



Robert Wood Johnson
Foundation
Support for this research was
provided by the Robert Wood
Johnson Foundation. The views
expressed here do not necessarily
reflect the views of the Foundation.

Exploring the Effects of a \$15 an Hour Federal Minimum Wage on Poverty, Earnings, and Net Family Resources

Created with ATTIS

Gregory Acs, Linda Giannarelli, Kevin Werner, and Ofronama Biu

September 2022

The federal minimum wage has stood at \$7.25 since 2009. Advocates for raising the federal minimum note that someone working full time at the current federal minimum does not earn enough to keep a family out of poverty. Critics of a higher minimum wage argue that raising it would end up taking jobs away from the very workers it is purported to help because employers could not afford the higher labor costs. The debates are contentious, and the research literature is unsettled.

To inform those debates, we use the [Analysis of Transfers, Taxes, and Income Security \(ATTIS\)](#) microsimulation model to project the potential effects of raising the minimum wage to \$15 an hour in 2022 under different assumptions about how increasing the minimum wage affects employment (box 1). We present a range of results that stem from various assumptions; this range is not meant to represent upper or lower bounds but instead to illustrate how raising the federal minimum wage may play out under these assumptions and to provide a sense of how alternative assumptions could affect the results. Because raising the minimum wage may affect the wages of those currently earning just above the new minimum, we focus on workers earning up to \$18 an hour, referred to here as “affected workers.” We estimate that an increase in the federal minimum wage to \$15 an hour would affect 56 million workers—about one-third of all workers in the US.

- If we assume, as many studies suggest, employment is not sensitive to the minimum wage so that no worker loses a job as a result of a federal increase (i.e., no job displacement occurs), we project that annual family earnings of affected workers would rise by an average of about \$5,600 and their net resources after taxes, transfers, and work-related expenses—including potential changes in the cash value of in-kind benefits from the Supplemental Nutrition

Assistance Program (SNAP)—would rise by almost \$4,200. The poverty rate as measured by the Supplemental Poverty Measure (SPM) would fall by 2.4 percentage points, lifting almost 7.6 million people, including workers and their family members, out of poverty.¹

- Under alternative research-based assumptions that some workers would lose their jobs as a result of an increase in the federal minimum wage, we project that up to 3.2 million workers would experience a job loss they otherwise would not have had during the year because of the higher federal minimum wage. Nonetheless, the average annual family earnings of all affected workers (combining those with and without job loss) would rise by about \$5,000, and their net resources would increase by more than \$3,700. The SPM poverty rate would fall by 2.1 percentage points, lifting almost 6.9 million people out of poverty.
- Even workers projected to experience job losses during the year would see their annual family earnings rise by a more modest average of \$1,600 under a \$15 minimum wage. This occurs because in our projections, workers may return to work at some later point in the year. When they do work, they do so at the wage rate consistent with the \$15 minimum wage. Further, as we measure earnings at the family level, a worker who lost a job may live with another affected worker who stayed employed and benefited from the higher minimum wage for the entire year.
- Although, on average, affected workers from all races and ethnicities see earnings and resource gains and reductions in poverty, Hispanic² workers see the largest benefits under all our projections. Assuming job-loss probabilities applied to all workers earning less than \$18 an hour, we project the family earnings of affected Hispanic workers would rise by \$5,900 and their net family resources would increase by almost \$4,500, amounts even higher than the overall averages of \$5,000 and \$3,700, respectively. The SPM poverty rate for Hispanic people would fall by 4.1 percentage points, and the number of Hispanic people in poverty would fall by 2.5 million.

BOX 1

Raising the Federal Minimum Wage to \$15 an Hour: Alternative Scenarios Regarding Employment

- Scenario 1: No change in employment
- Scenario 2: Workers earning less than \$15 an hour at risk of losing their jobs as wages rise because of the minimum wage increase
- Scenario 3: Workers earning less than \$18 an hour at risk of losing their jobs as wages rise because of the minimum wage increase

The probability that workers will lose their jobs depends on how much their own wage rates are projected to rise because of an increase in the minimum wage. Based on our interpretation of research on minimum wage and how we apply it to our population of workers who could see their wages rise as a result of an increase in the minimum wage to \$15 an hour, we assume that for working-age teenagers (ages 16 to 19), a 10 percent increase in their own wages results in a 4.7 percent chance of losing at least one month of employment; for adult workers, a 10 percent rise in their wages results in a 1.6 percent chance of losing at least one month of employment.³ In sensitivity analyses, we also consider job-loss probabilities that are almost twice as high as those used in scenarios 2 and 3.

Background

Congress established the federal minimum wage in 1938 and has increased it multiple times, most recently in 2009 when it was set to its current level of \$7.25 an hour.⁴ Thirty states and DC have set minimum wages above the federal minimum,⁵ and several cities have set minimum wages above their states' minimum wage. The vast majority of workers, but not all, are covered by minimum wage laws.⁶ The minimum wage an employer must pay to tipped workers is lower than the minimum for other covered workers, but the employer must ensure that total hourly compensation (with tips) reaches the minimum. Over the past decade, advocates have argued for raising the minimum wage to \$15 an hour.⁷ Several states and cities have already implemented or enacted legislation that would raise the minimum wage to \$15 an hour or higher,⁸ and Congress has taken up legislation that would raise the federal minimum wage to \$15 in phases.⁹

Opponents of raising the minimum wage argue that placing a price floor on wages leads to labor costs that are higher than the economic value of a worker's production and will in turn lead to a drop in employment. And higher wages may put significant upward pressure on the prices of goods and services, contributing to inflation. Proponents of minimum wage increases argue that markets are not perfectly competitive, and higher wages increase the incentives to work and worker productivity, allow workers to provide better for their families, and reduce the need for means-tested public assistance. According to this view, higher labor costs will largely be paid for through lower profits for business owners and diffused through small price increases passed on to consumers.

Both arguments have merit and support in the research literature. It would not be surprising that when prevailing wages are generally above the minimum wage, small increases in the minimum wage

will have little impact, if any, on overall employment, and any employment effects may be concentrated among younger workers who are generally not the primary source of support for their families. On the other hand, it would be highly likely that a minimum wage of \$50 an hour would create significant job loss.

A recent analysis by Cengiz and colleagues (2021) uses 172 minimum wage changes between 1979 and 2019, and they do not find significant employment effects for teenagers, older workers, and single mothers, who are likely to be affected by an increase because they tend to have low wages. Several other notable studies find minimum wage increases had little effect on employment (Card and Kruger 1997; Cengiz et al. 2019; Dube, Lester, and Reich 2010).

Another recent extensive review focuses on the employment effects of the minimum wage using studies published since the 1990s (Neumark and Shirley 2021). They note that research generally shows higher minimum wages reduce employment, although some of those estimated effects are not statistically different from zero. Specifically, they focus on the elasticity of employment, which indicates how much employment is expected to change for a given change in the minimum wage. For example, an elasticity of -0.1 indicates that if wages rise by 10 percent, employment falls by 1 percent. Neumark and Shirley's (2021) review focuses on overall employment and subsets of affected workers. They report stronger effects for young adults and people with less education: median elasticities for teens and young adults were around -0.12 and -0.15; for workers without high school degrees, the median elasticity was -0.18.

Rather than contributing to job loss, raising the minimum wage may lead employers to cut back hours. For example, a study of the impacts of raising the minimum wage in Seattle found that among workers earning less than \$19 per hour, hours worked fell by 9.4 percent when the local minimum wage rose from \$11 to \$13 an hour (Jardin et al. 2017). But the literature on the effects of minimum wage increases on hours worked is neither deep nor consistent, and the Congressional Budget Office (CBO; 2019) projects that if the minimum wage were increased, no change in the average hours worked would occur among workers who retained their jobs.

For ATTIS simulations, elasticities need to be calibrated so the implied changes in employment from a given rise in the federal minimum wage would be achieved solely through changes among the subset of workers whose wages would rise. For example, as noted above, if the employment elasticity is -0.1, then employment would fall by 1 percent if minimum wage rises by 10 percent. If only one-third of workers could potentially see their earnings rise, then to achieve the 1 percent implied drop in employment, 3 percent of affected workers would be predicted to lose their jobs.

Two recent examples of projections of the impacts of raising the minimum wage come from CBO (2019) and the National Academies of Sciences, Engineering, and Medicine (NAS; 2019). CBO's (2019) review of the literature leads them to adopt median elasticities for directly impacted workers of -0.83 for teenagers and -0.27 for adults for their simulations of increasing the federal minimum wage to \$15 in 2025. CBO (2019) estimates that up to 27 million workers get a raise, and 1.3 million people who would otherwise have been employed would be out of work in a typical week. The number of people

living in poverty would decline by 1.3 million. The NAS (2019) projects the impacts of raising the federal minimum wage to \$10.25 in 2020 and assumes the employment elasticity for directly affected workers is -0.11 for adults and -0.34 for teens. They project that child poverty would fall by 0.2 percentage points and that the number employed would fall by about 150,000.

Raising the minimum wage would also affect workers' taxes and eligibility for and use of public assistance. As with the literature on the employment effects of the minimum wage, no consensus exists in the research on changes in families' net incomes and their use of assistance programs. Zipperer, Cooper, and Evans (2021) estimate that a \$15 an hour minimum wage would improve family earnings and thereby reduce spending on tax credits and public assistance programs for families with low incomes by anywhere between \$13.4 to \$31.0 billion annually. In contrast, Snyder, Rinkevich, and Yuan (2019) analyzed state-level data from 1997 to 2015 and concluded that increases to low minimum wages (that is, minimum wages that are still relatively low compared with overall wages) were associated with a reduction in SNAP participation but increases to high minimum wages increased SNAP participation, presumably because the chances of job displacement are higher for larger increases in the minimum wage. Page, Spetz, and Millar (2005) find that a 10 percent increase in the state-level minimum wage was associated with a 1 to 2 percent rise in cash assistance caseloads, also because of induced changes in employment, but their results are sensitive to years studied and assumptions about state trends in caseloads and employment.

Projections of income gains, job losses, and use of public assistance will vary based on the size and timing of the proposed minimum wage increase, size and composition of the affected population, distribution of wages around the proposed minimum, and assumptions about the elasticity of employment. In our analysis, we project the effects of a \$15 federal minimum wage in 2022.¹⁰ This represents a large increase in the federal minimum wage that would be in effect today, not at some point in the next few years. As such, we would expect to see larger effects overall than those projected by the CBO (2019) and NAS (2019) for any given set of assumptions about employment elasticities. To better inform policy discussions, we produce a range of projections under various assumptions about the probability of job loss resulting from an increase in the minimum wage. Our analyses also account for changes in tax liabilities and the amount of benefits from means-tested public assistance programs, and we can also show how some impacts of a higher federal minimum wage vary by state.

Analytic Approach

We use the ATTIS microsimulation model to project the potential impacts of raising the federal minimum wage to \$15 an hour. For these projections, ATTIS begins with data from the 2018 American Community Survey (ACS) and "ages" those data using information on labor market trends and inflation to reflect the US in 2022. It also adjusts the data to reflect participation in means-tested public assistance programs and computes net federal and state tax liabilities including the receipt of refundable credits. For details on ATTIS's procedures, see the corresponding technical report, "Simulating the Effects of a \$15 an Hour Federal Minimum Wage on Poverty and Resources," by Giannarelli and Werner (2022).

We first compute the hourly wages of workers based on their reported earnings, usual hours worked, and weeks worked. Workers' hourly wage rates are simply their total earnings divided by total hours worked. Because people can make mistakes when reporting their earnings, usual hours, and weeks worked and because they are only asked to report weeks worked in ranges rather than with a specific number, computed hourly wages are imprecise. To ensure that our distribution of wages reasonably reflects the distribution of wages in 2022, we align it with data from the Current Population Survey (CPS) outgoing rotation groups, which provide data on hourly wages. Although this study is particularly concerned with hourly wage rates, ATTIS uses the ACS rather than the CPS because of the larger sample size in the ACS, allowing us to provide estimates for more population subgroups and present results at the state level.

Next, we identify the subset of all potentially covered workers who would be affected by increasing the federal minimum wage to \$15. To reduce the potential impact of measurement error, we first exclude any worker whose computed hourly wage is less than one-half of the federal minimum wage. All remaining covered workers earning less than \$15 an hour should see their wage rate rise if they remain employed. However, workers currently earning the new minimum wage or slightly more will likely also see their wage rates rise somewhat to preserve pay scales and differentials among workers (Cengiz et al. 2019). Following the general approach taken by the NAS, we assume that workers earning up to 20 percent above the new minimum wage (\$18 an hour in this case) will be affected by the minimum wage increase.

We then decide how much pay will rise for those who continue working. Rather than simply assume that all affected workers earning less than \$15 an hour will see their wage rates rise to exactly \$15, we again follow NAS and assume "spillover effects" will ensue: workers currently earning near \$15 an hour will see their wages grow to slightly more than \$15 (figure 1). So, we assume that workers earning within 20 percent of the new minimum wage (i.e., \$12 an hour or more) will earn slightly more than the new minimum of \$15, and those earning between \$15 and \$18 will also see modest increases. Thus, affected workers currently earning between \$12 and \$18 an hour will see their wage rates rise above \$15 but to no higher than \$18 an hour. Our procedure preserves workers' pay ranking but compresses the pay distribution.¹¹ For workers earning between the current federal minimum (\$7.25) and \$12, their new wage is set to the new federal minimum of \$15. Finally, for affected workers whose computed wage falls below the current federal minimum, we increase their wage rates by \$7.75, the difference between the current and proposed federal minimums, to avoid greatly overstating wage gains if subminimum wages are the result of imprecise measures of wage rates.¹²

FIGURE 1

Wage Changes Resulting from Increasing the Federal Minimum Wage to \$15 an Hour



URBAN INSTITUTE

Source: Authors' graphical representation.

Notes: Representation of assumptions about how much workers' wages would change if the federal minimum wage increased to \$15 an hour based on their original (pre-minimum-wage increase) hourly wage.

Some localities already have local minimum wages that exceed \$15 an hour, and some states have minimum wages at or near \$15. We assume that an increase in the federal minimum wage will have spillover effects for workers earning up to \$18 in those states and localities as described above because the rising wages in neighboring locations will put upward pressure on wages everywhere as employers compete for workers across state lines.

Finally, to complete our projections, we have to consider the impact rising wages will have on employment, which as noted earlier, is contentious. Because considerable uncertainty exists, we provide a plausible range of projections based on the current literature but acknowledge the true impact may lie outside this range. Nevertheless, by providing a range of estimates, we hope to inform discussions of minimum wage policy.

As many studies find no effect of minimum wage on employment (that is, effects that are statistically indistinguishable from zero), our first set of projections assumes that although all affected workers see their wages rise, none will lose their jobs.

But as much literature finds that higher minimum wages are associated with some job displacement (even if the negative effects are not precisely measured) and younger workers are more likely to

experience job displacement, we perform additional projections: (1) we assume only workers with wage rates up to \$15 before the increase are at risk of job loss as their wages rise, and (2) we assume that workers originally earning up to \$18 may experience job loss (box 1).

But how likely is job loss for affected workers? The probability of job loss given a specific change in wages is referred to as the employment elasticity, and a wide range of estimates exists. For our purposes, we need elasticities that apply to the subset of workers affected by the minimum wage increase we consider. Here, we adapt CBO's (2019) methodology for computing the long-run elasticities for affected workers.¹³ Job loss is directly related to how much the affected worker's wage changes. That means a worker whose wage rate grows from \$8 an hour to \$15 an hour will be more likely to lose their job than a worker going from \$12 to \$15.

Thus, for all our projections, we increase affected workers' wage rates, increase the earnings of those workers who retain their jobs, zero out earnings and most work-related expenses in months when people are projected to lose their jobs, recompute their families' annual taxes and benefits, and assess how their families' poverty status and net resources would change.¹⁴ Because we expect employment to be higher by the end of 2022 than at the beginning based on economic forecasts from the Philadelphia Federal Reserve Bank's Survey of Professional Forecasters, our model allows people without jobs to start working as the year progresses. As such, people who are projected to lose their jobs in response to a minimum wage increase join the pool of jobless individuals who may find work later in the year. In recomputing benefits, we use standard SNAP benefit computation policies (under which an increase in earnings usually reduces the potential benefit) rather than the special policies in place during the COVID-19 health emergency (which prevent such changes), to better capture the potential secondary impacts of the wage increase in a typical year. We present results for all affected workers and their families and for subsets of workers based on their demographic characteristics.

Results

We estimate that 56 million workers would be affected by an increase in the federal minimum wage from \$7.25 to \$15 an hour in 2022 (table 1). That includes workers in jobs we deem to be covered under federal minimum wage laws who currently earn less than \$15 an hour, as well as workers earning between \$15 and \$18 an hour. Affected workers represent about one-third of all workers.

Many affected workers live with other working family members and may have other sources of income beyond their own earnings. Under the current federal minimum wage, nearly two out of five affected workers live in families with cash incomes above three times the federal poverty level. (Three times the official poverty level for a family of four is about \$80,000 in 2022.) About one-quarter of affected workers are in precarious circumstances with incomes between one and two times the federal poverty level, and 13.3 percent of affected workers live in families with incomes below the federal poverty level.

TABLE 1

Workers Affected by Minimum Wage Increase*By demographics*

	All Workers		Workers Affected by Increase in Federal Minimum Wage ^a	
	Number (millions)	Distribution (%)	Number (millions)	Distribution (%)
Total	169.0		56.0	
<i>Income as percent of federal poverty level^b</i>				
< 100%	11.3	6.7	7.4	13.3
100–149%	9.7	5.8	6.7	12.0
150–199%	12.0	7.1	7.7	13.7
200–299%	26.2	15.5	12.8	22.8
300%+	109.7	64.9	21.4	38.2
<i>Age</i>				
< 20	6.8	4.0	4.8	8.5
20–24	15.6	9.3	10.2	18.1
25–54	106.8	63.2	31.0	55.4
55+	39.7	23.5	10.0	17.9
<i>Education (for people age 25+)</i>				
Less than high school diploma	12.0	7.1	6.1	14.8
High school diploma or equivalent	34.7	20.5	13.9	33.7
Some college but no degree	30.1	17.8	9.8	23.8
Associate degree	14.0	8.3	3.8	9.3
Bachelor's degree or more	55.7	33.0	7.5	18.3
<i>Race/ethnicity</i>				
AAPI, non-Hispanic people	10.4	6.2	2.8	5.0
Black, non-Hispanic people	19.7	11.7	8.3	14.9
Hispanic people	30.5	18.0	13.6	24.3
White, non-Hispanic people	103.3	61.1	29.3	52.3
People identifying as other race or multiple races	5.1	3.0	1.9	3.5
<i>Sex</i>				
Women	80.5	47.6	30.3	54.0
Men	88.5	52.4	25.7	46.0
<i>Number of own children ≤ 18 present</i>				

	All Workers		Workers Affected by Increase in Federal Minimum Wage ^a	
	Number (millions)	Distribution (%)	Number (millions)	Distribution (%)
0	114.9	68.0	41.4	73.9
1	22.4	13.2	6.3	11.3
2	20.4	12.1	5.0	8.9
3+	11.0	6.5	3.3	5.8
<i>Age of youngest own child present (for people with any own child present)</i>				
< 1	4.6	8.5	1.4	9.3
1–5	17.9	33.2	5.2	35.9
6–11	15.7	29.2	4.2	28.5
12–18	15.7	29.1	3.8	26.3
<i>Presence of other earners in family</i>				
Sole earner in family	N/A	N/A	18.4	32.8
Other earners in family, at least one < \$18/hour	N/A	N/A	22.1	39.4
Other earners in family, all > \$18/hour	N/A	N/A	15.6	27.8

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model using data from the 2018 American Community Survey, projected to reflect 2022.

Note: AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey. Numbers are rounded and therefore may not add up to 100 percent. Because we only tabulate for families with affected workers, irrelevant cells are designated with N/A.

^a Affected workers are those with computed wages between \$3.62 and \$18.00.

^b Federal poverty level in this table refers to the official poverty definition; we estimated 2022 poverty thresholds by increasing the 2021 poverty thresholds by the assumed level of inflation.

Affected workers represent a broad swath of the population. More than one-quarter (26.6 percent) of affected workers are under the age of 25, and 55 percent are between the ages of 25 and 54. Thus, affected workers skew somewhat younger than the population of all workers (13.3 percent of all workers are under age 25). About half of affected workers have education beyond a high school degree. A little over half are white people, almost a quarter are Hispanic people, about 15 percent are Black people, and 5.0 percent are Asian Americans or Pacific Islanders (AAPI).¹⁵ Some people identifying as certain races and ethnicities are underrepresented among affected workers, and others are overrepresented. For example, white and AAPI workers are somewhat underrepresented in the population of affected workers. Black and Hispanic people are somewhat overrepresented in the affected worker pool. Women represent 54 percent of affected workers but 48 percent of all workers.

TABLE 2

Workers Affected by Minimum Wage Increase, by Wage before Increase

	Affected workers (millions) ^a	Distribution by Wage before Minimum Wage Increase			
		< \$9 (%)	\$9-\$12 (%)	\$12-\$15 (%)	\$15-\$18 (%)
Women and men					
All races/ethnicities	56.0	19.6	17.9	23.2	39.3
AAPI, non-Hispanic people	2.8	19.9	17.6	21.3	41.2
Black, non-Hispanic people	8.3	21.2	18.1	23.5	37.1
Hispanic people	13.6	18.0	18.6	22.6	40.8
White, non-Hispanic people	29.3	19.8	17.5	23.6	39.2
People identifying as other race or multiple races	1.9	22.0	18.8	23.1	36.1
Women					
All races/ethnicities	30.3	20.1	18.5	23.2	38.2
AAPI, non-Hispanic people	1.5	20.0	18.0	21.2	40.8
Black, non-Hispanic people	4.7	21.7	18.6	23.1	36.7
Hispanic people	6.8	19.4	20.2	22.5	38.0
White, non-Hispanic people	16.2	19.8	17.8	23.7	38.7
People identifying as other race or multiple races	1.0	22.9	18.7	23.1	35.4
Men					
All races/ethnicities	25.7	19.1	17.2	23.2	40.5
AAPI, non-Hispanic people	1.3	19.8	17.1	21.4	41.7
Black, non-Hispanic people	3.7	20.7	17.6	24.1	37.6
Hispanic people	6.8	16.7	17.0	22.7	43.6
White, non-Hispanic people	13.1	19.7	17.1	23.4	39.7
People identifying as other race or multiple races	0.9	20.9	19.0	23.1	37.0

Source: Urban Institute's Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term "Hispanic" throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a Affected workers are those with computed wages between \$3.62 and \$18.00.

The majority of affected workers do not live in families with children. Only about one-quarter of affected workers live with their own children ages 18 and younger, and fewer than 15 percent live with two or more of their own children. Among those that have children and live with them, about 45 percent have children under age 6.

About one-third of affected workers are the sole earners in their families, and almost 40 percent live with at least one other earner whose hourly pay could rise if the federal minimum wage were to rise to \$15. In those families, any earnings declines that occur if one worker loses a job could be offset by earnings increases for other workers in the family.

The overall impact of raising the minimum wage depends on the distribution of current wages among affected workers. Those with relatively lower earnings stand to gain the most from an increase in the minimum wage but are also at the greatest peril for being displaced from their jobs. About 20 percent of affected workers currently earn less than \$9 an hour, and another 18 percent earn between \$9 and \$12 an hour (table 2). Those workers would see large increases in their hourly earnings from a \$15 an hour federal minimum wage. About one-quarter of affected workers earn between \$12 and the new proposed minimum of \$15, and about 40 percent earn between \$15 and \$18 an hour. As noted earlier, although the latter workers are already paid at or above the new minimum, we anticipate that a higher minimum wage will have spillover effects for those earning just above the new minimum.

Affected workers are a lower-earning subset of all workers, and the distribution of their wages is fairly similar among men and women and among all races and ethnicities studied. The proportion of affected workers with very low wage rates ranges narrowly from a low of 18.0 percent among Hispanic workers to a high of 22.0 percent for workers identifying as other or multiple races.¹⁶ Similarly, the share with wage rates between \$15 and \$18 an hour varies from a low of 36.1 percent for those identifying as other or multiple races to a high of 41.2 percent for AAPI people. Among affected workers, women are slightly more likely to have very low wage rates (less than \$9 an hour) than men (20.1 versus 19.1 percent), with Black women (21.7 percent) and women identifying as other or multiple races (22.9 percent) being most likely to be in this group. Among men of different races and ethnicities, Black men (20.7 percent), and men identifying as other or multiple races (20.9 percent) also were most likely to be in the lowest wage-rate category.

Rising earnings may be offset by higher taxes and the loss of public assistance benefits; conversely, the financial consequences of any job loss can be mitigated by public assistance. Nearly a quarter of affected workers receive some public assistance (table 3).¹⁷ The most used program for those workers is SNAP, with about one in five receiving benefits. Across demographic groups, the portion of affected workers in families with any of these means-tested benefits ranges from one-fifth of affected white workers to one-third of affected Black workers. Note that we do not consider unemployment insurance as it is not a means-tested benefit. Tax credits also provide additional supports to affected workers. More than 40 percent receive the earned-income tax credit (EITC) on their tax return, and 28 percent receive the child tax credit (CTC).¹⁸ Affected Black workers are the most likely group to receive the EITC (59.5 percent), and affected Hispanic workers are the most likely group to receive the CTC (34.3 percent).

TABLE 3

Benefits and Tax Credits Received by Workers Affected by the Proposed Minimum Wage before Wage Increases

	Affected workers (millions) ^a	Percent with Selected Tax Credits ^b		Percent Receiving Means-Tested Benefits Themselves or Who Are the Parent or Spouse of a Recipient							≥1 means-tested benefit (%)
		EITC (%)	CTC (%)	SNAP ^d (%)	Housing (%)	CCDF (%)	WIC (%)	TANF (%)	SSI (%)	LIHEAP (%)	
All races/ethnicities	56.0	41.5	28.0	19.9	2.4	1.9	3.4	0.6	1.8	4.5	24.2
AAPI people	2.8	39.4	30.7	14.7	1.4	1.1	2.6	0.5	1.7	4.5	19.8
Black, non-Hispanic people	8.3	59.5	29.6	27.9	7.0	4.4	4.9	1.0	2.4	6.4	33.8
Hispanic people	13.6	47.6	34.3	23.5	2.3	1.7	5.4	1.0	1.8	4.3	28.6
White, non-Hispanic people	29.3	33.3	24.5	16.0	1.3	1.2	2.1	0.4	1.6	3.9	19.5
People identifying as other race or multiple races	1.9	48.0	26.4	25.6	2.0	2.6	4.3	0.8	2.1	5.7	30.0

Source: Urban Institute's Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; CCDF = child care development fund; CTC = child tax credit; EITC = earned-income tax credit; LIHEAP = Low-Income Home Energy Assistance Program; SSI = Supplemental Security Income; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; we use the term "Hispanic" throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a Affected workers are those with computed wages between \$3.62 and \$18.00.

^b In the case of a married couple filing unit, if the filing unit receives a credit, both spouses are counted as recipients. Workers who are dependents in tax units taking a credit are not counted as receiving the credit.

^c In most cases, if a person is the spouse of a recipient or the parent of a child who is a recipient, that person's income is considered in determining the recipient's benefits, even if that person is not considered a recipient. Detailed policies and child definitions vary by program. Also, in some programs and situations, a non-recipient's income could be counted in determining the benefit of household members other than a spouse or child; those situations are not reflected in these counts.

^d Full-time students are counted as SNAP recipients in this tabulation only if they qualify under the program's standard policies (not including special provisions in place during the COVID-19 public health emergency).

Projected Impact of a Higher Federal Minimum Wage on Poverty, Income, and Employment

Across all of our assumptions about the extent of job displacement, we project that raising the federal minimum wage to \$15 an hour will reduce poverty and raise the average resources available to affected workers and their families. To fully capture how changes in earned income affect workers' tax liabilities, tax credits, and means-tested benefits, we discuss SPM poverty rather than use the official poverty measure that fails to account for taxes and in-kind transfers, such as SNAP benefits.

If we assume that no affected workers lose their jobs, a \$15 an hour minimum wage would lift 7.6 million people out of poverty and reduce the SPM poverty rate by 2.4 percentage points from a baseline SPM poverty rate of 14.7 percent (table 4).¹⁹ If workers earning less than \$15 an hour are assumed to be at risk of losing their jobs, our projected reductions in poverty fall to just under 7 million people and 2.2 percentage points.

TABLE 4
Poverty Effects of Increased Minimum Wage using Supplemental Poverty Measure
In millions

	Baseline	No-job-loss scenario	Job-Loss Scenarios	
			Possible for workers earning < \$15	Possible for all affected workers ^b
Number in SPM poverty (millions) ^a	47.5	39.9	40.5	40.6
SPM Poverty rate ^a (%)	14.7	12.4	12.6	12.6
Annual job loss (millions)	N/A	N/A	2.9	3.2
Average monthly job loss (millions)	N/A	N/A	1.1	1.2
Number below 200% SPM ^a	143.5	136.7	137.2	137.3
< 200% SPM ^a (%)	44.6	42.5	42.6	42.7

Source: Urban Institute's Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: SPM = Supplemental Poverty Measure. Note that some numbers are slightly different in the table than in the text because of rounding in the table.

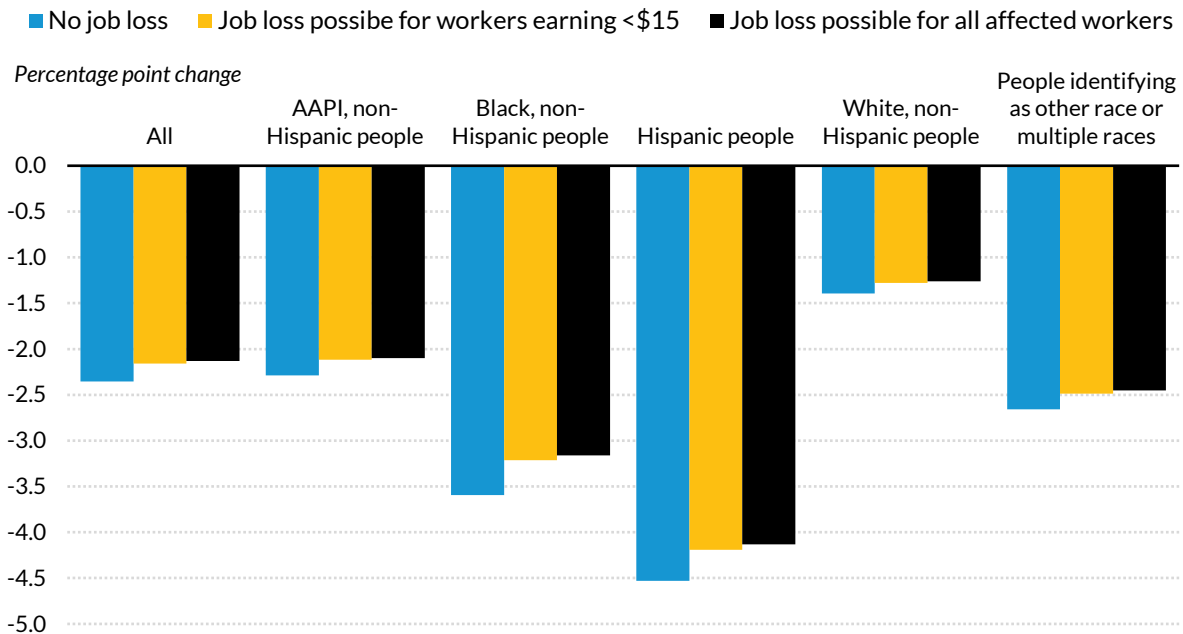
^a SPM poverty estimates are for the entire US population, not just affected workers and their families. Poverty is based on resources that use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^b Affected workers are those with computed wages between \$3.62 and \$18.00.

Fewer people are lifted out of poverty under that scenario because we project 2.9 million affected workers would experience a job loss at some point during the year, with 1.1 million experiencing job loss in the typical month. Even workers projected to lose work during the year may still work in some months.²⁰ Workers who are projected to lose their jobs are out of work for an average of 4.4 months in

this simulation. Finally, if we assume that anyone currently earning less than \$18 an hour is at risk of job displacement, we project that 3.2 million people would lose jobs at some point during the year, 1.2 million would lose employment in a typical month, 6.9 million would be lifted out of poverty, and the poverty rate would still decline, but by 2.1 percentage points.²¹

FIGURE 2
Percentage Point Reduction in Supplemental Poverty Measure Poverty by Race and Ethnicity in the Three Simulated Scenarios



URBAN INSTITUTE

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: SPM = Supplemental Poverty Measure. AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a SPM poverty estimates are for the entire US population, not just affected workers and their families. Poverty is based on resources that use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

A higher minimum wage will also lift some affected families with incomes between 100 and 200 percent of the SPM poverty level out of precarious positions, raising their incomes to above twice the SPM poverty level. If we assume no job loss, 6.8 million people are lifted above 200 percent of the SPM poverty level, a decrease in the low-income rate of 2.1 percentage points. When we assume that those earning less than \$15 an hour are at risk of job loss, the number lifted above 200 percent of SPM poverty is 6.2 million people; assuming the risk of job loss includes those earning less than \$18 an hour further lowers the number lifted above 200 percent of SPM poverty to 6.1 million.

In all scenarios, a federal minimum wage increase would result in SPM poverty falling among all race and ethnic groups with Hispanic people experiencing the largest declines (tables 5 and 6 and figure 2). Assuming no job losses, 2.8 million Hispanic people would be lifted out of poverty through a higher minimum wage, representing a 4.5 percentage point decline in poverty. Assuming workers earning up to \$18 are at risk of job loss, poverty among Hispanic people declines by 4.1 percentage points and 2.5 million people. For white people, we project declines in SPM poverty ranging from 1.3 to 1.4 percentage points (2.4 to 2.7 million people). For Black people, our projections range from 3.2 to 3.6 percentage points (1.2 to 1.4 million people).

TABLE 5
Supplemental Poverty Measure Effects of Increased Minimum Wage by Race and Ethnicity
In millions

	Baseline	Job-Loss Scenarios					
		No job loss		Possible for workers earning < \$15		Possible for all affected workers ^b	
		Number	Change	Number	Change	Number	Change
Number in poverty^a							
All races or ethnicities	47.5	39.9	-7.6	40.5	-7.0	40.6	-6.9
AAPI, non-Hispanic people	3.1	2.7	-0.4	2.7	-0.4	2.7	-0.4
Black, non-Hispanic people	8.2	6.8	-1.4	7.0	-1.3	7.0	-1.2
Hispanic people	13.8	11.1	-2.8	11.3	-2.6	11.3	-2.5
White, non-Hispanic people	20.3	17.7	-2.7	17.9	-2.4	17.9	-2.4
People identifying as other race or multiple races	1.9	1.6	-0.3	1.6	-0.3	1.6	-0.3

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a Supplemental Poverty Measure poverty estimates are for the entire US population, not just affected workers and their families. Poverty is based on resources that use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^b Affected workers are those with computed wages between \$3.62 and \$18.00.

TABLE 6

Supplemental Poverty Measure Effects of Increased Minimum Wage by Race and Ethnicity

In percentage points

	Job-Loss Scenarios						
	Baseline (%)	No job loss		Possible for workers earning < \$15		Possible for all affected workers ^b	
		Rate (%)	Percentage point change	Rate (%)	Percentage point change	Rate (%)	Percentage point change
Poverty Rate^a							
All races/ethnicities	14.7	12.4	-2.4	12.6	-2.2	12.6	-2.1
AAPI, non-Hispanic people	16.9	14.6	-2.3	14.8	-2.1	14.8	-2.1
Black, non-Hispanic people	20.9	17.3	-3.6	17.7	-3.2	17.8	-3.2
Hispanic people	22.7	18.1	-4.5	18.5	-4.2	18.5	-4.1
White, non-Hispanic people	10.6	9.2	-1.4	9.4	-1.3	9.4	-1.3
People identifying as other race or multiple races	16.4	13.7	-2.7	13.9	-2.5	13.9	-2.5

Source: Urban Institute's Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term "Hispanic" throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a Supplemental Poverty Measure poverty estimates are for the entire US population, not just affected workers and their families. Poverty is based on resources that use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^b Affected workers are those with computed wages between \$3.62 and \$18.00.

Younger workers are disproportionately likely to experience job loss, but the distribution of projected job loss by race, ethnicity, and sex is similar to the distribution for all affected workers (table 7). Under both our job-loss scenarios, just under one-third of workers projected to lose their jobs are under age 20, compared with 8.5 percent of all affected workers. Women constitute almost 55 percent of workers who lost their jobs and 54 percent of all affected workers. White workers constitute just over 52 percent of affected workers and about 53 percent of workers who lost their jobs, while Hispanic and Black workers constitute almost a quarter and just over 15 percent of affected and displaced workers, respectively.

On average, raising the federal minimum wage to \$15 an hour will raise the earnings of families with at least one affected worker by over \$5,000 annually, on average, even if workers earning up to \$18 an hour are at risk for job loss (table 8). Because increasing earnings may increase tax liabilities and reduce public assistance, the net resources available to these families increases by a little less than their earnings increase. If we assume no job losses, average earnings increase by over \$5,600, and net

resources increase by about \$4,200. Earnings and net resources increase for members of all race and ethnic groups, with Hispanic people experiencing the largest gains (about \$6,600 in earnings and \$4,900 in net resources). This likely reflects the fact that, when compared with non-Hispanic affected workers, Hispanic affected workers are more likely to live with other affected workers, meaning more people in those families would see their earnings rise. Earnings gains for AAPI and Black families are about \$6,000, and resource gains are about \$4,500 and \$4,200, respectively. People identifying as other race or multiple races see earnings increase by \$5,500 and net resources rise by \$4,000. For white families, earnings are projected to rise by \$5,100 and net resources by \$3,800.

TABLE 7
Job Loss from Minimum Wage Increase by Age, Race and Ethnicity, and Sex
Job loss in any month of the year

	All affected workers (%)	Workers Projected to Lose Jobs			
		Job loss possible for workers earning < \$15		Job loss possible for all affected workers ^a	
		Number (millions)	Percent distribution	Number (millions)	Percent distribution
All	100	2.9		3.2	
<i>Age</i>					
< 20	8.5	0.9	32.6	1.0	30.5
20+	91.5	1.9	67.4	2.2	69.5
<i>Race/ethnicity</i>					
AAPI, non-Hispanic people	5.0	0.1	4.5	0.1	4.6
Black, non-Hispanic people	14.9	0.4	15.2	0.5	15.1
Hispanic people	24.3	0.7	23.4	0.8	23.8
White, non-Hispanic people	52.3	1.5	53.1	1.7	52.8
People identifying as other race or multiple races	3.5	0.1	3.8	0.1	3.8
<i>Sex</i>					
Women	54.0	1.6	54.7	1.7	54.6
Men	46.0	1.3	45.3	1.5	45.4

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a Affected workers are those with computed wages between \$3.62 and \$18.00.

If we assume that workers earning less than \$15 an hour are at risk of job loss from a federal minimum wage increase, the average earnings and net resource gains are somewhat lower than in the

no-job-loss scenario, falling to \$5,100 and \$3,800, respectively. With even greater job losses, assuming all those earning less than \$18 an hour are at risk, average earnings and net resource gains are \$5,000 and \$3,700, respectively.

The average gains in earnings and net resources under scenarios in which workers are at risk for losing their jobs may mask variation in workers' experiences, which include both earnings and resource losses for some of the families of workers projected to lose their jobs and the gains of families whose affected workers see their hourly wage rates rise. But even families with a worker experiencing a job loss as a result of the higher minimum wage may be better off than before because workers will be paid at a higher rate for the time they do work, and the earnings of other working family members who do not experience job loss may also rise. And in some cases, earnings losses may be offset by increases in benefits.

Even under the scenario in which workers with earnings up to \$18 an hour are at risk for losing jobs as a result of a federal minimum wage increase, we project that the annual family level earnings of those who experience a job loss will rise by \$1,600 on average, and their net resources will rise by about \$1,900 (table 9). Net resources could rise more than earnings at the family level for some families experiencing a job loss because while a worker is jobless, that worker no longer incurs work-related expenses and, in some cases, job losses may trigger eligibility for benefits worth more than the lost earnings.²² Workers who keep their jobs under this scenario are projected to see annual family earnings rise by an average of \$5,300 and their net resources rise by \$3,900.

TABLE 8
Effect of Minimum Wage Increase on Families' Earnings and Resources

All families with at least one affected worker, in dollars

	Average Earnings (\$) ^a			Average Net Resources (\$) ^{a, b}		
	Baseline amount	New amount	Change	Baseline Amount	New Amount	Change
No job loss						
All races/ethnicities ^c	67,700	73,300	5,600	57,900	62,000	4,200
AAPI, non-Hispanic people	82,600	88,600	6,000	65,500	70,000	4,500
Black, non-Hispanic people	50,600	56,600	6,000	46,600	50,800	4,200
Hispanic people	61,500	68,100	6,600	52,100	57,000	4,900
White, non-Hispanic people	73,900	79,000	5,100	62,800	66,700	3,800
People identifying as other race or multiple races	56,400	61,900	5,500	49,200	53,200	4,000
Job loss possible for workers earning <15						
All races/ethnicities	67,700	72,800	5,100	57,900	61,700	3,800
AAPI, non-Hispanic people	82,600	88,000	5,500	65,500	69,600	4,100
Black, non-Hispanic people	50,600	56,000	5,400	46,600	50,500	3,900
Hispanic people	61,500	67,500	6,000	52,100	56,600	4,500

	Average Earnings (\$) ^a			Average Net Resources (\$) ^{a, b}		
	Baseline amount	New amount	Change	Baseline Amount	New Amount	Change
White, non-Hispanic people	73,900	78,500	4,700	62,800	66,300	3,500
People identifying as other race or multiple races	56,400	61,400	5,000	49,200	52,900	3,700
Job loss possible for all affected workers^d						
All races/ethnicities	67,700	72,700	5,000	57,900	61,600	3,700
AAPI, non-Hispanic people	82,600	87,900	5,400	65,500	69,500	4,000
Black, non-Hispanic people	50,600	55,900	5,300	46,600	50,400	3,800
Hispanic people	61,500	67,400	5,900	52,100	56,600	4,500
White, non-Hispanic people	73,900	78,500	4,600	62,800	66,300	3,400
People identifying as other race or multiple races	56,400	61,300	4,900	49,200	52,800	3,600

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a All amounts are rounded to the nearest \$100; the change in the average is computed from the unrounded averages and then rounded.

^b Economic resources are measured using the Supplemental Poverty Measure resource definition. The amount includes cash income plus the value of noncash benefits and tax refunds minus positive tax liabilities and medical out-of-pocket expenses and for people who are employed, child care and other work expenses. The computations use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^c Families are categorized by the race and ethnicity of the family head.

^d Affected workers are those with computed wages between \$3.62 and \$18.00.

TABLE 9

Effect of Minimum Wage Increase on Earnings and Resources

Families with at least one affected worker, by whether family has person experiencing job loss, in dollars

	Families Not Experiencing Job Loss						Families Experiencing Job Loss					
	Average earnings (\$) ^a			Average net resources (\$) ^{a, b}			Average earnings (\$) ^a			Average net resources (\$) ^{a, b}		
	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change
Job loss possible for workers earning <\$15												
All races/ethnicities ^c	67,200	72,500	5,300	57,500	61,400	3,900	75,000	77,600	2,600	63,100	65,700	2,600
AAPI, non-Hispanic people	82,100	87,700	5,600	65,200	69,400	4,200	90,300	92,900	2,600	70,200	72,800	2,600
Black, non-Hispanic people	50,600	56,200	5,600	46,600	50,500	4,000	50,000	52,700	2,700	47,000	49,600	2,500
Hispanic people	61,300	67,400	6,100	52,000	56,500	4,600	64,100	68,300	4,200	54,100	57,900	3,900
White, non-Hispanic people	73,100	77,900	4,800	62,300	65,900	3,600	85,900	87,800	1,900	71,200	73,300	2,100
People identifying as other race or multiple races	56,700	61,900	5,200	49,300	53,100	3,800	51,600	53,500	1,900	46,600	48,500	1,900
Job loss possible for affected workers^d												
All races/ethnicities	67,200	72,400	5,300	57,500	61,400	3,900	75,000	76,600	1,600	63,000	64,800	1,900
AAPI, non-Hispanic people	82,000	87,700	5,600	65,200	69,400	4,200	89,900	91,300	1,400	70,200	71,900	1,700
Black, non-Hispanic people	50,600	56,200	5,600	46,500	50,500	4,000	50,600	52,300	1,700	47,200	49,000	1,800

	Families Not Experiencing Job Loss						Families Experiencing Job Loss					
	Average earnings (\$) ^a			Average net resources (\$) ^{a, b}			Average earnings (\$) ^a			Average net resources (\$) ^{a, b}		
	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change	Baseline Amount	New Amount	Change
Hispanic people	61,200	67,400	6,100	51,900	56,500	4,600	64,700	67,800	3,000	54,500	57,500	3,000
White, non-Hispanic people	73,100	77,900	4,800	62,300	65,800	3,600	85,500	86,500	1,100	70,800	72,200	1,500
People identifying as other race or multiple races	56,700	61,900	5,200	49,300	53,100	3,800	52,600	53,200	500	47,300	48,300	1,000

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

Notes: AAPI = Asian American and Pacific Islander; we use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying American Community Survey.

^a All amounts are rounded to the nearest \$100; the change in the average is computed from the unrounded averages and then rounded.

^b Economic resources are measured using the Supplemental Poverty Measure resource definition. The amount includes cash income plus the value of noncash benefits and tax refunds minus positive tax liabilities and medical out-of-pocket expenses and for people who are employed, child care and other work expenses. The computations use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^c Families are categorized by the race and ethnicity of the family head.

^d Affected workers are those with computed wages between \$3.62 and \$18.00.

The impact of raising the federal minimum wage to \$15 an hour will vary from state to state; states with lower prevailing wage rates will see the greatest impacts on employment and the largest increase in earnings for their workers. Thus, in general, we project smaller changes in poverty in high-wage states and larger reductions in low-wage states (table 10). The smallest reductions in poverty would occur in Vermont, where the SPM poverty rate would fall by about 0.9 percentage points regardless of job-loss scenario. Conversely, we project the largest potential reductions in poverty in Louisiana, where the SPM poverty rate would fall between 3.2 and 3.6 percentage points across our scenarios. Another factor that affects the poverty changes is that the SPM poverty thresholds are higher in places with higher housing costs. The same level of earnings might be enough for a family’s resources to be above the SPM poverty level if they lived in one place but not another; in general, SPM thresholds are lower in nonmetropolitan areas where housing costs are also generally lower. In two places with the same current minimum wage and current distribution of wages but different SPM thresholds, the place with higher SPM thresholds would likely see a smaller reduction in poverty.

TABLE 10
Poverty Effects of Increased Minimum Wage by State

State	Baseline poverty rate ^a (%)	Job-Loss Scenarios					
		No job loss		Possible for workers earning < \$15		Possible for all affected workers ^b	
		New poverty rate ^a (%)	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a
Alabama	16.0	13.2	-2.8	13.3	-2.7	13.4	-2.6
Alaska	13.6	11.4	-2.1	11.5	-2.0	11.5	-2.0
Arizona	15.2	12.9	-2.3	13.1	-2.1	13.2	-2.1
Arkansas	16.2	13.6	-2.6	13.9	-2.3	14.0	-2.3
California	18.6	16.0	-2.6	16.2	-2.4	16.3	-2.4
Colorado	12.4	10.6	-1.9	10.7	-1.7	10.7	-1.7
Connecticut	12.3	10.9	-1.4	11.0	-1.3	11.1	-1.3
Delaware	13.2	10.6	-2.6	10.9	-2.3	10.9	-2.3
District of Columbia	15.8	14.6	-1.1	14.7	-1.1	14.7	-1.1
Florida	17.7	14.6	-3.1	14.9	-2.8	15.0	-2.8
Georgia	14.9	12.3	-2.6	12.5	-2.4	12.6	-2.4
Hawaii	12.7	11.3	-1.4	11.4	-1.3	11.4	-1.3
Idaho	12.2	10.3	-2.0	10.6	-1.6	10.7	-1.6
Illinois	12.7	10.8	-2.0	10.9	-1.8	11.0	-1.7
Indiana	13.2	10.8	-2.4	11.0	-2.2	11.1	-2.1
Iowa	10.0	8.3	-1.7	8.4	-1.6	8.4	-1.6
Kansas	12.4	10.3	-2.1	10.4	-2.0	10.4	-2.0

State	Job-Loss Scenarios						
	Baseline poverty rate ^a (%)	No job loss		Possible for workers earning < \$15		Possible for all affected workers ^b	
		New poverty rate ^a (%)	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a
Kentucky	15.7	13.2	-2.5	13.4	-2.3	13.4	-2.2
Louisiana	18.3	14.7	-3.6	15.0	-3.3	15.0	-3.2
Maine	10.6	9.2	-1.5	9.3	-1.3	9.3	-1.3
Maryland	11.7	10.0	-1.6	10.1	-1.5	10.1	-1.5
Massachusetts	12.1	10.8	-1.3	10.9	-1.2	10.9	-1.2
Michigan	13.9	11.8	-2.1	12.0	-2.0	12.0	-1.9
Minnesota	9.7	8.2	-1.5	8.4	-1.3	8.4	-1.3
Mississippi	17.8	14.8	-3.0	15.1	-2.8	15.1	-2.8
Missouri	13.1	10.8	-2.3	11.0	-2.1	11.0	-2.1
Montana	12.9	10.2	-2.7	10.4	-2.5	10.4	-2.5
Nebraska	10.6	8.3	-2.3	8.5	-2.2	8.5	-2.2
Nevada	16.0	13.2	-2.7	13.5	-2.4	13.5	-2.4
New Hampshire	9.5	8.2	-1.2	8.3	-1.1	8.4	-1.1
New Jersey	13.2	11.4	-1.9	11.5	-1.7	11.6	-1.6
New Mexico	17.2	14.2	-3.0	14.4	-2.8	14.5	-2.7
New York	17.0	14.9	-2.1	15.0	-2.0	15.1	-1.9
North Carolina	14.4	11.7	-2.7	11.9	-2.5	12.0	-2.4
North Dakota	9.9	8.3	-1.6	8.4	-1.5	8.4	-1.5
Ohio	12.0	10.2	-1.8	10.3	-1.7	10.3	-1.7
Oklahoma	14.1	11.3	-2.7	11.7	-2.3	11.8	-2.3
Oregon	14.2	12.2	-2.0	12.3	-1.9	12.3	-1.9
Pennsylvania	12.6	10.7	-1.9	10.8	-1.8	10.9	-1.7
Rhode Island	11.9	10.8	-1.1	10.9	-1.1	10.9	-1.0
South Carolina	15.2	12.5	-2.8	12.7	-2.5	12.7	-2.5
South Dakota	12.2	10.3	-1.8	10.3	-1.8	10.5	-1.6
Tennessee	14.8	12.2	-2.6	12.4	-2.5	12.4	-2.4
Texas	16.3	13.0	-3.3	13.2	-3.0	13.3	-3.0
Utah	10.2	8.5	-1.7	8.6	-1.6	8.7	-1.6
Vermont	11.9	11.0	-0.9	11.0	-0.9	11.0	-0.9
Virginia	13.9	11.9	-2.0	12.1	-1.9	12.1	-1.9
Washington	11.2	9.8	-1.4	9.9	-1.3	9.9	-1.3
West Virginia	14.7	12.4	-2.3	12.7	-2.1	12.7	-2.1
Wisconsin	10.1	8.5	-1.6	8.7	-1.5	8.7	-1.4

State	Job-Loss Scenarios						
	Baseline poverty rate ^a (%)	No job loss		Possible for workers earning < \$15		Possible for all affected workers ^b	
		New poverty rate ^a (%)	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a	New poverty rate ^a	Percentage point change ^a
Wyoming	12.1	10.4	-1.8	10.4	-1.7	10.4	-1.7

Source: Urban Institute’s Analysis of Transfers, Taxes, and Income Security model, using data from the 2018 American Community Survey, projected to reflect 2022.

^a We show the poverty rate for all state residents, not just affected workers and their families. The computations use 2022 benefit and tax policies, with the exception that Supplemental Nutrition Assistance Program benefits are computed without the special policies in place during the COVID-19 public health emergency.

^b Affected workers are those with computed wages between \$3.62 and \$18.00.

Discussion

A \$15 an hour federal minimum wage in 2022 represents a large increase in the minimum wage in many parts of the US. If the higher minimum wage induced no change in employment, we project the annual family earnings of affected workers would rise by \$5,600, and their net resources (considering changes in taxes and public assistance) would rise by \$4,200. Poverty as measured by the SPM would fall by 2.4 percentage points and 7.6 million fewer people would be poor. On average, workers from all racial and ethnic backgrounds are projected to see earnings and net resource gains and reduced poverty, and Hispanic workers and their families are projected to see the greatest gains. That likely reflects the fact that, when compared with non-Hispanic affected workers, Hispanic affected workers are more likely to live with other affected workers, meaning more people in those families would see their earnings rise.

That such a large increase in the minimum wage would not cause *any* displacement in the labor market is possible but not probable. When we account for the possibility of job loss by adapting a central finding from the literature on the sensitivity of employment to increases in the minimum wage in our projections, we find that 3.2 million workers will experience a job loss during the year that would otherwise not have occurred. Nevertheless, even accounting for this level of job loss, we project average earnings in families with at least one affected worker would rise by about \$5,000, and net resources would rise by more than \$3,700. About 6.9 million people would be lifted out of poverty, and the poverty rate would fall by 2.1 percentage points.

Considerable debate and uncertainty exist about the sensitivity of employment to the minimum wage. If employment is more sensitive than we have allowed for in our projections, job losses would be higher and income gains would be lower. In projections not shown in detail here, we find that if employment was roughly twice as sensitive to the minimum wage as we have assumed in our projections allowing for job loss, about 5.5 million workers would experience a job loss they otherwise would not have at some point during the year, but 6.3 million fewer people would be poor, and the poverty rate would be 2.0 percentage points lower than without the increase in the minimum wage.

Our approach to projecting the impacts of raising the minimum wage draws on the frameworks used by CBO (2019) and NAS (2019) but with some notable differences. Rather than considering job loss in a given week or month, we focus on the number of workers who would experience job loss they otherwise would not have at any point during a year. Looking over a year window allows more workers to experience a job loss, so our overall job-loss projections will be higher than those from snapshot analyses. But we also allow workers projected to lose a job in one month to regain employment in some future month. Although some workers may end up working less time during the year, they will be paid more for the time they do work. In addition, we consider a larger minimum wage increase than NAS (2019) and consider the impact in 2022 rather than in 2025 as does CBO (2019). Both those factors would lead us to find larger effects than the other studies as we would expect a large wage increase to have larger effects on both poverty and employment.

Raising the minimum wage may have broader macroeconomic effects we do not consider in this analysis. If employers passed along their higher-wage costs to consumers in the form of higher prices, the ensuing price increases would offset some of the buying power gained by workers. But if employers addressed the rising minimum wage by taking lower profits or by slowing the wage growth of more highly compensated employees and lower-wage workers were more likely to spend their new earnings than owners and the highly compensated, then the higher minimum wage could spur demand and growth in the economy.

Debates about the minimum wage at the federal and state levels have been ongoing for decades, and they likely will continue for decades into the future. Projections of the potential effects of raising the minimum wage that use sophisticated analytic tools like the ATTIS microsimulation model can illustrate how different estimates of the employment effects of the minimum wage influence outcomes and inform those debates. Here, we provide a range of results that flow from what we consider reasonable assumptions; they are not meant to be upper or lower bounds but illustrations of how raising the federal minimum wage may play out under those assumptions as well as a sense of the how alternative assumptions could affect the results. Our projections generally suggest notable income gains and poverty reductions from a \$15 per hour minimum wage. And although millions of workers may experience a job loss they otherwise would not have as a result of the minimum wage, the time they do spend working during the year will be paid at a higher rate, and their family members may also enjoy higher earnings. As such, even those workers who would experience a job loss are, on average, modestly better off over the course of a year.

Notes

- ¹ The SPM differs from the official measure both in its resource definition and poverty thresholds. The resource definition starts with cash income but adds the value of in-kind benefits and tax credits, and subtracts tax payments, child care expenses, other work expenses, and medical expenses. The poverty threshold varies not only by family structure but also by housing tenure and by location, with higher thresholds in areas with higher housing costs.
- ² We use the term “Hispanic” throughout this brief, as this is the primary terminology used by the US Census Bureau in the underlying ACS, which this analysis is based on. Survey respondents are asked to report race and

ethnicity, including whether or not they identify as being of “Hispanic, Latino, or Spanish origin.” The authors acknowledge this may not be the preferred identifier, and we remain committed to employing inclusive language whenever possible.

- ³ For a detailed discussion of how we developed these probabilities, see the corresponding technical report, as well as the discussion in the Analytic Approach section of this report.
- ⁴ “History of Federal Minimum Wage Rates under the Fair Labor Standards Act, 1938–2009,” Wage and Hour Division, Department of Labor, accessed August 4, 2022, <https://www.dol.gov/agencies/whd/minimum-wage/history/chart#fn1>.
- ⁵ “State Minimum Wages,” National Conference of State Legislators, last update March 9, 2022, <https://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>.
- ⁶ We exclude the self-employed from our discussion of workers. Workers with disabilities, full-time students, youth under age 20 in their first 90 consecutive calendar days of employment, tipped employees, and student-learners are exempt from the federal minimum under certain circumstances. See “Questions and Answers about the Minimum Wage,” Wage and Hour Division, Department of Labor, accessed August 4, 2022, <https://www.dol.gov/agencies/whd/minimum-wage/faq>.
- ⁷ “About Us,” Fight for \$15, accessed August 4, 2022, <https://fightfor15.org/about-us/>.
- ⁸ “Consolidated Minimum Wage Table,” Wage and Hour Division, Department of Labor, last updated July 1, 2022, <https://www.dol.gov/agencies/whd/mw-consolidated>.
- ⁹ Raise the Wage Act, S.53, 117th Congress (2021-2022).
- ¹⁰ We are not analyzing any specific proposal or piece of legislation. Indeed, most legislation raising the minimum wage to \$15 calls for phasing in the increase over time, reaching the \$15 level in 2025 or later. Our projections are a thought experiment illustrating what poverty, income, and employment would like in 2022 if the minimum wage were \$15.
- ¹¹ For someone earning between \$12 and \$15, their new wage equals \$15 plus half the difference between their current wage and \$12. For someone earning between \$15 and \$18, their new wage is their current wage plus half the difference between \$18 and their current wage.
- ¹² No covered worker should report earnings and hours that result in a computed hourly wage rate of less than \$7.25 an hour. However, because people may make small errors in reporting their earnings and hours usually worked, and we have to estimate their annual hours worked, we find some workers whose computed earnings fall below the prevailing federal minimum wage. Rather than exclude them from our analyses, we assume that those whose computed wages fall between \$3.62 and \$7.24 an hour are, in reality, earning the federal minimum. To avoid overstating the impact of a \$15 minimum wage, we simply add \$7.75 (the difference between the current and proposed minimum wages) to their current computed wage rates.
- ¹³ For affected adult workers ages 20 and older, we use CBO’s (2019) suggested median employment elasticity for all teens of -0.13 and derive the elasticity for affected teen workers following CBO’s (2019) process (see equation 1 in appendix A of CBO [2019]). In our data, about two-thirds of teenage workers have wages in the affected range and the wage increases necessary to bring them up to the proposed minimum is about half the size of the increase in the nominal minimum wage. Thus, for affected teens, we use an elasticity of -0.47. Following NAS (2019), we assume the elasticity for affected adults is one-third that for teens (-0.16). Additional details appear in the corresponding technical report.
- ¹⁴ Net resources are the cash and near cash resources available to a family after we account for taxes, means-tested benefits, child care expenses, other work-related expenses, and out-of-pocket medical expenses. In months when workers are simulated to be out of work because of minimum-wage-induced job loss, we assume that there are no expenses for transportation or miscellaneous work expenses but that families previously using nonparental child care continue to need it to search for a job.
- ¹⁵ All people who identify as being Hispanic are included exclusively in the group of Hispanic people. Thus, when we refer to AAPI people, Black people, people identifying as other race or multiple races, or white people, we are excluding Hispanic people who also identify in those race groups.

- ¹⁶ By US Census Bureau definitions, this group includes non-Hispanic American Indian and Alaska natives as well as non-Hispanic people who report multiple races.
- ¹⁷ Table 3 includes cash and in-kind means-tested benefits that directly affect the level of family resources used to compute the SPM. Cash benefits, nutrition benefits, LIHEAP, tax credits, and the value of housing subsidies (in general, the full value of the housing minus the family's payment) are all counted as SPM resources; and child care expenses (which may be substantially lowered by CCDF child care subsidies) are subtracted from SPM resources. Table 3 does not include Medicaid or CHIP, which are not valued as benefits in the SPM resource computation. Although out-of-pocket medical expenses are subtracted from SPM resources, and the loss of Medicaid or CHIP eligibility could increase those expenses, out-of-pocket medical expenses are viewed as static in this analysis. For a discussion of how raising the minimum wage could affect Medicaid eligibility, see Blavin and Gangopadhyaya (2022) and Gangopadhyaya et al. (2019).
- ¹⁸ Affected workers who do not live with their own children can still live in families in which someone else can claim the CTC. For example, an affected, childless, 19-year-old worker could benefit from the CTC received by their parents on behalf of younger siblings with whom they co-reside.
- ¹⁹ Although our analysis is based on data that have been projected to generally represent 2022, we chose not to incorporate the special SNAP policies in place during the COVID-19 public health emergency. Therefore, the baseline poverty rate for this analysis—14.7 percent—cannot be interpreted as a projection of the 2022 SPM poverty rate.
- ²⁰ Some workers who experience job loss can receive unemployment compensation. Because we are uncertain about their eligibility for those benefits, as well as the value of those benefits, we do not include projected unemployment compensation in our measure of family resources for those losing work because of the minimum wage increase. (Unemployment compensation is included in the baseline resource measure.)
- ²¹ In a sensitivity analysis, we did not allow any worker simulated to lose a job to return to work for the rest of the year. Under that assumption, SPM poverty still declines but by a smaller amount than in scenarios in which workers who lose their jobs have a chance to find work later in the year. If those who lose their jobs cannot return to work, we project that raising the minimum wage to \$15 an hour would lift 5.5 million people out of poverty, and the SPM poverty rate would fall by 1.7 percentage points.
- ²² Consistent with the SPM, we assume workers incur about \$190 in work-related commuting expenses a month. Thus when considering changes in net resources, the lost earnings from being jobless are partially offset by reduced work-related expenses (along with any other changes in public assistance). We also assume that parents who are no longer working do not incur child care expenses.

References

- Blavin, Fredric, and Anuj Gangopadhyaya. 2022. "How the Minimum Wage Affects the Health Insurance Coverage, Safety Net Program Participation, and Health of Low-Wage Workers and Their Families." Washington, DC: Urban Institute.
- Card, David, and Alan B. Krueger. 2015. *Myth and Measurement*. Princeton, NJ: Princeton University Press.
- Cengiz, Doruk, Arindrajit Dube, Attila S. Lindner, and Ben Zipperer. 2019. "The Effect of Minimum Wages on Low-Wage Jobs." *The Quarterly Journal of Economics* 134 (3): 1405–54. <https://doi.org/10.1093/qje/qjz014>.
- Cengiz, Doruk, Arindrajit Dube, Attila S. Lindner, and David Zentler-Munro. 2021. "Seeing Beyond the Trees: Using Machine Learning to Estimate the Impact of Minimum Wages on Labor Market Outcomes." NBER Working Paper No. 28399. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w28399>.
- Congressional Budget Office (CBO). 2019. *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage*. Washington, DC: CBO.
- Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. "Minimum Wage Effects across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics* 92(4): 945–64. https://doi.org/10.1162/REST_a_00039.

- Gangopadhyaya, Anuj, Jennifer M. Haley, Fredric Blavin, and Genevieve M. Kenney. 2019. "Raising the Minimum Wage in New Jersey: Implications for Earnings and Medicaid Eligibility and Enrollment." Washington, DC: Urban Institute.
- Giannarelli, Linda, and Kevin Werner. 2022. "Simulating the Effects of a \$15 an Hour Federal Minimum Wage on Poverty and Resources." Washington, DC: Urban Institute.
- Jardin, Ekaterina, Mark Long, Robert Plotnick, Emma van Inwegen, Jacob Vigdor, and Hilary Wething. 2017. "Minimum Wage Increases, Wages, and Low-Wage Employment: Evidence from Seattle." NBER Working Paper No. 23532. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w23532>.
- National Academies of Sciences, Engineering, and Medicine. 2019. "Appendix F: Urban Institute TRIM3 Technical Specification: Using Microsimulation to Assess the Policy Proposals of the National Academies Committee on Reducing Child Poverty." In *A Roadmap to Reducing Child Poverty*. Washington, DC: The National Academies Press.
- Neumark, David, and Peter Shirley. 2021. "Myth or Measurement: What Does the New Minimum Wage Research Say about Minimum Wages and Job Loss in the United States?" NBER Working Paper No. w28388. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w28388>.
- Page, Marianne E., Joanne Spetz, and Jane Millar. 2005. "Does the Minimum Wage Affect Welfare Caseloads?" *Journal of Policy Analysis and Management* 24 (2): 273–95. <http://www.jstor.org/stable/3326210>.
- Snyder, Thomas, Senayt Rinkevich, and Weici Yuan. 2019. "Do Minimum Wage Increases Affect SNAP Benefits?" *The B.E. Journal of Economic Analysis & Policy* 19 (2): 20180045. <https://doi.org/10.1515/bejeap-2018-0045>.
- Zipperer, Ben, David Cooper, and Josh Bivens. 2021. "A \$15 Minimum Wage Would Have Significant And Direct Effects On The Federal Budget." Washington, DC: Economic Policy Institute.

About the Authors

Gregory Acs is vice president for the Income and Benefits Policy Center at the Urban Institute, where his research focuses on social insurance, social welfare, and the compensation of workers. Acs has studied the low-wage labor market, changes in welfare policies and how they have affected welfare caseloads and the well-being of low-income families, and how state and federal policies affect the incentives families face as they move from welfare to work. Acs holds a PhD in economics and social work from the University of Michigan.

Linda Giannarelli is a senior fellow in the Income and Benefits Policy Center. She leads the group that develops the ATTIS model, codirects work with the TRIM3 simulation model, and is a national expert on the use of microsimulation modeling to study income supports for lower-income Americans. She also studies participation rates among people eligible for safety net programs, state policy variations in the provision of cash assistance and child care subsidies, and the impact of increased earnings on the net economic resources of lower-income families.

Kevin Werner is a research associate in the Income and Benefits Policy Center. He is part of the team that maintains and develops TRIM3, a microsimulation model that simulates major government tax and transfer programs and allows researchers to see the effects of various policy changes. He also works with the Urban Institute's ATTIS model. Werner has dual degrees in economics and political science from American University and a master's degree in applied economics from Georgetown University.

Ofronama Biu is a senior research associate in the Income and Benefits Policy Center at Urban, where she is a member of the Building America's Workforce cross-center initiative and is affiliated with the Office of Race and Equity Research. Biu has spent the past five years in senior research roles, using both quantitative and qualitative methods to explore racial and gender stratification in the economy, including occupational crowding and alternative work, race and gender disparities in workplace experiences, and workforce development. Biu has a Master of Public Administration degree in public and nonprofit management and policy from New York University, and a doctorate in public and urban policy from the New School.

Acknowledgments

This brief was funded by the Robert Wood Johnson Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

The authors gratefully acknowledge the large team that prepared the ACS data for use in ATTIS, adjusted those data to better represent 2022, and developed baseline simulations of each of the benefit and tax programs. In alphabetical order, the team includes Ilham Dehry, Kelly Dwyer, Dilovar Haydarov, Paul Johnson, Sarah Knowles, Danielle Kwon, Elaine Maag, Sarah Minton (a codirector of ATTIS), Joyce Morton (the lead programmer for ATTIS), Katie Shantz, Silke Taylor, Margaret Todd (who also provided support in preparing this brief), and Laura Wheaton (a codirector of ATTIS). We also owe thanks to Jeffrey Passel for developing the population weight adjustments, and to Anuj Gangopadhyaya, Genevieve Kenney, Daniel Kuehn, Pamela Loprest, Elaine Waxman, and Stephen Zuckerman for very helpful comments on earlier drafts.

About ATTIS

The Urban Institute's ATTIS microsimulation model allows Urban experts to examine how today's safety net supports US families and how changes to it could affect their economic well-being. By using data and evidence created with ATTIS, today's decisionmakers are better positioned to advance equitable and effective policy solutions that help individuals and families meet their basic needs. To learn more, visit urban.org/research-methods/attis-microsimulation-model.



ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation (RWJF) is committed to improving health and health equity in the United States. In partnership with others, we are working to develop a Culture of Health rooted in equity, that provides every individual with a fair and just opportunity to thrive, no matter who they are, where they live, or how much money they have.



ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org

Copyright © September 2022. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute.