The Bell Policy Center is pleased to release our Guide to Economic Mobility in Colorado. We hope it offers a comprehensive look at the barriers and opportunities communities face as we work to ensure economic mobility for every Coloradan.

After a year of conversations across the state and intensive research, it's clear to us that despite Colorado's overarching economic growth, too many Coloradans are not feeling the benefits of our state's exceptional prosperity. Many of our fellow citizens feel stuck and see the American Dream as elusive. Even still, there is pride in and optimism about the Colorado way of life.

This guide explores how the forces of shifting demographics, economic inequality, shrinking public investments, and technological change make economic mobility a steep uphill climb. Despite the challenges these forces present, we continue to believe successful use of policy levers in areas like education, health, housing, and labor and employment law can make that climb easier. Throughout this guide, we take measure of how we use those levers and offer ideas for how we can do better.

Our hope is the information, analysis, and recommendations offered here fuel a robust conversation about economic mobility in Colorado. We recognize there will be diverse perspectives on this information and welcome an open dialogue to discuss them.

The Bell Policy Center believes it's within our power to raise the economic floor, build a diverse and thriving middle class, and embrace innovation in Colorado. To do that, we need the facts and ideas for how to change our trajectory. We're confident this guide provides just that.
Forces

Colorado is growing older and more diverse. Notably, Hispanics will comprise one-third of Colorado’s population by 2050, but will make up more than 60 percent of new entrants to the workforce by that time. This underscores the importance of closing equity gaps today.

Colorado’s overall economic recovery stands out, but gains have been uneven throughout the state. Distressed communities persist both in rural and metro areas and Colorado is adding more low-wage jobs than any other. When adjusted for inflation, average weekly wages have only risen $33 since 2000.

Colorado families are hit particularly hard by the impact of low investment in public programs. At 3.7 percent, Colorado is investing a historically low percentage of its economy in services funded through the state’s General Fund.

As automation puts Colorado at a critical juncture over the next two decades, 477,000 Colorado workers are likely to be affected by changes in technology. Most of these are workers in low-skill, low-wage jobs.

Levers

High-quality early childhood education has become cost prohibitive for many families. The Colorado Preschool Program (CPP), which was designed to subsidize costs for low-income families, is only serving 20 percent of Colorado’s 3- and 4-year-olds.

Our changing workforce necessitates greater attention to postsecondary education. More must be done to further educate the 9 percent of Coloradans who haven’t completed a high school diploma or its equivalent, but we also need new approaches to meet the needs of the more than 30 percent of undergraduates aged 25 and older in our postsecondary system in an affordable way. Colorado’s outstanding student loan debt now totals $24.75 billion, and the state’s for-profit students face even higher average debt than other students.

Combined two-generation approaches to early childhood and postsecondary challenges show enormous potential for cost-effective ways to improve outcomes.

A historic number of Coloradans now have health insurance — at 6.5 percent, Colorado’s uninsured rate is down significantly from the 18 percent it was 10 years ago, but crucial pressure points still exist. A new study of 23 states finds Coloradans spend the most on out-of-pocket costs.

Lack of affordable housing is a top concern for Coloradans. A household must make $21.97 to afford rent and utilities in Colorado, but the average renter wage is only $17.13. Nearly half of all Colorado renters are cost burdened, with an additional 24 percent severely cost burdened.

In the workplace, updating wage, benefits, and worker protection practices would have positive implications for our state. Gender pay equity could mean the state’s poverty rate from 5.6 percent to 2.8 percent. Implementing the Obama administration’s proposed overtime eligibility changes would benefit 248,000 salaried Coloradans, especially female, black, and Hispanic workers.

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Colorado risks future public funding liabilities if it doesn’t address the high costs of long-term care, the lack of options to save for this expense, and retirement savings in the state. Care for seniors is among the biggest cost drivers in Medicaid and is projected to grow, and half of Coloradans don’t have access to retirement plans at work.
Forces

As many fight to enter or remain in today’s shrinking middle class, the road to opportunity is littered with hurdles hardworking Americans are expected to clear with varying levels of assistance. These are exacerbated by what the the Bell Policy Center identifies as “forces.”

This guide provides insight on some of the specific forces impeding Coloradans’ ability to get ahead and stay ahead. The examination of these forces offers the necessary lens to understand where we are and how we got here, but also sheds light on the unfair challenges Coloradans face due to outdated practices that can be solved with progressive and inclusive policymaking.

Demographics: A Changing Colorado

Colorado’s changing demographics have far-reaching implications for our state’s economic growth. A key indicator in determining prosperity and need across the state, demographics help us understand demands for housing, transportation, schools, and other public services. Because demographics affect so much of how Colorado operates, it’s imperative to recognize how these elements play into the vision of economic opportunity.

Population Growth

Overall, Colorado is growing faster than most states — it was the eighth fastest state in absolute population growth in 2016 — but our population is increasing more slowly than it has in the past. In recent years, Colorado has seen a 1.6 percent annual uptick in population, nearly half the 3 percent annual growth in the 1990s. Still, Colorado’s population is projected to grow from 5.6 million people in 2017 to 8.7 million in 2050, driven overwhelmingly by newcomers moving to the state.

Between 2010 and 2015, Colorado’s population grew by about 400,000, almost all of whom settled along the Front Range. Although the rate of net in-migration slowed in 2016, another 460,000 people are expected in Colorado by 2020, most of them headed to the Front Range.

Expected Population Growth

Outside of the Front Range, the population in 25 counties declined between 2010 and 2015. With more people moving out than in and deaths outnumbering births, these counties will struggle to sustain their population over the long run.

Growing and declining populations both have attributes that may encourage or discourage economic growth. Growing areas spin off lots of economic opportunities that attract people, which means greater demand for housing, transportation, and other resources. If supply does not or cannot keep pace, these areas become congested, expensive, and less attractive.

While stagnant and declining areas have fewer jobs and economic opportunities, they often have lower living costs and are less crowded, which can be enticing and spur growth. Since Colorado has several communities that are growing while others are declining, helping the latter prosper from statewide growth is important to promoting economic opportunities throughout Colorado.

One of the critical resources needed to generate growth in rural parts of Colorado is broadband internet access. While many rural towns located along major highways have broadband access, almost one-quarter of rural residents don’t, including many living in large portions of the Eastern Plains and mountains. The lack of high-speed internet affects how
schools, hospitals, and businesses operate and can make a difference in an area’s growth. The Bell met with members from several Colorado communities during the summer of 2017, and those on the Western Slope and in northwestern Colorado shared the importance of broadband access. The Governor’s Office of Information Technology is leading the efforts to increase coverage and capacity of broadband throughout Colorado, including mapping the availability of service and pursuing strategies to expand access. Ensuring all parts of Colorado have access to broadband is one strategy to help all communities benefit from Colorado’s economic growth.

**Colorado Is Getting Older**

Historically, Colorado has had a relatively low share of residents 65 and older; in 2015, Colorado was the 13th youngest state in the nation with a median age of 36.5.

During the same time, Colorado’s growth rate in the 65-and-over and 85-and-over population was the third and 15th fastest in the country, respectively. This is largely due to the number of baby boomers (born between 1946 and 1964) in the state.

Baby boomers account for 1 out of every 4 Coloradans and as they get older, so too does our overall population. Soon, our “young state” will be similar in age to the rest of the nation. As this happens, economic output throughout the state will be affected.

Four out of every 10 workers in Colorado are baby boomers and as they retire, our workforce will undergo a major transformation.

Approximately 1 million workers are projected to age out of the workforce by 2030, with most expected to leave between 2020 and 2030. Education, health, utilities, mining, and government are industries with a larger number of older workers and will rely on replacing retiring workers; this will open the door for new workers to find their place in Colorado’s workforce.

In addition, senior spending on health care and other services is projected to drive an almost 70 percent increase in jobs such as personal care aides, retail sales persons, and registered nurses over the coming decade.

If there are not enough new workers with the appropriate skills to fill the jobs vacated by retiring employees, Colorado runs the risk of constraining economic growth. Further limitation may come from the decline in incomes as Coloradans retire and live on pensions and savings.

With less spending from households headed by 65-and-older Coloradans comes reduced overall demand and slower economic growth. The drop in income and overall household expenditures also puts downward pressure on state tax revenues: The Colorado Futures Center projects state income taxes and state sales taxes will grow at a slower rate due to the aging of Colorado’s population.

When combined with the greater demand seniors place on public services such as health care, long-term care, income support, and property tax rebates, there will likely be a smaller share of public resources available in the future to be spent on services promoting opportunity, such as higher education, K-12 education, preschool, child care, housing, health care, and transportation.

**A More Diverse Colorado**

The number and share of racial and ethnic minorities in Colorado are projected to increase over the next two decades, growing from 1.8 million in 2017 to 4.0 million in 2050.
Racial and ethnic minorities are predicted to comprise about 46 percent of Colorado’s population in 2050, compared to about 30 percent in 2015. Hispanics will comprise the largest share of Colorado’s racial and ethnic minority population — over one-third — by 2050.

Colorado’s minority population tends to be younger and Hispanics will comprise over 60 percent of the growth in our working-age population between 2017 and 2020 and each decade through 2050. However, minorities in Colorado currently face numerous barriers to economic mobility.

For example, they currently have lower incomes, higher poverty rates, higher unemployment rates, less assets, lower educational attainment levels, more at-risk students, lower homeownership rates, and poorer health outcomes than the majority white population. We must address current gaps in educational and skills attainment if we want to ensure qualified workers fill the jobs of the future and find opportunity themselves.

To effectively address these challenges, Colorado must confront these disparities.
Colorado’s Economy: Strong Yet Uneven

In recent years, Colorado’s economy has been strong, growing faster than the national economy and that of most other states. In August 2017, our state had the second lowest unemployment rate in the nation at 2.4 percent, near its lowest level on record. Unemployment is projected to remain at 3 percent or less in 2018 and 2019.

Colorado created 217,000 net new jobs between 2014 and 2016 — that’s about 70,000 per year on average. The expectation is to add another 50,000 jobs each year from 2017 through 2019.

But a tight labor market and lack of qualified workers have analysts believing economic growth is being held back. They argue Colorado needs more workers; these could be older Coloradans foregoing retirement, new people moving to the state, or simply an increase in the number of people joining the workforce.

As many economists predicted, these conditions are beginning to put pressure on employers to increase wages. In October 2017, average wages in Colorado increased year-over-year by 2.7 percent or $0.73 per hour. However, the pace of wage growth has been much slower than in the recovery periods from past recessions.

When adjusting for inflation, average weekly wages have been essentially flat since 2000: They’ve only increased $33, or a little over 3 percent, since 2000.

The total personal income in the state, which is an overall measure of the size of Colorado’s economy, grew at an average rate of 5.4 percent each year between 2014 and 2016. This amount is projected to grow between 5 percent and 6 percent between 2017 and 2019.

The Leeds Business Confidence Index shows businesses’ expectations for future growth remain positive. The September 2017 state leading index published by the Federal Reserve Bank of Philadelphia projects Colorado’s economy will continue to expand into the first quarter of 2018, and the Colorado Secretary of State reports the number of new business entities increased by 5.1 percent in the third quarter of 2017 over the same period last year.
Uneven Growth Throughout the State

The unemployment rate in every Colorado metro area is lower than the national average, as well as lower than it was in 2016. The same holds true for year-over-year growth in the number of jobs for each metro area except Grand Junction, as illustrated in the graphic to the right.

Colorado was recently ranked as one of the top five states in the nation based on its low share of “distressed communities.” Produced by the Economic Innovation Group, the ranking says 45 percent of Coloradans — that’s 2.7 million people — live in “prosperous communities,” but some parts of the state aren’t faring as well. In compiling its distressed community rankings, EIG examines seven factors:

- Population over 25 without a high school diploma
- Amount of vacant housing
- Prime age population (25-64) not working
- Poverty rate
- Community’s median income compared to the state’s median income
- Change in jobs between 2011-2015
- Change in the number of businesses between 2011-2015

Although Colorado ranks low on these measures as a state, 11 counties in south and southeastern Colorado are listed as “distressed communities” due to high poverty rates, many vacant houses, low median incomes, and a loss of jobs and businesses.

The five counties with the highest distressed ratings are illustrated in the graphic below.
But it’s not just rural areas — even communities in metro Denver are facing economic distress. For example, the section of north and northeast Aurora comprising the 80010 zip code is considered distressed, even though Arapahoe County and Denver County are categorized as prosperous.

Beyond regional differences, some Coloradans are more likely to experience unemployment than others. Despite Colorado’s low unemployment rate in 2016, women and people of color experienced unemployment rates about one-third higher than those of men and white Coloradans. When looking at unemployment by age, teenagers have the highest unemployment rate by far, while older Coloradans see a substantial drop. This is largely due to retirement and workforce exits, so these Coloradans are not counted in unemployment statistics.
Growth in Low-Wage Sectors

About two-thirds of all new Colorado jobs projected to be created in 2017 are found in five industries:
- Health care and social assistance
- Accommodations and food services
- Retail trade
- Professional, scientific, and technical services
- Other services (except public administration)

About 6 out of 10 new jobs projected to be created in Colorado through 2026 will occur in six industries — the first four listed above plus two others:
- Construction
- Education services

Low-paying jobs in these industries include waiters and waitresses, cashiers, home health aides, personal care aides, child care workers, stock clerks, teacher’s aides, construction laborers, and hairstylists.

Three of these industry sectors pay average wages below 200 percent of the federal poverty level (FPL) for a family of four, an amount many analysts use as a rule of thumb for family-supporting wages. Two other industries — health care and social assistance and construction — pay average wages barely above 200 percent of FPL. However, the average wages in the accommodations and food services industry are below the amount needed to keep a family of four out of poverty. Only the professional, scientific, and technical services industry pays average wages high enough to support the needs of most families.

Many Colorado Workers Are In Low-Wage Jobs

Many Colorado Workers Are In Low-Wage Jobs


Compared to other states, Colorado has historically had a smaller share of residents working in low-wage jobs, but during 2016, almost 1 in 4 workers — 500,000 Coloradans — worked in an occupation with median wages unable to keep a family of four out of poverty. Unfortunately, the share of workers in these low-paying jobs has grown by 69 percent since 2004, when about 1 out of 8 Coloradans worked in these low-wage jobs. In 2016, about 3 of every 5 workers — 1.4 million Coloradans — worked in an occupation with median wages less than 200 percent FPL for a family of four. This rate has stayed nearly constant since 2004.
Joseph Zimmerman, a graduate student at the University of Colorado at Denver, analyzed the changes in average income, living costs, and net income for various types of low- and middle-income families across Colorado between 2001 and 2015. He found, when adjusted for inflation, families with higher incomes — defined as double their county’s median — saw their incomes grow faster than costs over this period. However, families with lower incomes — defined as equal to their county’s median — saw their average costs grow faster than their incomes.

**Despite Booming Economy, Inequality Persists**

One of the major forces affecting the future of opportunity in Colorado is economic inequality, including both income and wealth inequality. While these two measures are deeply interrelated, they are not the same and different policy solutions are needed to address each.

Income includes wages, salaries, interest on savings accounts, dividends, profits from business ventures and collecting rents, and capital gains. On the other hand, wealth, or “net worth” is the difference between an individual's assets and liabilities.

Assets include things such as the value of ownership in a personal residence, value of vehicles, cash in savings, checking, and money market accounts, and investments in stocks, bonds, mutual funds, real estate, and retirement accounts. Liabilities are debts individuals owe on car loans, credit card balances, mortgages, student loans, or other bills yet to be paid. Subtracting the value of liabilities from the value of assets determines an individual's net worth.

**Income Inequality**

Data from a variety of sources illustrate the escalating expansion of income inequality in the United States. This is seen in the share of income earned by the top 1 percent compared to other U.S. households, which has risen dramatically since the 1970s. New data from the Federal Reserve’s Survey of Consumer Finances confirms this trend, showing the share of income received by the top 1 percent rose to 23.8 percent in 2016. This is very close to the historic high reached in the 1920s, just prior to the onset of the Great Depression.

Several sources point out the root of this growing income inequality is exploding wage inequality. Wages for the top 1 percent rose almost 157 percent between 1979 and 2015, while the increase for the bottom 90 percent was only about 21 percent over the same period.
Income inequality is not isolated to certain regions or locations in the United States, whether urban or rural. It exists in all regions and all states throughout the country, including Colorado. The top 1 percent takes in 16.6 percent of all income in Colorado, compared to 20.1 percent nationally. According to the Economic Policy Institute (EPI), this puts Colorado at 21st among the states for income inequality.

The most income-unequal metropolitan areas in Colorado also hold some surprises: EPI’s data show Glenwood Springs ranks first in the state and ninth in the country, with the top 1 percent making 42.4 times more than the bottom 99 percent, with average annual incomes of $2,441,991 and $57,634, respectively. Sterling, Colorado ranks second in the state for income inequality and 21st nationally — the only other Colorado metro area in the nation’s top 25.

Wealth Inequality

As bad as income inequality has become, wealth inequality is an even larger problem, since wealth is much more highly concentrated in the population than income. This is important because wealth fuels the kinds of investments that promote economic mobility, such as a down payment on a house, tuition for college, or start-up money for a business.

Wealth also provides a cushion against setbacks like a job loss, health problems, or a major car repair bill. Income determines whether families can meet their current needs, while wealth helps them advance economically over the long term. It can be the difference between just getting by and getting ahead. Plus, wealth can be passed on from one generation to the next, giving young people a leg up as they start out in life.

Recent data from the Federal Reserve shows, in 2016, the top 10 percent of the population received about half of all income, but held more than three-quarters of all wealth in the country. Not only do those at the top have more wealth than those at the bottom, but their wealth is made up from different types of assets as well.

Since wealth is the difference between a household’s assets and liabilities, debt is a crucial element driving the country’s growing wealth inequality. Between 1999 and 2016, the mix in the type of debt Colorado families have has changed dramatically. While mortgage debt is still the largest, it has remained constant as a share of overall family debt, going from 77 percent in 1999 to 73 percent in 2016.
However, the amount of student debt held by families increased by almost 600 percent, and its share of family debt grew by almost 200 percent. Student loan debt is now the largest source, in dollar terms, of nonmortgage debt owed by families nationally, according to the Federal Reserve’s 2016 survey.

More Colorado Families Struggling With Student Debt, Other Non-Mortgage Debt

- **Student Loans**
- **Credit Cards**
- **Auto Loans**

**1999**
- $830
- $2,600
- $1,810

**2016**
- $5,630
- $3,380
- $4,490

Up **578.3%** since 1999
Up **30%** since 1999
Up **148.1%** since 1999


**Implications**

Clearly, both income and wealth inequality have negative implications. Economic inequality adversely affects the major levers of opportunity, including education, health, work policies, housing, and asset building. It also strains Colorado’s and the country’s overall economic stability and productivity.

The recently passed federal tax legislation is projected to increase the level of wealth and income inequality in the U.S.

Research finds inequality leads to several negative outcomes, including:
- Unequal access to education opportunities
- A range of [health problems](#)
- Reduced economic growth
- A shrinking middle class

The last point above is crucial, as income and wealth inequality in America now affect everyone struggling to enter or stay in the middle class. Even within the bottom 90 percent of American households, though, these repercussions are especially severe for those who have historically been left out and left behind by current policies, programs, and practices.

As the [Institute for Policy Studies](#) points out, continued acceleration of the racial wealth divide will impact black and Hispanic/Latino families and eventually the economy at large, as “the majority of U.S. households will no longer have enough wealth to stake their claim in the American middle class or higher.”

Given that almost half of Colorado’s population in 2050 is projected to be comprised of racial and ethnic minorities, it’s not a stretch to say the future of the middle class depends on whether we can reverse growing racial inequality.
As more and more low- and middle-income Coloradans face growing costs of living and stagnant incomes, it’s an important time to look to public investments. Public investments play a vital role in building and maintaining infrastructure, educating residents, and reducing the costs of services putting opportunities within reach of more families. A strong public sector could make postsecondary education more affordable, expand health insurance coverage, increase access to preschool, and lower the costs of child care — all ways to lessen the squeeze many families in Colorado feel today.

Today, the share of Colorado’s economy invested in public services aimed at expanding opportunity — is comprised of two-thirds income taxes paid by individuals and businesses, while about one-third is made up by sales taxes. When Colorado grew and the economy expanded, the total amount of money spent on state government did increase, but the amount of government revenues as a share of the economy has shrunk by about 20 percent since the 1990s.

From the mid-1970s through 2000, Colorado invested an average of 4.5 percent of the economy in state services each year (calculated as the ratio of General Fund revenues to total state personal income). The share has varied depending on the strength of the economy, but since 2000, Colorado has only invested, on average, 3.8 percent of the economy in state services.
At 3.7 percent this year, Colorado is investing almost a historically low percent of its economy in state services. This amount is only found in years when Colorado experienced a recession or the fallout of one: The share dropped to 3.9 percent in the middle of the shale oil bust and recession in 1983, then saw lows of 3.6 percent in 2002 following the dot-com crash, and 3.3 percent at the bottom of the Great Recession in 2009 and 2010. However, Colorado’s current low rate of investment is not due to the effects of a recession; in fact, Colorado’s economy today is one of the fastest growing in the country. General Fund revenues in 2018 and 2019 are expected to be an even smaller portion of the economy than now.

Total state and local expenditures made up about 20 percent to 24 percent of our economy in Colorado between 2000 and 2015. Nationally, that range is generally between 21 percent and 25 percent of the economy. What this shows is how Colorado spends about the same amount of our economy on local government services as the national average, meaning we aren’t using local government spending to compensate for the smaller portion spent on state services compared to other states.

### Higher Costs for Coloradans

Colorado is a low-tax state and typically ranks low nationally in terms of state taxes per $1,000 in personal income. As a result, Colorado doesn’t have a lot of revenue to spend on state services. Investing a smaller share of our economy in state services means an already lean state government has even less to work with. People all over the state feel these effects, making it harder for them to access the levers promoting opportunity.

We see the consequences most notably when it comes to education, child care, and housing. Colorado families now shoulder twice as much of the cost of tuition at public colleges and universities than they did in 2001. About 1 out of 3 4-year-old students who qualify for the Colorado Preschool Program are not served because of lack of state funding. Many Colorado school districts have cut staff, half are operating on four-day weeks, and many are forced to take further measures because state support is not keeping pace with costs. Only about 1 out of 8 children from low- and middle-income families eligible for child care assistance currently get it, partially due to a lack of state funding. At a time when many Coloradans cannot find affordable housing, our state devotes less funds for the construction of inexpensive options than most other states.

Colorado’s aging population, a shrinking sales tax base, and fewer local property tax revenues going to education all put pressure on state funding. Add in the cut of state income and sales tax rates in the early 2000s, and the amount of revenues generated by state taxes has dropped considerably.

Also straining Colorado’s ability to adequately invest in important services: rigid constitutional provisions. The Taxpayer Bill of Rights, or TABOR, prohibits the use of a progressive income tax and bans real estate transfer taxes and statewide property taxes. When coupled with TABOR, the Gallagher amendment makes it difficult for local governments, including school districts, to adjust their mill levies to maintain revenues from local property taxes. The inflexibility of these provisions results in inequities among school districts due to the level of local property taxes residents pay, with
many in wealthier districts paying a smaller share of property values than those in poorer ones.

As policymakers attempt to break down some of the barriers limiting economic opportunity, they find they lack the tools available in other states, but we can change that.

**Recommendations**

Colorado should amend TABOR to allow for a progressive income tax, raise the rates on higher incomes, and cut the rates on low and middle incomes. This will increase revenues and make the tax system fairer.

Colorado should recognize the economy has changed and levy sales taxes on more services, increasing revenues and making the tax system more progressive.

Colorado should follow the 35 other states that have either eliminated or limited the subsidy paid to large retailers to collect state sales taxes.

Colorado should apply a minimum property tax rate in local school districts, which would be fairer, raise more local funds, and free up state revenues for other purposes.

Throughout the rest of this report, we’ll offer more recommendations for other public investments that would benefit Colorado and its citizens.
Many futurists, economists, and high-tech business leaders predict there will be fewer jobs in the future because robots and other machines will be able to do everything humans can do, only better. Concerns about machines putting people out of work aren’t new. Historically, it has eliminated some jobs, but automation is also credited with increased productivity, improved performance, and lower costs of products or services. Over the years, automation has increased demand, stimulated economic growth, and resulted in more overall jobs.

However, current advances in artificial intelligence (AI) and robotics could mean workers will be replaced across all industries at roughly the same time, not just in specific jobs as in the past. Workers will have to do more than change industries to find work; they will have to develop new skills. This represents change on a previously unseen scale.

What Jobs Will Be Automated?

Several recent studies assess the types of jobs most likely to be partly or completely automated. While these studies come to different conclusions in terms of the number of jobs affected, they generally find low-wage jobs and those requiring less education are the most vulnerable.

Two researchers at Oxford University (Frey, Osborne) determined which of 702 U.S. occupations would most likely be automated over the next 10 years to 20 years. Grouped into high-, medium-, and low-risk categories, Frey and Osborne ultimately decided 47 percent of U.S. occupations fall in the high-risk category. Jobs that are low-wage, require less education, and are in the office and administrative support, transportation, logistics, and production industries are considered the most at risk by Frey and Osborne’s analysis.

Conversely, the Organization for Economic Co-operation and Development (OECD) argues while specific duties might be automated, few total occupations will be. Because of this, OECD estimates only 9 percent of jobs in the U.S. are at high risk of elimination. The consulting firm McKinsey and Company provides an even lower assessment: It says less than 5 percent of jobs are vulnerable to complete automation, but 46 percent of all tasks U.S. workers perform could be automated. Workers who perform routine physical activities, collect and process data, or are in low-skill, routine jobs — such as filing clerks and assembly line workers — are most at risk.

Other studies focus on the effects of automation on specific occupations. For example, economists at the U.S. Department of Commerce identified jobs most likely to be eliminated by the introduction of automated vehicles.

What Jobs in Colorado Are at Risk?

Using the previously cited studies, the Bell identified occupations in Colorado judged to be at high risk to automation. This produced a list of 307 occupations that could have all or part of their functions automated. We then ranked the occupations based on the number of Colorado employees in each occupation.

A total of 1.1 million Coloradans, or 41 percent of the total workforce, are working in occupations judged as high risk of being automated.

We then pinpointed occupations judged by Frey and Osborne to have a 90 percent or higher probability of being automated. This produced a list of 15 occupations, totaling 477,000 Colorado workers.
Workers With Lower Incomes & Less Education In Occupations More Likely To Be Automated

This doesn’t mean these jobs will be automated out of existence; some may, but it’s likely many more will see tasks change in some way and workers will need to learn new skills to evolve in their roles.

As many of the studies suggest, most of these occupations are categorized by low skill with low pay. Over half are occupations with mostly female workers, while two have almost all men. Almost 1 in 5 Colorado workers work in jobs most likely to be affected by automation.

To retain and better prepare these workers for the jobs of the future will require a focus on adult education, skill training, and help in making this retraining affordable. It will also likely mean an investment in work supports and other assistance, such as expanded unemployment insurance payments, to help workers as they transition into new jobs.

**Automation Could Promote Economic Growth, Especially in Colorado’s High-Tech Industries**

Colorado has a relatively high concentration of technology-related firms and workers. These high-tech industries help drive Colorado’s economy and accounted for half of the job growth in 2016. About 13 percent of the total jobs added in 2017 are in industries that are sources of primary and advanced technology jobs. These tech firms include more than those that work on AI, robotics, and business process automation, and Colorado is home to robot manufacturers and others that implement automation processes. Their continued expansion helps propel economic growth and creates jobs that make, install, service, and repair robots, and other forms of automation.

In addition to the effects on high-technology industries, automation can improve the performance and output of firms in other industries. The University of Colorado Leeds School of Business says increased automation and technological advancements helped Colorado manufacturers add to the state's GDP with a smaller workforce.

Advanced manufacturing is one of the 14 key industries comprising part of Colorado's sector strategy to promote economic development. It includes companies that may use or develop high-tech processes such as computer-aided design, robotics, and advanced material.
handling. Some industries, such as aerospace, electronics, and bioscience (also included in Colorado’s sector strategy), are comprised of more advanced manufacturing companies than others, but most industries have some advanced manufacturing components. Advanced manufacturing relies on innovative technology, automated processes and methods to improve product design, and production to gain a competitive edge.

If Colorado doesn’t fully invest in robotics, AI, and other forms of automation, we stand to lose jobs and economic growth to states and countries that do. China recently became the largest growth market for industrial robots, with its companies buying twice as many as U.S. companies did in 2015.

Alternative Work Arrangements and Automation

Working full-time at one job with a single employer is how many Americans viewed work for decades, but it may not be how we work in the future.

The percentage of U.S. workers who have engaged in alternative work arrangements, such as temporary help agency workers, on-call workers, contract company workers, and independent contractors or freelancers, rose from 10.7 percent in February 2005 to 15.8 percent in late 2015.

Nationally, 94 percent of new jobs created between 2005 and 2015 occurred in alternative work arrangements.

The number of total workers in “gig” or “sharing” economy jobs totaled 0.5 percent of all workers in 2015.

A recent study by McKinsey Global Initiative (MGI) finds between 20 percent to 30 percent of the working-age population in the U.S. is engaged in some form of independent earning. This could be in the form of second jobs or using online platforms to sell goods and/or rent rooms in their homes. MGI says some choose this approach to work, while others are forced to do it because they cannot find traditional jobs or need extra money. Workers who chose this approach generally report higher levels of satisfaction than those in traditional jobs, while those who take this approach out of necessity report the opposite.

Because independent workers have limited access to the income security protections of full-time jobs, MGI points out, “Labor market policies developed for the industrial era often do not apply to the world of independent work.”

Recommendation

Colorado needs to address the disruptive aspects of automation while reaping the economic benefits. Colorado should convene representatives from labor, the technology industry, other businesses, academia, and state and local governments and task them with assessing the impact of automation. This group should also develop recommendations for balancing automation’s effects on economic growth with those of affected workers.
Levers

Now that we understand the forces holding many Coloradans back from achieving economic mobility, it’s time to explore how the following “levers” can help rebuild our state’s middle class.

These levers are just some of the ways Colorado can implement broad change to support low- and middle-income families across the state. Throughout our analysis of how these levers currently operate and how they can better serve Coloradans, we offer recommendations for how to capitalize on their benefits and most effectively impact economic mobility in Colorado.

Education: Learning to Live and Work

Early Childhood Education

All children can benefit from responsive, stimulating curricula and classroom environments in their early years. This is especially true for children from low-income and dual-language backgrounds.

Yet, high-quality preschool is financially out of reach for many. Nationally, the average cost of providing preschool ranges from $4,700 (part day) to $8,600 (full day). Tuition charge to parents can be even higher. As such, many children don’t attend preschool, or instead attend lower-quality programs or child care options. This means a significant number of Colorado children lack access to critical early childhood learning experiences that could lead to increased success and opportunity in adulthood.

To help rectify this problem, the Colorado Preschool Program (CPP) provides preschool funding for 3- and 4-year-old children who have certain factors in their lives that increase their risk for challenges later in school. To be eligible for the program, a 4-year-old must have at least one risk factor (though most served have two or more) and a 3-year-old must have at least three.

In 2015, the average cost for a Colorado 4-year-old to attend preschool was $11,089

For a family making the state median income of $60,629, that’s 18% of their annual income.

For a family of four earning $45,510 (185% of FPL), the cost of sending one kid to preschool jumps up to 24%.

Source: Center for American Progress Child Care Desert Report, Bell analysis
According to the 2017 CPP Annual Legislative Report, in the 2015-2016 school year CPP served 26,907 children, or nearly 20 percent of Colorado’s 3- and 4-year-olds. CPP is funded at half the amount of per-pupil revenue districts receive for other students; this amount is determined and appropriated each year through the formula in the School Finance Act. School districts receive funding for slots and are required to use at least 95 percent of them for half-day preschool.

Colorado’s public investment in early childhood education (ECE) and child care programs adds $832 million to the economy, in both short- and long-term benefits, according to estimates by Early Milestones Colorado. These benefits include kindergarten students who are better prepared to start school, higher academic achievement, higher adult wages, and decreased rates of arrest. Early childhood investments typically take time to produce returns (e.g., reduced reliance on public assistance, or reduced crime in adulthood), but CPP demonstrates savings more quickly. For example, CPP children are about half as likely to repeat a grade in kindergarten through third grade.

As the 2016-2017 statewide average per-pupil funding was $7,425 for K-12 education, this indicates a savings of over $11 million to the state in terms of additional funding saved from being spent on repeated grades for three cohorts of CPP students, or about $3,692,700 per cohort funded.

At the local level, the Denver Preschool Program (DPP) helps Denver 4-year-olds attend preschool, regardless of income. An evaluation of the program demonstrates its effectiveness in preparing children for success through third grade, regardless of income level, race, gender, or natural language. Earlier analysis by the Bell cites longitudinal studies of programs like CPP and DPP which find a return on investment of nearly $13 for every $1 invested. Nobel Laureate James Heckman’s research also shows ample return on investment for preschool programs like CPP.
Early Childhood Development is a Smart Investment

The Earlier the Investment, the Greater the Return

Rate of Return to Investment

Prenatal 0-3  4-5  School  Post-School (Job Training)

Sources: James Heckman, Nobel Laureate in Economics

The successes of CPP could be even greater with more resources. Colorado ranks 39th in spending on statewide preschool ($2,505 less per pupil than the national average), leaving 4,140 Colorado kids on waiting lists for early childhood education and care. According to the Colorado Department of Education, 8,397 at-risk 4-year-olds were unable to attend either CPP or the federal Head Start Program, which also provides preschool programs, during the 2015-2016 school year.

Much of the progress left to be made in Colorado pertains as much to investing in the ECE workforce as it does to increasing family access to quality early learning experiences. Colorado meets only half of the quality standards set forth by the National Institute for Early Education Research. Its report finds Colorado could make improvements by providing teachers with access to professional development planning or coaching, as one example.

Additionally, compensation for early childhood workers is low. In 2016, the mean salary of Colorado preschool teachers was $30,177, which is only 57 percent of the mean salary for all Colorado occupations. A recent brief by the Working Poor Families Project says ECE workers, which also include those working with children under three, are paid only slightly more than cashiers and dishwashers, slightly less than coat and locker room attendants, and less than half of what kindergarten teachers earn despite working full-time, year-round.

Recommendations

Colorado should expand the Colorado Preschool Program. Fully funding CPP to provide slots for all eligible 4-year-olds would increase spending by about $31.5 million, but both CPP’s documented results and the outcomes experienced by universal (available to all) preschool programs show this would be a smart investment. Colorado could target its approach by first providing access to children insured by Health First Colorado, the state’s Medicaid program, as proposed by the Colorado Commission on Affordable Health Care. Research with a nationally representative sample shows preschool enrollment isn’t well linked with other service systems. Connecting services for these children could improve their health, educational, and economic outcomes.

Make the Colorado Preschool Program full day. In 2013 and 2014, the legislature created and bolstered the Early Childhood At-Risk Enhancement (ECARE) program (SB13-260). ECARE authorized 8,200 new slots for at-risk children to enroll in either preschool or full-day kindergarten, depending on how school districts prioritize slots. The Colorado Department of Education finds most children served with ECARE are kindergarteners. Research has shown a full day of preschool benefits children — and families need full-day preschool to accommodate work schedules. Policymakers could also consider further enhancing ECARE to incentivize more full-day preschool slots.

Prioritize improving the quality of early childhood education jobs. Strategies like teacher loan forgiveness, wage supplements, and tax credits, as well improving workplace benefits such as flexible schedules, paid time off, and insurance, could dramatically improve these positions and make careers in ECE attractive at a time when they are desperately needed.
Released in fall 2017, *Colorado’s Early Childhood Workforce 2020 Plan* outlines goals to improve wages and career support for early childhood workers, including those working with preschoolers. The plan also includes a variety of objectives to address fair compensation.

**Two-Generation Success**

Two-generation strategies are aimed at moving the entire family out of poverty and into economic stability. These strategies involve an intentional commitment to serving children and adults simultaneously, thus helping the entire family advance economically. Yet most programs focus on children or adults exclusively, so low-income parents are often unable to access education programs and workforce training because the programs don’t provide needed supports for them as parents.

Looking at education through a two-generation lens, state investments in early care and education help parents invest in their own development through educational activities and further engagement in the workforce. Effectively serving Colorado’s children during their earliest years not only yields downstream societal savings in the future, but also provides immediate support to parents.

Research shows when both children and parents are engaged in education, the effects on low-income families moving out of poverty are even greater. According to the National Head Start Association, research shows “how interventions in both the quality and quantity of low-income children’s early learning experiences and their parents’ increases in education, employment, and income can contribute to strengthening children’s outcomes — particularly when those interventions are integrated.”

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*Early Milestones Colorado* estimates the “enabling effect” of parents’ involvement in the workforce through paid early childhood care and education was more than $4.4 billion in 2015. The net gain would be even greater if more parents could spend a lesser share of their annual income on early care and education.

The Bell’s type of **two-generation approach** — one that intentionally links adult education, job training, workforce development, and postsecondary education for low-income parents with early childhood education for children — finds both kids and parents positively benefit. Advancing this approach is important because it emphasizes long-term investments to build human capital for both children and adults.

As children move past early childhood education into **K-12**, persistent emphasis on two-generation strategies is imperative. Creating a cycle where education is valued, continued, and accessible further benefits Colorado families and their communities. To learn more about the importance of K-12 education and its specific impact on Colorado, please see the work of the *Colorado Children’s Campaign* and its **2017 Kids Count Report**.
Postsecondary Education & Job Training

As outlined earlier in this report, rapid advances in automation have an increasingly profound impact on jobs. By 2020, 74 percent of all jobs in Colorado will require some level of postsecondary education and training, including targeted skills programs, short- and long-term certificates, and two-year and four-year degrees. However, estimates say in the same year, the work-related knowledge of a postsecondary graduate will have a “shelf life” of less than five years.

To meet this challenge, there is broad consensus postsecondary education and job training must fundamentally modify its approach to what it does, how it does it, who it does it for, and who provides it to ensure future learners are “robot-proof” in our emerging workforce and society. Adapting our current strategy on learning will provide more Coloradans with the opportunity to earn more, avoid unemployment, and build a stronger state economy.

Meeting the needs of a rapidly evolving workforce and a greatly diversified student body means the “ecosystem” of education and training providers will need to expand. It will be essential to think beyond the boundaries of traditional higher education, and even beyond the broader landscape of postsecondary and workforce training programs that currently exist.

The seeds of this new ecosystem are already being planted today in programs such as computer-coding and entrepreneurship boot camps; focused, short-term, intensive training and credentialing programs; corporate “universities” and training systems, online providers and others. Many of these programs can point to tremendous successes for themselves and their students. However, as this expansion in providers moves forward, it will be critical to ensure they serve all learners, and not just those who are already best prepared or have the most resources.

With the rise of new providers, institutions, public/private partnerships, organizational relationships and business models within this
ecosystem, there will also be a heightened need for mechanisms, safeguards, and information transparency protecting learners from unfair, deceptive, or predatory practices so they can achieve the outcomes they’re promised. State government will have an increasingly important coordinating and oversight role in developing an integrated and diverse future education and training ecosystem that best serves individuals, employers, and the public good.

**Needs and Disparities**

The accelerating rate at which knowledge and technology are advancing means postsecondary education and training can no longer be considered a “one-and-done” activity. Individuals will continually need to update their knowledge and skills throughout their lives, no matter what their level of education, skill set, or job title.

Because of this, one group to account for will be employees in need of “reskilling.” Although the actual size of this population is difficult to predict, Bell data from earlier in this guide show many of the occupations held predominately by low-skill workers have the highest probability of being greatly changed or eliminated through automation, potentially affecting more than 477,000 Colorado workers.

Clearly, to account for workforce demand created by technology and demographic shifts, existing and emerging postsecondary education and training providers will need to serve a far wider variety of learners beyond traditional students. A key challenge for Colorado will come in educating and training those who are currently underserved, including first-generation students, low-income students, and underrepresented racial and ethnic minorities, the latter of whom will comprise 48 percent of Colorado’s workforce in 2050, compared to 26 percent in 2010.

Colorado’s largest and fastest-growing ethnic group, Hispanics, currently has the lowest college enrollment rate for recent high school graduates and the lowest average postsecondary credential attainment rate of any major ethnic group in the state.
Looking more broadly, almost one-third of Colorado’s adult population lacks any level of education beyond high school, while another 400,000 Coloradans have some postsecondary education, but no credential. Additionally, about 9 percent of Colorado’s current working-age population, 320,000 Coloradans, have not completed a high school diploma or its equivalent.

Many adults without high school credentials are unprepared for postsecondary education or full workforce participation because they lack basic literacy and numeracy skills. Colorado’s current financial support for programs serving this population is extremely limited, with just under $1 million of state funds appropriated annually for this purpose. Based on the lack of resources available, state and federally funded adult education and literacy programs are only able to reach about 3 percent of eligible Colorado adults who lack basic skills or a high school equivalency, according to Colorado Department of Education staff.

That said, working-age adults are a significant and growing component of the postsecondary student body in Colorado and across the country. Previously considered “nontraditional,” current national data show 40 percent of undergraduate students are working-age adults. According to staff from the Department of Higher Education, 30 percent of undergraduates at public postsecondary institutions are aged 25 or older in Colorado, but if enrollments in private and for-profit institutions, training programs, and other skills-based credential providers were included, that figure would be much higher.

Another subset of formerly nontraditional students to consider: parents. National statistics show 26 percent of working-age students are parents, yet regardless of age, degree completion for postsecondary student parents is quite low, especially when compared to those students without children. A major barrier for student parents that has two-generation policy implications is the lack of affordable, quality on- or off-campus child care and early childhood education opportunities, especially for low-income families. In fact, the availability of on-campus child care has declined over the past decade, both in Colorado and throughout the nation.

Recommendations

Expand policies and programs to eliminate our state’s equity gaps among both traditional-age and adult learners, including concurrent enrollment and work-based/experiential learning programs, such as apprenticeships and internships in a broad range of fields.

Following the example of innovative programs like the Strengthening Working Families Initiative (SWFI) at Community College of Aurora and Community College of Denver, expand two-generation approaches to help adult students who are parents and their children succeed, and increase the access to high-quality, affordable child care/early childhood education options both on- and off-campus and in the workplace.

Increase Colorado’s funding for adult education and literacy programs to help more low-skilled, low-literacy adults prepare for and complete programs leading to high-quality, in-demand postsecondary skills and credentials, and expand our use of Integrated Education and Training (IET) programs that combine basic skills training with postsecondary career and technical coursework.
Changing How Colorado Learns

As the makeup of the Colorado’s students change, so too must the way they learn. One way to teach and train for the future of work includes experiential or work-based learning. This includes expanded apprenticeship, internship, mentorship, and co-op opportunities that help students focus on the “how” as well as the “what” of their chosen field.

While there will still be an important role for learning in the traditional classroom setting, it also means a stronger reliance on online and “blended” learning, virtual environments, and augmented reality to simulate real-world experiences. Colorado has been a leader in the areas of apprenticeship and work-based learning opportunities for youth, but more will need to be done to make these opportunities more widely available for a broader range of students. Such an expansion will require stable and sustained funding from both the public and private sectors. Among the various initiatives currently underway in Colorado are those listed in the table below.

Experiential/work-based learning will bring with it a sharper focus on competency-based skill acquisition and an expansion of short-term, intensive programs, micro-credentials, and “badges” that lead to recognized, high-demand job skills. It will mean providing “unbundled” content that is highly individualized to the needs of the learner. It will also require a changed relationship and partnership between employers and postsecondary education and training providers, blurring the boundaries between the two.

Future education and training will also need to emphasize social and human-centered skills and traits. These include creativity, entrepreneurship, curiosity, systems thinking, emotional intelligence, empathy, cultural sensitivity and awareness, and teamwork. They also include the ability — and the desire — to keep learning. Current Colorado job postings already show the human-centered traits employers most value.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Population Served</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CareerWise Colorado</strong></td>
<td>Statewide youth apprenticeship model based on the Swiss apprenticeship system. Connects schools and businesses, and provides three-year paid apprenticeships for students, including both in-school learning and on-the-job experience.</td>
<td>High school students. At the completion of the program, students will have earned about $30,000 in wages, completed about one year of college credit, and hold an industry-recognized certification.</td>
</tr>
<tr>
<td><strong>Pathways in Technology Early College High Schools (P-TECH)</strong></td>
<td>Partnerships between school districts, community colleges, and local industry employers. Students attend for six years and graduate with both a high school diploma and an associate’s degree, as well as work-based skills.</td>
<td>High school students, with an emphasis on socioeconomic and racial diversity, first-generation students, English language learners, and students with disabilities.</td>
</tr>
<tr>
<td><strong>Skillful</strong></td>
<td>Public-private initiative of Markle Foundation with LinkedIn, Microsoft, the state of Colorado, and local organization partners. Offers a network of online and on-the-ground resources connecting job seekers to high-demand jobs and training needed to advance their careers.</td>
<td>Reskilling adults and those entering the job market seeking skills-based training and industry-recognized credentials, as well as employers seeking qualified employees.</td>
</tr>
</tbody>
</table>

Source: Colorado Talent Pipeline Report, 2016
The Imperative for Affordability

Lifelong learning won’t be possible without making it affordable for learners throughout the length of their careers.

The costs to families associated with lifelong learning and reskilling will ultimately be unaffordable if they are asked to shoulder the bulk of the costs on their own. For example, workers who need to upgrade their skills in IT and computer information systems to meet the growing use of AI and robotics, will spend $2,000 for a short-term certificate to $74,700 for a Bachelor of Science degree, depending on the type of institution and the length of the program.

While state and federal resources such as the College Opportunity Fund (COF) stipend, various financial aid grants and loans, and tax credits may be available to help certain students afford a portion of the costs associated with retraining, these have limitations. In a lifelong learning environment, many will exhaust their eligibility for such assistance well before their retraining needs are met. Public resources alone will be insufficient to cover the growing postsecondary and job training population.

To increase investments from both the public sector and employers so students and families aren’t excluded financially from critical retraining opportunities, Colorado should encourage and incentivize employers to provide these benefits for employees. This will be especially important if we’re to reverse the devastating current reliance on student loans and their crippling effects on individuals, families, and society.

Recommendations

Ensure the state’s Credit for Prior Learning/ Prior Learning Assessment policy affords all students the chance to demonstrate mastery in subject matters/courses gained through prior educational, work, military, or life experiences. This should also allow for students to receive postsecondary course credit toward graduation without cost.

Establish a public/private partnership between government and business to create and fund a postsecondary education and training benefit for those who are not employed or who work in jobs without benefits, regardless of age, income, educational attainment, or background.

Private IT Education Very Costly

<table>
<thead>
<tr>
<th>Program</th>
<th>Credential</th>
<th>Provider</th>
<th>Length</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Specialist</td>
<td>Certificate</td>
<td>Public Community College</td>
<td>15 weeks</td>
<td>$2,600</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>Certificate</td>
<td>Public Community College</td>
<td>15 weeks</td>
<td>$1,900</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>Certificate</td>
<td>Public Community College</td>
<td>30 weeks</td>
<td>$3,500</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>Associate of Applied Science Degree</td>
<td>Public Community College</td>
<td>60 weeks</td>
<td>$13,000</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>Bachelor of Science Degree</td>
<td>Private Non-Profit University</td>
<td>4 years</td>
<td>$60,000</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Bachelor of Science Degree</td>
<td>Private For-Profit Institution</td>
<td>3 years</td>
<td>$74,700</td>
</tr>
<tr>
<td>Web Developer (“Boot Camp”)</td>
<td>Certificate</td>
<td>Private Occupational School</td>
<td>24 weeks</td>
<td>$21,000</td>
</tr>
<tr>
<td>Web Developer</td>
<td>Certificate</td>
<td>Public Community College</td>
<td>30 weeks</td>
<td>$5,200</td>
</tr>
</tbody>
</table>

Sources: Colorado Department of Higher Education, 2017
Lack of State Investment Causing Cost Shift for Coloradans

Unfortunately, Colorado’s state financial support for public postsecondary education is lower now than it was in 2000-2001 when adjusted for inflation, both in the total amount of funding and on a per-Colorado-student basis.

Colorado’s relative ranking among other states in funding postsecondary education is very low, ranking fourth lowest in the country when compared to the U.S. average for per-student appropriations in 2016.

Dwindling funding means students and families are now on the hook for increased tuition and other costs. In Colorado, the legislative Joint Budget Committee staff notes, “Most, but not all, tuition increases in recent years are explained by declines in state support.” A recent report by the Center for Budget and Policy Priorities points out nearly every state has shifted costs to students over the last 25 years, but Colorado is among the top states in its reliance on students and families to fund its public postsecondary institutions rather than through public dollars.

In 2000-2001, Colorado state funds covered 68 percent of college costs for in-state students, while student tuition made up the other 32 percent. Since then, Colorado’s share of funding has plunged and the share families pay in tuition has more than doubled.

This cost shift particularly impacts the postsecondary attendance decisions of low- and middle-income families, as well as students of color. A 2015 study by New York University researchers says a $1,000 tuition increase for full-time undergraduate students is associated with a drop in campus diversity of almost 6 percent.

Average tuition costs per full-time Colorado student increased about 100 percent between 2000-2001 and 2014-2015, while average household incomes only rose by 0.31 percent over the same period, when adjusted for inflation.
The 2016 University of Pennsylvania College Affordability Diagnosis says it takes 19 percent of Colorado middle-income families’ annual incomes to attend our public two-year schools full-time and 24 percent to attend our public four-year schools full-time. The report also characterizes Colorado’s public two- and four-year institutions as some of the least affordable in the country when compared to other states.

Need-based grant aid, which does not have to be repaid, is especially important for low- and middle-income students, and is focused on ensuring students who might not otherwise be able to attend college have that opportunity, while merit-based aid provides options for those who would likely attend anyway. To be most effective in expanding opportunity, state need-based financial aid should be available to students of all ages, those enrolled part-time, and those in short-term occupational and career programs leading to high-demand, industry-recognized credentials.

Colorado has done a good job over the years of ensuring the bulk of its state financial aid support is need based.

Although the number of students receiving state need-based financial aid has declined since 2011, the average award size has increased since then. Nevertheless, the amount of aid available has not been able to fully offset, nor even keep pace with, the escalating costs of postsecondary education and training. As a result, even after financial aid from all federal, state, and institutional sources has been awarded — including federal student loans — many students still have a significant amount of unmet need.
Average Unmet Financial Need for Colorado Full-Time Undergraduate Students Who Qualify for Aid

Recommendations

Increase the state's investment in postsecondary education and job training, including need-based financial aid, to stop the cost shift to students and families and reduce future reliance on student loans.

Explore innovative options for creating a Colorado version of the “free college” programs being implemented in states across the country, and ensure all Colorado postsecondary students, regardless of age or background, are eligible for the program.

Continue the state's current work on Open Educational Resources, which aim to reduce the costs of books, software, supplies, and other instructional materials, so as to lessen the financial burden of postsecondary studies for students and families.

Source: Joint Budget Committee, Colorado Department of Higher Education, 2016
One of the main ways students address their unmet need, even after federal student loans are received, is by taking on debt through private student loans. This increased reliance on both public and private student loan debt has led to a serious national problem with both personal and societal consequences.

In Colorado, outstanding student loan debt now totals $24.75 billion.

The Colorado Department of Higher Education reports 67.4 percent of students who graduate with a four-year bachelor’s degree from a Colorado public institution have debt, with an average amount of $25,877. The Center for Responsible Lending says graduates of Colorado’s for-profit four-year institutions owe, on-average, $32,452. Sixty percent of Colorado students graduating with a two-year associate degree hold student debt averaging $13,374.

Common misconceptions lead many to believe student loan debt is just a problem for young people, but the face of unmanageable loan debt is also increasingly retirement-age Americans. While some older borrowers have student loan debt from their own postsecondary credentials, about two-thirds borrowed for a child’s or grandchild’s education, making this a key two-generation issue.

Between 2005 to 2015, the number of Americans aged 60 and older with student loan debt quadrupled while the average amount they owed nearly doubled. In 2015, 37 percent of federal student loan borrowers aged 65 and older were in default. This can carry severe costs, since the federal government may “offset” these borrowers’ tax refunds and benefits such as Social Security to help repay their federal student loans, even if it means pushing them into poverty.

Although students from every type of institution pursuing a broad range of postsecondary credentials take on student loan debt, their experiences with repaying that debt are not the same. Recent data from the National Center for Education Statistics (NCES) on long-term outcomes for student loan borrowers reveal those who have the most difficulty in repaying their loans are students who begin a program but don’t complete the credential, and those who attend for-profit institutions.

| Did't Complete, Not Enrolled 5 Years Later | 44.5% |
| Undergrad Certificate | 44.3% |
| Associate Degree | 21.9% |
| Bachelor's Degree | 7.9% |
| Public 4-Year | 17.4% |
| Private Non-Profit 4-Year | 17.6% |
| Public 2-Year | 25.6% |
| For-Profit | 52.5% |
| Other* | 33% |

*Other includes public less-than-2-year, private non-profit 2-year, and private non-profit less-than-2-year

Many students from Colorado's four-year for-profit institutions experience these repayment difficulties. Completion rates for four-year for-profit institutions are much lower than for public or private four-year colleges, and their three-year cohort default rates are double that of four-year public institutions.

### Default Rate for Borrowers Who Dropped Out Based on Institution Type

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Black</th>
<th>Hispanic/Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public 4-Year</td>
<td>32%</td>
<td>29%</td>
<td>64%</td>
</tr>
<tr>
<td>Private Non-Profit 4-Year</td>
<td>33%</td>
<td>32%</td>
<td>65%</td>
</tr>
<tr>
<td>Public 2-Year</td>
<td>39%</td>
<td>50%</td>
<td>64%</td>
</tr>
<tr>
<td>Private For-Profit</td>
<td>14.7%</td>
<td>50%</td>
<td>63%</td>
</tr>
</tbody>
</table>

*Standard error is too high to report an estimate for Hispanic/Latino enrolled in private non-profit 4-year institution.

Source: Center for Responsible Lending, "Colorado's For-Profit College Students Struggle to Graduate, Pay Off Steep Debt Burdens," Jan. 2017
Both in Colorado and the nation, student loan debt has different impacts based on race. The new National Center for Education Statistics data show black students are more likely to borrow than white or Hispanic students, and nearly half of black borrowers in the cohort defaulted — including 75 percent of those who dropped out of for-profit colleges. Perhaps most troubling of all: 23 percent of black borrowers who completed a bachelor’s degree defaulted on their loans within 12 years, compared with only 9 percent of all borrowers who earned that degree.

For Colorado, the Center for Responsible Lending also warns poor outcomes at for-profit institutions are hitting low-income students and minorities the hardest. It notes black students represent 11 percent of for-profit enrollments in Colorado, compared to 5 percent and 7 percent respectively at public and private institutions. Similarly, 57 percent of for-profit students in Colorado are low-income, compared to 35 percent at public institutions and 43 percent at private institutions.

Additional state funding for postsecondary education and training, along with increased state need-based financial aid grants and decreased costs for books and supplies, could reduce the reliance on student loans, helping many of those with debt avoid taking out loans in the first place or pay them off more quickly.

### Black & Hispanic Student Borrowers More Likely to Default On Loans Regardless of Attainment Level

<table>
<thead>
<tr>
<th>Student Loan Status</th>
<th>Black</th>
<th>Hispanic/Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s Degree</td>
<td>6%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>17%</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>Certificate</td>
<td>40%</td>
<td>51%</td>
<td>54%</td>
</tr>
<tr>
<td>No Degree, Still Enrolled</td>
<td>23%</td>
<td>30%</td>
<td>46%</td>
</tr>
<tr>
<td>Dropped Out</td>
<td>38%</td>
<td>48%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Percent Who Defaulted

Based on default rates within 12 years of students who enrolled in 2003-2004 and took out federal loans for undergrad education.


### Recommendations

Make information on postsecondary educational and employment outcomes, and especially student loan debt, more readily available and transparent to students and families so that they can make better, more informed choices among the broad range of public, private, and for-profit program options available to them and reduce their reliance on student debt.

Encourage and support employer-funded programs to help employees pay off their student loan debt. Examples of companies now offering such a benefit include Aetna, ChowNow, Penguin Random House, PricewaterhouseCoopers, and Staples.

Ensure those who already have educational loan debt are treated fairly and honestly in the repayment and loan servicing process by supporting regulation/oversight of loan servicers, increasing protections for loan consumers, and supporting expansion of federal loan forgiveness programs.
Over the past several years, Colorado has engaged in ambitious health policymaking. From the creation of legislative commissions to spur health coverage reforms to Governor Hickenlooper’s vision and plan to make Colorado “the healthiest state,” our state has enjoyed bipartisan leadership on a variety of initiatives aimed at improving care, costs, and coverage.

We could make even greater strides by recognizing the clear influence opportunity has on health. Research from Boston University reveals areas of low economic opportunity are associated with higher mortality rates and greater incidences of obesity, hypertension, and diabetes, and moving from these areas to counties of high opportunity could improve mortality rates by 16.7 percent. The Brookings Institution suggests a lack of well-paying jobs and a dearth in the economic and social supports people need to thrive are partly to blame for a rising premature death rate among Americans with lower levels of education.

Colorado mortality rates compare favorably with other states, and Summit, Pitkin, and Eagle counties boast the greatest longevity in the nation. However, good outcomes are not uniform — rural areas, particularly in southeastern Colorado, fare worse than others, especially for male residents.

The Colorado Health Institute (CHI) illustrates the impact of income and education on health by pairing both with health survey results. Its analysis shows in Pueblo County and the San Luis Valley, which have some of these highest poverty rates in the state, more than 1 of 5 residents report fair or poor health. Conversely, 93 percent of Douglas County residents say they are healthy — Douglas County has the state’s lowest poverty rate and nearly 80 percent of its residents have pursued postsecondary education.

This research has important implications for the future of health and opportunity in Colorado. Our policy efforts should protect and improve upon the gains Colorado has made with respect to care and coverage, seek new ways to lower costs for our system and for individuals, and leverage the knowledge that better health outcomes occur by enriching how we live, work, learn, and play.

**Protecting Colorado’s Gains**

Colorado capitalized on reforms made possible by the Affordable Care Act (ACA) — reforms championed by bipartisan state-led health reform efforts in 2008. Colorado created its own health insurance exchange, expanded...
Medicaid coverage at no cost to the General Fund, tested innovative ways to pay for care, and piloted approaches allowing people to get physical and behavioral health care in a more streamlined, integrated way. Medicaid’s expansion also expanded Colorado’s economy, bumping up household earnings, prompting job growth, and increasing state General Fund revenue. These economic gains are projected to grow into 2035.

A historic number of Coloradans now have health insurance. The 2017 Colorado Health Access Survey (CHAS) shows almost 600,000 more residents have insurance today than in 2013. At 6.5 percent, Colorado’s uninsured rate is down from nearly 18 percent 10 years ago.

Medicaid has become a vital insurer for many Coloradans. Nearly 1 in 4 Coloradans — the majority of whom are working — are now insured through Medicaid. In 10 counties, more than 40 percent of the population is enrolled in the program.

There are still improvements to be made, as Colorado’s health gains haven’t been felt equally by all. Historically vulnerable populations, such as immigrants, non-citizens, and people of color, particularly Hispanic Coloradans, are more likely to be uninsured than others, as are those who make just over the income threshold to be eligible for subsidies.

The Bell’s Opportunity Handbook shows having health insurance is the first step in achieving better health and increasing opportunity. Not quite half of all Coloradans are insured through their employers, but this trend has been on the decline for some time. In fact, employer-sponsored insurance has declined by 14 percent since 2009, according to historical CHAS data. As fewer workers are offered health care through their jobs and the number of those in alternative work arrangements increases, Colorado must preserve and enhance a broader, universally accessible system so people get meaningful, affordable care.

Lowering Costs and Spending

Despite its positive changes, the ACA failed to lower health costs. State policymakers must focus on Colorado’s pain points related to cost and work to alleviate them.

Colorado residents in various communities, especially in the western part of the state, rank affordable health insurance high on the list of key factors impacting economic opportunity, per the Bell’s 2017 opportunity survey.

In conducting research for this guide, Bell staff attended conferences, interviewed experts, and met with local leaders in different parts of Colorado. At these meetings, we asked people to complete a short questionnaire ranking the top factors preventing people in their communities from achieving economic mobility. We also asked for them to indicate the importance of addressing these issues. Overall, respondents to the questionnaire ranked affordability issues at the top of their list, specifically:

- Affordable housing
- Affordable health insurance
- Affordable high-quality child care

We cite these findings throughout the report as we discuss the different forces affecting economic mobility and the policies to promote opportunity throughout Colorado.

In northwest Colorado, for example, residents are proud of their healthy lifestyles, but are stressed about the “astronomical” cost of rural health care and the distance they must travel to get it.

CHI’s recent tour of the state uncovers similar concerns about cost, as well as confusion about medical bills and insurance. Some struggle more with affordability than others, particularly black or Hispanic Coloradans and those who are economically disadvantaged. Nearly 80 percent of uninsured Coloradans blame the high cost on their lack of insurance, but even those with insurance find health care unaffordable largely due to insurance premiums and out-of-pocket costs.

Health insurance premiums have been slowly but steadily rising for many Coloradans, both for those insured by employers and those who receive premium tax credits, and are thus shielded from volatile price increases on the
individual market. Unfortunately, people buying private insurance who don’t qualify for subsidies (those making over 400 percent of the federal poverty level, or just under $100,000 for a family of four) have been financially squeezed. These Coloradans have experienced double-digit rate increases over the past few years and will contend with a 34 percent average increase in 2018, per the Division of Insurance. The problem is acute in rural, frontier, and mountain resort communities, which have some of the highest health costs in the country and where the cost of living is also high.

Out-of-pocket health spending is rising dramatically as health insurance plans grow less generous and more workers have high-deductible health plans. These costs will “accelerate” in the next decade, per the Centers for Medicare and Medicaid Services (CMS). The Kaiser Family Foundation (KFF) illustrates how personal health spending has grown for all workers over the past 10 years, especially for women, older adults, and those undergoing expensive treatments. JPMorgan Chase finds Coloradans between the ages of 18 and 64 have the highest out-of-pocket spending out of a 23-state sample.

A large majority of Coloradans self-report spending 5 percent or less of income on health expenses, but consumers say they take other actions to combat costs, such as skipping doctor visits or prescriptions. Adding in premium costs increases the burden. A 2015 Commonwealth Fund study reveals Colorado workers are paying 9.5 percent of their median household income toward total health costs (premiums and out-of-pocket spending), up from 6.2 percent a decade earlier.

Finally, medical debt and the burden it places on Colorado families warrants focus. Medical bankruptcies have greatly lessened, and only 14 percent of Coloradans overall say they struggle to pay medical bills, a number that has decreased since implementation of the ACA. However, those who do struggle must risk financial security just to cover costs. This is especially true for low- and middle-income Coloradans.

Of Those Struggling, This Is How They Try to Cover Costs

<table>
<thead>
<tr>
<th>Percent Struggling</th>
<th>0-100% FPL</th>
<th>101-200% FPL</th>
<th>201-300% FPL</th>
<th>301-400% FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot Pay for Basic Needs (Food, Rent, Utilities)</td>
<td>50.8%</td>
<td>49.4%</td>
<td>61.5%</td>
<td>74.3%</td>
</tr>
<tr>
<td>Took On Credit Card Debt</td>
<td>22.8%</td>
<td>40.2%</td>
<td>54.4%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Cut Back on Savings or Borrowed From Savings</td>
<td>18.6%</td>
<td>40.2%</td>
<td>50.2%</td>
<td>78.3%</td>
</tr>
</tbody>
</table>

Source: Colorado Health Institute 2017 CHAS data

Lower-Income Coloradans Struggle to Pay Medical Bills

Source: Colorado Health Institute 2017 CHAS data
Colorado’s General Fund is pinched by rising costs as well. The state’s annual growth rate on health spending is growing faster than the economy’s rate, just as it is nationally, and will likely do so in the future, according to the Colorado Commission on Affordable Health Care. Thus, a greater share of governmental spending is going to health care.

Many programs would benefit from decreased health costs, but Medicaid, which accounts for about one-quarter of General Fund spending, would be the most obvious winner. In addition to rising health costs overall, increasing aging and disabled populations play a role. Medicaid is hit hard by an aging population because it’s the primary payer of long-term services and supports (LTSS), which can be quite costly. LTSS aren’t covered by Medicare or most other forms of health insurance, so many people pay for this care themselves — at first. Many middle-class Coloradans will reach a point when they can no longer afford to pay for long-term care on their own. They will be forced to spend down their assets to the point where they qualify for Medicaid to help with those costs.

Because of federal rules around the program, state Medicaid programs must provide nursing home care to those who are eligible for it — and nursing home care is very expensive. Genworth, which tracks long-term care costs, calculates the annual cost for a private room in a Colorado nursing home is $102,564. Colorado also provides Home and Community Based Services (HCBS), which are optional, more cost-effective Medicaid programs. Medicaid has been, and will continue to be, a vital support for older Coloradans.

The Colorado Futures Center finds the state’s changing demographics and a faster rate of inflation on the cost of care for older enrollees (not the Medicaid expansion) will place pronounced pressure on Medicaid over the next 12 years. One out of every five Medicaid dollars will be spent on the adults over age 65, according to these estimates. The General Fund would greatly benefit from health care cost-reduction strategies aimed at best serving older adults.

The Bipartisan Policy Center (BPC) recommends a variety of strategies to better publicly fund LTSS. Expanding home- and community-based services (HCBS) and requiring Medicare to pay for respite (a break from caregiving) should be of interest to Colorado. Colorado is recognized as a leader in providing LTSS, and lawmakers have consistently supported efforts to improve these services, which serve 44,000 people in the state. Recent examples include eliminating waiting lists and implementing recommendations to improve respite care statewide. However, the LTSS Scorecard suggests there is room for improvement.

The BPC also encourages private sector solutions, such as participation in private long-term care insurance (LTCI) policies through employers, allowing these policies to be sold on health insurance exchanges, and making them available through workplace retirement plans. These ideas deserve consideration, but there are real barriers for consumers. Few carriers offer LTCI (and many plans have gone insolvent), existing policies are not robust or affordable, and only half of Coloradans have access to workplace retirement savings in the first place.

### Leveraging Social Programs

Over 60 percent of “health” is the result of social, environmental, and behavioral factors. Addressing these factors can lead to a major return on investment. Analysis by Harvard Business School and Yale School of Public Health finds, “substantial evidence of improved health outcomes and/or reduced health care spending” when housing, income support, nutrition, and other social factors are addressed. When Coloradans have these basic necessities it improves health equity, a term that refers to the philosophy all people should have the opportunity to lead healthy lives, regardless of race, ethnicity, income, school district, or zip code.

The United States is the only country without a publicly financed health system and it far outspends other industrialized nations when it comes to health costs, only to achieve poorer health outcomes. Conversely, it spends far less on social services, including retirement and disability benefits, employment programs, and
Recommendations

Protect and improve upon Colorado's insurance gains. Specifically, Medicaid should be protected and Colorado should reject federal block grants or similar financing schemes. An evisceration of this funding would mean Colorado must find billions of General Fund dollars to supplement the program or restrict care for children, the elderly, the poor, and the disabled. Colorado also should oppose proposals which seek to limit enrollment in other ways, such as work requirements for “able-bodied” adults. The research doesn’t support a need for work requirements and suggests they would have negative health impacts for vulnerable people.

Explore ways to leverage Medicaid and Colorado’s insurance exchange. Policymakers have encouraged experimentation with Medicaid payment reforms and new ways of delivering care, but should consider ways to expand insurance options, increase competition, and reduce costs. One idea is creating a public “buy-in” option, an idea under consideration in other states and at the national level. These programs can be structured in a variety of ways and could be offered on the exchange.

Alleviate high costs for consumers by acting on Cost Commission recommendations. The Cost Commission spent three years studying, discussing, and reaching bipartisan consensus on ways to bend Colorado’s cost curve. Colorado now has actionable strategies on how to target price transparency, protect consumers from unexpected and inaccurate medical bills, support the health care workforce, and reform how health services are paid for.

Focus on financing long-term care. Coloradans and their families are not prepared for these costs and the state General Fund is similarly unprepared to cover them as our population grows older. Colorado’s Strategic Action Planning Group on Aging is charged with creating recommendations around LTSS and can play an important role, along with the newly created state Advisor on Aging in the Governor’s Office.

Bend and blend spending toward social programs. Examples from the Cost Commission include folding in funding for housing and employment within our Medicaid system, creating a statewide screening and referral system for children who experience stressful or traumatic events, and investing in quality preschool for children insured through Medicaid.

Existing state initiatives are leveraging social programs to benefit health. An environmental scan published by the Colorado Department of Public Health and Environment points out an abundance of statewide and local level programs that aim to improve health outcomes using a social determinants lens. For instance, Colorado is poised to create “health neighborhoods” for all Health First Colorado members, which will link their medical care to community resources.

Many of the suggestions in this guide — increasing access to preschool and kindergarten, providing workers paid family and medical leave, raising wages, increasing investment in affordable higher education and housing — would also have dramatic positive impacts on Coloradans’ health. If we support these programs, we improve health.
While income is critical and determines how families meet basic needs, building assets is one of the key drivers to help families move into the middle class and build a stable and prosperous economic future. Assets cushion families against temporary setbacks and provide the foundation for investments that help families get ahead over the long term. Plus, they can be passed on from one generation to the next, adding to a family’s wealth.

Assets consist of checking accounts, stock mutual funds, 401(k) plans, and other financial accounts. They can also be nonfinancial items such as homes, vehicles, and businesses. National data shows families with higher incomes have more assets and assets with greater value. The number, value, and type of assets owned also varies by race, with whites having more on average than blacks and Hispanics.

![Minorities Hold Less Assets](chart)

Help Coloradans Create College Savings Accounts

The future of work and automation clearly shows all workers will need continuous training and education throughout their careers. However, Colorado students from low- and middle-income families are less likely to enroll in college than students from other income levels. In 2015, 42 percent of Colorado students whose family incomes were low enough to qualify for free and reduced lunch enrolled in college right out of high school, compared to 62 percent of the students whose family incomes were higher.

One way to turn this around is to help low- to middle-income families create education savings accounts. Considerable research shows having even small amounts of college savings helps. Children from low- to middle-income families with $500 or less in savings are three times more likely to enroll in college than children with no savings, and four times more likely to graduate.

![College Savings Accounts Increase Likelihood of College Graduation](chart)

Source: The Federal Reserve 2016 Consumer Finances Survey

Make It Easier to Save Income Tax Refunds

In 2016, 2 million Coloradans received a state income tax refund averaging $471. That amount only stands to grow for hardworking families with children, thanks to Colorado’s Earned Income Tax Credit (EITC) becoming permanent.

For most low- to middle-income families, their annual tax refund is the single largest payment they will receive all year. These tax refunds can help families build wealth, but many families cannot afford to save their entire refund because they have immediate expenses. Families can choose to save a portion of their refund after they receive it, but behavioral economics suggest an automatic, pre-commitment to save will result in greater savings.

In Colorado, families can directly deposit their tax refund into just one of three accounts or receive their refund as a check. Allowing families to split and directly deposit their refund among the three types of accounts — checking, savings, and 529 college savings accounts — would make saving for college easier, encourage overall savings, and help families meet immediate needs.

Taxpayers can already split federal tax refunds after a pilot test showed doing so encouraged saving among more families. Arkansas, California, Hawaii, Maryland, Ohio, and Oregon allow taxpayers to deposit their state refunds into multiple accounts, resulting in increased savings.

Legislation was considered in the 2016 (HB16-1371) and 2017 (SB17-149) sessions to allow Coloradans to directly deposit their income tax refunds in up to four different accounts, but each failed in Senate committees. If Colorado taxpayers used this option at the same rate as federal taxpayers, then 14,682 Colorado taxpayers would split their income tax refunds. This is a relatively easy and inexpensive way for the state to promote savings.

Protect Coloradans From Predatory Lending

Saving and building assets is hard enough for many families without having their savings stripped away by predatory lenders. High-cost lenders, check cashers, rent-to-own stores, and pawn shops seem to be everywhere in low-income neighborhoods. This is particularly true for minority neighborhoods, which are home to more of these businesses even after accounting for income, age, and gender.

The Center for Responsible Lending finds areas with over 50 percent black and Latino residents are seven times more likely to have a payday store than predominantly white areas (less than 10 percent black and Latino).

In 2010, Colorado reformed its payday lending laws, reducing the cost of the loans and extending the length of time borrowers could take to repay them. The rates on Colorado payday loans are lower than those in other states and borrowers in Colorado save $40 million per year over what they paid under the old rules. However, these loans are still expensive, having an average effective interest rate of 129 percent in 2016.

Payday Stores More Prevalent in Colorado’s Communities of Color

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood To Have A Payday Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Colorado Census Tracts</td>
<td>10.6%</td>
</tr>
<tr>
<td>Over 50% Black &amp; Latino</td>
<td>18.5%</td>
</tr>
<tr>
<td>Below 50% Black &amp; Latino</td>
<td>9.4%</td>
</tr>
<tr>
<td>Below 10% Black &amp; Latino</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Source: Center for Responsible Lending, analysis based on licensed locations from Colorado Attorney General’s Office
Recommendations

Colorado should help set up a 529 college savings account for every student in the Colorado Preschool Program and match the first $50 of deposits and any additional savings made to the accounts dollar-for-dollar up to $100. A bill (HB16-1196) to create a pilot program like this was considered in 2016 with the goal of creating 2,000 savings accounts per year for three years. It died in Colorado’s State Senate. A portion of the tax savings from reforming and limiting the subsidy provided to large corporations for collecting state sales taxes could be used to fund these accounts.

Colorado should revise its income tax administration to allow taxpayers to split their refunds and directly deposit them into up to four accounts.

Colorado should end the exemptions payday lenders receive and cap the interest rate on these loans at 36 percent APR.

Colorado shouldn’t raise the rates charged on high cost installment “supervised loans,” because hardworking Coloradans shouldn’t be required to pay more for these loans just so lenders can pad their profits.

Payday lenders are exempt from Colorado’s 36 percent limit. Instead, they charge a series of fees along with a 45 percent interest rate on these loans.

Colorado also allows high-cost installment loans that average almost $9,000 with terms ranging from three years to six years and average interest rates of about 22 percent. While lenders have lobbied the legislature to increase the rates they can charge, the Attorney General’s office, which regulates them, found the rate increase was not needed.
Colorado is an attractive place to live, thanks to a booming economy and vast recreational opportunities, but one major obstacle stands in the way of many families achieving economic opportunity: affordable housing.

An affordable home promotes opportunity as it not only provides shelter, but supports educational success, achieves asset building, and heightens well-being. In addition, housing is integral to two-generation success, as children living in safe and healthy housing have higher test scores, a higher likelihood to obtain job training or a postsecondary degree, and higher average lifetime earnings. National statistics from Enterprise Community Partners show for people with stable housing, health problems lessen and wellness is elevated, with Medicaid costs reduced by 45 percent.

Economists consider housing affordable if renters or homeowners spend 30 percent or less of their income on rent or mortgage payments. Those who spend over 30 percent are considered cost burdened, while renters and homeowners spending 50 percent or more are extremely cost burdened. This leaves individuals with less to spend on other crucial costs, such as food and child care; nationwide, cost-burdened families often spend nearly half as much on health care and 40 percent less on food.

As the number of people moving to Colorado is outpacing the growth in available housing units, especially along the Front Range, many families struggle to find viable options. In 2015, Colorado built 26,000 housing units, but this still lags behind growing household formations of 33,000 to 35,000 per year. The increasing number of households in Colorado and dearth of construction for multi-family units is part of the reason for the current lack of affordable housing.

### Home Price Appreciation in Colorado

<table>
<thead>
<tr>
<th></th>
<th>Percent Change Between Q1 2016 and Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Average</td>
<td>6%</td>
</tr>
<tr>
<td>Colorado Average</td>
<td>10.73%</td>
</tr>
<tr>
<td>Fort Collins</td>
<td>11.82%</td>
</tr>
<tr>
<td>Boulder</td>
<td>11.23%</td>
</tr>
<tr>
<td>Denver</td>
<td>10.85%</td>
</tr>
<tr>
<td>Colorado Springs</td>
<td>10.2%</td>
</tr>
<tr>
<td>Greeley</td>
<td>9.95%</td>
</tr>
<tr>
<td>Pueblo</td>
<td>7.5%</td>
</tr>
<tr>
<td>Grand Junction</td>
<td>6.58%</td>
</tr>
</tbody>
</table>

The need for affordable housing is felt throughout Colorado: An opportunity survey conducted by the Bell across the state shows Coloradans consistently rank affordable housing as one of the top factors preventing them from getting ahead economically.

**Homeowners & Renters Both Affected By High Housing Costs**

A report from the Federal Housing Finance Agency finds home prices in Colorado grew faster than in any other state except Washington state in the second quarter of 2017. Additionally, out of the top 20 metropolitan areas with the highest rate of house price appreciation in the country, three are in Colorado: Fort Collins, Denver, and Boulder. All Colorado metro areas are experiencing price appreciation above the national average, particularly those along the Front Range.

According to a National Housing Conference’s report, the income needed in 2017 to afford homeownership continued to increase, growing by almost double-digit rates in Colorado’s metro areas, as shown in the graphic to the right. High housing costs constrain economic growth, as most workers cannot afford to live in the city and often have less money to contribute to the surrounding economy.

Renters also face high costs. The Colorado Housing and Finance Authority (CHFA) reports nearly half of all Colorado renters are considered cost burdened, with an additional 24 percent severely cost burdened. The majority of Coloradan renters earning less than half of the area median income (AMI) are experiencing cost-burdened housing prices. From the National Low Income Housing Coalition’s (NLIHC) 2017 Out of Reach report, rent across most of Colorado is increasing faster than annual income. The fair market rent (FMR) for a two-bedroom rental in Colorado is $1,143, ranking 12th highest for rental units in the nation.
When broken down by hourly wage, a Colorado household must make $21.97 per hour to afford rent and utilities; however, the average renter wage in Colorado is only $17.13 per hour. At Colorado’s 2017 minimum wage of $9.30 per hour, one would need to work 95 hours a week, or 2.4 full-time jobs, to afford a two-bedroom rental. Metro areas such as Boulder and Denver require an even higher hourly wage for affordability at $23.85 and $25.10, respectively.

For those Coloradans with “everyday” jobs, renting is often out of the question, as illustrated in the graphic above. According to the Bureau of Labor Statistics’ findings, out of nine occupations, six cannot afford a two-bedroom rental based on the median wages paid.

Currently, Colorado has a shortage of nearly 121,000 affordable rental units for those who are extremely low-income (ELI), making 0 percent to 30 percent of the AMI. Out of Colorado’s 63 counties, none have an adequate supply of affordable housing for ELI renters. Furthermore, 28 counties, mostly mountain resort and metropolitan areas, including the Front Range, Eagle, Summit, and Grand counties, have less than one-third of the supply needed.
When the price of housing far exceeds people's ability to pay, it can result in dire consequences. A University of Denver report says, "A recent influx of new residents to Colorado combined with a steady decline of available low-income and affordable housing has contributed to a 600 percent increase in the homeless population from the late 1990s to 2010."

While homelessness results from various reasons, unaffordable housing is one primary cause. Unfortunately, this trend hasn't dissipated as our state's economy has grown. Colorado has seen a 6 percent jump in homelessness according to a 2016 Department of Housing and Urban Development (HUD) report. Additionally, Colorado has the country's largest increase in homeless veterans — up 24.3 percent between 2015 and 2016 — and an estimated 350 unaccompanied youth experiencing homelessness on any given night.

**Housing Disparities**

Colorado's housing market particularly impacts certain groups, creating further inequities in our state.

**Race**

White Coloradans are almost twice as likely as black Coloradans to own a home. Although Colorado's Hispanic population is the fastest growing, less than half own a home. This racial inequity trend impacts Colorado renters as well, with half of all black, Hispanic, and Native American renters experiencing cost-burdened housing.

According to a recent report from Colorado Center on Law and Policy, evictions disproportionately affect people of color. In Denver specifically, most evictions occur in neighborhoods with a high percentage of people of color and areas experiencing gentrification. These neighborhoods include northeast Denver’s Elyria Swansea, Clayton, North Park Hill, and west Denver's Westwood, Valverde, Ruby Hill, and Sun Valley.

**Gender**

Although Denver and Aurora are two of the top 10 cities nationwide with the lowest gender housing gap, women can still expect to pay 3 percent to 4 percent more of their income on a one-bedroom rental than men. In Colorado Springs, women pay 11.5 percent more than men.

According to the U.S. Census Bureau, women are nearly five times more likely to head a single-parent household than men. In Colorado, two-parent households are 1.7 times more likely to own a home than one-parent households. When accounting for these statistics jointly, this means Colorado women who are single parents are less likely to build wealth through homeownership. Additionally, unaffordable housing is a primary barrier for women and children escaping domestic violence, leading to high rates of homelessness. This barrier is often exacerbated by negative landlord references because of previous noise disturbances related to abuse.

**Age**

The housing market affects all age groups, though individuals over 65 in Colorado bear the greatest housing burden. Nearly half of these renters and 26 percent of homeowners are cost burdened. Nationwide, households carry more mortgage debt into their retirement years than they did a decade ago. The number of homeowners aged 65 and over with mortgage payments more than doubled since 1992. For homeowners aged 50 to 64 with mortgages, cost-burdened homeownership increased to 45 percent, while cost-burdened homeownership increased to 61 percent for homeowners aged 80 and older.

Additionally, homeownership rates for households aged 25 to 34 have decreased.

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![Colorado Homeownership by Race](image-url)
more than 9 percent since 2004, now standing 3 percent below the 1993 level. This correlates with a 5 percent drop in median household income for 25- to 34-year-olds since 2004. For those aged 35 to 44, the decrease in homeownership has been most severe, dropping 5 percent and currently down to 59 percent, a level not seen since the 1960s.

Colorado has begun adopting affordable housing policies; however, our state falls behind others for funding and implementation. Putting aside the issue of construction, Colorado must increase public funding to support affordable housing.

Low-Income Housing Tax Credits (LIHTC) give private companies incentives to build affordable housing units for lower-income Americans. According to a report by CHFA, in 2016 alone, Colorado’s state LIHTC financed over 1,000 affordable rental units. This program has been effective, with recent state legislation extending the credit of $5 million annually through 2019. Only 17 states have their own state-run LIHTC, with Massachusetts and Connecticut investing twice as much or more than Colorado.

Colorado created a state housing trust fund (HTF) to finance the construction of affordable homes. However, to be effective, this fund needs a consistent, reliable funding stream. Twenty-eight states have dedicated public revenues to fund their HTFs, most through real estate transfer taxes or document filing fees. However, TABOR prohibits new or increased real estate transfer taxes. As a result, Colorado is one of 10 states that doesn’t have consistent funding streams. Certain Colorado localities, however, have developed their own local housing trust funds, such as Summit County and Telluride. Localities that established HTFs before TABOR was enacted are able to use real estate transfer taxes, but cannot raise the rates. Those that implemented a housing trust fund after TABOR have to use other sources, such as lodging or sales taxes.

Enacted in 34 states, real estate transfer taxes impose a small charge at the state or county level when a housing title transfers owners. Although Colorado does have a real estate transfer tax, it’s the country’s lowest at .01 percent — other states’ range from .05 percent to 3 percent.

Manufactured housing (MH) are homes built in a factory then transported to the owner. Though MH offers an affordable homeownership choice for lower-income Coloradans, certain obstacles limit families’ ability to build assets through these homes. According to the Colorado Center on Law and Policy, MH units are classified differently than traditional homes, subjecting buyers to higher interest rates and short-term loans. Additionally, MH units are taxed differently than real estate, causing MH owners to pay an estimated $1,000 more in taxes than if the home was built onsite. In comparison, site-built homes pay a smaller documentary fee, which amounts to just $6.50 to $7.00 on average.

**Recommendations**

Colorado should follow other states and increase the state Low-Income Housing Tax Credits to meet the demand of affordable housing options.

Currently, TABOR prohibits new real estate transfer taxes, but if amended, making a small increase in Colorado’s real estate tax from .01 percent to .1 percent has the potential of increasing state revenue by $55.6 million in fiscal year 2019-2020, providing adequate funding for Colorado’s housing trust fund.

Another way to provide funding to the housing trust fund is to increase the document filing fee, a fee imposed during the filing of deeds, mortgages, and property transfers. In 2017, HB-1309 would’ve raised the fee from 1 cent to 2 cents for every $100 of a transaction and generated an estimated $7.6 million for affordable housing. The bill passed the House, died in a Senate committee.

Colorado should classify manufactured housing units as real residential property, lowering the taxes paid by buyers and providing manufactured housing owners with access to fair and equal financing of their homes.
Many of the employee benefits and protections we’ve come to recognize — paid time off, retirement plans, overtime pay, policies on discrimination — were created following the Great Depression. Based on the industrial workplace model prevalent at the time, this resulted in a social contract in which employers provided decent and stable income and benefits along with opportunities for career advancement in return for workers’ loyalty and productivity.

However, as pointed out earlier in this guide, that model is no longer the norm. Growth in the gig economy and increased use of alternative work arrangements — expected to continue due to automation — mean many workers are classified as “independent contractors,” not employees, leaving them uncovered by basic workplace protections and benefits. Even still, the delineation of “employee” doesn’t guarantee important benefits, as employers can decide to offer few or none at all. Because of these factors, a large number of workers, many of them in low-wage jobs, don’t have access to important benefits.

Despite the addition of new jobs and a low unemployment rate, Colorado workers need more of a safety net to advance economically. Throughout this section, we highlight some important benefits and protections Colorado can implement to adapt with the changing nature of work in our state and country.

**Making Pay Work**

### The Need for Pay Equity, Minimum Wage, Overtime, & EITC Expansion

At its most basic, one’s financial future hinges on a simple concept: Get a job, go to work, get a paycheck. Over the years, the jobs have changed, as has the work, both keeping pace with the progress of our workforce and economy, but as detailed earlier in this report, the paychecks haven’t done the same. As such, it came as no surprise many of those who participated in the Bell opportunity survey rated stagnant wages and the lack of good paying jobs as top concerns in Colorado.

### Pay Equity

Improvements in earnings would undoubtedly increase economic opportunity for Colorado families, especially when considering nearly half of the state’s workforce could earn more if Colorado took steps to eliminate the pay gap for female workers.

On average, Colorado women only bring home 81 cents for every dollar a man earns, but data show women of color earn even less. Black, Native American, and Hispanic women take home 64 cents, 58 cents, and 54 cents, respectively, compared to their white male counterparts. With 201,000 female-led family households in Colorado, failing to achieve pay equity is a missed opportunity for our state: Colorado women lose $14.5 billion each year due to the pay gap — money that could go toward strengthening their families and our economy.
Increased pay equity would mean over 57 percent of the 748,000 Colorado kids with working mothers would see benefits and the state’s poverty rate could fall from 5.6 percent to 2.8 percent.

The pay gap is affected by a host of factors. Analysts with the Brookings Institution, the Economic Policy Institute, and the National Women’s Law Center argue promoting work/life balance policies such as paid leave and improving investment in early care and education could help mitigate some of the known conditions that cause the pay gap.

However, research suggests an unexplained pay gap (at least 7 percent in Colorado) still exists even when controlling for variables such as work experience, length of time in the workforce, educational attainment, different occupations, and negotiating practices.

In 2017, Colorado policymakers bolstered protections around pay transparency, which can be especially impactful for women. In early August, the 2017 Colorado Pay Transparency Act took effect, protecting all Colorado employees from discriminatory or unfair employment practices if they discuss their wages and salaries with each other. This law strengthens 2008 pay transparency protections already implemented in our state — protections which have contributed to both pay increases for women and a narrowing wage gap, in particular for college-educated women.

Colorado’s Pay Equity Commission, which operated from 2007-2015, reviewed data, engaged in cross-sector collaboration, and gathered expertise from different perspectives, including labor, business, academia, representatives from women’s groups, and organizations representing people of color to find sensible solutions to eliminating this disparity. A few of the Commission’s recommendations were adopted, including conforming the Colorado Anti-Discrimination Act with the federal Civil Rights Act.

However, many of the Pay Equity Commission’s ideas, such as creating state oversight of pay equity policies, ensuring the state itself is a model employer, and partnering with business groups and educational institutions to implement best practices, were left on the table.

### Recommendations

Colorado should revisit the Pay Equity Commission’s recommendations and renew efforts to implement them.

As a compilation of state laws from the American Association of University of Women (AAUW) demonstrates, there is much more Colorado can do to eradicate the gap. In 2016, the Colorado House passed legislation that would’ve implemented some of these best practices. One bill (HB16-1166) would have prohibited companies from asking job applicants for their salary histories and the other (HB16-1001) would have required state contractors to comply with equal pay standards. Both bills were killed in the Senate, but policymakers could and should revive these efforts.

Colorado should also take additional steps outlined by the American Association of University of Women, such as requiring employers be liable for the costs and fees incurred by employees in a successful discrimination lawsuit. Currently, 33 other states do this.
Minimum Wage

In 2016, Colorado voters approved a Constitutional amendment to gradually increase the state minimum wage each year from $8.31 to $12.00 per hour by 2020. Following 2020, it will be increased to keep pace with inflation. This was a major accomplishment and will raise the wages for 477,000 hardworking Coloradans. Women, adult workers aged 25 and older, workers of color, and working parents significantly benefit from the increase.

For many parts of the state, raising the minimum wage to $12.00 makes sense. For other areas, such as the Denver metro area or mountain resort communities, where the cost of living — housing and child care costs have grown much faster than median incomes in these areas — is much higher, it might be more appropriate to have a higher minimum wage.

One way to assess the adequacy of the minimum wage is to compare it to median wages. The 2017 minimum of $9.30 equals 50 percent of statewide median wages in 2016, but only 42 percent of the median wages in the Boulder-Longmont metro area and 46 percent in the Denver-Aurora metro area.

In recent years, more than 40 cities and some counties nationally have adopted minimum wages that are higher than the federal or state minimum wage. These local wages better reflect living costs, and a recent study shows these increases provide needed raises for low-wage workers with little negative effect on job growth.

Colorado law currently prohibits local governments from setting a minimum wage higher than the federal or state minimum wage. Local officials and voters are in a better position to understand and reflect the needs of their communities, such as workers’ ability to afford the local cost of living and businesses capacity to pay higher wages. Local city councils or county commissions could vote to set higher minimum wages in their communities. Citizens could also set higher minimum wages through local ballot measures.

Recommendation

Colorado should remove the prohibition on local governments setting minimum wages that are higher than the state minimum wage. Local governments and citizens should consider whether a higher local minimum wage is appropriate for them.
Overtime

The federal Fair Labor Standards Act (FLSA) requires most workers in the U.S. be paid a minimum wage and, when they work more than 40 hours in a week, be compensated overtime pay at a rate of one and a half times their regular pay. This is sometimes referred to as “time and a half.”

Many managerial and administrative staff are exempt from the overtime provision. Exempt workers must meet all three criteria:

1. Be paid by salary, not per hour;
2. Perform executive, administrative, or professional duties; and,
3. Be paid above the current weekly standard of $455 ($23,660 per year for a full-time, year-round worker).

If a worker doesn’t meet all three criteria, they are eligible for overtime pay. Most often, workers are exempt because they earn over the rule’s weekly or year-round maximum. The current cutoff amount for overtime pay was last raised in 2004 during the Bush administration, an increase many argued was too small given it was set below the average wage at the time. Today, only 80,000 salaried workers in Colorado, or 7.7 percent of the state’s salaried workforce, automatically qualify for overtime pay based on their salaries. This is much smaller than the 62 percent who qualified in the 1970s, and even the 15 percent following the Bush administration’s changes in 2004.

In mid-2016, the Obama administration suggested a revision that would increase the amount of weekly pay for overtime-eligible workers to $913, or $47,456 per year. Raising the threshold by this amount would make an additional 248,000 Colorado salaried workers automatically qualified for overtime pay. In total, 328,000 Coloradans — about one-third of our salaried workforce — would be paid for the hours they work over 40 per week, increasing their incomes.

This change would exceedingly help women, black, Hispanic, and younger workers and those whose highest level of education is a high school diploma.

Recommendation

Colorado should set its own wage standard for qualifying for overtime pay to at least the level proposed by the Obama administration.
EITC Expansion

The Earned Income Tax Credit (EITC) is a federal tax credit that provides income support for low- to middle-income working families, particularly those with children. It's a refundable tax credit, meaning families receive the full amount of the credit, even if the value of the credit exceeds their income tax liability. The credit is applied to the income tax they owe, and families receive what remains if the credit is more than the tax owed.

Colorado has a state EITC, which offers a state income tax credit equivalent to 10 percent of the federal EITC a taxpayer receives. Like the federal EITC, Colorado's is also refundable. The rules governing the federal EITC are used to determine eligibility for the state EITC. It’s estimated that in tax year 2015, over 380,000 Coloradans received the state EITC — valued at about $220 on average.

The amount of the credit increases as the worker’s earnings grow from zero to about $10,000 to $14,000 for single and married taxpayers with children, respectively, depending on the number of children in the family. The amount of the tax credit gradually declines beginning around $18,000 for single taxpayers with children and about $24,000 for married taxpayers with children. The maximum amount of the federal EITC is $6,269 for taxpayers with three or more children. The EITC phases out completely at about $48,000 for single taxpayers and at about $53,500 for married taxpayers with three or more children. However, the EITC is much less generous for single and married taxpayers who have no children. It begins to phase out at about $8,200 for a single taxpayer and about $14,000 for married taxpayers. It ends completely for single taxpayers around $15,000 and $20,400 for married taxpayers. The maximum EITC for single and married taxpayers without children is $506.

A significant body of research shows the federal EITC lifts millions of families out of poverty each year and rewards work, especially for low-income women. However, the much smaller EITC for childless workers provides less of an incentive for these women to enter the workforce, as it offsets less payroll taxes and other expenses.

The value of the EITC could be enhanced by increasing the value of the credit available to working people without dependent children and by increasing the level of income they can earn before it phases out.

The District of Columbia expanded its EITC for workers without dependent children so single workers receive the maximum EITC at $12,060, phasing out completely at $24,120. For married workers, the limits are $24,360 and $32,480. This type of reform would best be done at the federal level, but Colorado could act if the federal government does not.

Recommendation

Colorado should work with its Congressional delegation to expand the federal Earned Income Tax Credit for workers without dependent children. If the federal government won’t act, Colorado should increase the amount of the state EITC for workers without dependent children.
“Work/life balance,” a concept allowing workers to accommodate both professional and personal needs, may be a rallying cry of the modern workforce, but few policy solutions or employer initiatives have yet to make it a mainstay for American workers. Instead, many face less of a balance and more of a balancing act as they must reconcile stagnant wages and growing costs with sacrifices both on the job and at home.

Creating a system that integrates work and life instead of putting the two at odds would be to the benefit of workers, loved ones, businesses, and whole communities.

Paid family and medical leave — compensated time for workers to care for loved ones or themselves — is not guaranteed in the United States. Research from the Organisation for Economic Co-operation and Development (OECD) shows 40 other countries across five continents provide paid leave, ranking the U.S. in last place and making it the only developed nation without such a standard. The Bureau of Labor Statistics’ most recent survey of workers finds only 13 percent of those in the private sector have access to paid family and medical leave through their employers.

The only federal law currently addressing the need for caregiving is the Family and Medical Leave Act (FMLA), enacted 25 years ago. FMLA gives certain employees job-protected unpaid leave for up to 12 weeks, but not every worker has this benefit. Businesses with under 50 employers are exempt from the law, and when accounting for this and other exclusions, 2 out of 5 workers do not have access to FMLA.

### Colorado Workers Lack Access to Paid Family & Medical Leave

<table>
<thead>
<tr>
<th>Industry</th>
<th>Colorado Employees</th>
<th>Colorado Employees With Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education &amp; Health</td>
<td>104,574</td>
<td>550,392</td>
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<tr>
<td>Trade, Transportation, &amp; Utilities</td>
<td>32,940</td>
<td>470,565</td>
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<tr>
<td>Leisure &amp; Hospitality</td>
<td>19,963</td>
<td>332,718</td>
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<tr>
<td>Professional, Scientific, &amp; Technical Services</td>
<td>57,749</td>
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<td>Construction</td>
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<td>157,130</td>
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<tr>
<td>Manufacturing</td>
<td>14,276</td>
<td>142,760</td>
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<tr>
<td>Finance &amp; Insurance</td>
<td>40,990</td>
<td>110,784</td>
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<tr>
<td>Other Services (Except Public Admin)</td>
<td>6,653</td>
<td>83,168</td>
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<tr>
<td>Information</td>
<td>24,452</td>
<td>74,097</td>
</tr>
<tr>
<td>Real Estate, Rental, &amp; Leasing</td>
<td>5,044</td>
<td>50,441</td>
</tr>
</tbody>
</table>

Who is Affected?

Analysis of national data by the Institute for Women’s Policy Research (IWPR) shows workers need family and medical leave for different reasons and at different times in their lives. For younger workers, leave is often used to care for a child, but older workers — who statistically have more access to paid leave than younger workers — generally use the benefit to care for themselves. In fact, older men have driven up the number of workers taking leave for self-care by 10 percent over the last 15 years. IWPR’s research emphasizes the burden on working women, who are more likely to take leave and less likely to receive pay when doing so.

According to BLS data, income earners in the top 10 percent are six times as likely to have access to paid leave compared to those in the bottom 10 percent. A Pew Research Center survey reveals other inequities: Approximately a quarter of Hispanic and a quarter of black workers are unable to take leave, compared to 13 percent of white workers. Those with lower levels of education are also less likely to have access.

A recent statewide poll of Colorado women of color shows nearly 60 percent support a national paid family and medical leave fund.

Access to paid leave differs between job type and industry. An employee is more likely to be offered paid leave if he or she works in a high-paying, full-time job for a large employer. Some Colorado industries are more likely than others to offer paid family and medical leave, as demonstrated in the chart on the previous page.

Benefits for Employees & Their Families

Paid family and medical leave helps parents. With nearly 62 percent of Colorado women serving as the primary or co-breadwinners in their homes, a woman’s income is crucial to family economic stability. Analysis by U.S. News and World Report and the American Enterprise Institute argue improving access to paid family leave, along with affordable, quality child care, would increase income for working mothers. A recent study commissioned by the National Partnership for Women and Families says women who take paid leave after childbirth report “stronger labor force attachment and positive changes in wages in the year following a child’s birth, when compared to those who do not take any leave.”
Children do better when their parents can take paid leave. Benefits include increased breastfeeding rates, rates of infant immunizations and preventive care for children, parent bonding, and improved child mortality. Longer-term, parental leave positively impacts educational attainment for kids, lowers teen pregnancy rates, leads to higher IQ scores, as well as higher earnings in adulthood.

Paid leave is a vital support for those caring for older adults, as well. According to AARP, Colorado caregivers assisting older adults generate $7.7 million in economic value annually. At the same time, nearly half of unpaid caregivers give their care recipient financial help, including assistance with health costs and personal care. However, lack of paid leave policies take a toll on Coloradans: Analysis from CHI shows those caring for older adults shouldered $3.7 billion in workplace-related costs in 2015.

Caregivers’ future financial stability is at risk because they cannot save for retirement, per a study by MetLife. With Colorado’s older adult population dramatically increasing, the proportion of available family caregivers is shrinking, which means Colorado will see exacerbated demands on unpaid (and paid) caregivers. This is precisely why the state’s Strategic Action Plan on Aging has urged the General Assembly to “establish family leave policies that set standards for compensating (these) employees.”

**Benefits for Employers**

In California, the paid leave program increased the hours worked by employees, with 89 percent to 99 percent of employers reporting the program has “a positive effect or no noticeable effect” on productivity, profitability, turnover, or morale. Other researchers assert firms see lower turnover and lower per-worker wage costs after implementation of paid family leave. In Rhode Island, employers surveyed after introducing the state paid leave program largely supported the program and demonstrated no evidence of decreased productivity.

Small Business Majority says 7 out of 10 small business owners support paid leave for their employees. Two-thirds favor state-administered programs that rely on employee and employer contributions.

In fact, employers can experience costs due to a lack of paid leave. CHI’s research on older adult caregivers in the workplace finds absenteeism, presenteeism, turnover, and increased health costs for their workers results in employers bearing $500 million in costs annually, which could rise to $1 billion by 2030.

According to the Center for American Progress, “policy providing paid family and medical leave is necessary because there is no evidence to suggest the landscape will change dramatically or quickly without policy interventions.” There is widespread public support for paid leave policies, progress from employers has been slow, and other states have blazed a trail for Colorado to follow.

Six states and the District of Columbia have created public family leave programs. States use different financing mechanisms, from employee- or employer-only contributions to a hybrid approach. Washington state and D.C. are notable in that they are the first jurisdictions to finance a public paid leave insurance program without a state-run temporary disability program. At least half of the states, including Colorado, have considered paid leave legislation.

**Recommendation**

In 2017, Colorado’s General Assembly considered the Family and Medical Leave Insurance Act (HB 17-1307). The bill would’ve created an employee-funded insurance program for all workers. It passed the House of Representatives for the first time, but died in the Senate. The bill’s momentum and the powerful positive testimony it inspired gives Colorado a plan to build on in the future.
Earned Paid Sick Leave

Earned paid sick time ensures employees’ job security and income when they are away from work due to illness or injury. Unlike family and medical leave, which is used for longer-term absences, earned paid sick time is based on the hours worked and helps employees in the short term. Earned paid sick policies often include “safe time” provisions, which enable workers to take this earned time off to deal with the impacts of domestic violence. The United States is the only industrialized country that fails to guarantee workers paid sick time.

A 2015 poll from Lake Research Partners showed 88 percent of respondents support workers earning paid sick days to care for themselves or family members.

Studies from Bureau of Labor Statistics (BLS) and Kaiser Family Foundation say between 68 percent to 70 percent of employers offer paid sick time to their employees. Large organizations are more likely to provide access than small firms, and public sector employers are more likely to offer these policies than those in the private sector.

However, national surveys of employees reveal a significant number — between 40 million and 50 million nationwide — who say they are unable to earn paid sick time. Approximately 2 out of 5 Coloradans, or 870,607 people, lack access to even one paid sick day, according to forthcoming research done by the Institute for Women’s Policy Research (IWPR).

People of color, low-wage workers, and those employed in part-time, temporary, or seasonal jobs in Colorado have less access than others. In fact, BLS data show 87 percent of private sector earners in the top 10 percent have access to paid sick time, while only 27 percent of the lowest wage earners can say the same. Hispanic workers are less likely to have paid sick days than workers in any other racial or ethnic group.

Employees Win

Paid sick time improves health for workers. An increasing number of Coloradans cite the inability to take time off work as a barrier to accessing health care, ranking higher than the challenge of finding an in-network doctor. Those without access to paid sick days are more likely to use emergency care rather than preventative and routine doctor’s visits for themselves or their families, according to the National Partnership for Women and Families. CDPHE finds paid sick leave policies could help decrease public health crises by limiting the spread of communicable diseases and infections. To contrast, research done for the National Bureau of Economic Research shows paid sick time laws in seven U.S. cities helped prevent the flu from spreading.

Certain industries like food service, construction, farming, retail, and caregiving are disproportionately affected by a lack of earned paid sick leave.

That means at least 220,000 waiters and waitresses, child care workers, and nursing assistants in Colorado are without the ability to earn paid sick days.

1 Day Of Unpaid Sick Time ≈ Pay Equivalent to Monthly Phone or Electric Bill

3 Days Of Unpaid Sick Time ≈ Pay Equivalent to Monthly Groceries or Health Insurance

7 Days Of Unpaid Sick Time ≈ Not Having Enough Money to Pay Monthly Rent or Mortgage

Source: Bell analysis using Institute for Women’s Policy Research data and Colorado Department of Labor and Employment data

Source: Economic Policy Institute, “Work Sick or Lose Pay?”
The Economic Policy Institute recently quantified the economic burden a lack of earned paid sick days places on working families. In households with two income earners both making $12 per hour (Colorado’s minimum wage in 2020), taking unpaid time off has dire consequences for the family budget.

The nature of at-will employment, a presumption of employment in Colorado (and in all states except Montana), means most employees can be fired by an employer for any reason, at any time. Without sick leave policies in place, employees can be fired for taking a day off to care for a loved one, get well, or prevent the spread of illness. In an Oxfam survey, 1 in 5 low-wage working mothers report losing a job because they were sick or had to care for a sick child.

**Businesses Benefit**

Earned paid sick time can be implemented without harming local businesses or costing jobs, according to analyses of existing municipal and state policies. Data from cities that have enacted paid sick time laws show no correlation between the policies and job loss. Analysis by the Bell reveals stronger overall job growth in Washington D.C. and San Francisco after implementation of an earned paid sick policy than in neighboring counties that didn’t have similar policies.

The Center on Law and Social Policy highlights how Seattle and San Francisco experienced faster employment growth than nearby comparable counties without a required paid sick time policy, while New York City experienced its lowest unemployment rate in six years just nine months after the law took effect. In Connecticut, jobs grew across industries in the six years following its law’s implementation, including in the leisure and hospitality industry.

The Center for American Progress observes in nearly all cites or states with laws requiring earned paid sick time, unemployment didn’t rise one year after implementation. Employers in Connecticut note positive benefits such as improved morale, reductions in the spread of illness, and low to no impact on overall cost or operations. IWPR’s research emphasizes paid sick time is positively related to employee productivity, lower turnover, and employer savings.

A lack of federal momentum and the pressing need for policy change have inspired state and local action. Since the first law was passed by voter initiative in 2006 in San Francisco, eight states and the District of Columbia, 28 cities, and two counties have enacted earned paid sick time laws. Voters in Arizona and Washington State passed mandatory paid sick time at the ballot in late 2016, Rhode Island’s legislature enacted a bill in the fall of 2017, and at least eight states considered legislation around paid sick days during their 2017 legislative sessions.

A compilation of earned paid sick time laws shows variation among state and local laws, though there are common themes. In general, policies require most employers to give most employees, including those working part-time, the ability to earn, accrue and take this time off. Most states cap earned time at anywhere from three days to five days; city policies tend to have more generous caps, and employers can offer more leave than the law requires. Policies stipulate reasons that a worker may take the earned time, and all allow workers to use that time to address the health needs of themselves and their loved ones. All state policies, and most city policies, include safe time as a permissible reason to take sick time.

**Recommendation**

Colorado should continue efforts to create an earned paid sick policy for all Colorado workers. The Colorado General Assembly considered bills in 2009 (SB 09-1210) and 2016 (SB 16-114), which would’ve granted all Colorado employees the right to earn job-protected paid sick and safe days. The bills died in committee. Denver voters also considered a proposal in 2013 that would have created an earned paid sick and safe day policy at the municipal level, though the effort failed at the ballot.
Child Care

Nearly 64 percent of Colorado children under the age of six live in a home where all primary caregivers work, underscoring the magnitude of need and highlighting the importance of child care as a lever to opportunity for Colorado families.

In a recent focus group hosted by the Bell, one mom put it bluntly: “To work as hard as I do, I need child care.”

Quality child care is the ultimate two-generation strategy, as it reinforces opportunity through multiple generations in a family. With good care, children thrive in the present and are poised for success in the future, similarly to the benefits of preschool and kindergarten.

Child care is vital to all working parents, but research consistently shows it's a decisive factor in promoting work efforts among low-income mothers. When a parent knows her child is being cared for in a safe, healthy, and stimulating environment, she is more empowered, secure in the workplace, and able to advance economically, so she can further provide for her children.

Beyond individual economic mobility, the Colorado economy will prosper if we enhance state efforts to make child care more affordable and available. Measurable benefits can accrue to the state’s workforce and employers in the form of reduced absenteeism, improved job retention and productivity, and greater participation in job training and education for parents. For example, researchers at the Economic Policy Institute find making child care more affordable for families could increase mothers' workforce participation rates, which would raise national GDP up to $600 billion annually, depending on the policy approach. These gains improve the economy for everyone.

Despite data showing child care benefits employees, most workplaces don’t assist workers in obtaining it. The National Study of Employers shows just 7 percent offer child care at or near the worksite. EPIC’s Family-Friendly Workplace Toolkit corroborates this when noting the U.S. National Center for Atmospheric Research (NCAR) in Boulder, Colorado, is “one of a few workplaces in Colorado with an on-site child care facility.” The National Study finds other policies related to child care also are few and far between. Though 1 in 5 employers offer benefits giving employees flexibility in managing work and family life, they report the high cost of child care is a barrier to providing this assistance.

The Center for American Progress argues “chronic” underfunding for child care should be mitigated not just by more investment, but by a culture shift in the way we view and assist families who need child care. Colorado’s focus on two-generation approaches means the state is well-positioned to be a leader in this culture shift.

Cost and Access Are Barriers to Opportunity

Among those who responded to the Bell’s opportunity survey, distributed to Coloradans from 11 counties in rural and urban areas of the state, most respondents ranked quality, affordable child care as a top factor helping people get ahead economically. They also stated a lack of child care is an obstacle to their success.

Analysts for the Colorado Department of Human Services concluded in 2016, “the price parents pay for child care in Colorado is a problem.” National research consistently rates Colorado’s child care costs among the least affordable in the country — and costs can be

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**Colorado’s Rising Cost of Child Care**

<table>
<thead>
<tr>
<th>Type</th>
<th>2006</th>
<th>2016</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant, Facility</td>
<td>$9,123</td>
<td>$9,741</td>
<td>$618</td>
</tr>
<tr>
<td>Infant, In-Home</td>
<td>$7,159</td>
<td>$7,103</td>
<td>$-52</td>
</tr>
<tr>
<td>4-Year-Old, Facility</td>
<td>$7,103</td>
<td>$8,727</td>
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<tr>
<td>4-Year-Old, In-Home</td>
<td>$6,560</td>
<td>$6,560</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: Child Care Aware, Parents and the High Cost of Child Care, 2006-2016
more pronounced depending on geography, age of child, and type of care setting.

The factors leading to higher child care costs are many and varied. They include regulations mandating caregiver ratios, the high overall personnel costs for providers (even though individual worker wages are low), high teacher turnover rates, the costs associated with putting quality early childhood education practices into place, and the fact the price of child care rises in response to demand, which is high. Public programs that subsidize child care pay a lower reimbursement rate to providers. As a result, providers have charged private-paying families more to offset their losses.

Cost is made more prohibitive because the United States has yet to prioritize public investment in ECE the same way it has for students in kindergarten and beyond. This contributes to child care, particularly high-quality care, being out of reach for many. Public funding for child care assistance comes from a patchwork of sources at the federal, state, and local level, and different programs have different eligibility requirements for families.

The Colorado Child Care Assistance Program (CCCAP), a statewide program administered at the county level, is Colorado’s largest publicly funded child care support program. CCCAP offsets child care costs for low-income families and has recently undergone a variety of changes to ensure higher quality child care is available. Most CCCAP families are headed by single parents, and qualitative research done by the Bell shows the program is a crucial support for families who work hard to get ahead, but cannot afford the high cost of child care on their own. As one parent explained, “If I didn’t have CCCAP, I couldn’t afford to have a job.”

**Although Colorado has increased funding for CCCAP over the past few years, it’s still underfunded and only serves about 13 percent of eligible Colorado families.**

Total federal funding for CCCAP, the majority of which comes from the Child Care and Development Block Grant, has declined over the past decade and a half — a $3 billion funding shortage after adjusting for inflation.

State and local policymakers and administrators in Colorado have found ways to maximize limited federal funding. Thanks to additional state investment, some Colorado counties implemented a “cliff effect” pilot program, which enables CCCAP parents to gradually increase their incomes while qualifying for reduced assistance. Additionally, municipalities such as Breckenridge, Denver, and Aspen, and some counties like Boulder, Dolores, Elbert, and Summit, are supporting early childhood initiatives that boost teacher pay, expand child care facilities, and increase access for families. Often these efforts require voter-approved tax increases dedicated to child care funding.

Administrators in Breckenridge say child care is as crucial to the town’s success as snow plows, an argument that has convinced officials to support the child care infrastructure with General Fund dollars. Other local leaders mention community demand for and concern about affordability and access had to hit “a crisis point” in order for the needed public support to appear. State policymakers can learn from and replicate local efforts which increase public investment in child care — ideally before it becomes a crisis.

Without access to care, many parents must decide between going back to work or staying at home to care for their child, which has ripple effects for family economic mobility. According to research by the Colorado Department of Public Health and Environment, licensed child care centers, family child care homes, and preschools had the capacity for 106,000 children in 2013, but 240,000 Colorado children needed care. The Center for American Progress corroborates this finding, by examining the locations of Colorado’s center-based early care and education programs, including child care centers, Head Start, and public and private preschool programs.
CAP’s analysis shows 1 out of 3 Coloradans live in a child care desert. Child care deserts are defined as, “neighborhoods or communities that are either lacking any child care options or have so few child care providers that there are more than three children for every licensed child care slot.” When communities are faced with this challenge, they must grapple with the fallout from waiting lists, unlicensed arrangements, or effects on parents’ employment decisions.

This problem is most acute in Colorado’s rural and urban areas. No matter the type of community, families who earn below the state median income are more likely than their higher-income neighbors to live in areas with gaps in the supply of child care. Hispanics are projected to be the fastest growing racial/ethnic group in Colorado, yet these families are more likely to live in areas with fewer child care options. Research shows areas with child care deserts are more likely to see lower levels of maternal workforce participation.

Other statewide analysis finds less than a quarter of all children under age six can be served by licensed child care facilities. In the counties of Conejos, Custer, Jackson, Kiowa, Moffat, Morgan, Park, and Rio Blanco, licensed care has the capacity to serve fewer than 10 percent of children. The problem is worse for families with infants and toddlers, as statewide, licensed providers can only care for about 18 percent of Colorado children under age two.

As recently as 2014, 19 counties were experiencing an “infant care crisis,” with the ability to only serve up to 9 percent of the children who need care. One Grand County focus group member told the Bell there are only two infant slots in licensed care for all families living there.

Many progressive proposals at the national level would limit child care expenses to a percentage of one’s income. While this type of public investment is difficult at the state level, Colorado could leverage tax credits to help with the cost of care, either by reducing a family’s tax liability or by providing a refund. Early care and education experts suggest tax credits for families are a promising approach for states to experiment with in addition to state appropriations.
Employers should be encouraged to use available tools, such as the Colorado Child Care Contribution Tax Credit. Dependent care flexible spending accounts, only offered through employers, allow employees to save up to $5,000 in pre-tax income that can be used to pay for caregiving costs. Unfortunately, according to the Bureau of Labor Statistics, nationally only 54 percent of state and local government workers and 36 percent of private industry workers have access to this type of benefit, and access has been stagnant over time. Finally, as recommended elsewhere in this report, Coloradans need jobs that offer flexible schedules and paid leave to help ease child care worries.

Colorado state and local officials must continue to press for increased public investment in child care. As the largest source of state child care assistance, innovative approaches to CCCAP should be continued. In addition to increased funding, 2016 stakeholder convenings with the Office of Early Childhood suggest programmatic improvements could help.

Recommendations

Further expand access to the Child Care Expenses Tax Credit by raising the income threshold to include more middle-income earners. Colorado has a Child Care Expenses Tax Credit available to those with incomes of $60,000 or less. It’s calculated as a percentage of the federal Child and Dependent Care Tax Credit and is weighted to give a higher percentage to lower-income families. Colorado recently passed legislation to ensure a glitch in the tax system didn't prevent our lowest earning families from accessing this credit.

Encourage employers to use the Colorado Child Care Contribution Tax Credit and dependent care flexible spending accounts to help families cover costs of child and dependent care. Encourage employers to implement other family-friendly policies.

Colorado should continue supporting the Colorado Child Care Assistance Program cliff effect pilot program and assist counties with refining implementation approaches.

Increase public awareness of Colorado Child Care Assistance Program and help parents navigate and better understand the program through development of a parent portal.
Researchers with the Families and Work Institute define workplace flexibility as, “a process for getting work done that increases effectiveness and efficiency on and off the job.” Rather than think of it as a perk for employees, they suggest employers use these policies as an opportunity to help their workers be more successful.

Not all workplaces can approach flexibility in the same way, but research cited by Colorado’s Department of Public Health and Environment (CDPHE) finds employers who offer it experience decreased turnover and increased employee engagement and loyalty. CDPHE’s analysis stresses the toll a lack of work/life integration can take on worker health, particularly because it creates stress, which can lead to poor mental health, weight gain, poor heart health, obesity, and high blood pressure. It can also create a tense work environment, causing stress to spill over to other employees.

Many employers are integrating flexible work arrangements into their organizations, which includes flextime and periodic telecommuting, and to a lesser degree, compressed workweeks, full-time telecommuting, and shift flexibility.

Human resources professionals surveyed by the Society for Human Resource Management (SHRM) attribute improved productivity and retention and decreased absenteeism to flexible work arrangements. SHRM’s findings show most employees cite workplace flexibility as critical to their job satisfaction, a percentage that has increased over time. Two out of 5 respondents say flexibility is why they would be unlikely to seek another job in the next year, and other positive impacts have been noted by employees.

Through Health Links, a program at the University of Colorado’s School of Public Health, employers can choose to take a Family Friendly Assessment to gauge how their policies meet the work/life balance needs of employees. Among employers who took the 2017 assessment, 39 percent have a written policy for flextime, and higher percentages report offering specific benefits associated with workplace flexibility, as shown in the above graph.

Colorado employers have good guidance in implementing flexible workplace policies, thanks to the efforts of programs such as Health Links and groups like Executives Partnering to Invest in Children (EPIC). Its Family-Friendly Workplace Toolkit touts flexible work hours as a crucial employer offering, in addition to core benefits like health insurance and retirement savings plans, paid leave, support services, career development, and community involvement.
Unfortunately, workers have uneven access to flexible work arrangements. Analysis from Georgetown Law and the Urban Institute shows workers with lower wages and incomes have less access to workplace flexibility, in part because of the work associated with lower-wage jobs.

Experts from the Center for American Progress (CAP) point to data from the Bureau of Labor Statistics and the American Time Use Survey that shows just over half of workers can alter their schedule or work location instead of taking leave or taking time off work. These work arrangements are less likely to be available to those with lower pay, Hispanic workers, and those with only a high school diploma. In fact, CAP notes workers with a college degree are nearly twice as likely to be able to change their schedules than those who only completed high school.

Workers in low-wage jobs are also more likely to have additional work schedule challenges. The Center for Law and Social Policy (CLASP) summarizes schedule challenges experienced by hourly workers, including irregular shifts, short-notice of upcoming shifts, shift fluctuation from week to week, and the fact many have jobs requiring them to be “on-call” every day.

When Oregon’s governor signed SB 828, it became the first state to create a predictive scheduling law, joining cities like San Francisco, Seattle, and New York. Predictive scheduling requires employers give employees advance notice about work schedules and guarantees employee pay if those schedules are changed without notification. Greater shift predictability and guaranteed pay have both economic and two-generation implications, as workers can plan their finances accordingly and account for child or dependent care. Employers also benefit from reduced turnover, increased productivity, and decreased absenteeism.

Right-to-request laws allow workers to ask for the workplace flexibility they need while protecting them from employer discrimination or retaliation. The federal Schedules That Work Act, introduced in 2015 and 2017 by Congressional Democrats, would protect workers while compelling employers to seriously consider flexibility requests and only deny them for valid business reasons. (Previous versions of this legislation also required employers in certain industries to offer predictive scheduling.) Vermont enacted a right-to-request law in 2013 as part of a broader worker rights bill. Employees are guaranteed the right to ask for flexible work arrangements without fear of retaliation, and employers have the “duty to consider” and discuss these requests. New Hampshire passed a similar law in 2016.

Recommendations

Colorado should follow the lead of cities and states that created their own scheduling and right-to-request laws.

Colorado should recognize and celebrate organizations that offer workflex options and other worker-friendly policies by creating a formal state-sponsored award or certification program. States like Arkansas and New Mexico and cities like Juneau and Santa Clara have offered these awards, and employers reported benefitting from the recognition in many ways. In 2016, the legislature considered the Colorado Family First Employer Program (HB16-1167), which would have created such a program.

Though the measure died in the Colorado Senate, it provides another template for improving workplace flexibility in Colorado.
Rejoining the Workforce

Nearly 9 out of 10 employers, 4 out of 5 landlords, and 3 out of 5 colleges use criminal record background checks on applicants, which can often keep those with criminal histories from making a better life for themselves and their families.

In Colorado, almost 17,500 people are incarcerated in prisons and an additional 11,000 are in jails. A multi-state survey of formerly incarcerated people finds access to employment is one of the biggest challenges they face. Studies show 60 percent of such individuals cannot find employment one year after release. This is especially troubling as a two-generation policy issue, given two-thirds thirds of male inmates were employed before their incarceration, and more than half were their families’ primary source of financial support. Estimates suggest nearly half of U.S. children have at least one parent with a criminal record, and 1 in 28 has an incarcerated parent.

A report from the Pew Charitable Trusts points out incarceration is especially concentrated among men, the young, those with low levels of education, and racial and ethnic minorities — especially black Americans. Nationally, 1 in every 87 white males ages 18 to 64 is incarcerated. The numbers for Hispanic and black males of similar age are 1 in 36 and 1 in 12, respectively.

In Colorado, minorities are also significantly overrepresented among those incarcerated. This is especially true for black Coloradans, who make up 4 percent of our state’s population, but comprise 18 percent of those in Colorado’s prisons and jails and have an incarceration rate almost triple that of white Coloradans.

When education level is considered, those without a high school diploma or the equivalent are far more likely to be incarcerated, affecting more than 1 in 3 black men ages 20 to 34, compared to 1 in 8 white men of the same age. Nationally, about 40 percent of inmates overall lack a high school diploma or the equivalent, 46 percent lack postsecondary education, and about 16 percent have below basic literacy levels. Colorado’s prison population has a higher rate of high school attainment, but still includes a significant percentage of inmates with basic academic and literacy needs.

Colorado Prison Population by Education Level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Diploma or Equivalent</td>
<td>75.4%</td>
</tr>
<tr>
<td>Associate Degree or Higher</td>
<td>1.2%</td>
</tr>
<tr>
<td>Illiterate in English</td>
<td>12.8%</td>
</tr>
<tr>
<td>Functionally Illiterate</td>
<td>9.8%</td>
</tr>
<tr>
<td>Literate, No H.S. Diploma/Equivalent</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Source: Bell analysis of data from Colorado Department of Corrections, FY 2016 Overview of Educational and Vocational Programs

Low levels of education along with a criminal history make it very difficult to compete in the labor market after release, significantly reducing wages and annual earnings.

Incarceration’s Effect on Men’s Pay

- No Incarceration: $39,100 Annually
- Post-Incarceration: $23,500 Annually

Source: Pew Charitable Trusts, Collateral Costs: Incarceration’s Effect on Economic Mobility
In Colorado, one of the top employment areas for ex-offenders reentering the workforce is food service occupations. Common entry-level jobs for formerly incarcerated individuals include:

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Entry-Level Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant/Food Service</td>
<td>Food Preparation</td>
</tr>
<tr>
<td>Warehouse Operations</td>
<td>Freight/Stock Laborer</td>
</tr>
<tr>
<td>Information Support</td>
<td>Customer Service Rep</td>
</tr>
<tr>
<td>Construction</td>
<td>Construction Laborer</td>
</tr>
<tr>
<td>Mobile Maintenance</td>
<td>Tire Repairer/Changer</td>
</tr>
<tr>
<td>Production</td>
<td>Team Assembler</td>
</tr>
</tbody>
</table>


Workforce Participation

From fiscal year 2010 to 2016, an average of 10,253 Colorado inmates were released annually by the Department of Corrections. In 2016, the total was 9,842. Even without incarceration or a conviction, an individual with a criminal record can have significant difficulty finding employment.

A 2014 study for the National Institute of Justice shows simply having an arrest during one’s lifetime decreases opportunities for employment more than any other employment-related stigma, including long-term unemployment, receiving public assistance, having only part-time or short-term employment experience, or having a high school equivalency rather than a diploma. As a result, job seekers with criminal records receive half as many job offers as those without records, and black applicants with criminal records receive two-thirds fewer.

Research studies point out expanding incarceration rates and subsequent employment challenges have deepened racial inequality in earnings and lifelong careers, and have likely contributed to the perpetuation of our nation’s poverty rate. Additionally, increased incarceration is among several factors that have affected the U.S. labor market and may, at least in part, help to explain gaps in workforce participation rates, especially for black men.

Several state and local policy approaches can address barriers to workforce reentry for those with criminal records.

Recommendations

Pass legislation to “Ban the Box”/Fair-Chance Hiring policies. This policy would remove the box on employment applications requiring disclosure of an applicant’s criminal history, and criminal background checks would be postponed until after an applicant has an opportunity to interview for the job and is being seriously considered for it. Over 150 cities and 29 states have enacted such laws. The Colorado Center on Law and Policy has led statewide “Ban the Box” legislative efforts to expand the state’s current requirements to include most private sector employers.

Enact “Clean Slate” automatic record-sealing/expungement laws. Although many states have processes in place by which those with criminal histories can petition to have their records cleaned, sealed, or expunged, in most cases this process is not automatic even for relatively minor and nonviolent crimes. The Colorado Center on Law and Policy is planning to offer Clean Slate legislation in 2018 related to automatic criminal record sealing of certain offenses.

Expand subsidized transitional jobs programs. Training programs for formerly incarcerated individuals after their release are also effective in providing the skills needed for reentry into the workforce.
Retirement Ready

In a 2016 study, the Bell Policy Center found almost 900,000 Colorado private sector workers in their prime working years aren’t participating in any type of retirement savings plans at work. More than 80 percent — or 753,972 Coloradans — work for employers who don’t offer a retirement savings plan.

The number of Coloradans aged 65 and older — the traditional age when workers retire — is projected to grow by 77 percent between 2015 and 2030. The state and local government will face a crisis if people retire without adequate savings and turn to public programs for support.

In Colorado, low-wage workers, members of minority groups, young workers, those working in small businesses, and those working in specific industries are the least likely to have a retirement savings plan at work.

Which Colorado Workers Are Less Likely to Have a Workplace Retirement Plan?

<table>
<thead>
<tr>
<th>Workers Type</th>
<th>Percent Without Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Industry</td>
<td>88%</td>
</tr>
<tr>
<td>Small Firm Workers</td>
<td>81%</td>
</tr>
<tr>
<td>Low-Wage Workers ($22K or Less)</td>
<td>76%</td>
</tr>
<tr>
<td>Accommodations &amp; Food Services</td>
<td>66%</td>
</tr>
<tr>
<td>Construction</td>
<td>65%</td>
</tr>
<tr>
<td>Hispanic Workers</td>
<td>56%</td>
</tr>
<tr>
<td>Asian/Pacific Islander Workers</td>
<td>50%</td>
</tr>
<tr>
<td>Workers Aged 25-29</td>
<td>49%</td>
</tr>
<tr>
<td>Black Workers</td>
<td>49%</td>
</tr>
<tr>
<td>Statewide Average</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Bell Policy Center analysis of IPUMS CPS microdata

In recent years, six states — California, Connecticut, Illinois, Maryland, Oregon, and Vermont — enacted legislation to provide workplace retirement plans for their private-sector workers who don’t have access to one. These states are in various stages of establishing public-private partnerships to create and run voluntary, low-cost, automatic enrollment workplace retirement savings plans.

California, Connecticut, and Oregon completed detailed market and financial analyses showing how their plans, as currently designed, are financially sustainable under a variety of economic scenarios. Oregon started enrolling workers in a pilot program in July and is rolling out their plan to firms with 100 or more workers in January 2018. Currently, the program has over 1,100 workers and 50 employers participating. California, Connecticut, and Illinois are expected to begin enrolling workers in their plans in 2019.

If we want all Coloradans to experience a financially secure retirement as a just reward for a life of hard work, we need to ensure there are appropriate mechanisms in place to help them save. The lowest-income retirees in Colorado, many with limited retirement savings, currently depend on Social Security for 80 percent of their income, even though it is designed to replace about 40 percent of their income in retirement.

A poll commissioned by AARP Colorado and Small Business Majority says a strong majority of Colorado small business owners support the creation of a privately managed, state retirement savings program, similar to the Secure Savings Plan. Three in 5 Colorado small business owners support such a plan (58 percent) and nearly 7 in 10 (69 percent) believe offering such a plan makes small businesses more competitive by attracting and retaining employees.
Studies also show raising the retirement savings for workers with the lowest earnings will save state and local governments millions of dollars in social spending. Economists at the University of Maine, say increasing retirement income by $1,000 per year for the lowest income retirees would save Colorado taxpayers $155 million in state safety net spending over 15 years. Economists at Brigham Young University determined if the one-third of Utah’s retirees with the lowest savings had increased their savings by just 10 percent over their working years — or about $14,000 — the state would have saved $194 million in federal and state government spending over 15 years.

Recommendation

Colorado should follow the lead of six other states and enact the Secure Savings Plan to create a public-private partnership to develop and operate a retirement savings plan for private sector workers without access to one at work. The plan should have automatic enrollment, low-fees, and portability among jobs in Colorado.
Acknowledgements & Special Thanks

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Through research, outreach, and advocacy, the Bell Policy Center identifies the challenges threatening Coloradans’ ability to get ahead and stay ahead and amplifies progressive solutions that work for real Coloradans. We are focused on raising the economic floor, building a diverse and thriving middle class, and sparking innovative ideas to prepare us for the future.