

2023

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LOW-WAGE WORK

IN COLORADO





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2023 STATE OF LOW-WAGE WORK

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Introduction

Colorado workers earning low-wages have experienced significant real wage increases, even during times of high inflation. The pandemic sparked a job switching trend among low-wage earners, which includes adults, seniors and college age workers. Low-wage workers were able to find better-paying jobs.

However, pay gaps persist for women and workers of color, and there is still work to be done in narrowing the gap between workers' pay and their increasing productivity (Mishel, 2021). To protect these gains and further close the gap, it is crucial to establish strong labor standards such as a higher minimum wage and rigorous enforcement of existing laws.

Low-wage work is defined as jobs paying less than what a full-time worker supporting a family of four would need to earn to live above the federal poverty level. In the wake of the pandemic, workers earning low-wages were able to switch jobs at a higher rate and leverage their power to demand better pay (Autor et al, 2023). This was especially true for non-college educated workers.

This has been increasingly visible to the average Coloradan. We pass our local sandwich shop and see the "hiring, starting \$19 an hour" signs. We might have noticed the Starbucks down the street takes a few extra minutes to churn out our cold brew due to short staffing. These more visible signs of a "hot labor market," one with more job openings than workers to fill them, may lead us to assume workers in sectors like food service and hospitality are doing just fine — but zooming out to broader trends over recent decades and digging into the less visible data tells a different story.

The hot labor market has not been the only factor in increasing worker power in Colorado. Intentional policy choices made during the pandemic by the state and federal government provided resources and tools for working families across the state, such as huge fiscal stimulus bills, expanding the Child Tax Credit (CTC), and protecting people from evictions.

These policies, however, were not permanent. We've already begun to see the economic challenges reemerge when these investments decline; for example, the lapse in the federal CTC expansion led to the number of children in poverty significantly increasing in 2022 (Hughes, 2023).

The tides have turned in the labor market, favoring workers like never before. But this window of opportunity may not stay open for long.

Colorado workers and advocates have been trying to fortify the gains made during the pandemic, and recent changes to Colorado's state minimum wage policy present opportunities to do so. In 2019, House Bill 1210 gave local governments within Colorado the authority to establish a local minimum wage higher than the state minimum wage, which many localities are now considering.



Our analysis of low-wage work in Colorado shows that many of the common low-wage jobs in Colorado have been paying more in the last two years, and Denver's minimum wage is at a historic high, promoting a more equitable and sustainable economy across the state.

The Colorado Department of Labor and Employment (CDLE)'s new report, tracking economic data in Denver, disputes common claims made by opponents of minimum wage increases. In the three years following implementation of its own higher minimum wage, Denver outpaced the rest of the state in jobs, wage growth, and sales tax revenues, indicating that local minimum wages can be a useful policy tool to advance shared economic prosperity (CDLE, 2023).

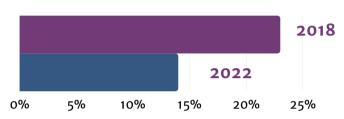
Recent research suggests that local wage ordinances are one of many useful policy tools to "lock in the gains made by low-wage workers" and ensure that rising inflation and the lack of federal action on minimum wage won't push us back into the status quo of slower growth for low-wage workers (Shierholz, 2018; Gould and deCourcey, 2023).

What is Low-wage Work?

A low-wage job pays less than what a full-time worker who supports a family of four would need to earn to live above the federal poverty level. In our first low-wage report in 2015, the annual threshold for a low-wage job was \$23,850, which translated into an hourly wage of \$12 an hour. Adjusting for inflation, the threshold is \$15.40 in 2022. We define jobs that paid less than \$15.40 in 2022 as low-wage jobs.

In 2018, about 23% of jobs in Colorado were classified as low-wage by that definition. The portion of Colorado jobs classified as low-wage dropped significantly over the past four years — making up 14% of jobs in 2022.

Portion of Jobs Classified as Low-wage



Source: CFI analysis of 2021 Occupational Employment and Wage Statistics (OEWS) data using \$15.40/hour as low-wage definition

While low-wage workers have seen gains, and median pay in Colorado is growing at one of the fastest rates in the nation, inequities persist in the labor market. Women, workers of color, and immigrant workers are still disproportionately likely to work in low-wage jobs. Historically excluded workers at the intersection of marginalized identities like race, gender, and immigration status stand to benefit most from improvements in working conditions in low-wage jobs.

Who are Low-wage Workers?

While 46.2% of total workers in Colorado are female, 51.5% of employees in low-wage jobs are female. Women are disproportionately represented in many common low-wage jobs.

In Colorado, women make up:



of waitresses/waiters



70% of cashiers



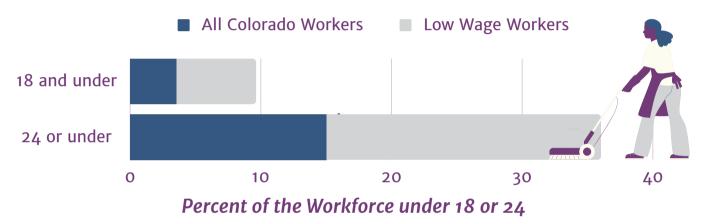
90% of childcare workers

Workers of color are also crowded into low-wage occupations in the state; 28% of all workers in the state are non-white, while 37% of employees in low-wage jobs are non-white.

About 3 in 10 workers in the state are non-white, while roughly 4 in 10 workers in low-wage jobs are non-white.



Employees in low-wage jobs also skew younger: 3.5% of all Colorado workers are 18 or under, whereas 9.6% of workers in low-wage jobs are 18 or under, and 15% of workers are 24 or under, but 36% of workers in low-wage jobs are 24 or under.



Immigrants in Colorado are disproportionately likely to be in low-wage jobs. 37% of immigrants are in jobs paying under \$37,800, compared to 25% of U.S.-born workers (Immigrants in the U.S. economy, 2023).

Among Coloradan immigrants working in low-wage occupations, over 70% work in service or transportation jobs, such as building cleaners, cooks, landscape workers, or movers. The pandemic highlighted the importance of many of these jobs to America's daily life that can often seem under-appreciated or invisible.



In all, 37% of immigrants are in jobs paying under \$37,800, compared to 25% of U.S.-born workers.

Pandemic Gains Were Not Equitably Shared

In the aftermath of the COVID pandemic, a hot labor market has led to historic real wage gains for those earning the least across the nation. This business cycle's impressive growth has been a notable exception to a disappointing rule — that wages for middle class and low-wage workers across the nation and in Colorado have stagnated over recent decades, despite booming productivity growth (DeSilver, 2017; Mishel, 2021).

The gap between pay and productivity means that workers have been getting paid less, while being expected to produce more (Mishel & Bivens, 2021). While low-wage workers are far more educated than their 1968 counterparts, their productivity and increased skills are not reflected in the wages they earn now. Minimum wage policies at the federal, state, and local levels have big impacts on low-wage workers, and can help close the gap between pay and productivity. Additionally, due to their concentration in low-wage work, female workers and people of color have been especially harmed by this gap, and thus stand to benefit most from stronger minimum wage policies.



Job switching in a hot post-pandemic labor market produced real wage growth for low-wage workers, which undid about a quarter of the total rise in income inequality over the last four decades.

New research finds that the recent rapid real wage growth for those at the bottom of the distribution relative to the rest of the workforce is partially attributable to an increase in labor market competition (Autor et al, 2023). A recent NBER study found that the pandemic "increased the elasticity of labor supply to firms in the low-wage labor market." In other words, there were more job openings than workers looking to fill them, giving workers more quitting power and allowing real wages to grow.

This was especially true among young, non-college educated workers, who the authors noted "disproportionately moved from lower-paying to higher-paying and potentially more-productive jobs." Employers needed these workers, and they had to start paying something much closer to a real living wage to entice folks back to the workplace. The authors found this wage growth not only reduced the gap between college-educated and non college-educated workers, but it also undid about a quarter of the rise in income inequality from the last four decades.

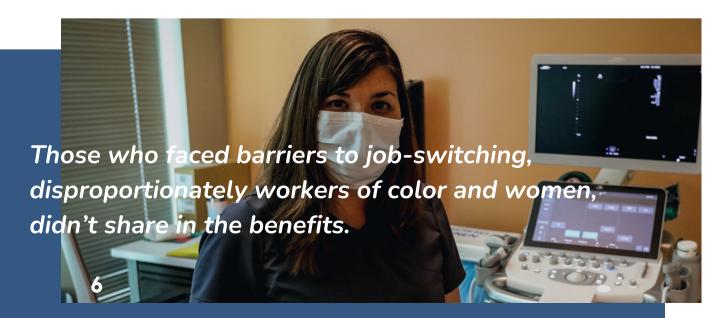
Despite Aggregate Gains, Gender & Racial Wage Gaps Remain

Since the pandemic, a strong labor market and low unemployment rates have generally translated to rising wages at the bottom. Outside of the spike in unemployment from the pandemic in 2020, unemployment rates have been historically low, but inequities persist for certain groups. For example, recent Bureau of Labor Statistics (BLS) data showed the economy added 339,000 jobs in May, over 52% of which were women's jobs (U.S BLS, 2023). However, a recent report found that the overall strong job number masks higher rates of joblessness for Black and Latina women, disabled women, and younger women (Javaid & LePage, 2023). Black women's unemployment rate actually increased a full percentage point from April to May of 2023.

Much of the wage growth at the lowest end since the pandemic was concentrated among those who switched jobs or industries, suggesting those who did not have that luxury to switch jobs have not seen the same gains (Autor et al, 2023). This likely means workers of color and women saw less gains, considering the strong evidence of Black workers historically wielding less bargaining power (Wilson & Darity, 2022).

Women, especially women of color and mothers, also have a lower propensity to demand better from their employers or gamble to take their skills elsewhere (Biasi and Sarsons, 2020; Shonk 2023). Recent research also indicates the pandemic widened the gender gap in requests for higher pay and promotion at their current jobs, which may also have made them less likely to reap the benefits of recent gains for job switchers (Konkel, 2021).

"Occupational overcrowding," or the crowding of certain workers into lower wage jobs due to discrimination in higher-wage sectors, depresses wages and further diminishes workers' bargaining power (Hamilton et al, 2011). The result is a concentration of women and people of color in these low-wage sectors, which may drive wages further down for workers who are pushed toward those occupations.



Despite Aggregate Gains, Gender & Racial Wage Gaps Remain

Motherhood also creates a large wage gap across the state; Colorado mothers make \$0.72 for every \$1 fathers make, while Latina mothers make \$0.46 for every \$1 white, non-hispanic fathers make, according to the U.S. Census Bureau's 2017-2021 American Community Survey data (The Wage Gap for Mothers by Race, 2023).

Nationally, men saw a larger wage increase over past years; from 2019 to 2022 men's average wages increased just over \$2, while women's average wages increased about half of that, by \$1.03 (State of Working America Data Library, 2022).

The gender wage gap is defined as the difference between median earnings of men and women relative to median earnings of men (OECD, 2023). One study on the wage gains for low-wage workers over the last 3 years found that while low-wage workers experienced much-needed gains, the gender pay gap widened during that same time, even though women are disproportionately likely to work in low-wage jobs (Gould & deCourcy, 2023).

Despite women and mothers being concentrated in low-wage jobs where workers saw real wage gains since 2019, the gender wage gap has widened over the past 3 years.

What do these long-standing and magnified inequities mean for the current labor market and potential policy interventions? We know a few things:

- Low-wage workers saw gains, but it was long overdue, especially for the marginalized workers who are disproportionately crowded into low-wage occupations.
- Evidence on job switching and wage gaps suggests that of all the low-wage workers who saw gains, those holding one or multiple marginalized identities likely saw less of a gain.

Are these gains fleeting or permanent? And how do we ensure sustained and equitable growth to ensure all Coloradans have access to prosperity, including mothers, workers of color, and low-wage workers?

Are Gains for Low-wage Workers Permanent or Fleeting?

As we transition into a post-pandemic economy, will gains for workers in the lowest paid jobs last? One prominent national labor economist, Arindrajit Dube, notes that as wage growth has slowed, and pay is no longer rising faster for workers in jobs like food service and retail relative to other occupations, there is cause for both hope and caution (Casselman, 2023).

While Dube contends "there are good reasons to think that at least a chunk of the changes that we've seen in the low-wage labor market will prove lasting," he also cautions **workers may lose this post-pandemic leverage if companies start cutting jobs**. This is a credible threat; the Colorado Secretary of State's Q1 and Q2 2023 Data Analysis Summary show that while the economy is still going strong, job growth is in fact on a slowing trajectory (Griswold, 2023).

The unique conditions and extreme disruptions created by the pandemic "boosted low-wage workers' leverage to demand better wages, thereby increasing the 10th-percentile wage across all states; this held true regardless of changes in state minimum wages." (Gould and Decourcey, 2023).

These gains may be tenuous, but policy tools can help ensure they stick.



As employers' willingness to pay higher wages, and targeted economic stimulus policies come to an end, and market demand and labor relations shift back, we need to lock in gains made for the most vulnerable workers during the pandemic.

Policies like minimum wage increases are arguably the most effective way to fortify real wage gains and continue closing the productivity gap, as well as reach workers who did not reap the benefits of the pandemic labor market as much as others (Shierholz, 2018; Gould and DeCourcey, 2023). Gains may be tenuous, but policy tools can help ensure they stick.

Real Wage Growth in Colorado

Many common low-wage jobs in Colorado have been paying more in the last two years. Figure 1 displays the change in common low-wage jobs. 64% of dishwashers went from being classified as "low-wage" in 2020 to 42% in 2022. 76% of waiters and waitresses who were earning low-wages in 2020 dropped to 53% in 2022.

FIGURE 1: COMMON LOW-WAGE JOBS ARE PAYING MORE

figure 1	Most Common Low Wage Jobs are Paying More							
3		Colorado Employment	10 th Wage	25 th Wage	Median	75 th Wage	90 th Wage	Portion Considered "Low Wage*"
Waiters and	2020	35,710	\$12.00	\$12.00	\$12.01	\$12.68	\$24.47	76%
Waitresses	2022	41,770	\$12.70	\$13.59	\$14.20	\$23.34	\$33.54	53%
Fast Food	2020	64,720	\$12.07	\$12.17	\$12.51	\$13.96	\$15.36	72%
Workers	2022	75,490	\$13.62	\$14.13	\$14.74	\$16.43	\$17.20	60%
Dishwashers	2020	8,300	\$12.10	\$12.33	\$12.86	\$14.49	\$15.64	64%
	2022	7,240	\$13.68	\$14.30	\$15.91	\$16.70	\$19.50	42%
Cashiers	2020	51,730	\$12.13	\$12.32	\$13.10	\$15.30	\$18.38	58%
	2022	50,200	\$13.37	\$13.81	\$14.70	\$16.67	\$18.59	59%
Maids and Housekeeping	2020	17,610	\$12.08	\$12.38	\$13.48	\$15.26	\$17.85	54%
Cleaners	2022	17,800	\$14.14	\$14.76	\$16.04	\$17.53	\$20.28	38%
Home Health and Personal	2020	36,610	\$12.14	\$12.50	\$13.83	\$15.49	\$18.64	49%
Care Aides	2022	35,910	\$14.17	\$14.99	\$15.99	\$17.44	\$19.59	35%
Retail Salespersons	2020	70,060	\$12.13	\$12.40	\$13.84	\$16.65	\$23.29	49%
Salespersons	2022	80,000	\$13.70	\$14.21	\$15.98	\$17.93	\$23.44	42%
Janitors and Cleaners	2020	32,540	\$12.16	\$12.56	\$14.16	\$16.63	\$19.76	44%
Cleaners	2022	32,240	\$14.16	\$14.85	\$16.85	\$18.39	\$22.58	32%
Childcare Workers	2020	10,550	\$12.17	\$12.73	\$14.33	\$16.65	\$19.87	41%
Workers	2022	8,000	\$14.20	\$14.68	\$16.74	\$17.86	\$19.47	34%

Source: Occupational Employment Statistics using linear interpolation between percentiles *low wage is defined as \$13.77 in 2020 and \$15.40 in 2022

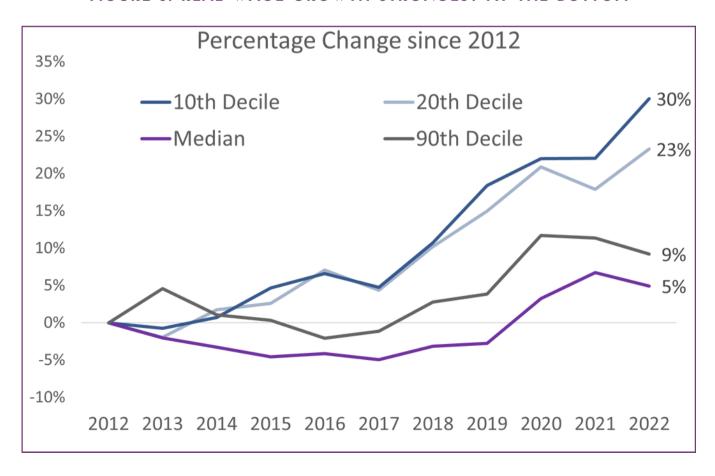
FIGURE 2: CHANGE IN REAL WAGES IN COLORADO, 2018-2022

Change in Real Wages in Colorado 2018 to 2022 figure 2					figure 2
	10th	25th	Median	75th	90th
2018	\$12.56	\$15.70	\$23.64	\$37.76	\$58.16
2022	\$14.68	\$17.65	\$24.16	\$38.54	\$60.60
Percentage Change in Real Wage	16.9%	12.4%	2.2%	2.1%	4.2%
Source: Occupational Employment Statistics in 2022 dollars using Denver-Boulder-Lakewood CPI					

Pay for jobs in the lower distribution of wages has seen some real growth — meaning the wage growth has outpaced inflation. Between 2018 and 2022, inflation-adjusted wages in the bottom 10th percentile grew nearly 17%. Twenty-fifth percentile real wages grew 12.4%.

Current Population Survey data tells a similar story. Figure 3 below shows the percentage change in wages since 2012 by decile in Colorado. The 10th decile wage grew by 30% in real terms over the past decade. Meanwhile, workers earning the median wage have only seen their wages grow by 5%.

FIGURE 3: REAL WAGE GROWTH STRONGEST AT THE BOTTOM



Although low-wage workers at the bottom 10% of income distribution may have seen real gains over the previous decade and during the recent post-pandemic business cycle, the rising cost of living is still a concern as gains for low-wage workers did not go as far as they could have without historic inflation. Further, as job growth is slowing in recent quarters, there is concern that recent gains may evaporate (Griswold, 2023; Casselman, 2023).

One recent report notes low earners across Colorado (defined as those making less than \$25,000 a year) have seen **only a 0.5 percent boost to real wages in 2023**, while those earning \$50,000 a year saw a 1.3% decrease over the year (Hallett, 2023). Growth is slowing.

In other words, low-wage workers have seen modest real wage gains when compared to middle-income earners. But these gains still fall far short of the standard for self-sufficiency.

Further, while those earning minimum wage in Colorado – especially in areas like Denver – have seen substantial real wage increases, many researchers and labor experts note this still falls short of a living wage (Newman, 2023). Advocates at the Service Employees International Union (SEIU), which represents many workers in low-wage occupations, contend that Denver's minimum wage still falls short of what workers need to make ends meet.

This is backed by data; the Colorado Center on Law and Policy publishes a self-sufficiency standard report that analyzes what a worker would need to make to adequately support themselves and a family in various areas of the state (Kucklick et al., 2022). **The hourly Self-Sufficiency Standard in Denver, at \$40.46** per hour for a family of one adult, one preschooler, and one school-aged child, is still far out of reach for a worker earning the **Denver minimum wage of \$15.87** in 2022.

Minimum Wage in Colorado

Strong Evidence Supports Minimum Wage Policies as a Tool to Promote Shared Economic Growth

A strong body of evidence shows minimum wage increases can reduce income inequality without reducing employment, while boosting consumer spending.

National data in the decade prior to the pandemic and Denver's experience since it enacted its own local minimum wage policy in 2019 shows that minimum wage can empower workers. Over the entire period from 2013 to 2019 leading up to the peak before the pandemic recession, low-end wage growth was 17.6% in states that increased their minimum wage at least once over that period, versus 9.3% in states that didn't (State of Working America Data Library, 2022). In Denver, economic outcomes since 2019 have been exceedingly positive (CDLE, 2023).

A recent meta-analysis of 37 studies over the last 15 years found no support for the proposition that minimum wage has had an important effect on unemployment in the U.S (Wolfson & Belman, 2015). Recent evidence also suggests minimum wage hikes do not lead to a spike in prices, especially small, scheduled minimum wage hikes that are indexed to inflation (MacDonald & Nilsson, 2016).



Who benefits the most from minimum wage hikes?

Raising the minimum wage will decrease poverty and increase earnings for all low-wage workers, but will disproportionately benefit workers of color and women. For example, the expansion of the federal minimum wage to cover additional industries in the 1966 Federal Labor Standards Act explained 20% of the reduction in the Black-White wage gap, without impacting employment levels (Derenoncourt & Montialoux, 2020). Analyses of the impact of a federal minimum wage boost show that women, particularly women of color and working mothers, would see their pay increase from a higher floor.

As was shown by workers' increased power as a result of pandemic policies, workers are stronger when they are not living in or on the brink of poverty. Experts have detailed the transformative potential of a \$15 an hour federal minimum wage, arguing it would not only uplift earners at the low end of wage distribution, but also bolster a middle class that has wielded less and less spending power as inflation increases (Khattar et al., 2023).

Minimum wage increases are an impactful way to reduce poverty, support increased consumer spending, and bolster local economic growth.

Spillover Benefits for All Coloradans

Research tells us minimum wage increases reduce poverty, support stronger local economies, produce increased economic development in low-wage areas, reduce crime, improve infant health, and reduce child abuse and teenage pregnancy (CBO, 2021; Bahn & McGrew, 2019; Fone et al., 2023; Komro et. al, 2016; Lenhart, 2020).

Shared Economic Growth





Stronger Infant Health



Impact on Colorado's Small Businesses

Wage boosts not only produce these listed anti-poverty benefits, but economic evidence shows they can increase consumption, which then supports local economic growth (Bahn & McGrew, 2019). One analysis from Brookings argued that a \$15 minimum wage could *help* restaurants and other hard-hit small businesses during the pandemic, and the arguments made here still hold true (Briggs & Jackson, 2021).

Another study found that even for small businesses, minimum wage hikes don't cause job losses (Wursten & Reich, 2023). In fact, a higher wage makes it easier for them to recruit workers and retain them, thus reducing turnover rates. Other research shows it **gives** workers a productivity boost (Coviello et al., 2022).



Though low-wage workers made real wage gains during the pandemic, they were not equitably shared, especially for women, women of color, and mothers. Strong minimum wage policies are not only necessary to lock in pro-worker gains, but can be powerful tools for communities recovering from inflation.

Colorado State Minimum Wage

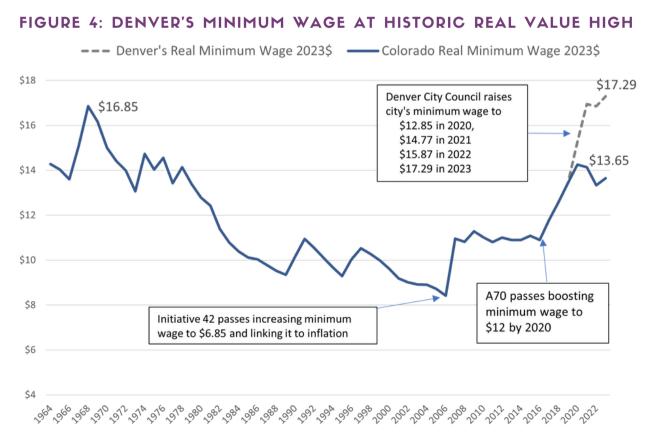
Much of Colorado's wage growth has occurred since 2017, a year after voters raised the statewide minimum wage for the second time in 10 years. In 2022, the Colorado minimum wage was \$12.56.

Colorado State Minimum Wage

In 2006, Colorado voters added Article XVIII, Section 15 to the Colorado Constitution through Initiative 42. This amendment raised the minimum wage to \$6.85 an hour from \$5.15 – also the federal level at the time – and required the minimum wage to be adjusted annually for inflation. Ten years later, Colorado voters passed Amendment 70, which raised the minimum wage to \$9.30 in 2017 from \$8.31 in 2016 and required an annual 90-cent increase until it reached \$12 in 2020. Since then it has risen with inflation each subsequent year.

Figure 4 shows the inflation-adjusted value of minimum wage since 1964. It hit its historically lowest real value in 2006 before voters passed Initiative 42. Colorado's minimum wage of \$13.65 is now worth more in real value than it has been in the last 40 years — but it's still worth three dollars less than in 1966.

Colorado's minimum wage of \$13.65 is at a real value high, **but it's still** worth three dollars less than in 1966.



Source: Nominal Minimum Wage adjusted by Denver-Boulder-Lakewood CPI using July 2023 as base year

Colorado State Minimum Wage

In 2023, Colorado had the 9th highest minimum wage of the 50 states. Increasing Colorado's minimum wage has succeeded in growing wages in the lowest paying jobs much faster than the median wage. Colorado's minimum wage was 37% of the median wage in 2001 — and in 2022, it was 52% of the median wage.

TABLE 1: COLORADO'S MINIMUM WAGE CONTINUES TO GROW COMPARED TO MEDIAN WAGE

	Median Wage Colorado	Minimum Wage Colorado	Minimum Wage to Median Wage Ratio
2001	\$14.08	\$5.15	37%
2002	\$14.46	\$5.15	36%
2003	\$14.96	\$5.15	34%
2004	\$15.39	\$5.15	33%
2005	\$15.53	\$5.15	33%
2006	\$15.82	\$5.15	33%
2007	\$16.29	\$6.85	42%
2008	\$16.87	\$7.02	42%
2009	\$17.44	\$7.28	42%
2010	\$17.68	\$7.24	41%
2011	\$17.82	\$7.36	41%
2012	\$17.84	\$7.64	43%
2013	\$18.04	\$7.78	43%
2014	\$18.28	\$8.00	44%
2015	\$18.66	\$8.23	44%
2016	\$19.09	\$8.31	44%
2017	\$19.66	\$9.30	47%
2018	\$20.34	\$10.20	50%
2019	\$21.28	\$11.10	52%
2020	\$22.26	\$12.00	54%
2021	\$23.05	\$12.32	53%
2022	\$24.16	\$12.56	52%
2023	N/A	\$13.65	

Local Wage Ordinances in Colorado

For 20 years, Colorado had a law on the books preventing cities from enacting local minimum wages above the state's level. During the 2019 legislative session, the Colorado General Assembly enacted a new statute permitting local governments to set their own jurisdiction-wide minimum wage. In November 2019, Denver City Council raised Denver's minimum wage to \$12.85 starting January 2020, \$14.77 in 2021, \$15.87 in 2022, and \$17.29 in 2023, making it the first jurisdiction in Colorado to act on the 2019 legislation lifting the ban on local minimum wage.

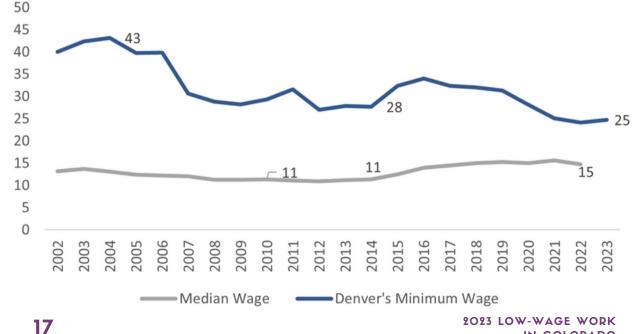
In May 2023, Edgewater became the second local government to enact a minimum wage. Edgewater City Council approved Ordinance 2023-07, which raises the minimum wage to \$15.02 in 2024, and is set to near Denver's minimum wage in future years.

Denver: Minimum Wage Historic Value and Cost of Living

The value of the minimum wage has made large gains relative to the median wage in Denver. In 2016, the median wage in Denver was \$20.26 and the minimum wage was \$8.31 — making the minimum wage 41% of the median wage. In 2022, Denver's median was \$26.01, and the minimum wage was \$15.87 — making the minimum wage 61% of the median wage.

The rising minimum wage has also outpaced the rise in rent in Denver. In 2004, a worker would need to work 43 hours a week to afford a 2-bedroom apartment in Denver. In 2021, that minimum wage worker now needs to work 25 hours to afford a 2-bedroom apartment.

FIGURE 5: HOURS WORKED TO COVER RENT AT DENVER'S MINIMUM WAGE



Denver: Minimum Wage Historic Value and Cost of Living

Rent compared to the *median* wage in the Mile High City has stayed pretty consistent — requiring 14 to 15 hours a week to cover the cost of that 2-bedroom apartment at a median wage job in both 2004 and 2020.

However, the rising cost of rent has prevented real wage gains from going as far. For example, it took 20 years for rent in Denver to double in price, between 1983 and 2003 but then only took five years to double again, between 2013 and 2018.

With how fast real wages have grown for Denverites in the bottom decile, if rent had not increased so quickly in the last five years, their dollars could go even farther.

While the rising minimum wage has outpaced the growing costs of rent in Denver for low-wage workers, rapid increases in housing costs have still eaten into gains.

Denver Policy Outcomes

As part of the 2019 bill that gave local governments in Colorado the authority to establish a local minimum wage, Colorado Department of Labor and Employment (CDLE) is required to write a report regarding local minimum wage laws in Colorado, including economic impact on jobs, earnings, and sales tax revenue in the localities with a higher minimum wage compared to neighboring jurisdictions without one (CDLE, 2023).

When Denver's minimum wage was raised, the initial CDLE report had to rely on limited data that was also impacted by the pandemic. However, now that Edgewater recently passed a minimum wage ordinance, CDLE was mandated to update that report with better data.

This updated version found that three years after raising Denver's minimum wage, common arguments made by opponents of minimum wage increases were unfounded.

Denver Policy Outcomes

Employment

With a higher minimum wage, Denver's unemployment rate was lower than the rest of the state, including in comparable jurisdictions (CDLE, 2023). Denver's unemployment was 5.45% in 2021 compared to 5.9% in the rest of Colorado. As the report states, "Overall, in both 2021 and 2022, as Denver's minimum wage rose significantly, its unemployment rate dropped more than any comparator jurisdiction's."

After raising its minimum wage, Denver outpaced the rest of the state in jobs, earnings growth, and sales tax revenues.

Weekly Earnings

Denver's average weekly wage growth outpaced the rest of Colorado **and** comparable jurisdictions in each of the first three years since its local minimum wage took effect. In 2020, 2021, and 2022, weekly wages in comparable jurisdictions across Colorado remained stagnant or fell, but weekly wages in Denver grew faster than the rest of the state and comparator jurisdictions.

Sales Taxes

With a higher minimum wage, Denver's sales tax collections grew more than the rest of the state and comparable jurisdictions. Between 2020 to 2022, Denver's per capita sales tax revenues at restaurants and bars increased by 85%, which was double the sales tax increase in Colorado as a whole and comparable cities.

With a strong minimum wage policy, Denver bars and restaurants not only recovered quickly despite being hit harder than the rest of the the state during the COVID -19 pandemic, but experienced "more spending — and more growth in spending — at restaurants and bars than Comparable Cities and Counties and the state as a whole" (CDLE, 2023).

Denver Wage Theft and Minimum Wage Implementation

CFI has previously highlighted the harms of wage theft across the state; our research estimates that over \$728 million in wage theft occurs annually in Colorado and nearly 440,000 low-wage workers experience wage theft every year (Jalali & Stiffler, 2022). Workers of color and women were most likely to experience wage theft, but we all lose out in the end; over \$45 million is lost annually in forgone tax revenue when wage theft occurs.

Researchers have noted stolen labor not only strips workers of fair pay and dignity, but the income insecurity generated when enforcement falls short can also exacerbate existing adverse health impacts of low-wages (Gerstein, 2021). High rates of wage theft can escalate many issues already facing Colorado such as homelessness and hunger, as well as decreasing mobility, ability to afford basic living expenses, or ability to pay for essential healthcare and child care.

Denver's beefed up wage theft enforcement has made it clear that wage theft is a pervasive issue, and low-wage workers are already benefiting from Denver Labor's increased capacity to enforce the law.

An important component of the 2019 Denver wage ordinance beefed up enforcement so that the Denver Auditor can ensure employers are in compliance with the statute; the auditor was charged with collecting and investigating suspected violations. The city increased enforcement even more in 2023, with the Civil Wage Theft Ordinance, Council Bill 22-1614, which created additional penalties and enforcement provisions for civil wage theft in Denver.

While a more robust analysis of multi-year data is needed, now that Denver is finally adding teeth to its program, it's clear that wage theft is a pervasive issue; and low-wage workers are already benefiting from Denver Labor's increased capacity to enforce the law. In 2022, Denver Labor recovered more than \$1 million for underpaid workers, which already exceeded previous annual records. In the first half of 2023, \$1,479,453 in stolen wages had already been recovered for employees across Denver (Denver Labor, 2023). Other localities should consider a similar ordinance to ensure that all Coloradans who have fallen victim to stolen wages are made whole.

Adjusting for Cost of Living

Counties around Denver and Colorado's ski towns are all in need of adjusting their minimum wage laws to keep up with their cost of living. For example, in 2021, if you'd adjust for the cost of living in Pitkin County (Aspen), the statewide minimum wage of \$12.32 should have been \$16.04. Table 2 shows how a minimum wage should be set to match the real value of Denver's in each Colorado county.

TABLE 2: ADJUSTING FOR COST OF LIVING ACROSS COUNTIES

County	Minimum Wage 2023	2023 Wage that is Equivalent to Denver's Minimum Wage Based on County Cost of Living
ADAMS	\$13.65	\$16.52
ALAMOSA	\$13.65	\$14.56
ARAPAHOE	\$13.65	\$16.45
ARCHULETA	\$13.65	\$15.60
BACA	\$13.65	\$13.86
BENT	\$13.65	\$13.88
BOULDER	\$13.65	\$16.77
BROOMFIELD	\$13.65	\$16.61
CHAFFEE	\$13.65	\$15.97
CHEYENNE	\$13.65	\$14.02
CLEAR CREEK	\$13.65	\$16.18
CONEJOS	\$13.65	\$14.33
COSTILLA	\$13.65	\$14.64
CROWLEY	\$13.65	\$14.63
CUSTER	\$13.65	\$15.51
DELTA	\$13.65	\$15.31
DENVER	\$17.29	\$17.29
DOLORES	\$13.65	\$14.92
DOUGLAS	\$13.65	\$16.71
EAGLE	\$13.65	\$17.30
EL PASO	\$13.65	\$16.29
ELBERT	\$13.65	\$15.97
FREMONT	\$13.65	\$15.37

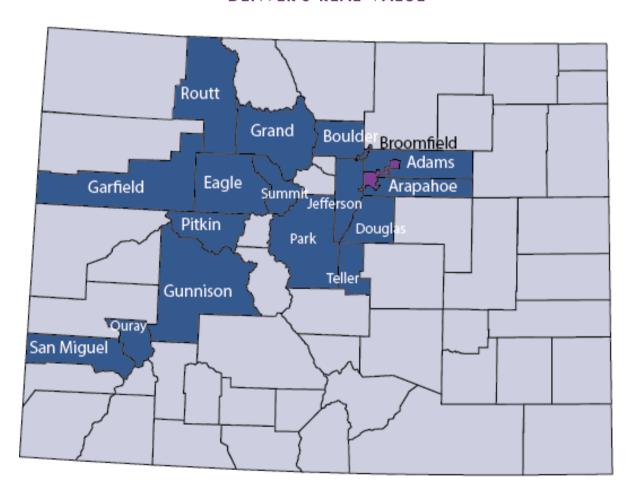
GARFIELD	\$13.65	\$17.05
GILPIN	\$13.65	\$15.80
GRAND	\$13.65	\$16.62
GUNNISON	\$13.65	\$16.44
HINSDALE	\$13.65	\$15.59
HUERFANO	\$13.65	\$14.94
JACKSON	\$13.65	\$15.10
JEFFERSON	\$13.65	\$16.55
KIOWA	\$13.65	\$14.19
KIT CARSON	\$13.65	\$14.58
LA PLATA	\$13.65	\$16.22
LAKE	\$13.65	\$15.80
LARIMER	\$13.65	\$15.91
LAS ANIMAS	\$13.65	\$14.54

Based on each county's unique cost of living, Table 2 shows how a minimum wage should be set to match the real value of Denver's.

LINCOLN	\$13.65	\$14.78
LOGAN	\$13.65	\$14.78
MESA	\$13.65	\$14.91
MINERAL	\$13.65	\$14.73
MOFFAT	\$13.65	\$16.04
MONTEZUMA	\$13.65	\$15.14
MONTROSE	\$13.65	\$15.46
MORGAN	\$13.65	\$15.23
OTERO	\$13.65	\$13.85
OURAY	\$13.65	\$16.49
PARK	\$13.65	\$16.67
PHILLIPS	\$13.65	\$14.35
PITKIN	\$13.65	\$20.03
PROWERS	\$13.65	\$14.12
PUEBLO	\$13.65	\$15.46

RIO BLANCO	\$13.65	\$14.67
RIO GRANDE	\$13.65	\$14.54
ROUTT	\$13.65	\$17.25
SAGUACHE	\$13.65	\$14.61
SAN JUAN	\$13.65	\$15.86
SAN MIGUEL	\$13.65	\$16.72
SEDGWICK	\$13.65	\$14.25
SUMMIT	\$13.65	\$17.79
TELLER	\$13.65	\$16.48
WASHINGTON	\$13.65	\$14.70
WELD	\$13.65	\$15.96
YUMA	\$13.65	\$14.54

FIGURE 6: COUNTIES WHOSE MINIMUM WAGE IS AT LEAST 20% BELOW DENVER'S REAL VALUE



What's Next for Other Counties?

Figure 6 shows which Colorado counties have minimum wages that are at least 20% below Denver's real value based on their unique cost of living. Mountain and resort communities are especially affected by lower minimum wages, as their cost of living is so high. Workers in those communities especially struggle to afford the increased cost of housing, transportation, and childcare.

Notably, the analysis above indexes each current wage to the "Denver equivalent" based on cost of living, but does not indicate the standard for self-sufficiency or what's necessary to promote economic vitality in each county.

For localities, like Boulder, considering an increase in their local minimum wage, proposed changes are very modest and would not necessarily produce sizeable market shifts upon implementation, but would serve to lock in this growth.



What's Next for Other Counties?

On November 2nd, 2023, Boulder County Commissioners will vote to increase the minimum wage to \$15.69 in unincorporated Boulder County beginning in 2024. The Boulder County Commission's proposal would increase the regional wage to 15% above Colorado's 2023 minimum wage starting in 2024.

The City of Boulder itself, along with Longmont, Louisville, Lafayette, and Erie, has opted to wait until 2025 to even consider joining the rest of the County (Castle, 2023).

Without any local policy intervention of this sort, since 2018, we've seen real wages go up by 20% for the lowest 10% of the wage distribution in Boulder County, as shown in Figure 7. In fact, the proposed \$15.69 boost is actually two cents lower than the average 2022 real wage for the lowest 10% of workers in Boulder County, which sat at \$15.71. Boulder has seen the biggest real wage growth at the bottom compared to Denver and a number of other localities across the state. In order to preserve these gains since 2018 and catch up to self-sufficiency standards, minimum wage policies are still critical.

Though counties like Boulder may be seeing strong wage growth at the bottom, inflation and the increased cost of living still don't put low-wage earners at self-sufficiency standards, and policy interventions like increasing the minimum wage and enforcing wage theft laws are still recommended.



Policy Recommendations

In a post-pandemic labor market that forced employers to step up their game and pay workers closer to their true value, Coloradans earning lowwages have seen real wage gains.

To ensure that many of the frontline workers who played a pivotal role in our state's robust economic recovery can continue to support their families, sustained policy actions can boost the economy for everyone, and to "lock in the gains made by low-wage workers" (Gould & deCourcy, 2023).

While current law caps the number of localities in the state that can enact local minimum wage ordinances at 10%, currently only Denver and Edgewater have taken advantage of the state law allowing for local wage ordinances (Colorado Revised Statutes, 2019). This means an additional 31 localities can enact their own minimum wage laws, but haven't yet (CDLE, 2023).

As we transition away from the COVID-19 labor market, what goes up may come back down. Strong labor standards, such as a higher minimum wage and robust enforcement of existing wage laws, can prevent workers from facing economic hardship when the labor market inevitably weakens.



Policy Recommendations

Seeing Denver's gains for workers, business, and sales tax revenue should encourage localities to take action. They could also follow Denver's lead by ensuring strong enforcement of the laws they already have on the books by investing in their wage theft and minimum wage enforcement regimes. Evidence tells us this will promote family economic security, support public health, and bolster consumer demand in economies across the state (Gernstein, 2021).

Setting a higher bar for those earning low-wages helps not only those at the bottom end of the distribution, but it also builds a more equitable economy for all. These policies can ensure rising inflation and the lack of federal action on minimum wage won't push us back into the status quo: a labor market stacked in favor of big corporations and against the interest of Colorado's working families.

Only intentional policy action centering those at the bottom end of the wage distribution can ensure continued economic growth across the state. Minimum wage increases are a sustainable path towards closing the remaining gap between productivity growth and wage growth, and combating the threat of inflation catching up with incomes as wage growth slows.

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Appendix: Cost of Living

Denver's annual average cost of living for 2023 was \$72,467 based on the cost of living data reported in Colorado Legislative Council Staff 2021 School District Cost-of-Living Study.

Because the School District Cost-of-Living Study reports 2021 cost of living, cost of living for the state and all counties increases 14.7% to put the cost into 2023 dollars based on the Denver-Aurora-Lakewood CPL.

Accordingly, statewide, the minimum wage comes to \$1.00 per hour for every \$4,191.29 in annual cost of living (i.e., $$72,467 \div $17.29 = $4,191.29$). For each Colorado county, Table 2 shows what wage would correspond to Denver's wage value using the ratio of \$1.00 per hour for every \$4,191 in annual cost of living.

Broomfield's data was calculated by averaging Boulder, Jefferson, and Adams Counties wage equivalent. For example, Boulder's minimum wage should be \$16.77 in 2023, instead of the state minimum of \$13.65, if it were to have the same real value of Denver's minimum wage.

