Race equity in Colorado's talent pipeline

A CCLP issue brief

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CCLP

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on Law and Policy

Key findings

- In 2019, 29.5% of Coloradans held a top job, or a job that is projected to have a high number of openings, above average growth rate, and pay a living wage for a family of three or an individual.
- In terms of employment in 2019, top jobs were concentrated among certain occupational groups. Coloradans employed in Tier 1 top jobs (with hourly wages above $31.19 per hour) were concentrated among management, healthcare practitioners and technical, architecture and engineering, and business and financial occupations while those employed in Tier 2 top jobs (with hourly wages above $16.35 per hour) were concentrated among construction and extraction, transportation, healthcare practitioners and technical occupations, and installation, maintenance, and repair occupations. No occupation in the food preparation and serving related occupational group was classified as a top job.
- Where top jobs are concentrated across occupational groups is important because certain racial or ethnic groups are more likely to be employed in certain occupations. In general, Coloradans employed in occupational groups with higher median wages are disproportionately White while Coloradans employed in occupational groups with lower median wages are disproportionately people of color.
- Among top jobs, Tier 1 top jobs holders are more likely to be White than we would expect given White Coloradans share of the workforce. Tier 2 top job holders are disproportionately Hispanic/Latinx. Overall, the racial and ethnic composition of all top job holders is roughly equal to the racial and ethnic composition of the state's workforce.
- Educational attainment likely plays a large role in explaining why Coloradans of color are less likely to hold Tier 1 top jobs. 90.7% of Tier 1 top jobs in 2021 required a credential past high school. However, 32.2% of Hispanic/Latinx Coloradans and 41.3% of Black/African American Coloradans had a post-secondary credential in 2019, compared to 64.2% of White Coloradans.
- Occupational segregation likely led workers of color to be more at risk of losing their job due to the COVID-19 pandemic. Between May 2019 and May 2020, the U.S. Bureau of Labor Statistics notes that employment across all occupational groups in Colorado declined by 100,490 jobs. 83.0% of these jobs were in occupational groups that had a lower share of White workers than Colorado's workforce as a whole.
- According to estimates from the Federal Reserve Bank, Colorado's economy would have grown by an additional $13 billion annually between 2005 and 2019 if racial disparities in our labor market were eliminated over that period (or $182 billion over the whole 14-year period).

Introduction

Each year, the Colorado Department of Labor and Employment, the Colorado Department of Higher Education, the Colorado Department of Education, and the Colorado Workforce Development Council release a *Talent Pipeline Report* that identifies areas of opportunity and demand in Colorado's labor market and highlights outcomes of certain statewide workforce development programs. The report

also identifies occupations in Colorado that it considers to be "top jobs," or those that meet three criteria: a projected high number of net annual openings (greater than 40); an above average projected growth rate over the next 10 years (greater than 10%); and an hourly wage above $31.19 per hour for Tier 1 top jobs or above $16.35 per hour for Tier 2 top jobs. Based on these factors, the report identifies 77 top jobs at Tier 1 and 122 top jobs at Tier 2 in Colorado for 2021.

Not only will our state need more workers to fill these occupations over the next ten years, these jobs also pay a wage that could support a family of three (one working adult, one non-working adult, and one child) if Tier 1 or a single individual if Tier 2 according to the *Talent Pipeline Report*.[1] In other words, these are jobs that allow Colorado's workforce to support themselves and their families.

The report identifies these occupations to help job seekers understand the skills and qualifications they will need to find a job in an occupation that is well paying and is in demand among employers. We can also use these top jobs to understand who in Colorado currently works in one. Using the most recent data from the U.S. Census Bureau, we estimate that 14.9% of employed Coloradans worked in a Tier 1 top job, while 14.6% worked in a Tier 2 top job in 2019.[2] In this issue brief, we will dive deeper into the racial and ethnic distribution of Coloradans across different occupations, including those that fall into Tier 1 or Tier 2 top job categories. While the occupational categories listed in the data from the U.S. Census Bureau are slightly different than those used in the *Talent Pipeline Report* in certain instances, we are confident these discrepancies do not significantly alter the findings of this issue brief.

We believe this data shows that Colorado must focus on creating equitable education and workforce development systems, particularly as we contemplate how best to use federal recovery dollars that have flowed into the state due to the COVID-19 pandemic. The Colorado Workforce Development Council has already identified a number of areas where it can support equity in its *Talent Equity Agenda*. As we show in this post, the racial and ethnic distribution of Coloradans is not equal across occupations, a phenomenon known as occupational segregation.[3] White Coloradans are disproportionately more likely to hold a Tier 1 top job than other racial and ethnic groups in the state a sign that our education and workforce systems do not do enough to combat the factors that lead to unequal outcomes for different racial and ethnic groups. Implementing and building on the recommendations in the *Talent Equity Agenda* will be essential to ensure that any Coloradan, regardless of their race or ethnicity, is able to pursue and obtain the job they desire.

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[1] McKennie, Caitlin. *2021 Colorado Talent Pipeline Report*. Colorado Workforce Development Council (2021). Accessed from https://drive.google.com/file/d/1BT7nWA5mVA3qjmR92WKUMyeoRJAF8o6T/view on 8 February 2022.
[2] Colorado Center on Law and Policy analysis of 2014-2019 5-Year American Community Survey microdata obtained from IPUMS USA: Version 11.0. IPUMS USA, University of Minnesota, www.ipums.org.
[3] Occupational segregation can also refer to the unequal share of men vs women in an occupation or occupational group or both. In this case, we use it to refer to the unequal distribution of White workers and workers of color across occupational groups in Colorado.

What are Colorado's top jobs?

Distribution of Employment by Top Job Tier and Occupational Group, 2019
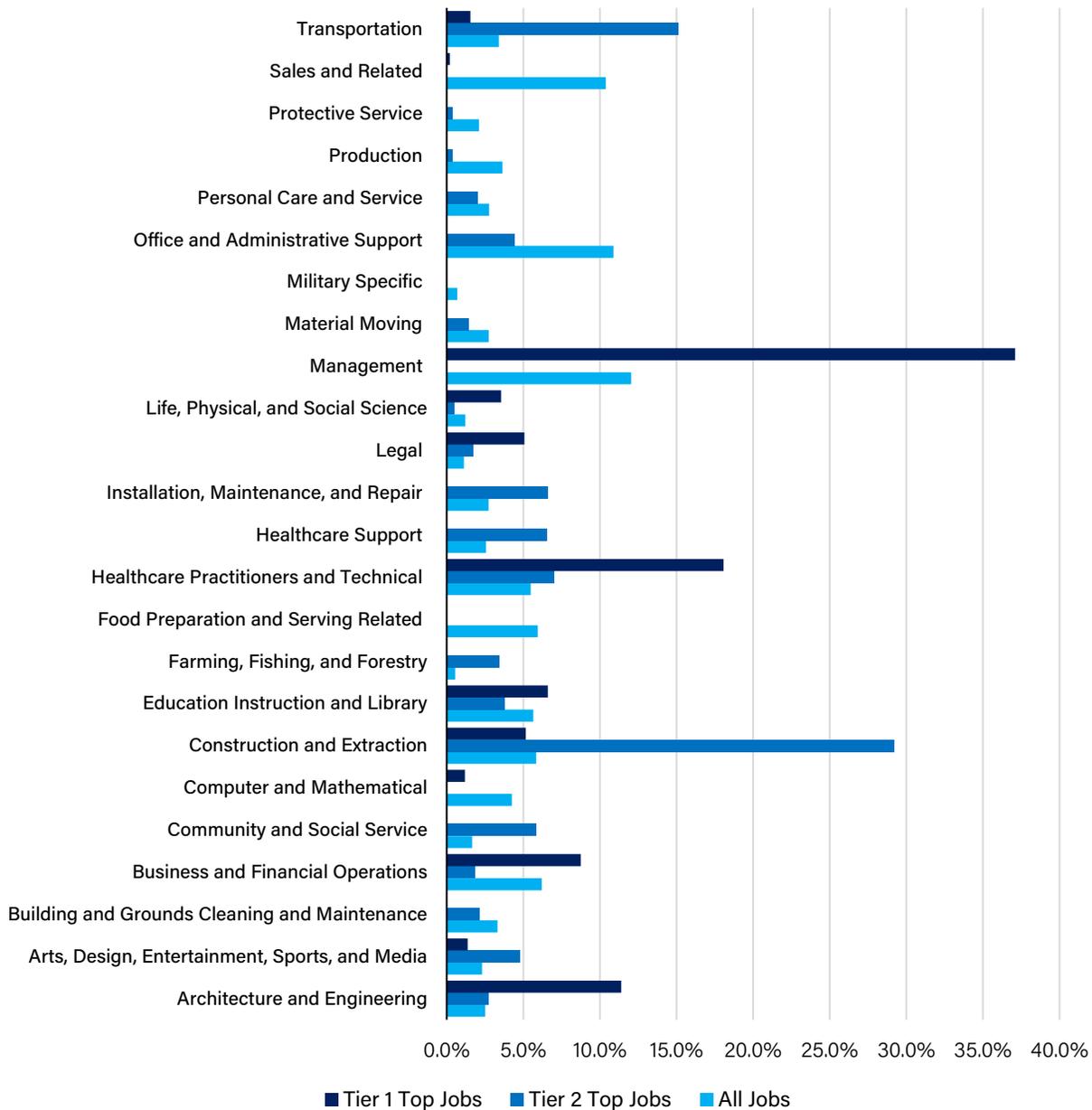
Source: Colorado Workforce Development Council; CCLP analysis of 2019 5-Year American Community Survey microdata obtained from IPUMS USA: Version 11.0

Looking at the occupations that fall into Tier 1 or Tier 2 top jobs in 2021 reveals some interesting patterns. First let's look at Tier 1 top jobs. Among Coloradans who held these jobs in 2019, over one-third (37.1%) worked in occupations that fell into the management occupational group compared to

12.0% among all workers in the state that year.[4] This is not surprising given the high wage threshold for Tier 1 top jobs—workers with jobs in management occupations had the highest median annual wage in the state in 2019 ($119,686).[5] Occupational groups that had a high concentration of existing Tier 1 top jobs included healthcare practitioners and technical occupations (18.1%), architecture and engineering occupations (11.4%), and business and financial occupations (8.8%). Twelve out of the 24 occupational groups in our state did not include any Tier 1 top jobs. [6]

Tier 2 top jobs tended to be more distributed across occupational groups in the state. In 2019, 29.2% of Tier 2 top jobs held by Coloradans were in construction and extraction occupations compared to 5.8% of all employed Coloradans who had a job in this occupational group. 15.1 percent of Coloradans employed in Tier 2 top jobs worked in a transportation occupation, followed by 7.0% in healthcare practitioners and technical occupations and 6.6% in installation, maintenance, and repair occupations.[7]

Two occupational groups contained no jobs that were classified as a top job (in Tier 1 or Tier 2). One of these groups was military specific occupations, which makes sense considering demand for jobs in the military do not necessarily follow normal labor market and economic trends. However, the second was food preparation and serving related occupations. The median annual wage for jobs in this occupational group was $25,178 in 2019. At $12.10 per hour, the median hourly wage is well below the wage minimum for a Tier 2 top job which likely explains why no occupation fell into a top job tier.[8] Despite low wages and low projected future growth, this occupational group was the fifth largest in the state in terms of share of total employment in 2019.

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4 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.
5 Occupational Employment and Wage Statistics (OEWS). Office of Labor Market Information, Colorado Department of Labor and Employment (2019). Accessed from https://www.colmigateway.com/ on 8 February 2022.
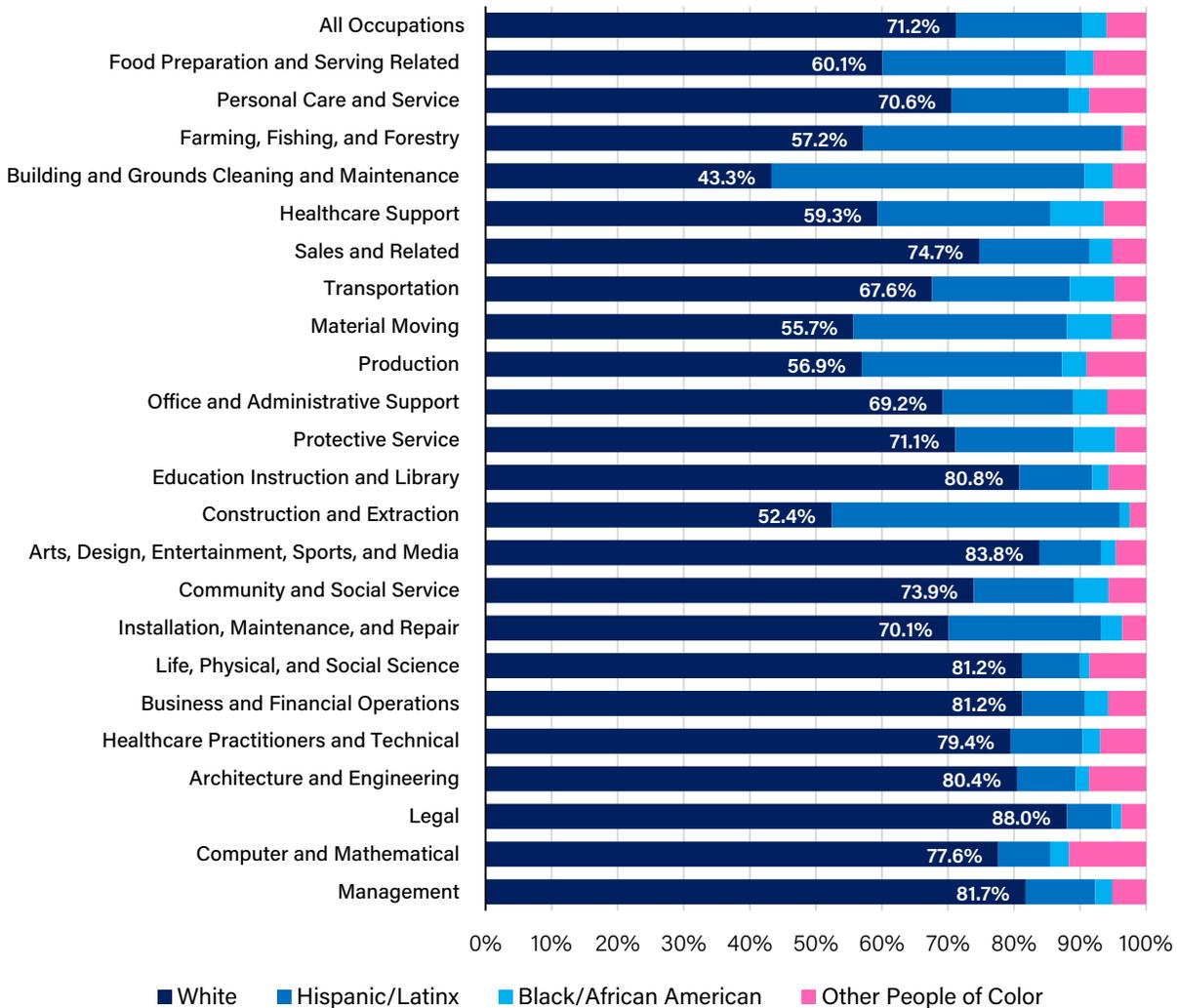**6** CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.
7 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.
8 OEWS, Colorado Department of Labor and Employment (2019).

Top Jobs and Race Equity

Racial/Ethnic Identity of Workers by Occupational Group, 2019

Occupational Group	White
All Occupations	71.2%
Food Preparation and Serving Related	60.1%
Personal Care and Service	70.6%
Farming, Fishing, and Forestry	57.2%
Building and Grounds Cleaning and Maintenance	43.3%
Healthcare Support	59.3%
Sales and Related	74.7%
Transportation	67.6%
Material Moving	55.7%
Production	56.9%
Office and Administrative Support	69.2%
Protective Service	71.1%
Education Instruction and Library	80.8%
Construction and Extraction	52.4%
Arts, Design, Entertainment, Sports, and Media	83.8%
Community and Social Service	73.9%
Installation, Maintenance, and Repair	70.1%
Life, Physical, and Social Science	81.2%
Business and Financial Operations	81.2%
Healthcare Practitioners and Technical	79.4%
Architecture and Engineering	80.4%
Legal	88.0%
Computer and Mathematical	77.6%
Management	81.7%

■ White   ■ Hispanic/Latinx   ■ Black/African American   ■ Other People of Color

Note: Occupational groups are listed in ascending order of their median annual wage in 2019.
Source: CCLP analysis of 2019 5-Year American Community Survey microdata obtained from IPUMS USA: Version 11.0

Where top jobs are within occupational groups is important, as the distribution of workers by race/ethnicity among occupations is not equal in the United States, and Colorado is no different. Due to systemic racism and other forms of historic and ongoing oppression, non-White workers are less likely to be employed in certain occupations than White workers and vice-versa. This matters for many reasons, one of which is wages.

In Colorado, the occupational groups that had the highest median annual wages in 2019 were also those with a share of White workers that was greater than the share of White workers in our labor force overall (71.2% in 2019). For example, management occupations had a median annual wage of

$119,686,[9] the highest in the state--81.7% of those employed in these occupations in 2019 were White.[10] Among the ten occupational groups with the highest median annual wage in 2019, all but one—installation, maintenance, and repair occupations—employed a higher share of White workers than we would expect given their share of the overall workforce.

On the other hand, the occupational group with the highest share of workers of color, building and grounds cleaning and maintenance occupations, had a median annual wage of $29,757.[11] Among the ten lowest paid occupational groups, all but one—sales and related occupations—had a higher share of workers of color than we would expect given non-White Coloradans made up 28.8% of our workforce in 2019.[12]

Racial/Ethnic Make-up of Employed Coloradans by Job Type, 2019
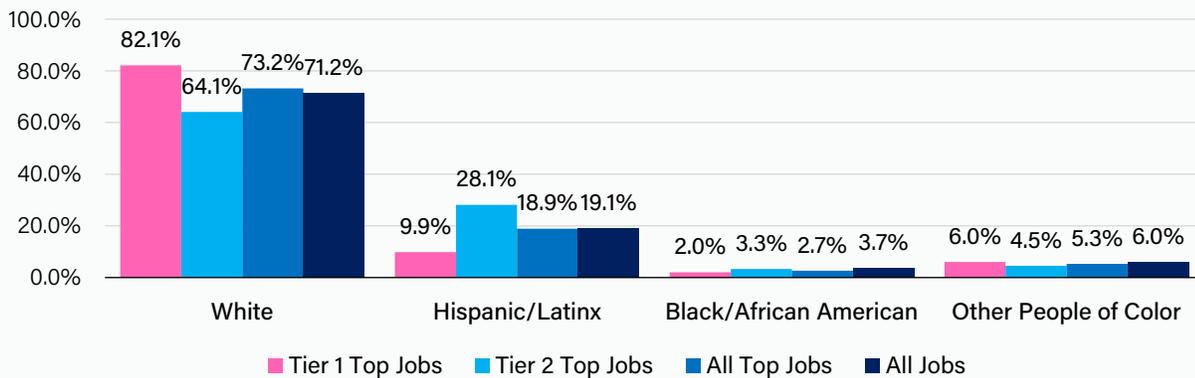
Source: CCLP analysis of 2019 5-Year American Community Survey microdata obtained from IPUMS USA: Version 11.0

This analysis suggests that our education and workforce development systems do not create racially equitable labor market outcomes for Coloradans. White workers in Colorado appear to have better access to the work experience and/or education necessary to work in our state's highest paying occupations.[13] This has important implications for the *Talent Pipeline Report*, specifically who in our state will be most likely to fill a Tier 1 or Tier 2 top job over the next ten years. If our goal is that any worker should be able to pursue any occupation, regardless of their racial or ethnic identity, we would expect to see the racial/ethnic makeup of workers employed in Tier 1 and Tier 2 top jobs to be roughly the same as their makeup in the workforce.

However, this is not the case. Among workers employed in Tier 1 top jobs, 82.1 percent were white in 2019 despite making up 71.2% of the workforce that year.[14] On the other hand, workers of color make up a smaller share of those employed in Tier 1 top jobs than we would expect given their share of the

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9 OEWS, Colorado Department of Labor and Employment (2019).

10 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.

11 OEWS, Colorado Department of Labor and Employment (2019).

12 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.

13 While we only discuss racial equity in this post, we do not mean to suggest that racism is the only cause of inequitable outcomes in our state's education and workforce systems. It is one of many distinct and intersecting forms of oppression, including classism and sexism, that perpetuate and reinforce inequities and inequality in Colorado.

14 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.

workforce. This disparity was particularly notable among Hispanic/Latinx[15] workers in the state, where there was a 9.2 percentage point difference between the share of Hispanic/Latinx workers employed in Tier 1 top jobs and the share of Hispanic/Latinx workers in Colorado's workforce. There was a smaller 1.7 percentage point gap for Black/African American workers and no gap among other people of color[16] when aggregated to a single group.[17]

Looking at Tier 2 top jobs shows a different picture. Unlike Tier 1 top jobs, the share of White workers in Tier 2 jobs is lower than in the workforce as a whole (64.1% vs 71.2%).[18] Hispanic/Latinx workers are over-represented in Tier 2 jobs, likely due to the fact that a large share of Tier 2 top jobs are in construction and extraction occupations. Among all workers in this occupational group, 43.6% were Hispanic/Latinx in 2019. The gap for Black/African American workers is just 0.4 percentage points and 2.5 percentage points among other people of color when aggregated to a single group. So while those who were employed in Tier 2 top jobs were less likely to be White, there are still notable disparities in the racial/ethnic composition of Tier 2 top job workers.

Despite the over- and under-representation of different racial/ethnic groups among Tier 1 and Tier 2 top jobs, these disparities become less evident when looking at the racial/ethnic makeup of all top job holders. However, we should be cautious in how we interpret this finding. On one hand, it suggests that there are no disparate outcomes in our state's labor market in terms of the likelihood of Coloradans from different racial and ethnic backgrounds to hold a top job. However, we cannot forget that the distinguishing factor between Tier 1 and Tier 2 top jobs is wages. White Coloradans are more likely to hold a top job that allows them to support themselves and their family, while non-White Coloradans are more likely to hold a top job that pays just enough to support themselves. That is great for individuals, but not so much for Tier 2 top job holders who have families they must also support. Indeed, this is one explanation for why 43.4 percent of Colorado households of color did not earn

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15 Although the U.S. Census Bureau classifies Hispanic/Latinx as an ethnic category and not a racial one (such as White, Black/African American, etc.), we refer to Hispanic/Latinx as a racial category that includes any Coloradans who identify Hispanic/Latinx as their ethnicity in Census Bureau data. The other racial categories only include Coloradans who identify as non-Hispanic/Latinx. While we recognize that the experiences of Hispanic/Latinx Coloradans differ based on their race which in turn reinforces inequities within this ethnic group, we adopt this approach for ease of analysis and discussion. Furthermore, we adopt the term Latinx as a gender-neutral term for Coloradans who identify as Latino or Latina, and acknowledge that the use of this term is contested.

16 We use the word "other people of color" to include American Indians/Alaska Natives, Asians, Native Hawaiians and Pacific Islanders, and Other racial categories and people of two or more racial identities who are not of Hispanic/Latinx origins. The names used for these racial categories are consistent with those used by the US Census Bureau, which was the source of this data.

17 The act of grouping these racial categories into an "other people of color" category is not intended to "other" or to not acknowledge the different experiences of these racial groups. In 2019, 3.2% of Colorado's workforce 16 years and older was Asian, 2.0% was of two or more races, 0.5% was American Indian/Alaska Native, 0.1% identified as an "other" racial category, and 0.1% was Native Hawaiian or Pacific Islander. Unfortunately, small population sizes make it difficult to draw conclusions about individual racial groups, so they are grouped for ease of analysis and discussion.

18 CCLP analysis of 2014-2019 5-Year Community Survey microdata from IPUMS USA: Version 11.0.

enough income to cover their basic needs in 2016 compared to 21.5 percent of White households.[19] Ultimately, this analysis suggests that Colorado needs to do more to make Tier 1 top jobs and other high-paying occupations more accessible to non-White workers if we hope to create more equitable outcomes in our state's labor market and to foster economic security for all racial and ethnic groups in Colorado.

The Talent Equity Agenda

In 2020, the Colorado Workforce Development Council published a *Talent Equity Agenda* which laid out a series of recommendations to promote racial equity in Colorado's labor market and workforce development systems. The report also suggested metrics that could track progress in promoting equity in career navigation and advancement; closing the digital divide; post-secondary credential attainment; unemployment; and equitable hiring, compensation, and promotion. Taking post-secondary credential attainment as an example, 90.7% of Tier 1 top jobs in 2021 required a credential past high school.[20] However, as the *Talent Equity Agenda* highlights, 32.2% of Hispanic/Latinx Coloradans and 41.3% of Black/African American Coloradans had a post-secondary credential in 2019, compared to 64.2% of White Coloradans.[21]

A post-secondary credential is essential for many Coloradans employed in Tier 1 top jobs, yet the opportunity to earn such a credential appears to be far less accessible for Coloradans of color. Whether due to quality of their school district, cost of post-secondary education, family responsibilities, or other factors, post-secondary education is not an opportunity that the majority of Hispanic/Latinx or Black/African American Coloradans appear to have been able to pursue. These barriers reinforce the racial/ethnic segregation in the labor market that we detail in this post. As the breadth of the recommendations in the *Talent Equity Agenda* suggest, disparities in educational attainment are just one of many areas where the state must do more to create a more equitable labor market. As the *Talent Equity Agenda* points out, closing the national educational achievement gap between Black/African American and Hispanic/Latinx children and their White counterparts would result in an estimated $2.3 trillion benefit to the U.S. economy by 2050.[22]

19 Pearce, Diana M. *Overlooked and Undercounted 2018: Struggling to Make Ends Meet in Colorado*. Prepared by the University of Washington's Center for Women's Welfare for the Colorado Center on Law and Policy (2018). Accessed from https://cclponline.org/wp-content/uploads/2018/12/CO18_Demo.pdf on 4 March 2022.
20 *2021 Colorado Talent Pipeline Report*. Colorado Workforce Development Council (2021).
21 Dougherty, Jean. *2019 Colorado Talent Pipeline Report*. Colorado Workforce Development Council (2019). Accessed from https://drive.google.com/file/d/12wf4KZTKd9ie9xEH6MAouaMlxFo-_yRP/view on 8 February 2022.
22 Walker, Renise. *2020 Colorado Talent Equity Agenda*. Colorado Workforce Development Council (2020). Accessed from https://drive.google.com/file/d/1JxsVfTB6n5HDOeaxFqOoqcq4mjHPJMKt/view on 8 February 2022.

A More Equitable Economy Benefits All Coloradans

The segregation of certain racial and ethnic groups into particular occupations and occupational groups is concerning for a number of reasons. During periods of economic growth, the concentration of workers of color in our state's lowest-paid occupational groups exacerbates wage and wealth gaps between racial and ethnic groups. How can workers of color ever close the earnings gaps between them and White workers if structural forces in our labor market shut them out of Colorado's highest paid occupations? On the other hand, it is common for certain occupations to experience more job losses than others during economic downturns. This was no different during the recession the resulted from the COVID-19 pandemic in 2020.

Between May 2019 and May 2020, the U.S. Bureau of Labor Statistics notes that employment across all occupational groups in Colorado declined by 100,490 jobs.[23] 83.0% of these jobs were in occupational groups that had a lower share of White workers than Colorado's workforce as a whole. In other words, due to occupational segregation, workers of color were more likely to be employed in an occupational group that was severely impacted by the job losses that accompanied the COVID-19 pandemic. On the other hand, White workers were more likely to be employed in occupational groups that saw employment rise between 2019 and 2020. If we look at the occupational group that saw the sharpest decline in employment over this period, food preparation and serving and related occupations, the share of White workers employed in these occupations was approximately 11.1 percentage points lower than the share of White workers in our labor force.[24]

And as our research on the racial and ethnic composition of Coloradans employed in top jobs shows, if the occupational segregation present across Colorado's top jobs continues into the future, White workers will continue to be over-represented among jobs with wages high enough to support a family of three. Race and ethnicity should not be a determining factor in whether or not a Coloradans is able to obtain a good, well-paying job.

The American Rescue Plan Act (ARPA) provides a unique opportunity for Colorado to invest in policies and programs that will be essential for an equitable economic recovery from the COVID-19 pandemic. Not only will doing so create opportunities for workers of color who are, for many reasons, less likely to have jobs in our state's fastest growing, highest paying occupations; they also have the potential to create economic prosperity for our state as a whole.

According to estimates from the Federal Reserve Bank, Colorado's economy would have grown by an additional $13 billion annually between 2005 and 2019 if racial disparities in our labor market were eliminated over that period (or $182 billion over the whole 14-year period).[25] Our economy would have

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23 Occupational Employment Statistics (OEWS). Bureau of Labor Statistics, U.S. Department of Labor (2019-20).
24 OEWS, Colorado Department of Labor and Employment (2019).
25 The analysis looked specifically at disparities in earnings, hours worked, educational attainment, and employment.

been \$3.8 billion larger annually if only the racial gaps in educational attainment were eliminated.[26] Prosperity Now, a national advocacy organization focused on economic justice, ranks Colorado 8th in the country when it comes to a range of economic outcome indicators for residents, but 37th in the country in terms of the disparities that exist across these indicators between White Coloradans and Coloradans of color.[27] The recommendations in the *Talent Equity Agenda* are just one of many strategies for how the state can improve on the disparate economic outcomes among Coloradans of different racial/ethnic backgrounds. Implementing these and other strategies to promote equity across racial, gender, and class lines will be essential to promoting a just and equitable economic recovery in Colorado.

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26 "How much could US states gain by closing racial and gender gaps in the labor market?" FedCommunities, Federal Reserve Bank (2021). Accessed from https://fedcommunities.org/data/closethegaps/ on 4 March 2022.
27 *Prosperity Now Scorecard 2020.* Prosperity Now (2020). Accessed from https://scorecard.prosperitynow.org/data-by-location#state/co on 8 February 2022.