

Acknowledgments

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Disclaimer

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Contents

Introduction	3
A Note on Methods	3
Findings	4
Conclusion	14
Appendix A: Methods	15
Appendix B: Distribution of Workers in Lower-Income Households by Selected	
Occupation and State	19
Appendix C: Demographic Characteristics of Workers, 2013 and 2023	20
Appendix D: Distribution of Workers by Occupation and Industry, 2013 and 2023	21
Notes	23

Introduction

Understanding employment patterns of different segments of the population—and the extent to which they may be exposed to or impacted by evolving labor market conditions—contributes to a deeper understanding of the economy, in support of the Federal Reserve's monetary policy goals. Multiple factors influence the landscape of employment opportunities and barriers that can affect an individual's or community's experience of and ability to participate in the labor market, from shifts in what kinds of jobs locate where in different regions (and who has access to them) to evolving technologies (such as generative artificial intelligence [AI]) that are changing the nature of work.

Lower-income workers, in particular, often experience barriers to participating and advancing in the labor market and achieving financial stability. This brief is the first in a series aimed at exploring the employment patterns of workers in lower-income households, how they have changed (and are changing) over time, and how these shifts influence the ability of these workers to engage in the economy.

The focus of this brief is to define and better understand the composition of workers in lower-income households. After summarizing the methods and data sources used, we identify the population of workers living in lower-income households, explore their demographic and employment characteristics and how they compare with the workforce as a whole, assess how these patterns vary across different parts of the country, and examine how they have changed over the past decade. We conclude with a discussion of potential directions for future research.

A Note on Methods

We use detailed person- and household-level American Community Survey (ACS) data from 2023 and 2013 to identify low- and moderate-income households (also referred to in this brief as LMI or "lower-income" households). We start with households rather than identifying lower-income people or occupations because people reporting relatively lower earnings may do so because they work in a lower-paying job or because they have chosen to work less given other income coming into the household. At the same time, an occupation may be shown to pay relatively lower wages, but people working in that occupation may also seek additional employment

to increase their total earnings. By focusing on the household level, our objective is to identify households with a combined total income—from all earners and sources of income—that puts them in the lower portion of the income distribution, meaning they are likely facing greater resource constraints relative to the typical household in their area.

We define lower-income households as those with incomes below 80% of the area median income for a given household size. (The "80% of area median income" threshold is employed in a range of government programs and regulations to identify lower-income people, families, and/or communities. (We then explore employment and demographic characteristics of workers living in households below that income threshold (referred to as both "workers in lower-income households" and "lower-income workers"). We define workers as anyone aged 16 and older who reported any earned income in the past year from working in the civilian labor force. Earned income includes wage and salary earnings as well as farm, self-employment, and "gig" income; it excludes benefits like Social Security and unemployment insurance.

Although workers may hold more than one job and work in more than one occupation, for this analysis, we focus on the *primary occupations* held by lower-income workers (i.e., occupations as defined by the group of activities or tasks required by the job ACS respondents identified as their primary source of employment). We also explore how these occupations intersect with *industries*, which can offer insights into how jobs held by lower-income workers distribute across different types of businesses and economic activities.

(For a more detailed discussion of methods and data sources, see Appendix A.)

Findings

Nearly 30% of workers live in a lower-income household.

In 2023, 27.9% of workers—48.9 million people—lived in a lower-income household. Compared with the working population as a whole, workers in lower-income households were slightly more likely to be female and tended to be somewhat younger, more racially and ethnically diverse, and have lower levels of educational attainment (Figure 1). In 2023, nearly two-thirds (64.0%) of lower-income workers were younger than 45 compared with just 56.9% of all workers. Although 58.3% of all workers

were White, that share falls to 46.9% for lower-income workers. In keeping with the relatively younger population, lower-income workers also reported lower levels of education: These workers were about 50% more likely to have a high school diploma or less, compared with all workers (47.2% versus 33.5%). In contrast, lower-income workers were about half as likely as all workers to have completed a bachelor's degree or higher (21.3% versus 38.1%). (It should be noted that, because our population includes workers starting at age 16, we are capturing workers who may go on to attain higher levels of education as they age.)

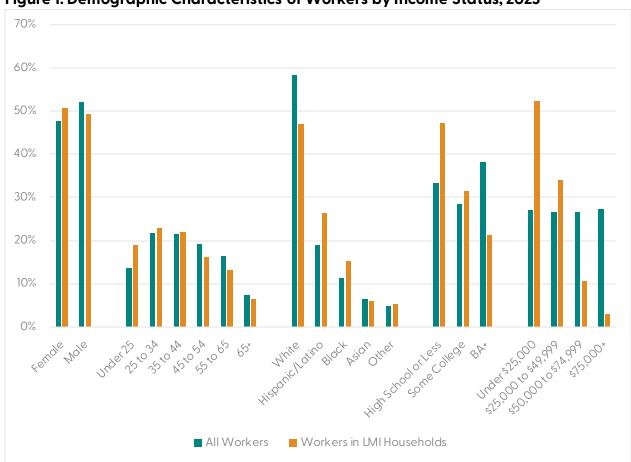


Figure 1. Demographic Characteristics of Workers by Income Status, 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: All differences are significant at the 95% confidence level.

As might be expected, given their household's income status—and the relatively younger population with lower levels of educational attainment—workers in lower-income households also reported much lower earnings than the average worker:

More than half of lower-income workers (52.4%) earned less than \$25,000 in 2023. By and large, lower-income workers did not have any other income sources beyond their earnings: 83.9% of lower-income workers reported earnings from work as their only source of income. That figure is roughly in line with the share for all workers reporting only earned income (82.3%).^{iv}

Despite low earning levels, most lower-income workers also reported working full-time. Nearly two-thirds (64.7%) of workers in lower-income households worked at least 35 hours a week, and more than half (57.2%) worked 40 hours or more a week. At the same time, 81.7% reported working at least 30 weeks a year and 69.4% reported working at least 50 weeks.

Workers in lower-income households are more likely than average to hold jobs in occupations such as Office and Administrative Support, Sales, and Food Preparation and Serving.

The occupational distribution of jobs held by lower-income workers differs considerably from the national average (Figure 2). One dimension along which these differ is education level, with lower-income workers holding occupations with lower levels of educational attainment in aggregate. Six occupation groups accounted for roughly half of all workers in lower-income households in 2023: Office and Administrative Support (11%), Sales (10%), Food Preparation and Serving (9%), and Construction and Extraction, Production, and Material Moving (6% each).

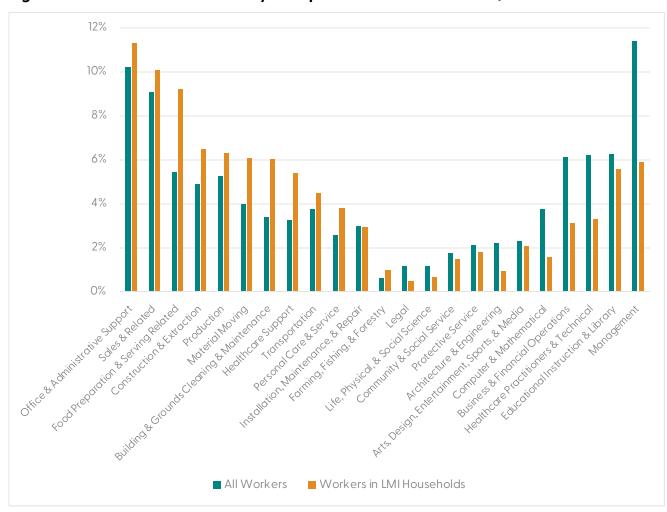
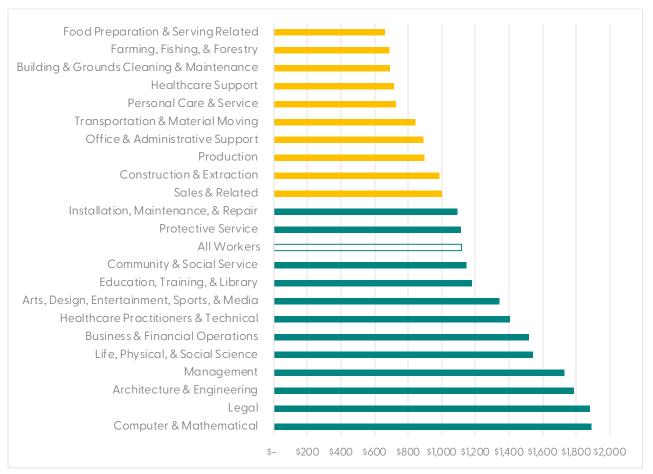


Figure 2. Distribution of Workers by Occupation and Income Status, 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: All differences are significant at the 95% confidence level, except for Installation, Maintenance, and Repair.

Occupations where the share of lower-income workers exceeded the national average in 2023 all tended to pay below the weekly earnings level typical for all workers (Figure 3). Median weekly earnings for full-time wage and salary workers in 2023 were \$1,117. By comparison, the median weekly earnings for full-time workers in Food Preparation and Service occupations were more than 40% less (\$660). For those working in Office and Administrative Support occupations—the most common occupation among workers in lower-income households—median weekly earnings were more than 20% lower than for all workers (\$891).





Source: U.S. Bureau of Labor Statistics analysis of Current Population Survey data. Note that yellow bars represent occupations where the share of lower-income workers exceeded the national average in 2023.

Although occupations offer insights into the types of jobs lower-income workers hold, industry designations can shed light on the kind of work their company or establishment does. Just as lower-income workers tend to cluster in certain occupations, there are also certain industries in which they are more likely to work (Figure 4). Leading industries that employ workers from lower-income households include Retail Trade, Accommodation and Food Service, and Construction, each of which employ higher-than-average shares of lower-income workers.

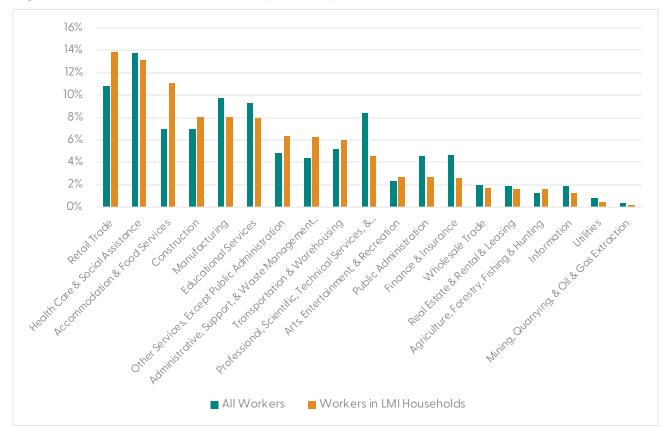


Figure 4. Distribution of Workers by Industry and Income Status, 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: All differences are significant at the 95% confidence level.

In the Western states that make up the Federal Reserve's Twelfth District, more than 10 million workers lived in a lower-income household in 2023.

The nine Western states included in the Federal Reserve System's Twelfth District account for one-fifth of the nation's workers. In 2023, 28.7% of the Twelfth District's workforce—10.4 million people—lived in a lower-income household, although that percentage varied within the district (Figure 5). States ranged from roughly 29% of workers living in lower-income households in California and Oregon to 27% in Arizona and Alaska. But a much more uneven landscape emerges at the county level.

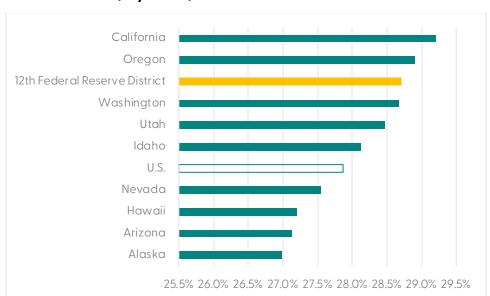
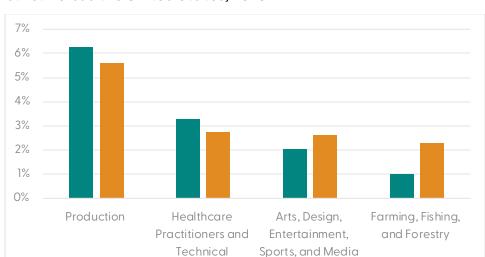


Figure 5. Percentage of Workers Living in Lower-Income Households in the Federal Reserve's Twelfth District, by State, 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata

Nearly one-third of the local workforce in several communities throughout the Twelfth District qualified as lower-income in 2023, including California's Yolo County (35.6%), Seattle's King County (31.9%), Provo's Utah County (31.6%), the Nez Perce Reservation and Lewiston area in Idaho (31.3%), and Alaska's Matanuska-Susitna and Kenai Peninsula Boroughs (29.7%). At the other end of the spectrum, shares reached as low as 24% in Ogden, Utah's suburban Davis County (24.1%) and in Idaho's Bonneville County (23.9%). These reflect differences in the overall income distributions of these places.

Given the industrial diversity of the District, the types of jobs lower-income workers held varied slightly, depending on where they were located. As a whole, workers in lower-income households in the Twelfth District were less likely to be employed in Production or Healthcare Practitioner and Technical occupations, and they were more likely than the national average to hold jobs in agricultural areas (i.e., Farming, Fishing, and Forestry) or in entertainment-oriented occupations (i.e., Arts, Design, Entertainment, Sports, and Media) (Figure 6).



■ 12th Federal Reserve District

Figure 6. Share of Lower-Income Workers in Select Occupations, Federal Reserve's Twelfth District versus the United States, 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: All differences are significant at the 95% confidence level.

Within the Twelfth District, some states saw slightly different distributions, reflecting the makeup of their local labor markets. For instance, states more oriented toward tourism saw lower-income occupations skew more heavily into services. Compared with the national average for lower-income workers, Hawai 'i registered higher shares of lower-income workers in Food Preparation and Serving and Personal Care occupations and lower shares in Production and Material Moving. Similarly, Nevada, with its concentration in gaming, saw lower-income workers more likely to work in food preparation and building and grounds maintenance, but somewhat less so in Educational Instruction and Library and Healthcare Practitioners and Technical occupations. (See Appendix B for state-level data.)

The number and makeup of workers in lower-income households has shifted slightly over the past decade, reflecting broader changes in the labor market.

Between 2013 and 2023, the number of workers in lower-income households grew by 4.4 million people—an increase of roughly 10%. However, the total number of workers increased at a similar pace over that time period, keeping the overall share of workers living in a lower-income household steady at 28%.

Although the proportion of lower-income workers remained the same, the makeup of the lower-income workforce changed somewhat over the decade. For instance, compared with 2013, lower-income workers in 2023 were less likely to be White (a decrease of 6.1 percentage points), more likely to be college graduates (an increase of 5.2 percentage points), and somewhat likely to be older (a 1.7 percentage-point increase for those aged 55 to 64 and a 2.2 percentage-point increase for those 65 and over, offset by declines in the share of workers under 35). All these shifts are in keeping with broader demographic changes in the workforce as a whole, except for age: Among all workers, the shares under 35 and between 55 and 64 held steady between 2013 and 2023. (See Appendix C for detailed data.)

Similarly, the types of jobs lower-income workers held also shifted somewhat over this period, tracking trends in the broader labor market. For instance, leading occupations for lower-income households remained the same in 2013 and 2023, with Office and Administrative Support, Sales, and Food Preparation and Serving occupations leading in both periods. However, the shares of workers employed in those occupations fell over the decade as other occupations, such as Management and Material Moving experienced gains (Figure 7).

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Figure 7. Distribution of Lower-Income Workers by Occupation, 2013 versus 2023

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: All differences are significant at the 95% confidence level, except for Installation, Maintenance, and Repair.

The shifting industry mix among lower-income workers also tracked broader shifts in employment. Retail Trade, Accommodation and Food Service, and Healthcare and Social Assistance remained among the top three most common industries to employ lower-income workers in both periods. But the share of workers employed in Retail Trade and Accommodation and Food Service fell slightly between 2013 and 2023 for all workers and workers in lower-income households, as employment in Transportation and Warehousing and Professional, Scientific, and Technical Services ticked upward for both groups. (For detailed data, see Appendix D.)

Conclusion

This analysis finds that workers in lower-income households make up a significant share of the civilian workforce, accounting for more than one in four workers. Detailed ACS microdata reveal that lower-income workers tend to skew a bit younger than the workforce as a whole and have lower levels of educational attainment, although that has shifted somewhat over the past decade due to changes in the broader population: Lower-income workers today are somewhat older and more educated than they were 10 years ago.

Workers in lower-income households tend to work full time but in jobs that pay less than the typical worker's earnings. Although the makeup of jobs held by lower-income workers has shifted slightly over the past decade, tracking changes in the labor market as a whole, lower-income workers remain more likely to work in office and administrative roles and in service occupations, such as food preparation and service and retail.

With this initial understanding of the scale and makeup of the workforce living in lower-income households, future research in this series will explore changing employment conditions for this segment of the workforce, including the extent to which emerging technologies, such as generative AI, stand to impact the jobs of lower-income workers and ways in which telework and commuting may be changing for these workers. Understanding how these employment patterns and conditions may be changing for workers in lower-income households can offer important insights for efforts to increase economic participation and mobility for these workers.

Appendix A: Methods

Several different approaches exist to identify low- and moderate-income people, jobs, households, and communities, whether for research purposes or for policies and programs. For the purposes of this analysis, we start by identifying low- and moderate-income households rather than trying to determine which individual workers or occupations might fit that description.

We start with households rather than people because people reporting relatively lower earnings may do so because they work in a lower-paying job or because they have chosen to work less given other income coming into the household (e.g., investment income or the salary of a higher-earning partner). Alternatively, an occupation may be shown to pay relatively lower wages, but people working in that occupation may also seek additional employment to increase their total earnings.

By focusing on the household level, our objective is to identify households with a combined total income—from all earners and sources of income—that puts them in the lower portion of the income distribution, meaning they are likely facing greater resource constraints relative to the typical household in their area. We then focus on understanding the employment situations of workers in those households.

Data Sources

We use the U.S. Census Bureau's American Community Survey (ACS) Public Use Microdata Sample (PUMS). The microdata provide detailed records of person- and household-level survey responses that allow us to create custom estimates. With these detailed data, we identify low- and moderate-income households and explore employment and demographic characteristics of workers in those households. This analysis focuses primarily on estimates derived from the 2023 PUMS data but also includes trend analysis using data from the 2013 PUMS.

Income Thresholds

To identify low- and moderate-income households, we set the income threshold at 80% of area median income (AMI). (See the definition of "area" below.) The "80% of area median income" threshold is employed in a range of government programs and regulations to identify lower-income people, families, and/or communities. For

instance, under the Community Reinvestment Act, communities with median incomes below 80% of the area median are considered low- to moderate-income. For U.S. Department of Housing and Urban Development programs, such as public housing or vouchers-based housing assistance, 80% of area median income demarcates low-income families and individuals.

We calculate AMI and the 80% threshold by household size, creating estimates for one-person households up to households of six or more people, after which sample sizes are not robust enough to support distinct estimates for larger households. (Note that we tested taking the estimates up to households of eight or more people, sample-size constraints notwithstanding, and the results were not significantly different.) Area medians—and the associated 80% threshold—range considerably depending on household size and across communities with different costs of living. For instance, in the Federal Reserve's 12th District, the typical (i.e., median) income threshold associated with 80% of AMI for a three-person household was \$76,400 (Table A.1). But that figure ranged from as low as \$41,840 in Cochise and Santa Cruz Counties, AZ, to as high as \$161,520 in San Mateo County, CA.

Table A.1. Typical Threshold for 80% of the Area Median Income by Selected State and Household Size, 2023

	Median 80% AMI Threshold by Household Size								
	1 Person	2 People	3 People	4 People	5 People	6+ People			
12th Federal Reserve District	\$31,040	\$65,800	\$76,400	\$87,240	\$85,200	\$96,000			
Alaska	\$31,680	\$75,640	\$80,360	\$93,320	\$116,640	\$118,280			
Arizona	\$28,000	\$57,280	\$67,200	\$72,000	\$76,000	\$82,400			
California	\$34,640	\$73,840	\$84,000	\$96,000	\$87,200	\$102,400			
Hawaii	\$28,800	\$76,000	\$79,680	\$112,000	\$86,960	\$133,280			
Idaho	\$28,880	\$59,440	\$74,400	\$82,440	\$84,040	\$90,400			
Nevada	\$33,720	\$65,360	\$77,800	\$82,000	\$84,400	\$80,600			
Oregon	\$28,400	\$63,080	\$73,960	\$84,640	\$80,800	\$81,000			
Utah	\$32,000	\$67,840	\$73,600	\$90,400	\$84,800	\$102,720			
Washington	\$29,040	\$70,800	\$77,480	\$93,640	\$92,640	\$103,760			

Source: Author analysis of 2023 American Community Survey Public Use Microdata; Selected states represent those included in the Federal Reserve's 12th District.

Geographies

Because the PUMS data provide such detailed person- and household-level records, the data are released at geographic levels designed to protect respondent confidentiality. Each public use microdata area (PUMA) contains at least 100,000 people. PUMAs are delineated based on aggregations of counties and contiguous census tracts and do not cross state boundaries.

Among the 2,462 PUMAs delineated in 2023, roughly two-thirds (68.1%) are drawn in ways that clearly conform to county boundaries. In some cases, a single PUMA may be coterminous with county boundaries, as is the case for Shasta County, CA, for example. In more populous areas, multiple PUMAs may exist within a county. For instance, Clark County, NV—home to Las Vegas—contains 15 PUMAs. In less populous, more rural areas, a single PUMA may encompass multiple counties to meet the population threshold for reporting (e.g., Josephine, Coos, and Curry Counties in Oregon are covered by one PUMA). Thus, where possible, we aggregate PUMAs to the county (or collection of counties) level for the purposes of determining AMI.

However, in some instances, PUMAs are drawn based on aggregated census tracts in ways that do not provide a clean county-based delineation (e.g., a PUMA may straddle multiple counties, as is the case for the PUMA in Idaho that encompasses Washington, Payette, and Gem Counties, as well as portions of Canyon and Ada Counties). In these cases, we treat the PUMA as the "area" for the purposes of calculating AMI. (Returning to the Idaho example, we do not aggregate further to get to a clean county delineation because doing so would mean adding the six PUMAs that make up the remainders of Canyon and Ada Counties to the original PUMA, which would create an agglomeration accounting for 42% of the state's population.)

Identifying Workers

Once we have identified low- and moderate-income households, we then identify the number of workers within the household. In keeping with U.S. Bureau of Labor Statistics employment estimates, we include all workers aged 16 or over in the civilian labor force. However, rather than including only people who reported actively working at the time of the ACS survey period (which would yield a workforce of 162,892,600), we include any person aged 16 or over who reported earned income within the past year

(which captures 175,555,600 workers). We make this adaptation in recognition of the greater volatility that exists in employment spells among lower-income workers.^{ix}

Throughout the report, we refer to the workers who meet these specifications as "workers in lower-income households" (or workers in LMI households), although, at times, we shorten to "lower-income workers" for brevity.

Appendix B: Distribution of Workers in Lower-Income Households by Selected Occupation and State

	U.S.	Alaska	Arizona	California	Hawaii	ldaho	Nevada	Oregon	Utah	Washington
Office and Administrative Support	11.3%	12.9%	12.7%	10.7%	12.6%	11.0%	11.9%	11.1%	12.0%	10.5%
Sales and Related	10.1%	8.4%	10.4%	9.7%	9.6%	9.2%	11.2%	10.0%	8.7%	9.4%
Food Preparation and Serving Related	9.2%	7.2%	8.5%	8.7%	11.7%	9.7%	11.8%	10.2%	7.6%	8.7%
Construction and Extraction	6.5%	7.8%	7.2%	6.5%	6.0%	6.7%	6.3%	5.4%	7.1%	6.0%
Production	6.3%	4.1%	4.8%	5.8%	3.4%	6.3%	5.0%	5.9%	6.2%	5.1%
Material Moving	6.1%	6.3%	6.3%	6.1%	4.1%	5.5%	7.1%	5.7%	5.3%	6.2%
Building and Grounds Cleaning and Maintenance	6.0%	6.7%	6.7%	6.5%	6.3%	6.0%	7.6%	4.8%	5.2%	5.2%
Management	5.9%	7.1%	5.5%	5.5%	6.1%	7.0%	5.2%	6.5%	6.5%	6.9%
Educational Instruction and Library	5.6%	6.8%	5.2%	5.0%	5.2%	5.7%	3.6%	5.8%	7.7%	5.7%
Healthcare Support	5.4%	5.7%	4.4%	6.3%	5.5%	5.8%	3.7%	6.7%	3.8%	5.4%
Transportation	4.5%	3.9%	4.4%	4.6%	4.5%	3.0%	6.2%	3.9%	3.6%	4.2%
Personal Care and Service	3.8%	4.7%	3.6%	4.2%	5.9%	3.8%	4.6%	3.8%	3.1%	3.1%
Healthcare Practitioners and Technical	3.3%	1.9%	3.5%	2.6%	3.0%	2.4%	1.7%	2.3%	3.8%	3.2%
Business and Financial Operations	3.1%	3.1%	3.3%	3.6%	3.0%	2.7%	3.4%	2.7%	2.7%	4.5%

Source: Author analysis of 2023 American Community Survey Public Use Microdata; Selected states represent those included in the Federal Reserve's Twelfth District. Occupations held by 3% of fewer of the nation's lower-income workers are not displayed.

Appendix C: Demographic Characteristics of Workers, 2013 and 2023

	All Workers				Workers	in LMI Hou	seholds	
	2013	2023	Change		2013	2023	Change	
Female	47.8%	47.8%	-0.1%		50.7%	50.7%	0.0%	
Male	52.2%	52.2%	0.1%		49.3%	49.3%	0.0%	_
Under 25	13.6%	14.1%	0.5%	*	19.0%	20.7%	1.7%	*
25 to 34	21.8%	21.5%	-0.3%	*	23.0%	24.8%	1.8%	*
35 to 44	21.5%	20.8%	-0.7%	*	21.9%	20.9%	-1.0%	*
45 to 54	19.2%	21.7%	2.6%	*	16.3%	17.8%	1.5%	*
55 to 65	16.5%	16.3%	-0.2%	*	13.2%	11.5%	-1.7%	*
65+	7.4%	5.6%	-1.8%	*	6.5%	4.3%	-2.2%	*
White	58.3%	65.5%	7.3%	*	46.9%	53.0%	6.1%	*
Hispanic/Latino	19.0%	15.8%	-3.2%	*	26.4%	23.4%	-2.9%	*
Black	11.4%	11.0%	-0.4%	*	15.3%	15.4%	0.1%	
Asian	6.4%	5.3%	-1.1%	*	6.1%	5.2%	-0.9%	*
Other	5.0%	2.4%	-2.6%	*	5.4%	2.9%	-2.4%	*
High School or Less	33.5%	35.7%	2.3%	*	47.2%	49.4%	2.1%	*
Some College	28.4%	32.4%	4.0%	*	31.4%	34.5%	3.1%	*
BA+	38.1%	31.9%	-6.3%	*	21.3%	16.1%	-5.2%	*
Under \$25,000	27.0%	41.8%	14.8%	*	52.4%	74.6%	22.2%	*
\$25,000 to \$49,999	26.7%	28.3%	1.7%	*	34.0%	22.0%	-12.0%	*
\$50,000 to \$74,999	26.7%	28.3%	1.7%	*	10.7%	3.0%	-7.7%	*
\$75,000+	27.3%	15.0%	-12.3%	*	2.9%	0.4%	-2.5%	*

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: Asterisks (*) denote statistically significant change at the 95% confidence level.

Appendix D: Distribution of Workers by Occupation and Industry, 2013 and 2023

D 1. Distribution of Workers by Occupation

		All Worker	S		Workers in LMI Households				
	2013	2023	Change		2013	2023	Change	_	
Architecture and Engineering	1.8%	2.2%	0.5%	*	0.7%	0.9%	0.3%	7	
Arts, Design, Entertainment, Sports, and Media	2.0%	2.3%	0.3%	*	1.7%	2.0%	0.3%	*	
Building and Grounds Cleaning and Maintenance	4.2%	3.4%	-0.8%	*	7.4%	6.0%	-1.4%	4	
Business and Financial Operations	4.7%	6.1%	1.4%	*	2.2%	3.1%	1.0%	Ą	
Community and Social Service	1.6%	1.7%	0.2%	*	1.2%	1.5%	0.3%	7	
Computer and Mathematical	2.5%	3.8%	1.2%	*	1.0%	1.6%	0.6%	- 1	
Construction and Extraction	5.2%	4.9%	-0.3%	*	6.8%	6.5%	-0.3%	- 1	
Educational Instruction and Library	6.1%	6.3%	0.2%	*	4.4%	5.6%	1.2%	7	
Farming, Fishing, and Forestry	0.8%	0.6%	-0.2%	*	1.3%	1.0%	-0.3%	ıle	
Food Preparation and Serving Related	6.1%	5.5%	-0.6%	*	10.5%	9.2%	-1.2%	ıle	
Healthcare Practitioners and Technical	5.3%	6.2%	0.9%	*	2.4%	3.3%	0.9%	- 4	
Healthcare Support	2.6%	3.3%	0.7%	*	3.9%	5.4%	1.5%	7	
Installation, Maintenance, and Repair	3.1%	3.0%	-0.1%	*	2.9%	3.0%	0.0%	_	
Legal	1.1%	1.2%	0.0%	*	0.4%	0.5%	0.1%	7	
Life, Physical, and Social Science	0.8%	1.2%	0.3%	*	0.4%	0.7%	0.2%	7	
Management	9.4%	11.4%	2.0%	*	4.4%	5.9%	1.5%	7	
Material Moving	2.7%	4.0%	1.3%	*	4.0%	6.1%	2.0%	- 4	
Office and Administrative Support	13.4%	10.2%	-3.1%	*	13.6%	11.3%	-2.3%	4	
Personal Care and Service	3.8%	2.6%	-1.3%	*	5.9%	3.8%	-2.1%	4	
Production	6.0%	5.2%	-0.8%	*	7.0%	6.3%	-0.7%	7	
Protective Service	2.2%	2.1%	-0.1%	*	1.7%	1.8%	0.1%	7	
Sales and Related	10.9%	9.1%	-1.8%	*	12.2%	10.1%	-2.1%	,	
Transportation	3.6%	3.8%	0.1%	*	4.0%	4.5%	0.4%	- 4	

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: Asterisks (*) denote statistically significant change at the 95% confidence level.

D 2. Distribution of Workers by Industry

		All Worke	rs	Workers in LMI Households					
	2013	2023	Change		2013	2023	Change	_	
Accommodation and Food Services	7.8%	7.0%	-0.9%	*	13.0%	11.1%	-1.9%	7	
Administrative and Support and Waste Management Services	4.6%	4.4%	-0.2%	*	6.9%	6.2%	-0.6%	,	
Agriculture, Forestry, Fishing, and Hunting	1.5%	1.2%	-0.2%	*	1.9%	1.6%	-0.3%	7	
Arts, Entertainment, and Recreation	2.4%	2.4%	0.0%		2.7%	2.7%	0.0%		
Construction	6.4%	7.0%	0.6%	*	7.6%	8.0%	0.4%	4	
Educational Services	9.1%	9.3%	0.2%	*	6.9%	8.0%	1.0%	4	
Finance and Insurance	4.5%	4.7%	0.1%	*	2.5%	2.6%	0.1%		
Health Care and Social Assistance	13.4%	13.7%	0.3%	*	12.8%	13.1%	0.4%	7	
Information	2.1%	1.9%	-0.2%	*	1.5%	1.3%	-0.2%	3	
Management of Companies and Enterprises	0.1%	0.1%	0.0%	*	0.0%	0.0%	0.0%	d.	
Manufacturing	10.3%	9.7%	-0.6%	*	8.5%	8.0%	-0.5%	7	
Mining, Quarrying, and Oil and Gas Extraction	0.6%	0.4%	-0.2%	*	0.3%	0.2%	-0.1%	3	
Other Services, Except Public Administration	5.0%	4.8%	-0.2%	*	6.7%	6.3%	-0.4%	d.	
Professional, Scientific, and Technical Services	6.6%	8.3%	1.8%	*	3.6%	4.5%	1.0%	Ą	
Public Administration	4.6%	4.6%	0.0%		2.4%	2.7%	0.3%	3	
Real Estate and Rental and Leasing	1.8%	1.8%	0.0%		1.7%	1.6%	-0.1%	3	
Retail Trade	11.8%	10.8%	-1.0%	*	14.7%	13.9%	-0.8%	7	
Transportation and Warehousing	4.0%	5.2%	1.2%	*	3.8%	6.0%	2.2%	,	
Utilities	0.8%	0.9%	0.0%		0.4%	0.4%	0.1%		
Wholesale Trade	2.6%	2.0%	-0.7%	*	2.2%	1.7%	-0.5%		

Source: Author analysis of 2023 American Community Survey Public Use Microdata Note: Asterisks (*) denote statistically significant change at the 95% confidence level.

Notes

[†] The Shifting Landscape of Job Proximity: A Conversation with Visiting Scholar Scott Allard – Federal Reserve Bank of San Francisco

- " Why Aren't More People Working in Low- and Moderate-Income Areas? Federal Reserve Bank of Kansas City
- For instance, under the Community Reinvestment Act, communities with median incomes below 80% of the area median are considered low- to moderate-income (see https://www.federalreserve.gov/consumerscommunities/cra_resources.htm#lmi). For U.S. Department of Housing and Urban Development program, such as public housing or vouchers-based housing assistance, 80% of area median income demarcates low-income families and individuals (see https://www.hud.gov/helping-americans/public-housing).
- No small percentage of workers in lower-income households reported drawing on Social Security (5.6%), and other retirement income (3.8%)—similar but somewhat lower levels compared with all workers (5.6% and 5.9%, respectively). Very few low-income workers reported receiving cash assistance (1.8%) or Supplemental Security Income (0.9%). (The shares for all workers were 0.8% and 0.5%, respectively.)
- VACS respondents report only a single occupation, which we interpret as their self-identified primary occupation—even if they work multiple jobs. This occupation could represent "gig" work, self-employment, or traditional employment.
- vi From the Bureau of Labor Statistics, see https://www.bls.gov/emp/tables/educational-attainment.htm.
- Data retrieved from IPUMS USA. Ruggles, Steven, Sarah Flood, Matthew Sobek, Daniel Backman, Grace Cooper, Julia A. Rivera Drew, Stephanie Richards, Renae Rogers, Jonathan Schroeder, and Kari C.W. Williams. 2025. IPUMS USA: Version 16.0. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D010.V16.0.

viii See

https://www.census.gov/content/dam/Census/library/publications/2021/acs/acs_pums_handbook_2021.pdf.

^{1x} See, e.g., Butcher, Kristin, and Diane Whitmore Schanzenbach. 2018. "Most Workers in Low-Wage Labor Market Work Substantial Hours, in Volatile Jobs." Washington, DC: Center on Budget and Policy Priorities.



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