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**United States Government Accountability Office** 

Report to the Ranking Member, Subcommittee on Primary Health and Retirement Security, Committee on Health, Education, Labor, and Pensions, U.S. Senate

September 2017

# LOW-WAGE WORKERS

Poverty and Use of Selected Federal Social Safety Net Programs Persist among Working Families

Accessible Version

## GAO Highlights

Highlights of GAO-17-677, a report to Ranking Member, Subcommittee on Primary Health and Retirement Security, Committee on Health, Education, Labor, and Pensions, U.S. Senate

#### Why GAO Did This Study

According to the Department of Labor, private-sector employers have added millions of jobs to the economy since the end of the most recent recession in 2009; however, many are in low-wage occupations. GAO was asked to examine several characteristics of low-wage workers and their families, including their use of federally funded social safety net programs over time.

This report answers the following questions: (1) What are the characteristics of the low-wage workforce and how have they changed over time? (2) To what extent are families with lowwage workers in poverty? and (3) To what extent do families with low-wage workers participate in selected social safety net programs and what factors affect their participation?

GAO analyzed CPS data from 1995, 2000, 2005, 2010, 2015, and 2016 on worker characteristics, family poverty, and participation in social safety net programs. GAO defined low-wage workers as those workers ages 25 to 64 earning \$16 or less per hour. In addition, GAO interviewed officials with state and local social safety net programs and other experts in four metropolitan areas-Atlanta, San Francisco, Santa Fe, and Washington, D.C.-representing a range of local minimum wage levels relative to the federal minimum wage, costs of living, and participation rates in five selected federally funded social safety net programs.

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## LOW-WAGE WORKERS

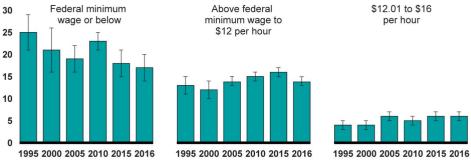
### Poverty and Use of Selected Federal Social Safety Net Programs Persist among Working Families

#### What GAO Found

According to GAO's analysis of data in the Census Bureau's Current Population Survey (CPS), on average, low-wage workers worked fewer hours per week, were more highly concentrated in a few industries and occupations, and had lower educational attainment than workers earning hourly wages above \$16 in each year GAO reviewed—1995, 2000, 2005, 2010, 2015 and 2016. Their percentage of the U.S. workforce also stayed relatively constant over time. About 40 percent of the U.S. workforce ages 25 to 64 earned hourly wages of \$16 or less (in constant 2016 dollars) over the period 1995 through 2016. The combination of low wages and few hours worked compounded the income disadvantage of low-wage workers and likely contributed to their potential eligibility for federal social safety net programs.

About 20 percent of families with a worker earning up to the federal minimum wage (currently \$7.25 per hour), 13 percent of families with a worker earning above federal minimum wage to \$12.00 per hour, and 5 percent of families with a worker earning \$12.01 to \$16 per hour were in poverty in each year GAO reviewed (see figure). The extent of poverty varied considerably by the type of family in which a worker lived. For example, single-parent families earning the federal minimum wage or below comprised a higher percentage of families in poverty. In contrast, married families with no children comprised the lowest percentage of families in poverty, and generally had family incomes at or above the poverty line.

Estimated Percentage of Working Families in Poverty, by Worker's Hourly Wage (in constant 2016 dollars)



Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677 Note: All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or

Note. An references to the rederar minimum wage are based on into percent of the noting rederar minimum wage in elect that year of the equivalent hourly calculated wage for salaried workers. Brackets are used to represent margins of error of estimated percentages at a 95 percent confidence level.

Families with a worker earning \$16 or less per hour consistently used selected federally funded social safety net programs between 2005 and 2016, with varied factors affecting eligible families' participation. GAO estimated that the percentage of these families enrolled in Medicaid rose significantly over the past 2 decades, almost tripling among families with a worker earning more than the federal minimum wage between 1995 and 2016. In contrast, an estimated 5 percent or less of these families received cash assistance from the Temporary Assistance for Needy Families (TANF) program at least once in the prior calendar year from 1995 through 2016. A low-wage worker's family type also influenced the extent that families used selected social safety net programs. For example, among families with minimum wage earners in 2016, GAO estimated that about half or more married families used none of the programs GAO examined-Medicaid, TANF, Supplemental Nutrition Assistance Program, Earned Income Tax Credit, and Additional Child Tax Credit—while more than half of single-parent families used three or more. Program officials and others told GAO that eligible working families may not participate in programs for a variety of reasons, including time needed to apply for benefits, low benefit amounts, and assumed ineligibility.

## Contents

Letter		1
	Background	5
	Characteristics of the Low-Wage Workforce Changed Little from 1995 through 2016	12
	Poverty Persisted among Working Families, Affecting Those with Minimum Wage Earners and Children the Most Families of Low-Wage Workers Consistently Use Certain Federal Social Safety Net Programs, but Several Factors May Limit	20
	Eligible Families' Use	27
	Agency Comments and Our Evaluation	35
Appendix I: Objectives, Scope, and	Methodology	37
Appendix II: Select Data on the Pero	centage of Working Families in Poverty	43
Appendix III: Select Data on the Nur	mber of Working Families in Poverty	48
Appendix IV: GAO Contacts and Sta	aff Acknowledgment	57
Appendix V: Accessible Data		58
	Data Tables	58
Tables		
	Table 1: Poverty Thresholds in Annual Income, Family Size, and Number of Related Children under Age 18, 2016	10
	Table 2: Calculated Weekly and Annual Earnings and PotentialSocial Safety Net Program Eligibility for a HypotheticalLow-Wage Worker Ages 25 to 64, by Wage Category	
	(2016) Table 2: Estimated Decenters of Working Families with Incomes	16
	Table 3: Estimated Percentage of Working Families with IncomesJust Above the Poverty Thresholds, 1995 through 2016	26
	Table 4: Estimated Percentage of Working Families with Income Below or Near the Poverty Threshold, by Family Type, and Wage Category, 1995 through 2016	43

Table 5: Estimated Number of Families in Poverty, by Family Type	
and Wage Category, 1995 through 2016 (in thousands)	48

#### Figures

Figure 1: Changes in the Federal Minimum Wage Rate, 1980 through 2016	6
Figure 2: State Minimum Wage Rates as of January 1, 2017 Figure 3: Population of Hourly and Minimum-Wage Workers in the	7
U.S. Workforce, and U.S. Poverty Trends for Individuals, 1995 through 2015	8
Figure 4: Estimated Percentage of Low-Wage Workers in the Total U.S. Workforce Ages 25 to 64, by Wage Category,	
1995 through 2016	13
Figure 5: Average Hours Worked per Week by Workers Ages 25 to 64 (Estimated), by Wage Category, 1995 through 2016	15
Figure 6: Top Five Industries Employing Highest Estimated	10
Percentage of Workers Ages 25 to 64, by Percentage of	
Wage Category Workforce, 1995 through 2016	18
Figure 7: Occupational Distribution of Low-Wage Workers Ages 25 to 64 (Estimated), 2016	19
Figure 8: Families with a Low-Wage Worker Ages 25 to 64, With	10
Annual Incomes under the Poverty Threshold	
(Estimated), by Wage Category, 1995 through 2016	22
Figure 9: Poverty among Families with a Worker Ages 25 to 64	
Earning the Federal Minimum Wage or Below (Estimated), by Family Type, 1995 through 2016	24
Figure 10: Estimated Rates of Medicaid Enrollment among	24
Families with a Low-Wage Worker Ages 25 to 64, by	
Wage Category, 1995 through 2016	28
Figure 11: Estimated Percentage of Families with a Minimum	
Wage Worker Using Some Combination of Medicaid, the	
Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, the Earned Income Tax	
Credit, and the Additional Child Tax Credit, by Family	
Type, 2016	31
Accessible Data for Estimated Percentage of Working Families in	
Poverty, by Worker's Hourly Wage (in constant 2016	50
dollars) Accessible Data for Figure 1: Changes in the Federal Minimum	58
Wage Rate, 1980 through 2016	58
Accessible Data for Figure 2: State Minimum Wage Rates as of	
January 1, 2017	60
Accessible Data for Figure 3: Population of Hourly and Minimum-	
Wage Workers in the U.S. Workforce, and U.S. Poverty Trends for Individuals, 1995 through 2015	61
Tends for marriadais, 1990 through 2010	01

Accessible Data for Figure 4: Estimated Percentage of Low-Wage	
Workers in the Total U.S. Workforce Ages 25 to 64, by	
Wage Category, 1995 through 2016	62
Accessible Data for Figure 5: Average Hours Worked per Week by	
Workers Ages 25 to 64 (Estimated), by Wage Category,	
1995 through 2016	63
Accessible Data for Figure 6: Top Five Industries Employing	
Highest Estimated Percentage of Workers Ages 25 to 64,	
by Percentage of Wage Category Workforce, 1995	
through 2016	63
Accessible Data for Figure 7: Occupational Distribution of Low-	
Wage Workers Ages 25 to 64 (Estimated), 2016	64
Accessible Data for Figure 8: Families with a Low-Wage Worker	
Ages 25 to 64, With Annual Incomes under the Poverty	
Threshold (Estimated), by Wage Category, 1995 through	
2016	65
Accessible Data for Figure 9: Poverty among Families with a	
Worker Ages 25 to 64 Earning the Federal Minimum	
Wage or Below (Estimated), by Family Type, 1995	~ 7
through 2016	67
Accessible Data for Figure 10: Estimated Rates of Medicaid	
Enrollment among Families with a Low-Wage Worker	~~~
Ages 25 to 64, by Wage Category, 1995 through 2016	69
Accessible Data for Figure 11: Estimated Percentage of Families	
with a Minimum Wage Worker Using Some Combination	
of Medicaid, the Supplemental Nutrition Assistance	
Program, Temporary Assistance for Needy Families, the	
Earned Income Tax Credit, and the Additional Child Tax	69
Credit, by Family Type, 2016	09

#### Abbreviations

ACTC	Additional Child Tax Credit
ASEC	Annual Social and Economic Supplement
BLS	Bureau of Labor Statistics
Census	Census Bureau

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CPS	Current Population Survey
EITC	Earned Income Tax Credit
HHS	Department of Health and Human Services
IRS	Internal Revenue Service
SNAP	Supplemental Nutrition Assistance Program
SPM	Supplemental Poverty Measure
TANF	Temporary Assistance for Needy Families
USDA	U.S. Department of Agriculture

.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W. Washington, DC 20548

September 22, 2017

The Honorable Bernard Sanders Ranking Member Subcommittee on Primary Health and Retirement Security, Committee on Health, Education, Labor, and Pensions United States Senate

Dear Senator Sanders:

According to the Department of Labor, private-sector employers have added millions of jobs to the economy since the end of the most recent recession in 2009; however, much of this job growth has been concentrated in low-wage occupations that are less likely to provide fulltime hours or employer-sponsored benefits. As a result, some workers may face difficulty earning enough to meet their families' basic needs.

Although working families may have one or more employed workers, a family's combined income, if reliant on employment in low-wage occupations, may keep the family in poverty. The Census Bureau (Census) recently reported that 11.3 percent of families and 6.3 percent of workers, including 2.4 percent of full-time workers, were in poverty in 2015. We previously reported that most people in poverty lived in households with at least some earnings.<sup>1</sup> By being in poverty, these workers and their families may be eligible to participate in one or more federally funded social safety net programs provided any other applicable eligibility requirements are also met. These programs assist low-income individuals and families with cash aid, food, shelter, health care, and other support. Some programs are administered by the federal government; others are administered by states.

You asked us to examine several aspects of low-wage workers and their families including their use of federally funded social safety net programs over time. In this report, we answer the following questions: (1) What are the characteristics of the low-wage workforce and how have they changed over time? (2) To what extent are families with a low-wage

<sup>&</sup>lt;sup>1</sup> GAO, *Federal Low-Income Programs: Multiple Programs Target Diverse Populations and Needs*, GAO-15-516 (Washington, D.C., July 30, 2015).

worker in poverty? and (3) To what extent do families with a low-wage worker participate in selected social safety net programs and what factors affect their participation?

To answer these questions, we analyzed data from 1995 through 2016 included in the Current Population Survey (CPS)—a national survey designed and administered jointly by Census and the Bureau of Labor Statistics (BLS) that serves as a key source of official government statistics on employment and unemployment in the United States. After discussions with Census and BLS officials, we selected the CPS and a supplemental CPS survey—the Annual Social and Economic Supplement (ASEC)—as the data sources best suited to answer our research questions because together they included hourly wage data, large sample sizes, data over time, and data on eligibility for and participation in social safety net programs. We selected these years to provide a historical view of the workforce at certain points in time extending across 2 decades. We assessed the reliability of the CPS and ASEC data by reviewing data documentation and interviewing officials at BLS and Census who use and maintain the dataset. We determined that the data from these sources were reliable for the purposes of our report. For the purposes of our analysis, we defined a "worker" as a wage or salary earner ages 25 to 64 in the civilian labor force with positive weekly earnings. We defined a "low wage" worker to be an individual who earned \$16 per hour or less. measured in constant 2016 dollars. We divided low-wage workers into three mutually exclusive categories, based on their estimated hourly wages:

- federal minimum wage or below; <sup>2</sup>
- above federal minimum wage to \$12.00; and
- \$12.01 to \$16.00.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> The current federal minimum wage of \$7.25 per hour was last increased in 2009. In our analysis of CPS data, we developed estimates using the federal minimum wage in each year that we reviewed. Employers may pay some workers—such as restaurant workers and others who receive tip income—hourly wages below this amount without violating federal minimum wage laws. To allow for the possibility that a worker earning minimum wage had average earnings above the minimum wage rate (e.g., by working overtime), we included in this wage category all hourly wage workers earning 110 percent of the federal minimum wage or below (e.g., \$7.98 per hour in 2017). For the purposes of our analysis, we excluded state and local minimum wage levels, which in some cases exceed the federal minimum wage, and focused solely on the federal minimum wage. As a result, some individuals paid at their state or local minimum wage level may appear in the data as earning above the federal minimum wage.

For the first objective, we used CPS and ASEC data to describe selected characteristics of low-wage workers, including the industries in which they worked, their occupations, the number of jobs that they held, and the number of hours that they worked. To determine if the characteristics of low-wage workers changed over time, we examined these variables using every fifth year of data from 1995 to 2015 (i.e., 1995, 2000, 2005, 2010, and 2015), as well as the most recent CPS data from 2016.

For the second objective, because poverty is determined on the basis of annual family income we used "families" as the unit of analysis.<sup>4</sup> We examined four different types of families with a low-wage worker: (1) married families with children; (2) married families without children; (3) single-parent families with children; and (4) other families. The "other families" category covers a wide variety of living situations, such as single adults living alone, but does not include married couples or a single parent living with children. We determined the extent of poverty among families with a low-wage worker using CPS variables on two poverty measures—the official poverty measure and the Supplemental Poverty Measure (SPM).<sup>5</sup> Our dataset derived from CPS data included families with at least one low-wage worker. We placed families with more than one low-wage worker in one or more of the categories we examined, depending on that worker's wages. For example, we included the family in both groups if a family had low-wage workers in more than one category (such as a worker earning the federal minimum wage and a worker earning between \$12.01 and 16). To estimate the number and

<sup>4</sup> CPS divides households into smaller units, including family groups of related individuals. Individuals belonging to an unrelated subfamily were analyzed as part of the unrelated subfamily.

<sup>5</sup> The SPM is not used to determine program eligibility; however, it provides more information than the official poverty measure on household resources available to meet living expenses. We compared household incomes to the official poverty measure from 1995 to 2016 and to the SPM for 2010 and 2015. The SPM includes the family plus cohabiting partners and their relatives, as well as any unrelated children in a household.

<sup>&</sup>lt;sup>3</sup> Because definitions of low-wage workers can vary, we chose to examine multiple hourly wage thresholds in addition to our lowest wage category of 110 percent of the federal minimum wage. Our threshold of \$12 per hour represents approximately the 20th percentile of hourly wage workers ages 25 to 64 in 2016, and is approximately equivalent to the wage rate of a worker working full-time (i.e., about 2,000 hours per year) to support a family of four at the poverty line (approximately \$24,000 per year for a family of four with two children in 2016). Our threshold of \$16 per hour, represents approximately the 40th percentile of hourly wage workers ages 25 to 64 in 2016, and is approximately the 40th two children in 2016). Our threshold of \$16 per hour, represents approximately the 40th percentile of hourly wage workers ages 25 to 64 in 2016, and is approximately equivalent the wage rate of a full-time worker supporting a family of six at the poverty level (or approximately \$32,000 per year for a family of six with four children in 2016).

percentage of families in our sample that were in poverty, we relied on the CPS poverty variable which uses a modified poverty index adopted by a Federal Interagency Committee in 1969 to provide a range of income cutoffs or "poverty thresholds" adjusted to take into account family size, number of children, and age of the family householder or unrelated individual. We calculated the percentage and number of these families in poverty in each of the 6 years we analyzed from 1995 through 2016.

For the third objective, we used the same CPS dataset on families with a low-wage worker to examine the extent to which families with a low-wage worker participated in five social safety net programs for low-income individuals: (1) Medicaid (health care); (2) the Supplemental Nutrition Assistance Program (SNAP) (formerly food stamps); (3) Temporary Assistance for Needy Families (TANF) (cash assistance); (4) the Earned Income Tax Credit (EITC): and (5) the Additional Child Tax Credit (ACTC).<sup>6</sup> We selected these five programs because they were large or well known, and were included in the CPS data. For each of the selected programs, we determined the number and types of families in each of our three wage categories that, according to CPS, reported participating in the program. We also analyzed whether families with a low-wage worker participated in more than one of these programs and which combinations of programs they used. We compared our results to existing reports, and interviewed staff at BLS and Census. To examine what is known about the reasons eligible working families do not participate in these selected programs, we conducted a literature review and interviewed public policy researchers and officials at state and local benefit agencies and/or community nonprofit organizations, including interviews in four metropolitan areas. We selected four locations—Atlanta, San Francisco, Santa Fe, and Washington, D.C.—because they represented a range of local minimum wage levels relative to the federal minimum wage, costs of living, and participation rates in our five selected social safety net programs. The content of our interviews and literature review is not generalizable, but provides examples of factors affecting working families who are eligible for, but do not receive assistance from social safety net programs.

<sup>&</sup>lt;sup>6</sup> CPS participation rates for TANF include only cash assistance. CPS data do not include information on families who were recipients of the other services funded by the TANF block grant, such as vocational training or childcare. As a result, when we discuss TANF in this report, we are referring only to TANF cash assistance.

Although CPS is a widely used source of labor force information, it is important to note that these data have some limitations. CPS is selfreported survey data collected from a probability sample. We did not independently verify the accuracy of the self-reported data. Specifically, CPS data on program participation are known to be underreported, for reasons that are not fully understood.<sup>7</sup> In addition, Census officials told us that CPS data on EITC and ACTC are modeled on who would be eligible rather than reported participation in these tax credit programs. All estimates produced from samples, such as the CPS data, are subject to sampling error. In addition to percentage estimates, we calculated margins of errors and include them in figures and tables. We include standard errors associated with certain poverty and program participation estimates in appendix II. The differences we discuss are statistically significant unless otherwise noted. For additional information on the methodology used in this report, see appendix I.

We conducted this performance audit from May 2016 to September 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Background

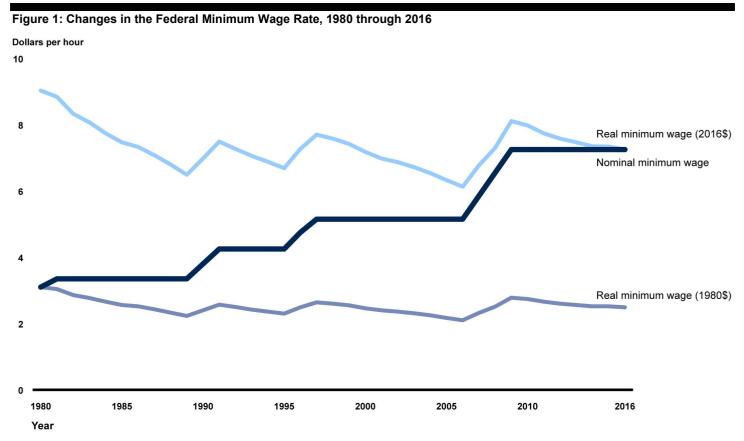
### Federal Minimum Wage

The lowest wage that a worker can earn is generally the federal minimum wage.<sup>8</sup> The Fair Labor Standards Act of 1938 first established a minimum wage of 25 cents per hour, which has been raised numerous times eventually reaching its current level of \$7.25 per hour. Since 1980 the federal government has increased the federal minimum wage various times; however, the actual purchase power after adjusting for inflation

<sup>&</sup>lt;sup>7</sup> For example, we previously reported that the Urban Institute found that in 2012, CPS data captured about 61 percent of people receiving TANF cash assistance and 57 percent of those receiving SNAP benefits. GAO-15-516.

<sup>&</sup>lt;sup>8</sup> Employers may pay some workers—such as restaurant workers and others who receive tip income—hourly wages below the federal minimum wage without violating federal minimum wage laws.

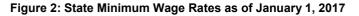
(i.e., the real value) of the minimum wage has trended downward (see fig. 1).

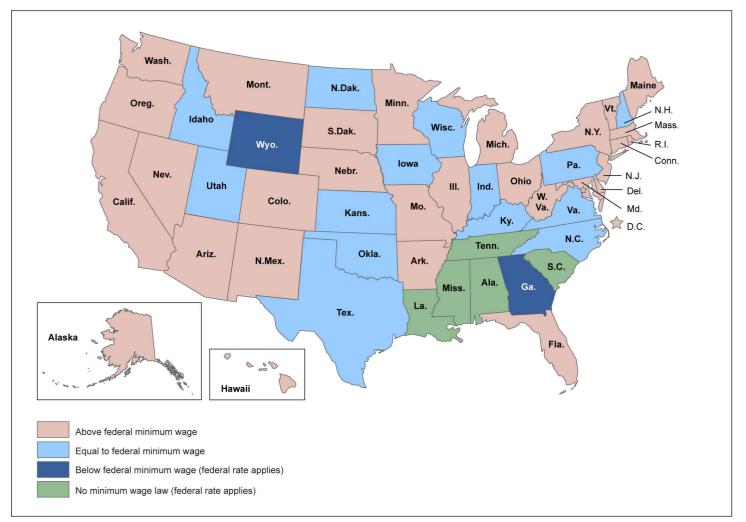


Source: GAO analysis of Bureau of Labor Statistics data. | GAO-17-677

Many states have enacted their own minimum wage laws, and under the provisions of the Fair Labor Standards Act of 1938, an individual is generally covered by the higher of the state or federal minimum-wage rates. As of January 1, 2017, according to the Department of Labor, 29 states and the District of Columbia had minimum wage rates above the federal minimum rate, and 2 states had minimum wage rates below the federal minimum rate. State minimum wages ranged from \$5.15 per hour

in Georgia and Wyoming to \$11.50 per hour in the District of Columbia (see fig. 2).<sup>9</sup>



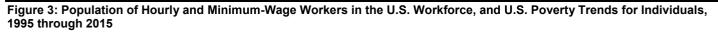


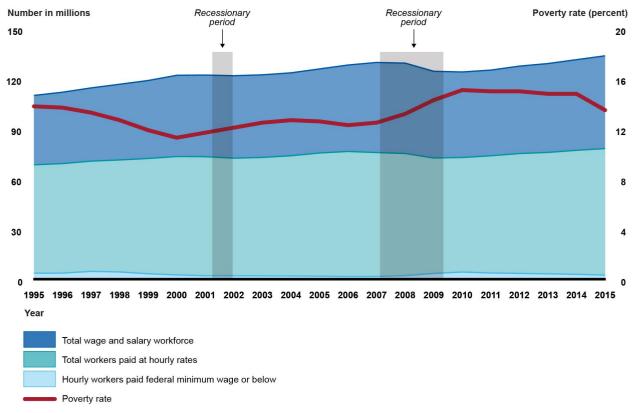
Source: GAO presentation of Department of Labor information, https://www.dol.gov/whd/minwage/america.htm. Map Resources (map). | GAO-17-677

According to BLS data, hourly workers earning at or below the federal minimum wage of \$7.25 per hour made up 1.6 percent of total wage and salary workers.in 2016. The number of minimum wage workers since

<sup>9</sup> States and localities may set minimum wages above, equivalent to, or below the federal minimum wage. However, the federal minimum wage rate applies in states and localities with minimum wage rates lower than the federal wage.

1995 ranged from a low of 1.7 million in 2006 to a high of 4.8 million in 1997 (see fig. 3).





Source: GAO analysis of data from the Census Bureau and the Bureau of Labor Statistics. | GAO-17-677

Note: Employers may pay some workers—such as restaurant workers and others who receive tip income—hourly wages below the federal minimum wage without violating federal minimum wage laws.

According to BLS, more than one-half of hourly workers earning the federal minimum wage were employed part-time in 2016, in contrast to about one-quarter of all hourly workers. By working part-time—defined by BLS as 1 to 34 hours per week—these workers are less likely to receive health insurance and other benefits from their employers.<sup>10</sup> Research has

<sup>&</sup>lt;sup>10</sup> For example, the Patient Protection and Affordable Care Act requires large employers to provide health insurance for employees who work 30 hours or more per week or to pay annual tax penalties. They are not obligated to provide this benefit for part-time workers.

also shown that many contingent workers, including some part-time workers, experience fluctuations in their earnings and employment status, making them more likely to seek assistance from federally funded social safety net programs, if eligible.<sup>11</sup>

#### Poverty Measurement

As we previously reported, the official poverty measure used to provide information on how many people are "in poverty" in the United States was developed in the 1960s, based on the cost of food at that time.<sup>12</sup> Each year Census updates its poverty thresholds—the income thresholds by which households are considered to be in poverty depending on family size. In 2016, the poverty thresholds ranged from \$11,511 to \$53,413, depending on family size and the age of the head of household (see table 1).

<sup>&</sup>lt;sup>11</sup> Eligibility for federal social safety net programs is often linked to individual, family, or household income, as well as other factors. Some families with a low-wage worker may not qualify to participate in these programs if their income exceeds the maximum threshold for the program.

<sup>&</sup>lt;sup>12</sup> GAO-15-516. Census sets the official poverty measure following the Office of Management and Budget's Statistical Policy Directive 14. See Office of Management and Budget, Definition of Poverty for Statistical Purposes, Statistical Policy Directive No. 14 (May 1978).

#### Table 1: Poverty Thresholds in Annual Income, Family Size, and Number of Related Children under Age 18, 2016

n/a		Poverty the	reshold ba	sed on nu	mber of re	lated child	ren under	18 years	
Size of family unit	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual): Under age 65	12,486	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
One person (unrelated individual): Aged 65 and older	11,511	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Two people: Householder under age 65	16,072	16,543	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Two people: Householder aged 65 and older	14,507	16,480	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Three people	18,774	19,318	19,337	n/a	n/a	n/a	n/a	n/a	n/a
Four people	24,755	25,160	24,339	24,424	n/a	n/a	n/a	n/a	n/a
Five people	29,854	30,288	29,360	28,643	28,205	n/a	n/a	n/a	n/a
Six people	34,337	34,473	33,763	33,082	32,070	31,470	n/a	n/a	n/a
Seven people	39,509	39,756	38,905	38,313	37,208	35,920	34,507	n/a	n/a
Eight people	44,188	44,578	43,776	43,072	42,075	40,809	39,491	39,156	n/a
Nine people or more	53,155	53,413	52,702	52,106	51,127	49,779	48,561	48,259	46,400

Source: U.S. Census Bureau | GAO-17-677

The Department of Health and Human Services (HHS) uses these poverty thresholds to update its poverty guidelines each year. These guidelines are used as an eligibility criterion of a number of federal programs, including certain low-income programs.<sup>13</sup>

We also previously reported that the official poverty measure had not changed substantially since it was first developed, and concerns about its inadequacies had resulted in efforts to develop a new measure.<sup>14</sup> For example, poverty threshold (the income level used to determine who is "in

<sup>14</sup> GAO-15-516.

<sup>&</sup>lt;sup>13</sup> HHS states that its poverty guidelines are a simplified version of the Census Bureau's poverty thresholds. However, there are some differences between the two. For instance, HHS's poverty guidelines vary by family size; while the Census poverty thresholds also vary by number of children, and, for households with one or two people, whether these members are elderly. Additionally, while HHS's poverty guidelines are higher in Alaska and Hawaii than in the contiguous United States, the Census poverty thresholds are the same across all states. Furthermore, due to differences in when each measure is updated, HHS's poverty guidelines approximate the Census poverty thresholds for the prior year. For HHS's most recent poverty guidelines, see Annual Update of the HHS Poverty Guidelines, 82 Fed. Reg. 8831 (Jan. 31, 2017).

poverty" each year) is based on three times the cost of food and does not take into account the cost of other basic necessities, such as shelter and utilities. Additionally, the official poverty measure considers cash income in determining a household's income, but does not include additions to income based on the value of noncash assistance (e.g., food assistance) or reductions based on other necessary living expenses (e.g., medical expenses or taxes paid). A National Academy of Sciences panel on poverty and an interagency technical working group suggested ways that a new poverty measure could address some of these concerns. Based on these suggestions, Census, with support from BLS, developed a new poverty measure—the Supplemental Poverty Measure (SPM)—in 2010. Unlike the official poverty measure, the SPM adds other forms of non-cash benefits, such as tax credits and SNAP benefits, and subtracts expenses, such as federal, state, and local income taxes, when calculating a household's resources.

#### Federally Funded Social Safety Net Programs

We have previously reported that federally funded social safety net programs generally provide targeted assistance to specific groups within the low-income population, such as people with disabilities and workers with children.<sup>15</sup> In 2015, we identified more than 80 federal programs (including 6 tax expenditures) that provided aid to individuals and families who may earn too little to meet their basic needs, cannot support themselves through work, or are disadvantaged in other ways. According to the Congressional Research Service, five of these programs— Medicaid, SNAP, TANF, EITC, and ACTC—accounted for \$551.2 billion in spending in fiscal year 2015, or two-thirds of total federal spending on low-income assistance programs in that year.<sup>16</sup>

Eligibility criteria vary for these five federally funded programs and can include both financial and nonfinancial criteria. As we have previously reported, some programs are administered by states, which may apply their own eligibility criteria.<sup>17</sup> Assistance may be provided to an individual, a family, or household. More recently, we reported that these programs'

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Congressional Research Service, *Federal Benefits and Services for People with Low Income: Overview of Spending Trends, FY2008-FY2015.* (Washington, D.C.: July 29, 2016).

<sup>&</sup>lt;sup>17</sup> GAO-15-516.

eligibility criteria varied significantly in terms of the income limits used.<sup>18</sup> In addition, we found that programs differed in the ways they measured applicants' income, the standards and methods used to determine the income limit (i.e., the maximum income an applicant may have and still be eligible for the program), whether this limit is set nationwide or varies by state or locality, and the amount of the income limit itself. We also found that rules for determining the maximum allowable income that an applicant may have a recipient could earn and still be eligible, the amounts themselves, and whether they are set nationwide or vary by state or locality, also varied significantly. For example, in TANF, income limits are determined by states. We found that some states use HHS's poverty guidelines, which are adjusted annually, while others had a limit set in state law, which is not adjusted. In addition to having income tests, we found that some programs limit assets that an eligible individual or family may hold, while others do not. Furthermore, we found that programs may have ongoing requirements that families must satisfy to remain enrolled and receiving assistance. For example, we found that some programs periodically require participants to recertify that their income remains below the income limit.

### Characteristics of the Low-Wage Workforce Changed Little from 1995 through 2016

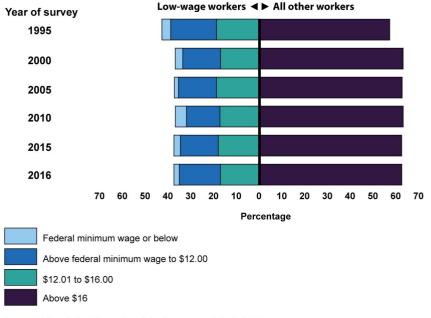
Low-Wage Workers Comprised About 40 Percent of the U.S. Workforce Ages 25 to 64

About 40 percent of U.S. workers ages 25 to 64 earned hourly wages of \$16 or less (in constant 2016 dollars) over the period 1995 through 2016, according to our analysis of CPS data (see fig. 4). In each of the 6 years we reviewed, an estimated 1 to 5 percent of these workers earned an hourly wage or less of that year's federal minimum wage, about 17

<sup>&</sup>lt;sup>18</sup> GAO, Federal Low-Income Programs: Eligibility and Benefits Differ for Selected Programs Due to Complex and Varied Rules, GAO-17-558 (Washington, D.C.: June 29, 2017).

percent earned above federal minimum wage to \$12 per hour, and about 18 percent earned above \$12 per hour to \$16 per hour.<sup>19</sup>

Figure 4: Estimated Percentage of Low-Wage Workers in the Total U.S. Workforce Ages 25 to 64, by Wage Category, 1995 through 2016



Source: GAO analysis of Current Population Survey data. | GAO-17-677

Note: All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All dollar amounts are in constant 2016 dollars. Percentage estimates have a margin of error of +/- 3 percentage points or less for percentage estimates at the 95 percent confidence level.

The stagnation of low-wage workers in the workforce as depicted in our analysis of CPS data is also consistent with the literature on income inequality. Recent studies have found that while average wages experienced little or no change from 1973 through 2011 (when held in

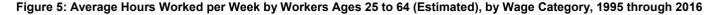
<sup>&</sup>lt;sup>19</sup> The hourly wages that we calculated from reported earnings are estimates and therefore may be imprecise, We made our measure of the federal minimum wage is equivalent to 110 percent of the federal minimum wage in a given year to account for this imprecision and to allow for minimum wage workers who may have earned overtime making their average wage slightly above the minimum wage rate. For example, in 2016, the federal minimum wage was \$7.25 per hour, but our analysis included minimum wage workers who earned \$7.98 per hour or less. The nominal federal minimum wage was \$4.25 in 1995, \$5.15 in 2000 and 2005, and \$7.25 in 2010 through 2017.

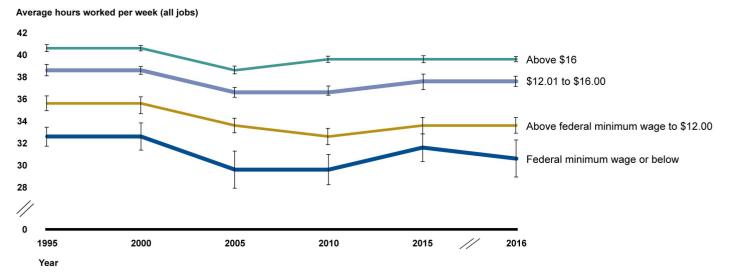
constant 2011 dollars), income inequality increased as a result of income growth among high-wage workers.<sup>20</sup>

## Limited Hours Compounded Low-Wage Workers' Income Disadvantage

Low-wage workers, on average, worked fewer hours per week from 1995 through 2016 than similar workers earning higher wages, according to our analysis of CPS data. In each of the years we reviewed, our estimates showed that workers who earned the federal minimum wage or less worked an average of about 30 hours per week, workers earning above the federal minimum wage to \$12 per hour worked an average of about 33 hours per week, and those earning \$12.01 to \$16 per hour worked an average of about 37 hours per week (see fig. 5).

<sup>&</sup>lt;sup>20</sup> An Economic Policy Institute study found that the 20<sup>th</sup> percentile of hourly wages for all workers went from \$9.75 in 1973 to \$9.86 in 2011 (in 2011 dollars). See Economic Policy Institute, *The State of Working America* (2012). Similarly, a Pew Research Center study found that the lowest and lower middle income households made up 27 percent of all households in 1991 and 29 percent in 2015. See Pew Research Center, *The American Middle Class is Losing Ground* (2015). Lastly, a BLS published study found that the hourly wage of the lowest 10 percent of workers went from \$8.87 in 2007 to \$8.57 in 2014 (in 2014 dollars). See Kristen Monaco and Brooks Pierce, "Compensation inequality: evidence from the National Compensation Survey," *Monthly Labor Review*, U.S. Bureau of Labor Statistics, July 2015.





Source: GAO analysis of Current Population Survey data. | GAO-17-677

Note: All references to the "federal minimum wage" are based on110 percent of the federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All dollar amounts are in constant 2016 dollars. Bars represent the margin of error for the 95 percent confidence interval of each estimate.

One option that a worker has to increase earnings is working multiple jobs. Our analysis of CPS data found that few low-wage workers held multiple jobs and low-wage workers tended to work multiple jobs at the same rate as workers earning higher wages. Specifically, our estimates showed that about 5 percent of low-wage workers in each low-wage category worked multiple jobs, or about the same percent as workers earning more than \$16 per hour in each of the years we reviewed.

The combination of low wages and limited hours can affect a worker's earnings and potential eligibility for federal social safety net programs. The reported growth of involuntary part-time workers—workers who would prefer to work more hours but are limited by economic conditions such as employers cutting hours or lack of full-time job opportunities—has likely reduced the average hours that low-wage workers can work.<sup>21</sup> According to BLS, the number of these involuntary part-time workers peaked during the Great Recession and has yet to return to pre-recession levels. In 2016, BLS estimated that 5.6 million workers were involuntary part-time workers, of which about 61 percent said they were part-time

<sup>&</sup>lt;sup>21</sup> Involuntary part-time workers are also referred to as underemployed workers.

because of business conditions and 34 percent said they could only find part-time employment.<sup>22</sup> In previous reports, we found that low-wage workers employed on a contingent basis were more likely to earn low wages, less likely to have employer-sponsored benefits, and more likely to rely on social safety net programs.<sup>23</sup> Low-wage workers who provide the sole income for a family may have income that is low enough to qualify them for federally funded social safety net programs. As shown in table 2, a hypothetical low-wage single parent who served as the sole income provider for a family of three would qualify for several programs of the five that we included in our analysis provided any other applicable eligibility requirements were also met.<sup>24</sup>

## Table 2: Calculated Weekly and Annual Earnings and Potential Social Safety Net Program Eligibility for a Hypothetical Low-Wage Worker Ages 25 to 64, by Wage Category (2016)

Wage category	Average hours per week (estimated)	Calculated weekly earnings <sup>a</sup>	Calculated annual earnings <sup>b</sup>	Potential eligibility for social safety net programs (based solely on income) <sup>c</sup>
Federal minimum wage or below <sup>d</sup>	30	\$239.25	\$12,441	Medicaid, SNAP, EITC, and ACTC
Above federal minimum wage to \$12.00	33	\$396	\$20,592	Medicaid, SNAP, EITC, and ACTC
\$12.01 - \$16.00	37	\$592	\$30,784	EITC and ACTC

Source: GAO analysis of Current Population Survey (CPS) data | GAO-17-677

<sup>a</sup>This assumes a worker earns the maximum wage and works the average hours for the respective wage level.

<sup>b</sup>Annual earnings are derived by multiplying weekly earnings by 52 weeks.

<sup>c</sup>The programs we analyzed are Medicaid, Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Earned Income Tax Credit (EITC), and the Additional Child Tax Credit (ACTC). This assumes no other source of family income in a family consisting of a single parent and two children. States may have different eligibility requirements for certain programs, and for this hypothetical, we generally compared to the federal eligibility rules. None of our hypothetical scenarios qualified for TANF cash assistance when compared to the average threshold of the 48 contiguous states and Washington, D.C. For SNAP, we use SNAP eligibility rules used by states that have not adopted SNAP's broad-based categorical eligibility. To determine potential eligibility for SNAP, we assumed that the calculated earning amount represented gross earnings under SNAP rules. To be eligible for SNAP, most households must meet gross and net income tests. Households cannot have gross monthly income (total, non-excluded income before

<sup>22</sup> BLS, The Employment Situation – April 2017 (Washington, D.C.: May 5, 2017).

<sup>23</sup> GAO, Contingent Workforce: Size, Characteristics, Earnings, and Benefits. GAO-15-168R (Washington, D.C.: Apr. 20, 2015) and GAO, Contingent Workers: Incomes and Benefits Lag Behind Those of Rest of Workforce, HEHS-00-76 (Washington, D.C.: June 30, 2000).

<sup>24</sup> For this review, we only considered the federal income-based requirements for these programs, and did not assess any other eligibility requirements.

any deductions) higher than 130 percent of HHS's poverty guidelines. They also cannot have net monthly income (gross income minus deductions) higher than 100 percent of HHS's poverty guidelines, or \$1,680 per month for a household of three under standard program eligibility rules). Medicaid eligibility criteria are based on those used in GAO-17-558 and focus on individuals eligible for Medicaid under Modified Adjusted Gross Income rules. Medicaid income eligibility requirements may vary among states. In the case of TANF cash assistance, where eligibility is set by the states, we use the July 2015 median state eligibility requirement for the 48 contiguous states and District of Columbia (\$817 per month), as reported in GAO-17-558.

<sup>d</sup>All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect in 2016 or the equivalent hourly calculated wage for salaried workers.

## Low-Wage Workers Remained Highly Concentrated in Five Industries and Six Occupations

The same five industries consistently employed the majority of low-wage workers from 1995 through 2016—leisure and hospitality, education and health, professional and business services, wholesale and retail trade, and manufacturing. Specifically, in each of the years we reviewed, these five industries employed approximately 70 percent of low-wage workers. Comparatively, these five industries also employed about 62 percent of workers earning more than \$16. (See fig. 6). Our estimates showed the highest concentration of low-wage workers to be in the health and education industry with an estimated 22 to 25 percent of workers in each of our wage categories in this industry.

Federal minimum			F	ive larges	t industries	s <b>∢</b> ► A	ll other ind	ustries		
wage or below	1995	(	68%				32%	]		
	2000	e	69%				31%			
	2005	72	!%				28%			
	2010	77%	3				23%			
	2015	73	%				27%			
	2016	72	!%				28%			
Above federal										
minimum wage to \$12 per hour	1995	73	%				27%			
	2000	749	%				26%			
	2005	749	%				26%			
	2010	75%	6				25%			
	2015	75%	6				25%			
	2016	76%	)				24%			
\$12.01 to \$16										
per hour	1995		66%				34%	6		
	2000		68%				32%	]		
	2005		66%				34%	6		
	2010		69%				31%			
	2015		69%				31%			
	2016		69%				31%			
Above \$16										
Above \$10	1995		62%				3	8%		
	2000		61%				3	39%		
	2005		64%				36			
	2010		64%				36			
	2015		65%				359			
	2016		65%				359	%		
		80	60	40	20	0	20	40	60	8
					Pe	ercentage				
						9-				

Figure 6: Top Five Industries Employing Highest Estimated Percentage of Workers Ages 25 to 64, by Percentage of Wage Category Workforce, 1995 through 2016

Source: GAO analysis of Current Population Survey data. | GAO-17-677

Note: The five industries employing the majority of low-wage workers were leisure and hospitality, education and health, professional and business services, wholesale and retail trade, and manufacturing. All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All dollar amounts are in constant 2016 dollars. Percentage estimates have a margin of error of +/- 4 percentage points or less for percentage estimates at the 95 percent confidence level.

#### **Occupational Concentration of Low-Wage Workers**

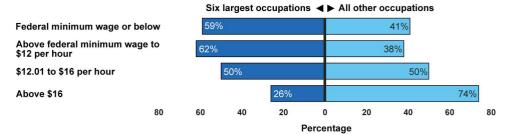
The following six occupational categories employed the majority of low-wage workers:

- <u>Food preparation and serving</u> fast food workers, cafeteria, and restaurant workers
- <u>Sales</u> cashiers, retail salespersons, and sales representatives
- <u>Office and administrative support</u> secretaries and administrative assistants, payroll and time-keeping clerks, and mail carriers
- <u>Building grounds cleaning and maintenance</u> janitors and building keepers, maids and housekeeping workers, and grounds maintenance workers
- <u>Personal care and service</u> hairdressers and barbers, child care workers, and home care aides
- <u>Transportation and materials moving</u> bus drivers, taxi drivers, ambulance drivers, and parking lot attendants

Source: Current Population Survey (CPS). | GAO-17-677

Low-wage workers were also highly concentrated in six occupational categories in 2016—food preparation and serving, sales, office and administrative support, building and grounds cleaning and maintenance, personal care and service, and transportation and material moving. (See textbox above for more detailed descriptions of these occupational categories). Our estimates showed that half or more of low-wage workers were employed in one of these six occupational categories in 2016 whereas 26 percent of higher-wage workers were employed in these categories (see fig. 7).

## Figure 7: Occupational Distribution of Low-Wage Workers Ages 25 to 64 (Estimated), 2016



Source: GAO analysis of Current Population Survey data. | GAO-17-677

Note: The six occupations employing the majority of low-wage workers were food service and preparation, sales, office and administrative support, building and grounds cleaning and maintenance, personal care and service, and transportation and material moving. All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All dollar amounts are in constant 2016 dollars. Percentage estimates have a margin of error of +/- 4 percentage points or less for percentage estimates at the 95 percent confidence level.

Although low-wage workers were concentrated in these six occupations, the amount of concentration varied by the amount of wages earned. For example, our estimates showed that workers earning hourly wages of federal minimum wage or below in 2016 were most concentrated in personal care and services, sales, and food service and preparation, with an estimated 11 to 12 percent of these workers participating in each occupation. In contrast, our estimates showed that workers earning \$12.01 to \$16 per hour were concentrated in office and administrative support occupations, with an estimated 18 percent of these workers participating in this occupation.

## Increases in Educational Attainment Have Not Led to Higher Wages

While low-wage workers had lower levels of education, on average, than workers earning higher wages, increases in their educational attainment from 1995 through 2016 generally did not lead to higher wages. Specifically, in each year we reviewed, about 68 percent of low-wage workers and about half of higher-wage workers had a high school diploma. However, the proportion of low-wage workers with college degrees also increased during this time. Our estimates showed that the percentage of workers earning \$12.01 to \$16 per hour with college degrees increased from 16 percent in 1995 to 22 percent in 2016. A similar trend occurred in the other low-wage categories. For example, the percentage of workers who had at least a high-school diploma yet earned the federal minimum wage or below increased from an estimated 70 percent in 1995 to 80 percent in 2016.

## Poverty Persisted among Working Families, Affecting Those with Minimum Wage Earners and Children the Most

Families with a low-wage worker ages 25 to 64 shared several common characteristics, according to our estimates based on CPS data. For example, our estimates showed that the majority of these families were not in poverty, had just one low-wage worker, and derived 80 percent or more of their family income from wages and salaries. In addition, on average, married families had two workers (contributing to a family income that often exceeded the poverty threshold); families with children had two children; and between 5 and 9 percent of families included someone over age 65.

### Percentage of Working Families in Poverty Has Remained Relatively Constant

The majority of families with a low-wage worker were not in poverty, yet the percentage of families that were in poverty persisted in each of the years we reviewed and in each of the low-wage categories we examined.<sup>25</sup> While higher wages were generally associated with a lower percentage of families in poverty in a given year, poverty levels among families of low-wage workers changed little in the past 2 decades across all three wage categories that we examined.<sup>26</sup> (See fig. 8.)

<sup>&</sup>lt;sup>25</sup> Poverty in the United States has fluctuated between about 10 and 15 percent since about 1970. The official U.S. poverty rate generally increases when the economy is in recession but recent experience suggests that it stays within a narrow range. For the period of 1995 to 2015, the U.S. poverty rate ranged from a low of 11.3 percent in 2000 to a high of 15.1 percent in 2010.

<sup>&</sup>lt;sup>26</sup> A recent report published by BLS that examined poverty among low-wage workers had similar findings. Specifically, it found that in 2013 workers earning up to \$9.25 had poverty rates of 21 percent and workers earning between \$9.26 and \$10.75 had poverty rates of 13 percent. Vincent A. Fusaro and H. Luke Shaefer, "How should we define "low-wage" work? An analysis using the Current Population Survey," *Monthly Labor Review* (Washington, D.C.: *Oct. 2016*).

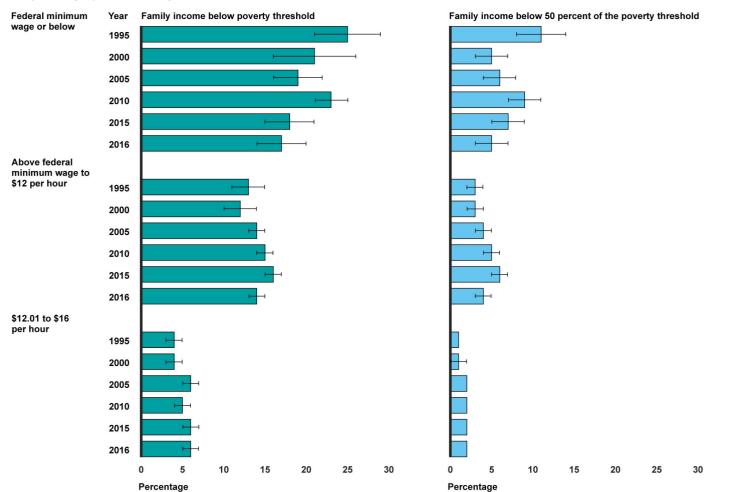


Figure 8: Families with a Low-Wage Worker Ages 25 to 64, With Annual Incomes under the Poverty Threshold (Estimated), by Wage Category, 1995 through 2016

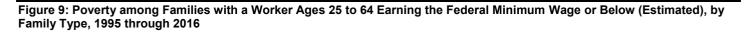
Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

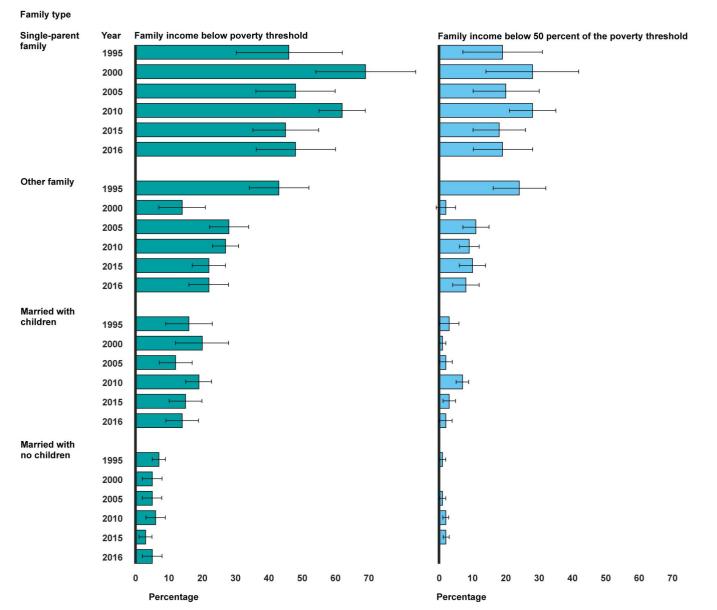
Note: All wage categories represent estimated hourly wages based on wage data reported by the survey respondent or imputed by CPS. All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All estimates including dollar amounts are reported in constant 2016 dollars. Brackets are used to represent margins of error of estimated percentages at a 95 percent confidence level.

### Poverty Was Most Prevalent among Families with Minimum Wage Earners and Children

In almost all of the years we reviewed, the presence of a child in a family with a low-wage worker was associated with higher rates of poverty regardless of the worker's wage category or marital status. For example, across all low-wage categories we examined from 1995 through 2016, 4 to 20 percent of married families with children were in poverty compared to 7 percent or fewer of married families without children. However, in 1995 the higher rate of poverty was not statistically different based on children for unmarried households in all of the wage categories. In addition, while poverty was most prevalent among families with a worker earning the federal minimum wage or below, it was most prevalent among single-parent families earning this amount.<sup>27</sup> (See fig. 9.)

<sup>&</sup>lt;sup>27</sup> See appendixes II and III for additional information on the estimated percentage and number of working families in poverty.





Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

Note: All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. The "other families" category includes families in CPS that consist of related and certain unrelated individuals who live together, including cohabiting partners and foster children, and may consist of a single individual. Across all of our low-wage thresholds, we found that married families with children, married families without children, and other families each made up about 30 percent of families

across all of our low-wage categories. Single-parent families made up the remaining 10 percent. Brackets are used to represent margins of error of estimated percentages at a 95 percent confidence level.

Our analysis of CPS data found sizeable percentages of families with a low-wage worker who had incomes just above the poverty threshold, potentially limiting their access to certain federal social safety net programs.<sup>28</sup> The estimated percentage of families with incomes placing them just beyond the poverty thresholds remained relatively unchanged across the years we reviewed (see table 3).<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> The percentage of families with a low-wage worker in poverty can vary depending on the measure used to calculate them. Our analysis of CPS data for 2010 and 2015—the only years when we performed our analysis for which CPS included both the official poverty measure and the SPM—found statistically significant differences in the estimates reported under each measure. For example, using the SPM—which adjusts for various taxes paid and government benefits received (e.g., SNAP benefits)—instead of the official poverty measure significantly increased the poverty percentage for married couples without children in each of our low-wage categories. In contrast, use of the SPM significantly decreased the percentage of single-parent families with a worker earning \$12.01 to \$16 per hour in poverty, but the decrease was statistically significant only in 2015.

<sup>&</sup>lt;sup>29</sup> See appendixes II and III for additional data on the percentage and number of working families in poverty.

Table 3: Estimated Percentage of Working Families with Incomes Just Above the	;
Poverty Thresholds, 1995 through 2016	

n/a	n/a	Family income relative to the	poverty threshold
Wage category	Year	100-149%	150-199%
Federal minimum wage or below <sup>a</sup>	1995	13	15
Federal minimum wage or below <sup>a</sup>	2000	16	9
Federal minimum wage or below <sup>a</sup>	2005	11	12
Federal minimum wage or below <sup>a</sup>	2010	15	11
Federal minimum wage or below <sup>a</sup>	2015	11	11
Federal minimum wage or below <sup>a</sup>	2016	11	9
Above federal minimum wage to \$12.00 <sup>a</sup>	1995	15	14
Above federal minimum wage to \$12.00 <sup>a</sup>	2000	14	15
Above federal minimum wage to \$12.00 <sup>a</sup>	2005	13	14
Above federal minimum wage to \$12.00 <sup>a</sup>	2010	14	14

n/a	n/a	Family income relative to the poverty threshold	
Wage category	Year	100-149%	150-199%
Above federal minimum wage to \$12.00 <sup>a</sup>	2015	13	14
Above federal minimum wage to \$12.00 <sup>a</sup>	2016	13	13
\$12.01 to \$16.00	1995	6	10
\$12.01 to \$16.00	2000	8	10
\$12.01 to \$16.00	2005	8	10
\$12.01 to \$16.00	2010	8	11
\$12.01 to \$16.00	2015	9	11
\$12.01 to \$16.00	2016	8	10

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

Note: All dollar amounts are reported in constant 2016 dollars. Percentage estimates have a margin of error of +/- 4 percentage points or less for percentage estimates at the 95 percent confidence level.

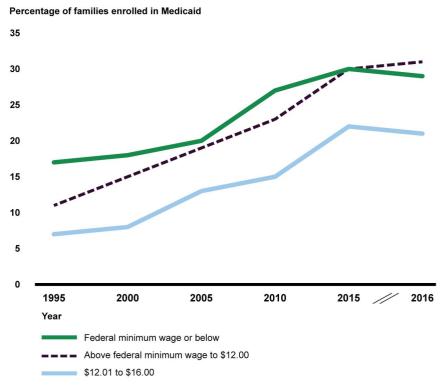
<sup>a</sup>All references to the "federal minimum wage" are based on 110 percent the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers.

## Families of Low-Wage Workers Consistently Use Certain Federal Social Safety Net Programs, but Several Factors May Limit Eligible Families' Use

Families with a low-wage worker may be eligible for and use one or more federal social safety net programs. The largest of these programs is Medicaid, which HHS reported had 69 million individuals enrolled in April 2017. Our estimates based on CPS data found that the percentage of families with a low-wage worker enrolled in Medicaid rose significantly over the past 2 decades, almost tripling for families with a worker earning more than the federal minimum wage between 1995 and 2016 (see fig. 10). In 2016, about 29 percent of families with a worker earning federal minimum wage or below, 31 percent of families with a worker earning

above federal minimum wage to \$12 per hour, and 21 percent of families with a worker earning \$12.01 to \$16 per hour were enrolled in Medicaid. This growth in enrollment coincided with a rise in overall Medicaid enrollment (i.e., not just families with a low-wage worker), which according to HHS, doubled during this time frame. Researchers have noted that key factors affecting the growth in Medicaid enrollment in the past decade were the 2008 recession and the expansion of Medicaid in some states under the Patient Protection and Affordable Care Act.<sup>30</sup>

## Figure 10: Estimated Rates of Medicaid Enrollment among Families with a Low-Wage Worker Ages 25 to 64, by Wage Category, 1995 through 2016



Source: GAO analysis of Current Population Survey data. | GAO-17-677

<sup>30</sup> Robin Rudowitz, Allison Valentine, and Vernon K. Smith, *Medicaid Enrollment and Spending Growth: FY 2016 and 2017* (Washington, D.C., Kaiser Commission on Medicaid and the Uninsured, Oct. 2016). Under the Affordable Care Act, states had authority to expand Medicaid eligibility under their state plans to cover nearly all adults with incomes at or below a specified percentage of the official poverty thresholds. According to the Kaiser Family Foundation, as of September 2016, 32 states expanded their Medicaid eligibility criteria, increasing the number of individuals who were eligible to enroll.

Note: All references to the "federal minimum wage" are based on 110 percent of the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers. All dollar amounts are in constant 2016 dollars. Percentage estimates have a margin of error of +/- 4 percentage points or less for percentage estimates at the 95 percent confidence level.

Families with a low-wage worker may also be eligible for and use other federal social safety net programs (e.g., TANF, SNAP, EITC, and ACTC). Our estimates showed that 5 percent or less of families with a low-wage worker received TANF cash assistance at least once in the prior calendar year from 1995 through 2016.<sup>31</sup> In previous work, we reported that as of July 2015, TANF income eligibility thresholds for a family of three ranged from \$0 to \$1,660 per month, depending on the state, with a median income threshold of \$817.<sup>32</sup> Given these thresholds, most low-wage workers, including workers earning federal minimum wage or below, would generally earn too much to gualify for TANF cash assistance in most states. In this report, our estimates showed that the percentage of families with a worker earning more than the federal minimum wage receiving SNAP benefits at least once in a calendar year doubled from 1995 to 2016. In 2016, about 16 percent of families with a worker earning federal minimum wage or below, 15 percent of families with a worker earning above federal minimum wage to \$12 per hour, and 8 percent of families with a worker earning \$12.01 to \$16 per hour received SNAP benefits.<sup>33</sup> The U.S. Department of Agriculture (USDA), which administers SNAP, has reported that the overall increase in SNAP enrollment from 1995 to 2014 was influenced by economic conditions, such as higher poverty rates during recessionary periods, and policy changes, such as increases the value of a vehicle that could be excluded when calculating a family's income.<sup>34</sup> Finally, our estimates showed that EITC eligibility generally increased among families with a worker earning above federal minimum wage over this time frame, with an estimated 23 to 35 percent

<sup>&</sup>lt;sup>31</sup> CPS participation rates for TANF include only cash assistance. CPS data do not include information on families who were recipients of the other services funded by the TANF block grant, such as vocational training or childcare.

<sup>&</sup>lt;sup>32</sup> GAO-17-558. July 2015 data were the most recent data available at the time of that review.

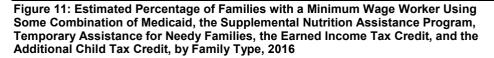
<sup>&</sup>lt;sup>33</sup> The margin of error of these estimates for SNAP usage in 20016, reflecting a 95 percent confidence interval, is 3 percent or below.

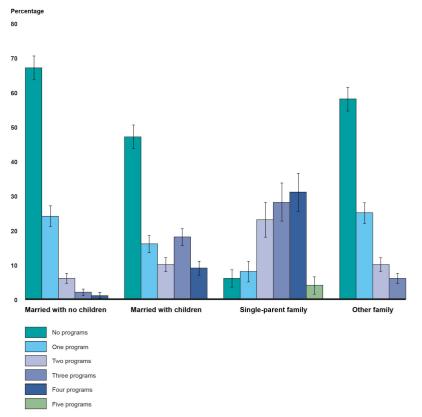
<sup>&</sup>lt;sup>34</sup> Kelsey Gray and Karen Cunnyngham, *Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to Fiscal Year 2014*, Report submitted to the USDA Food and Nutrition Service (Washington, DC: Mathematica Policy Research, June 2016).

of those families eligible in 2016; whereas eligibility for the ACTC generally remained unchanged among families with a low-wage worker.<sup>35</sup>

A low-wage worker's family type also influenced the extent that families used social safety net programs. When comparing program usage across different family types, we generally found that regardless of the low-wage workers' wages, a greater percentage of single-parent families used selected programs than the other family types we examined. For example, among families with a worker earning federal minimum wage or below in 2016, our estimates showed that two-thirds of married families without children and about half of married families with children used none of the aforementioned programs. In contrast, more than half of single-parent families used three or more of the programs (see fig. 11).

<sup>&</sup>lt;sup>35</sup> The margin of error of these estimates for EITC eligibility, reflecting a 95 percent confidence interval, is 1 percent or below.





Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

Note: This figure includes participation in Medicaid, the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families cash assistance, the Earned Income Tax Credit (EITC), and the Additional Child Tax Credit (ACTC). Families may have also participated in other programs not included here. All dollar amounts are in constant 2016 dollars. Minimum wage families are defined as families with at least one worker earning up to 110 percent of the hourly federal minimum wage in effect in 2016 (\$7.98), or the equivalent hourly calculated wage for salaried workers. The "other families" category includes families in the Current Population Survey (CPS) that consist of related and certain unrelated individuals who live together, including cohabiting partners and foster children, and may consist of a single individual. CPS estimates of EITC and ACTC eligibility are used as a proxy for participation because CPS does not estimate participation. Brackets are used to represent margins of error of estimated percentages at a 95 percent confidence level.

#### Several Factors May Affect Eligible Families' Participation in Social Safety Net Programs

Agencies that administer the selected social safety net programs indicated that eligible working families participate in these programs at a

lower rate than the total eligible population for reasons that are not well known. For example, IRS reported that in 2013, 80 percent of eligible filers—all of whom had earnings—claimed the EITC, with state rates ranging from 72 percent in the District of Columbia to 85 percent in Hawaii.<sup>36</sup> Additionally, USDA estimates show that a significantly smaller percentage of eligible households with a wage earner participated in SNAP than other eligible households—70 percent compared to 83 percent in fiscal year 2014.<sup>37</sup> Although some research has examined the reasons why eligible people choose not to participate in social safety net programs, our literature review found few studies that focused specifically on working families rather than the general eligible population, none of which had findings that were generalizable to the experiences of working families nationwide.<sup>38</sup>

Our interviews with state and local officials for the selected social safety net programs, representatives from nonprofit organizations, and researchers helped provide additional context for the experiences of working families. Specifically, the officials we interviewed identified several reasons why families with a low-wage worker may decline to participate in assistance programs for which they are eligible.

• Assumed ineligibility. Some workers may assume that earning income at a job automatically makes them ineligible for benefits, even if their earnings are low enough to qualify for assistance. A program

<sup>&</sup>lt;sup>36</sup> IRS-ACS Match, Center for Administrative Records Research and Applications, U.S. Census Bureau in collaboration with IRS, tax year 2013. https://www.eitc.irs.gov/EITC-Central/Participation-Rate (downloaded on July 7, 2017).

<sup>&</sup>lt;sup>37</sup> The report also found that eligible working families' participation in SNAP varied widely by state, from an estimated 97 percent in Wisconsin to about 49 percent in the District of Columbia, and they were significantly lower than those of other eligible families in 37 states and the District of Columbia. Karen Cunnyngham, *Reaching Those in Need: State Supplemental Nutrition Assistance Program Participation Rates in 2014,* Report submitted to the USDA Food and Nutrition Service, (Washington, DC: Mathematica Policy Research, Jan. 2017). In GAO-17-558, we reported that in 2012, approximately 28 percent of all eligible families participated in TANF cash assistance. We did not report separate participation rates for families with a low-wage worker. Medicaid program data do not track recipients with earnings, and the Internal Revenue Service has not published ACTC participation rates.

<sup>&</sup>lt;sup>38</sup> Reasons that could apply to all individuals include lack of information or misconceptions about programs and eligibility; language barriers or immigration status; lack of childcare or transportation during appointments; program requirements such as work participation that applicants may find difficult or do not wish to fulfill; and others. See GAO-17-558 and GAO, *Means Tested Programs: Information on Program Access Can Be an Important Management Tool*, GAO-05-221 (Washington, D.C.: Mar. 11, 2005).

official in Atlanta told us that eligible families are generally aware of the existence of a program, but assume they have to hit "rock bottom" before they can qualify for assistance. A researcher also told us that families that had exceeded the eligibility threshold in the past may assume they remain ineligible, even if their income has decreased.

- Lack of time. Some workers may find it difficult to take time off from work to apply for benefits in person at a program office, if required. Some states have implemented online or phone application processes to make programs more accessible to working families.<sup>39</sup> However, as a nonprofit director in Santa Fe cautioned, not all families have Internet access and the proficiency required to complete an application online.
- **Complex program requirements.** Some families may find program documentation requirements complex and difficult to fulfill. For example, the state TANF application in one city we reviewed requires applicants to provide information verifying their earned and unearned income, money in the bank, immigration status, identity, vehicle registration, and immunizations of children under 7 years of age. Other program documents state that beneficiaries must also resubmit financial information, along with verification of their children's school attendance, semi-annually or whenever changes occur that would affect their eligibility. Researchers have found that recent changes in the SNAP income documentation requirements, such as requiring less frequent recertification of income and eligibility, increased participation and retention of SNAP benefits.<sup>40</sup> In addition, some states have

<sup>&</sup>lt;sup>39</sup> GAO-17-558 provides additional information on actions that federal agencies and states have taken to streamline eligibility rules for federal low-income programs.

<sup>&</sup>lt;sup>40</sup> For example, see GAO, Supplemental Nutrition Assistance Program: Improved Oversight of State Eligibility Expansions Needed, GAO-12-670 (Washington, D.C.: Jul. 26, 2012) and Caroline Ratcliffe, Signe-Mary McKernan and Kenneth Finegold, "Effects of Food Stamp and TANF Policies on Food Stamp Receipt," Social Service Review, Vol. 82, No. 2 (June 2008), 291-334.

- combined applications for TANF, SNAP, and/or Medicaid into a single form, reducing the amount of paperwork that applicants must submit.<sup>41</sup>
- Stigma. Some working families may be especially sensitive to the stigma associated with some social safety net programs, because their earnings did not make them as self-sufficient as they hoped. To avoid this stigma, according to several officials we interviewed, eligible working families may choose not to participate in a program if their income is sufficient for them to survive without assistance. For example, a 2007 study of 115 EITC recipients in the Boston area found that respondents who had received TANF benefits desired to leave the program as soon as possible.<sup>42</sup> In contrast, according to a caseworker in San Francisco, while unemployed families face the same stigma, they cannot afford to refuse any benefits for which they qualify.
- **Minimal benefit amounts.** SNAP, TANF, EITC, and ACTC have means-tested structures that may reduce benefit levels as recipients' incomes increase. Several officials told us that at some point the benefits may become too small to be worth the effort of obtaining them. For example, a study of low-income customers of a large tax preparation service in two counties in California during the 2007 tax season found that 16 percent of those who had previously applied for SNAP had stopped pursuing the benefits because the "hassle was not worth it."<sup>43</sup>
- **Confusing tax rules.** Some families may find the process of claiming the EITC and ACTC on their tax returns to be confusing. For example,

<sup>43</sup> The study surveyed over 16,000 clients in San Francisco and Alameda counties with incomes low enough that they appeared to be eligible for SNAP. Diane Whitmore Schanzenbach, "Experimental Estimates of the Barriers to Food Stamp Enrollment," Institute for Research on Poverty Discussion Paper no. 1367-09, Sept. 2009.

<sup>&</sup>lt;sup>41</sup> GAO, Supplemental Nutrition Assistance Program: More Information on Promising Practices Could Enhance States' Use of Data Matching for Eligibility, GAO-17-111 (Washington, D.C.: Oct. 19, 2016).

<sup>&</sup>lt;sup>42</sup> In contrast, respondents considered EITC to be a reward for hard work. J. Sykes, K. Kriz, K. Edin, and S. Halpern-Meekin, "Dignity and Dreams: What the Earned Income Tax Credit (EITC) Means to Low-Income Families," American Sociological Review 2015, Vol. 80(2) 243–267. Additionally, another study found that the belief that poverty was caused by laziness increased the degree to which respondents internalized stigma when utilizing Medicaid. This older study was based on 1,405 interviews in 10 states and the District of Columbia in 1999, and the results of its regression models hold all other variables constant, J. Stuber, and M. Schlesinger, "Sources of Stigma for Means-Tested Government Programs," *Social Science & Medicine* 63 (2006) 933–945.

a nonprofit director in the District of Columbia told us that applying for these tax credits can be complex, especially the requirements for qualifying children and filing status, and families claiming the credits may need high quality and costly assistance to prepare their taxes. To help mitigate this complexity, IRS encourages individuals who may qualify for the tax credits to visit one of the more than 12,000 free tax help locations across the country, but this task may also interfere with some individuals' working hours.<sup>44</sup>

## Agency Comments and Our Evaluation

We provided a draft of this report to the Secretary of Labor and the Secretary of Commerce for comment. Each agency provided technical comments, which we incorporated in the report, as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Department of Labor, the Department of Commerce, and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact Cindy Brown-Barnes at (202) 512-7215 or Oliver Richard at (202) 512-8424.You may also reach us by e-mail at brownbarnesc@gao.gov or richardo@gao.gov. Contact points for our Offices of Congressional

<sup>&</sup>lt;sup>44</sup> IRS's Volunteer Income Tax Assistance program offers free tax help to people who generally make \$54,000 or less, persons with disabilities and limited English speaking taxpayers who need assistance in preparing their own tax returns. IRS-certified volunteers provide free basic income tax return preparation with electronic filing to qualified individuals. At select tax sites, taxpayers also have an option to prepare their own basic federal and state tax return for free using Web-based tax preparation software with an IRS-certified volunteer to help guide them through the process.

Relations and Public Affairs may be found on the last page of this report. GAO staff who contributed to this report are listed in appendix IV.

Sincerely yours,

Cindey S. Barnes

Cindy Brown-Barnes Director, Education, Workforce, and Income Security

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Oliver Richard Director, Applied Research and Methods

## Appendix I: Objectives, Scope, and Methodology

Our review focused on the following questions: (1) what are the characteristics of the low-wage workforce and how have they changed over time, (2) to what extent are families with low-wage workers in poverty, and (3) to what extent do families with low-wage workers participate in selected social safety net programs and what factors affect their participation.

### Analysis of Current Population Survey Data

After discussions with agency officials, we identified the Current Population Survey (CPS) as the data source best suited to answer our research questions. The CPS is a national survey designed and administered jointly by the Census Bureau (Census) and the Department of Labor's Bureau of Labor Statistics (BLS) and it contains data on individual earnings, as well as poverty rates of families and individuals. CPS is a key source of official government statistics on employment and unemployment in the United States and is the data source for several BLS and Census reports addressing issues similar to those in our objectives. For example, it is used to produce a BLS report on the characteristics of minimum wage workers and a Census report on the supplemental poverty rate.<sup>1</sup>

The CPS is conducted on a monthly basis, but different questions are asked in different months during the year. Respondents are surveyed over two separate 4-month periods. Information on hourly wages and other labor force topics are collected on a monthly basis of a sub-sample of respondents. Information on poverty, program participation and income over the prior calendar year is collected annually in the Annual Social and Economic Supplement (ASEC), conducted in March. In consultation with Census officials, we combined information on hourly wages and poverty and program participation, by linking respondents of the ASEC to the

<sup>&</sup>lt;sup>1</sup> For example, see BLS, "Characteristics of Minimum Wage Workers" (Washington, D.C.: April 2017) and. Census, "The Supplemental Poverty Measure: 2015" (Washington, D.C.: Sept. 13, 2016).

months those respondents answered questions about hourly wages (March, April, May, and June).<sup>2</sup> We used the CPS years 1995, 2000, 2005, 2010, 2015 and 2016.

Estimates produced from CPS data are subject to sampling error. For all of our estimates we weighted observations based on the monthly weight and generated standard errors under the assumption of with replacement sampling using state as a stratification variable.<sup>3</sup> To the extent possible, we compared our estimates of values published by Census derived from our weighting procedures and standard errors to reported values for that year and found them to be consistent. In addition to estimates, we generated standard errors or the margin of error for the 95 percent confidence interval, and report them with estimates in figures and tables. Based on our data checks, review of documentation and interviews with agency officials, we found the CPS data to be sufficiently reliable for our purposes. However, our method of estimating variance results in standard errors that are relatively conservative; that is, the 95 percent confidence intervals are wider than those resulting from the use of replicate weights.

#### Analysis of Low-Wage Workers

We relied on the monthly CPS information to obtain information about individual hourly wages to determine whether an individual was a lowwage worker. We relied on estimated hourly wages to determine the wage rate of salaried individuals, though in some cases we used reported hourly wages; to estimate hourly wages we used a method provided by BLS economists. This method included observations of (1) workers who reported an hourly wage and (2) salaried workers who reported weekly wages. We included both types of workers in our sample to obtain a broader spectrum of low-wage workers. This method also takes into account potential overtime hours worked and individuals working multiple jobs. We identified three mutually exclusive categories of low-wage workers earning:

• **110 percent of the federal minimum wage or below (salaried and hourly).** This group consisted of workers that earned 110 percent of

<sup>2</sup> For 1995 and 2000, we were only able to use the individuals in the month of March, because of difficulty matching the individuals across months.

<sup>3</sup> This procedure results in confidence intervals that are generally conservative (i.e., wider) than those based on replicate weights, and helps to ensure that we do not overstate the precision of our estimates based on the matched monthly CPS and ASEC data.

the federal minimum wage or below (based on the federal minimum wage in each of the years that we reviewed).

- Above 110 percent of the federal minimum wage to \$12.00. This group consisted of workers that earned above110 percent of the federal minimum wage in that year but not more than \$12.00 (in constant 2016 dollars).
- **\$12.01 to \$16.00.** This group consisted of workers that earned between \$12.01 and \$16.00 (in constant 2016 dollars).

To define these groups, we only included workers ages 25 to 64—a definition used in prior GAO work on the low-wage workforce.<sup>4</sup> We used this definition to ensure that our sample included workers who were more likely to be independent, out of school, and less likely to be earning a retirement pension.

For the groups described above, we reported the following statistics: occupation, industry, whether an individual worked multiple jobs, education level, and total number of hours worked at all jobs.

#### Analysis of Families with a Low-Wage Worker

As stated above, we relied on the ASEC to obtain information about the poverty rate and program participation of families.

- **Family type:** The unit of analysis within the CPS data was the "family record." We examined four different family types: (1) married couple families with children; (2) married couple families without children; (3) single-parent families with children; and (4) other families. The "other families" category covers a wide variety of living situations, such as single adults living alone, but does not include married couples or a single-parent living with children.
- **Poverty:** We relied on Census' determination within the ASEC survey to determine whether a family was in poverty. We used two different poverty measures. The official poverty measure measures a family's resources against a poverty threshold that varies by the number of supported adults and children. However, it excludes certain types of resources, such as in-kind assistance (such as Supplemental Nutrition Assistance Program benefits). We also used the Supplemental Poverty Measure, which is also provided by Census. The

<sup>&</sup>lt;sup>4</sup> GAO-12-10.

Supplemental Poverty Measure includes some in-kind assistance, but also deducts certain expenses such as child care from family resources. In 2016, Census reported that overall, the national rates of poverty are similar based on the two measures.

- **Program participation:** We relied on Census' determination within the ASEC survey to determine whether a family participated in the following federal social safety net programs: EITC, ACTC, Medicaid, SNAP, and TANF cash assistance. Specifically, we measured the use of programs in the following ways:
  - **Medicaid enrollment:** Anyone in the family enrolled in Medicaid, based on self-report.
  - **SNAP participation:** The family received SNAP benefits during the prior calendar year, based on self-report.
  - TANF participation: Anyone in the family received TANF cash assistance during the prior calendar year, based on self-report.<sup>5</sup>
  - **EITC eligibility:** Anyone in the family eligible for EITC receipt during the prior calendar year. Census determines EITC eligibility based on income and family structure.
  - ACTC eligibility: Anyone in the family eligible for ACTC receipt during the prior calendar year. Census determines ACTC eligibility based on income and family structure.

An important limitation to our analysis on program participation is that the use of the programs reported by CPS has been noted by researchers to be imprecise. The sources of imprecision are not fully known, and likely depend on the program. In the cases of Medicaid, SNAP, and TANF cash assistance, where benefit receipt is self-reported, CPS data are known to underreport program benefits, perhaps because a stigma is associated with its use. In addition, we reported that the Urban Institute staff found that CPS data captured about 61 percent of TANF cash assistance benefits received and 57 percent of SNAP benefits received in 2012.<sup>6</sup> In the case of EITC and ACTC, Census imputes eligibility for the credits from reported income and other information about the family. According to

<sup>&</sup>lt;sup>5</sup> A Census official told us that while Census reports SNAP participation at the household level in the ASEC, it prorates the benefits across families with multiple families in a household.

<sup>&</sup>lt;sup>6</sup> GAO, Federal Low-Income Programs: Multiple Programs Target Diverse Populations and Needs, GAO-15-516 (Washington, D.C., July 30, 2015).

researchers, in some cases the CPS will overstate usage of the EITC, by imputing the credit to those that do not claim it. In other cases, they will understate usage because they will fail to assign the credit to those that do claim it.<sup>7</sup> However, as noted earlier, we used these data because they were the best available for the analysis we wished to conduct.

#### Analysis of Factors Affecting Program Participation Decisions of Families with a Low-Wage Worker

To examine what is known about the reasons eligible working families do not participate in the five selected federal programs, we conducted a literature review of academic, government, and think tank reports published from 2006 to 2016. We excluded reports that we determined did not have sufficient methodological rigor.

To gather examples and current information on factors influencing families' decisions in a variety of settings, we interviewed researchers and industry groups as well as state and local officials at the selected social safety net programs and community nonprofit organizations that work with low-wage working families. We selected organizations from four metropolitan areas: Atlanta, San Francisco, Santa Fe, and Washington, D.C. The metropolitan areas represent a range of local minimum wage levels relative to the federal minimum wage, costs of living, and participation rates in the selected social safety net programs. We interviewed one to two state or local government or nonprofit agencies in each of these locations, but did not cover all five programs in each of the four locations.

We conducted a content analysis of the reports identified during our literature review and information gained in our interviews to identify factors that applied specifically to families with a low-wage worker. The information we gathered from the literature and interviews is not generalizable, but is used to provide examples of factors affecting working families who are eligible for, but not receiving, assistance from social safety net programs.

<sup>&</sup>lt;sup>7</sup> For discussion of the lack of concordance between actual program use and reported program use in the CPS, see Bruce D. Meyer and Robert M. Goerge, "Errors in Survey Reporting and Imputation and their Effects on Estimates of Food Stamp Program Participation," U.S. Census Bureau Center for Economic Studies Paper No. CES-WP-11-14 (Washington, D.C.: Apr. 1, 2011).

We conducted this performance audit from May 2016 to September 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and

## Appendix II: Select Data on the Percentage of Working Families in Poverty

Table 4: Estimated Percentage of Working Families with Income Below or Near the Poverty Threshold, by Family Type, and Wage Category, 1995 through 2016

			Fam	ily inco	me			
n/a	n/a	n/a	relative to the poverty threshold				error for 95 ence interval	
Family Type	Wage Category	Year	<100%	100- 149%	150- 199%	<100%	100-149%	150-199%
Married families without children	Federal minimum wage or below <sup>a</sup>	1995	7	6	11	4	4	7
Married families without children	Federal minimum wage or below <sup>a</sup>	2000	5	7	6	6	6	5
Married families without children	Federal minimum wage or below <sup>a</sup>	2005	5	7	8	3	4	4
Married families without children	Federal minimum wage or below <sup>a</sup>	2010	6	7	9	3	3	3
Married families without children	Federal minimum wage or below <sup>a</sup>	2015	3	5	6	2	3	3
Married families without children	Federal minimum wage or below <sup>a</sup>	2016	5	7	8	3	3	4
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	3	4	8	1	2	3
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	3	6	6	2	2	2
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2005	3	5	6	1	1	1
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2010	4	5	7	1	1	1
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	4	6	7	1	1	1
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2016	3	5	6	1	1	1
Married families without children	\$12.01 to \$16.00	1995	1	2	3	1	1	1
Married families without children	\$12.01 to \$16.00	2000	1	1	5	1	1	2

n/a	n/a	n/a	to t	Family income relative to the poverty threshold			Margins of error for 95 percent confidence interval (+/-)		
Family Type	Wage Category	Year	<100%	100- 149%	150- 199%	<100%	100-149%	150-199%	
Married families without children	\$12.01 to \$16.00	2005	2	2	4	1	1	1	
Married families without children	\$12.01 to \$16.00	2010	1	2	4		1	1	
Married families without children	\$12.01 to \$16.00	2015	1	3	5	1	1	1	
Married families without children	\$12.01 to \$16.00	2016	2	3	5	1	1	1	
Married families with children	Federal minimum wage or below <sup>a</sup>	1995	16	15	20	7	6	7	
Married families with children	Federal minimum wage or below <sup>a</sup>	2000	20	11	11	8	6	5	
Married families with children	Federal minimum wage or below <sup>a</sup>	2005	12	9	13	5	5	5	
Married families with children	Federal minimum wage or below <sup>a</sup>	2010	19	15	11	4	4	3	
Married families with children	Federal minimum wage or below <sup>a</sup>	2015	15	11	13	5	4	4	
Married families with children	Federal minimum wage or below <sup>a</sup>	2016	14	11	9	5	5	4	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	1995	12	13	13	3	3	3	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	14	11	12	3	3	3	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2005	12	13	15	2	2	2	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2010	14	14	15	2	2	2	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2015	15	12	14	2	2	2	
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2016	12	15	13	2	2	2	
Married families with children	\$12.01 to \$16.00	1995	4	9	12	2	2	3	
Married families with children	\$12.01 to \$16.00	2000	5	11	11	2	3	3	
Married families with children	\$12.01 to \$16.00	2005	5	9	12	1	1	1	

n/a	n/a	n/a	Family income relative to the poverty threshold				error for 95 nce interval	
Family Type	Wage Category	Year	<100%	100- 149%	150- 199%	<100%	100-149%	150-199%
Married families with children	\$12.01 to \$16.00	2010	6	11	11	1	2	2
Married families with children	\$12.01 to \$16.00	2015	7	11	12	1	2	2
Married families with children	\$12.01 to \$16.00	2016	6	10	11	1	2	2
Single-parent families	Federal minimum wage or below <sup>a</sup>	1995	46	21	6	16	14	7
Single-parent families	Federal minimum wage or below <sup>a</sup>	2000	69	15	4	15	11	5
Single-parent families	Federal minimum wage or below <sup>a</sup>	2005	48	15	15	12	9	9
Single-parent families	Federal minimum wage or below <sup>a</sup>	2010	62	13	9	7	5	4
Single-parent families	Federal minimum wage or below <sup>a</sup>	2015	45	21	12	10	8	6
Single-parent families	Federal minimum wage or below <sup>a</sup>	2016	48	22	12	12	9	8
Single-parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	40	34	12	8	7	5
•	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	32	34	19	8	8	6
	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	41	25	15	4	3	3
•	Above federal minimum wage to \$12.00 <sup>ª</sup>	2010	41	31	12	4	4	3
	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	42	23	14	4	3	3
•	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	37	27	17	4	4	3
Single-parent families	\$12.01 to \$16.00	1995	9	22	25	5	7	8
Single-parent families	\$12.01 to \$16.00	2000	17	24	19	6	7	6
Single-parent families	\$12.01 to \$16.00	2005	18	19	24	3	3	4
Single-parent families		2010	15	23	21	3	4	4
Single-parent families	\$12.01 to \$16.00	2015	19	27	22	3	4	4
Single-parent families	\$12.01 to \$16.00	2016	17	25	23	4	4	4
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	1995	43	16	15	9	6	6

n/a	n/a	n/a	to t	nily inco relative he pove hresholo	rty		error for 95 ence interval	
Family Type	Wage Category	Year	<100%	100- 149%	150- 199%	<100%	100-149%	150-199%
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2000	14	29	11	7	9	6
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2005	28	16	13	6	5	5
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2010	27	23	12	4	4	3
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2015	22	12	12	5	4	4
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2016	22	13	10	6	4	4
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	15	21	23	3	4	4
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	12	16	25	3	4	4
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2005	14	14	19	2	2	2
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2010	16	16	19	2	2	2
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	17	16	17	2	2	2
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2016	15	14	18	2	2	2
Other families <sup>b</sup>	\$12.01 to \$16.00	1995	5	3	11	2	2	3
Other families <sup>b</sup>	\$12.01 to \$16.00	2000	3	6	9	1	2	3
Other families <sup>b</sup>	\$12.01 to \$16.00	2005	6	7	10	1	1	1
Other families <sup>b</sup>	\$12.01 to \$16.00	2010	6	8	14	1	1	2
Other families <sup>b</sup>	\$12.01 to \$16.00	2015	7	8	14	1	1	2
Other families <sup>b</sup>	\$12.01 to \$16.00	2016	6	6	10	1	1	1
Total	Federal minimum wage or below <sup>a</sup>	1995	25	13	15	4	3	4
Total	Federal minimum wage or below <sup>a</sup>	2000	21	16	9	5	4	3
Total	Federal minimum wage or below <sup>a</sup>	2005	19	11	12	3	3	3
Total	Federal minimum wage or below <sup>a</sup>	2010	23	15	11	2	2	2
Total	Federal minimum wage or below <sup>a</sup>	2015	18	11	11	3	2	2

n/a	n/a	n/a	Family income relative to the poverty threshold			•	Margins of error for 95 percent confidence interval (+/-)		
Family Type	Wage Category	Year	<100%	100- 149%	150- 199%	<100%	100-149%	150-199%	
Total	Federal minimum wage or below <sup>a</sup>	2016	17	11	9	3	2	2	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	13	15	14	2	2	2	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2000	12	14	15	2	2	2	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	14	13	14	1	1	1	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2010	15	14	14	1	1	1	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	16	13	14	1	1	1	
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	14	13	13	1	1	1	
Total	\$12.01 to \$16.00	1995	4	6	10	1	1	2	
Total	\$12.01 to \$16.00	2000	4	8	10	1	1	2	
Total	\$12.01 to \$16.00	2005	6	8	10	1	1	1	
Total	\$12.01 to \$16.00	2010	5	8	11	1	1	1	
Total	\$12.01 to \$16.00	2015	6	9	11	1	1	1	
Total	\$12.01 to \$16.00	2016	6	8	10	1	1	1	

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

<sup>a</sup>All references to the "federal minimum wage" are based on 110 percent the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers,

<sup>b</sup>The "other families" category includes families in CPS that consist of related and certain unrelated individuals who live together, including cohabiting partners and foster children, and may consist of a single individual.

## Appendix III: Select Data on the Number of Working Families in Poverty

The following table presents the estimated total number of families with a worker ages 25 to 64 and the estimated number of these families in poverty. The table provides estimates based on the type of the worker's family type and hourly wage. As discussed in appendix I, to develop these estimates, we merged multiple months of Current Population Survey (CPS) survey data with data from the Annual Social and Economic Supplement (ASEC) survey to CPS to estimate poverty among families with low-wage workers. When we performed this procedure, the match rate between the datasets in each year was at least 90 percent, but varied by year. As a result, the estimates of the populations included in the table below may underestimate the actual number of families in poverty by as much as 10 percent. Because the extent of underestimation varied by year, conclusions based on comparisons of the estimates across years should be avoided.

In addition, the margin of error was larger than the estimated number in many cases, which limited what we could report. Specifically, we did not report the number of families with incomes less than 50 percent of the poverty threshold. We did report estimates of the percentage of families with incomes less than 50 percent, by family type. Table 5 provides the estimated numbers for this group, with the margins of error that were not included in the body of the report.

n/a n/a		n/a	Total families		Families in povert	у
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Total	Federal minimum wage or below <sup>a</sup>	1995	4,018	390	1,004	209

Table 5: Estimated Number of Families in Poverty, by Family Type and Wage Category, 1995 through 2016 (in thousands)

n/a	n/a	n/a	Total families		Families in povert	У
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Total	Federal minimum wage or below <sup>a</sup>	2000	3,489	381	740	183
Total	Federal minimum wage or below <sup>a</sup>	2005	1,731	138	325	60
Total	Federal minimum wage or below <sup>a</sup>	2010	4,482	224	1,052	112
Total	Federal minimum wage or below <sup>a</sup>	2015	2,806	185	494	78
Total	Federal minimum wage or below <sup>a</sup>	2016	2,211	168	370	71
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	17,357	761	2,261	309
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2000	15,133	753	1,827	284
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	14,933	387	2,026	152
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2010	13,175	369	1,956	150
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	15,527	418	2,514	179
Total	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	15,668	424	2,120	167
Total	\$12.01 to \$16.00	1995	15,088	717	561	146

n/a	n/a	n/a	Total fami	ilies	Families in po	verty
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Total	\$12.01 to \$16.00	2000	16,487	785	726	182
Total	\$12.01 to \$16.00	2005	17,230	409	967	104
Total	\$12.01 to \$16.00	2010	15,722	395	845	99
Total	\$12.01 to \$16.00	2015	17,318	437	1,119	119
Total	\$12.01 to \$16.00	2016	15,373	418	879	107
Married families without children	Federal minimum wage or below <sup>a</sup>	1995	1,002	189	66	46
Married families without children	Federal minimum wage or below <sup>a</sup>	2000	725	171	33	42
Married families without children	Federal minimum wage or below <sup>a</sup>	2005	523	75	27	18
Married families without children	Federal minimum wage or below <sup>a</sup>	2010	1,157	114	67	30
Married families without children	Federal minimum wage or below <sup>a</sup>	2015	760	97	25	16
Married families without children	Federal minimum wage or below <sup>a</sup>	2016	667	92	31	22
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	4,626	409	125	67
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	4,191	418	113	75

n/a	n/a	n/a	Total families		Families in povert	Y
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	3,954	205	116	35
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	2010	3,464	195	124	39
Married families without children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2015	3,958	219	141	42
Married families without children	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	4,304	231	124	41
Married families without children	\$12.01 to \$16.00	1995	4,282	389	58	42
Married families without children	\$12.01 to \$16.00	2000	4,465	425	51	47
Married families without children	\$12.01 to \$16.00	2005	4,949	228	79	30
Married families without children	\$12.01 to \$16.00	2010	4,921	230	48	24
Married families without children	\$12.01 to \$16.00	2015	5,067	246	66	29
Married families without children	\$12.01 to \$16.00	2016	4,464	233	75	32
Married families with children	Federal minimum wage or below <sup>a</sup>	1995	1,348	234	215	99

n/a	n/a	n/a	Total families		Families in povert	у
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Married families with children	Federal minimum wage or below <sup>a</sup>	2000	1,253	235	254	112
Married families with children	Federal minimum wage or below <sup>a</sup>	2005	480	73	59	28
Married families with children	Federal minimum wage or below <sup>a</sup>	2010	1,318	126	250	57
Married families with children	Federal minimum wage or below <sup>a</sup>	2015	826	103	125	41
Married families with children	Federal minimum wage or below <sup>a</sup>	2016	668	96	92	37
Married families with children	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	6,236	489	759	186
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2000	4,819	446	673	175
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2005	4,423	225	538	82
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2010	3,836	212	541	83
Married families with children	Above federal minimum wage to \$12.00 <sup>ª</sup>	2015	4,005	226	582	90
Married families with children	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	3,884	225	469	80

n/a	n/a	n/a	Total families		Families in povert	у
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Married families with children	\$12.01 to \$16.00	1995	5,740	472	220	93
Married families with children	\$12.01 to \$16.00	2000	5,536	484	287	115
Married families with children	\$12.01 to \$16.00	2005	5,686	251	311	62
Married families with children	\$12.01 to \$16.00	2010	4,756	232	307	63
Married families with children	\$12.01 to \$16.00	2015	5,008	250	339	67
Married families with children	\$12.01 to \$16.00	2016	4,241	233	265	60
Single- parent families	Federal minimum wage or below <sup>a</sup>	1995	323	101	148	67
Single- parent families	Federal minimum wage or below <sup>a</sup>	2000	433	139	297	116
Single- parent families	Federal minimum wage or below <sup>a</sup>	2005	186	46	89	31
Single- parent families	Federal minimum wage or below <sup>a</sup>	2010	559	80	348	65
Single- parent families	Federal minimum wage or below <sup>a</sup>	2015	310	61	141	41

n/a	n/a	n/a	Total families		Families in poverty	
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Single- parent families	Federal minimum wage or below <sup>a</sup>	2016	222	52	106	36
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	1,665	252	662	165
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	2000	1,575	257	510	145
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	1,716	138	708	90
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	2010	1,417	125	581	81
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	2015	1,968	156	828	102
Single- parent families	Above federal minimum wage to \$12.00 <sup>a</sup>	2016	1,860	155	693	96

n/a	n/a	n/a	Total far	nilies	Families in po	overty
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Single- parent families	\$12.01 to \$16.00	1995	1,129	208	104	63
Single- parent families	\$12.01 to \$16.00	2000	1,592	262	264	112
Single- parent families	\$12.01 to \$16.00	2005	1,502	128	277	54
Single- parent families	\$12.01 to \$16.00	2010	1,251	117	188	45
Single- parent families	\$12.01 to \$16.00	2015	1,626	140	314	62
Single- parent families	\$12.01 to \$16.00	2016	1,401	133	245	55
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	1995	1,346	234	575	166
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2000	1,078	212	156	77
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2005	541	77	150	39
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2010	1,448	127	387	67
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2015	910	105	204	50
Other families <sup>b</sup>	Federal minimum wage or below <sup>a</sup>	2016	654	90	141	44
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	1995	4,829	423	714	175

n/a	n/a	n/a	Total families		Families in povert	y
Family Type	Wage Category	Year	Number	(+/-)	Number	(+/-)
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	2000	4,549	433	532	157
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	2005	4,840	230	665	86
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>a</sup>	2010	4,458	221	710	89
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2015	5,596	257	962	110
Other families <sup>b</sup>	Above federal minimum wage to \$12.00 <sup>ª</sup>	2016	5,620	262	834	105
Other families <sup>b</sup>	\$12.01 to \$16.00	1995	3,938	381	178	84
Other families <sup>b</sup>	\$12.01 to \$16.00	2000	4,894	449	123	73
Other families <sup>b</sup>	\$12.01 to \$16.00	2005	5,092	233	300	57
Other families <sup>b</sup>	\$12.01 to \$16.00	2010	4,795	225	302	57
Other families <sup>b</sup>	\$12.01 to \$16.00	2015	5,616	258	400	71
Other families <sup>b</sup>	\$12.01 to \$16.00	2016	5,267	253	294	61

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-17-677

<sup>a</sup>All references to the "federal minimum wage" are based on 110 percent the hourly federal minimum wage in effect that year or the equivalent hourly calculated wage for salaried workers.

<sup>b</sup>The "other families" category includes families in CPS that consist of related and certain unrelated individuals who live together, including cohabiting partners and foster children, and may consist of a single individual.

# Appendix IV: GAO Contacts and Staff Acknowledgment

## GAO Contacts

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## Staff Acknowledgment

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## Appendix V: Accessible Data

## Data Tables

Year	Federal minimum wage or below	Confidence interval
1995	21	4
2000	16	5
2005	16	3
2010	21	2
2015	15	3
2016	14	3
Year	Above federal minimum wage to \$12 per hour	Confidence interval
1995	11	2
2000	10	2
2005	13	1
2010	14	1
2015	15	1
2016	13	1
Year	\$12.01 to \$16 per hour	Confidence interval
1995	3	1
2000	3	1
2005	5	1
2010	4	1
2015	5	1
2016	5	1

Accessible Data for Figure 1: Changes in the Federal Minimum Wage Rate, 1980 through 2016

n/a	Dollars per hour	Dollars per hour	Dollars per hour
Year	Nominal minimum	Real minimum wage	Real minimum wage
	wage	(2016\$)	(1980\$)

n/a	Dollars per hour	Dollars per hour	Dollars per hour
Year	Nominal minimum wage	Real minimum wage (2016\$)	Real minimum wage (1980\$)
1980	3.1	9.03	3.1
before 1985	3.35	8.84	3.04
before 1985	3.35	8.33	2.86
before 1985	3.35	8.07	2.77
before 1985	3.35	7.74	2.66
1985	3.35	7.47	2.56
before 1990	3.35	7.33	2.52
before 1990	3.35	7.08	2.43
before 1990	3.35	6.8	2.33
before 1990	3.35	6.49	2.23
1990	3.8	6.98	2.4
before 1995	4.25	7.49	2.57
before 1995	4.25	7.27	2.5
before 1995	4.25	7.06	2.42
before 1995	4.25	6.88	2.36
1995	4.25	6.69	2.3
before 2000	4.75	7.27	2.49
before 2000	5.15	7.7	2.64
before 2000	5.15	7.58	2.6
before 2000	5.15	7.42	2.55
2000	5.15	7.18	2.46
before 2005	5.15	6.98	2.4
before 2005	5.15	6.87	2.36
before 2005	5.15	6.72	2.31
before 2005	5.15	6.54	2.25
2005	5.15	6.33	2.17
before 2010	5.15	6.13	2.1
before 2010	5.85	6.77	2.32
before 2010	6.55	7.3	2.51
before 2010	7.25	8.11	2.78
2010	7.25	7.98	2.74
before 2015	7.25	7.74	2.66
before 2015	7.25	7.58	2.6
before 2015	7.25	7.47	2.56
before 2015	7.25	7.35	2.52

n/a	Dollars per hour	Dollars per hour	Dollars per hour
Year	Nominal minimum wage	Real minimum wage (2016\$)	Real minimum wage (1980\$)
2015	7.25	7.34	2.52
2016	7.25	7.25	2.49

#### Accessible Data for Figure 2: State Minimum Wage Rates as of January 1, 2017 Above federal Figure 1: Figure 1: Below federal No minimum wage

minimum wage minimum wage	minimum wage (federal rate applies)	law (federal rate applies)
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Above federal minimum wage	Equal to federal minimum wage	Below federal minimum wage (federal rate applies)	No minimum wag law (federal rate applies)
<ul> <li>Washington</li> <li>Oregon</li> <li>California,</li> <li>Nevada</li> <li>Arizona</li> <li>Alaska</li> <li>Hawaii</li> <li>New Mexico</li> <li>Colorado</li> <li>Montana</li> <li>South Dakota</li> <li>Nebraska</li> <li>Minnesota</li> <li>Missouri</li> <li>Arkansas</li> <li>Illinois</li> <li>Michigan</li> <li>Ohio</li> <li>West Virginia</li> <li>New York</li> <li>Vermont</li> <li>Maine</li> <li>Massachusetts</li> <li>Rhode Island</li> <li>Connecticut</li> <li>New Jersey</li> </ul>	<ul> <li>Idaho</li> <li>Utah</li> <li>North Dakota</li> <li>Kansas</li> <li>Oklahoma</li> <li>Texas</li> <li>Wisconsin</li> <li>Iowa</li> <li>Indiana</li> <li>Kentucky</li> <li>New Hampshire</li> <li>Pennsylvania</li> <li>Virginia</li> <li>North Carolina</li> </ul>	(federal rate	
<ul> <li>New Jersey</li> <li>Delaware</li> <li>Maryland</li> <li>Washington D.C.</li> <li>Florida</li> </ul>			

Accessible Data for Figure 3: Population of Hourly and Minimum-Wage Workers in the U.S. Workforce, and U.S. Poverty Trends for Individuals, 1995 through 2015						
n/a	Number in millions	Number in millions	Number in millions	n/a		

Year	Hourly workers paid federal minimum wage or below	Total wage and salary workforce	Total workers paid at hourly rates	Poverty rate (percent)
1995	3656	110038	68534	13.8
1996	3724	111960	69255	13.7
1997	4754	114533	70735	13.3
1998	4427	116730	71440	12.7
1999	3340	118963	72306	11.9
2000	2650	122089	73496	11.3
2001	2174	122229	73392	11.7
2002	2146	121826	72508	12.1
2003	2100	122358	72946	12.5
2004	2003	123554	73939	12.7
2005	1882	125889	75609	12.6
2006	1692	128237	76514	12.3
2007	1729	129767	75873	12.5
2008	2226	129377	75305	13.2
2009	3572	124490	72611	14.3
2010	4361	124073	72902	15.1
2011	3829	125187	73926	15
2012	3550	127577	75276	15
2013	3301	129110	75948	14.8
2014	2992	131431	77207	14.8
2015	2561	133743	78232	13.5

n/a	Low-wage workers	Low-wage workers	Low-wage workers	All other workers
Year of survey	Federal minimum wage or below (percentage)	Above federal minimum wage to \$12.00 (percentage)	\$12.01 to \$16.00 (percentage)	Above \$16 (percentage)
1995	3.87	20.13	18.82	57.19
2000	3.24	16.59	17.12	63.05
2005	1.81	16.67	18.88	62.64
2010	4.87	14.68	17.32	63.13
2015	2.87	16.62	18.1	62.4

n/a	Low-wage workers	Low-wage workers	Low-wage workers	All other workers
Year of survey	Federal minimum wage or below (percentage)	Above federal minimum wage to \$12.00 (percentage)	\$12.01 to \$16.00 (percentage)	Above \$16 (percentage)
2016	2.36	18.06	17.09	62.5

## Accessible Data for Figure 5: Average Hours Worked per Week by Workers Ages 25 to 64 (Estimated), by Wage Category, 1995 through 2016

o Above federal Federal minimum wage minimum wage
to \$12.00 or below
35 32
35 32
33 29
32 29
33 31
33 30

#### Accessible Data for Figure 6: Top Five Industries Employing Highest Estimated Percentage of Workers Ages 25 to 64, by Percentage of Wage Category Workforce, 1995 through 2016

Wage category	Year	Five largest industries (percentage)	All other industries (percentage)
Federal minimum wage or below	1995	68	32
Federal minimum wage or below	2000	69	31
Federal minimum wage or below	2005	72	28
Federal minimum wage or below	2010	77	23
Federal minimum wage or below	2015	73	27
Federal minimum wage or below	2016	72	28
Above federal minimum wage to \$12 per hour	1995	73	27

Wage category	Year	Five largest industries (percentage)	All other industries (percentage)
Above federal minimum wage to \$12 per hour	2000	74	26
Above federal minimum wage to \$12 per hour	2005	74	26
Above federal minimum wage to \$12 per hour	2010	75	25
Above federal minimum wage to \$12 per hour	2015	75	25
Above federal minimum wage to \$12 per hour	2016	76	24
\$12.01 to \$16 per hour	1995	66	34
\$12.01 to \$16 per hour	2000	68	32
\$12.01 to \$16 per hour	2005	66	34
\$12.01 to \$16 per hour	2010	69	31
\$12.01 to \$16 per hour	2015	69	31
\$12.01 to \$16 per hour	2016	69	31
Above \$16	1995	62	38
Above \$16	2000	61	39
Above \$16	2005	64	36
Above \$16	2010	64	36
Above \$16	2015	65	35
Above \$16	2016	65	35

## Accessible Data for Figure 7: Occupational Distribution of Low-Wage Workers Ages 25 to 64 (Estimated), 2016

Wage category	Six largest occupations (percentage)	All other occupations (percentage)
Federal minimum wage or below	59	41

Wage category	Six largest occupations (percentage)	All other occupations (percentage)
Above federal minimum wage to \$12 per hour	62	38
\$12.01 to \$16 per hour	50	50
Above \$16	26	74

#### Accessible Data for Figure 8: Families with a Low-Wage Worker Ages 25 to 64, With Annual Incomes under the Poverty Threshold (Estimated), by Wage Category, 1995 through 2016

n/a	n/a	threshold		Family incon percent of th threshold	
Wage category	Year	Percentage	Confidence interval (percentage)	Percentage	Confidence interval (percentage)
Federal minimum wage or below	1995	25	4	11	3
Federal minimum wage or below	2000	21	5	5	2
Federal minimum wage or below	2005	19	3	6	2
Federal minimum wage or below	2010	23	2	9	2
Federal minimum wage or below	2015	18	3	7	2
Federal minimum wage or below	2016	17	3	5	2
Above federal minimum wage to \$12 per hour	1995	13	2	3	1

n/a	n/a	Family income below poverty threshold		elow poverty Family income below 50 percent of the poverty threshold	
Wage category	Year	Percentage	Confidence interval (percentage)	Percentage	Confidence interval (percentage)
Above federal minimum wage to \$12 per hour	2000	12	2	3	1
Above federal minimum wage to \$12 per hour	2005	14	1	4	1
Above federal minimum wage to \$12 per hour	2010	15	1	5	1
Above federal minimum wage to \$12 per hour	2015	16	1	6	1
Above federal minimum wage to \$12 per hour	2016	14	1	4	1
\$12.01 to \$16 per hour	1995	4	1	1	1
\$12.01 to \$16 per hour	2000	4	1	1	
\$12.01 to \$16 per hour	2005	6	1	2	
\$12.01 to \$16 per hour	2010	5	1	2	

n/a	n/a	threshold			
Wage category	Year	Percentage	Confidence interval (percentage)	Percentage	Confidence interval (percentage)
\$12.01 to \$16 per hour	2015	6	1	2	
\$12.01 to \$16 per hour	2016	6	1	2	

Accessible Data for Figure 9: Poverty among Families with a Worker Ages 25 to 64 Earning the Federal Minimum Wage or Below (Estimated), by Family Type, 1995 through 2016

n/a	n/a	Family incor threshold			ne below 50 percent ty threshold
Family type	Year	Percentage	Confidence interval (percentage)	Percentage	Confidence interval (percentage)
Single- parent family	1995	46	16	19	12
Single- parent family	2000	69	15	28	14
Single- parent family	2005	48	12	20	10
Single- parent family	2010	62	7	28	7
Single- parent family	2015	45	10	18	8
Single- parent family	2016	48	12	19	9
Other family	1995	43	9	24	8
Other family	2000	14	7	2	3
Other family	2005	28	6	11	4

n/a	n/a	Family income below poverty threshold					ne below 50 percent y threshold
Family type	Year	Percentage	Confidence interval (percentage)	Percentage	Confidence interval (percentage)		
Other family	2010	27	4	9	3		
Other family	2015	22	5	10	4		
Other family	2016	22	6	8	4		
Married with children	1995	16	7	3	3		
Married with children	2000	20	8	1	1		
Married with children	2005	12	5	2	2		
Married with children	2010	19	4	7	2		
Married with children	2015	15	5	3	2		
Married with children	2016	14	5	2	2		
Married with no children	1995	7	2	1	1		
Married with no children	2000	5	3	0	0		
Married with no children	2005	5	3	1	1		
Married with no children	2010	6	3	2	1		
Married with no children	2015	3	2	2	1		
Married with no children	2016	5	3	0	0		

Accessible Data for Figure 10: Estimated Rates of Medicaid Enrollment among
Families with a Low-Wage Worker Ages 25 to 64, by Wage Category, 1995 through
2016

n/a	Percentage of families enrolled in Medicaid					
Year	Federal minimum wage or below	Above federal minimum wage to \$12.00	\$12.01 to \$16.00			
1995	17	11	7			
2000	18	15	8			
2005	20	19	13			
2010	27	23	15			
2015	30	30	22			
2016	29	31	21			

Accessible Data for Figure 11: Estimated Percentage of Families with a Minimum Wage Worker Using Some Combination of Medicaid, the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, the Earned Income Tax Credit, and the Additional Child Tax Credit, by Family Type, 2016

Family type	Number of programs	Percentage	Confidence interval (percentage)
Married with no children	No program	67	3.5
Married with no children	One program	24	3
Married with no children	Two programs	6	1.5
Married with no children	Three programs	2	1
Married with no children	Four programs	1	1
Married with children	No program	47	3.5
Married with children	One program	16	2.5
Married with children	Two programs	10	2
Married with children	Three programs	18	2.5
Married with children	Four programs	9	2

Family type	Number of programs	Percentage	Confidence interval (percentage)
Single-parent family	No program	6	2.5
Single-parent family	One program	8	3
Single-parent family	Two programs	23	5
Single-parent family	Three programs	28	5.5
Single-parent family	Four programs	31	5.5
Single-parent family	Five programs	4	2.5
Other famil	No program	58	3.5
Other famil	One program	25	3
Other famil	Two programs	10	2
Other famil	Three programs	6	1.5

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