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Employers would pocket $5.8 billion of workers' tips under Trump administration's proposed 'tip stealing' rule

Report • By Heidi Shierholz, David Cooper, Julia Wolfe, and Ben Zipperer • December 12, 2017

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On December 5, the Trump administration took its first major step toward allowing employers to legally pocket the tips earned by the workers they employ. The Department of Labor (DOL) released a proposed rule that would allow restaurants to take the tips that servers earn and share them with untipped employees such as cooks and dishwashers.[1] But, crucially, the rule doesn't actually *require* that employers distribute "pooled" tips to workers. Under the administration's proposed rule, as long as tipped workers earn minimum wage, *employers could legally pocket those tips*.

Evidence shows that even now, when employers are prohibited from pocketing tips, many still do. Research on workers in three large U.S. cities (Chicago, Los Angeles, and New York) finds that 12 percent of tipped workers had tips stolen by their employer or supervisor.[2] Further, recent research shows that workers in restaurants and bars are much more likely to suffer minimum wage violations—meaning that they receive less than the applicable minimum wage—than workers in other industries. For tipped workers, some of these minimum wage violations occur when an employer confiscates tips.[3]

With that much *illegal* tip theft currently taking place, it's clear that when employers can *legally* pocket the tips earned by their employees, many will. And although the bulk of tipped workers are in restaurants, tipped workers outside the restaurant industry—such as nail salon workers, casino dealers, barbers, and hairstylists—could also see their bosses start taking a cut from their tips.

We estimate that under this rule, employers would pocket $5.8 billion in tips earned by tipped workers each year. This is 16.1 percent of the estimated $36.4 billion in tips earned by tipped workers annually. A detailed methodology describing how we arrived at that estimate is provided as an appendix, including a discussion of the uncertainty around the estimate. We believe employers will pocket between $523 million

and $13.2 billion in workers' tips annually, with $5.8 billion being our best estimate.

DOL acknowledges that employers could legally pocket tips under their proposed rule, which rescinds portions of its long-standing tip regulations, including current restrictions[4] on employers keeping tips. DOL states, "The proposed rule rescinds those portions of the 2011 regulations that restrict employer use of customer tips when the employer pays at least the full Federal minimum wage."[5] It is thus deeply unusual that DOL did not provide a quantitative estimate of the amount of tips that will be transferred from workers to employers under the proposed rule, *given that they are required to do so by law*.

The requirements that agencies must follow as a part of the rulemaking process are very clear, and among them is the requirement that agencies must assess all quantifiable costs and benefits "to the fullest extent that these can be usefully estimated."[6] There is no question that DOL *could* have produced an estimate if they had wanted to; in this report, we have shown that it is possible to arrive at an estimate using the same data researchers routinely use in similar contexts and taking a methodological approach that is in precisely the same spirit of estimates the Department of Labor undertakes on a regular basis.

One plausible explanation for why DOL left out the required estimate is that any good-faith estimate would have shown this rule will result in a substantial shift of tips from workers to employers. It appears that the Trump Department of Labor is willing to ignore legally required steps in the rulemaking process in an effort to hide the fact that they are proposing a rule that will put workers' hard-earned tips into the pockets of employers.

Appendix: Methodology

In this appendix we describe our methodology for estimating the total amount of tips that will be "transferred" to employers (i.e., the amount of tips earned by tipped workers that, as a result of this rule, will be pocketed by employers).

To estimate the transfer from workers to employers, we first estimate the total amount of tips earned in the U.S. economy, and then we estimate the total amount of *potentially* transferred tips (the amount of tips that employers could legally take as a result of the rule). Finally, we estimate how much will *actually* be transferred to employers by estimating the share of potentially transferred tips that would be pocketed by employers as opposed to being redistributed among workers (either workers who received the tips or other workers in a tip pool).

We explain the methodology for estimating these three quantities (total tips earned, total potentially transferred tips, and total tips transferred) in turn.

Estimating total tips earned

We provide two estimates of total tips earned, one using W-2 data on reported tips and a second using an estimate of total tips in full-service restaurants plus an estimate of

reported tips outside of food service.

(1) **W-2 data on reported tips**. Our first estimate of reported tips is based on 2013 W-2 tabulations from the IRS, the most recent tip data available from the IRS.[7] Using tips reported to the IRS to estimate total tips earned in the economy will almost surely result in an underestimate of the total amount of tips, since tips are widely believed to be underreported.[8]

The total reported tip amount for 2013 is about $28.1 billion—the sum of Box 7, social security tips, and Box 9, allocated tips, from IRS *W-2 Statistics* Table 5.A.[9] To create an estimate of total tips for 2016, we assume that from 2013 to 2016, reported tips grew by 14.0 percent, the same as the growth of total wages and salaries over that period as calculated by the Quarterly Census of Employment and Wages (QCEW).[10] We then apply that growth rate to the amount of tips in 2013. Our estimate of total reported tips in 2016 is $32.0 billion. This estimate is shown in Table 1.

(2) **Estimate of total tips in full-service restaurants + W-2 reported tips outside of food service.** Our second is an estimate of total tips, both reported and unreported, in full-service restaurants, plus an estimate of W-2 reported tips outside the food service industry.

To estimate the total amount of tips in the full-service restaurant industry, we apply a conservative tip rate percentage of sales to the total revenue in that industry. Total 2016 revenue for employer firms in the full-service restaurant industry (NAICS 722511) from the Census Service Annual Survey is about $280.2 billion.[11] Using revenue data from full-service restaurants (and no other types of food service) means we are appropriately excluding restaurants and food service establishments where customers are less likely to tip, such as fast-food and fast-casual restaurants. However, it also means we are understating the amount of revenue (and therefore total tips) in the food service industry that is subject to tipping because our estimate excludes other tipped food service establishments such as bars and coffee shops.

The vast majority of full-service restaurants' revenue comes directly from customers' food orders. Since diners leave tips that are a percentage of their total bill, an appropriate "tip rate" percentage can be applied to total revenue to derive a total amount of tips. To estimate the total amount of tips in the full-service restaurant industry, we simply multiply revenue in that industry by a tip rate of 10.0 percent. Our estimate of the total amount of tips from full-service restaurants is therefore $28.0 billion.

A 10.0 percent tip rate is a conservative assumption for an average tip rate in the full-service restaurant industry. Using summaries of credit card tipping data,[12] we conservatively estimate the average credit card tip rate to be 14.2 percent. This data is from seven restaurant chains with a range of price tiers and excludes nontippers and cash tippers, who generally tip slightly less than those who tip with a credit card. We calculated a weighted mean based on the available data, which was the proportion of credit card customers who tipped below 15.0 percent (24.0 percent of these customers), from 15.0 percent up to but not including 18.0 percent (22.0 percent), from 18.0 percent up to but not including 20.0 percent (20.0 percent), and 20.0 percent or above (34.0 percent). We

Table 1

Total tips earned (in billions)

	Using W-2 data on reported tips (in billions)	Using preferred data source: Total tips in full-service restaurants + W-2 tips outside of food service (in billions)
Total tips earned	$32.0	$36.4

Source: EPI analysis of IRS W-2 data, Table 5.A; BLS Quarterly Census of Employment and Wages; Census 2016 Service Annual Survey, Table 2; Exhibit 4.1 in Michael Lynn, "Should U.S. Restaurants Abandon Tipping? A Review of the Issues and Evidence," *Psychosocial Issues in Human Resource Management* vol. 5, no. 1 (2017), 120–159; and Current Population Survey microdata

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conservatively assume that the tip rates for these groups are 0.0 percent, 16.5 percent, 19.0 percent, and 20.0 percent, respectively. This yields an average tip rate of 14.2 percent. This data did not include nontippers or cash tippers. However, even if we assume that 25 percent of all customers leave no tip and include those customers in our average, the modified average tip rate is 10.7 percent, which is still above our assumption of 10.0 percent.

To estimate the amount of tips outside the food service industry, we begin with the W-2 data on total reported tips described above. The W-2 data are not available by industry, so we use Current Population Survey (CPS) data to calculate the share of total tips earned that are *not* earned in the restaurant industry. (Our treatment of CPS data on tips is described in more detail below.) For workers in tipped occupations, the share of total tips not earned in restaurants or food service occupations is about 26.0 percent. Multiplying this share times the total W-2 reported tips obtains an estimate of $8.3 billion in tips outside the restaurant industry.

Finally, we add together our estimate of total full-service restaurant tips and total reported non–food service tips, for a total of $36.4 billion in tips. The result is an underestimate, because our restaurant estimate is restricted to full-service restaurants, which are not the only food service and drinking places where customers leave tips, and because our nonrestaurant tip estimate is still restricted to reported tips. Because it partially accounts for the underreporting of tips in the IRS data, this is the better data source than using IRS data alone. The estimate is given in Table 1.

Estimating total potentially transferred tips

Under this proposed rule, employers must pay workers the full minimum wage before they can take any tips; that is, employers cannot take any tip credit if they want control over employees' tips.[13] Employers who pay the full minimum wage could, however, take all tips earned in excess of the full minimum wage. In practice, that means that employers who want control over employees' tips will pay the full minimum wage under the new rule, even if they are currently using a tip credit. Thus, in our calculation of "potentially transferred tips," we exclude any tips that workers earn below the full minimum wage since employers who pocket tips under the new rule who had been taking a tip credit will pay the amount

they had been taking as a tip credit directly to workers instead.

The data sources described in the above section ("Estimating total tips earned") do not allow us to identify tips earned below the regular minimum wage. Thus, we turn to CPS data to calculate the share of total tips that are earned below the regular minimum wage, and we apply that ratio to the above data to get estimates of potentially transferred tips.

The CPS is a household survey that asks workers about their base wages (exclusive of tips) and about their tips earned, if any. Tips are widely known to be substantially underestimated in CPS data, so we do not use it as one of our main data sources for estimating total tips. However, because it has data on individual workers, it is the best available source for estimating what share of tips are earned above the regular minimum wage. One problem with the CPS data, however, is that earnings from tips are combined with both overtime pay and earnings from commissions. Researchers refer to the CPS variable that provides the aggregate weekly value of these three sources of earnings (overtime, tips, and commissions) as "OTTC." In order to isolate tips using this variable, we first restrict the sample to hourly workers in tipped occupations, to help ensure that we are not picking up workers who are likely to earn commissions.[14] For hourly workers in these tipped occupations who work less than or equal to 40 hours in a week, we assume that the entire amount of OTTC earnings is tips. For hourly workers in tipped occupations who work more than 40 hours, we must subtract overtime earnings. We calculate overtime earnings for these workers as 1.5 times their straight-time hourly wage times the number of hours they work beyond 40. For these workers, we assume their tipped earnings are equal to OTTC minus these overtime earnings. In other words, for hourly workers in tipped occupations:

> Weekly tips = OTTC for those who work ≤ 40 hours per week, and
>
> Weekly tips = OTTC − [(base wage) × 1.5 × (hours worked − 40)] for those who work > 40 hours per week.

If a worker's base wage (without tips) is at least as high as the minimum wage, the employer could potentially take all that worker's tips. In that case, potentially transferred tips are equal to total weekly tips earned. But if the worker's base wage is less than the minimum wage, the amount an employer who takes tips will *not* be legally able to take is equal to the weekly hours the tipped worker works multiplied by the difference between the minimum wage and the base hourly wage the tipped worker currently earns. In that case, potentially transferred tips are equal to total tips earned minus the amount just described that the employer cannot take. In other words,

> Potentially transferred tips = weekly tips if base wage ≥ minimum wage, and
>
> Potentially transferred tips = weekly tips – [(hours worked) × (minimum wage – base wage) if base wage < minimum wage.

To calculate the aggregate weekly amounts, we sum total tips and potentially transferred tips earned across all hourly workers in tipped occupations. The ratio of these two CPS aggregates (aggregate potentially transferred tips/aggregate total tips) is 0.72. To calculate

Table 2

Potentially transferred tips (in billions)

	Using W-2 data on reported tips (in billions)	Using preferred data source: Total tips in full service restaurants + W-2 tips outside of food service (in billions)
Total tips earned	$32.0	$36.4
Potentially transferred tips	$22.9	$26.0

Source: EPI analysis of IRS W-2 data, Table 5.A; BLS Quarterly Census of Employment and Wages; Census 2016 Service Annual Survey, Table 2; Exhibit 4.1 in Michael Lynn, "Should U.S. Restaurants Abandon Tipping? A Review of the Issues and Evidence," *Psychosocial Issues in Human Resource Management* vol. 5, no. 1 (2017), 120–159; and Current Population Survey microdata

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our estimates of potentially transferred tips, we multiply the estimates described above (in the section "Estimating total tips earned") by 0.72. These values are shown in Table 2.

Estimating total tips transferred

Standard economic logic dictates that employers will pocket any tips their tipped workers earn that are over and above the hourly wage these same workers could get in a nontipped job. Put another way: to get and keep the workers they need, employers must pay the tipped workers they employ as much as the workers' "outside option," since, all else being equal (i.e., assuming no important difference in nonwage compensation and working conditions), if these workers could earn more in another job, they would quit and go to that job. But to keep these workers, employers do not need to pay them any *more* than they could earn in another job (again, assuming all else is equal), since it would not be worth it to these workers to quit.

Using this same logic, employers will not shift any tips from tipped workers to nontipped workers, since the fact that they already have workers in those (nontipped) jobs means they are already paying what is needed to attract workers to those jobs. There may in some cases be an appearance of employers transferring tips from tipped workers to nontipped workers, but that is likely to be offset by employers paying lower base wages to nontipped workers so that the total amount earned by nontipped workers is close to what they would have earned in the absence of the proposed rule.

The exception to the above is if these workers are in a union. The collective leverage a union affords workers means that employers will be unlikely to pocket tips. A tip pool in a unionized shop is more likely to result in some tips being transferred from tipped workers to nontipped workers, but not to employers.

To calculate the "outside option wage," we again turn to the CPS. We model a worker's outside option wage by using regression analysis to determine the wage each worker would likely earn in a nontipped job. We regress hourly wage (including OTTC) on controls for age, education, gender, race, ethnicity, citizenship, marital status, and state, and use the results of that regression to predict what each tipped worker would earn in a

nontipped job. We refer to that predicted value as the outside option wage—it's the wage a similar worker in a nontipped job earns. We assume if a worker currently earns less than or equal to their outside option wage, the employer won't take any of that worker's tips. However, an employer will take all tips the worker earns above the outside option wage, as long as that value is above the state minimum wage.

> Let T = (current hourly wage including tips – outside option wage) × (hours worked). Then,
>
> Transferred tips = 0 if $T \leq 0$, and
>
> Transferred tips = T if $0 < T \leq$ potentially transferred tips, and
>
> Transferred tips = potentially transferred tips if T > potentially transferred tips. Further, we assume that if a tipped worker is in a union, transferred tips are zero.

To get a preliminary estimate of the total amount of transferred tips, we aggregate transferred tips across all hourly workers in tipped occupations. The ratio of the two CPS aggregates (aggregate transferred tips/aggregate potentially transferred tips) is 0.41. To calculate our preliminary estimates of transferred tips, we multiply the estimates described above (in the section "Estimating potentially transferred tips") by 0.41.

A few important adjustments to the preliminary estimates of total transferred tips are necessary in order to arrive at the final estimate of the amount of tips that will be transferred from workers to employers. First, while the above estimates are what we believe is most likely to happen, there is uncertainty about how employers will actually respond to the rule. Using the above methodology, we estimated that employers would take 41.0 percent of potentially transferred tips. To provide a range, albeit an extremely broad one, we believe that, at a bare minimum, employers will take at least as big a share of potentially transferred tips as they currently typically steal from workers. Data on the share of tips stolen from tipped workers by employers is not readily available, but recent research provides data on wages stolen due to one important form of wage theft suffered by tipped workers—minimum wage violations.[15] These data suggest that roughly 4.1 percent of the earnings of low-wage workers are stolen through minimum wage violations (found by multiplying the fourth and last columns of Table A3 in the report). Thus we assume that, at a bare minimum, employers will take 4.1 percent of potentially transferred tips. At the upper end, we assume that, at a maximum, employers would take all potentially transferred tips—as they could legally do, even if it is not a likely outcome given market forces.

That range must be further adjusted to note state-level impacts on tipped worker protections. Fifteen states (California, Delaware, Illinois, Kentucky, Pennsylvania, Minnesota, Montana, New Hampshire, New York, Nevada, North Carolina, North Dakota, Utah, Washington, and Wyoming) have state laws that are more protective of workers' tips than the proposed rule.[16] The proposed rule would not preempt these state laws if the rule were to become final. That in itself is unlikely to completely offset the impact of this rule since the change in the federal rule would likely result in some employers in these states taking workers' tips either because of confusion about the applicability of the federal rule

or because of the use of such potential confusion as a cover for deliberate theft. Nonetheless, the effect of the rule would be greatly diminished in these states relative to states that do not have more protective laws. We assume that, at the low end, no tips will be transferred to employers as a result of this rule in states with more protective laws, and, at the high end, 4.1 percent of potentially transferred tips will be transferred to employers as a result of the rule in these states (the latter being the same figure that provides the lower bound in states that do not have more protective laws). Our preferred estimate is the middle of these two, 2.05 percent.

Recent court cases will also likely impact what share of potentially transferred tips are transferred from workers to employers.

- For purposes of this analysis, we have disregarded any impact of this rule change in the states covered by the Tenth Circuit that do not also have more protective state laws (Colorado, Kansas, New Mexico, and Oklahoma) because of the July 2017 decision in *Marlow v. The New Food Guy*, No. 16-1134 (2017), which invalidated the rule in that Circuit and established a status quo in those states that lack this protection.
- We have also partially discounted (by 50 percent) the impact of the rulemaking in the states covered by the Fourth Circuit that do not also have more protective state laws (Maryland, South Carolina, Virginia, and West Virginia). In the Fourth Circuit, there is arguably some uncertainty about the enforceability of this requirement due to the 2015 in *Trejo v. Ryman*, No. 14-1485 (July 2015).
- Conversely, we have not discounted the impact of this rulemaking in the Ninth Circuit states that do not have more protective state laws (Alaska, Arizona, Hawaii, Idaho, Montana, Oregon, and Washington) given that the rule has been upheld in that Circuit in *Oregon Restaurant v. Perez*, No. 13-35765 (Feb. 2016), and given the law's private right of action and active FLSA plaintiffs' bar in these states. Likewise, we have not discounted the impact of this rule nationwide even though the DOL issued a nationwide nonenforcement policy in July 2017, given that such policy does not preclude private FLSA enforcement.

Table 3 summarizes the ratios we apply to potentially transferred tips in each set of states to arrive at our range of transferred tips, and Table 4 provides the final estimates. Table 4 shows that using the best data source for total tips earned in the economy (the estimate of total tips in full-service restaurants plus reported tips outside the restaurant industry), our estimate of the amount of tips that will be pocketed by employers as a result of this rule is between $523 million and $13.2 billion, with our best estimate being $5.8 billion.

Table 3

Share of potentially transferred tips that will be transferred, by state groups

	States without more protective state laws and not in the Fourth or Tenth Circuit	States with more protective state laws	Tenth Circuit states without more protective state laws	Fourth Circuit states without more protective state laws
Share of potentially transferred tips that will be transferred				
Low estimate	4.1%	0%	0%	2.05%
Preferred estimate	43.91%	2.05%	0%	21.95%
High estimate	100%	4.1%	0%	50.0%

Note: The 43.91% in the first column is the ratio of transferred tips to potentially transferred tips in those 28 states, calculated using CPS microdata.

The 15 states with more protective state laws are California, Delaware, Illinois, Kentucky, Minnesota, Montana, Nevada, New Hampshire, New York, North Carolina, North Dakota, Pennsylvania, Utah, Washington, and Wyoming. The four states in the Tenth Circuit without more protective state laws are Colorado, Kansas, New Mexico, and Oklahoma. The four states in the Fourth Circuit without more protective state laws are Maryland, South Carolina, Virginia, and West Virginia. The remaining 28 states (including D.C.) do not have more protective state laws and are not in the Fourth or Tenth Circuit.

Source: EPI analysis of IRS W-2 data, Table 5.A; BLS Quarterly Census of Employment and Wages; Census 2016 Service Annual Survey, Table 2; Exhibit 4.1 in Michael Lynn, "Should U.S. Restaurants Abandon Tipping? A Review of the Issues and Evidence," *Psychosocial Issues in Human Resource Management* vol. 5, no. 1 (2017), 120–159; Current Population Survey microdata; and relevant state laws and federal circuit court cases

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Table 4

Tips transferred from workers to employers (in billions)

	Using W-2 data on reported tips (in billions)	Using preferred data source: Total tips in full service restaurants + W-2 tips outside of food service (in billions)
Total tips earned	$32.0	$36.4
Potentially transferred tips	$22.9	$26.0
Tips transferred from workers to employers		
Low estimate	$0.460	**$0.523**
Preferred estimate	$5.1	**$5.8**
High estimate	$11.6	**$13.2**

Source: EPI analysis of IRS W-2 data, Table 5.A; BLS Quarterly Census of Employment and Wages; Census 2016 Service Annual Survey, Table 2; Exhibit 4.1 in Michael Lynn, "Should U.S. Restaurants Abandon Tipping? A Review of the Issues and Evidence," *Psychosocial Issues in Human Resource Management* vol. 5, no. 1 (2017), 120–159; and Current Population Survey microdata

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Endnotes

1. Tip Regulations under the Fair Labor Standards Act (FLSA), 82 Fed. Reg. 232 (December 5, 2017), 57395–57413.

2. Annette Bernhardt et al., *Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities, 2009*, Center for Urban Economic Development, National Employment Law Project, and UCLA Institute for Research on Labor and Employment, 2009.

3. David Cooper and Teresa Kroeger, *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*, Economic Policy Institute, May 10, 2017.

4. According to the current restrictions, "The FLSA prohibits any arrangement between the employer and the tipped employee whereby any part of the tip received becomes the property of the employer." See U.S. Department of Labor, Wage and Hour Division, "Fact Sheet #15: Tipped Employees Under the Fair Labor Standards Act (FLSA)," revised December 2016.

5. 82 Fed. Reg. 57408.

6. Maeve P. Carey, *Cost-Benefit and Other Analysis Requirements in the Rulemaking Process*, Congressional Research Service, December 9, 2014.

7. Internal Revenue Service (IRS), "Table 5.A. Summary of Items for Taxpayers with Form W-2, by Return and Earner Type, Tax Year 2013," *SOI Tax Stats—Individual Information Return Form W-2 Statistics*, accessed December 8, 2017.

8. In its estimates of unreported income, the IRS notes that "since a significant portion of tip income is paid in cash by customers, tip income is subject to less information reporting than most wages and salaries." See Internal Revenue Service, *Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2008–2010*, Publication 1415 (5-2016), Department of the Treasury, May 2016.

9. Internal Revenue Service (IRS), "Table 5.A. Summary of Items for Taxpayers with Form W-2, by Return and Earner Type, Tax Year 2013," *SOI Tax Stats—Individual Information Return Form W-2 Statistics*, accessed December 8, 2017. Social security tips are the total reported tips that are subject to social security tax. Allocated tips are additional tips allocated by employers if an employee's reported tips were less than 8 percent of food and drink sales. The sum of these two values to calculate total reported tips was also used in Maggie R. Jones (2016) "Measuring the Effects of the Tipped Minimum Wage Using W-2 Data," Working Paper 2016-3, Center for Administrative Records Research and Applications, U.S. Census Bureau, May 26, 2016.

10. QCEW data is available at www.bls.gov/cew.

11. Census 2016 Service Annual Survey, Table 2, accessed December 8, 2017, at www.census.gov/services/index.html.

12. See Exhibit 4.1 in Michael Lynn "Should U.S. Restaurants Abandon Tipping? A Review of the Issues and Evidence," *Psychosocial Issues in Human Resource Management* vol. 5, no. 1 (2017), 120–159.

13. The tip credit allows employers to pay less than the minimum wage to workers who customarily

receive tips, provided that those tips plus the reduced base wage still add up to the regular minimum wage. For more information about the tip credit, see Sylvia Allegretto and David Cooper, *Twenty-Three Years and Still Waiting for Change: Why It's Time to Give Tipped Workers the Regular Minimum Wage*, Economic Policy Institute, July 10, 2014.

14. Tipped occupations include waiters and waitresses (census code 4110); bartenders (4040); gaming services workers (4400); barbers (4500); hairdressers, hairstylists, and cosmetologists (4510); and miscellaneous personal appearance workers (4520) in all industries. Tipped occupations also include (4130) in the following industries: bowling centers (8580); other amusement, gambling, and recreation industries (8590); traveler accommodation (8660); (8670); restaurants and other food services (8680); drinking places, alcoholic beverages (8690); barber shops (8970); beauty salons (8980); nail salons and other personal care services (8990); and other personal services (9090).

15. David Cooper and Teresa Kroeger, *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*, Economic Policy Institute, May 10, 2017.

16. A description of the relevant laws in these states is available upon request.

The findings in this report have been corrected from its release on December 12, following a revised analysis of state laws prohibiting employers from pocketing workers' tips. The initial analysis had not included Washington and Montana as states with more protective state laws. More protective laws would not be preempted by the proposed rule, thus reducing the rule's impact in such states. The addition of Washington and Montana as more protective for workers reduces the total amount of tips transferred from workers to employers from the original estimate of $6.1 billion to $5.8 billion. See the methodological appendix for more details.