

# Increasing the Minimum Wage to \$15/Hour by 2028 Raises Wages for More Than 1.46 Million Workers in Pennsylvania.

## Who Are They?



KEYSTONE RESEARCH CENTER  
AND  
PA BUDGET AND POLICY CENTER

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by  
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# The Demographic Impacts of a Minimum Wage Increase<sup>1</sup>

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<sup>1</sup> This report is based on data from the US Census Bureau and the Bureau of Labor Statistics along with estimates from the Economic Policy Institute and Keystone Research Center.

Governor Wolf’s 2022-2023 budget includes a plan to raise the current \$7.25-per-hour minimum wage to \$12 in July 2022, followed by 50-cent increases yearly until July 2028, when it will be set at \$15 per hour. This proposal also aims to eliminate the tipped minimum wage, allowing currently tipped workers to join the climb to \$15 starting with \$12 in July 2022. In this report, we outline the demographic characteristics of workers who will benefit from this minimum wage increase.

**Table 1**

<b>Summary of minimum wage increases under proposed increase of Pennsylvania minimum wage, and numbers of workers affected by the increases, 2022–2028</b>							
					<b>All (directly &amp; indirectly) affected workers</b>		
<b>Date</b>	<b>Minimum wage</b>	<b>Directly affected</b>	<b>Indirectly affected</b>	<b>Total estimated state wage-earning workforce</b>	<b>Total wage increase (thousands, Q4 2021\$)</b>	<b>Total affected</b>	<b>Change in avg. annual income (year-round workers) (Q4 2021\$)</b>
31-Dec-21	\$7.25			5,903,500			
1-Jul-22	\$12.00	722,006	462,743	5,906,937	\$3,257,161	1,184,749	\$2,800
1-Jul-23	\$12.50	797,425	424,922	5,915,502	\$3,579,996	1,222,346	\$2,900
1-Jul-24	\$13.00	855,373	418,835	5,924,067	\$3,929,131	1,274,208	\$3,000
1-Jul-25	\$13.50	887,916	477,070	5,932,632	\$4,291,814	1,364,986	\$3,100
1-Jul-26	\$14.00	919,419	482,518	5,941,197	\$4,654,725	1,401,937	\$3,300
1-Jul-27	\$14.50	951,461	481,313	5,949,762	\$5,011,977	1,432,774	\$3,500
1-Jul-28	\$15.00	993,963	466,170	5,958,328	\$5,367,354	1,460,133	\$3,800

Notes: Values reflect the result of the proposed change in the state minimum wage. Totals may not sum due to rounding. Shares calculated from unrounded values. Directly affected workers would see their wages rise as the new minimum wage rate would exceed their existing hourly pay. Indirectly affected workers would have a wage rate just above the new minimum wage (between the new minimum wage and 115 percent of the new minimum). They would receive a raise as employer pay scales would be adjusted upward to reflect the new minimum wage. Wage increase totals are cumulative of all preceding steps.

Source: Keystone Research Center estimates using Current Population Survey (CPS) American Community Survey (ACS), and Economic Policy Institute (EPI) data and estimates.

A minimum wage increase would benefit workers across Pennsylvania. The first increase proposed for July 2022 would affect more than 1.1 million workers in Pennsylvania either directly or indirectly, with the final \$15 wage reaching more than 1.46 million people. Of the 1.46 million workers estimated to be affected by a \$15 minimum wage, almost 1 million would be directly affected, and more than 460,000 would be indirectly affected. Directly affected workers currently earn less than \$15 per hour, while indirectly affected workers make slightly more than \$15—but projections show these indirectly affected workers would see a slight wage increase as pay scales are adjusted upward. By July 2028, 24.5 percent of Pennsylvania’s workforce would be affected by this minimum wage increase.

Table 1 shows the wage impacts of raising the minimum wage. The average affected worker would see a \$2,800-per-year raise for full-time, year-round work. By 2028, when the minimum wage has reached \$15 per hour, the average affected worker would see a \$3,800 increase for full-time, year-round work.

In all, Pennsylvania workers would see a \$5.3 billion increase in yearly wages, a significant economic stimulus.

### Who benefits? Demographics of affected workers

Mainstream ideas paint the average low-wage worker as someone just starting out in the work force—a teenager’s first job or someone working for pocket money as a secondary earner in a household. Contrary to this belief, most workers who would benefit under this proposal are not teenagers, and many have significant work experience. 24.5 percent of all workers in Pennsylvania earn wages that would be impacted by this minimum wage increase. The following analysis shows who would be directly impacted by a minimum wage increase (those earning less than \$15 per hour) and those who would be indirectly affected (those who earn between the new minimum and 115 percent of the new minimum). Each section of this report has figures whose underlying data are included in Appendix 1.

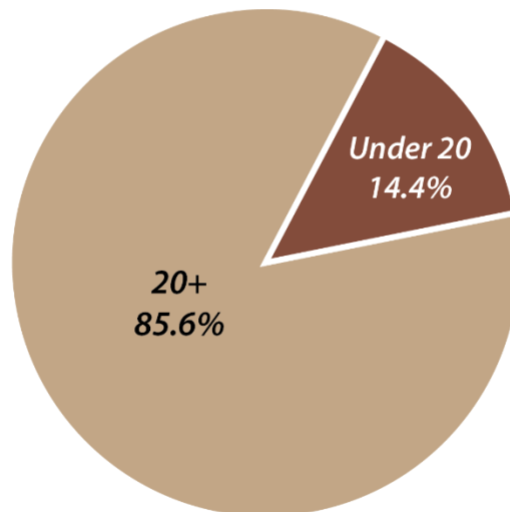
#### Age

Only 14.4 percent of workers who benefit from a \$15 minimum wage are teenagers—the vast majority are older. Figure 1 shows that 85.6 percent of workers who would see a wage increase are 20 or older.

Figure 1

### Most Workers Who Would Benefit From a \$15 Minimum Wage Increase Are Not Teens

Share of those who would benefit from an increase to \$15 in 2028 by age category



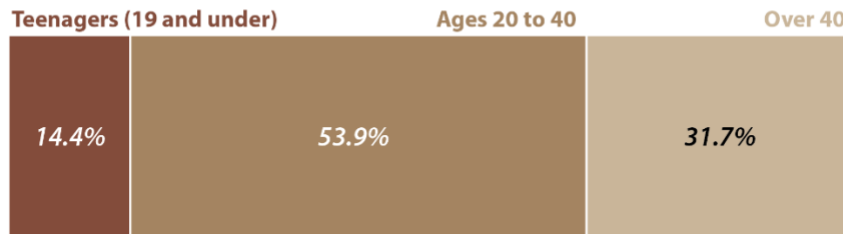
Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 2 breaks down the age distribution of affected workers.

Workers between the ages of 20 and 40 make up 53.9 percent of those who would benefit under this proposal. 31.7 percent who would benefit are over age 40. Older workers (age 55+) are 16.5 percent of affected workers. Figure 2 and Figure 1 show that only a small percentage—14.4 percent—of the workers who would benefit are teenagers. This is contrary to the mainstream idea that low-wage workers are primarily younger entry workers or teenagers working for pocket change.

**Figure 2**

### Share of Affected Workers Who Are in Each Age Category



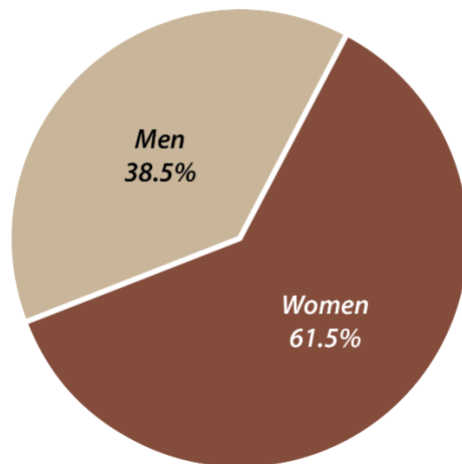
Source: Keystone Research Center based on data from the Economic Policy Institute.

### Gender

The minimum wage increase benefits all low-wage workers, but women disproportionately work low-wage jobs. Figure 3 shows that of all the workers who would benefit from a minimum wage increase to \$15 by 2028, 61.5 percent of them are women. In fact, by 2028, 30 percent of all women in the Pennsylvania workforce would benefit from a minimum wage increase (18.7 percent of all men); see Appendix 1.

**Figure 3**

### Women Make Up Over 60% of Workers Who Would Benefit From a Minimum Wage Increase to \$15/Hour by 2028



Source: Keystone Research Center based on data from the Economic Policy Institute.

### Race/Ethnicity

White, non-Hispanic workers in Pennsylvania make up 68.6 percent of those who benefit from the proposed minimum wage increase. 14.4 percent of workers who would benefit are Black and 11.6 percent are Hispanic, with smaller shares for workers who identify as Asian or another race/ethnicity. With the full proposal enacted, 37.4 percent of Black workers and 44.8 percent of all Hispanic workers in Pennsylvania would see a wage increase (see Appendix 1).

Figure 4

### White Workers Make Up Most of Those Who Would Benefit From a 2028 Raise to \$15/Hour; Larger Shares of Workers of Color Would Benefit

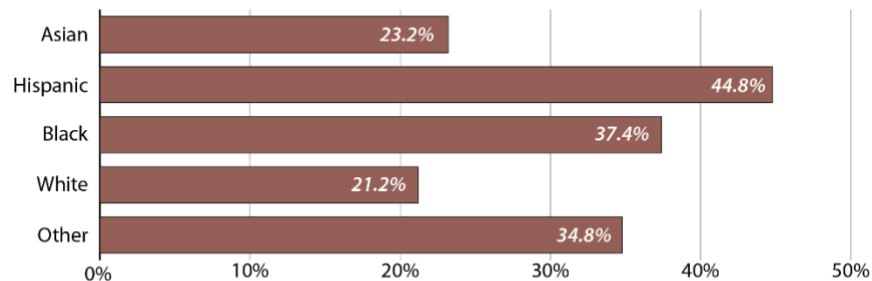


Source: Keystone Research Center based on data from the Economic Policy Institute.

Whites make up the largest share of workers who would benefit from a higher minimum wage, but other racial and ethnic groups benefit at higher rates. Figure 5 shows that 44.8 percent of all Hispanic workers in Pennsylvania would benefit from a 2028 raise in the minimum wage to \$15/hr. 37.4 percent of Black workers in the state would see a wage increase, and almost a quarter of all Asian workers would benefit.

Figure 5

### Share of Workers in Each Racial/Ethnic Group That Would Benefit From a \$15 Wage in 2028



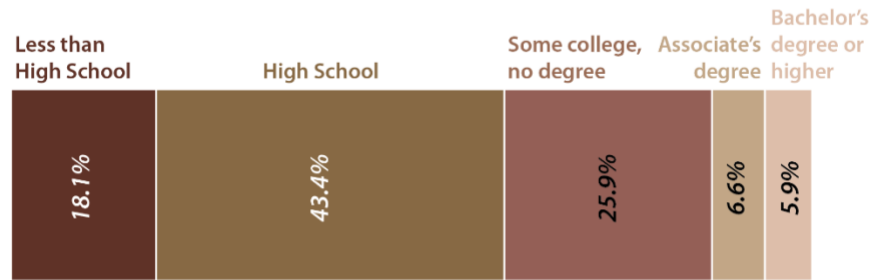
Source: Keystone Research Center based on data from the Economic Policy Institute.

## Education

High school graduates make up the largest education group who would benefit from a \$15 minimum wage by 2028. Of those, 18.1 percent who benefit have less than a high school education. One common misconception about low-wage work is that is overwhelmingly done by people with low education levels. However, figure 6 shows that more than 38 percent of those who would benefit have at least some college experience.

Figure 6

### Of Those Workers Who Would Benefit From a Minimum Wage Increase to \$15 by 2028, Four in Ten Have Some College Experience

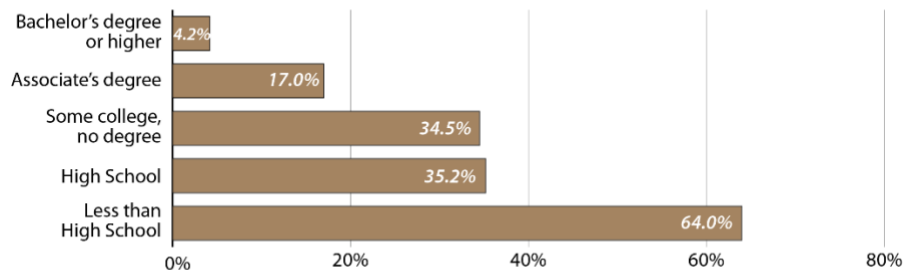


Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 7 shows the share of workers who would benefit from a minimum wage increase in each educational category. Out of all PA workers with less than a high school education, 64 percent would see a wage increase. More than a third of workers with either a high school degree or some college would get a raise. 17 percent of workers with an associate degree would see a wage increase and 4.2 percent of workers with a bachelor's degree or higher would get a raise with a \$15 -per-hour minimum wage by 2028.

Figure 7

### Share of Workers in Each Educational Attainment Group That Would Benefit From a 2028 Minimum Wage Raise to \$15



Source: Keystone Research Center based on data from the Economic Policy Institute.

### *Hours of Work*

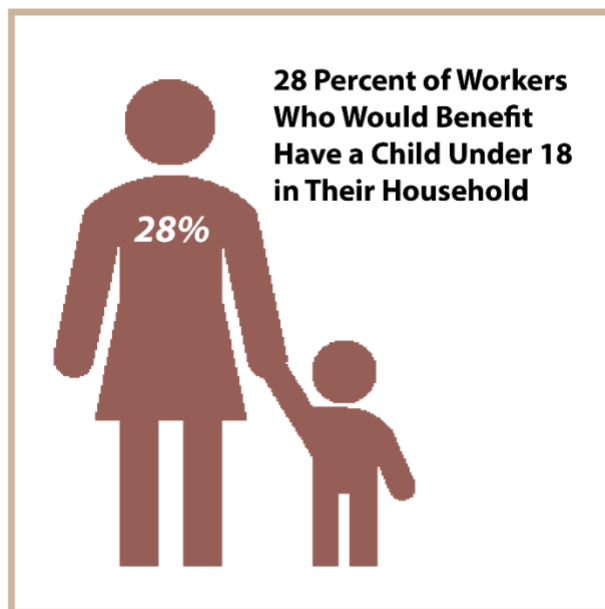
Almost half of workers who would benefit from a 2028 minimum wage increase to \$15 per hour are full-time workers who work 35 or more hours a week.

While full-time workers are the plurality of workers who would benefit from a wage increase, only 15.2 percent of all full-time workers would see a wage increase.

### *Family Status and Children*

More than 28 percent of Pennsylvania workers who would benefit from the proposed minimum wage increase are parents to a child who lives with them. Under this proposal, 17 percent of all Pennsylvania parents who have a child under 18 years of age in the household would see a wage increase.

Figure 8



### *Industry*

Workers from many different industries will benefit from the proposed \$15-per-hour wage by 2028. 23.7 percent of workers who will benefit are in wholesale trade and retail trade jobs. According to the US Department of Commerce Retail Indicator Division, 2021 retail sales were one of the strongest in history.<sup>2</sup> 2021 retail sales were 21.9 percent higher than they were in in 2019, representing \$6.6 trillion in sales. Meanwhile, many retail workers see low pay; almost 41 percent of retail and wholesale trade workers would see their wages rise if the minimum wage were raised to \$15 by 2028.

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<sup>2</sup>US Census, December 2021 Monthly Retail Trade Report, <https://www2.census.gov/retail/releases/historical/marts/adv2112.pdf>

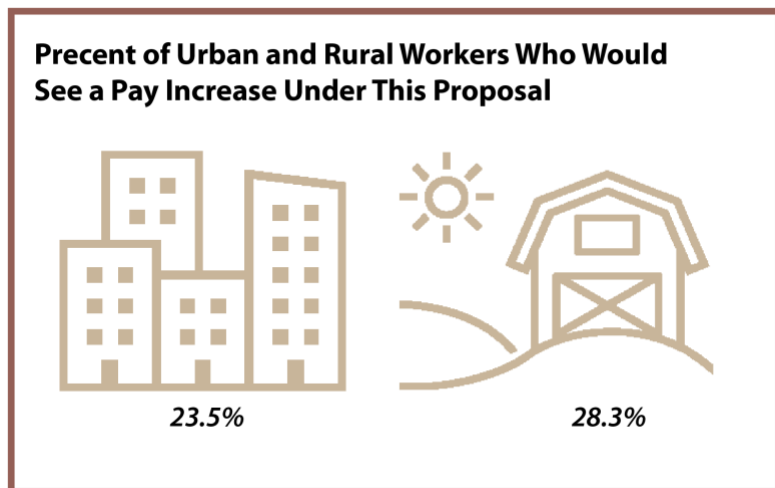


About a quarter of those who would benefit work in educational services, health care, or social services assistance, with another 22.7 percent working in restaurants, accommodation, and recreational services.

#### *Location*

Of urban Pennsylvania residents, 23.5 percent would benefit under this proposal, while 28.3 percent of rural residents would see their wages rise.

Figure 9



#### **Conclusion**

The minimum wage in Pennsylvania has stagnated at \$7.25 per hour since 2008. A lot has changed since then, especially in the past three years as a public health crisis has changed our lives and heavily impacted the economy. The creation of the minimum wage in 1938 played a significant role in ensuring that workers could receive adequate wages for their work—wages that could help provide for them and their families. However, because the United States and Pennsylvania have not continued to update the minimum wage to keep up with inflation, low-wage workers today find themselves earning a lower wage each year, even if they’re working the same job. As the costs of goods and services have changed, many have fortunately decreased in price. But some essentials like the cost of housing, gasoline, and education have far outpaced inflation, taking larger and larger shares of low-wage workers’ paychecks.

At its start, Pennsylvania’s minimum wage was 43 percent of the average worker’s wage—but today it is only around 24 percent of the average wage, a new low<sup>3</sup>. Raising the wage to \$15 per hour by 2028 would raise Pennsylvania workers’ wages closer to the level they were in the 1950s and 1960s—around half of the average Pennsylvania wage. Wages would increase directly due to the minimum wage increase and indirectly due to employers’ shifting pay scales. And its impact would be significant—more than 24 percent of Pennsylvania’s workforce would see an increase in their wages by 2028.

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<https://www.workstats.dli.pa.gov/Documents/Minimum%20Wage%20Reports/Minimum%20Wage%20Report%202022.pdf>

As this report shows, workers across demographic boundaries would benefit. With this policy change, we would see more than 1.46 million workers across the state with higher wages, a reduction in poverty across the state, the elimination of disparities between tipped and untipped workers, and a decrease in existing gender and race disparities. A pay increase for low-wage workers would directly inject more money into our state economy, which is much needed as we continue to recover from the COVID-19 public health crisis. And with annual wage adjustments linked to inflation, Pennsylvania’s workers of the future wouldn’t have to worry about their wages lagging.

### *Data Notes and Limitations*

Data used for the core of these estimations were provided by the Economic Policy Institute, based on two Census surveys. They combine the geographic sample size and precision of the American Community Survey’s (ACS) five-year (2015-2019) data with the accuracy of employment and wage estimates based on the Current Population Survey (CPS) for 2019 to estimate an hourly wage variable for working Pennsylvanians. The employment numbers for 2019 using the EPI data are similar to end-of-year 2021 employment numbers. It is the unusual character of the 2020 economy and data restrictions that leads EPI to use 2019 numbers over 2020.

To adjust for wage changes from 2019 to December 2021, Keystone Research Center ran an estimation, based on the change in CPI-U, adjusting wages 9.3% across the board due to inflation. This was an effort to simulate wage growth that has occurred since 2019. These wage growth adjustments were applied to all survey respondents. To adjust to July 2022 data, we additionally inflated wages by 1.3% based on the Federal Open Market Committee Inflation Forecast 2022<sup>4</sup> at (median annual inflation forecast = 2.6%; we assume 1.3% from December 2021 to July 1, 2022). To further adjust to July 2028, we inflated wages 14.25% to July 2028 dollars based on Consumer Price Index estimates in the Congressional Budget Office’s economic projections. Additionally, to simulate population growth in Pennsylvania’s wage-earning workforce between mid-2022 and mid-2028, we grew the population .87% based on a prior estimate from the Economic Policy Institute’s minimum wage simulation, which covered 6 years (2021-2027).

While we assume the same wage inflation adjustment across the entire wage distribution, prior research over the past several decades shows that wage growth is usually faster for workers at higher earnings levels than for lower-wage workers. In addition, COVID-19 has introduced distinct patterns of wage change and challenges for data collection and interpretation. In particular, because low-wage workers left the labor force in large numbers in early 2020, wages at the bottom of the distribution appeared to increase even though low-wage workers still employed may not have seen wage increases. As low-wage workers have returned to the job market in the last few months, a reverse compositional effect may be lowering wages or suppressing wage growth estimates at higher levels. Additionally, low-wage workers have had some leverage to bid up their pay—in particular, they’ve had increased ability to quit their jobs in favor of better ones.<sup>5</sup>

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<sup>4</sup> <https://www.federalreserve.gov/monetarypolicy/fomcproptabl20211215.htm>.

<sup>5</sup> For more reading about low-wage work and pay in 2021, see Economic Policy Institute, “State of Working America 2021: Measuring wages in the pandemic labor market,” April 27, 2022, <https://www.epi.org/publication/swa-wages-2021/>.

## Appendix :

## Demographic characteristics of workers who would benefit if the Pennsylvania minimum wage was raised to \$15 in July 2028

<b>Group</b>	<b>Total affected directly or indirectly</b>	<b>Share affected directly or indirectly</b>	<b>Share of the total affected in this group</b>
Wage-earner	1,460,133	24.5%	100.0%
<b>Sex</b>			
<i>Male</i>	561,602	18.7%	38.5%
<i>Female</i>	898,531	30.4%	61.5%
<b>Age</b>			
<i>Teenager (19 and under)</i>	210,849	91.3%	14.4%
<i>20-40</i>	787,066	31.6%	52.9%
<i>over 40</i>	462,219	14.6%	31.7%
<i>over 55</i>	241,285	18.0%	16.5%
<i>over 65</i>	94,514	31.1%	6.5%
<b>Race / ethnicity</b>			
<i>White, non-Hispanic</i>	1,001,134	21.2%	68.6%
<i>Black, non-Hispanic</i>	209,871	37.4%	14.4%
<i>Hispanic, any race</i>	169,033	44.8%	11.6%
<i>Asian, non-Hispanic</i>	47,294	23.2%	3.2%
<i>Other race/ethnicity</i>	32,800	34.8%	2.2%
<b>Family status</b>			
<i>have child in house</i>	416,025	17.0%	28.5%
<b>Usual weekly work hours</b>			
<i>Full time (35+ hours)</i>	716,629	15.2%	49.1%
<b>Educational attainment</b>			
<i>Less than high school</i>	264,405	64.0%	18.1%
<i>High school</i>	634,248	35.2%	43.4%
<i>Some college, no degree</i>	378,552	34.5%	25.9%
<i>Associate degree</i>	96,320	17.0%	6.6%
<i>Bachelor's degree or higher</i>	86,608	4.2%	5.9%
<b>Major Industry</b>			
<i>Agriculture, fishing, forestry, mining</i>	21,667	32.9%	1.5%
<i>Construction</i>	32,335	11.0%	2.2%
<i>Manufacturing</i>	95,540	13.0%	6.5%
<i>Wholesale trade/retail trade</i>	345,451	40.9%	23.7%
<i>Transportation, warehousing, utilities</i>	56,842	16.4%	3.9%
<i>Information</i>	10,362	10.6%	0.7%
<i>Finance, insurance, real estate</i>	28,716	7.7%	2.0%
<i>Professional, science, management services/Administrative, support, waste services</i>	89,876	15.7%	6.2%

<i>Educational Services/healthcare, social assistance</i>	341,888	21.0%	23.4%
<i>Arts, entertainment, recreational services, accommodation, restaurants</i>	332,153	65.7%	22.7%
<i>Other services</i>	90,844	37.2%	6.2%
<i>Public administration</i>	14,459	5.7%	1.0%
<b>Urban/Rural</b>			
<i>Urban</i>	1,101,953	23.5%	75.5%
<i>Rural</i>	358,180	28.3%	24.5%

Data note: Indirectly affected workers are those who earn up to 115% of the new minimum wage. For this table, that value is \$17.25.

Data source: Keystone Research Center estimates using CPS, ACS, and EPI data and estimates.