



More and More Workers Finding Denver Unaffordable

An issue brief from the Colorado Fiscal Institute

A fast-food worker in Denver would need to put in 62 hours a week to afford to live in the Mile High City, while a dishwasher working in a restaurant's kitchen would have to toil for 61 hours to live in the city. Things aren't much better for housekeepers, who'd need to labor for 59 hours a week to live in Denver nor for janitors, who'd have to put in 51 hours a week to reside in the city.

These are just a few of the findings of a CFI study of wages versus the cost of living in Denver. Our issue brief, which relies on federal wage data and cost-of-living calculations from the Economic Policy Institute, shows how low and stagnant wages combined with a skyrocketing cost of living mean many workers critical to the daily life of the city can no longer afford to live in Denver.

It's important to note that for low- and moderate-income workers with children, the number of hours they need to work to be able to live in Denver shoots up even more dramatically. For example, the typical fast-food worker who needs to work 62 hours a week to support herself would have to work 114 hours a week to support herself and a child. Obviously, the only way these workers usually afford to keep living in Denver is either by working multiple jobs, living with others and/or relying private or public assistance.

This issue brief is meant to supplement a report by the Economic Policy Institute, "Family Budgets and Income Sufficiency in Denver," which details the cost of living in Denver. EPI uses its innovative Family Budget Calculator to measure the cost of rent/housing, food, transportation, childcare, healthcare, taxes and other necessities.

By determining the specific cost of living in Denver, EPI's Family Budget Calculator also makes a great resource to evaluate the adequacy of wages in the area. Therefore, we take EPI's work one step further and apply its cost-of-living income thresholds to Denver-specific wage and occupation data to determine which occupations don't pay enough for their workers to afford to live in Denver. We also take a look at how the number of low-wage jobs and the pay of those low-wage jobs have changed over time. We find that, just like the whole state of Colorado, the share of low-wage jobs in Denver is growing.

The Gap Between Wages and Cost of Living in Denver

To afford to live modestly in Denver, a single individual must make \$28,829 a year.ⁱ That translates to \$555 a week or \$13.88 an hour for a 40-hour per week worker. Many of the jobs in Denver pay less than \$13.88 an hour. In fact, 30.5 percent of jobs in Denver pay less than \$13.88 an hour.ⁱⁱ Table 1 illustrates the wage distribution in the Denver area. The median wage — the level at which half make more and half make less — is \$19.41 an hour.

Table 1: Wage Distribution in Denver

	Employment	10th percentile wage	25th percentile wage	Median wage	75th percentile wage	90th percentile wage
All Occupations	1,325,430	\$ 9.14	\$ 12.32	\$ 19.41	\$ 31.78	\$ 48.40

Source: 2014 Occupational Employment Statistics for the Denver-Aurora-Broomfield Metropolitan Area from BLS

A worker could also choose to work more hours per week to make ends meet especially when they make less than \$13.88 a hour. So we ask a slightly different question: How many hours a week must be worked at particular jobs in order to afford to live in Denver? We calculate those results in Table 2. A fast-food worker must work 62 hours a week to meet the family budget threshold of \$555 a week for a single worker. A waiter or waitress must work 48 hours a week at the occupation's median wage to support themselves. Similarly, a janitor must work 51 hours and home health aides must work 45 hours a week to afford to live in Denver.

Table 2: Hours worked a week to afford to live in Denver by occupation

Occupations	Required Work Hours to Afford Living in Denver		Hourly Median Wage
	Single	Single parent	
Food Preparation and Serving Workers, Including Fast Food	62	114	\$8.96
Dishwashers	61	111	\$9.17
Hosts and Hostesses	60	111	\$9.19
Counter Attendants	60	111	\$9.22
Maids and Housekeeping Cleaners	59	109	\$9.41
Cashiers	59	108	\$9.43
Cleaners of Vehicles and Equipment	59	108	\$9.48
Cooks, Fast Food	56	103	\$9.96
Food Preparation Workers	55	101	\$10.07
Personal Care Aides	54	100	\$10.24
Laundry and Dry-Cleaning Workers	53	98	\$10.47
Hairdressers, Hairstylists and Cosmetologists	52	95	\$10.77
Janitors and Cleaners	51	95	\$10.79
Cooks, Restaurant	50	92	\$11.15
Bakers	49	90	\$11.32
Waiters and Waitresses*	48	88	\$11.59
Bartenders*	48	88	\$11.66
Childcare Workers	47	87	\$11.79
Food Processing Workers	47	87	\$11.79
Home Health Aides	45	83	\$12.36
Taxi Drivers and Chauffeurs	41	76	\$13.39
Receptionists and Information Clerks	39	71	\$14.31
Physical Therapist Aides	39	71	\$14.36
Healthcare Support Workers	38	71	\$14.47
Construction Laborers	36	67	\$15.36
Dental Laboratory Technicians	34	63	\$16.12
Bus Drivers, Transit and Intercity	34	63	\$16.26
Pharmacy Technicians	34	62	\$16.45
Travel Agents	32	59	\$17.47
Emergency Medical Technicians and Paramedics	31	58	\$17.77
Maintenance and Repair Workers, General	31	57	\$17.96
Massage Therapists	30	56	\$18.29
Welders, Cutters and Solderers	30	55	\$18.66
Dental Assistants	29	53	\$19.22
Carpenters	27	50	\$20.25
Chefs and Head Cooks	26	49	\$21.04
Graphic Designers	25	46	\$22.38
Bus and Truck Mechanics and Diesel Engine Specialists	25	45	\$22.60
Plumbers, Pipefitters, and Steamfitters	24	44	\$23.20
Paralegals and Legal Assistants	22	41	\$24.85
Legal Support Workers	22	40	\$25.37
Real Estate Sales Agents	18	34	\$30.43
Construction and Building Inspectors	18	33	\$31.26
Real Estate Brokers	17	31	\$32.86
Engineers	12	22	\$46.90
Lawyers	10	18	\$55.88
Pharmacists	10	18	\$57.99
Air Traffic Controllers	9	16	\$64.26
Dentists	8	14	\$70.58
Nurse Anesthetists	7	13	\$77.13
Family and General Practitioners	6	11	\$89.02

**median wages were adjusted for under-reporting of tips, see end noteⁱⁱⁱ*

Source: CFI calculations dividing family budget threshold for single individual in Denver of \$28,829 and for single parent \$53,116 divided by 52 weeks then divided by each occupation's median wage.

The pay in many low-wage jobs in Denver used to be higher

Table 3: Employment and Wages of Common Jobs in Denver between 2001 and 2014

Occupations	Employment			Median Wage		
	2001	2014	Change	2001*	2014	Change
Combined Food Preparation and Serving Workers, Including Fast Food	18,020	34,510	92%	\$9.96	\$8.96	-10%
Dishwashers	4,390	3,680	-16%	\$10.38	\$9.17	-12%
Hosts and Hostesses	3,660	5,470	49%	\$9.77	\$9.19	-6%
Counter Attendants	1,130	2,560	127%	\$10.95	\$9.22	-16%
Maids and Housekeeping Cleaners	7,710	7,960	3%	\$10.94	\$9.41	-14%
Cashiers	24,240	24,860	3%	\$10.81	\$9.43	-13%
Cleaners of Vehicles and Equipment	3,330	2,830	-15%	\$12.44	\$9.48	-24%
Cooks, Fast Food	3,550	2,060	-42%	\$11.59	\$9.96	-14%
Food Preparation Workers	5,360	6,130	14%	\$11.12	\$10.07	-9%
Personal Care Aides	2,740	8,720	218%	\$10.78	\$10.24	-5%
Laundry and Dry-Cleaning Workers	2,060	1,700	-17%	\$11.40	\$10.47	-8%
Hairdressers and Cosmetologists	3,730	4,000	7%	\$13.27	\$10.77	-19%
Janitors and Cleaners	17,060	20,560	21%	\$11.50	\$10.79	-6%
Cooks, Restaurant	10,000	12,480	25%	\$13.12	\$11.15	-15%
Waiters and Waitresses**	22,380	27,490	23%	\$11.21	\$11.59	3%
Bartenders**	2,130	5,260	147%	\$12.41	\$11.66	-6%
Childcare Workers	1,690	4,540	169%	\$10.28	\$11.79	15%
Home Health Aides	3,010	10,610	252%	\$15.94	\$12.36	-22%
Taxi Drivers and Chauffeurs	1,790	1,220	-32%	\$12.89	\$13.39	4%
Receptionists and Information Clerks	10,290	11,010	7%	\$15.18	\$14.31	-6%
Healthcare Support Workers	19,910	950	-95%	\$16.52	\$14.47	-12%
Construction Laborers	9,080	10,510	16%	\$14.95	\$15.36	3%
Bus Drivers, Transit and Intercity	1,690	2,070	22%	\$16.94	\$16.26	-4%
Pharmacy Technicians	1,140	2,440	114%	\$17.27	\$16.45	-5%
Travel Agents	1,620	860	-47%	\$16.08	\$17.47	9%
Emergency Medical Technicians	1,080	1,440	33%	\$17.05	\$17.77	4%
Maintenance and Repair Workers	7,490	9,100	21%	\$18.74	\$17.96	-4%
Welders, Cutters, Solderers	1,530	1,980	29%	\$19.68	\$18.66	-5%
Dental Assistants	3,450	3,270	-5%	\$24.20	\$19.22	-21%
Carpenters	7,810	7,090	-9%	\$22.06	\$20.25	-8%
Chefs and Head Cooks	1,110	970	-13%	\$18.21	\$21.04	16%
Graphic Designers	1,460	2,310	58%	\$21.81	\$22.38	3%
Bus and Truck Mechanics	2,340	2,860	22%	\$23.63	\$22.60	-4%
Plumbers, Pipefitters, and Steamfitters	5,650	3,900	-31%	\$24.64	\$23.20	-6%
Paralegals and Legal Assistants	2,020	3,750	86%	\$25.71	\$24.85	-3%
Real Estate Sales Agents	1,460	1,450	-1%	\$24.66	\$30.43	23%
Real Estate Brokers	1,160	700	-40%	\$19.15	\$32.86	72%
Lawyers	4,370	9,020	106%	\$54.94	\$55.88	2%
Pharmacists	1,560	3,160	103%	\$45.84	\$57.99	26%
Air Traffic Controllers	200	190	-5%	\$59.61	\$64.26	8%
Family and General Practitioners	250	1,230	392%	\$64.13	\$89.02	39%
Total Occupations	1,150,070	1,325,430	15%	\$19.81	\$19.41	-2%

*Wages were adjusted using Denver-Boulder-Greeley CPI

** median wages were adjusted for under-reporting of tips, see end note IV

Source: CFI analysis of Occupational Employment Statistics for the Denver Metropolitan Area

As wages have fallen or stagnated for many low-wage jobs, it becomes harder and harder for workers in these jobs to live in Denver. An illustrative example of the growth in low-wage jobs in Denver is the food service industry. The number of bartenders in Denver since 2001 has more than doubled while their median wage has fallen by 6 percent. The number of food counter workers also has doubled in that same time, while the median wage of a counter attendant in Denver fell by 16 percent. And the number of food preparation workers grew by 92 percent, while their median wage fell by 10 percent. Other occupations have seen large drops in wages, such as home health aides and dental assistants, who have seen their median wages fall by more than 20 percent in real terms since 2001.

Denver, like the entire state of Colorado, has seen a rise in the share of low-wage jobs. As mentioned above, 30.5 percent of jobs pay less than \$13.88 an hour. The share of low-wage jobs has grown in recent years. In 2001, 27 percent of jobs in Denver paid less than the inflation-adjusted equivalent of \$13.88 an hour today.

CFI believes this issue brief highlights the need for “economy-boosting” jobs while pointing out the negatives of “economy-busting” jobs. What Colorado needs is less growth in low-paying jobs that necessitate greater reliance on public assistance just to get by and more growth in jobs that pay well enough for residents to make ends meet while strengthening our community and our economy.

Chris Stiffler
Economist
Colorado Fiscal Institute

ⁱ Economic Policy Institute’s “Family Budgets and Income Sufficiency In Denver” for single individual which is the sum of housing \$7,200; food \$3,240; transportation \$5,705; healthcare \$3,010; necessities \$5,047, and taxes \$4,618.

ⁱⁱ CFI calculation using linear interpolation between 25th percentile wage and median wage

ⁱⁱⁱ Median wages of waiters/waitresses and bartender occupations were adjusted upward by 31 percent to account for under-reporting bias. OES data relies on employee self-reported wage data, which includes tips that are often under-reported. We follow the methodology of Williams and Genest (2015) “Estimating Hourly Tip Income for Waiters and Waitresses in Full-Service Restaurants in California.” The authors use establishment-based data on food sales, tip percentages, and employee hours to estimate hourly wages for waiters and waitresses. The OES reported median wage in California in 2013 was \$9.54 and their establishment-based estimate, which also accounted for tip sharing, was \$12.57. This was roughly a 31 percent adjustment. We used the same adjustment to account for under-reporting of tips in Denver.