## Economic <br> Policy Institute

# Employers steal billions from workers' paychecks each year 

Survey data show millions of workers are paid less than the minimum wage, at significant cost to taxpayers and state economies

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What this report finds: This report assesses the prevalence and magnitude of one form of wage theft-minimum wage violations (workers being paid at an effective hourly rate below the binding minimum wage)-in the 10 most populous U.S. states. We find that, in these states, 2.4 million workers lose $\$ 8$ billion annually (an average of \$3,300 per year for year-round workers) to minimum wage violations-nearly a quarter of their earned wages. This form of wage theft affects 17 percent of lowwage workers, with workers in all demographic categories being cheated out of pay.

Why it matters: Minimum wage violations, by definition, affect the lowest-wage workers-those who can least afford to lose earnings. This form of wage theft causes many families to fall below the poverty line, and it increases workers' reliance on public assistance, costing taxpayers money. Lost wages can hurt state and local economies, and it hurts other workers in affected industries by putting downward pressure on wages.

What can be done about it: Strengthen states' legal protections against wage theft, increase penalties for violators, bolster enforcement capacities, and protect workers from retaliation when violations are reported.

## Introduction and key findings

For the past four decades, the majority of American workers have been shortchanged by economic policymaking that has suppressed the growth of hourly wages and prevented greater improvements in living standards. Achieving a secure, middle-class lifestyle has become increasingly difficult as hourly pay for most workers has either stagnated or declined. For millions of the country's lowest-paid workers, financial security is even more fleeting because of unscrupulous employers stealing a portion of their paychecks.

Wage theft, the practice of employers failing to pay workers the full wages to which they are legally entitled, is a widespread and deep-rooted problem that directly harms
millions of U.S. workers each year. Employers refusing to pay promised wages, paying less than legally mandated minimums, failing to pay for all hours worked, or not paying overtime premiums deprives working people of billions of dollars annually. It also leaves hundreds of thousands of affected workers and their families in poverty. Wage theft does not just harm the workers and families who directly suffer exploitation; it also weakens the bargaining power of workers more broadly by putting downward pressure on hourly wages in affected industries and occupations. For many low-income families who suffer wage theft, the resulting loss of income forces them to rely more heavily on public assistance programs, unduly straining safety net programs and hamstringing efforts to reduce poverty.

Researchers have long known that measuring wage theft is challenging-it takes many forms, violations are not always recognized or reported, and suitable public data sources are limited. Yet in recent years, several studies have attempted to better quantify the harm caused by wage theft. This study adds to those efforts by using data from the Current Population Survey to assess the prevalence and magnitude of wage theft in the form of minimum wage violations-i.e., workers being paid at an effective hourly rate below the binding minimum wage. We look specifically at instances of such wage theft in the 10 most populous U.S. states: California, Florida, Georgia, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, and Texas. We limit our focus to these 10 states so that we can carefully account for each state's individual minimum wage policies and state-specific exemptions to wage and hour laws. Data for the 10 most populous states also provide adequate sample sizes to describe the severity of minimum wage violations and the affected populations within each state. Our findings provide a better assessment of minimum wage violations than previous studies that have only considered violations of the federal minimum wage. And, because the total workforce in these 10 states accounts for more than half of the entire U.S. workforce, our estimates shed new light on the scope of wage theft nationwide.

## Key findings

We find that:

- In the 10 most populous states in the country, each year 2.4 million workers covered by state or federal minimum wage laws report being paid less than the applicable minimum wage in their state-approximately 17 percent of the eligible low-wage workforce.
- The total underpayment of wages to these workers amounts to over $\$ 8$ billion annually. If the findings for these states are representative for the rest of the country, they suggest that the total wages stolen from workers due to minimum wage violations exceeds $\$ 15$ billion each year.
- Workers suffering minimum wage violations are underpaid an average of $\$ 64$ per week, nearly one-quarter of their weekly earnings. This means that a victim who works year-round is losing, on average, \$3,300 per year and receiving only \$10,500 in annual wages.
- Young workers, women, people of color, and immigrant workers are more likely than other workers to report being paid less than the minimum wage, but this is primarily because they are also more likely than other workers to be in low-wage jobs. In general, low-wage workers experience minimum wage violations at high rates across demographic categories. In fact, the majority of workers with reported wages below the minimum wage are over 25 and are native-born U.S. citizens, nearly half are white, more than a quarter have children, and just over half work full time.
- In the 10 most populous states, workers are most likely to be paid less than the minimum wage in Florida ( 7.3 percent), Ohio ( 5.5 percent), and New York ( 5.0 percent). However, the severity of underpayment is the worst in Pennsylvania and Texas, where the average victim of a minimum wage violation is cheated out of over 30 percent of earned pay.
- The poverty rate among workers paid less than the minimum wage in these 10 states is over 21 percent-three times the poverty rate for minimum-wage-eligible workers overall. Assuming no change in work hours, if these workers were paid the full wages to which they are entitled, less than 15 percent would be in poverty.

The next section provides background on the minimum wage, the problem of wage theft in general, and previous research on the topic of wage theft. The subsequent sections present our findings and analysis of minimum wage violations in the 10 most populous states. The final section discusses the economic and social consequences of wage theft and what can be done to fight it.

## Background and previous research

## The longstanding need to update the Fair Labor Standards Act

The Fair Labor Standards Act (FLSA), enacted in 1938, established the basic protections that have governed work in the United States since the Great Depression. With regard to pay, the FLSA "put a floor under wages and a ceiling over hours" through the creation of the federal minimum wage and provisions for overtime pay-i.e., a limit on the hours per week employees may work without receiving additional compensation (Roosevelt 1938). Over the years, the law has been periodically updated to strengthen protections or expand coverage to new classes of workers—such as the 1966 amendments to the FLSA that extended coverage to service sector and hospitality workers, and the Department of Labor's extension of FLSA protections to home care workers in 2016.

Unfortunately, over the past several decades, updates to the FLSA have been inadequate or too infrequent to keep pace with changes in the economy and employment. For example, as explained in Cooper (2015), the failure of federal lawmakers to adequately raise the federal minimum wage has left millions of workers being paid 25 percent less in inflation-adjusted terms than their counterparts almost 50 years ago. Similarly, Eisenbrey
and Kimball (2016) describe how neglect of federal overtime rules has drastically reduced the share of the workforce that is eligible for overtime pay.

Additionally, in recent decades, employers have increasingly adopted business practices that have weakened the scope of protection afforded by the law. Groundbreaking research by the former Administrator of the U.S. Department of Labor's Wage and Hour Division, David Weil, documents the "fissuring" of U.S. workplaces and the growth of subcontracting (Weil 2014). Fissuring refers to the practice of companies contracting out various functions that were previously done in-house. In such arrangements, unscrupulous employers-be it the subcontractor or the contracting parent company-will sometimes use the multilayered or "fissured" nature of the employer-employee relationship to attempt to avoid responsibility when workers allege mistreatment. Weil also details how a growing share of the workforce today are classified as independent contractors—and thereby not covered by the FLSA-despite the fact that these workers perform tasks traditionally done via direct employment. In some cases, such arrangements are deliberate and illegal misclassification by employers seeking to dodge the tax and regulatory requirements of regular employment. Carré (2015) notes that numerous studies find that 10 to 20 percent of employers have misclassified a worker as an independent contractor.

## What is wage theft?

Wage theft is the failure to pay workers the full wages to which they are legally entitled. Wage theft can take many forms, including but not limited to:

Minimum wage violations: Paying workers less than the legal minimum wage

- Overtime violations: Failing to pay nonexempt employees time-and-a-half for hours worked in excess of 40 hours per week
- Off-the-clock violations: Asking employees to work off-the-clock before or after their shifts
- Meal break violations: Denying workers their legal meal breaks

Pay stub and illegal deductions: Taking illegal deductions from wages or not distributing pay stubs

- Tipped minimum wage violations: Confiscating tips from workers or failing to pay tipped workers the difference between their tips and the legal minimum wage
- Employee misclassification violations: Misclassifying employees as independent contractors to pay a wage lower than the legal minimum

For more information about the different forms of wage theft, see Bernhardt et al. (2009) or Gordon et al. (2012).

Even without employers trying to avoid the law, the FLSA has various built-in worker and employer exemptions that limit its scope to only a portion of American workers. For example, the law specifically excludes a variety of specific occupations from the minimum wage, such as newspaper delivery workers, seasonal farm workers, workers in commercial fisheries and canneries, private investigators, and telephone switchboard operators. Similarly, many salaried white-collar workers whose duties are deemed executive, administrative, or professional, and whose pay is above a set threshold, are excluded from the overtime provisions of the law. Businesses with annual revenue less than \$500,000 that do not engage in "interstate commerce" are exempt from the wage and hour provisions of the FLSA altogether. In the 10 states analyzed in this study, we estimate that the federal minimum wage law covers roughly 72 percent of civilian, noninstitutionalized workers. When state minimum wage laws are also taken into account, about 88 percent of the workforce is covered by either state or federal minimum wage laws. ${ }^{1}$

Many states provide stronger protections or expanded coverage beyond the FLSA in state law. For example, California's minimum wage-in addition to being significantly higher than the federal minimum wage ${ }^{2}$-covers nearly 100 percent of workers in the state. Other states, such as Michigan, have enacted higher wage standards yet allow a greater number of exemptions than the FLSA. Other states simply defer to the federal statute either for the level of the standard, the breadth of coverage, or both. In recent years, cities and counties have increasingly adopted their own minimum wages and other labor standards in light of federal or state inaction. ${ }^{3}$ The FLSA is explicit that when federal, state, or local labor laws are inconsistent, workers are always entitled to the highest standard. Yet the patchwork of varying levels of protection and coverage across the country can make it difficult for workers to know what their rights are and complicate jurisdictions' efforts to enforce the law, leading to significantly different economic outcomes for people doing the same job in different localities.

## Enforcement of wage and hour laws

While federal labor protections have been left to erode, the agency charged with enforcing wage and hour laws has been stretched increasingly thin. In 2015, the Wage and Hour Division (WHD) of the U.S. Department of Labor-the agency responsible for investigating minimum wage violations-employed roughly the same number of investigators as it did nearly 70 years ago: WHD employed 1,000 investigators in 1948 and fewer than 1,000 in 2015 (Galvin 2016a; U.S. DOL 2017a). Yet today, the agency is expected to protect a workforce nearly six times larger than it did in the 1940s-22.6 million in 1948 and more than 135 million in 2015 (Galvin 2016a; U.S. DOL 2017b). In 1948, there was one investigator for every 22,600 covered workers; today it is one per every 135,000 workers. As the number of investigators per worker has shrunk, so has the agency's ability to effectively police violations of labor law: from 1980 to 2015, the number of cases investigated by the agency decreased by 63 percent (NELP 2008; U.S. DOL various years).

The lack of sufficient federal investigators is especially problematic for the many workers in states that do not have a state wage and hour office or similar enforcement body. Fourteen states, most of which use the federal minimum wage, either lack the capacity to
investigate wage theft claims or lack the ability to file lawsuits on behalf of victims (Galvin 2016b). ${ }^{4}$ These states effectively defer to the federal government for enforcement. Workers in these states must seek any possible remedy from the federal government or through private litigation. Some states, such as Florida, lack any state labor department altogether.

Even in states with their own enforcement powers, filing a wage theft claim against an employer can be extremely difficult. For example, Gordon et al. (2012) describe the daunting process required by the lowa Workforce Development Agency (IWD):

IWD currently requires every worker who files a wage claim to complete an extensive written questionnaire and to subsequently respond to multiple rounds of mailed notices and requests for documentation on very strict deadlines. At any point in the process, failure to respond in writing or to provide requested information in a timely manner results in IWD closing the case. Though employers are allowed to have attorneys or other third parties represent them in the claims process, workers are not. In fact, IWD will close a worker's case if it learns that an attorney or other third party (a pastor, union representative, or community organizer, for example) is assisting the worker in contacting the employer, communicating with enforcement agencies, or using other means to try recover the worker's wages. When a claim is filed, there is no clear mechanism for updating workers on the status of a claim and-with the exception of the claim form-all communication from the agency (including requests for additional necessary documentation) is in English only. The lowa complaint process contains a multitude of procedural obstacles that may actively discourage workers from pursuing claims. (Gordon et al. 2012, 14)

Few workers who experience wage and hour violations are able to pursue a private lawsuit against their employer, and even fewer employers end up paying any significant restitution. Employers found to have illegally underpaid an employee are usually required only to pay back a portion of the stolen wages-not even the full amount owed, much less a penalty for violating the law (Galvin 2016a). Additional penalties are typically only imposed in cases where the employer forged false documents. In addition to the minuscule likelihood of being caught, employers who are found guilty of violating wage and hour laws typically still pay less than they would have had they paid workers their earned wages to begin with. Consequently, employers are effectively incentivized to violate the law. (U.S. GAO 1981; Ashenfelter and Smith 1979).

Recent research by Daniel Galvin (2016a) finds that when states enact strong penalties against wage theft—particularly "treble damages" statutes that award victims of wage theft three times the value of their stolen wages-it does have a deterrent effect. Workers experience measurably lower rates of wage theft in states with such laws. However, for the greatest impact, such laws must be accompanied by sufficient investigatory resources and authority, protections against retaliation for workers alleging mistreatment, payment of victims' attorneys' fees by violators, and other legal provisions that empower victims to speak out against abuse.

## The many forms of wage theft

Wage theft is the failure to pay workers the full wages to which they are legally entitled. As explained in Meixell and Eisenbrey (2014), "in essence, it involves employers taking money that belongs to their employees and keeping it for themselves. Amounts that seem small, such as not paying for time spent preparing a work station at the start of a shift, or cleaning up at the end of a shift, can add up."

Wage theft can take many forms. Minimum wage violations occur when employees are paid less than the federal, state, or local minimum wage, depending on which is highest and covers the employee in question. For employees to be considered victims of minimum wage violations, those employees must be paid at an hourly wage rate less than the legal minimum, although they need not be paid on an hourly basis. Nonexempt workers paid on a weekly or salaried basis must still be paid at a level equivalent to an hourly rate of the minimum wage for all the hours that they work; minimum wage violations may occur when hourly workers are illegally required to work unpaid hours or when salaried employees work excessive hours-either of which may cause their effective hourly wage rate to fall below the legal minimum wage. ${ }^{5}$

Salaried workers who do not meet the requirements that would exclude them from the overtime provisions of the FLSA (or state overtime laws) are also victims of wage theft if their employers fail to pay them at 1.5 times their regular hourly rate for all hours worked beyond 40 in a single week. Even if nonexempt employees are paid at their regular hourly rate for work hours beyond 40 , they are still being cheated-failure to pay the time-and-ahalf overtime rate is illegal and constitutes wage theft.

Wage theft can also occur when employers deny workers meal breaks, make illegal deductions from employees' paychecks, or make illegal adjustments to reported work hours (Sellekaerts and Welch 1983; Bernhardt et al. 2009; Gordon et al. 2012). Some of these actions could result in minimum wage violations-e.g., if an employer illegally adjusted reported work hours so that an employee was not paid for all hours worked, thereby bringing their effective hourly rate below the minimum wage. However, they would not need to result in a minimum wage violation for them to be unlawful. All of these actions constitute wage theft.

Tipped workers are especially prone to suffer wage theft because of their separate treatment under the law. In most states and under federal law, employers of workers who customarily receive tips—such as restaurant servers and nail salon attendants—may credit workers' tips against their required minimum wage. For example, federal law allows employers to pay tipped workers as little as $\$ 2.13$ per hour, provided that the employees' tips over the course of a week raise their effective hourly pay to at least the minimum wage. If the tips are inadequate, employers are required to make up the difference. Unfortunately, policing this requirement is largely left to the tipped workers themselves, who would need to carefully track their weekly hours and tips to know if employers were paying an adequate base wage. Moreover, the FLSA and most state tipped wage laws do not specify the period over which weekly tips are supposed to be calculated, nor do they specify how employers are to treat secondary tipping-when tipped workers share a
portion of their tips with support staff.
The opaqueness of tipped wage laws leaves most tipped workers with little knowledge of their rights and particularly open to abuse. Allegretto and Cooper (2014) describe how tipped workers subject to a lower tipped minimum wage have lower total hourly takehome pay, have greater gender pay disparities, and experience poverty at much higher rates than nontipped workers or tipped workers who receive the full minimum wage before tips. Cooper (2017) shows that restaurant servers experience poverty at roughly double the rate of nontipped workers, with the highest poverty rates occurring in states with low tipped minimum wages.

## Victims of wage theft are often already struggling to make ends meet

Previous research has shown that wage theft disproportionately hurts low-wage workers, often already the most vulnerable segment of the workforce. The literature overwhelmingly finds that workers who experience wage theft are more likely to be women, to be nonwhite or Hispanic, and to have less education (Ashenfelter \& Smith 1979; Bernhardt et al. 2009; ERG 2014; Galvin 2016; Sellekaerts \& Welch 1984).

Among all forms of wage theft, minimum wage violations are particularly pernicious. By definition, minimum wage violations withhold earnings from the lowest-paid workers in society, who typically are the least able to afford a loss of income. Indeed, research by the Eastern Research Group on wage theft in California and New York showed that minimum wage violations took a significant percentage of pay from low-wage workers already struggling to make ends meet (ERG 2014). The same study found that minimum wage violations increased poverty rates among workers who experienced wage theft by 22.9 percent in California and 40.6 percent in New York. The authors note that when workers in low-income households are illegally underpaid, not only do those workers and their families suffer, but the public is harmed as well-the government collects less in tax revenue, and taxpayers must provide additional funding for social welfare programs to fill in the gaps that employers created. ${ }^{6}$

## Analysis

This report looks closely at one form of wage theft-minimum wage violations-and quantifies the impact of these violations on workers in the 10 most populous U.S. states: California, Florida, Georgia, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, and Texas.

Assessing the full impact of all forms of wage theft is exceedingly difficult. No public data source exists with the requisite information to accurately assess workers' exempt status, total hours worked, total wages received, and what forms of compensation they receive—e.g., hourly/weekly base pay, tips, overtime, etc. Bernhardt et al. (2009) is perhaps the most comprehensive report on the occurrence of wage theft in its many
forms. Yet to produce such a report, the researchers conducted their own survey of frontline workers in three major metropolitan areas; this survey was specially designed to capture evidence of multiple forms of wage theft. The authors found that, among lowwage workers in their sample, over a quarter were victims of minimum wage violations and more than two-thirds experienced at least one type of wage theft violation.

Our study most closely resembles ERG (2014), a report commissioned for the U.S. Department of Labor on minimum wage violations and their monetary effects in California and New York. Like ERG, we use data from the Current Population Survey Outgoing Rotation Group to identify workers whose reported weekly earnings and weekly hours of work equate to an hourly wage below the binding minimum wage in their state. Our methods and findings are in line with ERG and other recent and historical literature on wage theft and minimum wage noncompliance. ${ }^{7}$ However, our study builds upon recent research in several important ways. In assessing minimum wage violations in the 10 most populous states, we account for each state's specific minimum wage laws and exemptions, in addition to those in the FLSA, thereby better isolating the workforce eligible for the minimum wage. ${ }^{8}$ Because we study the 10 most populous states, our statistics on the aggregate population across these states provides a more detailed picture of the breadth and magnitude of minimum wage violations in the United States than analyses of fewer states or select cities. Total nonfarm employment in these 10 states accounts for more than half (53 percent) of all U.S. employment. We also examine these largest states because doing so provides adequate sample sizes to produce detailed statistics within each state. The statistics in this report are averages for 2013 through 2015, thus presenting the most recent estimates of wage theft in the United States. ${ }^{9}$

## Findings

In the 10 most populous states in the country, 2.4 million minimum-wage-eligible workers report being paid less than the applicable minimum wage in their state. This represents just over 4 percent of all eligible workers in these states. Of course, minimum wage policy is most relevant for workers at the bottom of the wage distribution, and these 2.4 million victims of minimum wage violations make up more than 17 percent of all low-wage workers who are eligible for the minimum wage. ${ }^{10}$

As shown in Table 1, workers suffering minimum wage violations report being paid, on average, $\$ 1.88$ per hour less than the applicable state or federal minimum wage. Their lost wages amount to about $\$ 64$ per week on average weekly earnings of only \$203-meaning that victims are losing nearly one-quarter of their weekly earnings to wage theft. For those workers that are employed 52 weeks per year, this implies average annual losses of over $\$ 3,300$ per year on average annual wages received of only $\$ 10,500$. The total annual wages denied these workers across all 10 states is over $\$ 8$ billion. The workforce in these 10 states accounts for 53 percent of the total U.S. workforce. Thus, if the rates and magnitude of minimum wage violations are similar in the remaining states, it suggests that the total wages stolen by employers when workers are illegally paid below the minimum wage amounts to over $\$ 15$ billion annually.

In the 10 most populous states, $\mathbf{2 . 4}$ million workers lose $\$ 8$ billion annually to minimum wage violations
Statistics on minimum wage violations in the 10 most populous states

|  |  |  |  |  |  |  | Eligible workers experiencing minimum wage violations |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

*Workers in Georgia covered by the FLSA are subject to the federal minimum wage of $\$ 7.25$. Workers exempt from the FLSA but covered under Georgia's state minimum wage law have a minimum wage of $\$ 5.15$.
Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Eligible low-wage workers" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in each state.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
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Share of low-wage minimum-wage-eligible workers experiencing minimum wage violations, by state

*Workers in Georgia covered by the FLSA are subject to the federal minimum wage of $\$ 7.25$. Workers exempt from the FLSA but covered under Georgia's state minimum wage law have a minimum wage of \$5.15.

Note: The 2015 minimum wage for each state is shown in parentheses. "Low-wage minimum-wage-eligible workers" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in each state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

Table 1 also describes the rates at which workers experience minimum wage violations in each of the 10 states included in this analysis, with some notable differences across states. First, the state with the highest rate of minimum wage violations is Florida, where 7.3 percent of eligible workers-just over 400,000 people—report being paid less than the minimum wage. This figure is even more shocking when considered as a share of the lowwage workforce in Florida: the data suggest that one out of every four low-wage workers in Florida is a victim of wage theft. ("Low-wage minimum-wage-eligible workers" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in each state.)

Figure A shows the shares of each state's minimum-wage-eligible low-wage workforce that reports being paid less than the minimum wage. After Florida ( 24.9 percent), Ohio has the second highest share with 22.7 percent of low-wage workers experiencing minimum wage violations, followed closely by Illinois, where 22.1 percent of low-wage workers are paid below the minimum wage.

Florida's high rate of minimum wage violations is noteworthy for two additional reasons. First, Florida's state minimum wage was higher than the federal minimum wage in all three years of this study, although it was never the highest of the states analyzed in this report. In theory, employers have a greater incentive to violate higher minimum wages because they face greater potential savings from underpayment. But during the survey period, California's minimum wage was $\$ 8.00$ per hour through June of 2014 and then $\$ 9.00$ per hour from July 2014 through December 2015. Florida's minimum wage was $\$ 7.79$ for all of 2013, $\$ 7.93$ for all of 2014, and $\$ 8.05$ for all of 2015 (IWC n.d.; Florida DEO 2016). In fact, Florida's minimum wage ranks in the middle of the pack among these 10 states for the entire survey period. In other words, Florida's unusually high violation rates do not appear to be a result of the level of Florida's minimum wage.

The second reason Florida's high violation rate is noteworthy may explain why the state's high violation rate is occurring-namely, that in Florida employers have little reason to think they will ever be caught. As explained in Galvin (2016), Florida has very weak state labor laws-the fifth-weakest in the country, per Galvin-and the state has no enforcement body to investigate abuse. Florida eliminated its Department of Labor and Employment Security in 2002. Our findings, thus, seem to corroborate Galvin's conclusion that the strength of a state's labor laws and its enforcement capacity do have a significant impact on the likelihood that employers will commit wage theft.

Although workers in Florida are the most likely to suffer minimum wage violations, workers in Texas and Pennsylvania suffer the most when their wages are stolen. Figure B shows that workers in Texas whose employers fail to pay them at least the minimum wage for all hours worked are deprived of $\$ 85$ each week. These workers are losing nearly one-third (31.7 percent) of their earned pay to wage theft. If these workers are employed 52 weeks per year, they lose $\$ 4,400$ on average each year and have average annual wages of only $\$ 9,500$. In Pennsylvania, workers experiencing minimum wage violations are underpaid by an average of $\$ 80$ per week. Employers in Pennsylvania who commit wage theft are stealing, on average, 34.6 percent of the wages earned by victim employees. If these workers are employed 52 weeks per year, this amounts to losses of $\$ 4,200$ per year on paid wages of only $\$ 8,500$.

Workers in North Carolina have the third-highest average losses per victim due to minimum wage violations. Workers who suffer minimum wage violations in North Carolina lose an average of $\$ 72$ per week, and their employers are illegally capturing 29 percent of their earned wages. If these workers are employed 52 weeks per year, this amounts to losses of $\$ 3,800$ on paid wages of only $\$ 9,300$ annually. The severity of minimum wage violations in North Carolina may come as less of a surprise given that the state's elected labor commissioner during the period studied showed little interest in enforcing wage laws. An investigation by The Charlotte Observer noted that during the commissioner's $15-y e a r$ tenure, her office "sued companies for failing to pay wages only 35 times, an average of less than 2.5 times a year" (Locke 2015).

It is noteworthy that in all three of these states-Texas, Pennsylvania, and North Carolina-the binding minimum wage is the federal minimum wage of $\$ 7.25$. The

Figure $B \quad$ Workers in Texas and Pennsylvania suffer the most when their wages are stolen
Average paid and unpaid weekly wages of workers experiencing minimum wage violations, by state


Note: Weekly amount paid represents the average weekly wages received by workers experiencing minimum wage violations. Weekly amount stolen represents the average weekly lost wages for workers experiencing minimum wage violations.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
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particularly large lost wages for wage theft victims in these states, despite the relatively low value of the minimum wage, raises questions about these states' legal framework, penalty structure, and enforcement practices for combating wage theft. To the extent that these states are deferring enforcement to federal authorities, they may be placing their state's most vulnerable workers at risk of particularly harmful labor practices.

It should also be noted that these estimates were produced by calculating the difference between the effective minimum wage and workers' reported hourly wage. If some of these workers were promised more than the minimum wage, then these figures understate the true value of their lost wages.

## Poverty and use of public assistance among wage theft victims

As shown in Table 2, workers who experience minimum wage violations are far more likely to be in poverty than the other minimum-wage-eligible workers. Among the 2.4 million workers experiencing minimum wage violations in the analyzed states, 517,000-or 21.4 percent-had total family incomes below the poverty line. In contrast, the poverty rate of all minimum-wage-eligible workers in these states was only 6.9 percent. In other words,

## Far fewer workers would be in poverty if their employers paid them the legal minimum wage

Poverty status of all minimum-wage-eligible workers in the 10 most populous states and of those paid less than the minimum wage, actual and if all workers were paid correctly

|  | At current wage values |  |  | If subminimum wages were raised to the applicable minimum wage |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number of minimum-wage-eligible workers | Number of eligible workers in poverty | Share of workers in poverty | Number of eligible workers in poverty | Share of workers in poverty | Change in number in poverty | Change in share in poverty |
| All minimum-wage-eligible workers | 59,014,000 | 4,075,000 | 6.9\% | 3,916,000 | 6.6\% | -159,000 | $\begin{aligned} & -0.3 \\ & \text { ppt. } \end{aligned}$ |
| Eligible workers paid less than the minimum wage | 2,422,000 | 517,000 | 21.4\% | 358,000 | 14.8\% | -159,000 | $\begin{aligned} & -6.6 \\ & \text { ppt. } \end{aligned}$ |

Note: Numbers may not add due to rounding. Shares are computed based on unrounded numbers.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group and March Supplement data, 2013-2016

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workers suffering minimum wage violations are more than three times as likely to be in poverty as someone chosen at random in the eligible workforce.

Table 2 also shows that many of these workers are in poverty as a direct result of their employers' stealing from them. If all workers experiencing minimum wage violations were paid the applicable minimum wage for all reported hours worked, it would lift 31 percent of those in poverty above the poverty line. Consequently, the poverty rate among these workers would fall from 21.4 percent to 14.8 percent, and the overall poverty rate among the minimum-wage-eligible workforce would decline from 6.9 percent to 6.6 percent.

With such low levels of income, it is unsurprising that many of the workers who suffer minimum wage violations must rely on public assistance programs to make ends meet. Table 3 shows that roughly one in three workers experiencing minimum wage violations receive some form of public assistance, either directly or through a family member. ${ }^{11}$ One in five have a family member who receives free or reduced school lunch. Nearly 18 percent receive food-purchasing assistance through the Supplemental Nutrition Assistance Program (SNAP; formerly known as the Food Stamp Program). Just under 4 percent receive housing subsidies, and 3.4 percent receive home energy assistance. While these last two numbers may seem small, the rates of participation in these programs among those suffering minimum wage violations are nearly three times and two-and-a-half times, respectively, the rates of the overall minimum-wage-eligible workforce.

Nearly one-third of workers experiencing minimum wage violations receive some form of public assistance

Public assistance usage among minimum-wage-eligible workers and those experiencing minimum wage violations

| Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Share receiving public assistance benefit | Number | Share receiving public assistance benefit |
| All minimum-wage-eligible workers | 59,014,000 |  | 2,422,000 |  |
| Family receives some public assistance | 13,517,000 | 22.9\% | 802,000 | 33.1\% |
| Family receives food-purchasing assistance | 4,282,000 | 7.3\% | 429,000 | 17.7\% |
| Family receives energy assistance | 771,000 | 1.3\% | 81,000 | 3.4\% |
| Child in family receives reduced or free school lunch | 10,373,000 | 17.6\% | 496,000 | 20.5\% |
| Family receives housing subsidy | 838,000 | 1.4\% | 95,000 | 3.9\% |

Note: Numbers may not add due to rounding. Shares are computed based on unrounded numbers.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group and March Supplement data, 2013-2016

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## Demographic characteristics of workers being paid less than the minimum wage

The demographic characteristics of workers who experience minimum wage violations closely resemble the demographics of the overall low-wage workforce (Cooper 2015). That is, workers who experience minimum wage violations are by definition low-wage. Lowwage workers are more likely to be vulnerable to minimum wage violations relative to the workforce in general, but those within the low-wage workforce are not necessarily more likely to experience minimum wage violations at a higher rate than other low-wage earners in their respective demographic categories. In fact, when we examine violation rates among just the low-wage workforce, many of the differences between demographic groups diminish or disappear. This shows that the problem of wage theft is not limited to any particular group; low-wage workers of all races, ethnicities, genders, and immigration statuses are being cheated out of pay at significant rates. Below, we discuss which minimum-wage-eligible workers experience minimum wage violations and the impact this has on all workers.

## Gender

Women are more likely than men to experience minimum wage violations, as shown in Figure C. Women also make up a majority of victims of minimum wage violations despite making up less than half of the minimum-wage-eligible workforce. While the average
annual amount stolen from men and women suffering minimum wage violations is comparable—about $\$ 64$ and $\$ 63$ per week, respectively—women tend to be paid less to begin with, meaning that the earned wages that they are denied constitute a greater share of their earnings ( 24.8 percent of women's wages compared with 22.8 percent of men's). Those workers that are employed 52 weeks per year lose $\$ 3,300$ on average each year and have average annual wages of only $\$ 11,300$ for men and $\$ 9,900$ for women. In other words, women are paid less to begin with and thus are left even worse off after their wages are stolen.

Men lose an average of $\$ 64$ per week from minimum wage violations, totaling $\$ 3.6$ billion annually. The average woman suffering a minimum wage violation loses $\$ 63$ each week, but the larger number of women suffering violations brings the annual total of wages stolen from women workers to $\$ 4.4$ billion. (See Appendix Table A3.)

## Age

Figure D shows that young workers (age 16 to 24 ) are three times as likely to be paid below the minimum wage as older workers. Nearly 10 percent of young workers are paid less than the minimum wage. Young workers account for nearly one-third of workers experiencing minimum wage violations. However, older workers still make up the majority of those experiencing minimum wage violations. In fact, more than half of all workers suffering minimum wage violations are prime-age workers (age 25 to 54). Older workers (age 55 to 85 ) experience violations at a lower rate than young workers, but still account for about 16 percent of all workers suffering minimum wage violations.

Prime-age and older workers also lose a larger share of their income to minimum wage violations. As shown in Figure D, workers age 25 to 54 experiencing minimum wage violations lose 24.1 percent of their earned wages to this form of wage theft, averaging a loss of $\$ 70$ per week. If these workers are employed 52 weeks per year, they lose $\$ 3,600$ on average each year. Victims age 55 and older lose a similar amount, but due to their lower average wage levels, their losses represent more than a quarter of their earned wages ( 25.5 percent). In total, $\$ 4.5$ billion is stolen from prime-age workers and $\$ 1.4$ billion from older workers. Young workers suffering violations lose $\$ 2.1$ billion annually. They are denied, on average, $\$ 50$ per week -22.5 percent of their earned wages-or $\$ 2,600$ for those that work the full year.

## Race and ethnicity

Workers of color are more likely to experience minimum wage violations than white workers, as shown in Figure E. Roughly 5 percent of black workers and Hispanic workers are paid less than the minimum wage, compared with only 3.5 percent of white workers. This is partly a function of the fact that people of color are disproportionately represented among low-wage workers (Cooper 2015; Wilson \& Rodgers 2016). Nevertheless, white workers still make up the largest share (47.1 percent) of workers experiencing minimum wage violations.

White workers suffering minimum wage violations have the largest share of annual wages

Figure $C$ Women are more likely than men to suffer minimum wage violations

Shares by gender of workers experiencing minimum wage violations


Shares of men and women experiencing minimum wage violations


Average paid and unpaid weekly wages of workers experiencing minimum wage violations, by gender


Note: Weekly amount paid represents the average weekly wages received by workers experiencing minimum wage violations. Weekly amount stolen represents the average weekly lost wages for workers experiencing minimum wage violations.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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Figure $D$ Young workers are three times as likely to suffer minimum wage violations as other workers

Shares by age group of workers experiencing minimum wage violations


Share of each age group experiencing minimum wage violations


Average paid and unpaid weekly wages of workers experiencing minimum wage violations, by age


Note: Weekly amount paid represents the average weekly wages received by workers experiencing minimum wage violations. Weekly amount stolen represents the average weekly lost wages for workers experiencing minimum wage violations.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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Figure $\mathrm{E} \quad$ Workers of color are more likely to suffer minimum wage violations than white workers

Shares by racial/ethnic group of workers experiencing minimum wage violations


Share of each racial/ethnic group experiencing minimum wage violations


Average paid and unpaid weekly wages of workers experiencing minimum wage violations, by race and ethnicity


Note: Weekly amount paid represents the average weekly wages received by workers experiencing minimum wage violations. Weekly amount stolen represents the average weekly lost wages for workers experiencing minimum wage violations.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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stolen-26.5 percent-compared with 21.4 percent for black workers, 21.2 percent for Hispanic workers, and 24.3 percent for workers of other races and ethnicities. White workers lose an average of $\$ 67$ each week, totaling $\$ 4$ billion per year. If these workers are employed 52 weeks per year, they lose $\$ 3,500$ on average each year from minimum wage violations. On average, minimum wage violations amount to $\$ 55$ weekly for black workers, $\$ 60$ weekly for Hispanic workers, and $\$ 69$ weekly for workers of other races. For those with a full-year work schedule of 52 weeks, these weekly losses translate to an annual total of \$2,900 for black workers, \$3,100 for Hispanic workers, and \$3,600 for workers of other races. The amount of annual wages lost to minimum wage violations for nonwhite workers totals $\$ 4$ billion per year.

## Citizenship and nativity

The incidence of minimum wage violations for nonwhite workers is intertwined with their nativity and citizenship status. Among workers who are victims of minimum wage violations, U.S.-born citizens make up nearly three-quarters ( 72.3 percent) of workers suffering violations-and over four-fifths of the total minimum-wage-eligible workforce are U.S. citizens, as shown in Figure F. Workers who were not born in the United States have higher minimum wage violation rates than those born in the U.S.; however, naturalized citizens have rates more similar to those of U.S.-born citizens. The overall violation rate among native-born citizens is 3.8 percent, and the rate for naturalized citizens is 4.1 percent. Noncitizens are significantly more likely to experience minimum wage violations than either U.S.-born or naturalized citizens: 6.5 percent report being paid below the minimum wage.

The higher violation rate among noncitizens is not surprising, as workers who lack the protections of citizenship are more easily exploited. Immigrant workers may be forced to suffer exploitive conditions out of fear that employers may question their immigration status. Many authorized immigrant workers may have family or friends who lack authorization; they may fear retribution against their community if they speak out against abuse. The exploitation of immigrant workers is a problem, however, that has implications for immigrants and nonimmigrants alike. Whenever any group of workers can be exploited and paid artificially low wages, it lowers the wages of similarly skilled workers and other workers in the same industry-regardless of those workers' nativity (Costa, Cooper, and Shierholz 2014).

## Education

Workers with less education are more likely to experience minimum wage violations than workers with a bachelor's degree or higher. This is largely because workers with lower educational attainment make up a disproportionate share of low-wage workers. Figure G shows that nearly 9 percent of workers with less than a high school diploma are paid below the minimum wage, compared with 4.5 percent of high school graduates, 4.3 percent of workers with some college experience, and only 1.9 percent of workers with a bachelor's degree or higher. The vast majority of workers suffering minimum wage violations ( 86.0 percent) do not have a college degree.

Figure $F$ Non-U.S. citizens are more likely to suffer minimum wage violations than U.S. citizens

## Shares by citizenship status of workers experiencing minimum wage violations



## Share of each citizenship status group experiencing minimum

 wage violations

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
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## Family type

As shown in Figure H, unmarried workers—with and without children-are more likely to experience minimum wage violations than married workers. This is particularly troubling for single parents who may be the sole provider for one or more children at home. Parents make up about a quarter ( 26.4 percent) of workers experiencing minimum wage violations; about a third of these are single parents.

Although single parents have slightly lower rates of minimum wage violations than unmarried workers without children (4.7 percent, compared with 5.6 percent), single parents who are victims of minimum wage violations lose a larger share of their earnings than workers in any other family type. Employers who underpay single parents are stealing a quarter ( 25.3 percent) of these workers' earnings. Single parents are underpaid by an average of $\$ 69$ per week, which amounts to an average of $\$ 3,600$ each year for those that work 52 weeks per year. On average, married parents experiencing minimum wage violations lose 23.5 percent of their earnings, married workers without children lose 24.6 percent, and unmarried workers without children lose 23.5 percent.

Workers with less education are more likely to experience minimum wage violations than workers with a bachelor's degree or higher

## Shares by educational attainment of workers experiencing minimum wage violations



## Share of each educational attainment group experiencing

 minimum wage violations

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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Single and married parents lose a weekly average of \$69 and \$70, respectively, to minimum wage violations. If these workers are employed 52 weeks per year, they lose $\$ 3,600$ on average each year. Across all victims in the 10 states studied, this adds up to $\$ 2.3$ billion each year that parents earn but are not paid. Among workers without children, married workers lose an average of $\$ 71$ each week to minimum wage violations-totaling $\$ 3,700$ for those working 52 weeks per year-and unmarried workers are robbed of an average of $\$ 58$ weekly—totaling $\$ 3,000$ for those working the full year. Married workers without children lose a total of $\$ 1.7$ billion each year to minimum wage violations, and unmarried workers without children lose a total of $\$ 4$ billion each year.

## Family income

As shown in Figure I, the majority of workers who experience minimum wage violations come from families of modest means. Nearly 29 percent of all those with a violation have total family incomes less than \$25,000; nearly half have total family incomes less than

Figure $\mathrm{H} \quad$ Unmarried workers-with and without kids-are more likely to experience minimum wage violations than married workers

Shares by family type of workers experiencing minimum wage violations


Share of each family type experiencing minimum wage violations


Average paid and unpaid weekly wages of workers experiencing minimum wage violations, by family type


Note: Weekly amount paid represents the average weekly wages received by workers experiencing minimum wage violations. Weekly amount stolen represents the average weekly lost wages for workers experiencing minimum wage violations.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

Figure I The majority of workers who experience minimum wage violations come from families of modest means
Family income of workers experiencing minimum wage violations


Note: For a more detailed breakdown of family income categories, see Appendix Table A3.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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\$40,000; and nearly two-thirds have family incomes less than \$60,000.

## Work hours

Part-time workers (those employed fewer than 35 hours per week) are three-and-a-half times more likely to experience minimum wage violations than those who work full time ( 35 hours or more per week), as shown in Figure J. Still, full-time workers make up more than half ( 52.5 percent) of all workers suffering minimum wage violations.

## Industries and occupations

The leisure and hospitality industry has historically had the highest rates of low-wage workers and minimum wage violations (Bernhardt et al. 2009; ERG 2014). This is heavily driven by food and drink service establishments where workers earn most of their pay through tips and face special challenges in ensuring their employers are paying them properly. ${ }^{12}$ In order to get a better picture of the degree to which food and drink service workers are affected by minimum wage violations compared with other leisure and hospitality workers, we extracted the data for food and drink service workers into a separate category. Consistent with past research, our results show that workers in food and drink service are more likely than workers in any other industry to experience

Figure $J \quad$ Part-time workers are 3.5 times more likely to experience minimum wage violations than full-time workers

Shares by usual weekly work hours of workers experiencing minimum wage violations

Part or mid time (<34 hour_. Full time (35+ hours)


Share of each work hours group experiencing minimum wage violations


Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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minimum wage violations. As shown in Figure K, over 14 percent of all workers in food and drink service (one out of every seven) report being paid less than the minimum wage. (See Appendix Table A3 for data on other industries and occupations.) Food and drink service workers make up over a quarter ( 25.9 percent) of all workers suffering minimum wage violations-the largest share of any single industry.

The industries with the next highest rates of violations are agriculture, forestry, and fishing ( 9.1 percent); leisure and hospitality excluding food and drink service ( 6.8 percent); and retail ( 4.7 percent). Many agriculture workers-particularly seasonal agriculture workers-are exempt from the minimum wage under federal law and under many state laws. ${ }^{13}$ Still, those who are subject to the minimum wage have higher rates of minimum wage violations than workers in most other industries. This is likely because the agriculture workforce is predominantly nonwhite and immigrant, with lower levels of education-all factors that correlate with higher rates of wage theft.

Among major occupations, as shown in Figure L, workers who experience minimum wage violations are more likely to work in a service job than in any other occupation. Service workers make up 46.5 percent of all workers suffering minimum wage violations. The next closest occupational categories are sales workers (15.0 percent) and office and

Figure $\mathrm{K} \quad$ Workers in the food and drink service industry are more likely to suffer minimum wage violations than workers in other industries

Shares of workers in select industries experiencing minimum wage violations


Industries of workers experiencing minimum wage violations


Note: Industries with the highest rates of minimum wage violations are shown. Other industry-specific data can be found in Appendix Table A3.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
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administrative support (8.1 percent).

## Union coverage

Figure M shows that workers not covered by unions-those who are neither in a union themselves nor covered by a union contract-are almost twice as likely (4.4 percent) to

Figure $L$ Workers who experience minimum wage violations are much more likely to work in a service occupation than in any other occupation
Occupations of workers experiencing minimum wage violations


Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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experience minimum wage violations as those in a union or covered by a union contract (2.3 percent). Workers are less likely to be victims of wage theft when they have bargaining power. Not only are non-union workers more likely to experience wage theft-those who are victims lose a larger share of their income compared to workers covered by a union. Among workers suffering minimum wage violations, those not covered by a union lose nearly one-quarter ( 24.0 percent) of their earnings on average. Those who are covered by a union lose an average of 17.4 percent of their earnings (see Appendix Table A3).

## Discussion and conclusions

The findings in this paper should help illuminate the severity of the problem of wage theft in the United States. Accurately measuring wage theft is a difficult task. State and federal violation records undoubtedly understate the true severity of the problem because most wage theft goes unreported and enforcement is under-resourced. Public surveys that collect wage and hour information do not capture the requisite information to assess wage theft in all the ways it can occur. Even studies that use the best publicly available data sources, such as this one, must cope with a high degree of measurement error-which we discuss more fully in the appendix.

Nevertheless, the findings in this report-and similar previous studies-indicate that even

Figure $M$ Workers not covered by a union are almost twice as likely to experience minimum wage violations
Share of each union status group experiencing minimum wage violations


Note: Union status was not available for 11.5 percent of the sample. The share experiencing minimum wage violations from these cases is 1.8 percent.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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when examining only one form of possible wage theft, the magnitude of the crime being committed against American workers is huge. Workers in the 10 most populous states, home to about half of the country's total workforce, are being cheated out of $\$ 8$ billion annually. If these findings hold true for the other half of the U.S. workforce, it would mean that bad employers across the country are stealing around $\$ 15$ billion annually from their employees just from minimum wage violations alone.

It is worth noting that this number, $\$ 15$ billion, exceeds the value of property crimes committed in the United States each year: according to the FBI, the total value of all robberies, burglaries, larceny, and motor vehicle theft in the United States in 2015 was $\$ 12.7$ billion (FBI 2016; Meixell \& Eisenbrey 2014). Property crime is a better understood, more tangible form of crime than wage theft, and federal, state, and local governments spend tremendous resources to combat it. In contrast, lawmakers in much of the country allocate little, if any, resources to fighting wage theft, yet the cost of wage theft is at least comparable to-and likely much higher than-the cost of property crime. (It is important to note that our estimate doesn't include all forms of wage theft: if minimum wage violations total $\$ 15$ billion on their own, it is likely the full cost of all forms of wage theft-including failure to pay overtime, misclassification, off-the-clock violations, illegal deductions, and others-dwarfs the cost of property crime.) It is beyond the scope of this report to assess the efficiency of spending public dollars to fight one form of crime versus another; however, our findings should raise questions among lawmakers as to whether adequate resources are being dedicated to ensuring the economic security of Americans not just in public and in their homes, but at their jobs.

Fiscally responsible lawmakers and concerned citizens should also recognize that when employers steal from their employees, there are public costs. At the simplest level, when earned wages are not paid to workers, there is a straightforward loss in payroll and income tax revenue. States with sales taxes are also likely to forego sales tax revenues from the stolen income that workers will never spend and that employers may choose to save.

This report also shows that many workers who suffer minimum wage violations have total family incomes below the federal poverty line, and one-third of workers experiencing violations rely on taxpayer-funded public assistance programs. As discussed in Cooper (2016), considerable public savings could come from raising wages more broadly among low-wage workers-for example, by raising the federal minimum wage or pursuing policies that strengthen these workers' bargaining power-and this savings could go a long way toward bolstering safety net programs or funding new public investments. But the "savings" to be had from eliminating wage theft is different-it is actually a recouping of money employers have stolen from both employees and taxpayers, since at least some portion of public dollars going to support these low-wage workers and their families are dollars they already earned on the job.

The loss of income for victims of wage theft also weakens the consumer demand that drives the U.S. economy. The majority of workers suffering minimum wage violations come from families of modest means, most of which spend every dollar of income they receive simply because they must in order to make ends meet. In contrast, corporations and business owners are likely to save a larger portion of their income. This implies that when money is taken from low-wage workers and kept by employers, it leads to a net loss in consumer demand. The $\$ 8$ billion in illegally withheld earnings identified in this study is not a huge sum in the context of the macro economy-but it certainly is a large sum for the low-wage workers from whom it is stolen, and especially for those who live in low-income households where their wages make up a significant portion of family income. Improving the welfare of low-income households has the potential not just for short-term increases in consumer demand, but also for longer-term improvements in those households' ability to better their own financial footing. Research has shown that raising incomes for low-income households improves health outcomes, educational outcomes, and social mobility-the likelihood that children will be able to achieve greater financial success than their parents (Leigh 2016; Mishel et al. 2012b; Duncan, Ziol-Guest, and Kalil 2008).

If there is a silver lining in our findings, it is that our results seem to corroborate Galvin (2016a), who finds that tougher wage and hour laws and stronger enforcement against wage theft deter higher rates of violations. In other words, this is a solvable problem. Although we do not attempt to replicate Galvin's more rigorous causal assessment of the relationship between the strength of a state's labor laws and violation rates, our descriptive results do fit with Galvin's conclusions. They suggest that strengthening a state's legal protections against wage theft, increasing penalties, and bolstering enforcement capacities may help to reduce the incidence of employers cheating their workers out of pay.

Arguments that strengthening labor laws or cracking down on violators might hurt business growth or disadvantage one jurisdiction's "business climate" versus another's are specious and damaging to law-abiding business owners. Employers that commit wage theft have artificially lower labor costs and thus may be able to undercut competitors who follow the law. No business should be able to gain a competitive advantage by cheating its employees. If a business cannot succeed without breaking the law, it should not exist.

Finally, wage theft has ramifications for the trajectory of wages and incomes for the broad
middle class. When employers can exploit millions of people, it harms an even larger group, because it puts downward pressure on wages for similarly skilled workers and others in the same industries. As discussed in Bivens et al. (2014), many factors have suppressed wage growth for U.S. workers over the past four decades. The ability of employers to steal earned wages from their employees-largely with impunity-is but one more factor that has kept a generation of American workers from achieving greater improvements in their standard of living. Lawmakers who care about the long-term economic health of American households and the ability of ordinary working people to get ahead should be paying more attention to whether those workers are actually being paid all the wages they have earned.

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## Appendix: Data and methodology

This paper uses data from the outgoing rotation group of the Current Population Survey (CPS-ORG) to assess the incidence of workers reporting hourly wages below the binding minimum wage. The CPS-ORG data is widely recognized as the best publicly available source of hourly wage information. Past research on wage theft has found that the CPS works well for identifying minimum wage violations, although the CPS does have some limitations, which are discussed later in this section. In order to have sufficient samples of low-wage workers in all states, we use three years of data for calendar years 2013-2015.

The CPS is the longest-running government survey of labor market conditions in the United States. CPS data are used to calculate the monthly unemployment rate, and supplements to the CPS are used to measure a host of other government statistics on wages, incomes, union membership, health insurance coverage, and poverty. Respondents to the CPS are surveyed for four consecutive months, excluded for the next eight months, and then surveyed again for four more months. In the fourth month and in the final month-i.e., before going "out of rotation"-participants are asked about their hourly and weekly pay, as well as the number of hours they worked in the preceding week. With this information, we can identify minimum wage violations by comparing respondents' reported hourly wage against the state minimum wage that was in effect in the month they were surveyed.

There are, however, some challenges that must be addressed in the CPS hourly wage data. First, the ORG data only report hourly wages for those workers that indicate they are paid on an hourly basis. For non-hourly workers, the ORG data report only weekly earnings inclusive of any overtime, tips, bonuses, and commissions (OTBC). Ideally, to compare workers' regular hourly wage against the minimum wage, we would need an estimate of weekly earnings inclusive of tips and commissions, but not bonuses or overtime. Although some respondents do report working more than 40 hours in a week, it is not possible to easily disaggregate wages paid at their regular hourly rate from wages potentially paid at an overtime premium rate ("time-and-a-half").

Similar challenges arise for tipped workers who do report being paid hourly. Tipped workers are supposed to report their base wage before tips in response to one survey question and their total weekly earnings, inclusive of OTBC, in a second. This should allow researchers to analyze hourly wages both inclusive and exclusive of tips, but the inclusion of overtime and bonuses in the weekly earnings data can be problematic for tipped workers who may be receiving both tips and overtime.

To address these challenges, we calculate hourly wages in the sample using the most conservative approach. For hourly workers that do not report receiving any OTBC, we use their reported hourly wage. For hourly workers that do report receiving OTBC, we use the greater of their reported hourly wage or their weekly earnings, inclusive of OTBC, divided by weekly hours. For all non-hourly workers, we calculate hourly wages using their reported weekly earnings, inclusive of OTBC, divided by their reported weekly hours. This approach means that our estimates may be understating the true incidence of minimum
wage violations and the volume of wages stolen, since we are treating bonuses, overtime, and commissions as part of the hourly base wage.

Consistent with ERG (2014) and Galvin (2016a), we exclude from our final sample all observations of workers not specifying hourly/nonhourly status, observations of nonhourly workers with weekly earnings less than $\$ 10$, and all observations of workers with hourly wages less than $\$ 1$. We then distribute the weights from these observations to all remaining valid observations.

## Coverage of the FLSA and state minimum wage laws

As explained in the body of the report, not all workers are eligible for the minimum wage. The FLSA has a variety of exemptions for different occupations and classes of workers. State minimum wage laws also vary greatly in the volume and types of exemptions allowed for businesses to pay workers less than the minimum wage. For example, virtually all workers in California are subject to the state minimum wage. In contrast, Florida's state minimum wage law explicitly exempts all workers exempted from the federal minimum wage.

To limit our sample to minimum-wage-eligible workers, we carefully account for all possible exemptions to the minimum wage portions of the FLSA and each state's specific minimum wage exemptions. In cases where the data do not allow for the straightforward exemption of a particular industry or occupation, we either take the broadest possible interpretation of the exemption or randomly assign exempt status to the proportion of workers in that industry or occupation that the Department of Labor estimates to be exempt from the FLSA. For example, DOL estimates that 3 percent of seasonal amusement and recreational establishment workers are exempt. (See Kimball and Mishel 2015 and U.S. DOL 2015 for further detail.) Thus, we mark as exempt from the FLSA 3 percent of workers in those industries that can include seasonal amusement and recreational establishment workers: independent artists, performing arts, spectator sports, and related industries; museums, art galleries, historical sites, and similar institutions; bowling centers; other amusement, gambling, and recreation industries; and recreational vehicle parks, camps, and rooming and boarding houses.

The list of all federal and state exemptions is too long to include here; however, we are happy to provide greater detail upon request.

Appendix Table A1 shows the share of the workforce in each of the 10 most populous states that we estimate to be covered under federal or state minimum wage laws. Of the roughly 67.3 million workers in these 10 states, we estimate that 71.7 percent are covered under the FLSA, 84.8 percent are covered under state minimum wage laws, and 87.6 percent are covered under either the FLSA or state minimum wage laws. Although California does have some exemptions to the minimum wage-such as door-to-door salespeople and individuals who are the parent, spouse, or child of the employer-they are very limited and most cannot be identified in the CPS data. Thus, in our sample, we

|  | Total workforce | Share of <br> workers <br> covered by <br> federal <br> minimum wage | Share of <br> workers <br> covered by state <br> minimum wage | Share of <br> workers <br> covered by <br> federal or state <br> minimum wage |
| :--- | :---: | :---: | :---: | :---: |
| Total | $67,349,000$ | $71.7 \%$ | $84.8 \%$ | $87.6 \%$ |
| California | $14,575,000$ | $70.6 \%$ | $100.0 \%$ | $100.0 \%$ |
| Florida | $7,626,000$ | $72.3 \%$ | $72.3 \%$ | $72.3 \%$ |
| Georgia | $3,831,000$ | $71.0 \%$ | $92.8 \%$ | $98.4 \%$ |
| Illinois | $5,248,000$ | $70.9 \%$ | $98.3 \%$ | $98.8 \%$ |
| Michigan | $3,819,000$ | $74.9 \%$ | $69.3 \%$ | $74.9 \%$ |
| New York | $7,806,000$ | $66.6 \%$ | $70.1 \%$ | $77.5 \%$ |
| North Carolina | $3,822,000$ | $72.6 \%$ | $80.8 \%$ | $81.4 \%$ |
| Ohio | $4,685,000$ | $76.3 \%$ | $83.2 \%$ | $83.6 \%$ |
| Pennsylvania | $5,290,000$ | $72.7 \%$ | $80.7 \%$ | $81.3 \%$ |
| Texas | $10,649,000$ | $73.0 \%$ | $83.8 \%$ | $91.5 \%$ |

Note: California's minimum wage covers $99.96 \%$ of workers in the state. Numbers may not add due to rounding. Shares are computed based on unrounded numbers.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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consider nearly all California workers to be covered by the state minimum wage. (We exempt door-to-door salespeople, which reduces the minimum-wage-eligible workforce by 0.04 percent to 99.96 percent.) Florida's 72.3 percent of workers covered by either the state or federal minimum wage is the lowest share covered of all the states analyzed in this report. Florida's state minimum wage law does not cover any additional workers beyond those already covered by the FLSA.

## Sensitivity analysis

As noted in the body of this report, accurately measuring minimum wage violations is challenging, and even the best public data sources-such as the CPS-ORG data we use-contain measurement error that can confound results. In this section, we describe the results of a series of sensitivity tests we performed, similar to those in ERG (2014), to assess how measurement error may be influencing our findings.

Appendix Table A2 shows the results of three different sensitivity tests. The first row presents our original results. The second row shows results for only those CPS respondents that report being hourly workers; these workers should have less measurement error in their hourly wage data than workers paid on a weekly or salaried basis. In this specification, the workforce analyzed shrinks by roughly one-third and the share of workers experiencing minimum wage violations drops by 0.5 percentage points to 3.6 percent. The amount of wages stolen falls by 16.5 percent on an hourly basis and 25 percent on a weekly or annual basis. The share of affected workers' earned wages that are not paid shrinks by 3.8 percentage points to 20.1 percent.

## Sensitivity analysis

| Category | Total number of minimum-wage-eligible workers | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Share of eligible workers | Average hourly under-payment | Average weekly under-payment | Average weekly wages received | Average annual under-payment if full-year | Average annual wages received if full-year | Share of earned wages not paid |
| Baseline analysis | 59,014,000 | 2,422,000 | 4.1\% | \$1.88 | \$64 | \$203 | \$3,300 | \$10,500 | 23.9\% |
| Hourly workers only | 37,887,000 | 1,352,000 | 3.6\% | \$1.57 | \$48 | \$189 | \$2,500 | \$9,800 | 20.1\% |
| Change from baseline | -35.8\% | -44.2\% | -0.5 ppt | -16.5\% | -25.0\% | -6.5\% | -25.0\% | -6.5\% | -3.8 ppt |
| Excluding proxy responses | 28,629,000 | 948,000 | 3.3\% | \$2.08 | \$73 | \$207 | \$3,800 | \$10,700 | 26.1\% |
| Change from baseline | -51.5\% | -60.9\% | -0.8 ppt | 11.0\% | 14.7\% | 1.9\% | 14.7\% | 1.9\% | 2.2 ppt |
| Only hourly violations $>\$ 0.25$ | 59,014,000 | 1,999,000 | 3.4\% |  |  |  |  |  |  |
| Change from baseline | 0.0\% | -17.5\% | -0.7 ppt |  |  |  |  |  |  |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Numbers may not add due to rounding. Shares are computed based on unrounded numbers.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

The third row of Appendix Table A2 shows results excluding all CPS responses that were given by a member of the household on another member's behalf-i.e., proxy responses. Because household members may not be fully informed of each other's exact wage rates and work schedules, proxy responses can be more susceptible to measurement error. When we exclude proxy responses, the analyzed workforce is cut roughly in half. We find that 3.3 percent report being paid wages below the minimum wage-a reduction of 0.8 percentage points from the baseline analysis. The average hourly wages lost actually increases by 11.0 percent, and the weekly wages lost increases by 14.7 percent. In this specification, workers report losing, on average, 26.1 percent of their earned pay.

For the last row of Appendix Table A2, we do not count instances of minimum wage violations if the reported or calculated hourly wage is within 25 cents of the applicable minimum wage. Researchers have found that CPS respondents are prone to round their hourly wage rates to the nearest dollar-e.g., reporting an hourly wage of $\$ 7.00$ when they are actually paid $\$ 7.25 .{ }^{14}$ Thus, in this specification, we assume that reported wages as low as $\$ 0.25$ below the applicable minimum wage are instances of errors in reporting, not wage theft. With this leeway, the share of the workforce experiencing minimum wage violations falls by 0.7 percentage points to 3.4 percent. Since we are restricting the pool of affected workers to those that experience wage theft of more than 25 cents, we do not report changes in the amount of lost wages as we would be directly biasing any such calculations.

While there is undoubtedly measurement error in the CPS-ORG data, it is still the best available public data source on hourly wages. Where possible, we have taken the more conservative approach in our estimates, particularly in how we handle exemptions and how we construct hourly wage values for non-hourly workers. The results of these sensitivity tests show that even when we limit our sample to those observations with the most accurate wage information, or allow for greater error in the wage measure before designating a violation, we see that there are still millions of workers who appear to be victims of wage theft and that their losses are substantial.

## Additional tables

Appendix Table A3 shows the full demographic and wage statistics for the minimum-wageeligible workforce and workers suffering minimum wage violations in the 10 states studied. Appendix Tables A4 through A13 show the same statistics for each individual state.

## Strinhary statistics on minimum wage violations in the 10 most populous states

|  | Minimum-w work | ge-eligible ers | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 59,014,000 | 100.0\% | 2,422,000 | 4.1\% | 100.0\% | \$1.88 | \$64 | \$3,300 | \$8,002,000,000 | \$203 | \$10,500 | \$25,500,000,000 | 23.9\% |
| Low-wage earners | 14,094,000 | 23.9\% | 2,422,000 | 17.2\% | 100.0\% | \$1.88 | \$64 | \$3,300 | \$8,002,000,000 | \$203 | \$10,500 | \$25,500,000,000 | 23.9\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 31,521,000 | 53.4\% | 1,088,000 | 3.5\% | 44.9\% | \$1.78 | \$64 | \$3,300 | \$3,624,000,000 | \$216 | \$11,300 | \$12,200,000,000 | 22.8\% |
| Women | 27,493,000 | 46.6\% | 1,334,000 | 4.9\% | 55.1\% | \$1.95 | \$63 | \$3,300 | \$4,378,000,000 | \$191 | \$9,900 | \$13,300,000,000 | 24.8\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 2,031,000 | 3.4\% | 276,000 | 13.6\% | 11.4\% | \$1.26 | \$31 | \$1,600 | \$439,000,000 | \$151 | \$7,900 | \$2,200,000,000 | 16.8\% |
| 20 and over | 56,983,000 | 96.6\% | 2,145,000 | 3.8\% | 88.6\% | \$1.95 | \$68 | \$3,500 | \$7,564,000,000 | \$209 | \$10,900 | \$23,300,000,000 | 24.5\% |
| 16-24 | 8,607,000 | 14.6\% | 791,000 | 9.2\% | 32.7\% | \$1.69 | \$50 | \$2,600 | \$2,060,000,000 | \$173 | \$9,000 | \$7,100,000,000 | 22.5\% |
| 25-54 | 39,012,000 | 66.1\% | 1,240,000 | 3.2\% | 51.2\% | \$1.95 | \$70 | \$3,600 | \$4,524,000,000 | \$221 | \$11,500 | \$14,300,000,000 | 24.1\% |
| 55-85 | 11,395,000 | 19.3\% | 390,000 | 3.4\% | 16.1\% | \$2.00 | \$70 | \$3,600 | \$1,418,000,000 | \$204 | \$10,600 | \$4,100,000,000 | 25.5\% |


| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | $32,872,000$ | $55.7 \%$ | $1,141,000$ | $3.5 \%$ | $47.1 \%$ | $\$ 2.04$ | $\$ 67$ | $\$ 3,500$ | $\$ 3,966,000,000$ | $\$ 186$ |
| Black | $7,205,000$ | $12.2 \%$ | 353,000 | $4.9 \%$ | $14.6 \%$ | $\$ 9,700$ | $\$ 11,000,000,000$ | $26.5 \%$ |  |  |
| Hispanic | $13,834,000$ | $23.4 \%$ | 708,000 | $5.1 \%$ | $29.2 \%$ | $\$ 1.69$ | $\$ 55$ | $\$ 2,900$ | $\$ 1,013,000,000$ | $\$ 203$ |
| Other | $5,103,000$ | $8.6 \%$ | 220,000 | $4.3 \%$ | $9.1 \%$ | $\$ 10,600$ | $\$ 3,700,000,000$ | $21.4 \%$ |  |  |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Married parent | 15,139,000 | 25.7\% | 417,000 | 2.8\% | 17.2\% | \$1.92 | \$70 | \$3,600 | \$1,519,000,000 | \$229 | \$11,900 | \$5,000,000,000 | 23.5\% |
| Single parent | 4,713,000 | 8.0\% | 223,000 | 4.7\% | 9.2\% | \$2.06 | \$69 | \$3,600 | \$800,000,000 | \$204 | \$10,600 | \$2,400,000,000 | 25.3\% |
| Married, no kids | 15,246,000 | 25.8\% | 451,000 | 3.0\% | 18.6\% | \$1.95 | \$71 | \$3,700 | \$1,675,000,000 | \$219 | \$11,400 | \$5,100,000,000 | 24.6\% |
| Unmarried, no kids | 23,916,000 | 40.5\% | 1,331,000 | 5.6\% | 55.0\% | \$1.80 | \$58 | \$3,000 | \$4,008,000,000 | \$189 | \$9,800 | \$13,100,000,000 | 23.5\% |


| Family income |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Less than $\mathbf{\$ 1 0 , 0 0 0}$ | $2,186,000$ | $3.7 \%$ | 185,000 | $8.4 \%$ | $7.6 \%$ | $\$ 1.99$ | $\$ 68$ | $\$ 3,500$ | $\$ 649,000,000$ | $\$ 196$ | $\$ 10,200$ | $\$ 1,900,000,000$ |
| $\mathbf{\$ 1 0 , 0 0 0 - \$ 2 4 , 9 9 9}$ | $6,991,000$ | $11.8 \%$ | 512,000 | $7.3 \%$ | $21.2 \%$ | $\$ 1.83$ | $\$ 62$ | $\$ 3,200$ | $\$ 1,662,000,000$ | $\$ 207$ | $\$ 10,800$ | $\$ 5,500,000,000$ |


| Appendix Table A3 (cont.) <br> Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 9,707,000 | 16.4\% | 478,000 | 4.9\% | 19.7\% | \$1.81 | \$62 | \$3,200 | \$1,546,000,000 | \$208 | \$10,800 | \$5,200,000,000 | 23.0\% |
| \$40,000-\$59,999 | 10,630,000 | 18.0\% | 415,000 | 3.9\% | 17.1\% | \$1.85 | \$64 | \$3,300 | \$1,377,000,000 | \$208 | \$10,800 | \$4,500,000,000 | 23.5\% |
| \$60,000-\$99,999 | 15,051,000 | 25.5\% | 470,000 | 3.1\% | 19.4\% | \$1.86 | \$62 | \$3,200 | \$1,528,000,000 | \$201 | \$10,400 | \$4,900,000,000 | 23.7\% |
| \$100,000-\$149,999 | 8,178,000 | 13.9\% | 205,000 | 2.5\% | 8.5\% | \$1.94 | \$62 | \$3,200 | \$664,000,000 | \$189 | \$9,800 | \$2,000,000,000 | 24.9\% |
| \$150,000 or more | 6,272,000 | 10.6\% | 157,000 | 2.5\% | 6.5\% | \$2.07 | \$71 | \$3,700 | \$577,000,000 | \$186 | \$9,700 | \$1,500,000,000 | 27.6\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 3,570,000 | 6.0\% | 77,000 | 2.2\% | 3.2\% | \$1.85 | \$70 | \$3,700 | \$283,000,000 | \$237 | \$12,300 | \$1,000,000,000 | 22.9\% |
| Manufacturing | 6,760,000 | 11.5\% | 130,000 | 1.9\% | 5.4\% | \$1.84 | \$68 | \$3,600 | \$461,000,000 | \$236 | \$12,300 | \$1,600,000,000 | 22.4\% |
| Retail | 7,582,000 | 12.8\% | 358,000 | 4.7\% | 14.8\% | \$1.25 | \$41 | \$2,100 | \$763,000,000 | \$208 | \$10,800 | \$3,900,000,000 | 16.4\% |
| Agriculture, forestry, and fishing | 467,000 | 0.8\% | 43,000 | 9.1\% | 1.8\% | \$1.65 | \$71 | \$3,700 | \$157,000,000 | \$276 | \$14,400 | \$600,000,000 | 20.4\% |
| Wholesale | 1,659,000 | 2.8\% | 41,000 | 2.5\% | 1.7\% | \$1.58 | \$62 | \$3,200 | \$131,000,000 | \$254 | \$13,200 | \$500,000,000 | 19.5\% |
| Transportation and utilities | 3,456,000 | 5.9\% | 96,000 | 2.8\% | 4.0\% | \$1.77 | \$72 | \$3,800 | \$362,000,000 | \$253 | \$13,100 | \$1,300,000,000 | 22.3\% |
| Information | 1,323,000 | 2.2\% | 36,000 | 2.7\% | 1.5\% | \$2.03 | \$64 | \$3,400 | \$122,000,000 | \$167 | \$8,700 | \$300,000,000 | 27.9\% |
| Financial activities | 3,625,000 | 6.1\% | 84,000 | 2.3\% | 3.5\% | \$2.25 | \$83 | \$4,300 | \$362,000,000 | \$209 | \$10,900 | \$900,000,000 | 28.5\% |
| Professional and business | 6,432,000 | 10.9\% | 192,000 | 3.0\% | 7.9\% | \$1.81 | \$64 | \$3,300 | \$635,000,000 | \$223 | \$11,600 | \$2,200,000,000 | 22.2\% |
| Education and health | 12,027,000 | 20.4\% | 324,000 | 2.7\% | 13.4\% | \$1.90 | \$64 | \$3,300 | \$1,073,000,000 | \$202 | \$10,500 | \$3,400,000,000 | 23.9\% |
| Food and drink service | 4,394,000 | 7.4\% | 627,000 | 14.3\% | 25.9\% | \$2.21 | \$68 | \$3,500 | \$2,209,000,000 | \$168 | \$8,700 | \$5,500,000,000 | 28.8\% |
| Other leisure and hospitality | 1,840,000 | 3.1\% | 124,000 | 6.8\% | 5.1\% | \$1.72 | \$60 | \$3,100 | \$388,000,000 | \$194 | \$10,100 | \$1,300,000,000 | 23.6\% |
| Other industries | 5,880,000 | 10.0\% | 289,000 | 4.9\% | 12.0\% | \$2.01 | \$70 | \$3,700 | \$1,057,000,000 | \$205 | \$10,700 | \$3,100,000,000 | 25.5\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 6,935,000 | 11.8\% | 98,000 | 1.4\% | 4.1\% | \$2.74 | \$115 | \$6,000 | \$589,000,000 | \$211 | \$11,000 | \$1,100,000,000 | 35.3\% |
| Professional | 11,630,000 | 19.7\% | 192,000 | 1.6\% | 7.9\% | \$2.26 | \$78 | \$4,100 | \$778,000,000 | \$200 | \$10,400 | \$2,000,000,000 | 28.0\% |
| Service | 11,704,000 | 19.8\% | 1,126,000 | 9.6\% | 46.5\% | \$2.05 | \$66 | \$3,400 | \$3,849,000,000 | \$187 | \$9,700 | \$10,900,000,000 | 26.0\% |
| Sales | 6,970,000 | 11.8\% | 364,000 | 5.2\% | 15.0\% | \$1.37 | \$46 | \$2,400 | \$877,000,000 | \$206 | \$10,700 | \$3,900,000,000 | 18.4\% |
| Office and | 7,674,000 | 13.0\% | 197,000 | 2.6\% | 8.1\% | \$1.46 | \$44 | \$2,300 | \$447,000,000 | \$203 | \$10,500 | \$2,100,000,000 | 17.7\% |


| Appendix Table A3 (cont.) <br> Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | 351,000 | 0.6\% | 41,000 | 11.6\% | 1.7\% | \$1.70 | \$77 | \$4,000 | \$164,000,000 | \$281 | \$14,600 | \$600,000,000 | 21.6\% |
| Construction and extraction | 3,090,000 | 5.2\% | 73,000 | 2.4\% | 3.0\% | \$1.73 | \$65 | \$3,400 | \$249,000,000 | \$241 | \$12,500 | \$900,000,000 | 21.3\% |
| Installation, maintenance, and repairs | 2,281,000 | 3.9\% | 39,000 | 1.7\% | 1.6\% | \$2.06 | \$82 | \$4,300 | \$167,000,000 | \$219 | \$11,400 | \$400,000,000 | 27.2\% |
| Production | 4,030,000 | 6.8\% | 104,000 | 2.6\% | 4.3\% | \$1.71 | \$61 | \$3,200 | \$330,000,000 | \$234 | \$12,200 | \$1,300,000,000 | 20.7\% |
| Transportation | 4,350,000 | 7.4\% | 188,000 | 4.3\% | 7.8\% | \$1.53 | \$56 | \$2,900 | \$552,000,000 | \$235 | \$12,200 | \$2,300,000,000 | 19.4\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 3,156,000 | 5.3\% | 307,000 | 9.7\% | 12.7\% | \$1.54 | \$20 | \$1,100 | \$323,000,000 | \$85 | \$4,400 | \$1,400,000,000 | 19.2\% |
| Mid time (20-34 hours) | 8,817,000 | 14.9\% | 844,000 | 9.6\% | 34.9\% | \$1.88 | \$48 | \$2,500 | \$2,101,000,000 | \$158 | \$8,200 | \$6,900,000,000 | 23.2\% |
| Full time (35+ hours) | 47,042,000 | 79.7\% | 1,271,000 | 2.7\% | 52.5\% | \$1.95 | \$84 | \$4,400 | \$5,578,000,000 | \$261 | \$13,500 | \$17,200,000,000 | 24.5\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 6,281,000 | 10.6\% | 559,000 | 8.9\% | 23.1\% | \$1.49 | \$51 | \$2,700 | \$1,482,000,000 | \$212 | \$11,000 | \$6,200,000,000 | 19.4\% |
| High school | 16,789,000 | 28.4\% | 752,000 | 4.5\% | 31.1\% | \$1.83 | \$63 | \$3,300 | \$2,451,000,000 | \$206 | \$10,700 | \$8,100,000,000 | 23.3\% |
| Some college | 18,152,000 | 30.8\% | 772,000 | 4.3\% | 31.9\% | \$2.02 | \$65 | \$3,400 | \$2,630,000,000 | \$191 | \$9,900 | \$7,700,000,000 | 25.5\% |
| Bachelor's degree or higher | 17,791,000 | 30.1\% | 338,000 | 1.9\% | 14.0\% | \$2.30 | \$82 | \$4,300 | \$1,439,000,000 | \$207 | \$10,700 | \$3,600,000,000 | 28.4\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 45,934,000 | 77.8\% | 1,731,000 | 3.8\% | 71.5\% | \$1.92 | \$63 | \$3,300 | \$5,657,000,000 | \$189 | \$9,900 | \$17,100,000,000 | 24.9\% |
| Foreign born | 13,080,000 | 22.2\% | 691,000 | 5.3\% | 28.5\% | \$1.76 | \$65 | \$3,400 | \$2,345,000,000 | \$235 | \$12,200 | \$8,500,000,000 | 21.7\% |
| U.S.-born citizen | 46,500,000 | 78.8\% | 1,750,000 | 3.8\% | 72.3\% | \$1.92 | \$63 | \$3,300 | \$5,705,000,000 | \$190 | \$9,900 | \$17,300,000,000 | 24.8\% |
| Naturalized U.S. citizen | 5,786,000 | 9.8\% | 236,000 | 4.1\% | 9.7\% | \$1.87 | \$69 | \$3,600 | \$842,000,000 | \$230 | \$12,000 | \$2,800,000,000 | 23.0\% |
| Not a U.S. citizen | 6,728,000 | 11.4\% | 436,000 | 6.5\% | 18.0\% | \$1.71 | \$64 | \$3,300 | \$1,455,000,000 | \$239 | \$12,400 | \$5,400,000,000 | 21.2\% |


| Appendix Table A3 (cont.) <br> Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | $\qquad$ | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Union status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Union covered | 615,000 | 1.0\% | 14,000 | 2.3\% | 0.6\% | \$1.63 | \$46 | \$2,400 | \$34,000,000 | \$217 | \$11,300 | \$200,000,000 | 17.4\% |
| Not union covered | 51,596,000 | 87.4\% | 2,288,000 | 4.4\% | 94.5\% | \$1.88 | \$63 | \$3,300 | \$7,551,000,000 | \$201 | \$10,500 | \$23,900,000,000 | 24.0\% |
| Union status not available | 6,804,000 | 11.5\% | 120,000 | 1.8\% | 4.9\% | \$1.82 | \$67 | \$3,500 | \$417,000,000 | \$229 | \$11,900 | \$1,400,000,000 | 22.7\% |
| State |  |  |  |  |  |  |  |  |  |  |  |  |  |
| California | 14,569,000 | 24.7\% | 590,000 | 4.1\% | 24.4\% | \$1.88 | \$64 | \$3,400 | \$1,979,000,000 | \$224 | \$11,700 | \$6,900,000,000 | 22.3\% |
| Florida | 5,515,000 | 9.3\% | 404,000 | 7.3\% | 16.7\% | \$1.57 | \$54 | \$2,800 | \$1,124,000,000 | \$213 | \$11,100 | \$4,500,000,000 | 20.1\% |
| Georgia | 3,769,000 | 6.4\% | 82,000 | 2.2\% | 3.4\% | \$1.94 | \$71 | \$3,700 | \$301,000,000 | \$203 | \$10,600 | \$900,000,000 | 25.9\% |
| Illinois | 5,185,000 | 8.8\% | 243,000 | 4.7\% | 10.0\% | \$1.62 | \$53 | \$2,800 | \$675,000,000 | \$205 | \$10,700 | \$2,600,000,000 | 20.6\% |
| Michigan | 2,861,000 | 4.8\% | 130,000 | 4.5\% | 5.4\% | \$2.05 | \$63 | \$3,300 | \$429,000,000 | \$169 | \$8,800 | \$1,100,000,000 | 27.3\% |
| New York | 6,047,000 | 10.2\% | 300,000 | 5.0\% | 12.4\% | \$1.82 | \$62 | \$3,200 | \$965,000,000 | \$210 | \$10,900 | \$3,300,000,000 | 22.8\% |
| North Carolina | 3,111,000 | 5.3\% | 84,000 | 2.7\% | 3.5\% | \$2.14 | \$72 | \$3,800 | \$316,000,000 | \$179 | \$9,300 | \$800,000,000 | 28.8\% |
| Ohio | 3,915,000 | 6.6\% | 217,000 | 5.5\% | 9.0\% | \$1.65 | \$53 | \$2,800 | \$601,000,000 | \$185 | \$9,600 | \$2,100,000,000 | 22.4\% |
| Pennsylvania | 4,299,000 | 7.3\% | 107,000 | 2.5\% | 4.4\% | \$2.46 | \$80 | \$4,200 | \$448,000,000 | \$164 | \$8,500 | \$900,000,000 | 32.9\% |
| Texas | 9,743,000 | 16.5\% | 265,000 | 2.7\% | 10.9\% | \$2.38 | \$85 | \$4,400 | \$1,165,000,000 | \$182 | \$9,500 | \$2,500,000,000 | 31.7\% |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Numbers may not add due to rounding. Shares are computed based on
unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in each state.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

## Economic Policy Institute

nSuintmary statistics on minimum wage violations in California

| Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 14,569,000 | 100.0\% | 590,250 | 4.1\% | 100.0\% | \$1.88 | \$64 | \$3,400 | \$1,979,000,000 | \$224 | \$11,700 | \$6,886,000,000 | 22.3\% |
| Low-wage earners | 3,071,000 | 21.1\% | 590,250 | 19.2\% | 100.0\% | \$1.88 | \$64 | \$3,400 | \$1,979,000,000 | \$224 | \$11,700 | \$6,886,000,000 | 22.3\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 7,855,000 | 53.9\% | 273,340 | 3.5\% | 46.3\% | \$1.76 | \$64 | \$3,300 | \$910,000,000 | \$238 | \$12,400 | \$3,388,000,000 | 21.2\% |
| Women | 6,714,000 | 46.1\% | 316,910 | 4.7\% | 53.7\% | \$1.98 | \$65 | \$3,400 | \$1,069,000,000 | \$212 | \$11,000 | \$3,498,000,000 | 23.4\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 376,000 | 2.6\% | 49,640 | 13.2\% | 8.4\% | \$1.32 | \$31 | \$1,600 | \$80,000,000 | \$174 | \$9,100 | \$450,000,000 | 15.2\% |
| 20 and over | 14,193,000 | 97.4\% | 540,610 | 3.8\% | 91.6\% | \$1.93 | \$68 | \$3,500 | \$1,898,000,000 | \$229 | \$11,900 | \$6,437,000,000 | 22.8\% |
| 16-24 | 1,988,000 | 13.6\% | 183,400 | 9.2\% | 31.1\% | \$1.75 | \$51 | \$2,700 | \$487,000,000 | \$193 | \$10,000 | \$1,841,000,000 | 20.9\% |
| 25-54 | 9,878,000 | 67.8\% | 311,750 | 3.2\% | 52.8\% | \$1.88 | \$69 | \$3,600 | \$1,121,000,000 | \$243 | \$12,700 | \$3,946,000,000 | 22.1\% |
| 55-85 | 2,703,000 | 18.6\% | 95,100 | 3.5\% | 16.1\% | \$2.13 | \$75 | \$3,900 | \$371,000,000 | \$222 | \$11,600 | \$1,100,000,000 | 25.2\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 5,784,000 | 39.7\% | 168,980 | 2.9\% | 28.6\% | \$2.23 | \$75 | \$3,900 | \$663,000,000 | \$209 | \$10,900 | \$1,834,000,000 | 26.5\% |
| Black | 730,000 | 5.0\% | 41,950 | 5.7\% | 7.1\% | \$1.65 | \$51 | \$2,600 | \$111,000,000 | \$220 | \$11,400 | \$480,000,000 | 18.7\% |
| Hispanic | 5,498,000 | 37.7\% | 283,270 | 5.2\% | 48.0\% | \$1.64 | \$58 | \$3,000 | \$849,000,000 | \$238 | \$12,400 | \$3,510,000,000 | 19.5\% |
| Other | 2,557,000 | 17.5\% | 96,050 | 3.8\% | 16.3\% | \$2.08 | \$71 | \$3,700 | \$356,000,000 | \$213 | \$11,100 | \$1,063,000,000 | 25.1\% |
| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married parent | 4,051,000 | 27.8\% | 112,030 | 2.8\% | 19.0\% | \$1.82 | \$67 | \$3,500 | \$390,000,000 | \$249 | \$13,000 | \$1,451,000,000 | 21.2\% |
| Single parent | 1,039,000 | 7.1\% | 48,620 | 4.7\% | 8.2\% | \$1.57 | \$58 | \$3,000 | \$147,000,000 | \$253 | \$13,200 | \$640,000,000 | 18.7\% |
| Married, no kids | 3,621,000 | 24.9\% | 111,220 | 3.1\% | 18.8\% | \$2.14 | \$77 | \$4,000 | \$445,000,000 | \$231 | \$12,000 | \$1,334,000,000 | 25.0\% |
| Unmarried, no kids | 5,858,000 | 40.2\% | 318,380 | 5.4\% | 53.9\% | \$1.86 | \$60 | \$3,100 | \$996,000,000 | \$209 | \$10,900 | \$3,461,000,000 | 22.3\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 515,000 | 3.5\% | 44,120 | 8.6\% | 7.5\% | \$2.04 | \$69 | \$3,600 | \$158,000,000 | \$211 | \$11,000 | \$484,000,000 | 24.6\% |
| \$10,000-\$24,999 | 1,557,000 | 10.7\% | 120,060 | 7.7\% | 20.3\% | \$1.91 | \$67 | \$3,500 | \$416,000,000 | \$224 | \$11,700 | \$1,399,000,000 | 22.9\% |


| Appendix Table A4 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 2,179,000 | 15.0\% | 114,000 | 5.2\% | 19.3\% | \$1.57 | \$54 | \$2,800 | \$321,000,000 | \$239 | \$12,400 | \$1,418,000,000 | 18.5\% |
| \$40,000-\$59,999 | 2,287,000 | 15.7\% | 95,200 | 4.2\% | 16.1\% | \$1.76 | \$62 | \$3,200 | \$306,000,000 | \$240 | \$12,500 | \$1,188,000,000 | 20.5\% |
| \$60,000-\$99,999 | 3,552,000 | 24.4\% | 107,380 | 3.0\% | 18.2\% | \$1.99 | \$69 | \$3,600 | \$385,000,000 | \$219 | \$11,400 | \$1,222,000,000 | 24.0\% |
| \$100,000-\$149,999 | 2,227,000 | 15.3\% | 55,640 | 2.5\% | 9.4\% | \$1.90 | \$65 | \$3,400 | \$188,000,000 | \$214 | \$11,100 | \$619,000,000 | 23.3\% |
| \$150,000 or more | 2,252,000 | 15.5\% | 53,860 | 2.4\% | 9.1\% | \$2.33 | \$73 | \$3,800 | \$204,000,000 | \$198 | \$10,300 | \$556,000,000 | 26.9\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 805,000 | 5.5\% | 15,320 | 1.9\% | 2.6\% | \$1.82 | \$72 | \$3,800 | \$57,000,000 | \$262 | \$13,600 | \$209,000,000 | 21.6\% |
| Manufacturing | 1,526,000 | 10.5\% | 40,140 | 2.6\% | 6.8\% | \$1.96 | \$74 | \$3,800 | \$154,000,000 | \$244 | \$12,700 | \$509,000,000 | 23.2\% |
| Retail | 1,669,000 | 11.5\% | 81,650 | 4.9\% | 13.8\% | \$1.55 | \$49 | \$2,500 | \$207,000,000 | \$224 | \$11,600 | \$951,000,000 | 17.9\% |
| Agriculture, forestry, and fishing | 276,000 | 1.9\% | 29,360 | 10.7\% | 5.0\% | \$1.69 | \$66 | \$3,500 | \$101,000,000 | \$277 | \$14,400 | \$422,000,000 | 19.4\% |
| Wholesale | 394,000 | 2.7\% | 9,670 | 2.5\% | 1.6\% | \$1.46 | \$53 | \$2,700 | \$27,000,000 | \$270 | \$14,100 | \$136,000,000 | 16.4\% |
| Transportation and utilities | 757,000 | 5.2\% | 23,870 | 3.2\% | 4.0\% | \$1.53 | \$58 | \$3,000 | \$72,000,000 | \$262 | \$13,600 | \$325,000,000 | 18.1\% |
| Information | 424,000 | 2.9\% | 10,150 | 2.4\% | 1.7\% | \$2.46 | \$82 | \$4,300 | \$44,000,000 | \$195 | \$10,200 | \$103,000,000 | 29.7\% |
| Financial activities | 878,000 | 6.0\% | 21,290 | 2.4\% | 3.6\% | \$2.61 | \$93 | \$4,800 | \$103,000,000 | \$211 | \$11,000 | \$233,000,000 | 30.5\% |
| Professional and business | 1,798,000 | 12.3\% | 56,710 | 3.2\% | 9.6\% | \$1.92 | \$69 | \$3,600 | \$204,000,000 | \$241 | \$12,600 | \$712,000,000 | 22.3\% |
| Education and health | 3,091,000 | 21.2\% | 97,000 | 3.1\% | 16.4\% | \$2.09 | \$70 | \$3,600 | \$352,000,000 | \$209 | \$10,900 | \$1,055,000,000 | 25.0\% |
| Food or drink service | 958,000 | 6.6\% | 87,630 | 9.1\% | 14.8\% | \$1.79 | \$55 | \$2,900 | \$251,000,000 | \$195 | \$10,100 | \$888,000,000 | 22.0\% |
| Other leisure and hospitality | 504,000 | 3.5\% | 28,370 | 5.6\% | 4.8\% | \$1.59 | \$49 | \$2,500 | \$72,000,000 | \$210 | \$10,900 | \$310,000,000 | 18.9\% |
| Other industries | 1,491,000 | 10.2\% | 89,090 | 6.0\% | 15.1\% | \$2.05 | \$72 | \$3,800 | \$336,000,000 | \$223 | \$11,600 | \$1,034,000,000 | 24.5\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 2,162,000 | 14.8\% | 32,580 | 1.5\% | 5.5\% | \$2.91 | \$114 | \$5,900 | \$193,000,000 | \$217 | \$11,300 | \$368,000,000 | 34.5\% |
| Professional | 3,291,000 | 22.6\% | 64,590 | 2.0\% | 10.9\% | \$2.42 | \$80 | \$4,200 | \$269,000,000 | \$207 | \$10,800 | \$694,000,000 | 27.9\% |
| Service | 2,717,000 | 18.6\% | 231,170 | 8.5\% | 39.2\% | \$1.88 | \$62 | \$3,200 | \$750,000,000 | \$216 | \$11,200 | \$2,593,000,000 | 22.4\% |
| Sales | 1,480,000 | 10.2\% | 88,140 | 6.0\% | 14.9\% | \$1.61 | \$54 | \$2,800 | \$245,000,000 | \$219 | \$11,400 | \$1,004,000,000 | 19.6\% |
| Office and | 1,889,000 | 13.0\% | 44,370 | 2.3\% | 7.5\% | \$1.71 | \$47 | \$2,500 | \$109,000,000 | \$204 | \$10,600 | \$470,000,000 | 18.9\% |


| Appendix Table A4 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | 213,000 | 1.5\% | 26,140 | 12.3\% | 4.4\% | \$1.65 | \$66 | \$3,400 | \$89,000,000 | \$285 | \$14,800 | \$388,000,000 | 18.7\% |
| Construction and extraction | 655,000 | 4.5\% | 13,890 | 2.1\% | 2.4\% | \$1.32 | \$53 | \$2,800 | \$38,000,000 | \$272 | \$14,200 | \$197,000,000 | 16.3\% |
| Installation, maintenance, and repairs | 453,000 | 3.1\% | 12,830 | 2.8\% | 2.2\% | \$2.02 | \$77 | \$4,000 | \$51,000,000 | \$227 | \$11,800 | \$151,000,000 | 25.3\% |
| Production | 805,000 | 5.5\% | 33,380 | 4.1\% | 5.7\% | \$1.81 | \$67 | \$3,500 | \$116,000,000 | \$253 | \$13,100 | \$438,000,000 | 20.9\% |
| Transportation | 902,000 | 6.2\% | 43,180 | 4.8\% | 7.3\% | \$1.37 | \$52 | \$2,700 | \$118,000,000 | \$260 | \$13,500 | \$583,000,000 | 16.8\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 770,000 | 5.3\% | 66,920 | 8.7\% | 11.3\% | \$1.58 | \$20 | \$1,100 | \$71,000,000 | \$94 | \$4,900 | \$326,000,000 | 17.8\% |
| Mid time (20-34 hours) | 2,250,000 | 15.4\% | 203,600 | 9.0\% | 34.5\% | \$1.80 | \$44 | \$2,300 | \$470,000,000 | \$176 | \$9,200 | \$1,867,000,000 | 20.1\% |
| Full time (35+ hours) | 11,548,000 | 79.3\% | 319,740 | 2.8\% | 54.2\% | \$2.00 | \$86 | \$4,500 | \$1,438,000,000 | \$282 | \$14,700 | \$4,693,000,000 | 23.5\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 1,822,000 | 12.5\% | 164,160 | 9.0\% | 27.8\% | \$1.55 | \$55 | \$2,900 | \$471,000,000 | \$242 | \$12,600 | \$2,069,000,000 | 18.5\% |
| High school | 3,241,000 | 22.2\% | 156,570 | 4.8\% | 26.5\% | \$1.88 | \$65 | \$3,400 | \$530,000,000 | \$225 | \$11,700 | \$1,830,000,000 | 22.5\% |
| Some college | 4,336,000 | 29.8\% | 181,960 | 4.2\% | 30.8\% | \$1.94 | \$64 | \$3,300 | \$602,000,000 | \$210 | \$10,900 | \$1,985,000,000 | 23.3\% |
| Bachelor's degree or higher | 5,170,000 | 35.5\% | 87,560 | 1.7\% | 14.8\% | \$2.38 | \$83 | \$4,300 | \$376,000,000 | \$220 | \$11,400 | \$1,002,000,000 | 27.3\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 9,569,000 | 65.7\% | 339,780 | 3.6\% | 57.6\% | \$1.89 | \$62 | \$3,200 | \$1,091,000,000 | \$211 | \$11,000 | \$3,721,000,000 | 22.7\% |
| Foreign born | 5,000,000 | 34.3\% | 250,470 | 5.0\% | 42.4\% | \$1.87 | \$68 | \$3,500 | \$888,000,000 | \$243 | \$12,600 | \$3,166,000,000 | 21.9\% |
| U.S.-born citizen | 9,735,000 | 66.8\% | 344,380 | 3.5\% | 58.3\% | \$1.89 | \$62 | \$3,200 | \$1,105,000,000 | \$211 | \$11,000 | \$3,784,000,000 | 22.6\% |
| Naturalized U.S. citizen | 2,398,000 | 16.5\% | 91,930 | 3.8\% | 15.6\% | \$2.21 | \$77 | \$4,000 | \$370,000,000 | \$223 | \$11,600 | \$1,067,000,000 | 25.7\% |
| Not a U.S. citizen | 2,435,000 | 16.7\% | 153,940 | 6.3\% | 26.1\% | \$1.67 | \$63 | \$3,300 | \$505,000,000 | \$254 | \$13,200 | \$2,035,000,000 | 19.9\% |

AppenNixte.ạlethear annual wages are calculated by multiplying weekly wages by 52 weeks per year. Numbers may not add due to rounding. Shares are computed based A4 (coßち)unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## Sunhmary statistics on minimum wage violations in Florida

|  | Minimumwor | ge-eligible ers | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 5,515,000 | 100.0\% | 404,040 | 7.3\% | 100.0\% | \$1.57 | \$54 | \$2,800 | \$1,124,000,000 | \$213 | \$11,100 | \$4,465,000,000 | 20.1\% |
| Low-wage earners | 1,623,000 | 29.4\% | 404,040 | 24.9\% | 100.0\% | \$1.57 | \$54 | \$2,800 | \$1,124,000,000 | \$213 | \$11,100 | \$4,465,000,000 | 20.1\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 2,931,000 | 53.1\% | 186,210 | 6.4\% | 46.1\% | \$1.60 | \$55 | \$2,900 | \$537,000,000 | \$218 | \$11,300 | \$2,113,000,000 | 20.3\% |
| Women | 2,584,000 | 46.9\% | 217,830 | 8.4\% | 53.9\% | \$1.55 | \$52 | \$2,700 | \$587,000,000 | \$208 | \$10,800 | \$2,353,000,000 | 20.0\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 209,000 | 3.8\% | 54,940 | 26.3\% | 13.6\% | \$0.88 | \$20 | \$1,100 | \$58,000,000 | \$166 | \$8,600 | \$474,000,000 | 10.9\% |
| 20 and over | 5,306,000 | 96.2\% | 349,100 | 6.6\% | 86.4\% | \$1.68 | \$59 | \$3,100 | \$1,066,000,000 | \$220 | \$11,400 | \$3,992,000,000 | 21.1\% |
| 16-24 | 803,000 | 14.6\% | 121,200 | 15.1\% | 30.0\% | \$1.29 | \$39 | \$2,000 | \$245,000,000 | \$188 | \$9,800 | \$1,184,000,000 | 17.1\% |
| 25-54 | 3,572,000 | 64.8\% | 216,710 | 6.1\% | 53.6\% | \$1.72 | \$60 | \$3,100 | \$681,000,000 | \$225 | \$11,700 | \$2,533,000,000 | 21.2\% |
| 55-85 | 1,139,000 | 20.7\% | 66,130 | 5.8\% | 16.4\% | \$1.61 | \$58 | \$3,000 | \$199,000,000 | \$218 | \$11,300 | \$749,000,000 | 21.0\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 3,047,000 | 55.3\% | 195,980 | 6.4\% | 48.5\% | \$1.86 | \$61 | \$3,200 | \$623,000,000 | \$191 | \$9,900 | \$1,947,000,000 | 24.2\% |
| Black | 830,000 | 15.1\% | 72,380 | 8.7\% | 17.9\% | \$1.32 | \$44 | \$2,300 | \$167,000,000 | \$221 | \$11,500 | \$832,000,000 | 16.7\% |
| Hispanic | 1,411,000 | 25.6\% | 116,870 | 8.3\% | 28.9\% | \$1.21 | \$43 | \$2,200 | \$260,000,000 | \$237 | \$12,300 | \$1,443,000,000 | 15.3\% |
| Other | 226,000 | 4.1\% | 18,800 | 8.3\% | 4.7\% | \$1.75 | \$76 | \$4,000 | \$75,000,000 | \$248 | \$12,900 | \$243,000,000 | 23.5\% |
| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married parent | 1,210,000 | 21.9\% | 66,870 | 5.5\% | 16.6\% | \$1.71 | \$64 | \$3,300 | \$223,000,000 | \$237 | \$12,300 | \$825,000,000 | 21.3\% |
| Single parent | 467,000 | 8.5\% | 39,480 | 8.5\% | 9.8\% | \$1.67 | \$54 | \$2,800 | \$111,000,000 | \$215 | \$11,200 | \$441,000,000 | 20.0\% |
| Married, no kids | 1,453,000 | 26.3\% | 75,190 | 5.2\% | 18.6\% | \$1.78 | \$64 | \$3,300 | \$249,000,000 | \$222 | \$11,500 | \$866,000,000 | 22.3\% |
| Unmarried, no kids | 2,385,000 | 43.2\% | 222,490 | 9.3\% | 55.1\% | \$1.44 | \$47 | \$2,400 | \$541,000,000 | \$202 | \$10,500 | \$2,333,000,000 | 18.8\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 219,000 | 4.0\% | 33,350 | 15.2\% | 8.3\% | \$1.69 | \$51 | \$2,700 | \$89,000,000 | \$205 | \$10,600 | \$355,000,000 | 20.1\% |
| \$10,000-\$24,999 | 850,000 | 15.4\% | 95,890 | 11.3\% | 23.7\% | \$1.37 | \$48 | \$2,500 | \$239,000,000 | \$221 | \$11,500 | \$1,104,000,000 | 17.8\% |


| Appendix Table | Minimum-w wor | ge-eligible ers |  |  |  |  | gible workers ex | periencing minim | um wage violat | ons |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 1,097,000 | 19.9\% | 84,770 | 7.7\% | 21.0\% | \$1.41 | \$48 | \$2,500 | \$212,000,000 | \$221 | \$11,500 | \$976,000,000 | 17.8\% |
| \$40,000-\$59,999 | 1,169,000 | 21.2\% | 66,350 | 5.7\% | 16.4\% | \$1.66 | \$58 | \$3,000 | \$199,000,000 | \$208 | \$10,800 | \$718,000,000 | 21.7\% |
| \$60,000-\$99,999 | 1,300,000 | 23.6\% | 76,890 | 5.9\% | 19.0\% | \$1.72 | \$59 | \$3,100 | \$237,000,000 | \$211 | \$11,000 | \$843,000,000 | 21.9\% |
| \$100,000-\$149,999 | 583,000 | 10.6\% | 25,470 | 4.4\% | 6.3\% | \$1.74 | \$56 | \$2,900 | \$75,000,000 | \$199 | \$10,400 | \$264,000,000 | 22.1\% |
| \$150,000 or more | 297,000 | 5.4\% | 21,310 | 7.2\% | 5.3\% | \$1.92 | \$66 | \$3,400 | \$73,000,000 | \$186 | \$9,700 | \$206,000,000 | 26.3\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 385,000 | 7.0\% | 17,440 | 4.5\% | 4.3\% | \$1.40 | \$50 | \$2,600 | \$45,000,000 | \$237 | \$12,300 | \$215,000,000 | 17.3\% |
| Manufacturing | 305,000 | 5.5\% | 15,790 | 5.2\% | 3.9\% | \$1.21 | \$41 | \$2,100 | \$34,000,000 | \$265 | \$13,800 | \$218,000,000 | 13.4\% |
| Retail | 929,000 | 16.8\% | 71,750 | 7.7\% | 17.8\% | \$0.90 | \$28 | \$1,400 | \$104,000,000 | \$212 | \$11,000 | \$792,000,000 | 11.6\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 167,000 | 3.0\% | 9,830 | 5.9\% | 2.4\% | \$0.97 | \$40 | \$2,100 | \$21,000,000 | \$295 | \$15,300 | \$151,000,000 | 12.0\% |
| Transportation and utilities | 334,000 | 6.1\% | 11,330 | 3.4\% | 2.8\% | \$1.62 | \$68 | \$3,500 | \$40,000,000 | \$267 | \$13,900 | \$157,000,000 | 20.2\% |
| Information | 100,000 | 1.8\% | 4,710 | 4.7\% | 1.2\% | \$1.91 | \$61 | \$3,200 | \$15,000,000 | \$158 | \$8,200 | \$39,000,000 | 27.8\% |
| Financial activities | 323,000 | 5.9\% | 15,020 | 4.6\% | 3.7\% | \$2.15 | \$87 | \$4,500 | \$68,000,000 | \$223 | \$11,600 | \$174,000,000 | 28.2\% |
| Professional and business | 625,000 | 11.3\% | 43,380 | 6.9\% | 10.7\% | \$1.69 | \$60 | \$3,100 | \$135,000,000 | \$222 | \$11,600 | \$501,000,000 | 21.2\% |
| Education and health | 891,000 | 16.2\% | 29,970 | 3.4\% | 7.4\% | \$1.67 | \$57 | \$3,000 | \$89,000,000 | \$207 | \$10,800 | \$322,000,000 | 21.7\% |
| Food or drink service | 541,000 | 9.8\% | 108,670 | 20.1\% | 26.9\% | \$1.86 | \$60 | \$3,100 | \$342,000,000 | \$195 | \$10,100 | \$1,100,000,000 | 23.7\% |
| Other leisure and hospitality | 312,000 | 5.7\% | 29,110 | 9.3\% | 7.2\% | \$1.39 | \$51 | \$2,600 | \$77,000,000 | \$205 | \$10,700 | \$311,000,000 | 19.8\% |
| Other industries | 592,000 | 10.7\% | 46,130 | 7.8\% | 11.4\% | \$1.96 | \$64 | \$3,300 | \$154,000,000 | \$197 | \$10,200 | \$472,000,000 | 24.6\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 393,000 | 7.1\% | 13,940 | 3.5\% | 3.4\% | \$2.78 | \$119 | \$6,200 | \$86,000,000 | \$222 | \$11,500 | \$161,000,000 | 34.8\% |
| Professional | 787,000 | 14.3\% | 15,340 | 2.0\% | 3.8\% | \$2.13 | \$83 | \$4,300 | \$66,000,000 | \$207 | \$10,700 | \$165,000,000 | 28.7\% |
| Service | 1,393,000 | 25.3\% | 200,850 | 14.4\% | 49.7\% | \$1.73 | \$57 | \$3,000 | \$593,000,000 | \$204 | \$10,600 | \$2,134,000,000 | 21.8\% |
| Sales | 918,000 | 16.7\% | 68,930 | 7.5\% | 17.1\% | \$1.10 | \$36 | \$1,900 | \$130,000,000 | \$220 | \$11,400 | \$787,000,000 | 14.2\% |
| Office and | 740,000 | 13.4\% | 33,370 | 4.5\% | 8.3\% | \$1.34 | \$42 | \$2,200 | \$72,000,000 | \$198 | \$10,300 | \$344,000,000 | 17.4\% |


| Appendix Table A5 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | $\qquad$ | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 340,000 | 6.2\% | 16,400 | 4.8\% | 4.1\% | \$1.37 | \$44 | \$2,300 | \$38,000,000 | \$247 | \$12,900 | \$211,000,000 | 15.2\% |
| Installation, maintenance, and repairs | 267,000 | 4.8\% | 7,390 | 2.8\% | 1.8\% | \$2.00 | \$71 | \$3,700 | \$27,000,000 | \$183 | \$9,500 | \$70,000,000 | 28.0\% |
| Production | 247,000 | 4.5\% | 13,150 | 5.3\% | 3.3\% | \$1.08 | \$38 | \$2,000 | \$26,000,000 | \$253 | \$13,200 | \$173,000,000 | 12.9\% |
| Transportation | 422,000 | 7.7\% | 33,790 | 8.0\% | 8.4\% | \$1.33 | \$48 | \$2,500 | \$85,000,000 | \$230 | \$12,000 | \$404,000,000 | 17.4\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time $<$ <20 hours) | 258,000 | 4.7\% | 44,930 | 17.4\% | 11.1\% | \$1.29 | \$18 | \$900 | \$42,000,000 | \$88 | \$4,600 | \$206,000,000 | 17.1\% |
| Mid time (20-34 hours) | 939,000 | 17.0\% | 133,420 | 14.2\% | 33.0\% | \$1.55 | \$40 | \$2,100 | \$277,000,000 | \$166 | \$8,600 | \$1,151,000,000 | 19.4\% |
| Full time (35+ hours) | 4,318,000 | 78.3\% | 225,690 | 5.2\% | 55.9\% | \$1.64 | \$69 | \$3,600 | \$805,000,000 | \$265 | \$13,800 | \$3,108,000,000 | 20.6\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 514,000 | 9.3\% | 84,310 | 16.4\% | 20.9\% | \$1.06 | \$35 | \$1,800 | \$152,000,000 | \$220 | \$11,400 | \$963,000,000 | 13.6\% |
| High school | 1,875,000 | 34.0\% | 149,150 | 8.0\% | 36.9\% | \$1.43 | \$49 | \$2,600 | \$381,000,000 | \$220 | \$11,500 | \$1,710,000,000 | 18.2\% |
| Some college | 1,858,000 | 33.7\% | 121,290 | 6.5\% | 30.0\% | \$1.82 | \$60 | \$3,100 | \$377,000,000 | \$201 | \$10,400 | \$1,265,000,000 | 23.0\% |
| Bachelor's degree or higher | 1,268,000 | 23.0\% | 49,290 | 3.9\% | 12.2\% | \$2.28 | \$84 | \$4,300 | \$214,000,000 | \$206 | \$10,700 | \$527,000,000 | 28.9\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 4,130,000 | 74.9\% | 276,150 | 6.7\% | 68.3\% | \$1.64 | \$54 | \$2,800 | \$773,000,000 | \$199 | \$10,300 | \$2,853,000,000 | 21.3\% |
| Foreign born | 1,384,000 | 25.1\% | 127,890 | 9.2\% | 31.7\% | \$1.43 | \$53 | \$2,700 | \$351,000,000 | \$242 | \$12,600 | \$1,612,000,000 | 17.9\% |
| U.S.-born citizen | 4,187,000 | 75.9\% | 281,200 | 6.7\% | 69.6\% | \$1.63 | \$53 | \$2,800 | \$780,000,000 | \$199 | \$10,400 | \$2,916,000,000 | 21.1\% |
| Naturalized U.S. citizen | 676,000 | 12.3\% | 42,100 | 6.2\% | 10.4\% | \$1.40 | \$53 | \$2,800 | \$116,000,000 | \$246 | \$12,800 | \$539,000,000 | 17.8\% |
| Not a U.S. citizen | 651,000 | 11.8\% | 80,740 | 12.4\% | 20.0\% | \$1.46 | \$54 | \$2,800 | \$228,000,000 | \$241 | \$12,500 | \$1,010,000,000 | 18.4\% |

AppenNixte.ahlif-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliA5 (colab)e estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.
Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## AppendixSałinmary statistics on minimum wage violations in Georgia

A6
Minimum-wage-eligible workers

Eligible workers experiencing minimum wage violations

| Category | Minimum-wage-eligibleworkers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 3,769,000 | 100.0\% | 81,570 | 2.2\% | 100.0\% | \$1.94 | \$71 | \$3,700 | \$301,000,000 | \$203 | \$10,600 | \$862,000,000 | 25.9\% |
| Low-wage earners | 869,000 | 23.0\% | 81,570 | 9.4\% | 100.0\% | \$1.94 | \$71 | \$3,700 | \$301,000,000 | \$203 | \$10,600 | \$862,000,000 | 25.9\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 1,959,000 | 52.0\% | 38,400 | 2.0\% | 47.1\% | \$1.77 | \$72 | \$3,700 | \$144,000,000 | \$218 | \$11,400 | \$436,000,000 | 24.8\% |
| Women | 1,810,000 | 48.0\% | 43,170 | 2.4\% | 52.9\% | \$2.08 | \$70 | \$3,600 | \$157,000,000 | \$190 | \$9,900 | \$426,000,000 | 27.0\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 92,000 | 2.4\% | 2,790 | 3.0\% | 3.4\% | \$1.49 | \$54 | \$2,800 | \$8,000,000 | \$140 | \$7,300 | \$20,000,000 | 27.9\% |
| 20 and over | 3,677,000 | 97.6\% | 78,780 | 2.1\% | 96.6\% | \$1.95 | \$72 | \$3,700 | \$293,000,000 | \$206 | \$10,700 | \$842,000,000 | 25.8\% |
| 16-24 | 453,000 | 12.0\% | 17,130 | 3.8\% | 21.0\% | \$2.22 | \$69 | \$3,600 | \$61,000,000 | \$162 | \$8,400 | \$145,000,000 | 29.8\% |
| 25-54 | 2,644,000 | 70.2\% | 52,230 | 2.0\% | 64.0\% | \$1.83 | \$70 | \$3,700 | \$191,000,000 | \$218 | \$11,400 | \$593,000,000 | 24.3\% |
| 55-85 | 672,000 | 17.8\% | 12,210 | 1.8\% | 15.0\% | \$1.99 | \$77 | \$4,000 | \$49,000,000 | \$196 | \$10,200 | \$125,000,000 | 28.1\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 2,097,000 | 55.7\% | 39,300 | 1.9\% | 48.2\% | \$2.14 | \$84 | \$4,400 | \$172,000,000 | \$207 | \$10,800 | \$423,000,000 | 28.9\% |
| Black | 1,142,000 | 30.3\% | 23,840 | 2.1\% | 29.2\% | \$1.83 | \$64 | \$3,300 | \$79,000,000 | \$194 | \$10,100 | \$241,000,000 | 24.7\% |
| Hispanic | 305,000 | 8.1\% | 10,920 | 3.6\% | 13.4\% | \$1.42 | \$47 | \$2,500 | \$27,000,000 | \$225 | \$11,700 | \$128,000,000 | 17.4\% |
| Other | 224,000 | 5.9\% | 7,510 | 3.4\% | 9.2\% | \$1.94 | \$58 | \$3,000 | \$23,000,000 | \$180 | \$9,400 | \$70,000,000 | 24.4\% |
| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married parent | 1,010,000 | 26.8\% | 19,660 | 1.9\% | 24.1\% | \$1.75 | \$58 | \$3,000 | \$60,000,000 | \$208 | \$10,800 | \$212,000,000 | 22.0\% |
| Single parent | 332,000 | 8.8\% | 7,570 | 2.3\% | 9.3\% | \$2.12 | \$71 | \$3,700 | \$28,000,000 | \$193 | \$10,100 | \$76,000,000 | 26.9\% |
| Married, no kids | 1,024,000 | 27.2\% | 17,700 | 1.7\% | 21.7\% | \$2.09 | \$90 | \$4,700 | \$83,000,000 | \$223 | \$11,600 | \$205,000,000 | 28.8\% |
| Unmarried, no kids | 1,403,000 | 37.2\% | 36,650 | 2.6\% | 44.9\% | \$1.92 | \$68 | \$3,600 | \$130,000,000 | \$194 | \$10,100 | \$369,000,000 | 26.1\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 148,000 | 3.9\% | 6,190 | 4.2\% | 7.6\% | \$1.89 | \$59 | \$3,100 | \$19,000,000 | \$199 | \$10,300 | \$64,000,000 | 22.8\% |


| Appendix Table A6 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$10,000-\$24,999 | 463,000 | 12.3\% | 18,030 | 3.9\% | 22.1\% | \$1.59 | \$66 | \$3,400 | \$61,000,000 | \$236 | \$12,300 | \$222,000,000 | 21.7\% |
| \$25,000-\$39,999 | 645,000 | 17.1\% | 15,950 | 2.5\% | 19.6\% | \$2.02 | \$72 | \$3,800 | \$60,000,000 | \$185 | \$9,600 | \$154,000,000 | 28.0\% |
| \$40,000-\$59,999 | 701,000 | 18.6\% | 16,740 | 2.4\% | 20.5\% | \$2.02 | \$72 | \$3,700 | \$62,000,000 | \$195 | \$10,100 | \$170,000,000 | 26.9\% |
| \$60,000-\$99,999 | 983,000 | 26.1\% | 15,320 | 1.6\% | 18.8\% | \$1.79 | \$62 | \$3,200 | \$49,000,000 | \$200 | \$10,400 | \$160,000,000 | 23.7\% |
| \$100,000-\$149,999 | 497,000 | 13.2\% | 4,070 | 0.8\% | 5.0\% | \$3.93 | \$140 | \$7,300 | \$30,000,000 | \$132 | \$6,800 | \$28,000,000 | 51.6\% |
| \$150,000 or more | 332,000 | 8.8\% | 5,290 | 1.6\% | 6.5\% | \$1.57 | \$70 | \$3,600 | \$19,000,000 | \$241 | \$12,500 | \$66,000,000 | 22.5\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 217,000 | 5.8\% | 3,990 | 1.8\% | 4.9\% | \$1.27 | \$57 | \$3,000 | \$12,000,000 | \$289 | \$15,000 | \$60,000,000 | 16.5\% |
| Manufacturing | 431,000 | 11.4\% | 6,360 | 1.5\% | 7.8\% | \$2.27 | \$93 | \$4,800 | \$31,000,000 | \$208 | \$10,800 | \$69,000,000 | 30.9\% |
| Retail | 464,000 | 12.3\% | 6,390 | 1.4\% | 7.8\% | \$1.33 | \$59 | \$3,100 | \$20,000,000 | \$229 | \$11,900 | \$76,000,000 | 20.6\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 109,000 | 2.9\% | 1,640 | 1.5\% | 2.0\% | \$2.43 | \$120 | \$6,300 | \$10,000,000 | \$239 | \$12,500 | \$20,000,000 | 33.5\% |
| Transportation and utilities | 275,000 | 7.3\% | 5,930 | 2.2\% | 7.3\% | \$1.59 | \$64 | \$3,300 | \$20,000,000 | \$245 | \$12,700 | \$75,000,000 | 20.8\% |
| Information | 96,000 | 2.5\% | 1,530 | 1.6\% | 1.9\% | \$1.36 | \$50 | \$2,600 | \$4,000,000 | \$191 | \$9,900 | \$15,000,000 | 20.7\% |
| Financial activities | 232,000 | 6.2\% | 2,720 | 1.2\% | 3.3\% | \$1.36 | \$41 | \$2,100 | \$6,000,000 | \$194 | \$10,100 | \$27,000,000 | 17.4\% |
| Professional and business | 438,000 | 11.6\% | 6,970 | 1.6\% | 8.5\% | \$1.62 | \$70 | \$3,600 | \$25,000,000 | \$246 | \$12,800 | \$89,000,000 | 22.1\% |
| Education and health | 770,000 | 20.4\% | 12,290 | 1.6\% | 15.1\% | \$1.38 | \$53 | \$2,800 | \$34,000,000 | \$214 | \$11,100 | \$137,000,000 | 20.0\% |
| Food or drink service | 267,000 | 7.1\% | 19,420 | 7.3\% | 23.8\% | \$2.68 | \$74 | \$3,900 | \$75,000,000 | \$131 | \$6,800 | \$133,000,000 | 36.2\% |
| Other leisure and hospitality | 71,000 | 1.9\% | 2,400 | 3.4\% | 2.9\% | \$2.69 | \$86 | \$4,500 | \$11,000,000 | \$173 | \$9,000 | \$22,000,000 | 33.3\% |
| Other industries | 384,000 | 10.2\% | 10,610 | 2.8\% | 13.0\% | \$2.17 | \$93 | \$4,800 | \$51,000,000 | \$215 | \$11,200 | \$119,000,000 | 30.1\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 576,000 | 15.3\% | 3,600 | 0.6\% | 4.4\% | \$2.71 | \$129 | \$6,700 | \$24,000,000 | \$200 | \$10,400 | \$37,000,000 | 39.3\% |
| Professional | 815,000 | 21.6\% | 5,800 | 0.7\% | 7.1\% | \$1.71 | \$66 | \$3,400 | \$20,000,000 | \$184 | \$9,600 | \$56,000,000 | 26.3\% |
| Service | 598,000 | 15.9\% | 32,950 | 5.5\% | 40.4\% | \$2.49 | \$78 | \$4,100 | \$134,000,000 | \$161 | \$8,400 | \$276,000,000 | 32.7\% |


| Appendix Table A6 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Sales | 428,000 | 11.4\% | 12,320 | 2.9\% | 15.1\% | \$1.39 | \$59 | \$3,100 | \$38,000,000 | \$230 | \$12,000 | \$148,000,000 | 20.5\% |
| Office and administrative support | 511,000 | 13.6\% | 8,600 | 1.7\% | 10.5\% | \$1.16 | \$47 | \$2,500 | \$21,000,000 | \$249 | \$13,000 | \$111,000,000 | 16.0\% |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 165,000 | 4.4\% | 4,120 | 2.5\% | 5.1\% | \$1.14 | \$50 | \$2,600 | \$11,000,000 | \$282 | \$14,600 | \$60,000,000 | 15.1\% |
| Installation, maintenance, and repairs | 143,000 | 3.8\% | 2,890 | 2.0\% | 3.5\% | \$2.48 | \$115 | \$6,000 | \$17,000,000 | \$245 | \$12,800 | \$37,000,000 | 31.9\% |
| Production | 237,000 | 6.3\% | 2,550 | 1.1\% | 3.1\% | \$1.40 | \$55 | \$2,800 | \$7,000,000 | \$217 | \$11,300 | \$29,000,000 | 20.1\% |
| Transportation | 282,000 | 7.5\% | 6,660 | 2.4\% | 8.2\% | \$1.25 | \$48 | \$2,500 | \$17,000,000 | \$248 | \$12,900 | \$86,000,000 | 16.3\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time $<$ <20 hours) | 136,000 | 3.6\% | 3,890 | 2.9\% | 4.8\% | \$1.96 | \$32 | \$1,700 | \$7,000,000 | \$68 | \$3,500 | \$14,000,000 | 32.2\% |
| Mid time (20-34 hours) | 452,000 | 12.0\% | 20,820 | 4.6\% | 25.5\% | \$2.45 | \$63 | \$3,300 | \$68,000,000 | \$121 | \$6,300 | \$131,000,000 | 34.3\% |
| Full time (35+ hours) | 3,181,000 | 84.4\% | 56,870 | 1.8\% | 69.7\% | \$1.75 | \$77 | \$4,000 | \$226,000,000 | \$243 | \$12,600 | \$718,000,000 | 24.0\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 312,000 | 8.3\% | 11,650 | 3.7\% | 14.3\% | \$1.35 | \$50 | \$2,600 | \$30,000,000 | \$201 | \$10,500 | \$122,000,000 | 19.9\% |
| High school | 1,054,000 | 28.0\% | 24,000 | 2.3\% | 29.4\% | \$1.91 | \$70 | \$3,600 | \$87,000,000 | \$213 | \$11,100 | \$266,000,000 | 24.6\% |
| Some college | 1,120,000 | 29.7\% | 26,950 | 2.4\% | 33.0\% | \$2.32 | \$82 | \$4,200 | \$115,000,000 | \$186 | \$9,700 | \$261,000,000 | 30.5\% |
| Bachelor's degree or higher | 1,283,000 | 34.0\% | 18,960 | 1.5\% | 23.2\% | \$1.78 | \$70 | \$3,700 | \$69,000,000 | \$217 | \$11,300 | \$214,000,000 | 24.5\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 3,237,000 | 85.9\% | 66,420 | 2.1\% | 81.4\% | \$2.01 | \$76 | \$3,900 | \$261,000,000 | \$202 | \$10,500 | \$697,000,000 | 27.3\% |
| Foreign born | 532,000 | 14.1\% | 15,150 | 2.8\% | 18.6\% | \$1.62 | \$50 | \$2,600 | \$40,000,000 | \$210 | \$10,900 | \$166,000,000 | 19.3\% |
| U.S.-born citizen | 3,271,000 | 86.8\% | 66,420 | 2.0\% | 81.4\% | \$2.01 | \$76 | \$3,900 | \$261,000,000 | \$202 | \$10,500 | \$697,000,000 | 27.3\% |


| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naturalized U.S. citizen | 206,000 | 5.5\% | 1,430 | 0.7\% | 1.8\% | \$3.28 | \$86 | \$4,400 | \$6,000,000 | \$128 | \$6,700 | \$10,000,000 | 40.0\% |
| Not a U.S. citizen | 291,000 | 7.7\% | 13,720 | 4.7\% | 16.8\% | \$1.45 | \$47 | \$2,400 | \$33,000,000 | \$219 | \$11,400 | \$156,000,000 | 17.6\% |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliable estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## App <br> dsunhmary statistics on minimum wage violations in Illinois

| Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 5,185,000 | 100.0\% | 243,250 | 4.7\% | 100.0\% | \$1.62 | \$53 | \$2,800 | \$675,000,000 | \$205 | \$10,700 | \$2,598,000,000 | 20.6\% |
| Low-wage earners | 1,100,000 | 21.2\% | 243,250 | 22.1\% | 100.0\% | \$1.62 | \$53 | \$2,800 | \$675,000,000 | \$205 | \$10,700 | \$2,598,000,000 | 20.6\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 2,660,000 | 51.3\% | 113,310 | 4.3\% | 46.6\% | \$1.52 | \$54 | \$2,800 | \$319,000,000 | \$220 | \$11,500 | \$1,299,000,000 | 19.7\% |
| Women | 2,526,000 | 48.7\% | 129,940 | 5.1\% | 53.4\% | \$1.71 | \$53 | \$2,700 | \$356,000,000 | \$192 | \$10,000 | \$1,299,000,000 | 21.5\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 173,000 | 3.3\% | 28,990 | 16.7\% | 11.9\% | \$1.29 | \$27 | \$1,400 | \$41,000,000 | \$125 | \$6,500 | \$188,000,000 | 17.9\% |
| 20 and over | 5,012,000 | 96.7\% | 214,260 | 4.3\% | 88.1\% | \$1.66 | \$57 | \$3,000 | \$634,000,000 | \$216 | \$11,200 | \$2,410,000,000 | 20.8\% |
| 16-24 | 698,000 | 13.5\% | 77,030 | 11.0\% | 31.7\% | \$1.33 | \$36 | \$1,900 | \$143,000,000 | \$172 | \$9,000 | \$690,000,000 | 17.2\% |
| 25-54 | 3,447,000 | 66.5\% | 122,450 | 3.6\% | 50.3\% | \$1.80 | \$64 | \$3,300 | \$409,000,000 | \$224 | \$11,600 | \$1,426,000,000 | 22.3\% |
| 55-85 | 1,040,000 | 20.1\% | 43,770 | 4.2\% | 18.0\% | \$1.62 | \$54 | \$2,800 | \$123,000,000 | \$212 | \$11,000 | \$482,000,000 | 20.3\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 3,445,000 | 66.4\% | 136,830 | 4.0\% | 56.3\% | \$1.74 | \$56 | \$2,900 | \$397,000,000 | \$192 | \$10,000 | \$1,363,000,000 | 22.5\% |
| Black | 650,000 | 12.5\% | 48,020 | 7.4\% | 19.7\% | \$1.41 | \$47 | \$2,500 | \$118,000,000 | \$215 | \$11,200 | \$537,000,000 | 18.0\% |
| Hispanic | 755,000 | 14.6\% | 42,600 | 5.6\% | 17.5\% | \$1.36 | \$45 | \$2,400 | \$100,000,000 | \$227 | \$11,800 | \$503,000,000 | 16.6\% |
| Other | 336,000 | 6.5\% | 15,800 | 4.7\% | 6.5\% | \$1.90 | \$73 | \$3,800 | \$60,000,000 | \$236 | \$12,300 | \$194,000,000 | 23.6\% |
| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married parent | 1,391,000 | 26.8\% | 44,720 | 3.2\% | 18.4\% | \$1.58 | \$56 | \$2,900 | \$129,000,000 | \$239 | \$12,400 | \$555,000,000 | 18.9\% |
| Single parent | 393,000 | 7.6\% | 18,640 | 4.7\% | 7.7\% | \$2.07 | \$71 | \$3,700 | \$69,000,000 | \$195 | \$10,100 | \$189,000,000 | 26.7\% |
| Married, no kids | 1,355,000 | 26.1\% | 52,540 | 3.9\% | 21.6\% | \$1.77 | \$63 | \$3,300 | \$172,000,000 | \$223 | \$11,600 | \$610,000,000 | 22.0\% |
| Unmarried, no kids | 2,047,000 | 39.5\% | 127,340 | 6.2\% | 52.4\% | \$1.51 | \$46 | \$2,400 | \$304,000,000 | \$188 | \$9,800 | \$1,244,000,000 | 19.7\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 168,000 | 3.2\% | 17,940 | 10.7\% | 7.4\% | \$1.76 | \$59 | \$3,100 | \$55,000,000 | \$197 | \$10,200 | \$184,000,000 | 23.2\% |
| \$10,000-\$24,999 | 502,000 | 9.7\% | 42,400 | 8.4\% | 17.4\% | \$1.53 | \$47 | \$2,400 | \$103,000,000 | \$210 | \$10,900 | \$463,000,000 | 18.2\% |


| Appendix Table A7 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 702,000 | 13.5\% | 43,610 | 6.2\% | 17.9\% | \$1.84 | \$62 | \$3,200 | \$142,000,000 | \$207 | \$10,800 | \$469,000,000 | 23.2\% |
| \$40,000-\$59,999 | 933,000 | 18.0\% | 43,310 | 4.6\% | 17.8\% | \$1.46 | \$49 | \$2,600 | \$111,000,000 | \$215 | \$11,200 | \$484,000,000 | 18.6\% |
| \$60,000-\$99,999 | 1,346,000 | 26.0\% | 51,120 | 3.8\% | 21.0\% | \$1.58 | \$54 | \$2,800 | \$143,000,000 | \$214 | \$11,100 | \$569,000,000 | 20.0\% |
| \$100,000-\$149,999 | 791,000 | 15.3\% | 21,440 | 2.7\% | 8.8\% | \$1.92 | \$62 | \$3,200 | \$69,000,000 | \$188 | \$9,800 | \$210,000,000 | 24.7\% |
| \$150,000 or more | 744,000 | 14.3\% | 23,440 | 3.2\% | 9.6\% | \$1.40 | \$44 | \$2,300 | \$53,000,000 | \$181 | \$9,400 | \$220,000,000 | 19.5\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 230,000 | 4.4\% | 5,980 | 2.6\% | 2.5\% | \$1.54 | \$57 | \$3,000 | \$18,000,000 | \$248 | \$12,900 | \$77,000,000 | 18.7\% |
| Manufacturing | 662,000 | 12.8\% | 18,880 | 2.9\% | 7.8\% | \$1.72 | \$64 | \$3,300 | \$63,000,000 | \$249 | \$12,900 | \$244,000,000 | 20.5\% |
| Retail | 584,000 | 11.3\% | 38,240 | 6.5\% | 15.7\% | \$1.26 | \$39 | \$2,100 | \$78,000,000 | \$180 | \$9,300 | \$357,000,000 | 18.0\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 160,000 | 3.1\% | 2,800 | 1.8\% | 1.2\% | \$1.39 | \$54 | \$2,800 | \$8,000,000 | \$269 | \$14,000 | \$39,000,000 | 16.7\% |
| Transportation and utilities | 314,000 | 6.0\% | 15,090 | 4.8\% | 6.2\% | \$2.07 | \$84 | \$4,400 | \$66,000,000 | \$243 | \$12,600 | \$190,000,000 | 25.8\% |
| Information | 104,000 | 2.0\% | 5,100 | 4.9\% | 2.1\% | \$1.26 | \$39 | \$2,000 | \$10,000,000 | \$160 | \$8,300 | \$42,000,000 | 19.7\% |
| Financial activities | 421,000 | 8.1\% | 6,270 | 1.5\% | 2.6\% | \$1.40 | \$51 | \$2,700 | \$17,000,000 | \$205 | \$10,600 | \$67,000,000 | 20.0\% |
| Professional and business | 579,000 | 11.2\% | 16,750 | 2.9\% | 6.9\% | \$1.33 | \$53 | \$2,800 | \$46,000,000 | \$246 | \$12,800 | \$215,000,000 | 17.7\% |
| Education and health | 1,182,000 | 22.8\% | 41,550 | 3.5\% | 17.1\% | \$1.91 | \$58 | \$3,000 | \$126,000,000 | \$198 | \$10,300 | \$429,000,000 | 22.8\% |
| Food or drink service | 345,000 | 6.7\% | 54,860 | 15.9\% | 22.6\% | \$1.75 | \$48 | \$2,500 | \$137,000,000 | \$173 | \$9,000 | \$492,000,000 | 21.8\% |
| Other leisure and hospitality | 140,000 | 2.7\% | 8,640 | 6.2\% | 3.6\% | \$1.67 | \$63 | \$3,300 | \$28,000,000 | \$228 | \$11,900 | \$103,000,000 | 21.6\% |
| Other industries | 451,000 | 8.7\% | 27,700 | 6.1\% | 11.4\% | \$1.41 | \$50 | \$2,600 | \$72,000,000 | \$228 | \$11,900 | \$329,000,000 | 18.0\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 800,000 | 15.4\% | 8,360 | 1.0\% | 3.4\% | \$2.47 | \$97 | \$5,000 | \$42,000,000 | \$213 | \$11,100 | \$93,000,000 | 31.1\% |
| Professional | 1,126,000 | 21.7\% | 21,770 | 1.9\% | 9.0\% | \$2.40 | \$80 | \$4,100 | \$90,000,000 | \$190 | \$9,900 | \$215,000,000 | 29.6\% |
| Service | 904,000 | 17.4\% | 106,710 | 11.8\% | 43.9\% | \$1.57 | \$49 | \$2,500 | \$271,000,000 | \$208 | \$10,800 | \$1,152,000,000 | 19.1\% |
| Sales | 566,000 | 10.9\% | 38,520 | 6.8\% | 15.8\% | \$1.34 | \$41 | \$2,100 | \$81,000,000 | \$174 | \$9,000 | \$349,000,000 | 18.9\% |
| Office and | 721,000 | 13.9\% | 21,840 | 3.0\% | 9.0\% | \$0.96 | \$30 | \$1,500 | \$34,000,000 | \$195 | \$10,200 | \$222,000,000 | 13.2\% |


| Appendix Table <br> A7 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 179,000 | 3.5\% | 5,870 | 3.3\% | 2.4\% | \$1.59 | \$60 | \$3,100 | \$18,000,000 | \$262 | \$13,600 | \$80,000,000 | 18.6\% |
| Installation, maintenance, and repairs | 175,000 | 3.4\% | 3,590 | 2.1\% | 1.5\% | \$2.13 | \$82 | \$4,200 | \$15,000,000 | \$193 | \$10,000 | \$36,000,000 | 29.7\% |
| Production | 347,000 | 6.7\% | 11,940 | 3.4\% | 4.9\% | \$1.25 | \$46 | \$2,400 | \$28,000,000 | \$270 | \$14,100 | \$168,000,000 | 14.4\% |
| Transportation | 361,000 | 7.0\% | 24,280 | 6.7\% | 10.0\% | \$2.01 | \$74 | \$3,900 | \$94,000,000 | \$220 | \$11,400 | \$278,000,000 | 25.3\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 307,000 | 5.9\% | 45,250 | 14.7\% | 18.6\% | \$1.19 | \$16 | \$800 | \$37,000,000 | \$90 | \$4,700 | \$212,000,000 | 14.7\% |
| Mid time (20-34 hours) | 739,000 | 14.2\% | 84,300 | 11.4\% | 34.7\% | \$1.50 | \$37 | \$1,900 | \$164,000,000 | \$170 | \$8,800 | \$744,000,000 | 18.1\% |
| Full time (35+ hours) | 4,139,000 | 79.8\% | 113,700 | 2.7\% | 46.7\% | \$1.87 | \$80 | \$4,200 | \$475,000,000 | \$278 | \$14,400 | \$1,642,000,000 | 22.4\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 389,000 | 7.5\% | 46,800 | 12.0\% | 19.2\% | \$1.20 | \$41 | \$2,100 | \$99,000,000 | \$215 | \$11,200 | \$524,000,000 | 15.8\% |
| High school | 1,249,000 | 24.1\% | 73,750 | 5.9\% | 30.3\% | \$1.76 | \$61 | \$3,200 | \$235,000,000 | \$213 | \$11,100 | \$817,000,000 | 22.3\% |
| Some college | 1,540,000 | 29.7\% | 86,920 | 5.6\% | 35.7\% | \$1.53 | \$48 | \$2,500 | \$216,000,000 | \$196 | \$10,200 | \$884,000,000 | 19.7\% |
| Bachelor's degree or higher | 2,007,000 | 38.7\% | 35,780 | 1.8\% | 14.7\% | \$2.10 | \$67 | \$3,500 | \$125,000,000 | \$200 | \$10,400 | \$372,000,000 | 25.1\% |
| Nativity \& citizenshi |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 4,279,000 | 82.5\% | 190,500 | 4.5\% | 78.3\% | \$1.66 | \$52 | \$2,700 | \$519,000,000 | \$192 | \$10,000 | \$1,905,000,000 | 21.4\% |
| Foreign born | 906,000 | 17.5\% | 52,750 | 5.8\% | 21.7\% | \$1.48 | \$57 | \$3,000 | \$156,000,000 | \$252 | \$13,100 | \$693,000,000 | 18.4\% |
| U.S.-born citizen | 4,326,000 | 83.4\% | 190,850 | 4.4\% | 78.5\% | \$1.66 | \$52 | \$2,700 | \$519,000,000 | \$192 | \$10,000 | \$1,909,000,000 | 21.4\% |
| Naturalized U.S. citizen | 406,000 | 7.8\% | 21,030 | 5.2\% | 8.6\% | \$1.50 | \$60 | \$3,100 | \$65,000,000 | \$259 | \$13,500 | \$283,000,000 | 18.7\% |
| Not a U.S. citizen | 453,000 | 8.7\% | 31,370 | 6.9\% | 12.9\% | \$1.47 | \$55 | \$2,900 | \$90,000,000 | \$249 | \$12,900 | \$406,000,000 | 18.2\% |

Appendiłotabtuall-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliA7 (contable estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## Appendi> <br> Sehłmary statistics on minimum wage violations in Michigan

| Category | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 2,861,000 | 100.0\% | 130,200 | 4.5\% | 100.0\% | \$2.05 | \$63 | \$3,300 | \$429,000,000 | \$169 | \$8,800 | \$1,144,000,000 | 27.3\% |
| Low-wage earners | 759,000 | 26.5\% | 130,200 | 17.2\% | 100.0\% | \$2.05 | \$63 | \$3,300 | \$429,000,000 | \$169 | \$8,800 | \$1,144,000,000 | 27.3\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 1,528,000 | 53.4\% | 50,110 | 3.3\% | 38.5\% | \$1.83 | \$57 | \$3,000 | \$148,000,000 | \$175 | \$9,100 | \$455,000,000 | 24.6\% |
| Women | 1,333,000 | 46.6\% | 80,090 | 6.0\% | 61.5\% | \$2.19 | \$67 | \$3,500 | \$281,000,000 | \$165 | \$8,600 | \$689,000,000 | 29.0\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 145,000 | 5.1\% | 15,510 | 10.7\% | 11.9\% | \$1.39 | \$35 | \$1,800 | \$29,000,000 | \$140 | \$7,300 | \$113,000,000 | 20.2\% |
| 20 and over | 2,716,000 | 94.9\% | 114,690 | 4.2\% | 88.1\% | \$2.14 | \$67 | \$3,500 | \$401,000,000 | \$173 | \$9,000 | \$1,031,000,000 | 28.0\% |
| 16-24 | 512,000 | 17.9\% | 55,500 | 10.8\% | 42.6\% | \$1.60 | \$44 | \$2,300 | \$127,000,000 | \$153 | \$7,900 | \$441,000,000 | 22.3\% |
| 25-54 | 1,785,000 | 62.4\% | 58,090 | 3.3\% | 44.6\% | \$2.43 | \$78 | \$4,000 | \$235,000,000 | \$179 | \$9,300 | \$541,000,000 | 30.3\% |
| 55-85 | 565,000 | 19.8\% | 16,600 | 2.9\% | 12.8\% | \$2.23 | \$78 | \$4,000 | \$67,000,000 | \$187 | \$9,700 | \$162,000,000 | 29.3\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 2,244,000 | 78.4\% | 91,520 | 4.1\% | 70.3\% | \$2.11 | \$63 | \$3,300 | \$298,000,000 | \$168 | \$8,700 | \$801,000,000 | 27.1\% |
| Black | 348,000 | 12.1\% | 22,500 | 6.5\% | 17.3\% | \$1.72 | \$55 | \$2,800 | \$64,000,000 | \$172 | \$8,900 | \$201,000,000 | 24.1\% |
| Hispanic | 148,000 | 5.2\% | 9,750 | 6.6\% | 7.5\% | \$2.47 | \$90 | \$4,700 | \$46,000,000 | \$160 | \$8,300 | \$81,000,000 | 35.9\% |
| Other | 122,000 | 4.3\% | 6,420 | 5.3\% | 4.9\% | \$1.75 | \$64 | \$3,300 | \$21,000,000 | \$181 | \$9,400 | \$61,000,000 | 26.1\% |
| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Married parent | 652,000 | 22.8\% | 15,430 | 2.4\% | 11.9\% | \$1.96 | \$65 | \$3,400 | \$52,000,000 | \$209 | \$10,900 | \$168,000,000 | 23.7\% |
| Single parent | 234,000 | 8.2\% | 13,240 | 5.7\% | 10.2\% | \$2.46 | \$72 | \$3,700 | \$49,000,000 | \$162 | \$8,400 | \$112,000,000 | 30.7\% |
| Married, no kids | 721,000 | 25.2\% | 20,720 | 2.9\% | 15.9\% | \$2.30 | \$78 | \$4,100 | \$84,000,000 | \$188 | \$9,800 | \$203,000,000 | 29.4\% |
| Unmarried, no kids | 1,254,000 | 43.8\% | 80,800 | 6.4\% | 62.1\% | \$1.94 | \$58 | \$3,000 | \$243,000,000 | \$157 | \$8,200 | \$662,000,000 | 26.9\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 105,000 | 3.7\% | 9,600 | 9.1\% | 7.4\% | \$2.05 | \$63 | \$3,300 | \$32,000,000 | \$156 | \$8,100 | \$78,000,000 | 28.8\% |


| Appendix Table A8 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$10,000-\$24,999 | 311,000 | 10.9\% | 23,190 | 7.5\% | 17.8\% | \$2.44 | \$76 | \$3,900 | \$91,000,000 | \$172 | \$8,900 | \$207,000,000 | 30.6\% |
| \$25,000-\$39,999 | 474,000 | 16.6\% | 27,100 | 5.7\% | 20.8\% | \$1.95 | \$63 | \$3,300 | \$89,000,000 | \$173 | \$9,000 | \$243,000,000 | 26.8\% |
| \$40,000-\$59,999 | 569,000 | 19.9\% | 24,060 | 4.2\% | 18.5\% | \$2.37 | \$71 | \$3,700 | \$89,000,000 | \$179 | \$9,300 | \$224,000,000 | 28.5\% |
| \$60,000-\$99,999 | 807,000 | 28.2\% | 28,980 | 3.6\% | 22.3\% | \$1.81 | \$58 | \$3,000 | \$88,000,000 | \$175 | \$9,100 | \$263,000,000 | 25.1\% |
| \$100,000-\$149,999 | 405,000 | 14.2\% | 13,460 | 3.3\% | 10.3\% | \$1.50 | \$39 | \$2,000 | \$28,000,000 | \$146 | \$7,600 | \$102,000,000 | 21.2\% |
| \$150,000 or more | 190,000 | 6.6\% | 3,800 | 2.0\% | 2.9\% | \$2.09 | \$63 | \$3,300 | \$12,000,000 | \$134 | \$7,000 | \$27,000,000 | 32.0\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 136,000 | 4.8\% | 2,660 | 1.9\% | 2.0\% | \$1.39 | \$48 | \$2,500 | \$7,000,000 | \$213 | \$11,100 | \$29,000,000 | 18.3\% |
| Manufacturing | 625,000 | 21.8\% | 7,770 | 1.2\% | 6.0\% | \$2.39 | \$97 | \$5,100 | \$39,000,000 | \$194 | \$10,100 | \$78,000,000 | 33.4\% |
| Retail | 422,000 | 14.7\% | 21,000 | 5.0\% | 16.1\% | \$0.89 | \$27 | \$1,400 | \$30,000,000 | \$202 | \$10,500 | \$221,000,000 | 11.9\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 77,000 | 2.7\% | 2,760 | 3.6\% | 2.1\% | \$0.72 | \$31 | \$1,600 | \$5,000,000 | \$282 | \$14,700 | \$41,000,000 | 10.0\% |
| Transportation and utilities | 166,000 | 5.8\% | 2,340 | 1.4\% | 1.8\% | \$1.32 | \$70 | \$3,600 | \$8,000,000 | \$299 | \$15,500 | \$36,000,000 | 18.9\% |
| Information | 40,000 | 1.4\% | 1,670 | 4.2\% | 1.3\% | \$2.80 | \$72 | \$3,700 | \$6,000,000 | \$109 | \$5,700 | \$9,000,000 | 39.8\% |
| Financial activities | 111,000 | 3.9\% | 4,450 | 4.0\% | 3.4\% | \$1.49 | \$52 | \$2,700 | \$12,000,000 | \$224 | \$11,600 | \$52,000,000 | 18.8\% |
| Professional and business | 249,000 | 8.7\% | 7,960 | 3.2\% | 6.1\% | \$1.57 | \$42 | \$2,200 | \$18,000,000 | \$185 | \$9,600 | \$77,000,000 | 18.6\% |
| Education and health | 508,000 | 17.7\% | 9,980 | 2.0\% | 7.7\% | \$1.87 | \$61 | \$3,200 | \$31,000,000 | \$169 | \$8,800 | \$88,000,000 | 26.4\% |
| Food or drink service | 234,000 | 8.2\% | 49,720 | 21.3\% | 38.2\% | \$2.66 | \$77 | \$4,000 | \$199,000,000 | \$138 | \$7,200 | \$358,000,000 | 35.7\% |
| Other leisure and hospitality | 83,000 | 2.9\% | 6,320 | 7.6\% | 4.9\% | \$2.02 | \$52 | \$2,700 | \$17,000,000 | \$136 | \$7,100 | \$45,000,000 | 27.5\% |
| Other industries | 204,000 | 7.1\% | 13,560 | 6.6\% | 10.4\% | \$2.47 | \$81 | \$4,200 | \$57,000,000 | \$156 | \$8,100 | \$110,000,000 | 34.2\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 214,000 | 7.5\% | 3,720 | 1.7\% | 2.9\% | \$2.27 | \$85 | \$4,400 | \$16,000,000 | \$174 | \$9,100 | \$34,000,000 | 32.8\% |
| Professional | 467,000 | 16.3\% | 4,180 | 0.9\% | 3.2\% | \$2.96 | \$92 | \$4,800 | \$20,000,000 | \$162 | \$8,400 | \$35,000,000 | 36.3\% |
| Service | 541,000 | 18.9\% | 67,820 | 12.5\% | 52.1\% | \$2.65 | \$79 | \$4,100 | \$278,000,000 | \$142 | \$7,400 | \$502,000,000 | 35.6\% |


| Appendix Table | Minimum-wage-eligible <br> workers |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Naturalized U.S. citizen | 104,000 | 3.6\% | 4,830 | 4.7\% | 3.7\% | \$1.47 | \$47 | \$2,500 | \$12,000,000 | \$205 | \$10,700 | \$52,000,000 | 18.7\% |
| Not a U.S. citizen | 114,000 | 4.0\% | 7,980 | 7.0\% | 6.1\% | \$2.57 | \$96 | \$5,000 | \$40,000,000 | \$191 | \$9,900 | \$79,000,000 | 33.5\% |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliable estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## App A9

|  | Minimum-w wo | age-eligible ers | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 6,047,000 | 100.0\% | 299,860 | 5.0\% | 100.0\% | \$1.82 | \$62 | \$3,200 | \$965,000,000 | \$210 | \$10,900 | \$3,270,000,000 | 22.8\% |
| Low-wage earners | 1,543,000 | 25.5\% | 299,860 | 19.4\% | 100.0\% | \$1.82 | \$62 | \$3,200 | \$965,000,000 | \$210 | \$10,900 | \$3,270,000,000 | 22.8\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 3,198,000 | 52.9\% | 145,670 | 4.6\% | 48.6\% | \$1.84 | \$64 | \$3,400 | \$488,000,000 | \$215 | \$11,200 | \$1,629,000,000 | 23.1\% |
| Women | 2,849,000 | 47.1\% | 154,190 | 5.4\% | 51.4\% | \$1.80 | \$59 | \$3,100 | \$477,000,000 | \$205 | \$10,600 | \$1,641,000,000 | 22.5\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 181,000 | 3.0\% | 29,630 | 16.3\% | 9.9\% | \$1.21 | \$29 | \$1,500 | \$45,000,000 | \$153 | \$7,900 | \$236,000,000 | 16.0\% |
| 20 and over | 5,866,000 | 97.0\% | 270,220 | 4.6\% | 90.1\% | \$1.89 | \$65 | \$3,400 | \$920,000,000 | \$216 | \$11,200 | \$3,035,000,000 | 23.3\% |
| 16-24 | 851,000 | 14.1\% | 92,020 | 10.8\% | 30.7\% | \$1.58 | \$45 | \$2,300 | \$214,000,000 | \$174 | \$9,100 | \$834,000,000 | 20.4\% |
| 25-54 | 3,946,000 | 65.2\% | 162,910 | 4.1\% | 54.3\% | \$1.89 | \$70 | \$3,600 | \$589,000,000 | \$232 | \$12,000 | \$1,961,000,000 | 23.1\% |
| 55-85 | 1,250,000 | 20.7\% | 44,920 | 3.6\% | 15.0\% | \$2.06 | \$69 | \$3,600 | \$162,000,000 | \$203 | \$10,600 | \$475,000,000 | 25.4\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 3,457,000 | 57.2\% | 124,830 | 3.6\% | 41.6\% | \$1.93 | \$62 | \$3,200 | \$405,000,000 | \$189 | \$9,800 | \$1,225,000,000 | 24.8\% |
| Black | 894,000 | 14.8\% | 56,910 | 6.4\% | 19.0\% | \$1.81 | \$62 | \$3,200 | \$184,000,000 | \$215 | \$11,200 | \$637,000,000 | 22.4\% |
| Hispanic | 1,102,000 | 18.2\% | 79,910 | 7.3\% | 26.6\% | \$1.75 | \$63 | \$3,300 | \$261,000,000 | \$228 | \$11,900 | \$949,000,000 | 21.6\% |
| Other | 595,000 | 9.8\% | 38,210 | 6.4\% | 12.7\% | \$1.61 | \$58 | \$3,000 | \$115,000,000 | \$232 | \$12,000 | \$460,000,000 | 20.0\% |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Married parent | 1,392,000 | 23.0\% | 50,080 | 3.6\% | 16.7\% | \$1.95 | \$72 | \$3,700 | \$187,000,000 | \$231 | \$12,000 | \$603,000,000 | 23.7\% |
| Single parent | 474,000 | 7.8\% | 26,170 | 5.5\% | 8.7\% | \$2.24 | \$78 | \$4,000 | \$106,000,000 | \$205 | \$10,700 | \$279,000,000 | 27.5\% |
| Married, no kids | 1,499,000 | 24.8\% | 59,080 | 3.9\% | 19.7\% | \$1.86 | \$72 | \$3,800 | \$222,000,000 | \$231 | \$12,000 | \$710,000,000 | 23.8\% |
| Unmarried, no kids | 2,682,000 | 44.4\% | 164,530 | 6.1\% | 54.9\% | \$1.70 | \$53 | \$2,700 | \$450,000,000 | \$196 | \$10,200 | \$1,679,000,000 | 21.1\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 220,000 | 3.6\% | 21,870 | 9.9\% | 7.3\% | \$2.29 | \$87 | \$4,500 | \$98,000,000 | \$200 | \$10,400 | \$228,000,000 | 30.2\% |
| \$10,000-\$24,999 | 664,000 | 11.0\% | 58,070 | 8.7\% | 19.4\% | \$1.75 | \$58 | \$3,000 | \$174,000,000 | \$214 | \$11,100 | \$646,000,000 | 21.2\% |


| Appendix Table A9 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 969,000 | 16.0\% | 60,010 | 6.2\% | 20.0\% | \$1.72 | \$59 | \$3,100 | \$183,000,000 | \$219 | \$11,400 | \$683,000,000 | 21.2\% |
| \$40,000-\$59,999 | 1,003,000 | 16.6\% | 50,610 | 5.0\% | 16.9\% | \$1.81 | \$66 | \$3,500 | \$175,000,000 | \$223 | \$11,600 | \$587,000,000 | 22.9\% |
| \$60,000-\$99,999 | 1,549,000 | 25.6\% | 59,270 | 3.8\% | 19.8\% | \$1.70 | \$55 | \$2,900 | \$170,000,000 | \$205 | \$10,700 | \$633,000,000 | 21.1\% |
| \$100,000-\$149,999 | 904,000 | 14.9\% | 31,880 | 3.5\% | 10.6\% | \$2.06 | \$63 | \$3,300 | \$105,000,000 | \$191 | \$10,000 | \$317,000,000 | 24.8\% |
| \$150,000 or more | 739,000 | 12.2\% | 18,140 | 2.5\% | 6.0\% | \$1.82 | \$63 | \$3,300 | \$60,000,000 | \$187 | \$9,700 | \$176,000,000 | 25.3\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 361,000 | 6.0\% | 12,020 | 3.3\% | 4.0\% | \$2.65 | \$102 | \$5,300 | \$64,000,000 | \$213 | \$11,100 | \$133,000,000 | 32.3\% |
| Manufacturing | 464,000 | 7.7\% | 11,680 | 2.5\% | 3.9\% | \$1.96 | \$61 | \$3,200 | \$37,000,000 | \$219 | \$11,400 | \$133,000,000 | 21.9\% |
| Retail | 804,000 | 13.3\% | 53,920 | 6.7\% | 18.0\% | \$1.12 | \$34 | \$1,800 | \$96,000,000 | \$209 | \$10,900 | \$586,000,000 | 14.0\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 135,000 | 2.2\% | 3,890 | 2.9\% | 1.3\% | \$1.43 | \$56 | \$2,900 | \$11,000,000 | \$263 | \$13,700 | \$53,000,000 | 17.4\% |
| Transportation and utilities | 353,000 | 5.8\% | 13,900 | 3.9\% | 4.6\% | \$2.25 | \$91 | \$4,800 | \$66,000,000 | \$234 | \$12,100 | \$169,000,000 | 28.1\% |
| Information | 189,000 | 3.1\% | 4,790 | 2.5\% | 1.6\% | \$1.72 | \$68 | \$3,500 | \$17,000,000 | \$208 | \$10,800 | \$52,000,000 | 24.7\% |
| Financial activities | 300,000 | 5.0\% | 10,630 | 3.5\% | 3.5\% | \$2.46 | \$93 | \$4,800 | \$51,000,000 | \$224 | \$11,600 | \$124,000,000 | 29.4\% |
| Professional and business | 668,000 | 11.0\% | 18,790 | 2.8\% | 6.3\% | \$2.31 | \$80 | \$4,200 | \$78,000,000 | \$221 | \$11,500 | \$216,000,000 | 26.6\% |
| Education and health | 1,545,000 | 25.5\% | 49,760 | 3.2\% | 16.6\% | \$1.71 | \$61 | \$3,200 | \$157,000,000 | \$223 | \$11,600 | \$578,000,000 | 21.4\% |
| Food or drink service | 439,000 | 7.3\% | 76,990 | 17.5\% | 25.7\% | \$1.86 | \$59 | \$3,100 | \$235,000,000 | \$198 | \$10,300 | \$794,000,000 | 22.8\% |
| Other leisure and hospitality | 206,000 | 3.4\% | 15,020 | 7.3\% | 5.0\% | \$1.76 | \$58 | \$3,000 | \$45,000,000 | \$197 | \$10,200 | \$154,000,000 | 22.6\% |
| Other industries | 578,000 | 9.6\% | 28,470 | 4.9\% | 9.5\% | \$2.18 | \$72 | \$3,800 | \$107,000,000 | \$189 | \$9,800 | \$279,000,000 | 27.7\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 491,000 | 8.1\% | 7,910 | 1.6\% | 2.6\% | \$2.47 | \$92 | \$4,800 | \$38,000,000 | \$188 | \$9,800 | \$77,000,000 | 32.9\% |
| Professional | 1,344,000 | 22.2\% | 27,910 | 2.1\% | 9.3\% | \$1.81 | \$65 | \$3,400 | \$94,000,000 | \$239 | \$12,400 | \$346,000,000 | 21.4\% |
| Service | 1,541,000 | 25.5\% | 140,530 | 9.1\% | 46.9\% | \$1.94 | \$66 | \$3,400 | \$479,000,000 | \$199 | \$10,400 | \$1,457,000,000 | 24.8\% |
| Sales | 727,000 | 12.0\% | 50,070 | 6.9\% | 16.7\% | \$1.34 | \$44 | \$2,300 | \$115,000,000 | \$214 | \$11,100 | \$557,000,000 | 17.2\% |
| Office and | 664,000 | 11.0\% | 26,670 | 4.0\% | 8.9\% | \$1.71 | \$47 | \$2,500 | \$65,000,000 | \$202 | \$10,500 | \$281,000,000 | 18.9\% |


| Appendix Table <br> A9 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | $\begin{gathered} \text { Average } \\ \text { hourly } \\ \text { underpayment } \end{gathered}$ | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 322,000 | 5.3\% | 10,640 | 3.3\% | 3.5\% | \$2.32 | \$88 | \$4,600 | \$49,000,000 | \$222 | \$11,500 | \$123,000,000 | 28.4\% |
| Installation, maintenance, and repairs | 219,000 | 3.6\% | 2,510 | 1.1\% | 0.8\% | \$3.26 | \$109 | \$5,700 | \$14,000,000 | \$181 | \$9,400 | \$24,000,000 | 37.6\% |
| Production | 303,000 | 5.0\% | 11,080 | 3.7\% | 3.7\% | \$1.73 | \$58 | \$3,000 | \$34,000,000 | \$231 | \$12,000 | \$133,000,000 | 20.2\% |
| Transportation | 432,000 | 7.1\% | 22,530 | 5.2\% | 7.5\% | \$1.69 | \$65 | \$3,400 | \$76,000,000 | \$233 | \$12,100 | \$273,000,000 | 21.8\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 360,000 | 5.9\% | 34,220 | 9.5\% | 11.4\% | \$1.70 | \$20 | \$1,000 | \$36,000,000 | \$79 | \$4,100 | \$140,000,000 | 20.3\% |
| Mid time (20-34 hours) | 916,000 | 15.1\% | 103,960 | 11.4\% | 34.7\% | \$1.69 | \$42 | \$2,200 | \$226,000,000 | \$165 | \$8,600 | \$891,000,000 | 20.3\% |
| Full time (35+ hours) | 4,772,000 | 78.9\% | 161,680 | 3.4\% | 53.9\% | \$1.93 | \$84 | \$4,300 | \$703,000,000 | \$266 | \$13,800 | \$2,239,000,000 | 23.9\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 616,000 | 10.2\% | 72,860 | 11.8\% | 24.3\% | \$1.56 | \$54 | \$2,800 | \$204,000,000 | \$219 | \$11,400 | \$829,000,000 | 19.8\% |
| High school | 1,679,000 | 27.8\% | 85,620 | 5.1\% | 28.6\% | \$1.75 | \$59 | \$3,100 | \$262,000,000 | \$206 | \$10,700 | \$917,000,000 | 22.2\% |
| Some college | 1,729,000 | 28.6\% | 94,210 | 5.4\% | 31.4\% | \$1.97 | \$64 | \$3,300 | \$315,000,000 | \$196 | \$10,200 | \$962,000,000 | 24.7\% |
| Bachelor's degree or higher | 2,023,000 | 33.5\% | 47,160 | 2.3\% | 15.7\% | \$2.04 | \$75 | \$3,900 | \$183,000,000 | \$229 | \$11,900 | \$562,000,000 | 24.6\% |
| Nativity \& citizenshi |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 4,299,000 | 71.1\% | 187,840 | 4.4\% | 62.6\% | \$1.81 | \$58 | \$3,000 | \$563,000,000 | \$195 | \$10,100 | \$1,905,000,000 | 22.8\% |
| Foreign born | 1,748,000 | 28.9\% | 112,020 | 6.4\% | 37.4\% | \$1.83 | \$69 | \$3,600 | \$402,000,000 | \$234 | \$12,200 | \$1,366,000,000 | 22.7\% |
| U.S.-born citizen | 4,356,000 | 72.0\% | 192,100 | 4.4\% | 64.1\% | \$1.81 | \$57 | \$3,000 | \$572,000,000 | \$195 | \$10,100 | \$1,948,000,000 | 22.7\% |
| Naturalized U.S. citizen | 914,000 | 15.1\% | 46,700 | 5.1\% | 15.6\% | \$1.70 | \$66 | \$3,500 | \$161,000,000 | \$240 | \$12,500 | \$582,000,000 | 21.7\% |
| Not a U.S. citizen | 777,000 | 12.9\% | 61,070 | 7.9\% | 20.4\% | \$1.95 | \$73 | \$3,800 | \$231,000,000 | \$233 | \$12,100 | \$740,000,000 | 23.8\% |

 A9 (contble estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

Appendix Surinmary statistics on minimum wage violations in North Carolina
A10
Minimum-wage-eligible
workers
Eligible workers experiencing minimum wage violations

| Category | workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 3,111,000 | 100.0\% | 83,780 | 2.7\% | 100.0\% | \$2.14 | \$72 | \$3,800 | \$316,000,000 | \$179 | \$9,300 | \$779,000,000 | 28.8\% |
| Low-wage earners | 681,000 | 21.9\% | 83,780 | 12.3\% | 100.0\% | \$2.14 | \$72 | \$3,800 | \$316,000,000 | \$179 | \$9,300 | \$779,000,000 | 28.8\% |


| Gender |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Men | $1,624,000$ | $52.2 \%$ | 36,610 | $2.3 \%$ | $43.7 \%$ | $\$ 1.76$ | $\$ 68$ | $\$ 3,500$ | $\$ 130,000,000$ | $\$ 208$ | $\$ 10,800$ |
| Women | $1,487,000$ | $47.8 \%$ | 47,170 | $3.2 \%$ | $56.3 \%$ | $\$ 2.44$ | $\$ 76$ | $\$ 3,900$ | $\$ 186,000,000$ | $\$ 156$ | $\$ 8,100$ |


| Under 20 | 116,000 | $3.7 \%$ | 8,710 | $7.5 \%$ | $10.4 \%$ | $\$ 1.59$ | $\$ 36$ | $\$ 1,800$ | $\$ 16,000,000$ | $\$ 119$ | $\$ 6,200$ | $\$ 54,000,000$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0}$ and over | $2,994,000$ | $96.3 \%$ | 75,070 | $2.5 \%$ | $89.6 \%$ | $\$ 2.20$ | $\$ 77$ | $\$ 4,000$ | $\$ 300,000,000$ | $\$ 186$ | $\$ 9,700$ | $\$ 725,000,000$ |
| $\mathbf{1 6 - 2 4}$ | 467,000 | $15.0 \%$ | 26,890 | $5.8 \%$ | $32.1 \%$ | $\$ 2.36$ | $\$ 75$ | $\$ 3,900$ | $\$ 105,000,000$ | $\$ 139$ | $\$ 7,200$ | $\$ 195,000,000$ |
| $\mathbf{2 5 - 5 4}$ | $2,048,000$ | $65.8 \%$ | 42,980 | $2.1 \%$ | $51.3 \%$ | $\$ 2.12$ | $\$ 75$ | $\$ 3,900$ | $\$ 168,000,000$ | $\$ 203$ | $\$ 10,500$ | $\$ 453,000,000$ |
| $\mathbf{5 5 - 8 5}$ | 595,000 | $19.1 \%$ | 13,910 | $2.3 \%$ | $16.6 \%$ | $\$ 1.76$ | $\$ 59$ | $\$ 3,100$ | $\$ 43,000,000$ | $\$ 181$ | $\$ 9,400$ | $\$ 131,000,000$ |


| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | 1,929,000 | 62.0\% | 48,020 | 2.5\% | 57.3\% | \$2.13 | \$65 | \$3,400 | \$162,000,000 | \$168 | \$8,700 | \$420,000,000 | 27.9\% |
| Black | 655,000 | 21.1\% | 16,620 | 2.5\% | 19.8\% | \$2.24 | \$83 | \$4,300 | \$72,000,000 | \$162 | \$8,400 | \$140,000,000 | 33.9\% |
| Hispanic | 353,000 | 11.4\% | 14,010 | 4.0\% | 16.7\% | \$1.79 | \$72 | \$3,800 | \$53,000,000 | \$236 | \$12,300 | \$172,000,000 | 23.5\% |
| Other | 173,000 | 5.6\% | 5,120 | 3.0\% | 6.1\% | \$2.86 | \$109 | \$5,700 | \$29,000,000 | \$176 | \$9,100 | \$47,000,000 | 38.2\% |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Married parent | 783,000 | $25.2 \%$ | 14,750 | $1.9 \%$ | $17.6 \%$ | $\$ 2.09$ | $\$ 76$ | $\$ 3,900$ | $\$ 58,000,000$ | $\$ 205$ | $\$ 10,700$ | $\$ 158,000,000$ |
| Single parent | 280,000 | $9.0 \%$ | 8,830 | $3.2 \%$ | $10.5 \%$ | $\$ 2.35$ | $\$ 80$ | $\$ 4,100$ | $\$ 37,000,000$ | $\$ 179$ | $\$ 9,300$ | $\$ 82,000,000$ |
| Married, no kids | 875,000 | $28.1 \%$ | 15,950 | $1.8 \%$ | $19.0 \%$ | $\$ 1.68$ | $\$ 57$ | $\$ 3,000$ | $\$ 47,000,000$ | $\$ 198$ | $\$ 10,300$ | $\$ 164,000,000$ |
| Unmarried, no kids | $1,173,000$ | $37.7 \%$ | 44,240 | $3.8 \%$ | $52.8 \%$ | $\$ 2.28$ | $\$ 75$ | $\$ 3,900$ | $\$ 174,000,000$ | $\$ 163$ | $\$ 8,500$ | $\$ 375,000,000$ |

Family income

| Less than $\$ 10,000$ | 153,000 | $4.9 \%$ | 7,210 | $4.7 \%$ | $8.6 \%$ | $\$ 2.34$ | $\$ 90$ | $\$ 4,700$ | $\$ 34,000,000$ | $\$ 186$ | $\$ 9,700$ | $\$ 70,000,000$ | $32.5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Appendix Table A10 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$10,000-\$24,999 | 508,000 | 16.3\% | 18,350 | 3.6\% | 21.9\% | \$2.39 | \$80 | \$4,100 | \$76,000,000 | \$167 | \$8,700 | \$160,000,000 | 32.3\% |
| \$25,000-\$39,999 | 578,000 | 18.6\% | 17,920 | 3.1\% | 21.4\% | \$1.96 | \$68 | \$3,500 | \$64,000,000 | \$196 | \$10,200 | \$182,000,000 | 25.8\% |
| \$40,000-\$59,999 | 609,000 | 19.6\% | 9,810 | 1.6\% | 11.7\% | \$2.65 | \$75 | \$3,900 | \$38,000,000 | \$133 | \$6,900 | \$68,000,000 | 36.0\% |
| \$60,000-\$99,999 | 796,000 | 25.6\% | 21,090 | 2.6\% | 25.2\% | \$1.93 | \$68 | \$3,600 | \$75,000,000 | \$189 | \$9,800 | \$207,000,000 | 26.5\% |
| \$100,000-\$149,999 | 323,000 | 10.4\% | 6,990 | 2.2\% | 8.3\% | \$1.84 | \$59 | \$3,100 | \$21,000,000 | \$192 | \$10,000 | \$70,000,000 | 23.5\% |
| \$150,000 or more | 144,000 | 4.6\% | 2,400 | 1.7\% | 2.9\% | \$1.60 | \$63 | \$3,300 | \$8,000,000 | \$178 | \$9,300 | \$22,000,000 | 26.1\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 215,000 | 6.9\% | 5,030 | 2.3\% | 6.0\% | \$1.74 | \$64 | \$3,300 | \$17,000,000 | \$234 | \$12,100 | \$61,000,000 | 21.6\% |
| Manufacturing | 444,000 | 14.3\% | 4,100 | 0.9\% | 4.9\% | \$1.90 | \$84 | \$4,400 | \$18,000,000 | \$243 | \$12,600 | \$52,000,000 | 25.8\% |
| Retail | 437,000 | 14.1\% | 11,630 | 2.7\% | 13.9\% | \$1.28 | \$43 | \$2,200 | \$26,000,000 | \$188 | \$9,800 | \$114,000,000 | 18.4\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 79,000 | 2.5\% | 360 | 0.5\% | 0.4\% | \$3.76 | \$150 | \$7,800 | \$3,000,000 | \$148 | \$7,700 | \$3,000,000 | 50.3\% |
| Transportation and utilities | 162,000 | 5.2\% | 4,290 | 2.6\% | 5.1\% | \$1.93 | \$114 | \$5,900 | \$25,000,000 | \$313 | \$16,300 | \$70,000,000 | 26.6\% |
| Information | 50,000 | 1.6\% | 900 | 1.8\% | 1.1\% | \$3.69 | \$136 | \$7,100 | \$6,000,000 | \$91 | \$4,700 | \$4,000,000 | 59.9\% |
| Financial activities | 146,000 | 4.7\% | 3,330 | 2.3\% | 4.0\% | \$1.67 | \$70 | \$3,600 | \$12,000,000 | \$205 | \$10,600 | \$35,000,000 | 25.5\% |
| Professional and business | 265,000 | 8.5\% | 4,220 | 1.6\% | 5.0\% | \$2.05 | \$58 | \$3,000 | \$13,000,000 | \$159 | \$8,300 | \$35,000,000 | 26.6\% |
| Education and health | 691,000 | 22.2\% | 9,430 | 1.4\% | 11.3\% | \$1.42 | \$42 | \$2,200 | \$20,000,000 | \$199 | \$10,300 | \$97,000,000 | 17.4\% |
| Food or drink service | 238,000 | 7.6\% | 25,960 | 10.9\% | 31.0\% | \$3.04 | \$96 | \$5,000 | \$129,000,000 | \$126 | \$6,600 | \$170,000,000 | 43.2\% |
| Other leisure and hospitality | 82,000 | 2.6\% | 4,280 | 5.2\% | 5.1\% | \$1.81 | \$57 | \$3,000 | \$13,000,000 | \$182 | \$9,500 | \$40,000,000 | 23.9\% |
| Other industries | 286,000 | 9.2\% | 10,240 | 3.6\% | 12.2\% | \$2.00 | \$63 | \$3,300 | \$33,000,000 | \$181 | \$9,400 | \$97,000,000 | 25.6\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 232,000 | 7.5\% | 5,760 | 2.5\% | 6.9\% | \$2.23 | \$100 | \$5,200 | \$30,000,000 | \$217 | \$11,300 | \$65,000,000 | 31.6\% |
| Professional | 683,000 | 22.0\% | 9,630 | 1.4\% | 11.5\% | \$1.86 | \$55 | \$2,900 | \$28,000,000 | \$185 | \$9,600 | \$92,000,000 | 23.0\% |
| Service | 552,000 | 17.8\% | 39,130 | 7.1\% | 46.7\% | \$2.62 | \$82 | \$4,200 | \$166,000,000 | \$148 | \$7,700 | \$300,000,000 | 35.6\% |


| Appendix Table A10 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Sales | 397,000 | 12.8\% | 9,780 | 2.5\% | 11.7\% | \$1.44 | \$55 | \$2,800 | \$28,000,000 | \$180 | \$9,400 | \$92,000,000 | 23.3\% |
| Office and administrative support | 358,000 | 11.5\% | 6,310 | 1.8\% | 7.5\% | \$1.44 | \$53 | \$2,800 | \$18,000,000 | \$188 | \$9,800 | \$62,000,000 | 22.1\% |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 185,000 | 6.0\% | 5,050 | 2.7\% | 6.0\% | \$2.14 | \$85 | \$4,400 | \$22,000,000 | \$220 | \$11,400 | \$58,000,000 | 27.8\% |
| Installation, maintenance, and repairs | 149,000 | 4.8\% | 330 | 0.2\% | 0.4\% | \$0.05 | \$2 | \$100 | \$0 | \$292 | \$15,200 | \$5,000,000 | 0.7\% |
| Production | 291,000 | 9.3\% | 1,200 | 0.4\% | 1.4\% | \$3.83 | \$126 | \$6,500 | \$8,000,000 | \$180 | \$9,400 | \$11,000,000 | 41.1\% |
| Transportation | 256,000 | 8.2\% | 6,030 | 2.4\% | 7.2\% | \$0.96 | \$49 | \$2,500 | \$15,000,000 | \$292 | \$15,200 | \$92,000,000 | 14.3\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 176,000 | 5.7\% | 11,210 | 6.4\% | 13.4\% | \$1.23 | \$17 | \$900 | \$10,000,000 | \$87 | \$4,500 | \$51,000,000 | 16.0\% |
| Mid time (20-34 hours) | 483,000 | 15.5\% | 28,170 | 5.8\% | 33.6\% | \$2.72 | \$72 | \$3,700 | \$105,000,000 | \$122 | \$6,400 | \$179,000,000 | 36.9\% |
| Full time (35+ hours) | 2,452,000 | 78.8\% | 44,400 | 1.8\% | 53.0\% | \$2.00 | \$87 | \$4,500 | \$201,000,000 | \$238 | \$12,400 | \$549,000,000 | 26.8\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 366,000 | 11.8\% | 18,520 | 5.1\% | 22.1\% | \$1.69 | \$55 | \$2,800 | \$53,000,000 | \$174 | \$9,000 | \$168,000,000 | 23.9\% |
| High school | 942,000 | 30.3\% | 24,680 | 2.6\% | 29.5\% | \$2.05 | \$71 | \$3,700 | \$91,000,000 | \$183 | \$9,500 | \$235,000,000 | 28.0\% |
| Some college | 980,000 | 31.5\% | 26,350 | 2.7\% | 31.5\% | \$2.58 | \$85 | \$4,400 | \$117,000,000 | \$167 | \$8,700 | \$228,000,000 | 33.9\% |
| Bachelor's degree or higher | 823,000 | 26.4\% | 14,230 | 1.7\% | 17.0\% | \$2.08 | \$74 | \$3,800 | \$55,000,000 | \$200 | \$10,400 | \$148,000,000 | 27.0\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 2,703,000 | 86.9\% | 70,100 | 2.6\% | 83.7\% | \$2.22 | \$73 | \$3,800 | \$265,000,000 | \$170 | \$8,900 | \$621,000,000 | 29.9\% |
| Foreign born | 407,000 | 13.1\% | 13,670 | 3.4\% | 16.3\% | \$1.73 | \$71 | \$3,700 | \$50,000,000 | \$221 | \$11,500 | \$157,000,000 | 24.2\% |
| U.S.-born citizen | 2,727,000 | 87.7\% | 71,380 | 2.6\% | 85.2\% | \$2.21 | \$73 | \$3,800 | \$271,000,000 | \$172 | \$8,900 | \$637,000,000 | 29.9\% |


| Category |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Naturalized U.S. citizen | 99,000 | 3.2\% | 1,300 | 1.3\% | 1.6\% | \$2.36 | \$73 | \$3,800 | \$5,000,000 | \$181 | \$9,400 | \$12,000,000 | 28.6\% |
| Not a U.S. citizen | 284,000 | 9.1\% | 11,100 | 3.9\% | 13.2\% | \$1.66 | \$69 | \$3,600 | \$40,000,000 | \$225 | \$11,700 | \$130,000,000 | 23.4\% |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliable estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## disinhmary statistics on minimum wage violations in Ohio

|  | Minimum-w wor | ge-eligible rs | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 3,915,000 | 100.0\% | 216,990 | 5.5\% | 100.0\% | \$1.65 | \$53 | \$2,800 | \$601,000,000 | \$185 | \$9,600 | \$2,084,000,000 | 22.4\% |
| Low-wage earners | 956,000 | 24.4\% | 216,990 | 22.7\% | 100.0\% | \$1.65 | \$53 | \$2,800 | \$601,000,000 | \$185 | \$9,600 | \$2,084,000,000 | 22.4\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 2,005,000 | 51.2\% | 82,160 | 4.1\% | 37.9\% | \$1.51 | \$55 | \$2,900 | \$235,000,000 | \$208 | \$10,800 | \$887,000,000 | 20.9\% |
| Women | 1,911,000 | 48.8\% | 134,830 | 7.1\% | 62.1\% | \$1.73 | \$52 | \$2,700 | \$366,000,000 | \$171 | \$8,900 | \$1,196,000,000 | 23.4\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 195,000 | 5.0\% | 49,470 | 25.4\% | 22.8\% | \$0.81 | \$19 | \$1,000 | \$50,000,000 | \$153 | \$7,900 | \$393,000,000 | 11.2\% |
| 20 and over | 3,721,000 | 95.0\% | 167,520 | 4.5\% | 77.2\% | \$1.89 | \$63 | \$3,300 | \$551,000,000 | \$194 | \$10,100 | \$1,691,000,000 | 24.6\% |
| 16-24 | 666,000 | 17.0\% | 105,870 | 15.9\% | 48.8\% | \$1.34 | \$41 | \$2,100 | \$224,000,000 | \$166 | \$8,600 | \$915,000,000 | 19.7\% |
| 25-54 | 2,431,000 | 62.1\% | 71,950 | 3.0\% | 33.2\% | \$1.93 | \$66 | \$3,400 | \$247,000,000 | \$211 | \$11,000 | \$789,000,000 | 23.8\% |
| 55-85 | 819,000 | 20.9\% | 39,170 | 4.8\% | 18.1\% | \$1.95 | \$64 | \$3,300 | \$130,000,000 | \$186 | \$9,700 | \$379,000,000 | 25.5\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 3,254,000 | 83.1\% | 164,600 | 5.1\% | 75.9\% | \$1.68 | \$54 | \$2,800 | \$466,000,000 | \$183 | \$9,500 | \$1,565,000,000 | 23.0\% |
| Black | 405,000 | 10.3\% | 35,120 | 8.7\% | 16.2\% | \$1.44 | \$46 | \$2,400 | \$84,000,000 | \$193 | \$10,000 | \$353,000,000 | 19.2\% |
| Hispanic | 130,000 | 3.3\% | 7,730 | 5.9\% | 3.6\% | \$1.66 | \$59 | \$3,100 | \$24,000,000 | \$210 | \$10,900 | \$84,000,000 | 21.9\% |
| Other | 126,000 | 3.2\% | 9,550 | 7.6\% | 4.4\% | \$1.87 | \$55 | \$2,800 | \$27,000,000 | \$165 | \$8,600 | \$82,000,000 | 24.8\% |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Married parent | 922,000 | $23.6 \%$ | 22,520 | $2.4 \%$ | $10.4 \%$ | $\$ 2.38$ | $\$ 86$ | $\$ 4,500$ | $\$ 100,000,000$ | $\$ 201$ |
| Single parent | 327,000 | $8.4 \%$ | 20,590 | $6.3 \%$ | $9.5 \%$ | $\$ 10,500$ | $\$ 235,000,000$ | $29.9 \%$ |  |  |
| Married, no kids | $1,026,000$ | $26.2 \%$ | 31,140 | $3.0 \%$ | $14.4 \%$ | $\$ 1.68$ | $\$ 59$ | $\$ 3,100$ | $\$ 63,000,000$ | $\$ 193$ |
| Unmarried, no kids | $1,640,000$ | $41.9 \%$ | 142,740 | $8.7 \%$ | $65.8 \%$ | $\$ 100$ | $\$ 207,000,000$ | $23.4 \%$ |  |  |


| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than \$10,000 | 159,000 | 4.0\% | 19,290 | 12.2\% | 8.9\% | \$1.41 | \$47 | \$2,500 | \$47,000,000 | \$200 | \$10,400 | \$201,000,000 | 19.1\% |
| \$10,000-\$24,999 | 423,000 | 10.8\% | 48,020 | 11.4\% | 22.1\% | \$1.75 | \$53 | \$2,700 | \$132,000,000 | \$181 | \$9,400 | \$452,000,000 | 22.5\% |


| Appendix Table | Minimumwo | ge-eligible rs |  |  |  |  | ( |  | wage violatio |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 678,000 | 17.3\% | 36,040 | 5.3\% | 16.6\% | \$1.94 | \$65 | \$3,400 | \$121,000,000 | \$181 | \$9,400 | \$339,000,000 | 26.3\% |
| \$40,000-\$59,999 | 802,000 | 20.5\% | 42,020 | 5.2\% | 19.4\% | \$1.47 | \$50 | \$2,600 | \$109,000,000 | \$201 | \$10,400 | \$439,000,000 | 19.9\% |
| \$60,000-\$99,999 | 1,136,000 | 29.0\% | 46,290 | 4.1\% | 21.3\% | \$1.66 | \$49 | \$2,500 | \$117,000,000 | \$176 | \$9,100 | \$423,000,000 | 21.7\% |
| \$100,000-\$149,999 | 521,000 | 13.3\% | 18,540 | 3.6\% | 8.5\% | \$1.35 | \$52 | \$2,700 | \$50,000,000 | \$180 | \$9,400 | \$174,000,000 | 22.3\% |
| \$150,000 or more | 197,000 | 5.0\% | 6,780 | 3.4\% | 3.1\% | \$1.85 | \$68 | \$3,600 | \$24,000,000 | \$157 | \$8,200 | \$55,000,000 | 30.4\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 187,000 | 4.8\% | 2,390 | 1.3\% | 1.1\% | \$2.57 | \$103 | \$5,300 | \$13,000,000 | \$218 | \$11,300 | \$27,000,000 | 32.0\% |
| Manufacturing | 688,000 | 17.6\% | 9,910 | 1.4\% | 4.6\% | \$1.34 | \$51 | \$2,600 | \$26,000,000 | \$258 | \$13,400 | \$133,000,000 | 16.4\% |
| Retail | 503,000 | 12.9\% | 33,930 | 6.7\% | 15.6\% | \$1.01 | \$29 | \$1,500 | \$52,000,000 | \$188 | \$9,800 | \$332,000,000 | 13.5\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 114,000 | 2.9\% | 2,730 | 2.4\% | 1.3\% | \$2.08 | \$84 | \$4,400 | \$12,000,000 | \$227 | \$11,800 | \$32,000,000 | 27.0\% |
| Transportation and utilities | 199,000 | 5.1\% | 5,560 | 2.8\% | 2.6\% | \$2.11 | \$74 | \$3,900 | \$22,000,000 | \$229 | \$11,900 | \$66,000,000 | 24.5\% |
| Information | 62,000 | 1.6\% | 3,220 | 5.2\% | 1.5\% | \$1.92 | \$41 | \$2,100 | \$7,000,000 | \$140 | \$7,300 | \$23,000,000 | 22.6\% |
| Financial activities | 224,000 | 5.7\% | 5,560 | 2.5\% | 2.6\% | \$1.89 | \$72 | \$3,800 | \$21,000,000 | \$237 | \$12,300 | \$68,000,000 | 23.4\% |
| Professional and business | 314,000 | 8.0\% | 9,250 | 2.9\% | 4.3\% | \$1.80 | \$62 | \$3,200 | \$30,000,000 | \$205 | \$10,600 | \$98,000,000 | 23.2\% |
| Education and health | 877,000 | 22.4\% | 30,240 | 3.4\% | 13.9\% | \$1.98 | \$70 | \$3,600 | \$110,000,000 | \$189 | \$9,800 | \$297,000,000 | 27.1\% |
| Food or drink service | 335,000 | 8.6\% | 84,820 | 25.3\% | 39.1\% | \$1.82 | \$54 | \$2,800 | \$237,000,000 | \$160 | \$8,300 | \$705,000,000 | 25.2\% |
| Other leisure and hospitality | 104,000 | 2.7\% | 10,610 | 10.2\% | 4.9\% | \$1.37 | \$44 | \$2,300 | \$24,000,000 | \$163 | \$8,500 | \$90,000,000 | 21.1\% |
| Other industries | 289,000 | 7.4\% | 16,430 | 5.7\% | 7.6\% | \$1.27 | \$46 | \$2,400 | \$39,000,000 | \$206 | \$10,700 | \$176,000,000 | 18.2\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 314,000 | 8.0\% | 7,970 | 2.5\% | 3.7\% | \$2.80 | \$124 | \$6,400 | \$51,000,000 | \$213 | \$11,100 | \$88,000,000 | 36.7\% |
| Professional | 822,000 | 21.0\% | 21,370 | 2.6\% | 9.8\% | \$2.29 | \$80 | \$4,200 | \$89,000,000 | \$184 | \$9,600 | \$204,000,000 | 30.4\% |
| Service | 715,000 | 18.3\% | 106,700 | 14.9\% | 49.2\% | \$1.69 | \$50 | \$2,600 | \$278,000,000 | \$168 | \$8,700 | \$930,000,000 | 23.0\% |
| Sales | 434,000 | 11.1\% | 33,570 | 7.7\% | 15.5\% | \$0.92 | \$27 | \$1,400 | \$48,000,000 | \$179 | \$9,300 | \$312,000,000 | 13.3\% |
| Office and | 510,000 | 13.0\% | 15,150 | 3.0\% | 7.0\% | \$1.46 | \$43 | \$2,200 | \$34,000,000 | \$201 | \$10,400 | \$158,000,000 | 17.6\% |


| Appendix Table A11 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | $\begin{gathered} \text { Average } \\ \text { hourly } \\ \text { underpayment } \end{gathered}$ | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| administrative support |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 174,000 | 4.4\% | 3,330 | 1.9\% | 1.5\% | \$2.11 | \$85 | \$4,400 | \$15,000,000 | \$232 | \$12,100 | \$40,000,000 | 26.9\% |
| Installation, maintenance, and repairs | 164,000 | 4.2\% | 2,460 | 1.5\% | 1.1\% | \$2.06 | \$79 | \$4,100 | \$10,000,000 | \$225 | \$11,700 | \$29,000,000 | 26.1\% |
| Production | 415,000 | 10.6\% | 5,560 | 1.3\% | 2.6\% | \$1.82 | \$70 | \$3,600 | \$20,000,000 | \$233 | \$12,100 | \$68,000,000 | 23.0\% |
| Transportation | 351,000 | 9.0\% | 18,120 | 5.2\% | 8.4\% | \$1.47 | \$48 | \$2,500 | \$46,000,000 | \$227 | \$11,800 | \$214,000,000 | 17.6\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 268,000 | 6.8\% | 42,310 | 15.8\% | 19.5\% | \$1.07 | \$15 | \$800 | \$32,000,000 | \$93 | \$4,800 | \$204,000,000 | 13.6\% |
| Mid time (20-34 hours) | 680,000 | 17.4\% | 93,900 | 13.8\% | 43.3\% | \$1.61 | \$42 | \$2,200 | \$205,000,000 | \$164 | \$8,500 | \$799,000,000 | 20.4\% |
| Full time (35+ hours) | 2,968,000 | 75.8\% | 80,780 | 2.7\% | 37.2\% | \$1.99 | \$87 | \$4,500 | \$364,000,000 | \$257 | \$13,400 | \$1,081,000,000 | 25.2\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 293,000 | 7.5\% | 51,030 | 17.4\% | 23.5\% | \$0.99 | \$27 | \$1,400 | \$72,000,000 | \$168 | \$8,700 | \$445,000,000 | 13.9\% |
| High school | 1,431,000 | 36.5\% | 76,150 | 5.3\% | 35.1\% | \$1.65 | \$55 | \$2,900 | \$219,000,000 | \$192 | \$10,000 | \$760,000,000 | 22.4\% |
| Some college | 1,178,000 | 30.1\% | 63,900 | 5.4\% | 29.4\% | \$1.75 | \$53 | \$2,800 | \$176,000,000 | \$187 | \$9,700 | \$621,000,000 | 22.1\% |
| Bachelor's degree or higher | 1,014,000 | 25.9\% | 25,910 | 2.6\% | 11.9\% | \$2.64 | \$99 | \$5,100 | \$133,000,000 | \$190 | \$9,900 | \$257,000,000 | 34.1\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 3,683,000 | 94.1\% | 207,000 | 5.6\% | 95.4\% | \$1.64 | \$53 | \$2,800 | \$571,000,000 | \$184 | \$9,600 | \$1,980,000,000 | 22.4\% |
| Foreign born | 232,000 | 5.9\% | 9,990 | 4.3\% | 4.6\% | \$1.85 | \$56 | \$2,900 | \$29,000,000 | \$200 | \$10,400 | \$104,000,000 | 22.0\% |
| U.S.-born citizen | 3,701,000 | 94.5\% | 207,990 | 5.6\% | 95.9\% | \$1.65 | \$53 | \$2,800 | \$577,000,000 | \$184 | \$9,500 | \$1,985,000,000 | 22.5\% |
| Naturalized U.S. citizen | 93,000 | 2.4\% | 3,770 | 4.1\% | 1.7\% | \$1.92 | \$58 | \$3,000 | \$11,000,000 | \$207 | \$10,700 | \$41,000,000 | 21.8\% |
| Not a U.S. citizen | 121,000 | 3.1\% | 5,220 | 4.3\% | 2.4\% | \$1.37 | \$45 | \$2,300 | \$12,000,000 | \$212 | \$11,000 | \$58,000,000 | 17.4\% |

Appendixotabteall-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliA11 (contble estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## AppendixStirnmary statistics on minimum wage violations in Pennsylvania

| Category | workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 4,299,000 | 100.0\% | 107,150 | 2.5\% | 100.0\% | \$2.46 | \$80 | \$4,200 | \$448,000,000 | \$164 | \$8,500 | \$916,000,000 | 32.9\% |
| Low-wage earners | 1,034,000 | 24.1\% | 107,150 | 10.4\% | 100.0\% | \$2.46 | \$80 | \$4,200 | \$448,000,000 | \$164 | \$8,500 | \$916,000,000 | 32.9\% |


| Gender |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Men | $2,226,000$ | $51.8 \%$ | 43,600 | $2.0 \%$ | $40.7 \%$ | $\$ 2.34$ | $\$ 83$ | $\$ 4,300$ | $\$ 188,000,000$ | $\$ 188$ | $\$ 9,800$ |
| Women | $2,073,000$ | $48.2 \%$ | 63,550 | $3.1 \%$ | $59.3 \%$ | $\$ 25,000,000$ | $30.6 \%$ |  |  |  |  |


| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 | 193,000 | 4.5\% | 12,320 | 6.4\% | 11.5\% | \$2.15 | \$52 | \$2,700 | \$33,000,000 | \$122 | \$6,400 | \$78,000,000 | 29.8\% |
| 20 and over | 4,106,000 | 95.5\% | 94,830 | 2.3\% | 88.5\% | \$2.50 | \$84 | \$4,400 | \$415,000,000 | \$170 | \$8,800 | \$837,000,000 | 33.1\% |
| 16-24 | 696,000 | 16.2\% | 39,180 | 5.6\% | 36.6\% | \$2.12 | \$58 | \$3,000 | \$119,000,000 | \$152 | \$7,900 | \$310,000,000 | 27.7\% |
| 25-54 | 2,652,000 | 61.7\% | 48,780 | 1.8\% | 45.5\% | \$2.62 | \$91 | \$4,700 | \$230,000,000 | \$178 | \$9,300 | \$451,000,000 | 33.8\% |
| 55-85 | 951,000 | 22.1\% | 19,200 | 2.0\% | 17.9\% | \$2.76 | \$100 | \$5,200 | \$99,000,000 | \$155 | \$8,000 | \$154,000,000 | 39.2\% |


| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| White | $3,447,000$ | $80.2 \%$ | 78,360 | $2.3 \%$ | $73.1 \%$ | $\$ 2.60$ | $\$ 83$ | $\$ 4,300$ | $\$ 338,000,000$ | $\$ 155$ | $\$ 8,100$ |
| Black | 412,000 | $9.6 \%$ | 12,920 | $3.1 \%$ | $12.1 \%$ | $\$ 633,000,000$ | $34.8 \%$ |  |  |  |  |
| Hispanic | 279,000 | $6.5 \%$ | 9,070 | $3.2 \%$ | $8.5 \%$ | $\$ 1.80$ | $\$ 79$ | $\$ 4,100$ | $\$ 53,000,000$ | $\$ 145$ | $\$ 7,600$ |
| Other | 161,000 | $3.7 \%$ | 6,810 | $4.2 \%$ | $6.4 \%$ | $\$ 98,000,000$ | $35.3 \%$ |  |  |  |  |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Married parent | 962,000 | 22.4\% | 16,420 | 1.7\% | 15.3\% | \$2.54 | \$91 | \$4,700 | \$77,000,000 | \$189 | \$9,900 | \$162,000,000 | 32.3\% |
| Single parent | 327,000 | 7.6\% | 12,570 | 3.8\% | 11.7\% | \$2.79 | \$94 | \$4,900 | \$61,000,000 | \$156 | \$8,100 | \$102,000,000 | 37.5\% |
| Married, no kids | 1,201,000 | 27.9\% | 15,080 | 1.3\% | 14.1\% | \$2.50 | \$95 | \$4,900 | \$74,000,000 | \$171 | \$8,900 | \$134,000,000 | 35.7\% |
| Unmarried, no kids | 1,808,000 | 42.1\% | 63,080 | 3.5\% | 58.9\% | \$2.37 | \$72 | \$3,700 | \$235,000,000 | \$158 | \$8,200 | \$518,000,000 | 31.2\% |

Family income

| Less than $\$ 10,000$ | 138,000 | $3.2 \%$ | 8,550 | $6.2 \%$ | $8.0 \%$ | $\$ 2.19$ | $\$ 83$ | $\$ 4,300$ | $\$ 37,000,000$ | $\$ 161$ | $\$ 8,400$ | $\$ 72,000,000$ | $34.1 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Appendix Table A12 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$10,000-\$24,999 | 408,000 | 9.5\% | 18,730 | 4.6\% | 17.5\% | \$2.24 | \$77 | \$4,000 | \$75,000,000 | \$183 | \$9,500 | \$178,000,000 | 29.5\% |
| \$25,000-\$39,999 | 663,000 | 15.4\% | 22,460 | 3.4\% | 21.0\% | \$2.97 | \$99 | \$5,100 | \$115,000,000 | \$151 | \$7,800 | \$176,000,000 | 39.6\% |
| \$40,000-\$59,999 | 825,000 | 19.2\% | 16,980 | 2.1\% | 15.8\% | \$2.29 | \$84 | \$4,400 | \$74,000,000 | \$180 | \$9,300 | \$158,000,000 | 31.9\% |
| \$60,000-\$99,999 | 1,262,000 | 29.4\% | 21,770 | 1.7\% | 20.3\% | \$2.29 | \$73 | \$3,800 | \$83,000,000 | \$174 | \$9,100 | \$197,000,000 | 29.6\% |
| \$100,000-\$149,999 | 621,000 | 14.4\% | 9,800 | 1.6\% | 9.1\% | \$2.70 | \$60 | \$3,100 | \$31,000,000 | \$123 | \$6,400 | \$63,000,000 | 32.9\% |
| \$150,000 or more | 381,000 | 8.9\% | 8,870 | 2.3\% | 8.3\% | \$2.41 | \$72 | \$3,700 | \$33,000,000 | \$154 | \$8,000 | \$71,000,000 | 31.8\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 227,000 | 5.3\% | 850 | 0.4\% | 0.8\% | \$1.04 | \$42 | \$2,200 | \$2,000,000 | \$246 | \$12,800 | \$11,000,000 | 14.5\% |
| Manufacturing | 599,000 | 13.9\% | 5,350 | 0.9\% | 5.0\% | \$2.52 | \$68 | \$3,500 | \$19,000,000 | \$179 | \$9,300 | \$50,000,000 | 27.6\% |
| Retail | 567,000 | 13.2\% | 12,170 | 2.1\% | 11.4\% | \$1.99 | \$80 | \$4,100 | \$50,000,000 | \$193 | \$10,000 | \$122,000,000 | 29.2\% |
| Agriculture, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Wholesale | 124,000 | 2.9\% | 2,910 | 2.4\% | 2.7\% | \$2.56 | \$97 | \$5,000 | \$15,000,000 | \$171 | \$8,900 | \$26,000,000 | 36.0\% |
| Transportation and utilities | 268,000 | 6.2\% | 3,200 | 1.2\% | 3.0\% | \$1.77 | \$73 | \$3,800 | \$12,000,000 | \$209 | \$10,900 | \$35,000,000 | 25.7\% |
| Information | 71,000 | 1.7\% | 1,150 | 1.6\% | 1.1\% | \$2.06 | \$44 | \$2,300 | \$3,000,000 | \$102 | \$5,300 | \$6,000,000 | 30.4\% |
| Financial activities | 284,000 | 6.6\% | 3,740 | 1.3\% | 3.5\% | \$3.91 | \$104 | \$5,400 | \$20,000,000 | \$102 | \$5,300 | \$20,000,000 | 50.4\% |
| Professional and business | 392,000 | 9.1\% | 4,570 | 1.2\% | 4.3\% | \$1.28 | \$46 | \$2,400 | \$11,000,000 | \$228 | \$11,900 | \$54,000,000 | 16.9\% |
| Education and health | 926,000 | 21.5\% | 14,870 | 1.6\% | 13.9\% | \$2.34 | \$76 | \$3,900 | \$59,000,000 | \$161 | \$8,400 | \$125,000,000 | 32.0\% |
| Food or drink service | 316,000 | 7.3\% | 40,450 | 12.8\% | 37.8\% | \$2.70 | \$77 | \$4,000 | \$161,000,000 | \$134 | \$7,000 | \$282,000,000 | 36.3\% |
| Other leisure and hospitality | 116,000 | 2.7\% | 4,110 | 3.5\% | 3.8\% | \$2.30 | \$78 | \$4,000 | \$17,000,000 | \$153 | \$8,000 | \$33,000,000 | 33.7\% |
| Other industries | 377,000 | 8.8\% | 9,660 | 2.6\% | 9.0\% | \$2.79 | \$107 | \$5,500 | \$54,000,000 | \$183 | \$9,500 | \$92,000,000 | 36.9\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 384,000 | 8.9\% | 6,260 | 1.6\% | 5.8\% | \$3.08 | \$154 | \$8,000 | \$50,000,000 | \$195 | \$10,100 | \$63,000,000 | 44.2\% |
| Professional | 774,000 | 18.0\% | 6,360 | 0.8\% | 5.9\% | \$2.98 | \$103 | \$5,300 | \$34,000,000 | \$147 | \$7,600 | \$49,000,000 | 41.2\% |
| Service | 932,000 | 21.7\% | 55,930 | 6.0\% | 52.2\% | \$2.60 | \$76 | \$4,000 | \$221,000,000 | \$142 | \$7,400 | \$414,000,000 | 34.8\% |


| Appendix Table A12 (cont.) | Minimum-wage-eligible workers |  | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Sales | 495,000 | 11.5\% | 15,680 | 3.2\% | 14.6\% | \$1.93 | \$64 | \$3,300 | \$52,000,000 | \$185 | \$9,600 | \$151,000,000 | 25.6\% |
| Office and administrative support | 556,000 | 12.9\% | 4,490 | 0.8\% | 4.2\% | \$1.95 | \$51 | \$2,700 | \$12,000,000 | \$168 | \$8,800 | \$39,000,000 | 23.3\% |
| Farming, forestry, and fishing | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Construction and extraction | 217,000 | 5.0\% | 850 | 0.4\% | 0.8\% | \$1.04 | \$42 | \$2,200 | \$2,000,000 | \$246 | \$12,800 | \$11,000,000 | 14.5\% |
| Installation, maintenance, and repairs | 169,000 | 3.9\% | 720 | 0.4\% | 0.7\% | \$2.16 | \$107 | \$5,600 | \$4,000,000 | \$250 | \$13,000 | \$9,000,000 | 30.0\% |
| Production | 360,000 | 8.4\% | 7,100 | 2.0\% | 6.6\% | \$2.49 | \$76 | \$4,000 | \$28,000,000 | \$172 | \$9,000 | \$64,000,000 | 30.6\% |
| Transportation | 387,000 | 9.0\% | 6,610 | 1.7\% | 6.2\% | \$2.30 | \$85 | \$4,400 | \$29,000,000 | \$193 | \$10,000 | \$66,000,000 | 30.7\% |
| Worker status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time (<20 hours) | 314,000 | 7.3\% | 16,700 | 5.3\% | 15.6\% | \$2.44 | \$33 | \$1,700 | \$29,000,000 | \$62 | \$3,200 | \$54,000,000 | 34.7\% |
| Mid time (20-34 hours) | 670,000 | 15.6\% | 37,490 | 5.6\% | 35.0\% | \$2.77 | \$72 | \$3,700 | \$140,000,000 | \$117 | \$6,100 | \$228,000,000 | 38.0\% |
| Full time (35+ hours) | 3,315,000 | 77.1\% | 52,960 | 1.6\% | 49.4\% | \$2.25 | \$102 | \$5,300 | \$280,000,000 | \$230 | \$12,000 | \$634,000,000 | 30.6\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 330,000 | 7.7\% | 18,710 | 5.7\% | 17.5\% | \$2.11 | \$69 | \$3,600 | \$67,000,000 | \$156 | \$8,100 | \$152,000,000 | 30.6\% |
| High school | 1,639,000 | 38.1\% | 41,900 | 2.6\% | 39.1\% | \$2.46 | \$84 | \$4,400 | \$183,000,000 | \$181 | \$9,400 | \$394,000,000 | 31.8\% |
| Some college | 1,236,000 | 28.7\% | 30,810 | 2.5\% | 28.7\% | \$2.49 | \$79 | \$4,100 | \$127,000,000 | \$159 | \$8,200 | \$254,000,000 | 33.3\% |
| Bachelor's degree or higher | 1,095,000 | 25.5\% | 15,730 | 1.4\% | 14.7\% | \$2.83 | \$87 | \$4,500 | \$71,000,000 | \$142 | \$7,400 | \$116,000,000 | 38.1\% |
| Nativity \& citizenship |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S.-born | 3,958,000 | 92.1\% | 95,130 | 2.4\% | 88.8\% | \$2.58 | \$82 | \$4,300 | \$408,000,000 | \$155 | \$8,000 | \$765,000,000 | 34.8\% |
| Foreign born | 341,000 | 7.9\% | 12,020 | 3.5\% | 11.2\% | \$1.56 | \$65 | \$3,400 | \$40,000,000 | \$242 | \$12,600 | \$151,000,000 | 21.1\% |
| U.S.-born citizen | 3,982,000 | 92.6\% | 95,240 | 2.4\% | 88.9\% | \$2.58 | \$82 | \$4,300 | \$408,000,000 | \$155 | \$8,000 | \$766,000,000 | 34.8\% |

Appendix Table
A12 (cont.)

Minimum-wage-eligible workers

Eligible workers experiencing minimum wage violations

| Category |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| Naturalized U.S. citizen | 149,000 | 3.5\% | 2,250 | 1.5\% | 2.1\% | \$1.28 | \$55 | \$2,900 | \$6,000,000 | \$279 | \$14,500 | \$33,000,000 | 16.6\% |
| Not a U.S. citizen | 167,000 | 3.9\% | 9,660 | 5.8\% | 9.0\% | \$1.63 | \$67 | \$3,500 | \$34,000,000 | \$233 | \$12,100 | \$117,000,000 | 22.4\% |

Note: Full-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Data are not shown where sample sizes are too small to provide reliable estimates. Numbers may not add due to rounding. Shares are computed based on unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015
Economic Policy Institute

## Sưplmary statistics on minimum wage violations in Texas

|  | Minimum-w wor | ge-eligible ers | Eligible workers experiencing minimum wage violations |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| All workers | 9,743,000 | 100.0\% | 264,690 | 2.7\% | 100.0\% | \$2.38 | \$85 | \$4,400 | \$1,165,000,000 | \$182 | \$9,500 | \$2,507,000,000 | 31.7\% |
| Low-wage earners | 2,458,000 | 25.2\% | 264,690 | 10.8\% | 100.0\% | \$2.38 | \$85 | \$4,400 | \$1,165,000,000 | \$182 | \$9,500 | \$2,507,000,000 | 31.7\% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 5,535,000 | 56.8\% | 118,290 | 2.1\% | 44.7\% | \$2.28 | \$86 | \$4,500 | \$526,000,000 | \$197 | \$10,300 | \$1,214,000,000 | 30.2\% |
| Women | 4,208,000 | 43.2\% | 146,390 | 3.5\% | 55.3\% | \$2.46 | \$84 | \$4,400 | \$638,000,000 | \$170 | \$8,800 | \$1,293,000,000 | 33.0\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 20 | 351,000 | 3.6\% | 24,320 | 6.9\% | 9.2\% | \$2.29 | \$62 | \$3,200 | \$79,000,000 | \$132 | \$6,800 | \$166,000,000 | 32.1\% |
| 20 and over | 9,392,000 | 96.4\% | 240,360 | 2.6\% | 90.8\% | \$2.39 | \$87 | \$4,500 | \$1,086,000,000 | \$187 | \$9,700 | \$2,341,000,000 | 31.7\% |
| 16-24 | 1,474,000 | 15.1\% | 73,210 | 5.0\% | 27.7\% | \$2.68 | \$88 | \$4,600 | \$335,000,000 | \$144 | \$7,500 | \$550,000,000 | 37.9\% |
| 25-54 | 6,610,000 | 67.8\% | 152,390 | 2.3\% | 57.6\% | \$2.25 | \$82 | \$4,300 | \$653,000,000 | \$200 | \$10,400 | \$1,582,000,000 | 29.2\% |
| 55-85 | 1,659,000 | 17.0\% | 39,090 | 2.4\% | 14.8\% | \$2.32 | \$87 | \$4,500 | \$176,000,000 | \$185 | \$9,600 | \$376,000,000 | 31.9\% |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 4,168,000 | 42.8\% | 92,360 | 2.2\% | 34.9\% | \$2.68 | \$92 | \$4,800 | \$441,000,000 | \$167 | \$8,700 | \$801,000,000 | 35.5\% |
| Black | 1,139,000 | 11.7\% | 22,560 | 2.0\% | 8.5\% | \$2.21 | \$70 | \$3,600 | \$82,000,000 | \$176 | \$9,100 | \$206,000,000 | 28.5\% |
| Hispanic | 3,853,000 | 39.6\% | 133,970 | 3.5\% | 50.6\% | \$2.25 | \$82 | \$4,200 | \$569,000,000 | \$188 | \$9,800 | \$1,308,000,000 | 30.3\% |
| Other | 583,000 | 6.0\% | 15,790 | 2.7\% | 6.0\% | \$2.03 | \$88 | \$4,600 | \$72,000,000 | \$233 | \$12,100 | \$192,000,000 | 27.3\% |


| Marital \& family status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Married parent | 2,765,000 | 28.4\% | 54,060 | 2.0\% | 20.4\% | \$2.29 | \$86 | \$4,500 | \$242,000,000 | \$209 | \$10,900 | \$589,000,000 | 29.1\% |
| Single parent | 840,000 | 8.6\% | 27,720 | 3.3\% | 10.5\% | \$2.77 | \$89 | \$4,600 | \$128,000,000 | \$164 | \$8,500 | \$237,000,000 | 35.2\% |
| Married, no kids | 2,472,000 | 25.4\% | 51,930 | 2.1\% | 19.6\% | \$1.96 | \$75 | \$3,900 | \$203,000,000 | \$209 | \$10,800 | \$563,000,000 | 26.5\% |
| Unmarried, no kids | 3,666,000 | 37.6\% | 130,970 | 3.6\% | 49.5\% | \$2.50 | \$87 | \$4,500 | \$592,000,000 | \$164 | \$8,500 | \$1,118,000,000 | 34.6\% |
| Family income |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than \$10,000 | 361,000 | 3.7\% | 16,510 | 4.6\% | 6.2\% | \$2.71 | \$92 | \$4,800 | \$79,000,000 | \$176 | \$9,100 | \$151,000,000 | 34.4\% |
| \$10,000-\$24,999 | 1,305,000 | 13.4\% | 69,650 | 5.3\% | 26.3\% | \$2.26 | \$81 | \$4,200 | \$295,000,000 | \$190 | \$9,900 | \$687,000,000 | 30.0\% |


| Appendix Table | Minimum-w wor | ge-eligible ers |  |  |  |  | igible workers ex | eriencing minim | um wage violat |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Total number | Share of total | Number | Share of total group | Group's share of category | Average hourly underpayment | Average weekly underpayment | Average annual underpayment if full-year | Total earned annual wages not paid to workers | Average weekly wages received | Average annual wages received if full-year | Total annual wages received by workers experiencing minimum wage violations | Share of earned wages not paid |
| \$25,000-\$39,999 | 1,723,000 | 17.7\% | 56,200 | 3.3\% | 21.2\% | \$2.29 | \$82 | \$4,300 | \$239,000,000 | \$186 | \$9,700 | \$543,000,000 | 30.6\% |
| \$40,000-\$59,999 | 1,732,000 | 17.8\% | 49,680 | 2.9\% | 18.8\% | \$2.40 | \$82 | \$4,300 | \$213,000,000 | \$178 | \$9,200 | \$459,000,000 | 31.7\% |
| \$60,000-\$99,999 | 2,321,000 | 23.8\% | 42,370 | 1.8\% | 16.0\% | \$2.40 | \$82 | \$4,300 | \$181,000,000 | \$177 | \$9,200 | \$390,000,000 | 31.7\% |
| \$100,000-\$149,999 | 1,306,000 | 13.4\% | 17,350 | 1.3\% | 6.6\% | \$2.29 | \$75 | \$3,900 | \$68,000,000 | \$178 | \$9,200 | \$160,000,000 | 29.8\% |
| \$150,000 or more | 996,000 | 10.2\% | 12,920 | 1.3\% | 4.9\% | \$3.01 | \$133 | \$6,900 | \$89,000,000 | \$175 | \$9,100 | \$117,000,000 | 43.2\% |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Construction | 806,000 | 8.3\% | 11,520 | 1.4\% | 4.4\% | \$2.14 | \$83 | \$4,300 | \$50,000,000 | \$215 | \$11,200 | \$129,000,000 | 27.8\% |
| Manufacturing | 1,016,000 | 10.4\% | 9,900 | 1.0\% | 3.7\% | \$1.86 | \$78 | \$4,100 | \$40,000,000 | \$214 | \$11,100 | \$110,000,000 | 26.7\% |
| Retail | 1,204,000 | 12.4\% | 27,620 | 2.3\% | 10.4\% | \$1.71 | \$70 | \$3,600 | \$101,000,000 | \$225 | \$11,700 | \$324,000,000 | 23.7\% |
| Agriculture, forestry, and fishing | 70,000 | 0.7\% | 3,150 | 4.5\% | 1.2\% | \$1.31 | \$65 | \$3,400 | \$11,000,000 | \$297 | \$15,400 | \$49,000,000 | 17.9\% |
| Wholesale | 301,000 | 3.1\% | 4,450 | 1.5\% | 1.7\% | \$2.55 | \$91 | \$4,700 | \$21,000,000 | \$183 | \$9,500 | \$42,000,000 | 33.3\% |
| Transportation and utilities | 628,000 | 6.4\% | 10,470 | 1.7\% | 4.0\% | \$1.38 | \$56 | \$2,900 | \$31,000,000 | \$253 | \$13,200 | \$138,000,000 | 18.2\% |
| Information | 187,000 | 1.9\% | 3,080 | 1.6\% | 1.2\% | \$2.12 | \$61 | \$3,200 | \$10,000,000 | \$129 | \$6,700 | \$21,000,000 | 32.0\% |
| Financial activities | 706,000 | 7.2\% | 10,750 | 1.5\% | 4.1\% | \$2.29 | \$94 | \$4,900 | \$53,000,000 | \$194 | \$10,100 | \$109,000,000 | 32.6\% |
| Professional and business | 1,103,000 | 11.3\% | 23,060 | 2.1\% | 8.7\% | \$1.90 | \$63 | \$3,300 | \$75,000,000 | \$189 | \$9,800 | \$226,000,000 | 24.9\% |
| Education and health | 1,547,000 | 15.9\% | 29,050 | 1.9\% | 11.0\% | \$1.88 | \$61 | \$3,200 | \$93,000,000 | \$186 | \$9,700 | \$281,000,000 | 24.8\% |
| Food or drink service | 722,000 | 7.4\% | 78,720 | 10.9\% | 29.7\% | \$3.32 | \$108 | \$5,600 | \$444,000,000 | \$135 | \$7,000 | \$552,000,000 | 44.5\% |
| Other leisure and hospitality | 223,000 | 2.3\% | 15,340 | 6.9\% | 5.8\% | \$2.40 | \$106 | \$5,500 | \$85,000,000 | \$186 | \$9,700 | \$148,000,000 | 36.4\% |
| Other industries | 1,229,000 | 12.6\% | 37,570 | 3.1\% | 14.2\% | \$2.19 | \$79 | \$4,100 | \$154,000,000 | \$194 | \$10,100 | \$378,000,000 | 28.9\% |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management | 1,370,000 | 14.1\% | 8,260 | 0.6\% | 3.1\% | \$2.76 | \$134 | \$6,900 | \$57,000,000 | \$214 | \$11,100 | \$92,000,000 | 38.4\% |
| Professional | 1,520,000 | 15.6\% | 14,680 | 1.0\% | 5.5\% | \$2.34 | \$88 | \$4,600 | \$67,000,000 | \$184 | \$9,600 | \$140,000,000 | 32.3\% |
| Service | 1,811,000 | 18.6\% | 144,160 | 8.0\% | 54.5\% | \$2.75 | \$90 | \$4,700 | \$677,000,000 | \$157 | \$8,200 | \$1,178,000,000 | 36.5\% |
| Sales | 1,146,000 | 11.8\% | 26,120 | 2.3\% | 9.9\% | \$2.10 | \$81 | \$4,200 | \$110,000,000 | \$199 | \$10,300 | \$270,000,000 | 28.9\% |
| Office and | 1,361,000 | 14.0\% | 19,700 | 1.4\% | 7.4\% | \$1.67 | \$56 | \$2,900 | \$57,000,000 | \$214 | \$11,100 | \$219,000,000 | 20.7\% |



Appendixtéaplen-year annual wages are calculated by multiplying weekly wages by 52 weeks per year. Numbers may not add due to rounding. Shares are computed based A13 (con申.) unrounded numbers. "Low-wage earners" includes all minimum-wage-eligible workers in the bottom quintile of wage earners in the state.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group data, 2013-2015

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## Endnotes

1. See Appendix Table A1 for more information about coverage of federal and state minimum wage laws.
2. On January 1, 2017, California's state minimum wage was raised to $\$ 10.50$ per hour. It is scheduled to rise to $\$ 15$ per hour on January 1, 2022.
3. To see a complete list of cities and counties that have adopted higher minimum wages, see EPI's Minimum Wage Tracker (EPI 2017).
4. Ten states have no investigatory capacity; seven of these use the federal minimum wage. Four additional states have investigatory capacity but do not have the ability to file civil suits on behalf of harmed workers; of these four, three use the federal minimum wage. See Galvin (2016b) for details.
5. Note that overtime violations are distinct from minimum wage violations, though both may occur in the same incident. That is, an employer who fails to pay a worker for hours worked over 40, such that the employee's average wage falls below the minimum wage, is guilty of both an overtime violation (failure to pay the time-and-a-half premium for hours over 40 in a week) and a minimum wage violation (failure to pay the minimum wage for each hour worked). The data used in this study do not allow us to identify overtime violations separately; however, we do observe instances of minimum wage violations that are also overtime violations-provided that the affected worker is eligible for overtime.
6. For more research on wages and government assistance, see Cooper (2016).
7. Studies from within the last 10 years find violation rates between 2.3 and 4.3 percent for all workers and between 11.1 and 19.5 percent for low-wage workers (Bernhardt et al. 2009; ERG 2014; Galvin 2016a). An in-depth discussion of our findings can be found in the next section.
8. We do not account for cities or counties with minimum wages higher than their state minimum wage. Thus, our estimates may understate the volume of minimum wage violations in states containing localities with higher minimum wages.
9. As detailed in the appendix, minimum wage violations are calculated based upon the minimum wage in effect in each state in each year.
10. Throughout this report, "low-wage workers" are identified as all workers in the bottom quintile of wage earners within each state. In our data, that is an hourly wage of $\$ 10.21$ in California, $\$ 10.04$ in Florida, $\$ 10.07$ in Georgia, $\$ 10.30$ in Illinois, $\$ 10.13$ in Michigan, $\$ 10.73$ in New York, $\$ 9.96$ in North Carolina, $\$ 10.26$ in Ohio, $\$ 10.43$ in Pennsylvania, and $\$ 10.02$ in Texas.
11. Workers receiving any public assistance reflect those workers whose families receive benefits through at least one of these programs: SNAP, LIHEAP, Section-8 housing assistance, or the reduced school lunch program.
12. See Allegretto and Cooper (2014).
13. Over two-thirds (69 percent) of minimum wage violations in the agriculture industry take place in California, where all agriculture workers are entitled to the state minimum wage.
14. See Mishel et al. (2012a), Appendix B, for more information.

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