



The Impact of Student Debt on Colorado's Economy

April 4, 2019

What is a 'good business climate?'



- **Education and training based on global standards**
- Modern infrastructure - roads, rail, ports, airports, telecommunications, broadband access, sewer, reliable water and energy
- Stable, fair taxation
- Prepared development sites
- Expedited permitting
- Development and job creation incentives
- Capital availability - venture, equity and debt
- Tech. R&D commercialization
- Affordable, quality housing
- Accessible and affordable, quality healthcare, childcare and elder care
- Safe communities, schools, parks, streets
- Vibrant and diverse arts, cultural, sports and recreational activities
- High quality protected natural environment
- Embracing of diverse cultures, races and lifestyles
- Collaborative leaders committed to continuous improvement and highest quality of all community assets
- Leadership that constantly challenges the status-quo, searching for a "better way"

From Mike Fitzgerald, Former CEO, Denver South Economic Development Partnership

Our Vision and Mission

The Arapahoe/Douglas Workforce Development Board is dedicated to identifying and promoting workforce development strategies that positively impact the economic wellbeing of Arapahoe and Douglas Counties.

OUR VISION is sustainable employment through strategic human capital investments that produce positive economic returns for our business/ industry and our communities.

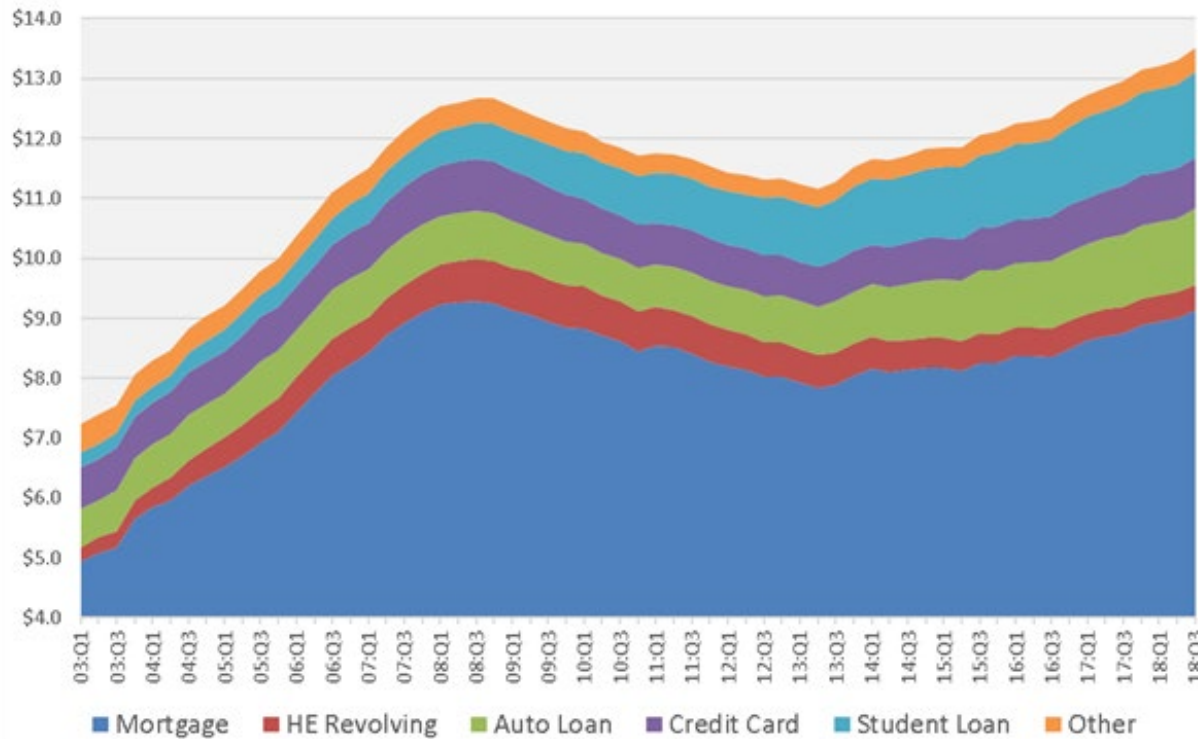
OUR MISSION is to create a best in class regional system that is responsive to business/industry that results in a skilled workforce equipped with a work ethic, academic proficiency, and occupational specific talent that rivals our competition.

Essentially, we're trying to help create and maintain greater metro Denver as an opportunity city – a place where someone can work hard and get ahead.

Understanding the adverse impact of high student debt in Colorado is vital to that endeavor.

The National Picture

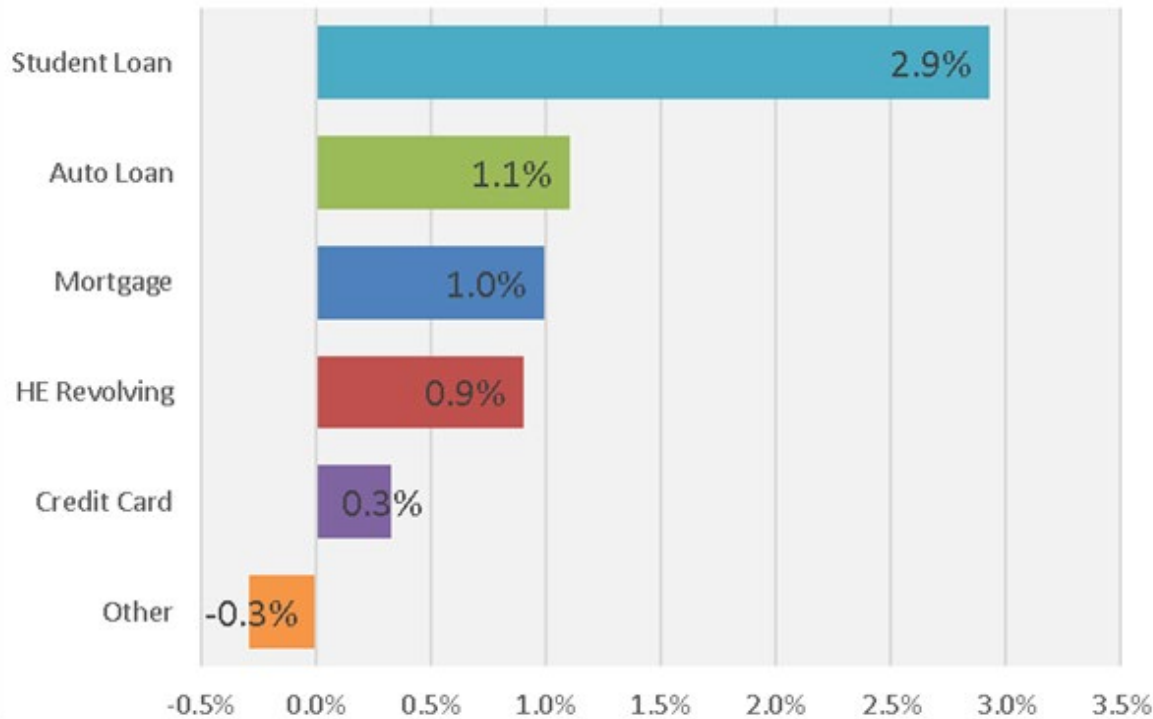
US Consumer Debt Balance and Its Composition
(In \$Trillions)



According to the most recent data, through the fourth quarter of 2018, released by the Federal Reserve Bank of New York, national student debt now stands at \$1.457 trillion, and makes up just over 10.7% of total U.S. consumer debt.

Fastest Growing Type of Debt

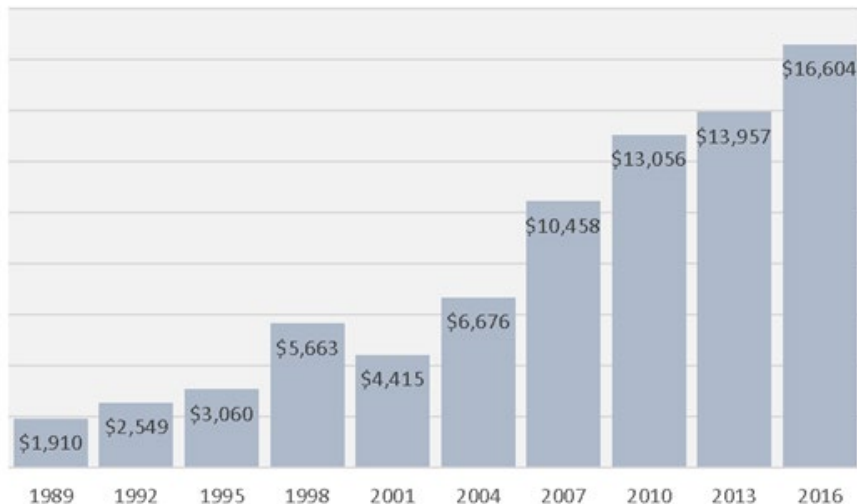
Compound Annual Growth Rate by Debt Type,
First Quarter 2003 through Third Quarter 2018



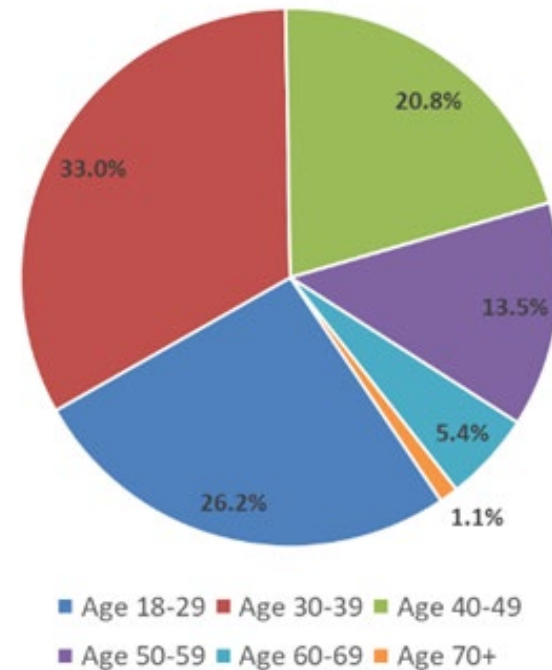
This bar chart, (also from the New York Federal Reserve Bank), shows that national student debt has grown much more rapidly between 2003 and 2018 than other types of consumer debt.

A Multi-Generational Challenge

Average Student Debt for Households Led by a 25-34 Year-Old
(2016 Dollars)



Percent of Total Student Loan Balance by Age Grouping

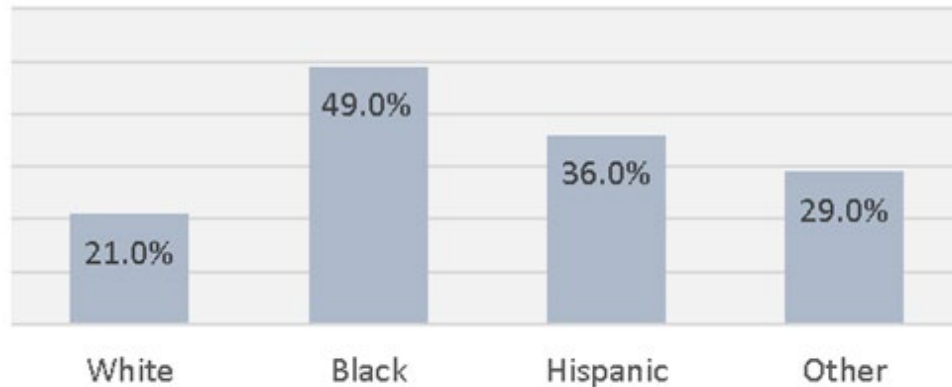


The challenge is multi-generational, but because of rapidly escalating costs, student loan debt is rising over twice as fast as any other type of debt. Over time, this will disproportionately affect younger Coloradans.

What it Means to Default

Percent Defaulting on Student Loans
By Race/Ethnicity

Source: Center for American Progress



A review of literature on student loan default shows disparities for racial and ethnic minorities.

Because half of the labor force in Colorado will be made up of racial and ethnic minorities by 2050 according to the State Demographer, this problem affects us.

The far right column shows significantly higher default rates across the board for all races and ethnicities. Several factors might contribute to this, including higher costs, looser standards around student acceptance, and/or lack of business-relevant outcomes in many private for-profit schools.

Percent Who Dropped Out Defaulting Within 12 Years of Entry
By Type of Institution

| Race/Ethnicity | Public 4-Year | Private Non-Profit 4-Year | Public Two-Year | Private For-Profit |
|---------------------------|---------------|---------------------------|-----------------|--------------------|
| White | 39.0% | 33.0% | 32.0% | 50.0% |
| Black or African-American | 64.0% | 65.0% | 54.0% | 75.0% |
| Hispanic or Latino | 50.0% | Unknown | 29.0% | 63.0% |
| All Students | 44.0% | 40.0% | 36.0% | 62.0% |

Source: Center for American Progress

Remediation and Completion

This is compounded by the fact that 40-60% of incoming freshmen must take remedial mathematics, English or both prior to embarking on their college-level coursework.

These students are much less likely to complete, with fewer than 25% finishing their intended degree program (Miller, 2017).

Statistically, students who must take remedial courses borrow at the same rate as students who do not, but have much lower graduation rates, they are also likely to have higher loan default rates.

These students are disproportionately persons of color, African-American (56%), Hispanic/Latino (45%), versus 35% of white students (Jimenez, 2016).

Forever Loans

This table shows the median percentage of the original student loan still outstanding 12 years after the borrower entered college. This table includes those who have paid off their student loans in their entirety.

| Median Percentage of Original Student Loan Balance Still Owed 12 Years After College Entry | | |
|--|---------------|---------------|
| Race/Ethnicity | 2003-04 Entry | 1995-96 Entry |
| White | 65.0% | 60.0% |
| Black or African-American | 113.0% | 101.0% |
| Hispanic or Latino | 83.0% | 72.0% |
| All Students | 80.0% | 68.0% |

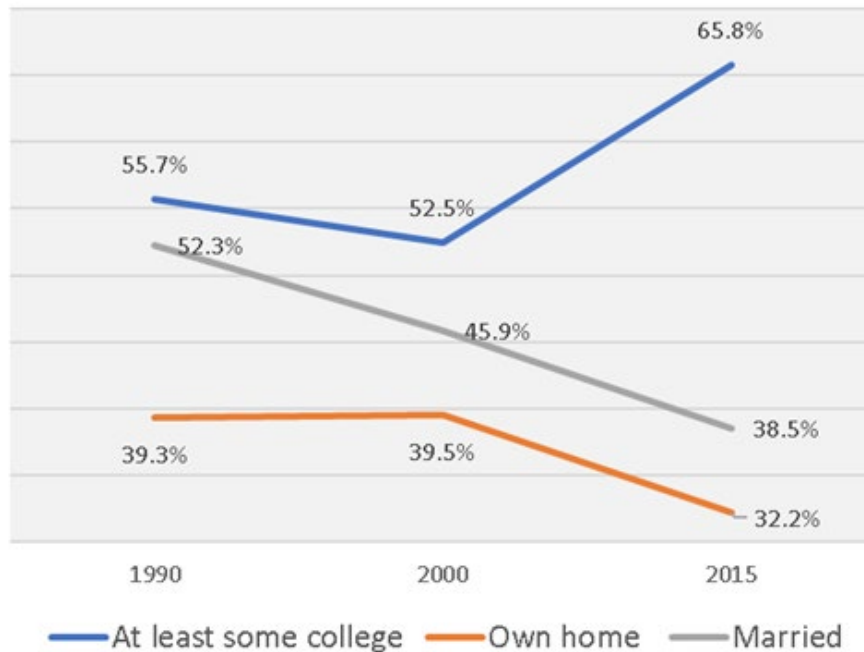
Source: Center for American Progress

| Median Percentage of Original Student Loan Balance Still Owed 12 Years After Entry (2003-04 Academic Year) | | | | |
|--|---------|-------|------------------------|--------------------|
| Educational Attainment | Overall | White | Black/African American | Hispanic or Latino |
| Attained Bachelor's Degree | 60.0% | 47.0% | 114.0% | 79.0% |
| Attained Associate Degree | 92.0% | 76.0% | 124.0% | 100.0% |
| Attained Certificate | 76.0% | 70.0% | 108.0% | Unknown |
| Still Enrolled | 101.0% | 97.0% | 115.0% | 100.0% |
| Dropped Out | 83.0% | 68.0% | 106.0% | 79.0% |

Source: Center for American Progress

On the Ground

Education Levels vs. Home Ownership
Household Heads, Age 18-34



Generational Decline in Earnings, Age 25-34

| Median Income | 1989 | 2013 |
|-------------------|----------|----------|
| Individual Worker | \$50,910 | \$40,581 |

Source: Young Invincibles, 2017

Median Assets, Age 25-34

| Median Income | 1989 | 2013 |
|---------------------|-----------|-----------|
| Degree Without Debt | \$244,872 | \$133,800 |
| Degree With Debt | \$150,751 | \$43,510 |
| No Degree | \$34,470 | \$16,000 |

Source: Young Invincibles, 2017

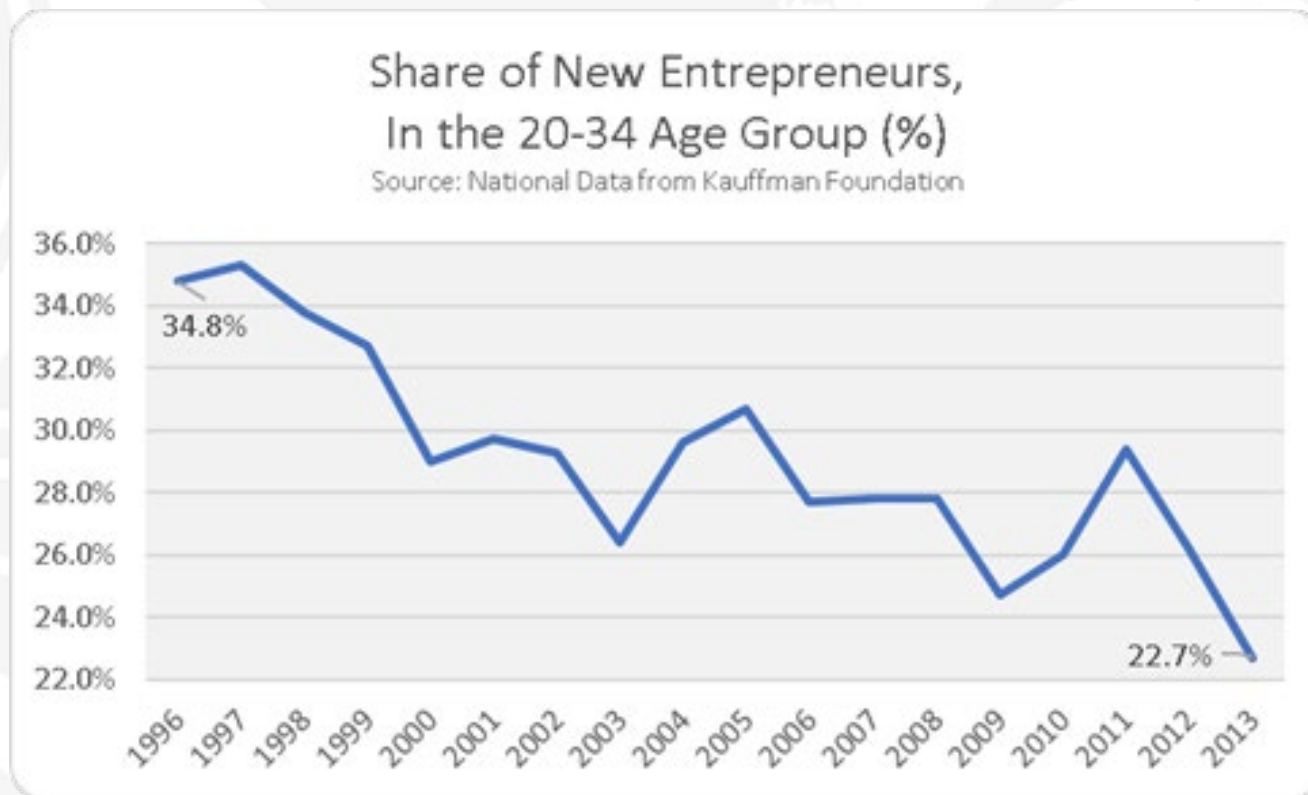
Net Wealth, Age 25-34

| Median Income | 1989 | 2013 |
|---------------------|-----------|----------|
| Degree Without Debt | \$125,572 | \$75,000 |
| Degree With Debt | \$86,547 | \$6,600 |
| No Degree | \$16,322 | \$7,750 |

Source: Young Invincibles, 2017

We saw how student loan debt is disproportionately affecting younger Americans; these figures show delays in marriage, buying homes, fewer assets and less wealth accumulation.

Fewer Young Entrepreneurs



“Because of the corrosive impact of student debt on start-ups, millennials seem to be the new lost generation of entrepreneurs. Although it is difficult to pin down a direct relationship between college loans and entrepreneurial activity, the weight of student debt appears to be deterring some would-be business owners.” (Wasick, 2017)

The Effect in Colorado

| Opportunity Cost of Student Loan Repayment in Colorado | | | | |
|--|------------------|------------------|--------------|-------------------------------|
| Level | Average Interest | Estimated Number | Avg. Payment | Aggregate Annual Cash Outflow |
| Undergraduate | 4.81% | 385,548 | \$304.68 | \$1,409,626,195 |
| Graduate | 6.38% | 230,764 | \$331.55 | \$918,117,894 |
| PLUS | 7.44% | 16,137 | \$350.43 | \$67,857,237 |
| Totals | 5.45% | 632,449 | \$315.65 | \$2,395,601,326 |

Sources: 2019 Analysis by Student Borrower Protection Center (SBPC) and New Era Colorado, US Census, US Bureau Labor Statistics, US Dept. of Education

On January 22, 2019, the Student Borrower Protection Center (SBPC) and New Era Colorado released an analysis of Colorado student debt using data obtained from the U.S. Department of Education and the Federal Reserve Bank of Philadelphia. This analysis revealed that presently there are 733,700 people in Colorado who owe student debt of \$26.4 billion. This is an average of \$36,032 per student debtor. Of these, 632,449 are currently paying, and 101,251 are in default.

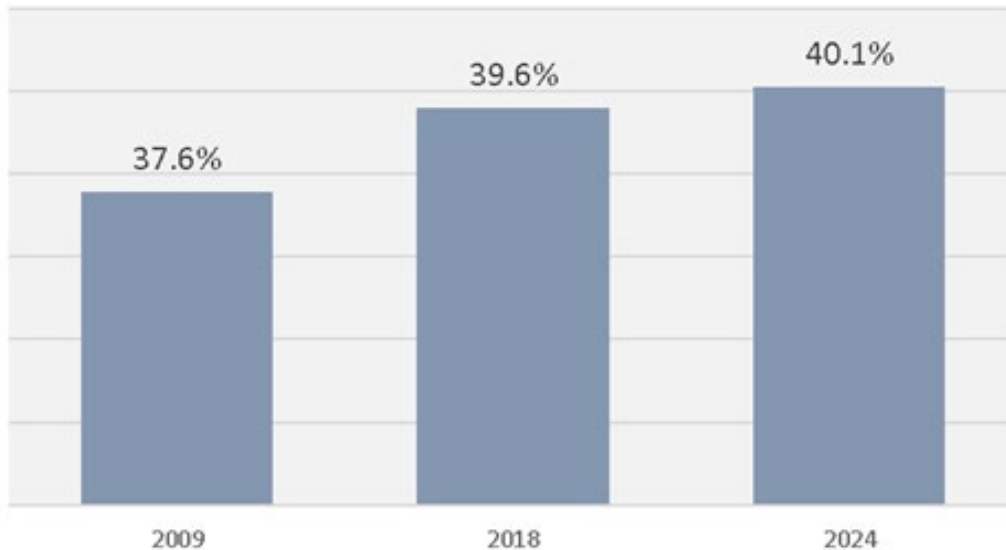
Lower Demand for Goods & Services

| Value Taken Out of Colorado Economy by Aggregate Student Loan Remittance Combining Data Aggregated from 2019 Student Borrower Protection Center/New Era Colorado Analysis With Estimates from the Latest Bureau of Labor Statistics Consumer Expenditure Survey (CEX) | | | |
|---|------------------------|---|--|
| Expenditure Category | Category Spending Rate | Aggregate Annual Loss to Colorado Economy | <i>"The average Coloradan with student debt has this much less to spend annually."</i> |
| Housing | 33.80% | (\$809,713,248) | (\$1,280) |
| Healthcare | 8.20% | (\$196,439,309) | (\$311) |
| Transportation | 16.00% | (\$383,296,212) | (\$606) |
| Food | 12.00% | (\$287,472,159) | (\$455) |
| Apparel & Services | 3.10% | (\$74,263,641) | (\$117) |
| Insurance & Retirement Investments | 11.00% | (\$263,516,146) | (\$417) |
| Entertainment | 5.30% | (\$126,966,870) | (\$201) |
| Personal Care | 1.30% | (\$31,142,817) | (\$49) |
| Source: U.S. Bureau Labor Statistics, Consumer Expenditure Survey | | | |

Nearly one in four working age Coloradans (23.5%) are paying an average monthly remittance of \$315.65 to service their student loans. This adds up to an aggregate amount of nearly \$2.4 billion leaving the state each year, remitted to either the federal government or private lenders, and not being used to purchase local goods and services.

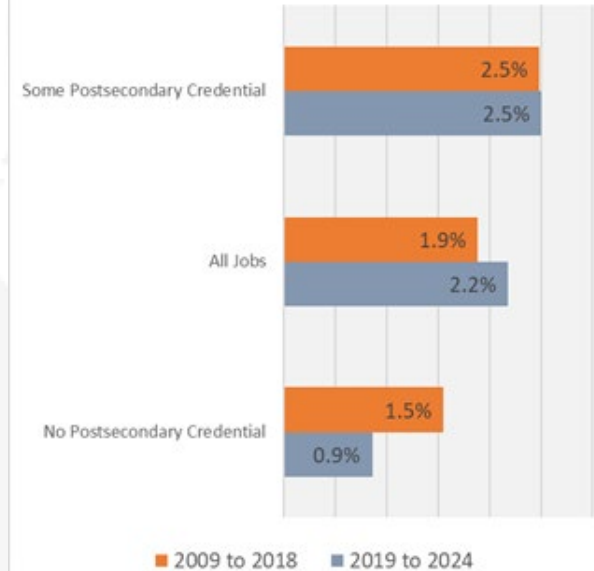
Higher Demand for Degrees

Percent of Jobs Requiring Some Postsecondary Credential, Colorado



Compounded Annual Growth Rate by Academic Attainment, Colorado

Source: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker



Note: Some sources say that the percentage of jobs requiring some training past high school is double this. Much of this training, such as for skilled construction, utilities and broadband trades, is not listed in the Integrated Postsecondary Education Data System (IPEDS), and so does not show here. The actual percentage, then, is significantly higher than this bar chart implies.

Over the Next 5 Years

Projected Employer Demand for New Degrees, All Levels, Colorado, 2019 through 2024

| SOC | Occupation Family | New Jobs Added | Postsecondary Non-Degree Certificate | Associates | Bachelors | Masters | Doctoral or Professional |
|---------|--|----------------|--------------------------------------|------------|-----------|---------|--------------------------|
| 11-0000 | Management Occupations | 14,678 | | 12 | 13,901 | 671 | |
| 13-0000 | Business and Financial Operations Occupations | 18,383 | 23 | | 17,862 | | |
| 15-0000 | Computer and Mathematical Occupations | 13,192 | | 842 | 10,403 | 233 | |
| 17-0000 | Architecture and Engineering Occupations | 5,631 | | 1,175 | 4,230 | | |
| 19-0000 | Life, Physical, and Social Science Occupations | 2,883 | | 532 | 1,443 | 240 | 667 |
| 21-0000 | Community and Social Service Occupations | 5,807 | | | 3,241 | 1,727 | |
| 23-0000 | Legal Occupations | 2,259 | 21 | 748 | 15 | | 1,392 |
| 25-0000 | Education, Training, and Library Occupations | 16,948 | 253 | 1,016 | 8,702 | 603 | 2,836 |
| 27-0000 | Arts, Design, Entertainment, Sports, and Media Occupations | 5,051 | 205 | 13 | 3,727 | | |
| 29-0000 | Healthcare Practitioners and Technical Occupations | 20,884 | 3,122 | 3,219 | 7,334 | 2,642 | 3,674 |
| 31-0000 | Healthcare Support Occupations | 12,509 | 7,956 | 462 | | | |
| 33-0000 | Protective Service Occupations | 5,281 | 671 | | 10 | | |
| 35-0000 | Food Preparation and Serving Related Occupations | 25,673 | 5 | | | | |
| 37-0000 | Building and Grounds Cleaning and Maintenance Occupations | 9,289 | | | | | |
| 39-0000 | Personal Care and Service Occupations | 16,170 | 1,944 | 21 | | | |
| 41-0000 | Sales and Related Occupations | 20,513 | | | 1,803 | | |
| 43-0000 | Office and Administrative Support Occupations | 27,519 | | 155 | 13 | | |
| 45-0000 | Farming, Fishing, and Forestry Occupations | 1,947 | | | 27 | | |
| 47-0000 | Construction and Extraction Occupations | 17,321 | | | | | |
| 49-0000 | Installation, Maintenance, and Repair Occupations | 10,252 | 2,736 | 191 | | | |
| 51-0000 | Production Occupations | 6,091 | 19 | | | | |
| 53-0000 | Transportation and Material Moving Occupations | 16,400 | 2,901 | 72 | 270 | | |
| | Totals | 274,681 | 19,856 | 8,458 | 72,981 | 6,116 | 8,569 |

Source: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker

Using IPEDS data aggregated by EMSI, we see this is the actual demand for newly degreed/credentialed people in Colorado over the next five years based on projections of occupational job growth by typical entry level educational attainment.

The Urban Front Range

| Comparative Need for Newly Degreed Individuals, 2019-2024 | | | |
|---|----------|-------------------------|---------|
| Level/Period | Colorado | Central Planning Region | Percent |
| All Jobs | 274,680 | 220,887 | 80.4% |
| Postsecondary Non-Degree Award | 19,856 | 15,976 | 80.5% |
| Associates Degree | 8,458 | 7,000 | 82.8% |
| Bachelors Degree | 72,997 | 60,316 | 82.6% |
| Masters Degree | 6,116 | 5,001 | 81.8% |
| Doctoral/Professional Degree | 8,569 | 6,975 | 81.4% |

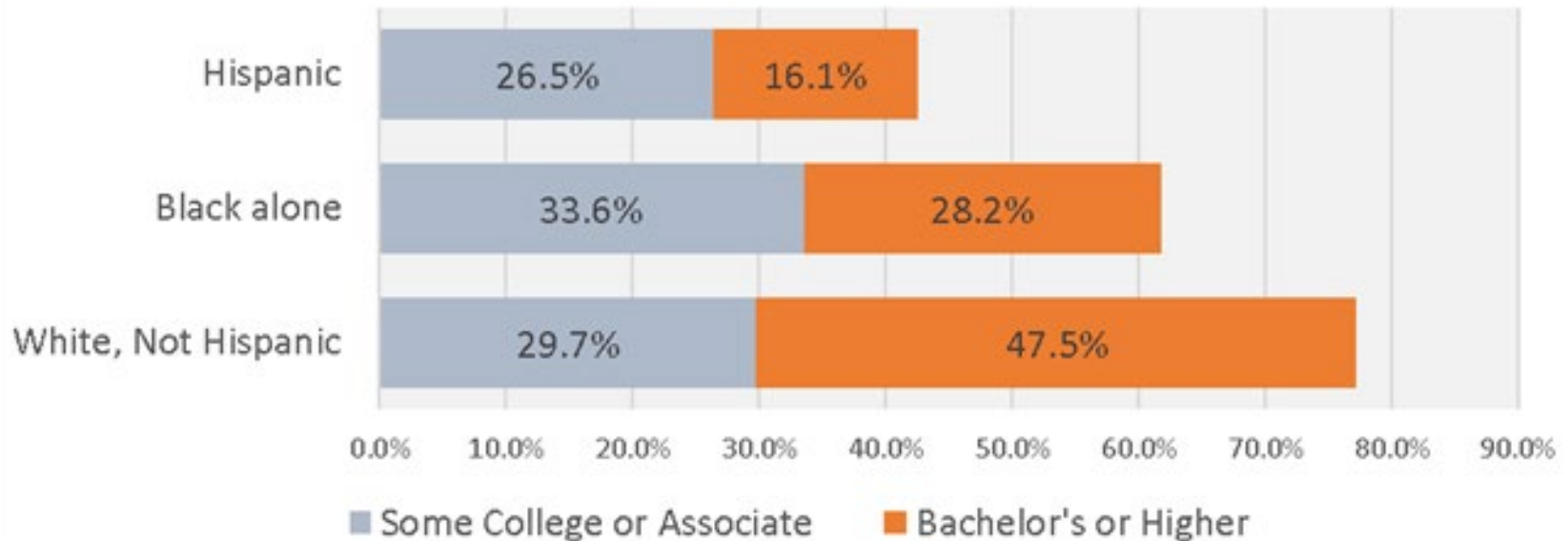
Source: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker

- Businesses along Colorado's urban front range, excluding Greeley, are currently losing \$1.97 billion per year in potential demand for local goods and services due to the opportunity cost of student loan remittance.
- By 2024, businesses will be losing an estimated \$3.22 billion annually in foregone demand for goods and services due to reduced demand caused by student loan remittance.

Minority Disparity

Comparative Educational Attainment by Race/Ethnicity, Colorado

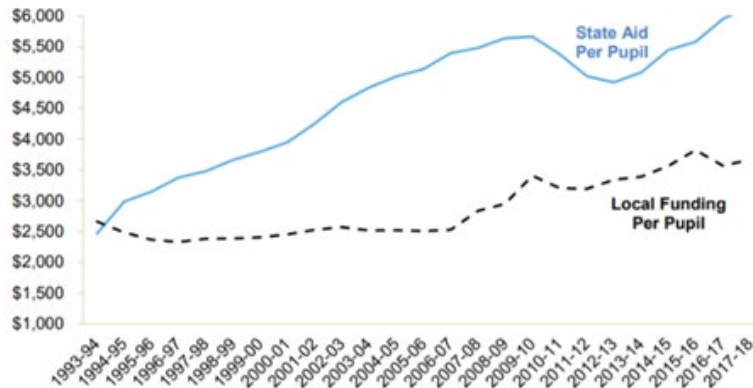
Source: US Census Bureau



According to the Colorado Demographer, around 48% of Colorado's labor force will be made up of racial and ethnic minorities by 2050. Since employers in Colorado currently require 33.7% of workers to have a bachelor's degree or higher, this means that Colorado must find a way to increase the educational attainment of its minorities.

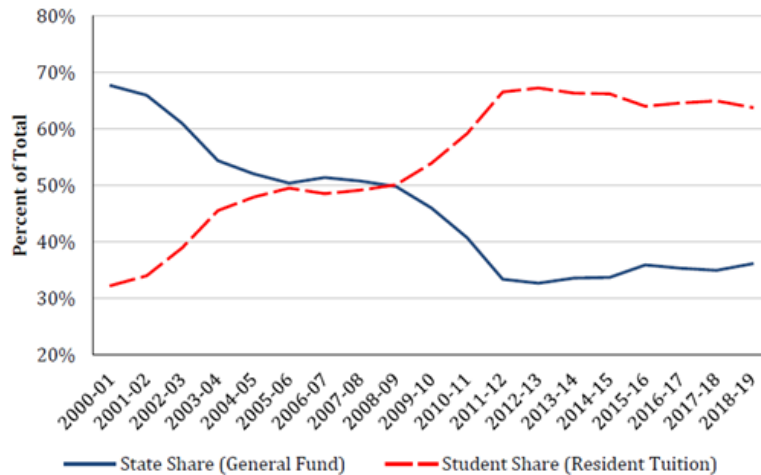
Unsustainable Budget Structure

Figure 2
Statewide Average School Finance Funding Per Pupil



Source: Legislative Council Staff

Average Resident Student's Share of College, All Governing Boards
(adjusted for inflation in 2015 dollars)



- Colorado has some mandatory expenditures that are growing. K-12 is pictured in the top line graph.
- Colorado's inmate population has grown at a pace 5% above the national average.
- Medicaid was expanded in Colorado under the Affordable Care Act, adding 554,000 more people to the rolls at an average annual cost of \$4,898 each.
- As a result of these competing priorities, and funding constraints inherent in TABOR and the Gallagher Amendment, higher education is one of the few areas that can be cut resulting in the students bearing more of the cost.

What Can We Do?

What Should We Do?

Young people in Colorado have never faced a greater need for getting higher education while at the same time, the cost of higher education is greater than it has ever been, and due to Colorado's state funding structure the public colleges and universities have been forced to pass the biggest part of the cost onto students in tuition and fee increases.

The fundamental question here seems to be whether we look at our students, whatever age they might be, as an investment in Colorado's future, or whether we do not.

If we do not, are we willing to watch young Coloradans run up debt, and Colorado businesses suffer from artificially low demand for goods and services?