



— The Bell Policy Center presents —

# Higher Education in Colorado

PART #2

## The Value of Higher Education in Colorado





## Key Highlights

- Postsecondary credentials are becoming increasingly important to obtaining a well-paying job in Colorado's workforce, but the type of credential is often more important when looking at larger equity disparities.
- There are significant disparities in the credentials pursued and the amount of debt accrued based upon race and gender.
- The amount of student debt accrued and the time it takes to pay it off is different among Coloradans and has significant long-term wealth implications.

Earning a postsecondary credential in Colorado provides an array of benefits.<sup>1</sup> Individual benefits include shorter periods of unemployment, higher earning capacity, greater professional and economic mobility, and higher levels of savings. Societal benefits include increased tax revenues and workforce flexibility and productivity, as well as less reliance on government support. Despite these benefits, the value of a postsecondary credential greatly depends on the type of postsecondary credential pursued and the amount of student debt accrued. There are also significant differences between the types of credentials being pursued and the amount of student debt being taken out for postsecondary education based on race and gender.

According to the 2020 Colorado Talent Pipeline Report, Colorado's fastest growing occupations are in the industry areas of computer and mathematics, health care, education, community and social service, science, engineering, legal, and management.<sup>2</sup> Most of these occupations will require a postsecondary credential, which is why closing equity gaps and making higher education more affordable and attainable for all Coloradans is critical to making upward professional and economic mobility a possibility for all.

## Types of Postsecondary Credentials & Demographic Disparities

The type of postsecondary credential pursued can greatly affect one's wage earnings. The highest wage earnings are typically earned in science, technology, engineering, and math (STEM) occupations,<sup>3</sup> and the demand for workers in these occupations is expected to increase.<sup>4</sup> Despite this, there are notable differences in the types of credentials that are pursued by Coloradans based on gender and race. Fewer women of color, specifically Black and Hispanic women, pursue a STEM credential.<sup>5</sup> They are also the only groups out of both men and women that a STEM credential is not in their top five pursued degree programs. This results in greater wage gaps in Colorado's workforce, and perpetuates disparities in the value of a postsecondary credential for women of color in Colorado.

**Gender:** In Colorado, men are more likely than women to pursue a credential in the STEM and business fields, while women are more likely to pursue a bachelor's degree in arts, humanities, and communication, and a bachelor's degree in the social and behavioral sciences and humanities.<sup>6</sup> This typically results in significantly lower median wages for women, thus potentially decreasing the value of their postsecondary credential.

Degree Program	% of Women Completers Earning a Postsecondary Credential	Five-Year Median Wage Earnings for Women	% of Men Completers Earning a Postsecondary	Five-Year Median Wage Earnings for Men
<b>Bachelor's Degree: STEM</b>	9.7%	\$51,167	20.9%	\$67,737
<b>Bachelor's Degree: Arts, Humanities, &amp; Communication</b>	19.6%	\$42,875	14.3%	\$45,577
<b>Bachelor's Degree: Business</b>	9.5%	\$55,215	13.9%	\$61,640
<b>Bachelor's Degree: Social &amp; Behavioral Sciences &amp; Human Services</b>	16.0%	\$43,758	12.0%	\$49,131

Source: Colorado Department of Higher Education, 2020

As seen in the chart above, men consistently out earn women in all professions. This reflects the wage disparities in Colorado's workforce based on gender,<sup>7</sup> and may also discourage women from pursuing a postsecondary credential. According to the most recent data, if the gender wage gap were eliminated in Colorado, the state's economy would have grown by an additional \$9.2 billion in gross domestic product (GDP) in 2014.<sup>8</sup> Therefore, eliminating gender disparities in wages not only positively impacts individuals, but the nation as a whole.

**Intersectionality of Race and Gender:** Differences in degree programs pursued also persist across racial lines in Colorado.<sup>9</sup> Black students are more likely to pursue a bachelor's in social and behavioral sciences and human services, followed closely by a bachelor's in arts, humanities, and communication.<sup>10</sup> The intersectionality of both race and gender further exacerbates inequities in the value of a postsecondary credential to a Colorado graduate.

Both Asian and white women in Colorado are more likely to pursue a bachelor's in either business or in STEM. Both Black and Hispanic women are most likely to pursue a bachelor's in social and behavioral sciences and human services, a bachelor's in arts, humanities, and communication, or a certificate in health.<sup>11</sup> Black and Hispanic women are also more likely to pursue an associate arts degree in humanities and communication.<sup>12</sup> The median wage earnings for these credentials are typically less than they are for a bachelor's in business or STEM.<sup>13</sup> Therefore, Black and Hispanic women are often pursuing credentials that do not easily allow for opportunities for upward professional and economic mobility.


In Colorado, both Asian and white men are most likely to pursue a bachelor's in STEM.<sup>14</sup> Black men are more likely to pursue a bachelor's in social and behavioral sciences and human services or a bachelor's in arts, humanities and communication, while Hispanic men are more likely to pursue a trades certificate, despite their lower median wages.<sup>15</sup>

A degree program in STEM often costs more than other programs,<sup>16</sup> presenting barriers in the affordability of pursuing a postsecondary credential in STEM for Black and Hispanic students. Racial wealth gaps persist, as white families on average have higher incomes than households of color.<sup>17</sup> Making a postsecondary credential in STEM more affordable for all students would allow for Black and Hispanic students to have a higher return on investment for their postsecondary credential.

Racial gaps in wage earnings do persist though, as both white and Asian men and women typically earn more than Hispanic and Black men and women to some degree in most occupations. Therefore, the Colorado job market is not rewarding the appropriate wages associated with these credentials for Black and Hispanic individuals.

**Student Debt:** In order to pay for postsecondary education, more students and families have to rely on student loans. Student debt is one of the fastest growing forms of debt in the U.S., and more than 700,000 Coloradans owe a collective \$26.4 billion in outstanding student debt.<sup>18</sup> More students are enrolling in and attending college now more than ever before, and the cost of tuition has continued to rise

due to demand, institutional expenses, and expanding grant and loan availability.<sup>19</sup> Debt can be worth the cost and is more easily paid off if one completes their credential. The amount of student debt varies across degree types, race, and gender.



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**Degree Type:** According to data from the Colorado Department of Higher Education, 55 percent of bachelor's degree graduates from Colorado higher education institutions completed their degree with an average debt total of \$25,700 in 2019.<sup>20</sup> Only 10 percent of bachelor's degree completers graduated school with more than \$40,000 in debt. For associate degree graduates in 2019, 42 percent completed their degree program with debt, averaging a total of \$13,300. Only 2 percent of associate degree graduates completed their degree program with more than \$40,000 in debt. Therefore, bachelor's degree completers graduated with more debt, although a bachelor's costs more than an associate degree. Despite this, those who graduate with a bachelor's degree often earn higher median wages in the years after graduation.<sup>21</sup>

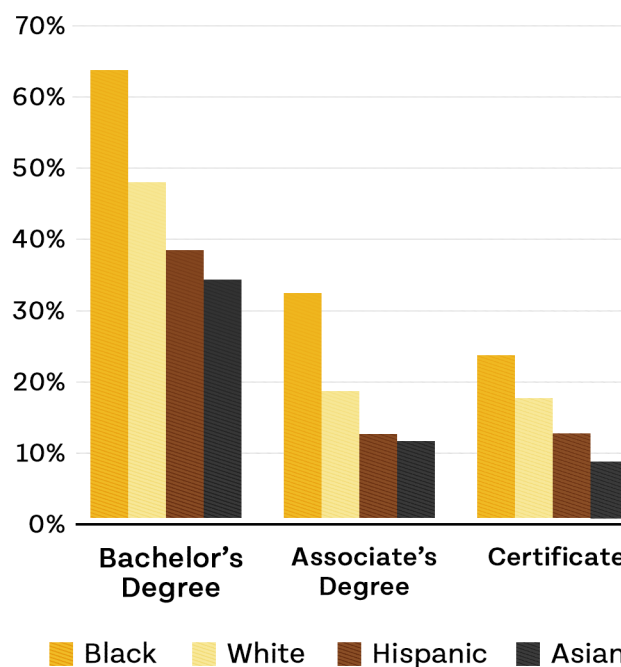


Every year, approximately 1 million student borrowers default on nearly \$20 billion in federal loans.<sup>22</sup> According to data from the National Center for Education Statistics, 12 years after degree completion, only 8 percent of bachelor's degree recipients defaulted on their loans compared to 44 percent of certificate recipients and 22 percent of associate degree recipients.<sup>23</sup>

**Race:** Nationally, Black students tend to take out more debt than other races pursuing similar postsecondary credentials, while Asian and Hispanic students typically borrow less.<sup>24</sup> Black graduates are also more likely to have a difficult time repaying their loans. Black students, on average, were more likely to borrow \$20,000 or more in student loans in 2015-2016.<sup>25</sup>

This trend is primarily due to racial wealth gaps. On average, white families have roughly three times the wealth as typical Hispanic or Black families.<sup>26</sup> Therefore, students of color are more likely to have to take out larger amounts of debt to obtain a postsecondary credential. This highlights racial disparities between wealth and student debt, and the value of a postsecondary credential in achieving upward economic mobility for marginalized communities.

**Percentage of Students Borrowing \$20,000 + by Credential Type & Race/Ethnicity**

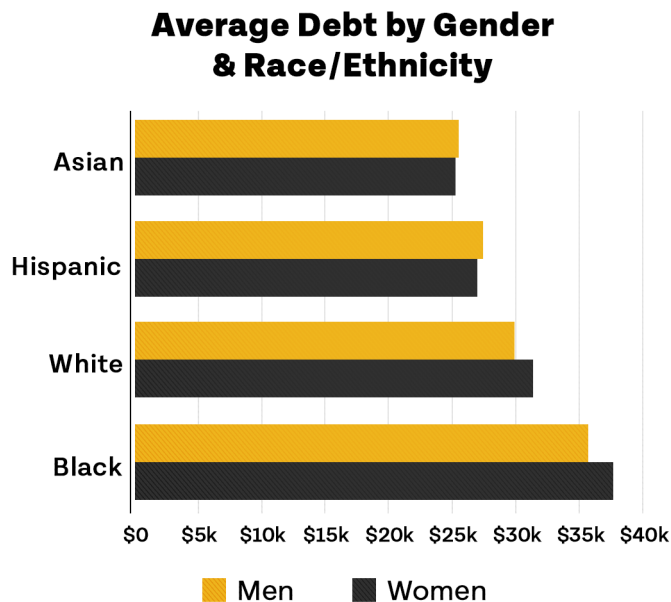


Source: American Council on Education, 2019

**Only 8 percent of bachelor's degree recipients defaulted on their loans compared to 44 percent of certificate recipients and 22 percent of associate degree recipients.**

**Gender:** Women hold approximately two-thirds of the student loan debt in the United States, amounting to \$929 billion dollars.<sup>27</sup> Overall, both Black men and women graduate with more debt than other races, with Black men holding an average of \$35,655 in debt after completion and Black women holding an average of \$37,655 in debt after completion.<sup>28</sup>

Due to data showing women, especially women of color, not only graduate with more debt than men, but also make significantly less than men in the workforce and pursue degree programs with lower median wages, a postsecondary credential may not hold the same value for a woman that it does for men.



## Needs for the Future of Work & Learning

To close inequities in both education and the workforce and to ensure all Coloradans get the same value out of receiving a postsecondary credential, there are some significant needs for the future of work and learning in Colorado. To increase access and affordability of STEM degree programs to women and Black and Hispanic students, expanding scholarships and emergency grants available to these students pursuing a STEM postsecondary credential is critical.<sup>29</sup> This would ease some of the cost burden of tuition and the amount of debt one accrues, and potentially encourage more Black and Hispanic students, as well as women to pursue credentials in these programs, thus increasing the value of their higher education through higher wages and job demand.

Improving the quality of and increasing diversity in navigation and coaching services for students of color is also important.<sup>30</sup> Hiring more racially diverse higher education navigators and coaches may have a greater influence on students in their degree choices because they can work with someone who shares their same racial identity. Also, implementing evidence-based curricula on the wage earnings produced by different credentials to guide navigation and coaching services ensures that students can be given proper guidance on which degree programs may lead to better wages. Therefore, more students of color may choose to pursue credentials in STEM and business, which both produce higher wages in the workforce.

Developing and implementing more stackable credential pathways (SCPs) can be useful for closing equity gaps in the accessibility and affordability of obtaining a postsecondary credential.<sup>31</sup> Stackable credentials offer a career pathway in a defined program that allows students to earn credentials by building off previous experience or credentials, providing flexible on and offramps to accommodate the lifestyles and needs of students (especially student parents), and ensuring previous work and learning experience leads to credentials so students are more likely to get a higher earning job in a competitive workforce.<sup>32</sup> Stackable credential pathways may allow more nontraditional students, such as student parents, as well as low-income students, women, and students of color to pursue a postsecondary credential at a lower cost and/or in a way that is more accommodating to their lifestyle.

Expanding tuition assistance programs, including loans and grants for women and students of color, can also help reduce the cost of postsecondary education for these groups.<sup>33</sup> Loans are a form of student debt, but as mentioned previously, can be helpful in financing postsecondary education if a student completes their degree program and receives their credential.<sup>34</sup> Therefore, navigation and coaching may be helpful in encouraging students to finish their postsecondary degree program. The gender-based wage gaps in Colorado's workforce greatly affect the value of postsecondary credentials for women and women of color. Investing in affordable, high-quality child care and early childhood education could help provide women, who often are the primary caregivers for children, the ability to keep

their jobs and excel in the workforce, thus potentially closing the gender wage gap.

## Conclusion

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A postsecondary credential often leads to greater opportunities for professional and economic mobility, but gender- and racial-based inequities in higher education and the workforce in Colorado affect the subsequent return on investment one receives from their postsecondary credential. The number of jobs in Colorado increasingly are requiring a postsecondary credential; therefore, eliminating barriers in the affordability and accessibility of higher education is critical to ensuring that all Coloradans, regardless of their racial or gender identity, can thrive.

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## Endnotes

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