



Legislative Council Staff

Nonpartisan Services for Colorado's Legislature

Room 029 State Capitol, Denver, CO 80203-1784

Phone: (303) 866-3521 • Fax: (303) 866-3855

lcs.ga@state.co.us • leg.colorado.gov/lcs

Memorandum

February 11, 2021

TO: Interested Persons

FROM: Elizabeth Ramey, Principal Economist, 303-866-3522

SUBJECT: Income Inequality in Colorado and COVID-19 Impacts

Summary

This memo provides an overview of data on income inequality in Colorado and the economic impacts of the COVID-19 pandemic by income and other demographic characteristics. This memo uses new sources of publicly available high-frequency data from the U.S. Census Bureau and private companies to examine how the pandemic's effects have been distributed among Colorado's diverse households. Available data suggest the following:

- Prior to the pandemic, income inequality in Colorado had been increasing.
- Lower-wage workers and lower-income households have been disproportionately impacted by pandemic-related economic and other losses.
- Workers' and households' experiences have been uneven across different groups, with younger, female, Hispanic or Latinx, non-white, and less-educated Coloradans and Colorado households with children more likely to experience adverse economic and other impacts.
- Some of these gaps have narrowed during the economic recovery since April 2020, but are sensitive to the trajectory of the virus and have begun widening again in recent months.

Contents

Summary	1
Income Inequality	1
COVID-Era Impacts	3

Income Inequality in Colorado

Measures of inequality. There are several different ways of measuring income inequality. The Gini Coefficient, which summarizes the dispersion of income in an economy, is one of the most widely used measures of income inequality. It ranges from the theoretical cases of 0, or perfect equality (everyone has the same income) to 1, or perfect inequality (1 person earns 100 percent of the income). Another widely used measure is the concentration of income, or the share of income held, by top income groups. Inequality may also be examined by looking at dispersion or concentration of wealth or consumption, but income-based measures of inequality are the most widely used as income data

are regularly collected and updated by state and federal departments of revenue, as well as the U.S. Census Bureau.

Historical trends. Prior to the onset of the pandemic and related economic crisis in 2020, income inequality in both the U.S. and Colorado had been increasing for several decades, reflecting a trend across nearly all advanced and many emerging economies worldwide. High earners in the U.S. have seen their share of income and wealth grow steadily, while the average real wage of nonsupervisory workers has remained largely stagnant for over 40 years, even in the midst of the longest economic expansion in U.S. history, spanning from mid-2009 through early 2020.

Figure 1
Top 10 Percent Income Share

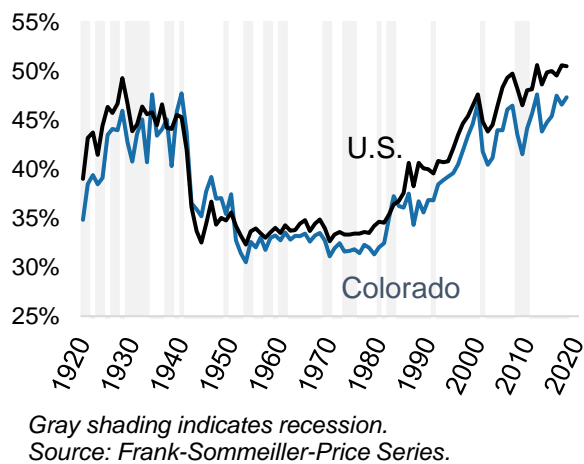


Figure 1 shows the income shares of the top 10 percent of earners for the U.S. and Colorado from 1920 to 2018. By this measure, income inequality reached a pre-World War II-peak nationally in 1928, at 49 percent, and in Colorado in 1940, at 48 percent before declining sharply. For roughly the next three decades, the post-war period saw substantial economic growth along with generally shared prosperity, with the income share of the top 10 percent stabilizing at near 30 percent of total income across households. Economic growth began to slow, and income inequality to rise again in the early 1980s, with income shares of the top 10 percent reaching or exceeding previous highs, at just over 50 percent of income nationwide, and 47 percent in Colorado in 2018, the most recent year for which data are available.¹

Also indicated by Figure 1, the past two recessions have briefly halted the trend toward increased inequality, although this has not always been the case. Income shares of the top 10 percent retrenched following both the bursting of the Dot-Com bubble in 2001 and the Great Recession of 2007-09, as both saw stock market-based income, concentrated among top income-earners, evaporate. In both cases, however, the recovery saw the incomes of the top earners rebound much more quickly than those of the bottom 90 percent, so that income inequality quickly resumed its ascent.

Recent measures: How does Colorado compare? According to the most recent data available, from 2018, Colorado has a slightly more equal distribution of income by various measures than the nation as a whole, but is ranked relatively unequally among the fifty states. At 47 percent, Colorado's top 10 percent share of income is just above the 50-state average, and ranks 20th highest, just behind Alabama and ahead of Missouri. State shares of the top 10 percent range from Florida's 63 percent to Alaska's 34 percent. In addition to Florida, top shares belong to high earners in Nevada, New York, Massachusetts, and Connecticut. As shown in Table 1, at 19 percent, Colorado ranks in the 70th percentile for the top one percent income share, just below the nationwide share of 22 percent, but above the 50-state average of 18 percent. In terms of its Gini coefficient, Colorado's is the fifteenth

¹ Income shares in 2012 and 2013 are likely distorted by a spike in capital gains realized in 2012 ahead of rates increases in 2013, which inflated the 2012 share then depressed the 2013 share, accounting for part of the fluctuation in those years.

most unequal at 0.62 and just below the U.S.'s 0.63. Just under 2 percent of the nation's millionaires reside in Colorado, or the sixteenth most among the fifty states.

Table 1
Top 1 Percent Income Share

Rank	State	Percent	Rank	State	Percent	Rank	State	Percent
1	Florida	32.1	18	Missouri	16.8	35	Ohio	16.0
2	Nevada	30.8	19	Utah	16.7	36	Maryland	15.8
3	New York	29.4	20	Pennsylvania	16.7	37	Montana	15.8
4	Connecticut	26.2	21	South Dakota	16.6	38	Delaware	15.5
5	Massachusetts	25.2	22	New Hampshire	16.6	39	Oklahoma	15.3
6	Wyoming	24.6	23	North Carolina	16.5	40	Indiana	14.5
7	California	23.5	24	Minnesota	16.5	41	New Mexico	14.3
8	Illinois	22.5	25	Kentucky	16.0	42	Vermont	14.2
9	Texas	21.3	26	South Carolina	16.8	43	North Dakota	14.2
10	Arkansas	20.7	27	Kansas	16.7	44	Nebraska	14.1
11	Washington	20.0	28	Oregon	16.7	45	Mississippi	14.0
12	Tennessee	19.6	29	Rhode Island	16.6	46	Maine	13.5
13	Michigan	19.3	30	Virginia	16.6	47	Iowa	13.0
14	Georgia	19.3	31	Idaho	16.5	48	West Virginia	12.3
15	Colorado	19.2	32	Wisconsin	16.5	49	Hawaii	11.6
16	New Jersey	19.2	33	Louisiana	16.0	50	Alaska	10.4
17	Arizona	19.0	34	Alabama	16.0		U.S.	22.0

Source: Frank-Sommeiller-Price Series available at: https://www.shsu.edu/eco_mwf/inequality.html.

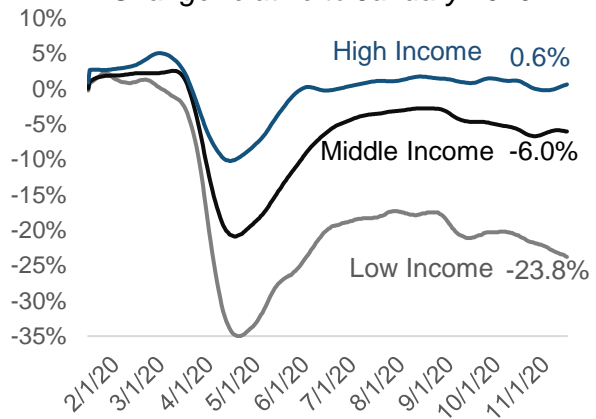
COVID-Era Impacts

A K-Shaped recovery. By transferring income to higher-income households, which tend to have higher savings rates, rising inequality dampens overall spending and growth in gross domestic product (GDP) in the economy. In addition, the more lower-income households struggle to meet basic needs, the less they are able to develop their skills and productive capacity, leading to lost potential output and dampened productivity growth. Not only does rising inequality dampen economic and productivity growth, it also increases the economy's vulnerability to shocks such as the twin health and economic crises spurred by the COVID-19 pandemic. Available data suggest that low-income populations have greater exposure to the health and economic risks associated with the pandemic, making them more likely to suffer the loss of jobs, income, health, and well-being. This, in turn, contributes to a further rise in inequality. While certain industries and populations continue to struggle to recover from the economic collapse early in the pandemic, others have rebounded fairly quickly, a phenomenon known as a "K-shaped" recovery.

Employment impacts of the COVID-19 recession. A key driver of this K-shaped divergence of fortunes is that job losses have been concentrated in virus-sensitive industries, largely related to in-person services that disproportionately employ low-wage workers. This asymmetry is expected to continue to plague these sectors until the pandemic is firmly under control.

As shown in Figure 2, data on changes in employment by income from Opportunity Insights, a research and policy institute based at Harvard University, indicate a significant gap in employment losses between high- and low-income workers (those earning more than \$60,000 per year and those earning less than \$27,000 per year). Total employment declined by 6.6 percent in Colorado and by 5.6 percent in the U.S. between January 2020 and November 15, 2020, the latest date for which data are available. This is similar to the decline experienced by middle-income workers. While the rapid recovery of low-wage employment early in the recovery helped narrow the gap initially, low-income workers' gains stagnated, reaching a post-collapse high in July 2020, down 17.3 percent compared to January 2020, before resuming a decline. Employment of low-income workers was down by 23.8 percent in November 2020. High-income workers saw their employment recover to pre-pandemic levels by June 2020, and in November their employment was slightly above where it was when the pandemic began.

Figure 2
Change in Colorado Employment
Change relative to January 2020



Source: Opportunity Insights Economic Tracker.

While we lack detailed demographic data on these workers from Opportunity Insights, Table 2 shows the demographic characteristics of workers in the hardest-hit industries. Between February 2020 and April 2020, the accommodations and food services, health care and social assistance, and arts, entertainment, and recreation sectors together lost 202,300 jobs, or 59 percent of the 342,300 total jobs lost in Colorado over this period. With the exception of state and local governments, these sectors remained the biggest job losers (in terms of numbers of jobs lost) through December 2020. As of December 2020, employment in the hardest hit sectors is down 25 percent, 5 percent, and 33 percent, respectively, compared to year-ago levels. As shown in Table 2, compared to the statewide average for all jobs, the most-impacted industries pay lower wages on average, and workers in those industries are more likely to be younger, female, Hispanic or Latinx, non-white, and without a college degree.

Household experiences during COVID-19. The Census Bureau's Household Pulse Survey is the most comprehensive source of high-frequency data available on households' experiences during the coronavirus pandemic. The survey was developed and launched in April 2020. It is now in its third phase, which began October 28, 2020, with slight changes to the questionnaire and frequency of data collection during each phase. Although the data are comprehensive and near real-time, the small sample size means a relatively high margin of error when responses are extrapolated to produce statewide estimates. The data across phases may not be directly comparable, so the ability to construct time series is limited.

**Table 2
Demographic Characteristics of Colorado Workers**

	All Industries	Top 3 Impacted Industries	Accommodation and Food Services	Health Care and Social Assistance	Arts, Entertainment, and Recreation
Total Workers	2,666,275	691,730	280,473	344,852	66,405
Percent of Total Workers		25.9%	10.5%	12.9%	2.5%
Average Monthly Earnings	\$5,152		\$2,261	\$4,511	\$2,649
Workers by Age					
14-24	11.8%	18.5%	30.1%	8.6%	21.5%
25-54	46.3%	51.3%	55.9%	48.9%	44.7%
55-64	35.4%	24.0%	8.6%	36.0%	26.6%
65+	6.5%	6.2%	5.4%	6.6%	7.1%
Workers by Sex					
Female	48.4%	63.7%	51.3%	76.7%	48.7%
Male	51.6%	36.3%	48.7%	23.3%	51.3%
Workers by Race and Ethnicity					
Hispanic or Latino	18.6%	20.3%	23.9%	18.9%	12.3%
White Alone	70.6%	67.2%	61.9%	69.2%	79.7%
Black or African American Alone	4.5%	5.3%	5.4%	5.7%	3.0%
Asian Alone	3.7%	4.2%	5.5%	3.7%	2.0%
Other/Multiracial*	2.5%	2.9%	3.3%	2.5%	2.9%
Workers by Educational Attainment**					
Less than high school	13.7%	15.3%	14.5%	11.3%	9.8%
High school or equivalent, no college	25.4%	26.0%	20.3%	22.0%	20.4%
Some college or Associate degree	31.4%	32.3%	21.0%	31.0%	24.8%
Bachelor's degree or advanced degree	29.6%	26.4%	14.1%	27.2%	23.5%

Source: U.S. Census Bureau, Center for Economic Studies, not seasonally adjusted.

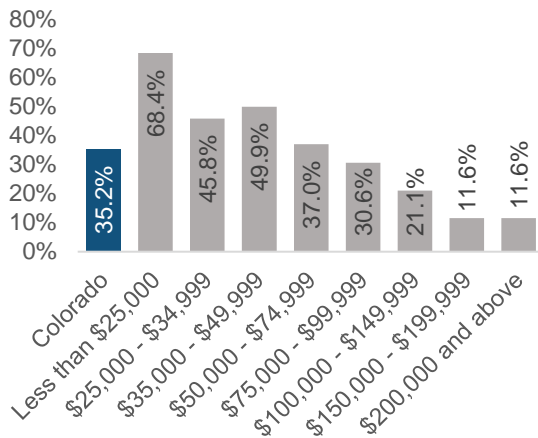
* "Other" races include American Indian, Alaska Native, Native Hawaiian, or Pacific Islander.

** Workers age 25 and over.

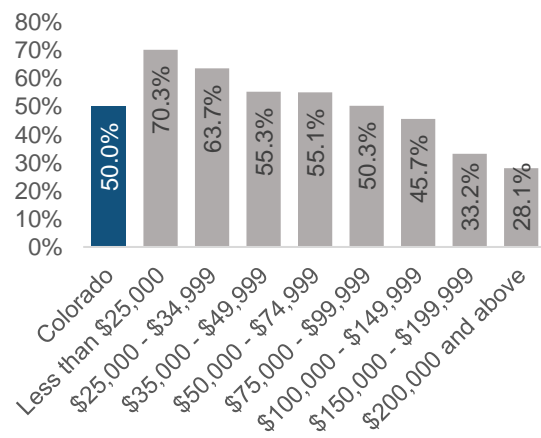
As is the case for the nation as a whole, the Household Pulse data indicate that the pandemic has caused widespread distress along several dimensions of Colorado households, and that the burden is distributed unevenly, with lower-income households experiencing the greatest impacts. By income level, Figure 3 shows various measures of Colorado households' experiences during the COVID-19 pandemic. Over one-third of Colorado adults live in households experiencing difficulty paying usual household expenses, and have felt nervous, anxious, or on edge most of the time; half have experienced a loss of employment income since March 2020; and almost half have experienced a shift toward telework. Compared to the statewide average, lower-income households are more likely to report experiencing difficulty paying household expenses (top left), experiencing loss of employment income since March 2020 (top right), experiencing symptoms of anxiety (bottom right), and being less likely to telework (bottom left).

Figure 3
Household Experiences During COVID-19

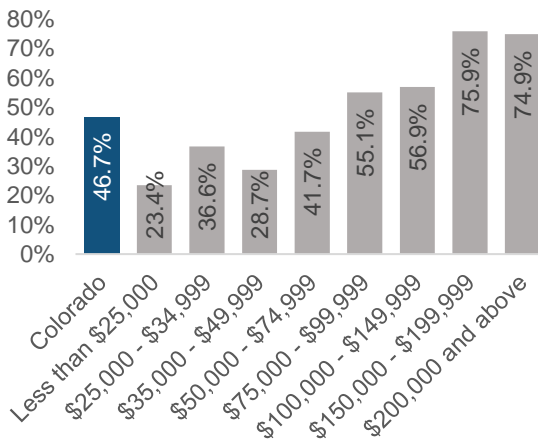
Ability to Pay Usual Household Expenses



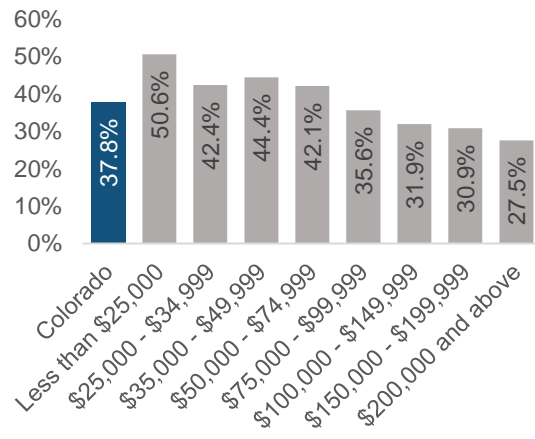
Experienced Loss of Employment Income



Substituted In-Person Work for Telework



Experienced Symptoms of Anxiety



Source: Legislative Council Staff calculations based on data from the U.S. Census Bureau, Household Pulse Survey. Average of data collected November 25, 2020 through December 7, 2020 and December 9 through 21, 2020.

Table 3 presents Colorado household experiences during the coronavirus pandemic by demographic characteristics. In general, Colorado households have fared better than the nation as a whole. However, these experiences differ among demographic groups. Compared to the statewide average, people experiencing economic and mental health distress are more likely to be younger; Hispanic or Latinx; black or African American, other, or multiracial; without a college degree; or living in households with children.

Table 3
Colorado Household Experiences by Demographic Characteristic
Share of Respondents

		Employment¹	Food²	Rent³	Expenses⁴	Telework⁵	Anxiety⁶	Depression⁷	
U.S.		49.5%	13.2%	19.4%	36.6%	37.4%	35.2%	24.1%	
Colorado		50.0%	10.9%	18.0%	35.2%	46.7%	37.8%	22.8%	
Age						Age			
	18 - 24	61.8%	6.6%	14.1%	44.5%	53.1%	18 - 29	54.2%	36.7%
	25 - 39	59.5%	18.0%	16.3%	42.5%	55.8%	30 - 39	46.4%	27.7%
	40 - 54	52.3%	12.2%	19.5%	38.1%	56.3%	40 - 49	39.9%	24.6%
	55 - 64	47.7%	6.6%	35.0%	31.9%	40.5%	50 - 59	28.9%	15.4%
	65+	27.3%	2.7%	10.4%	18.0%	18.7%	60 - 69	28.3%	13.7%
							70 - 79	17.9%	10.6%
							80+	32.0%	24.1%
Sex									
	Male	50.2%	10.9%	18.5%	34.0%	47.6%		34.8%	21.2%
	Female	49.8%	10.8%	17.7%	36.4%	45.9%		40.8%	24.3%
Race and Ethnicity									
	Hispanic or Latino (any race)	64.5%	23.9%	30.9%	50.7%	36.5%		42.9%	23.2%
	White	45.2%	7.6%	12.0%	29.9%	48.9%		37.2%	22.6%
	Black or African American	57.5%	14.0%	35.8%	61.1%	56.6%		26.8%	23.2%
	Asian	58.5%	4.6%	5.2%	28.7%	57.7%		29.9%	24.7%
	Other/Multiracial⁸	52.4%	13.0%	25.0%	44.6%	41.7%		39.0%	23.4%
Education									
	Less than high school	45.2%	40.6%	32.2%	60.7%	16.1%		42.7%	21.7%
	High school or equivalent, no college	57.7%	14.1%	26.2%	46.5%	27.6%		35.3%	25.2%
	Some college or Associate degree	55.3%	15.1%	19.5%	42.0%	45.0%		43.6%	28.0%
	Bachelor's degree or higher	41.2%	3.7%	6.7%	19.4%	64.5%		34.4%	17.7%
Children Under 18									
	Children in household	33.8%	16.2%	21.4%	44.0%	51.1%		40.3%	24.5%
	No children	28.3%	7.9%	16.3%	30.1%	44.1%		36.5%	21.9%

Source: LCS calculations from U.S. Census Bureau, Household Pulse Survey; Average of data collected November 25–December 7 and December 9–21, 2020.

¹ Experienced loss of employment income since March 2020.

² Sometimes or often not enough to eat in the previous seven days.

³ Not caught up on rent payments.

⁴ Somewhat or very difficult to pay usual household expenses in the previous seven days.

⁵ At least one adult in the household substituted some or all in-person work for telework because of the coronavirus pandemic.

⁶ Felt nervous, anxious, or on edge most of the time during the previous seven days.

⁷ Felt down, depressed, or hopeless most of the time during the previous seven days.

⁸ "Other" races include American Indian, Alaska Native, Native Hawaiian, or Pacific Islander.