

DENVER WORKERS IN MINIMUM & LOW-WAGE JOBS

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In recent years, more than 40 cities and counties across the U.S. have set higher local minimum wages to better help workers in their communities get ahead economically. Rigorous economic analyses of these local minimum wage laws show they boost earnings without having significant negative effects on employment. The Colorado General Assembly is considering a bill (HB19-1210) to repeal the current law prohibiting local governments from setting a minimum wage higher than the state minimum wage. Our research shows:

- A higher local minimum wage in Denver would likely help 116,183 workers
- Greater proportions of these workers are people of color, women, and less educated compared to all workers
- A greater proportion of these workers live at or below 200 percent of the federal poverty level (FPL), compared to Denver workers overall

To better understand the types of workers who would most likely be affected by changes in Denver's local minimum wage to \$15 per hour, we analyzed data from the U.S. Census Bureau's 2017 American Community Survey (ACS).ⁱ To conduct our analysis, we define workers in low-wage jobs as those making between the 2016 tipped wage and the 2017 minimum wage (\$5.29-\$9.29) and define workers in affected minimum wage jobs as those making between \$9.30 and \$14.99. We used the 2016 tipped and 2017 minimum wage to capture a larger group of people, as there were a few hundred observations identified as making more than zero dollars, but below the 2017 tipped wage. In defining these measures, we focused on all workers who were working at least 20 hours per week.

	Low-Wage Jobs	Minimum Wage Jobs	Minimum or Low-Wage Jobs
Hourly Wages	\$5.29-9.29 ⁱⁱ	\$9.30-14.99 ⁱⁱⁱ	\$5.29-14.99
Hours Per Week	20+	20+	20+
Number of People	38,283	77,900	116,183

After calculating the number of people who could be affected by a local minimum wage law in Denver, we did a more thorough analysis of who is in this group. Below are proportional breakdowns by age, race, Hispanic origin, sex, educational attainment, Federal Poverty status, and occupational category, for low- and minimum wage workers. We also compare these workers to the entire population working at least 20 hours per week (all workers).

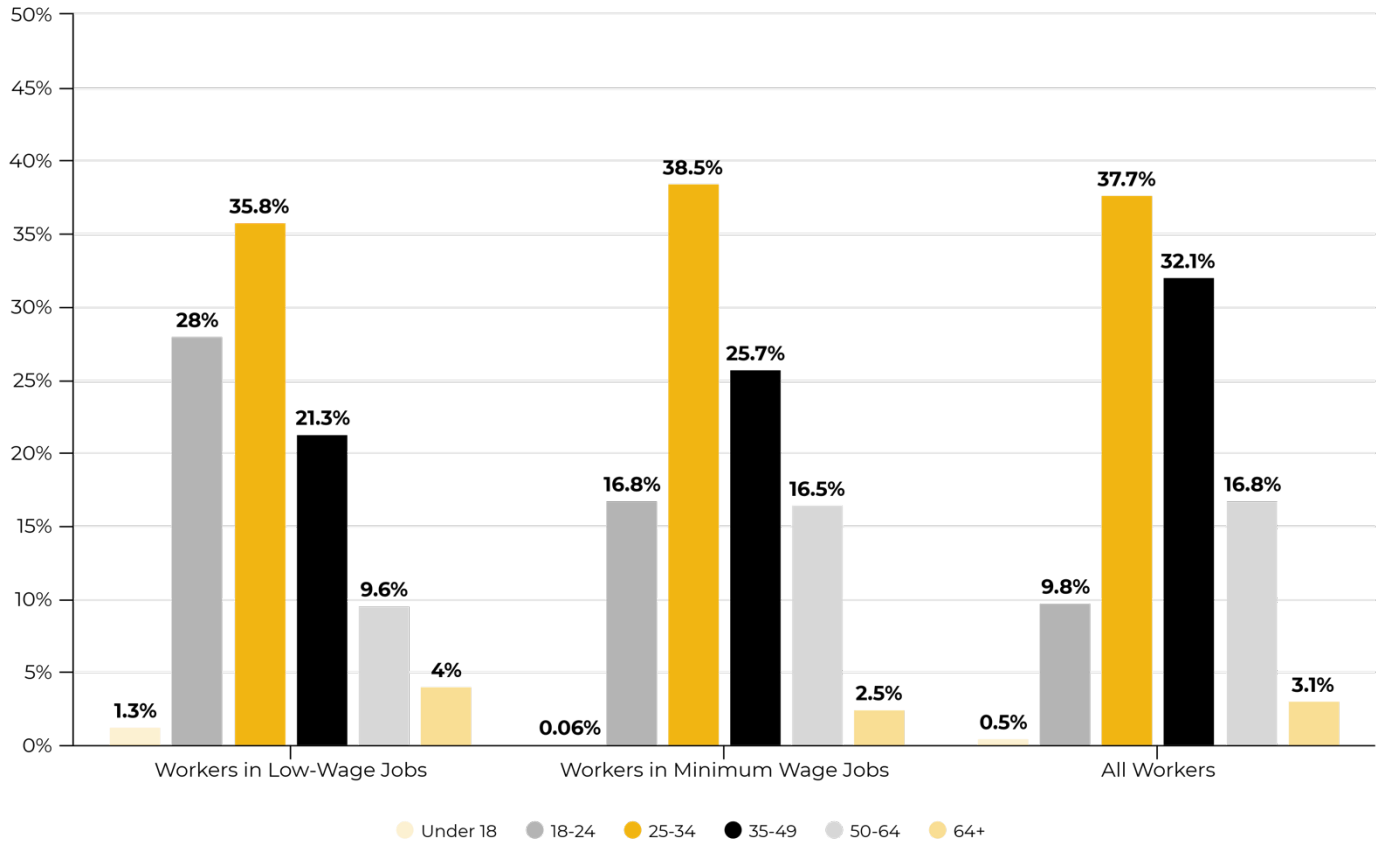
Number & Demographics of Denver Workers in Low-Wage or Minimum Wage Jobs in 2017

In 2017, there were 116,183 Denver workers working at least 20 hours per week and making less than 15 dollars per hour. Of these, 38,283 were in low-wage jobs (between the 2016 tipped wage and the 2017 minimum wage, \$5.28-\$9.29) and 77,900 were in minimum wage jobs (\$9.30 to \$14.99). About 77 percent of the sample were workers in minimum wage jobs, and 23 percent were in low-wage jobs. Although wages for this group might have risen over the last two years, 2017 is the most recent year these local wage data are available. These data give us a loose approximation of the population in Denver currently earning within this range, which is the population that could potentially be affected by a local minimum wage law of \$15 per hour taking effect in Denver.

Age

Denver workers under the age of 18 and between the ages of 18 and 34 (considered prime working years) are overrepresented in minimum and low-wage jobs compared to all workers. Those between 18 and 24 are particularly overrepresented, by over 18 percent in low-income jobs and 7 percent in minimum wage jobs.

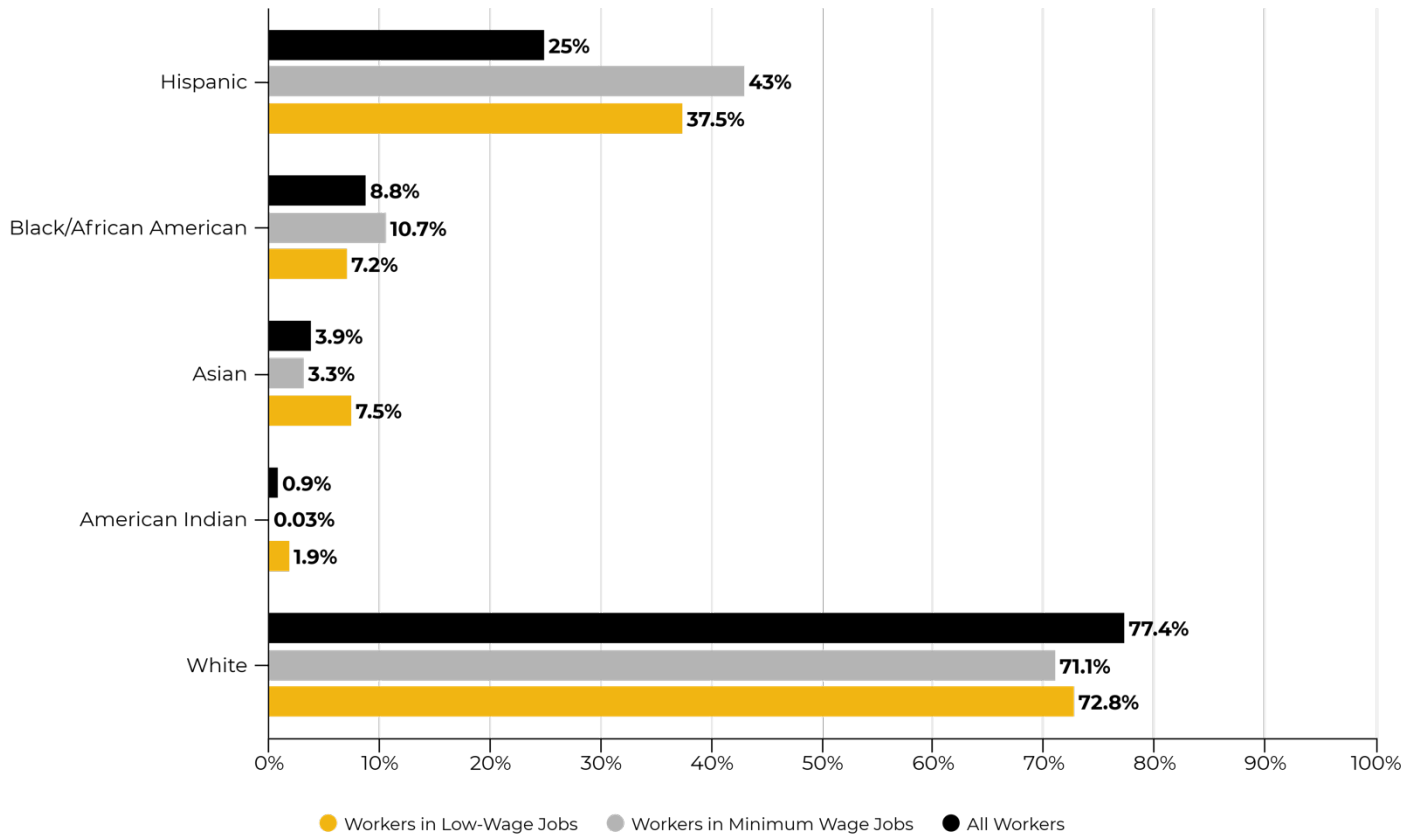
Figure 1: Workers in Minimum & Low-Wage Jobs Compared to All Workers, By Age



Race & Ethnicity

People of color, specifically Hispanic/Latinx workers, are overrepresented in low-wage jobs (about 38 percent) and minimum wage jobs (43 percent) compared to their representation in all jobs (just 25 percent). The majority of Denver workers are white. (Note: Hispanic individuals may be of any race.)

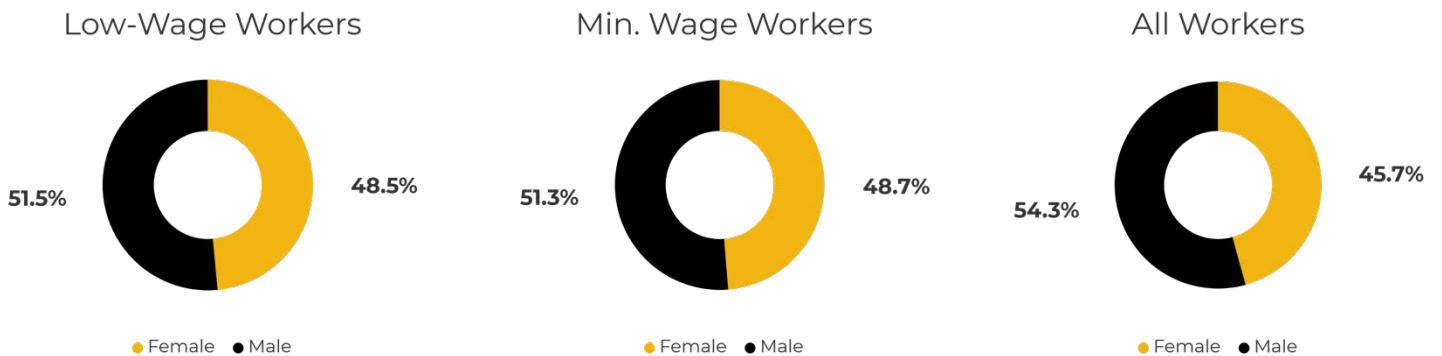
Figure 2: Workers in Minimum & Low-Wage Jobs Compared to All Workers, By Race & Ethnicity



Gender

While there are fewer women than men among Denver workers, women are overrepresented, and men are underrepresented among both workers in low-wage and minimum wage jobs compared to all workers.

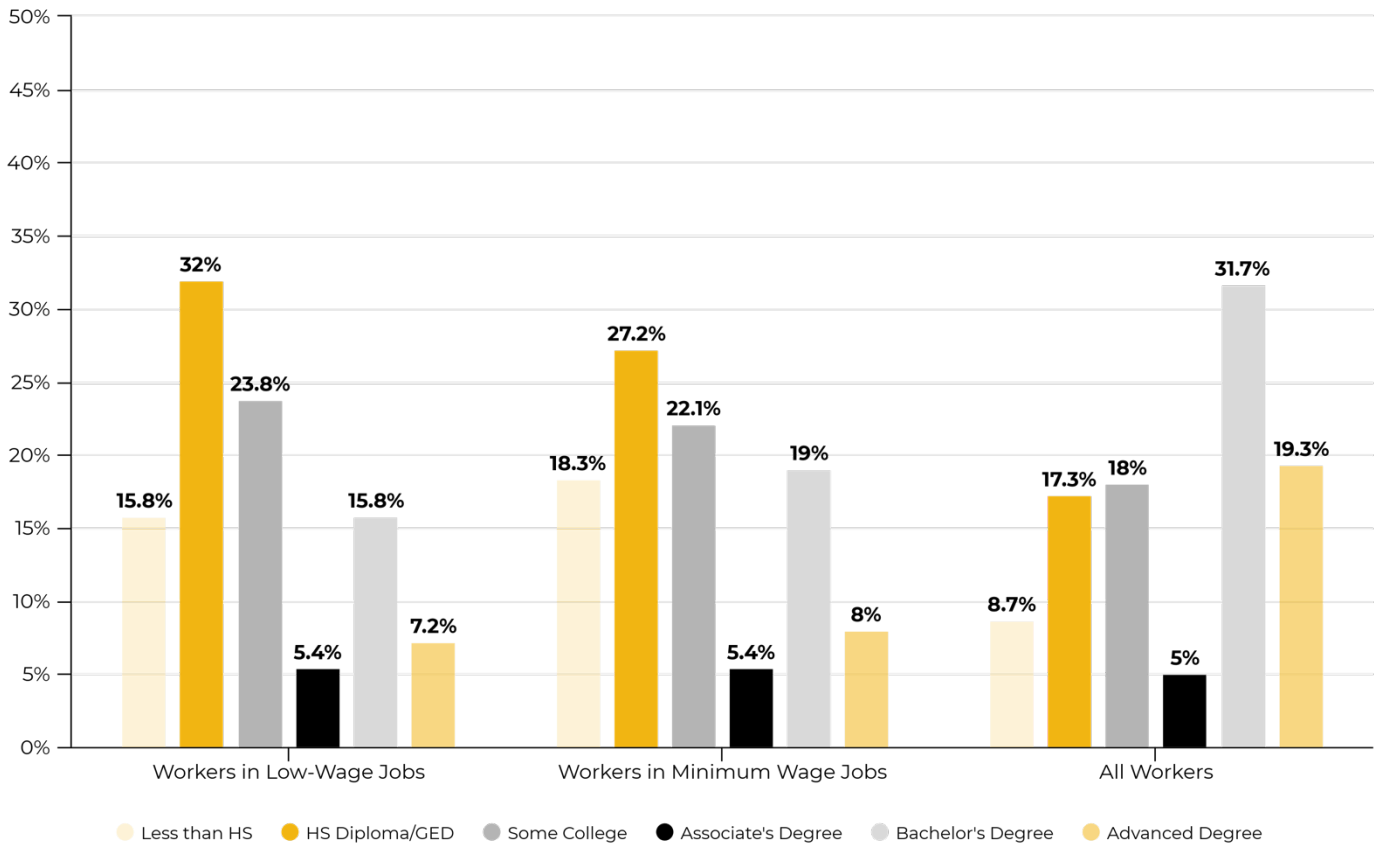
Figure 3: Workers in Minimum & Low-Wage Jobs Compared to All Workers, By Gender



Educational Attainment

Denver workers in low-wage and minimum wage jobs have lower educational attainment levels compared to Denver workers overall. For example, 16 percent of workers in low-wage jobs and 18.3 percent of workers in minimum wage jobs have less than a high school diploma, while about 8.7 percent of all workers have only this level of education. About 32 percent of all workers have a maximum of a bachelor's degree, compared to 16 percent and 19 percent for workers in low-wage and minimum wage jobs, respectively. Workers in low-wage and minimum wage jobs are overrepresented among those who have reached a maximum of a high school diploma or GED and some college compared to all workers.

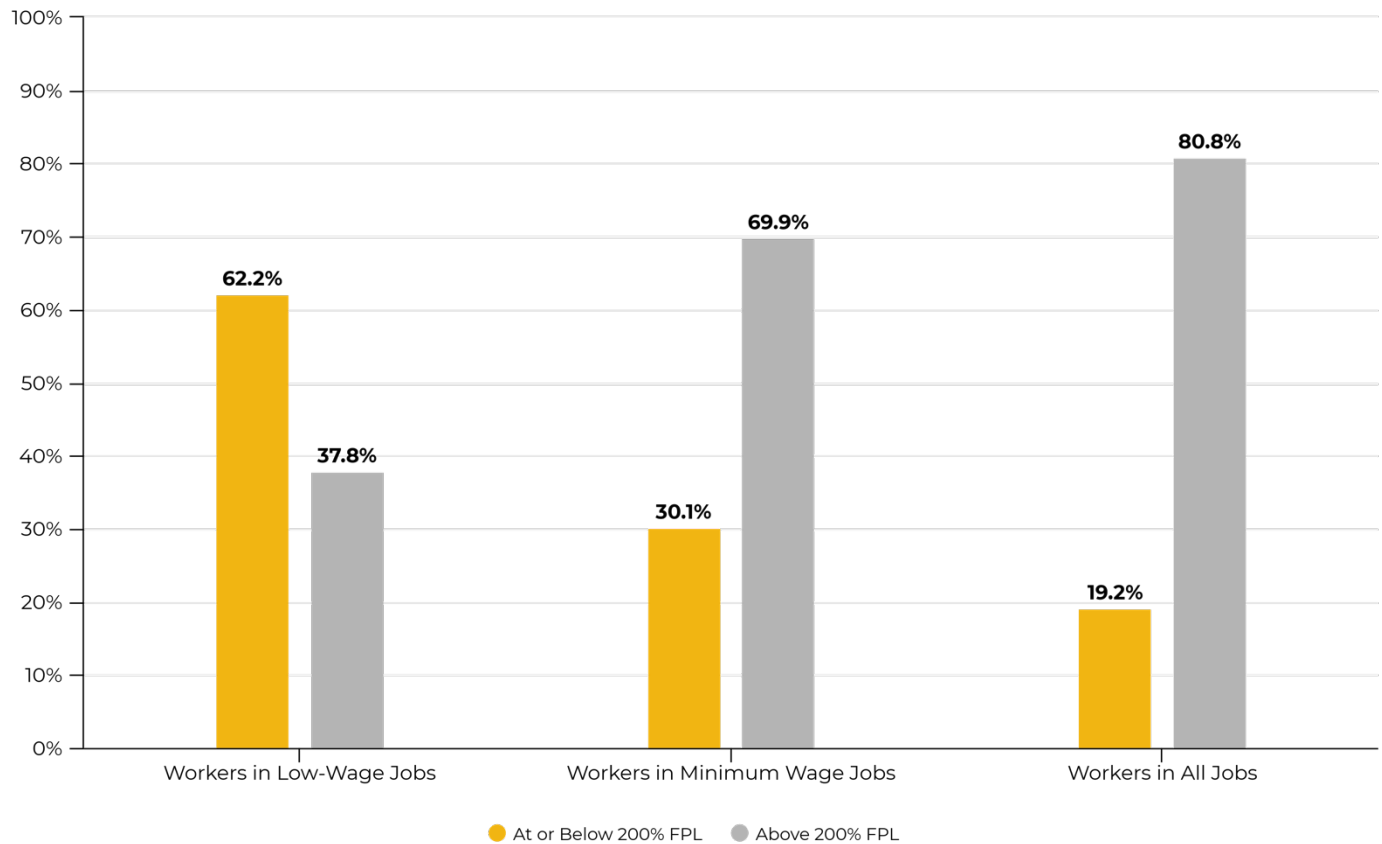
Figure 4: Workers in Minimum & Low-Wage Jobs Compared to All Workers, By Highest Educational Attainment



Economic Self-Sufficiency

Higher proportions of Denver workers in low-wage and minimum wage jobs are more likely to live in poverty, compared to those in all jobs. When we consider families who live at or below 200 percent FPL — a standard sometimes used as a measure of self-sufficiency — we see workers in low-wage and minimum wage jobs are overrepresented by about 40 percent and 27 percent, respectively, compared to all workers. They are underrepresented among those who live above that 200 percent threshold by about 38 percent and 11 percent, respectively, compared to all workers. Eight out of 10 all workers live above 200 percent of FPL. Only about 4 out of 10 low-income workers do.

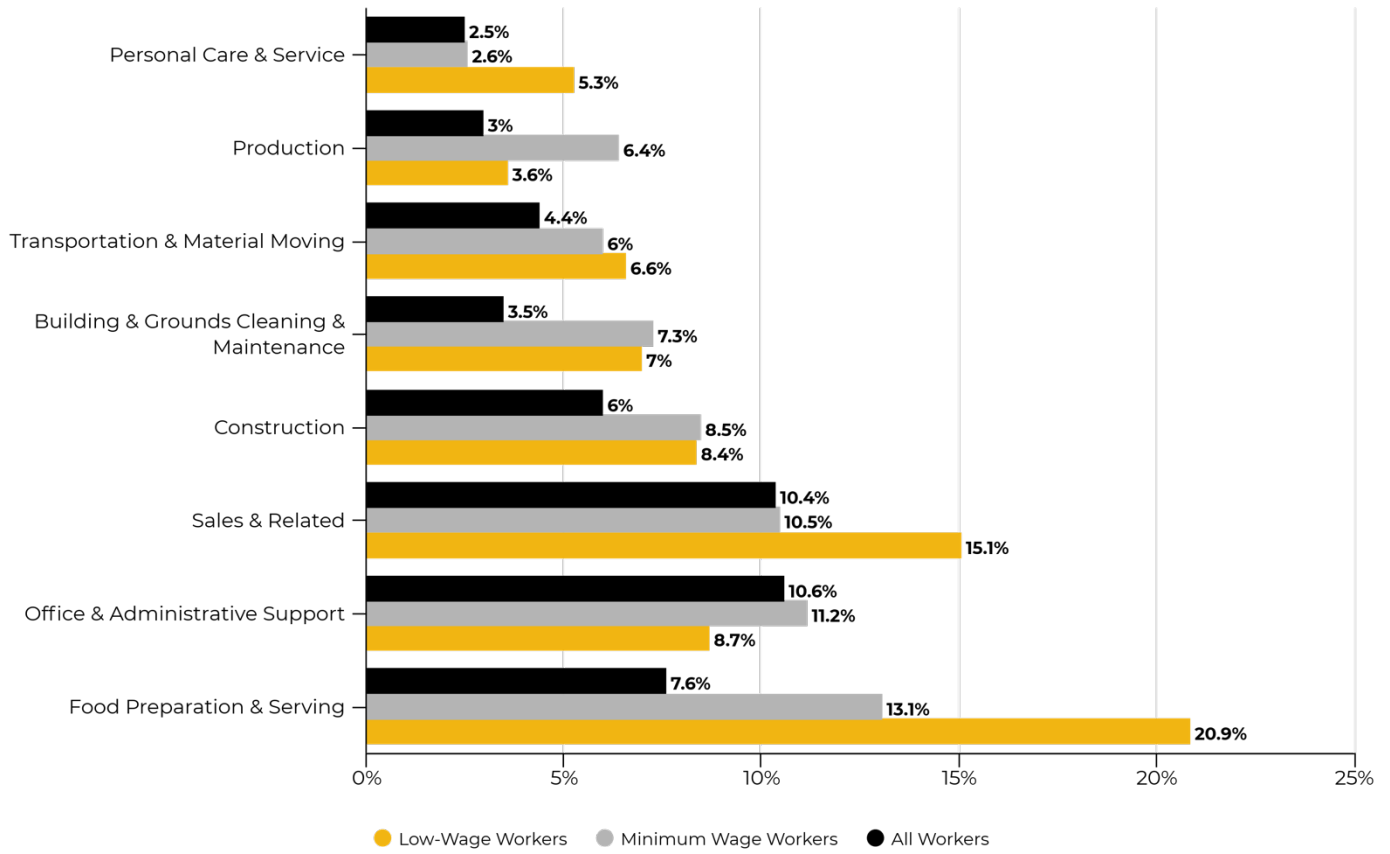
Figure 5: Workers in Minimum & Low-Wage Jobs Compared to All Workers, By FPL Status



Occupational Category

Some occupational categories employ higher proportions of workers in low-wage and minimum wage jobs compared to the proportion of workers in that category overall. For instance, the figure below demonstrates 5.3 percent of personal care and service workers, which include jobs like child care workers and personal care aides, are identified as low-income workers, while the workers in the personal care and service workforce only represent 2.5 percent of all workers in Denver. The largest concentration is food preparation and serving, which includes cooks, servers, and dishwashers, with 21 percent of the workers in that category being identified as low income, even though workers in the food preparation and serving category only represent 7.6 percent of all workers.

Figure 6: Proportion of Workers in Minimum & Low-Wage Jobs, Compared to All Workers^{iv}



Appendix

Methodology

To analyze these data, we selected our variables of interest, then downloaded an extract from the IPUMS website that included those variables (see below). Because these data did not include all the variables needed to conduct our analysis, we created:

- an hourly wage variable ($\text{income}/(\text{usual hours worked} * 52 \text{ weeks})$)
- a low-wage worker variable (hourly = \$5.29-\$9.29)
- a minimum wage worker variable (hourly = \$9.30-\$14.99)
- an educational attainment variable that combined categories to create those we needed
- a dummy variable for federal poverty level status (1 = at or below 200% FPL; 0 = above 200% FPL)
- an occupation variable that collapsed categories to create those we needed

After creating these variables, we ran survey commands in Stata 15 to identify those working 20 hours or more in Denver who fell into our low-wage or minimum wage categories. We also ran the survey command “proportion” to estimate the following for low-wage and minimum wage workers, compared to all workers:

- proportion in each age group
- proportion in each racial and ethnic category
- proportion male or female
- proportion in each educational attainment category
- proportion above or at/below 200% FPL

Variable	IPUMS Data	Bell Created	Type	Range/Categories
Hours worked	Yes	No	Numerical	0-99
Income	Yes	No	Numerical	0-496,000
Household #	Yes	No	Numerical	217,631-241,908
Person weight	Yes	No	Numerical	1-1,621
City	Yes	No	Categorical	Denver Not identifiable (dropped from estimates)
Race	Yes	No	Categorical	White Black/African American American Indian or Alaska Native Chinese Japanese Other Asian or Pacific Islander Other race Two major races Three or more major races
Hispanic	Yes	No	Categorical	Not Hispanic Mexican Puerto Rican Cuban Other
Sex	Yes	No	Categorical	Male Female
Age	Yes	(Transformed)	Categorical	Under 18 18-44 44-64 65 and over
Hourly wage	No	Yes	Numerical	0-1,346
Low wage	No	Yes	Dummy	1 = Low wage (hourly = 5.29-9.29) 0 = Not low wage
Min. wage	No	Yes	Dummy	1 = Minimum wage (hourly = 9.30-14.99) 0 = Not minimum wage
Ed. Attainment	Yes	(Transformed)	Categorical	Less than HS HS Diploma or GED Some college Associate's degree Bachelor's degree Advanced degree
FPL	No	Yes	Dummy	1 = At or below 200% FPL 0 = Above 200% FPL
Occupation	Yes	(Transformed)	Categorical	(Too many to list here)

ⁱ IPUMS-USA, University of Minnesota, www.ipums.org.

ⁱⁱ There were 255 observations in the data identified as having positive earnings of less than \$5.2/hr. These represent a population size of 30,098. **We cannot explain these observations, as they are below the legal tipped wage for 2016.** There are 297 observations for remaining low-wage workers (\$5.29-9.29), which represent a population size of 38,283. These are the observations we used for our analysis. If we included those making positive earnings of less than \$5.29 hourly, the total number of people potentially affected by a minimum wage increase would be about 30,000 higher, around 146,000.

ⁱⁱⁱ There are about 580 observations in the data identified as minimum wage (\$9.30-14.99). These represent a population size of about 77,900.

^{iv} *Production* includes jobs such as food processing (baker) and industrial processing (machinist, welder). *Transportation & material moving* includes jobs like garbage collector, taxi driver, and bus driver. *Building & grounds cleaning & maintenance* includes jobs like janitor, housekeeper, and groundskeeper. *Sales & related* includes jobs like cashier, travel agent, and telemarketer.