup> This can mostly be explained by the fact that many minority teachers are concentrated in public schools serving high-poverty, high-minority or urban communities.<sup>74, 75</sup> Teachers at these schools report having more serious discipline problems, inadequate resources, less classroom autonomy, and fewer opportunities for professional development than teachers in other types of schools—all factors driving low teacher retention.

Compared to scarce quantitative research on teacher recruitment, there is a relative depth of research on the drivers of teacher retention. As a result, we now have a much better understanding of why teachers leave schools and why they stay.

Research on the factors that lead to high teacher attrition rates can be divided into three categories:

- Student and teacher characteristics
- Job structure (compensation, class size, instructional resources, etc.)
- Working conditions (isolation, autonomy and professional development).

Most of this research has been done in relation to teachers in general. We assume, for the purposes of this study, that research on teachers in general is also applicable to minorities, with some special factors specific to minority teachers. We will specify when results can be broken out for minority teachers.

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<sup>73</sup> Ingersoll, R., Merrill, L., & Stuckey, D. (2014).

<sup>74</sup> Ingersoll and May 2011

<sup>75</sup> It should be noted that because minority teachers only represent 17.3% of the work force, the teaching staff at urban, high-poverty, high minority schools are still predominately white. For instance, only 42% of teachers are minority in high-minority public schools. Likewise, only 35% of teachers are minority in high-poverty public schools and within those schools, white teachers are more likely to leave than minority teachers (Ingersoll and May 2011, Achinstein et al. 2010).

**Student and Teacher Characteristics:** In an early study of teacher retention, Ingersoll found that student problems with discipline and lack of motivation increase the likelihood of teacher attrition.<sup>76</sup> Students' social class and race also matter. Teachers in schools with majority nonwhite students were up to three times more likely to leave than teachers in schools with majority white students.<sup>77</sup> Similarly, schools with high rates of poverty and lower-achieving students also experience lower retention rates. However, within these hard-to-staff schools, minority teachers had lower rates of attrition than white teachers.<sup>78</sup> Researchers also found lower retention rates in urban and suburban schools than in rural schools.<sup>79</sup>

In a comprehensive review of research on teacher attrition, Borman and Dowling found that teachers who entered the profession after age 30 are more likely to remain in teaching and much less likely to leave than those who enter the profession below age 30.<sup>80</sup> Women were more likely to leave the profession than men, teachers who were married were slightly more likely to leave the profession than non-married teachers, and teachers who had new children were more likely to leave the profession than teachers who did not (though there is evidence that many of these teachers return to teaching).<sup>81</sup>

In terms of qualifications, teachers with degrees in math and sciences tend to leave the profession in higher rates than teachers in other subject areas.<sup>82</sup> Teachers with graduate degrees also have relatively lower retention rates. Also, Borman and Dowling found mixed results in terms of retention and teachers' academic achievement, measured by scores on college admission and placement exams.

Retention rates in the overall teacher workforce tend to be lower for teachers originating from short-term, alternative certification programs.<sup>83</sup> Research has shown that higher proportions of minority teachers receive their teacher certification in alternative programs, although we were not able to directly determine if this pattern of lower retention rates held for minority teachers with alternative certifications.<sup>84</sup>

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<sup>76</sup> Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Education Research Journal*, 38(3), 499-534.

<sup>77</sup> Borman, G.D. and N.M. Dowling. 2008. Teacher Attrition and Retention: A Meta-Analytic and Narrative Review of the Research. *Review of Educational Research* 78: 367; Hanushek, E., Kain, J. & Rivkin, S. (2004). Why public schools lose teachers. *Journal of Human Resources* 39(2) 326-254; Loeb, S., Darling-Hammond, L., and Luczak, J. (2005) How Teaching Conditions Predict Teacher Turnover in California Schools. *Peabody Journal of Education*, Vol. 80, No. 3, pp. 44-70.

<sup>78</sup> Achinstein et al. (2010).

<sup>79</sup> Borman and Dowling (2008).

<sup>80</sup> Ibid.

<sup>81</sup> Ibid.

<sup>82</sup> Ibid.

<sup>83</sup> Johnson, S. M., & Birkeland, S. (2003). Pursuing "a sense of success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581-617.

<sup>84</sup> Villegas, A. M., & Geist, K. (2008, March). Profile of new teachers of color in U.S. public schools: A look at issues of quantity and quality. Paper presented at the annual meeting of the American Educational Research Association, New York.

**Job structure:** The same Borman and Dowling review described above reported on 14 studies that included salary as a predictor of teacher attrition, all of which found that higher salaries correlated with higher rates of retention (as would be expected). This suggests that financial incentives to teach in difficult schools could be one way to offset high rates of attrition. For example, evaluation of the ProComp alternative compensation system in Colorado found that hard-to-staff bonuses were associated with increased retention.<sup>85</sup> A three-year study of a North Carolina program to pay math, science, and special education teachers an annual bonus of \$1,800 to teach in high poverty or academically failing schools found this incentive reduced overall rate of attrition by 12%.<sup>86</sup>

Another possible factor in recruitment and retention of new teachers is the structure of retirement benefit packages. A recent study by the Colorado Pension Project<sup>87</sup> showed that only about 13% of teachers in Colorado reach the combination of age and years of service required to receive a full benefit. Teachers who leave the system before full retirement still receive benefits, but get substantially less money. The study explains: “the back-loaded distribution of retirement benefits means that those who take time off to care for family, move to or from Colorado, or who move between the private and public sectors over their careers are more likely to lose out under the state’s formula.”<sup>88</sup> This inequitable distribution of benefits may also be a barrier for recruitment and retention of teachers from the millennial generation (“Generation Y”), who are more likely to switch jobs and careers throughout their working life.<sup>89</sup> It may also be a hindrance to mid-career switchers, who may never reach the age and years of service requirements for full benefits.

One factor that has been shown to increase teacher retention is additional funding for instructional resources. Schools that spent an additional \$500 per pupil in instructional spending increased retention rates of teachers by a factor of five over less well-funded schools.<sup>90</sup> Another study found that schools with poor facilities and a lack of textbooks suffer higher attrition due to low teacher job satisfaction.<sup>91</sup> In Colorado, particularly in smaller districts, administrators reported that teachers, in general, leave for better opportunities and higher salaries. Others commented that the largest factor causing minority teachers to leave teaching is advancement, as teachers of color have opportunities to grow. Often they are not leaving the district, they are leaving the classroom.

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<sup>85</sup> Proctor, Diane, Walters, Bonnie, Reichardt, Robert, Goldhaber, Dan., & Walch, Joe. (2011). *Making a Difference in Education Reform: ProComp Evaluation Report 2006-2010*. The Evaluation Center, University of Colorado Denver: Denver, CO

<sup>86</sup> Clotfelter, Charles, Elizabeth Glennie, Helen Ladd, Jacob Vigdor. Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina. *Journal of Public Economics*. Volume 92, Issues 5–6, June 2008, Pages 1352–1370

<sup>87</sup> <http://coloradopensionproject.com>.

<sup>88</sup> <http://coloradopensionproject.com/retirement-security/winners-losers/>.

<sup>89</sup> Schofield, C.P. and S.H. Honore. 2014. The Millennial Compass: Truths about the 30-and-under Generation in the Workplace. MSL Group. <http://mslgroup.com/insights/2014/the-millennial-compass.aspx>

<sup>90</sup> Borman and Dowling 2008.

<sup>91</sup> Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teacher conditions predict teacher turnover in California Schools. *Peabody Journal of Education*, 80(3), 44–70.

**Working conditions:** From individual interviews with teachers of color, a focus group of teachers at a training session in Loveland, and interviews with district administrators, we heard teachers of color sometimes leave because the overall building may be culturally insensitive. Some administrators believe they lose minority teachers because they may be the only minority teacher in the building and they feel very isolated.

*"We haven't helped our principals understand teachers of color and haven't provided enough diversity training." (District Administrator)*

A survey by Ingersoll and May of 300 Missouri K-12 teachers found that job satisfaction was more important than salary, duties, and instructional spending in teachers' decisions to remain in the profession.<sup>92</sup> The researchers found that school organizational conditions (collective faculty decision-making and individual classroom autonomy) strongly related to minority teacher departures.<sup>93</sup> They found that when organizational conditions were constant, there were no significant differences in attrition rates between minority and white teachers. These working conditions factors were more significant than salary, professional development or instructional spending.

A number of interviewees said the contentiousness of heightened scrutiny and accountability of teachers in a career with relatively low pay contributed to teachers leaving the profession. One respondent said,

*"Teachers feel a tremendous urgency to increase scores in chronically low-performing schools; this combined with kids coming in in real poverty—these are enormous challenges teachers face every day. Further, teachers are subject to our turnaround efforts. . . . [There is] less stability [in turnaround schools] than in affluent schools—more of a churn feeling. This contributes to teachers leaving." (District Administrator)*

*"My actual instruction time is minimal now, because I have to progress monitor, assess every other week, and then track where students are according to grade level. Testing really throws me. When I'm overwhelmed, [students] are too, and that's energy I don't want to give them." (Teacher)*

Minority teachers reported that growing expectations of the state and districts, evaluations from people without experience in teaching, increasing mandates, and poor administrative support are reasons they may leave the teaching profession.

In a study using the national Teacher Follow-up Survey data, Ingersoll and Connor suggested that minority teachers, like their nonminority colleagues, were more likely to leave schools where they

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<sup>92</sup> Perrachione, Beverly A., Vicki J. Rosser George J. Petersen. 2008. Why Do They Stay? Elementary Teachers' Perceptions of Job Satisfaction and Retention. *Professional Educator* 32(2).

<sup>93</sup> Ingersoll and May 2011.

lacked administrative support.<sup>94</sup> However, the study went further, linking predicted probabilities of minority teacher attrition with school working conditions. Ingersoll and Connor found that low levels of teacher classroom autonomy, administrative support, and faculty influence in decision-making reduced minority teacher retention rates. Their model predicted 30% attrition among minority teachers in schools with low levels of teacher autonomy compared to 15% attrition in schools with high autonomy, 24% attrition in schools with low administrative support compared to 16% in schools with high administrative support, and 22% attrition in schools with low faculty influence compared to 13% in schools with high faculty influence.

This study was consistent with analysis of the TELL survey of North Carolina teachers that examined teachers' perceptions of working conditions and intended and actual departures.<sup>95</sup> This study used the TELL survey of teachers which has also been administered in Colorado. Ladd found that working conditions were significantly correlated with teachers' stated intentions to depart a school, as well as actual departure rates. Among the factors included in measures of working conditions, the quality of school leadership was by far the most important, outpacing facilities and resources, teacher empowerment, professional development, mentoring, and time.<sup>96</sup>

A recent cross-state analysis of working conditions using TELL survey data shows that Colorado teachers' perceptions of working conditions are significantly lower than other states.<sup>97</sup> Colorado teachers rated factors such as adequate planning time, facilities, resources, school leadership, professional development opportunities, and support for instructional practices well below the average of the nine states included in the study (CO, DE, KY, MA, MD, NC, OH, TN, and VT). Colorado teachers rated factors such as community involvement and ability to manage student conduct at or around average. Colorado teachers did not rate any component of working conditions above the average of the states in the study.

Reichardt and his colleagues found similar results regarding the importance of school leadership in teacher decisions to stay or leave schools.<sup>98</sup> Using follow-up qualitative methods, (interviews and surveys) the researchers discovered that for teachers, positive administrative support was related to: 1) support when working with challenging students and parents, and 2) phasing in district and state reform initiatives to allow teachers to integrate them into their ongoing instructional practices.

The results of the above studies suggest that conventional wisdom regarding the relationship between student demographics and teacher attrition does not tell a complete story. Low teacher retention rates

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<sup>94</sup> Results described in Achinstein et al. 2010. Original data and analysis published in Ingersoll RM, Connor R (April, 2009) *Paper presented at the annual meeting of the American Educational Research Association* (San Diego, CA), What the national data tell us about minority and Black teacher turnover.

<sup>95</sup> Ladd, H.F. 2009. Teachers' Perceptions of their Working Conditions: How Predictive of Policy-Relevant Outcomes? CALDER Working Paper No. 33.

<sup>96</sup> Ladd, H.F. 2009. Teachers' Perceptions of their Working Conditions: How Predictive of Policy-Relevant Outcomes? CALDER Working Paper No. 33.

<sup>97</sup> New Teacher Center. 2013. 2013 TELL Survey: Cross-State Analyses of Results, 2012-2013. New Teacher Center.

<sup>98</sup> Reichardt, R., R. Snow, J. Schlang, and K. Hupfield. 2008. Overwhelmed and Out: Principals, District Policy and Teacher Retention. Connecticut Center for School Change.

are driven by the less satisfactory conditions in which they must teach, which are more likely to occur at the most disadvantaged schools.<sup>99</sup> Reichardt and colleagues suggest that in an era in which reforms are inundating classrooms and introducing new burdens and requirements on teachers, the primary role of principals, district administrators, and even policymakers is to reduce unnecessary distractions for teachers so they can focus on implementing reforms and educating children without being overwhelmed.<sup>100</sup>

**Costs of Teacher Recruitment and Attrition:** For the past decade, researchers have been trying to determine the cost of teacher attrition using various business and educational models. On the front end of the teacher pipeline, it can cost around \$10,000 per hire to recruit, hire, and support a new teacher,<sup>101</sup> a figure that drives home the importance of teacher retention. The Alliance for Excellent Education (2005) estimated the national yearly cost of replacing public school teachers at between \$2.2 billion and \$4.9 billion. The National Commission of Teaching and America's Future (2007) put the national cost at \$7.3 billion a year. In her doctoral dissertation for the University of Oklahoma, Edwynna Synar examined the various fiscal components of teacher attrition in a mid-sized urban school district in the Southern U.S.<sup>102</sup> Utilizing data from 1999 to 2008, she found that the yearly attrition costs ranged from \$3.2 million in 2003 to \$5.7 million in 2005, with an average yearly cost of \$4.1 million. This translated into per-leaver cost ranging from \$10,000 to \$18,300.

In a study of two Southeast Florida School Districts with high minority student populations—St. Lucie and Broward County—researchers discovered some interesting links between the costs of teacher attrition and investments in teacher retention.<sup>103</sup> For the 2004–05 school year, the cost of replacing a teacher in the St. Lucie School District was \$4,631 per teacher, and the district had a attrition of 320 teachers out of 1,952 (16.4%). In the same year in the Broward County School District, the annual costs associated with replacing a teacher were calculated at \$12,652 per teacher, and the district had a attrition of 1,206 teachers out of a total of 16,648 teachers in the school system (7.25%). The study shows, then, that St. Lucie County School District had a very high teacher attrition rate, but a relatively low cost of teacher attrition, while Broward County School District had a higher cost of teacher attrition, but relatively lower teacher attrition rate. An explanation for these differences is Broward County's investment in its teacher induction and support program, which greatly reduced attrition rates.

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<sup>99</sup> Johnson, S.M., M.A. Kraft, J.P. Papay. 2012. How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement. *Teachers College Record* 114: 1-39.

<sup>100</sup> Reichardt et al. 2008.

<sup>101</sup> Reichardt, R., M. Arnold, and K. Hupfield. 2006. In Search of Quality: Recruiting, Hiring, and Supporting Teachers. Connecticut Center for School Change; Milanowski, A.T. and A.R. Odden. 2007. A New Approach to the Cost of Turnover. Working Paper 13. The School Finance Redesign Project. Seattle, WA: University of Washington.

<sup>102</sup> Synar, Edwynna. 2010. Examination of the financial costs of teacher turnover in mid-sized urban school districts. PhD dissertation U. of Oklahoma

<sup>103</sup> Eliah Watlington, Robert Shockley, Paul Guglielmino, and Rivka Felsher. 2010. The High Cost of Leaving: An Analysis of the cost of teacher turnover. *Journal of Education Finance*.

The Broward County program, the New Educator Support System (NESS), represents a significant investment and commitment by the school district to support and retain teachers. Given these expenditures, the costs associated with replacing a teacher were significantly higher in Broward than in St. Lucie, but the retention costs paid off in lower attrition.<sup>104</sup> Interestingly, and in contrast to other studies, the district with the largest minority student population was not the district with the highest attrition rate. Broward has a minority student population of 69.7%, compared to 57.9% in St. Lucie. The authors believe that Broward County is an anomaly due to the strong investment in teacher retention.

## Retention Strategies

Given the low rates of retention during the first five years of teachers' careers, programs to ease the transition into teaching from teacher preparation programs or other careers are likely to be most effective in reducing rates of attrition.<sup>105</sup> Research shows various factors that are important to reducing attrition among minority teachers:

- Higher salaries and incentives
- Effective principals and school leadership
- Comprehensive mentoring and induction programs
- Networks of teacher collaboration and support
- More classroom autonomy
- Better facilities and educational resources
- Support for humanistic commitments

While research shows that increased pay, reduced class sizes, and incentives to teach in difficult schools may be effective in retention, the reality is that these all require significant financial outlays by states and local school districts that may not be possible in the current budgetary environment. There are other strategies that are relatively cheap and can reduce attrition by addressing some of the major concerns of minority teachers.

As described in the section above, creating comprehensive induction programs for beginning teachers can pay financial dividends in terms of reduced attrition and can also provide the benefits that accrue from a stable workforce: networks of collaboration and support, collegiality, and investments in human capital. Research in Colorado has found that supportive environments are highly valued by newly prepared teachers and may also help with recruitment.<sup>106</sup>

The reality is that assigning beginner teachers to the most difficult assignments or giving them less support resources than veteran teachers lead to high attrition. A “sink or swim” environment inevitably

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<sup>104</sup> Shockley, R., P. Guglielmino, and E. J. Watlington. 2006. A national crisis in teacher education: What are the costs? [http://www.pearsonschool.com/live/assets/200727/2006\\_1 ShockleyGu glielminoWatlington-558-1.pdf](http://www.pearsonschool.com/live/assets/200727/2006_1 ShockleyGu glielminoWatlington-558-1.pdf).

<sup>105</sup> Borman and Dowling

<sup>106</sup> Proctor, Diane, Walters, Bonnie, Reichardt, Robert, Goldhaber, Dan., & Walch, Joe. (2011). *Making a Difference in Education Reform: ProComp Evaluation Report 2006-2010*. The Evaluation Center, University of Colorado Denver: Denver, CO

leads to lower retention rates for beginning teachers. Research shows that schools with mentoring programs for beginning teachers or teacher networks for collaboration have less attrition than those without such programs.<sup>107</sup>

There also are a number of programs that have demonstrated success in retaining quality teachers and building a stable teaching staff at schools in the most need of high quality instruction and leadership. The New Teacher Center provided the following legislative and policy recommendations for support of induction programs in Colorado:<sup>108</sup>

- Provide more regular and intensive induction program oversight.
- Assess the effectiveness and impact of induction programs.
- Strengthen requirements for educator induction programs.
- Provide dedicated state funding to elevate induction program quality and enhancement.
- Establish an online clearinghouse of induction best practices and key program tools.

Most successful programs involve strong collaboration between teacher education programs (both traditional university-based programs and alternative programs such as Urban Teacher Residencies). They also require careful recruitment and selection of participants and candidate teachers, culturally sensitive education curriculum, and induction and support well past the first year of teaching

A study by Susan Kardos and Susan Moore Johnson on first- and second-year teachers in California, Florida, Massachusetts, and Michigan found that new teachers working in “integrated professional cultures” characterized by collaboration and interaction between novices and veterans were less likely to leave teaching.<sup>109</sup> The study also documented a strong positive correlation between new teachers’ ongoing professional interaction with experienced colleagues and job satisfaction, a key factor in reducing attrition.

School organization is also important. Teachers are more likely to stay in teaching if they perceive that they have more autonomy in their classroom and that they contribute to school-wide decision-making.<sup>110</sup> In a study that targeted first-year teachers in New York City as well as NYC teachers that had recently left teaching, researchers found that perceptions of administrative support and influence in the

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<sup>107</sup> Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). Who stays in teaching and why: A review of the literature in teacher retention. Cambridge, MA: Harvard Graduate School of Education, Project on the Next Generation of Teachers, AARP.

<sup>108</sup> New Teacher Center. 2013. Increasing the Effectiveness of Educator Induction Programs in Colorado: A Report to the Colorado Department of Education and the Colorado State Board of Education. New Teacher Center.

<sup>109</sup> Kardos, S.M., and S.M. Johnson. 2007. On Their Own and Presumed Expert: New Teachers Experience with Their Colleagues. *Teachers College Record* Volume 109 Number 9, 2007, p. 2083-2106.

<sup>110</sup> Johnson, S. M. (2006). The workplace matters: Teacher quality, retention and effectiveness. Washington DC: National Education Association.

school were by far the most important for decisions to remain in teaching or to leave the teaching profession.<sup>111</sup>

On that same topic, research also shows that more effective principals are important to retention, recruitment and development of quality teachers. Effective principals can significantly increase school effectiveness by retaining higher-quality teachers and removing less-effective teachers; attracting and hiring higher-quality teachers to fill vacancies; and having teachers who improve at a greater pace than those in schools with less effective principals.<sup>112</sup>

Another important but often overlooked factor in minority teacher retention is the idea that minority teachers are motivated by what researchers call “humanistic commitments.”<sup>113</sup> In a five-year study of minority teachers in California, researchers found that many minority teachers are drawn to the profession specifically to work with minority students and to make a difference in their lives. Many of these teachers remain at their schools, despite the challenges and many negative factors that often reduce retention, because they feel a deep sense of loyalty to their students. The authors of this study suggest that the ranks of minority teachers can be bolstered through pre-service programs focused on diversity and culturally relevant teaching, with an emphasis on working in urban schools with large proportions of poor, minority students.

### Lessons from Other States

Other states are making targeted efforts at minority teacher recruitment and retention. Research in comparison states can be thought of as both providing protection and offering prescriptive suggestions for Colorado. This research is protective in that it ensures Colorado can learn from outside states’ mistakes and challenges; it is prescriptive in that it ensures we take note of outside states’ greatest successes.

To situate our findings and recommendations in a broader context, APA chose two states for comparison: Connecticut and Oregon. APA chose these comparison states because both have adopted legislation specifically focused on minority teacher recruitment. Oregon passed its Minority Teacher Act in 1991 and the Connecticut General Assembly passed two minority teacher recruitment laws in 1998. Both states have used these pieces of legislation to form (and, over the years, reform) task forces and initiatives. Colorado can find many suggestions for its own efforts in Oregon and Connecticut’s proven best practices.

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<sup>111</sup> Boyd, Donald, Pamela Grossman, Marsha Ing, Hamilton Lankford, Susanna Loeb, James Wyckoff. 2009. The Influence of School Administrators on Teacher Retention Decisions. CALDER. Working Paper #25.

<sup>112</sup> Beteille, Tara, Demetra Kalogrides, and Susanna Loeb. 2009. Effective Schools: Managing the Recruitment, Development, and Retention of High-quality Teachers. CALDER Working Paper No. 37

<sup>113</sup> Achinstein, B., R.T. Ogawa, D. Sexton, and C. Freitas. 2010. Retaining Teachers of Color: A Pressing Problem and a Potential Strategy for “Hard-to-Staff” Schools. REVIEW OF EDUCATIONAL RESEARCH 80 (1): 71-107.

### **Oregon**

In 1991, Oregon passed the Minority Teacher Act. Since then, there have been "sporadic efforts to address the gap between the demographics of the state's educator workforce and that of the K-12 students they serve," but "[the] gap [...] continues to widen" as of 2003, 2005, and 2011 reports.<sup>114</sup> To address these lagging results, SB 755 in [year] revised the Minority Teacher Act.

The Oregon Education Investment Board (OEIB) adopted an "Oregon Equity Lens" in April 2013 to identify specific "[target] areas for action, intervention, and investment."<sup>115</sup> Education leaders around the state formed an Oregon Educator Equity Advisory Group (OEEAG). OEEAG formed an Educator Workforce Data Team to help collect and analyze data. APA interviewed two OEIB members to learn more about the lens and about best practices:

*"The Equity Lens is a guiding premise for examining every aspect of education and for engaging others in discussion of data disaggregated by race, ethnicity, gender, and economic level. More and more groups working on education issues are using the Equity Lens to examine their policies and practices and to adopt changes that better address equity gaps." (OEIB member)*

Oregon also uses an Educator Equity Scorecard and TELL surveys (which are also conducted in Colorado) to measure the effectiveness of SB 755 minority teacher recruitment and retention initiatives. The Scorecard and the surveys also help evaluate hiring practices and working conditions for all teachers, especially diverse teacher candidates. The Educator Equity Scorecard tracks a number of data points to monitor recruitment, retention, community partnerships, and culturally conscious pedagogy at the school and district levels. Beyond tracking the number of educators of color who are educated, hired, and retained, the scorecard also examines the degree to which schools and districts engage in partnerships with community organizations that expand the reach of the school and create a more welcoming and inclusive climate. Another element of the Scorecard is designed to look at the diversity of educators promoted to leadership positions and of course the score card will also examine student data points disaggregated by race and ethnicity.

*"It is important to understand the working conditions of teachers to improve recruitment and retention. It will be important to be sensitive to the most meaningful data, not just all data." (OEIB member)*

Interview respondents said their most important lessons from the work in Oregon to date were to: 1) pay equal attention to recruitment and retention, both during the pipeline and after hiring, 2) provide culturally-responsive training for principals and district-level employees charged with recruiting and interviewing prospective educators, 3) understand the possible impact of teacher unions on minority

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<sup>114</sup> Oregon Education Investment Board (July 2014). "Executive Summary." The 2014 Oregon Minority Teacher Status Report, In Accordance with Senate Bill 755.

<sup>115</sup> Oregon Education Investment Board (July 2014). "Full Status Report:" The 2014 Oregon Minority Teacher Status Report, In Accordance with Senate Bill 755. "Process for Developing the 2014 Status Report." Pg. 12.

teacher recruitment/retention, and 4) find best practices for tracking data, understanding there may be missing data. Oregon interviewees shared:

*"Best practices for minority educators are best practices for all educators." (OEIB member)*

*"There still needs to be dialogue on union practices that could sabotage minority teacher recruitment efforts. For example, seniority is a priority for unions, so newly hired teachers are often given the biggest challenges, the highest attrition schools and classrooms, the least support." (OEIB Member)*

To succeed in making change, one respondent noted that there must be "legislative teeth" and structured partnerships. The OEIB found it extremely useful to partner with the Chalkboard Project—a group made up of the biggest foundations in Oregon, which collaborate to decide on projects where they can make a difference. Chalkboard has an initiative called TeachOregon, which "gives school districts and universities the opportunity to design innovative models to prepare the next generation of diverse and effective Oregon teachers." TeachOregon is a nonprofit focused on good clinical practice, mentorship, etc. People look to this relatively new initiative for support.

*"Diversifying the teacher workforce really is going to take some policy investment and some financial investment. We need structured support and partnerships." (OEIB Member)*

### ***Connecticut***

In 1998, Connecticut passed two laws to maximize minority teacher recruitment. The General Assembly approved PA 98-252, requiring boards of education to create, in writing, formal minority recruitment plans, and then implement those plans; and PA 98-168, encouraging minority college students to become teachers through financial incentives including tuition grants and loan reimbursements.

The statutes also established Regional Education Service Centers (RESCs). By 2000, Connecticut school districts were partnering with RESCs to implement five-step recruitment plans. These plans included: 1) grow your own programs, 2) Praxis I exam preparation, 3) targeted outreach for college and high school students, 4) software to match teacher candidates with school district openings, and 5) committees to advise minority recruitment. New RESC tools, like a teacher candidate-school district matching database, helped connect schools with diverse teacher candidates. Numbers of minority certified staff began to increase, but with two caveats: minority teacher numbers were clustered in certain urban areas, and the numbers were still low overall.<sup>116</sup>

Connecticut's six RESCs collaborated to form the Regional Education Service Center Minority Teacher Recruiting Alliance, or RESC MTR, in 2007. The State Department of Education allocates General Assembly funds to the RESC MTR, which narrowed its stated purpose to three points: 1) "encourage minority middle and secondary school students to attend institutions of higher education and enter teacher preparation programs," 2) "recruit minority students attending institutions of higher education to enroll in teacher preparation programs and pursue teaching careers," and 3) "recruit and retain

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<sup>116</sup> Lohman, Judith (2000). Minority Teacher Recruitment. Connecticut General Assembly Office of Legislative Research. <http://www.cga.ct.gov/2000/rpt/2000-R-0102.htm>.

minority teachers in Connecticut schools.”<sup>117</sup> Connecticut is currently trying to shift from committee processes to an RFP, and this shift should be possible unless they are hit with a funding freeze.

APA interviewed members of the MTR Alliance. Research, one respondent explained, should be used to determine funding:

*“It is important not to be lured by the quick solutions, just to make it look like something is happening or throw money at the problem. Instead, we have to put research behind possible solutions to determine which are best.” (Connecticut Interviewee)*

RESC MTR identified a variety of possible programmatic priorities, including: 1) pipelines to teaching, 2) PRAXIS test preparation, 3) scholarships for minority teachers, and 4) minority teacher recruitment fairs. Between these choices, task forces are currently most interested in strengthening pipelines to teaching and increasing the availability of scholarships for minority teachers. Connecticut has not seen much return on test preparation efforts or on minority teacher recruitment fairs, so focus has shifted away from these strategies.

Connecticut’s efforts to recruit and maintain minority teachers reinforced what APA had already heard from Colorado: programs and strategies should match local contexts and districts need to recognize their strengths and weaknesses in recruiting and retaining diverse teachers. Connecticut, like Colorado, can stir feelings of hesitation in minority teacher candidates. Certain Connecticut districts tried to recruit from Historically Black Colleges and Universities (HBCUs) in the Deep South and found that the cultural landscape of Connecticut was not a selling point:

*“We’re not necessarily a warm, welcoming climate for people of color, so these efforts raised a larger question of whether students would willingly leave the South to come to Connecticut. We have to see if there are deeper systemic issues. We can’t just assume we can transplant students of color to Connecticut without any barriers.” (Connecticut State Department of Education Employee)*

Programs that match contexts will improve the overall minority experience, addressing the whole pipeline to teaching. It is important to note that some minority students have had negative experiences in the contexts of their own educations, and this may affect their interest in teaching professionally. “Recruitment efforts need to start much earlier to make education more positive for minorities in general,” a respondent said.

### ***Conclusions from Other States***

Gathering information on best practices in Connecticut and Oregon reinforced the conclusions from research that programs must match contexts and that continued evaluation is critical to the success of any legislative measure(s). Specifically, we heard that outcomes should be evaluated early, so that action plans can be consistently adjusted and improved. Colorado is still in early stages of creating and implementing strategies for minority teacher recruitment and retention. As such, the state has to put

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<sup>117</sup> Connecticut Alliance of Regional Education Service Centers: <http://www.now.info/RESCMTR/>.

time into research, evaluation, and dialogue between stakeholders. This ongoing examination of efforts will help Colorado ensure it's effectiveness in attracting diverse teacher candidates and determine where its funding will have the greatest impact.

Colorado will need to strengthen existing resources, like scholarships and grants, and develop additional incentives for prospective teachers. Per the recommendations of this report, Colorado should create a grant system addressing minority teacher pipelines and form a consortia of representatives to evaluate pipeline efforts. When Colorado has established a grant system and consortia (similar to Oregon), the state can shift focus to more specific, local practices. For example, Oregon is currently working to provide district-level trainings in cultural responsiveness. In the future, Colorado can implement trainings like these. Research in Oregon and Connecticut underscores the need to fit with the particular contexts of districts to strengthen systems for minority teacher candidates. Ultimately, the objective is clearer interviewing and hiring pathways; greater administrative supports; increased opportunities for teacher mentoring and coaching; and more cultural understanding and dialogue within schools.

## Conclusions and Policy Implications

During the 2012-13 school year, the proportion of minority students in Colorado was 43%, up 24 percentage points since 1996. As the proportion of minority students continues to grow, the need for more minority teachers grows as well. The need to increase the share of minority teachers can be seen both in the literature and in the field. However, despite this agreed-upon need, Colorado's teacher workforce has not become more diverse, instead remaining at about 10% minority since 1999.

Within this framework, it should be acknowledged that demographics of Colorado's teacher workforce resemble demographics of its college-educated workforce. However, there is some indication of change on the horizon. Colorado's colleges and universities are graduating a higher proportion of minority students (21%) than are being hired into new teaching jobs in Colorado (12%). Our education system has the opportunity to proactively influence the diversity of teachers entering the profession.

Colorado is uncommon in that a large share of our teachers, more than 50%, are prepared out of state.<sup>118</sup> However, when it comes to minority teachers, more than 50% are prepared in state. This fits with what we heard from our interviews with district representatives and minority teachers: The pull of home is important to minority teachers. Local recruitment is seen as a more effective strategy than out-of-state recruitment for most districts, particularly those districts that lack capacity for extensive out-of-state recruitment efforts.

Recruitment strategies can be applied throughout the teacher preparation pipeline. To be effective, recruitment strategies must be tailored to fit the context where minority teachers live, are prepared, and work—taking into account geographic area, population demographics, local culture, and lived experiences of minorities—since there is no single backdrop to minority teacher recruitment and

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<sup>118</sup> Boyd, D., Lankford, H., Loeb, S. & J. Wyckoff. 2003. The Draw of Home: How Teachers Preferences for Proximity Disadvantage Urban Schools. National Bureau of Economic Research. Cambridge, MA

retention, and no monolithic minority community. Some effective strategies include: fitting with context; recruitment of minority candidates already living and working in a community; intentional and focused recruitment in nontraditional areas, or from nontraditional social and professional pools like church groups, local businesses, chambers of commerce, and other community organizations; support for minority candidates' cultures, and for cultural competency in general, within districts and teacher preparation programs; a focus on teaching as a way to give back to the community, particularly for minority teachers who may have a strong sense of humanistic commitment; and implementation of programs at each stage in people's careers (early outreach / grow your own programs, recruitment within college, and recruitment of recent graduates and mid-career switchers). Many of Colorado's recruitment programs have gained momentum but have not intentionally focused on recruiting minority teachers. Some programs have suffered from inconsistent funding.

As with recruitment, there is no single strategy to address minority teacher retention. However, relationships and intent are also important to retention. Quite simply, people choose to remain in the classroom if they have the supports they need to be professionally successful and have a personally fulfilling life. These supports include mentoring, induction, placing teachers in environments where they can succeed, effective professional development as well as a workplace that provides a level of autonomy and respect. Other strategies for increasing retention include: higher salaries and incentives; effective principals and school leadership; comprehensive mentoring and induction programs; networks of teacher collaboration and support; increased classroom autonomy; better facilities and education resources; and support of, or positive reinforcement for, teachers' humanistic commitments.

There are many recommendations for increasing the proportion of minorities entering the teaching profession, and for engaging minority teachers who are already working in classrooms. No one tool emerged as "The Solution." Instead, each recommended strategy has the potential to be successful in the right context and with the right intentionality. There is a common desire across school districts and teacher preparation programs to address minority teacher recruitment and retention issue. Still, Colorado needs additional capacity in terms of support, resources, and knowledge to improve recruitment and retention efforts. Different communities within Colorado also have different strengths and concerns to consider when addressing the dearth of minority teachers. Strategies must fit with contexts. Finally, relationships are a key part of recruitment and retention efforts. To help people move through the various pipelines to teaching, we must build good, long-lasting, and culturally supportive relationships within minority communities, within institutions, and between individuals.

There is no single, statewide solution to the challenge of recruiting and retaining minority teachers. Instead, there are multiple possible solutions, tailored to fit the assets and needs of different communities and different parts of the state. The role of the state is to help communities organize and build capacity to recruit and retain minority teachers, and to evaluate recruitment and retention efforts to learn from successes and challenges. In order to accomplish these goals of organization, capacity-building, and continued evaluation, we make these recommendations:

***Recommendations for the Legislature:*** The legislature has a key role in providing incentives and long-term capacity-building support for minority teacher recruitment and retention. We recommend the legislature create and authorize a multi-million dollar per year program that consists of a set of five to ten multi-year grants. These grants would be available to individual and consortia of districts, teacher preparation institutions, and non-profit organizations to increase the recruitment and retention of effective minority teachers. The grantees should conduct programs that best meet their needs and context. Below is a list of program options:

- Create Regional Minority Teacher Recruitment Alliances, responsible for developing minority teacher recruitment plans for their respective member districts.
- Develop financial incentives, such as bonuses or loan forgiveness, for minority teachers.
- Develop and grow Teacher Cadet programs focused on minority students.
- Create minority teacher induction programs between districts and teacher preparation programs.
- Provide principal, school staff and district administrator training and support on cultural competence and minority teacher recruitment and retention.
- Create financial supports for paraprofessionals attaining their teaching licenses.
- Forge partnerships between Minority Serving Institutions (MSIs) and local districts in Colorado to enhance the minority teacher pipeline.
- Provide additional funding for mid-career recruitment programs focused on attracting minorities into the classroom.
- Support centers within teacher preparation programs to assist with minority teacher recruitment, advocacy, and support.

Any efforts to improve minority teacher recruitment and retention should flow out of an underlying theory of action, with four components: identification of potential teachers to recruit or current teachers to retain; engagement with potential teachers to recruit or current teachers to retain; support for potential and current teachers to help them enter or remain in the profession; and outcomes in terms of increasing the number of minority teachers. Each proposal should describe the process for accomplishing each of the four components above, as well as the challenges and supports to the implementation of those components. Evaluations for each program should be tailored to support implementation needs and to gather program-specific evidence of impact. Along with this specificity, evaluations should also examine the implementation of each program component listed above. A recommended set of indicators, or evaluation questions to measure progress, is listed in Appendix III.

At the same time that program should include these components, programs should also be monitored through a set of indicators, or evaluation and measurement questions to track progress. These indicators, to be used across the entire portfolio of programs working to increase the share of minority teachers, should include the following questions:

A four-component theory of action, taken together with clear indicators of progress, will strengthen the programs created to support statewide minority teacher recruitment and retention goals. Using these

components and indicators, programs can work to increase the share of minority teachers while also tailoring practices to align with specific community contexts.

After the proposals process, recipients awarded grant funding could determine how to best use resources based on their local context and needs. Grants should strengthen the recruitment and training of teachers of color through both traditional and alternative routes. The grant program should also be structured to help grow the capacity of districts that do not currently have experience with grant competitions or human resources innovations (e.g. smaller, poorer, more rural districts).

Building capacity will require monetary resources, but with specific expectations for how these resources will be used. Put differently, these grant efforts should not just passively exist; they must accomplish measurable progress. To this aim, the legislature must require collection of data on progress, provide for periodic evaluation of grant-funded programs, and reporting so that program successes and pitfalls can be shared within the education community.

As school districts, teacher preparation programs and non-profits would propose projects to create and strengthen minority teacher pipelines, data collection will be key to evaluating and learning from recruitment and retention programs to help determine how resources are best allocated. Some data collection will require legislative mandates so that all of the appropriate data is collected and can be shared across state departments.

Any efforts to improve minority teacher recruitment and retention should flow out of an underlying theory of action, with four components: identification of potential teachers to recruit or current teachers to retain; engagement with potential teachers to recruit or current teachers to retain; support for potential and current teachers to help them enter or remain in the profession; and outcomes in terms of increasing the number of minority teachers. Each proposal should describe the process for accomplishing each of the four components above, as well as the challenges and supports to the implementation of those components. Evaluations for each program should be tailored to support implementation needs and to gather program-specific evidence of impact. Along with this specificity, evaluations should also examine the implementation of each program component listed above.

At the same time that program should include these components, programs should also be monitored through a set of indicators, or evaluation and measurement questions to track progress. Shared indicators of success will strengthen our ability to identify and learn from successful programs. To develop these indicators, we recommend creating a Board for Investing in Colorado Educators (BICE): a consortium or collaborative group of educators and leaders to guide the broader recommendations and the implementation of this report.

In structure and design, BICE would mirror consortiums in other states, like the Oregon Education Investment Board (OEIB). The OEIB ensures that Oregon's legislatively adopted "Equity Lens," is used with fidelity. The lens, as described by an OEIB member interviewed for this report, is a "guiding premise for examining every aspect of education, and for engaging others in discussion of data disaggregated by

race, ethnicity, gender, and economic level.” In Colorado, BICE could host discussions prior to the release of a grant-related RFP, and provide support districts or programs that do not regularly participate in competitive grant programs.

BICE should determine how to create competition for developing a minority teacher pipeline, deciding what an effective grant application looks like, contains, or involves. BICE would also set up specific measures of progress. We suggest the following indicators as starting points:

1. How many people were identified as potential teachers or current teachers to be retained?
2. How many people were engaged in the process of learning about the program to recruit or retain teachers?
3. How many people entered the program?
4. What supports did people receive?
5. Did all program participants receive the same supports, or did supports vary by person? If the supports varied by person, why and how did they vary?
6. How many people successfully completed the program?
7. How many minorities who participated in the program entered teaching or were retained in teaching?

Indicators of progress could also focus on how many minority teachers are staying in classrooms beyond their first three years of teaching, demonstrating a high likelihood to stay in the teaching profession long-term. As part of this work, BICE should create and issue a yearly educator equity scorecard (that includes minority teacher preparation, recruitment and retention statistics, highlights successful program and important next steps for addressing this issue. More information on components and indicators can be found in Appendix III.

***Recommendations for Administrative Support:*** The recommendations for administrative support are threefold. First, CDE should conduct an expert examination of the teacher licensure test results. This examination could identify whether there are differences in pass rates by race/ethnicity, and whether the tests, or aspects of the tests, are barriers for minority teacher candidates. If there are significant differences in pass rates between racial/ethnic groups, then CDE should review the tests for cultural bias, validity, and reliability as indicators of teacher preparation and success. And if the tests are deemed valid, reliable predictors of educator effectiveness, and if there are still disparities in pass rates between racial/ethnic groups, then the focus should shift to helping minority candidates understand and effectively prepare for the tests. This preparation could take the form of classes, coaching, tutoring, or other study strategies.

Second, CDE can either help broker and facilitate programs or hire a contractor to respond to the legislation-authorized incentive programs for minority teacher recruitment. For example, CDE could help develop a resource center within the state to help build district capacity to recruit and retain minority teachers; help districts collaborate and share resources; support minority teachers as they seek workplaces that are a good fit to their needs and expectations; and communicate the importance of

diversity. A resource center could also include a clearinghouse to distribute information—a place for districts or preparation programs to turn with questions about any part of the pipeline.

Third, Colorado must improve its data collection to ensure it has the capacity to fully describe the teacher preparation pipeline and workforce. For all of the current and new programs that support people through the teacher pipeline, there must be clear plans and procedures for data collection on who is in the pipeline and whether they are retained in the pipeline. The consortia developing plans for the pipeline should create data collection plans and get legislative permission to share data as needed.

***Recommendations for the Teacher Preparation Community:*** Teacher preparation programs must respond to legislation-authorized grant programs. Equally important, teacher preparation programs can continue to be a proactive part the solution to the challenge of increasing the proportion of minority teachers in Colorado. Teacher preparation programs can continue and expanding efforts to be welcoming, culturally sensitive places where all candidates feel supported. Furthermore, preparation programs can expand connections with surrounding communities, community colleges, and districts to create networks of relationships where candidates of color can excel.

***Recommendations for School Districts:*** Districts play a major role in recruiting students of color to teacher assistant roles, teacher cadet programs, and other grow-your-own pathways to teaching. Districts should build on existing resources that include creating and sustaining highly supportive licensure programs for paraprofessionals and other classified staff. All districts need to evaluate and improve their efforts at minority teacher recruitment and retention. Districts should also consider how to best educate all staff—minority and nonminority—in issues of diversity and cultural competence.

In the long run, school districts play a central role in preparing and supporting minority students as they enter higher education. In other words, districts play a central role in preparing their own workforce. Therefore long-term efforts to increase the number of minority students who succeed in college, and believe teaching is a good career after they graduate, are central to changing the demographics of Colorado's teacher workforce.

***Recommendations for the Minority Community:*** Efforts to address minority teacher recruitment and retention should involve various members and groups from the minority community (e.g. NAACP Denver, the Department of Africana Studies at Metro State University Denver, CLLARO, Colorado Latino Forum, etc.) in problem-solving conversations and recommendations. Minority groups can help connect interested potential teachers with pipeline opportunities, and can help new minority teachers—whether new to Colorado or to the teaching profession—feel welcomed and connected to Colorado.

***Recommendations for all Stakeholders:*** Minority teacher recruitment and retention is a change in culture, a set of technical policy challenges, and a political challenge. Above, we have outlined the technical and policy recommendations. But there is also a political challenge of sustaining public policy efforts around this issue. Key to the implementation and success of these efforts are sustained

partnerships among stakeholders, to advocate for and support efforts to improve minority teacher recruitment and retention.

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## **Appendix I: Additional Detail on the Research Design**

### **Research Questions**

Research questions were divided based on the sources of data used to answer the questions.

### **Demographic Analysis**

1. What are trends in teacher demographics at the school, district, state, and national levels? How do those trends compare to trends in student demographics and in the college-educated workforce?
2. What are the demographics of students enrolled in and graduating from Colorado teacher preparation programs?

### **Literature Review**

1. Identify causes for the low numbers of minorities pursuing and represented in the teaching force with a focus on recruitment and retention.
2. Identify barriers and supports to minority and other individuals who want to enter and remain in the teaching profession.

### **Qualitative Data Collection (districts and teacher preparation programs)**

1. Identify challenges and promising practices to inform policy recommendations around increasing minority teacher recruitment and retention.
2. As available, collect data on barriers to minorities entering the teaching profession.

### **Qualitative Data Collection (minority teachers and prospective teachers)**

1. What are the barriers of a teaching career choice?
2. Why did you choose to enter teaching (or not for prospective teachers)?
3. What are the barriers to becoming a teacher?
4. Are there things your prep program or school district did to help with recruiting or retention?

### **Policy Analysis**

Prepare a synthesis of the findings and recommendations for the state to consider on improving minority teacher recruitment and retention. Recommendations should include specific roles or actions that different actors can/should play to support this work.

### **Detail on Interview Data Collection**

To begin collecting data for this evaluation, a multi-layered interview sample of individuals and groups throughout Colorado was created. Interviews started with CDE recommended districts and teacher preparation and then APA added recommendations from the interviewees creating a snowball sample from recommendations for additional interviewees from the original sample. A number of individuals preferred to be interviewed rather than to participate in a focus group. We completed interviews using APA staff, contractors, and partners. APA partnered with the Community Organizations Aligning Together (COAT), a coalition of groups focused on minority issues in Colorado for a portion of the interviews presenting the voice of minority teachers and potential teachers.

Data was collected from , a teacher focus group with eight teachers from across Colorado, a student focus group with four participants (at UNC), and a district employee focus group with three participants. Our interviews included conversations with 19 district employees, 21 teacher preparation program

employees, 16 current or former classroom teachers, eight teacher candidates and/or prospective teachers, and three outside state task force and/or State Board of Education employees. Our partners at COAT collected interviews that provided information on the lived experiences of prospective, current, and former teachers of color.

Our interview sample for districts captured both 1) districts recommended by CDE as having exemplary programs and 2) districts APA identified as having effectively increased their black or Hispanic teacher workforce. These districts were identified through longitudinal analysis of public data reported by CDE on staff characteristics between 2001 and 2010. We then identified “effective” districts for our sample that were among the top five in the state for a) adding black or Hispanic teachers, b) percentage change in black or Hispanic teachers and c) reducing the gap between share of black or Hispanic teachers or students. Among the group of districts identified through this analysis, we contacted seven districts in addition to those recommended by CDE. These “effective” districts had either multiple indicators of success or single indicators of success, but supported a more representative sample of districts. Representativeness was based on district size and location.

The 21 interviews with district employees included five superintendents and 14 Human Resources directors, chiefs, or officers. The districts were located throughout the state including the Metro Denver region, Pikes Peak Region, Southwest region, Southeast region, and North Central region. The size of districts captured the diversity of Colorado contexts including seven districts with over 25,000 students and three with fewer than 1,200 students. District locals included urban, suburban, and rural.

The 22 teacher preparation program interviews included 10 deputy directors, program directors, program managers, and executive directors; three deans or associate deans; eight department chairs, department employees, or subject-area instructors; and one vice president.

The 16 teacher interviews included one focus group of eight participants at the University of Northern Colorado (UNC); four teachers in Denver Public Schools; one teacher in Aurora Public Schools; one teacher in Cherry Creek Schools; one former Teach for America teacher; and one teacher educated in southwestern Colorado and now teaching in northwestern New Mexico. The five interviews with students and/or prospective teachers included conversations with two students in Denver, one student in Fort Collins, and one student in Durango.

COAT interviews were integrated as teacher interviews and as student (prospective teacher or teacher candidate) interviews, and are counted above. COAT conducted six interviews with three African-American teachers, two Latina teachers, and one African-American student.

#### **Interview/Focus group Protocols for CDE Minority Teacher study**

Drafted by Tracey O'Brien and Robert Reichardt

October 1, 2014

HR Directors in Colorado – School Districts (interviews)

Administrators – Teacher Prep Programs (interviews)

HR Directors OUTSIDE of Colorado – School Districts

Administrators OUTSIDE of Colorado – Teacher Prep Programs (interviews)

Minority teachers – (focus groups/group interviews)

Minority college students including those in teacher prep programs – (focus groups/group Interview)

All interview/focus group participants will receive an information form describing the study, discussing how all responses are confidential and anonymous and their participation is voluntary.

***Minority Teachers focus group protocol:***

- 1) How long have you been teaching? Grade level? How many different schools?
- 2) Why did you decide to become a teacher?
- 3) Were you recruited, and if so, how?
- 4) What barriers have you experienced in becoming a teacher? How did you overcome these barriers?
- 5) [Depending on number of new teachers – 1-3 years, may ask about Induction Programs and mentoring; were they mentored and did this help their transition to teaching, help their performance in the classroom – Also, are there things that your teacher preparation program did that specifically helped you to stay in the program?]
- 6) What are some of the reasons or factors that keep you in the classroom?
- 7) What are some of the barriers or challenges that could cause you to leave teaching?
- 8) Have any of you left teaching for a period of time? What motivated you to return? What obstacles did you encounter upon returning?
- 9) Do you think your principal feels it is a priority that you to remain in teaching and at your current school? [effect of principal/administrator on teachers cannot be overestimated]
- 10) Is there something that your district or your building does that helps you to remain in the teaching profession? (induction, professional development, part of decision-making, compensation, administrative support)
- 11) What are the professional and personal rewards of being a teacher?

***Minority college students including those in teacher prep programs focus group protocol:***

- 1) Are you considering teaching as a profession (why or why not)?
- 2) If you are in a teacher preparation program, how long have you been in your teacher prep program?

- 3) What made you want to become a teacher?
- 4) Were there things/barriers you need to overcome in order to enter teaching?
- 5) If you are in teacher preparation, were you recruited into the program? If so, how?
- 6) Do you feel welcome and comfortable at your school? In your program?
- 7) When you were younger, did you have many teachers who were Latino or African American? Did this have any influence on your decision to become a teacher? Do you now?
- 8) What are the strengths of your program and how have these impacted your desire to complete the program?
- 9) Are there barriers you have to overcome in order to complete your teacher prep program?
- 10) What support do you want or think you will need to be successful in the classroom?

***HR Administrator interview protocol:***

- 1) What are your staffing priorities or goals?
- 2) Is there a shortage of minority teachers in your district? Do you need more minority teachers? Why?
- 3) Are there barriers to recruiting minority teachers?
- 4) Do you have a plan for recruiting minority teachers? If so, how do you know if the plan is working? If so, what parts of the plan are working best?
- 5) Do you track your successes and challenges in recruiting and retaining minority teachers? If so, what have you learned from this?
- 6) Is retaining minority teachers in your district a problem? Do you know some of the reasons why minority teachers leave the district?
- 7) Are you more focused on recruitment or retention of minority teachers? If more focused on one than the other, why?
- 8) Generally, how do you think about placement of minority teachers? What drives the placement of teachers? Are there more minority teachers placed or are teaching in higher poverty, higher attrition schools?
- 9) Have you partnered with or started a teacher preparation program to increase the number of available minority teachers? Why or why not?
- 10) Do you have a teacher cadet or other program to encourage high school students to become teachers? If so, what parts have been successful? What parts have not been as successful?

*Teacher Prep Program Administrators interview protocol:*

- 1) Do you have a plan to recruit minority students? Why? Why is it important to have this plan?
- 2) Is recruiting minority students a priority? Is it a priority of your institution or a personal priority? What kinds of strategies do you use given this is a priority? Are these strategies different for minority students than recruitment strategies for their peers?
- 3) Are there barriers to recruiting minority students? What are they?
- 4) Are there strategies for the recruitment of minority teacher candidates that have been particularly successful? What contributed to that success?
- 5) Do you have specific goals for recruiting students to your program? How are these goals developed? How do you know if the goals have been met?
- 6) Do you feel that retaining minority students in your program is a problem? If so, what are the major barriers?
- 7) Do you have a plan for retaining students? What strategies work to retain minority students?
- 8) Do you have information about the retention rates of your graduates? If not, would this information be useful? How?
- 9) Do you currently or have a plan to work with school district HR team members to help with the recruitment and placement of minority teachers?
- 10) Do you recruit students of color from current schools or districts that are already in the system but not a teacher (such as paraprofessionals)?

*COAT Conducted Interview Protocol*

We would like to hear about minority teachers' lived experiences in several different "blocks" of the teaching profession. These are some of the questions we are interested in but the interviews should be guided by the lived experience.

1. **Initial access/exposure** to profession.
  - a. Were there role models available?
  - b. Was information about options and pathways available?
  - c. Was there encouragement or recruitment?
  - d. Was teaching a viable professional option?
2. **Entry/education/training** in the profession.
  - a. Why teaching over other options?
  - b. What was the pathway into the profession?
  - c. Was the experience different as a minority?
  - d. Did classes/instruction discuss minority-specific issues?

3. **Teaching** experience.

- a. What has been the most positive part of the teaching experience?
- b. What do minority teachers bring to the classroom?
- c. What kind of supports are there for minority teachers specifically?
- d. What are the opportunities for growth?
- e. What are the reasons for staying in the classroom?
- f. What are the typical reasons for leaving the classroom?

In each of these blocks, we want to learn about what minority teachers experienced. We would like to hear about 1) best practices, 2) support, 3) problems, 4) action taken, 5) experiences/stories, and 6) sense of agency or sense of influence. In addition, any particular problem or problems that needed to be navigated by the individual would likely make the illustration even more compelling.

***Out of State HR Director Interview Protocol***

- 1) What are your staffing priorities or goals?
- 2) What are the demographics of students in your district? Do you have concentrations of certain minorities over others? How do teacher demographics compare to student demographics?
- 3) Why do teachers want to work in your district? Are there factors that would make your district more attractive to white teachers versus minority teachers, or vice versa?
- 4) Is there a shortage of minority teachers in your district? Do you need more minority teachers? Why?
- 5) What are the barriers to recruiting minority teachers?
- 6) What strategies have you used to recruit minority teachers? How do you know if these strategy is working? Where have you had the most success?
- 7) Why do you think teachers leave the profession in your district? Do you think the reasons for leaving are any different for non-minority versus minority teachers?
- 8) Going forward, are you more focused on recruitment or retention of minority teachers? Why? Is one area more challenging than the other?
- 9) Generally, how do you think about placement of minority teachers? Are there more minority teachers in higher poverty or higher attrition schools?
- 10) Have you partnered with or started a teacher preparation program to increase the number of available minority teachers? Why or why not?

11) Do you have a teacher cadet or other program to encourage high school students to become teachers?

a. If so, what parts have been successful?

b. What parts have not been as successful?

12) Who in this state do you look to when you have questions about minority teacher recruitment and retention?

***Out of State Administrator Interview Protocol***

1) Do you have a plan to recruit minority students? Why or why not?

a. If recruiting minority students is a priority, is it a priority of your institution or a personal priority?

b. Do you have specific goals for recruiting students to your program?

c. What kind of strategies do you use to recruit minority students? Do these differ from strategies to recruit non-minorities? What strategies have been most successful?

d. Are there barriers to recruiting minority students?

2) Are you partnering or working with other organizations or programs to recruit teachers?

3) Do you have a plan or strategy for retaining students? What strategies have been most successful?

a. Do you feel that retaining minority students in your program is a problem?

b. Are retention concerns different for minority versus non-minority students?

4) Do you have information about the retention rates of your graduates? If not, would this information be useful? How?

5) Do you work with school district HR team members to help with the recruitment and placement of minority teachers? If not, do you plan to?

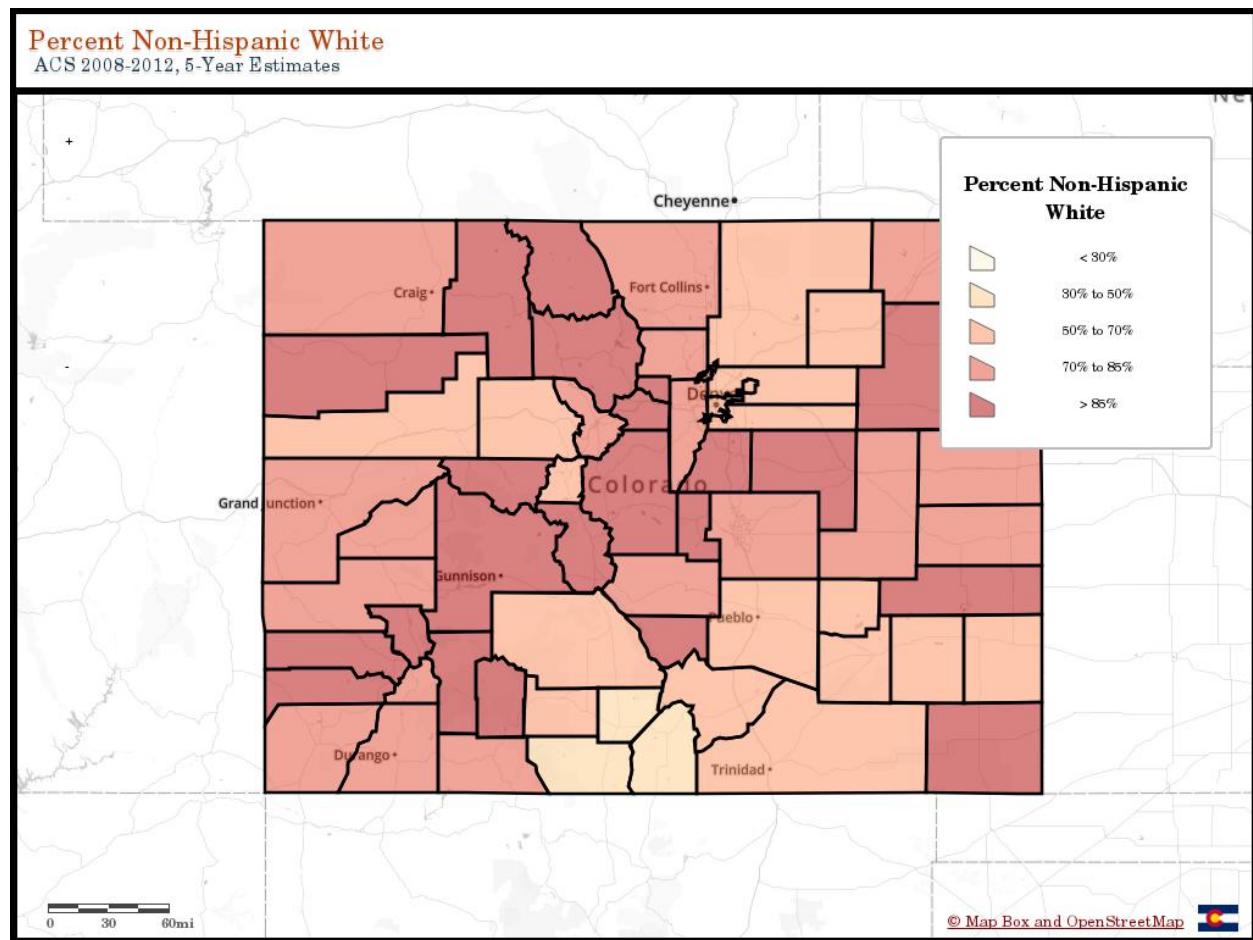
6) Do you recruit students of color from current schools? Do you recruit minority district employees like paraprofessionals?

- 7) Who in this state do you look up to or call when you have questions about minority teacher recruitment and retention?

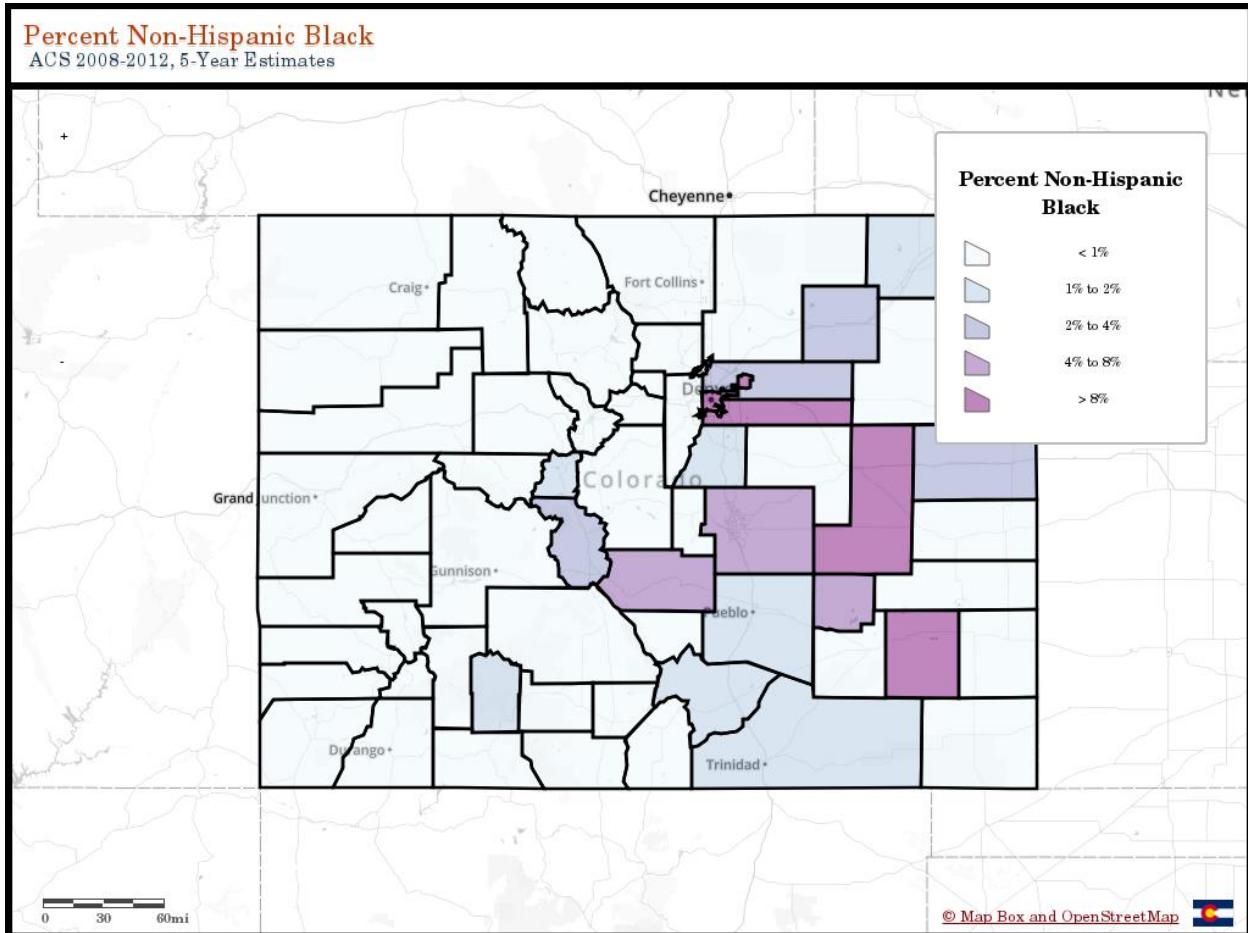
## Appendix II: Maps Describing Colorado's Racial/Ethnic Population

The following maps from the Colorado State Demographers web site show the distribution of the different racial and ethnic groups throughout Colorado. The input data for these maps come from the American Community Survey conducted by the Census Bureau. The maps show a lumpy distribution of racial and ethnic groups throughout the state. The end result is racial and ethnic makeup of individual Colorado counties can be very different from one-another.

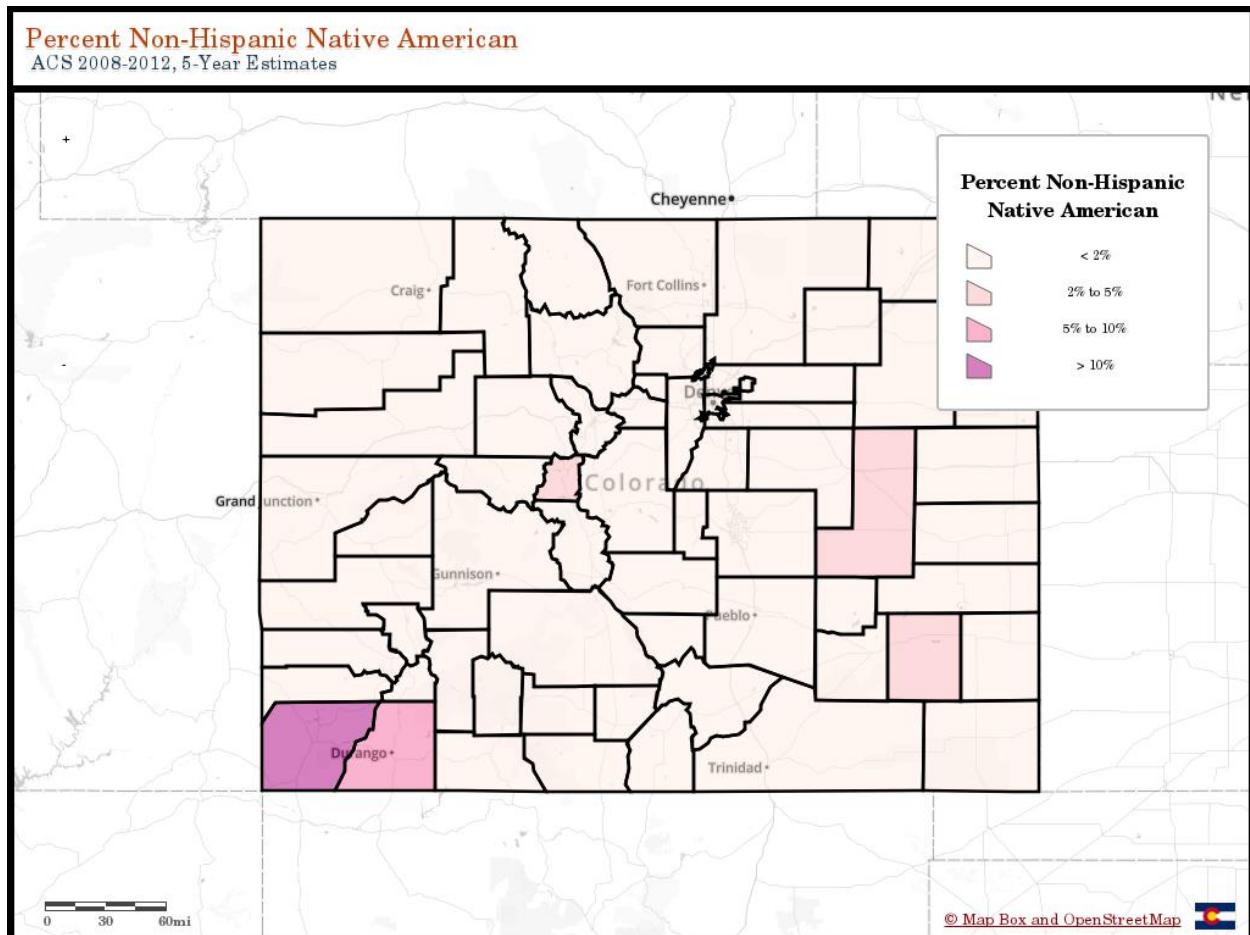
**Figure 11: The Proportion of White Residents in Colorado Counties Ranges from Under 30% to over 80%**



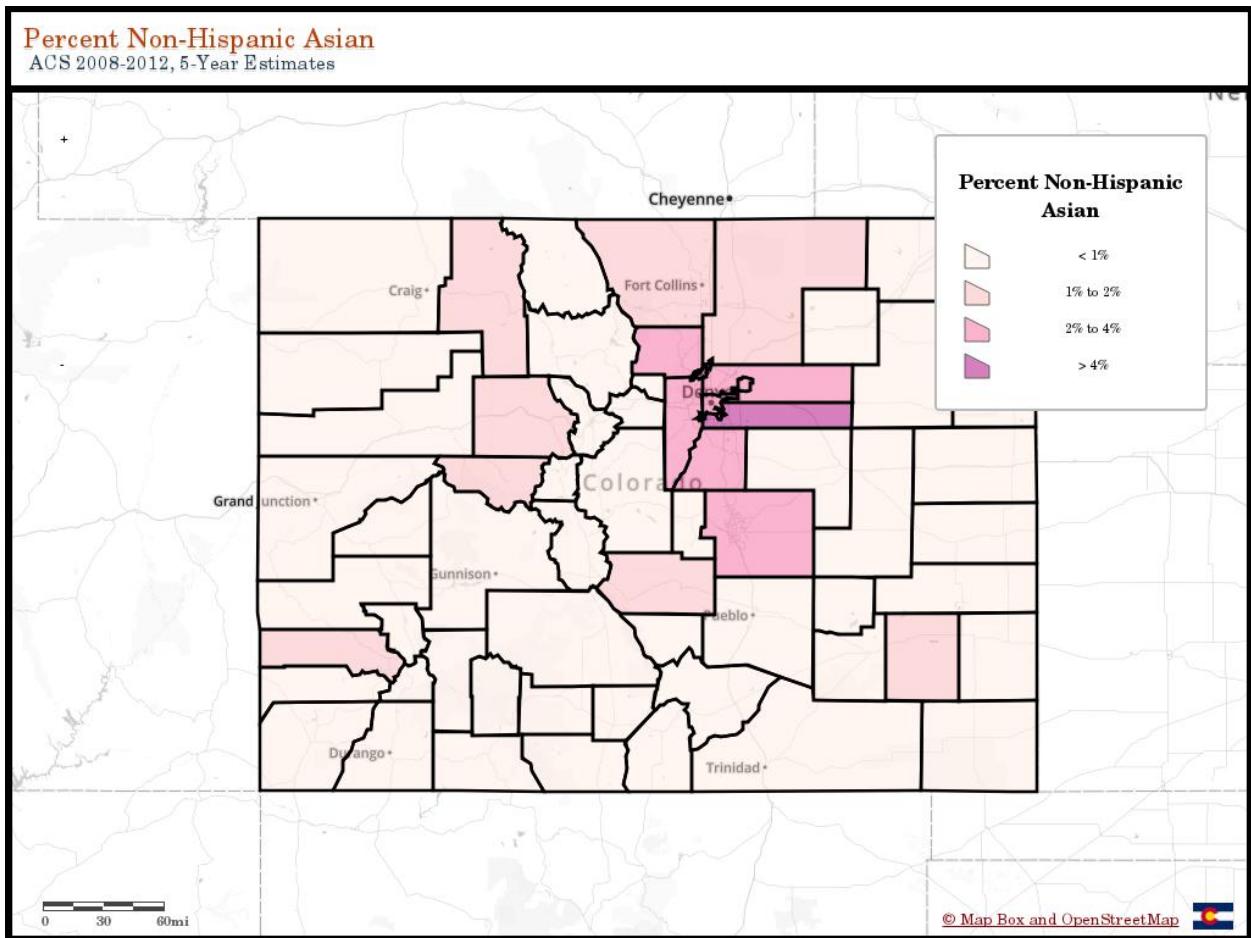
**Figure 12: The Highest Concentration of Black Colorado Residents is in Front Range Counties**



**Figure 13: The Highest Concentration of Colorado's Native American Population is in the Southwestern Corner of the State**



**Figure 14: The Concentration of Asians in Colorado is Highest in a Few Front Range and Mountain Counties**



### **Appendix III: Program Theory of Action and Potential Indicators of Progress**

Each of the efforts to improve minority teacher recruitment and retention should flow out of a shared, underlying theory of action. The theory of action has four components: identification, engagement, support, and outcomes. This section provides a more detailed overview of components of programs expected to develop to help increase the proportion of minority teachers in Colorado. These components should be reflected in program proposals and evaluation plans, as well as in the indicators used to monitor, support and hold programs accountable. The four components can be described as follows:

- ***Identification of potential teachers to recruit or current teachers to retain:*** For example, an early outreach program could focus on high school students who are potential teachers. A college-based program would identify groups or populations of minority students who could be teachers. A mid-career program identifies groups of adults who could be mid-career switchers into teaching. For retention, programs identify varies groups of existing teachers who can be more effectively engaged and supported.

Each proposal must identify the following: Who is target group or audience for the program? Why does the proposer believe this group or audience can become, or have become, successful teachers?

- ***Engagement with potential teachers to recruit or current teachers to retain:*** In this component, programs contact identified potential teachers. This contact may include informing people of the benefits of entering or staying in the teaching profession. It may also include a needs assessment of services to be offered to people to help them move ahead within the profession.

Each proposal must identify the following: What are the processes to engage groups or people identified as potential or current teachers?

- ***Support for potential and current teachers to help them enter or remain in the profession:*** This is the main programmatic component, and could include activities such as providing teacher preparation and support while students are in high school or college; or providing scholarships and incentives to help people enter or remain in the profession, etc.

Each proposal should identify this following: How and when will supports provided? Who will provide them? How and when will the target audiences receive them?

- ***Outcomes in terms of increasing the number of minority teachers:*** Some programs will target high school students, so it maybe six to eight years before these students enter the teaching profession, which may be beyond the period of the grant. In that case, programs can measure concrete intermediate steps to becoming a teacher, such as retention in higher education institutions or completion of components of teacher preparation programs.

Each proposal must identify the following: What is the intended outcome of the program? How can that outcome be measured?

Each proposal should describe the process for accomplishing each of the four components above, as well as the challenges and supports to the implementation of those components. Evaluations for each program should be tailored to support implementation needs and to gather program-specific evidence of impact. Along with this specificity, evaluations should also examine the implementation of each program component listed above.

At the same time that program should include these components, programs should also be monitored through a set of indicators, or evaluation and measurement questions to track progress. These indicators, to be used across the entire portfolio of programs working to increase the share of minority teachers, should include the following questions:

1. How many people were identified as potential teachers or current teachers to be retained?
2. How many people were engaged in the process of learning about the program to recruit or retain teachers?
3. How many people entered the program?
4. What supports did people receive?
5. Did all program participants receive the same supports, or did supports vary by person? If the supports varied by person, why and how did they vary?
6. How many people successfully completed the program?
7. How many minorities who participated in the program entered teaching or were retained in teaching?

A four-component theory of action, taken together with these indicators of progress, can strengthen the programs created to support statewide minority teacher recruitment and retention goals. Using these components and indicators, programs can work to increase the share of minority teachers while also tailoring practices to align with specific community contexts.