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**Employment
Policies**

INSTITUTE

COUNTING THE COST

The Impact of an \$8.25 New Jersey
Minimum Wage on State and
Local Government

The Employment Policies Institute (EPI) is a nonprofit research organization dedicated to studying public policy issues surrounding employment growth. Among other issues, EPI research has quantified the impact of new labor costs on job creation, explored the connection between entry-level employment and welfare reform, and analyzed the demographic distribution of mandated benefits. EPI sponsors nonpartisan research that is conducted by independent economists at major universities around the country.

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I N S T I T U T E

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Executive Summary

This fall, New Jersey voters will decide whether to alter the state Constitution to raise the minimum wage to \$8.25 and then put it on autopilot to rise in future years. The debate in the state has focused on whether or not raising the minimum wage would reduce opportunities for the entry-level workforce. But there's another cost to consider—the financial cost to state, county, and municipal governments.

In this study, Drs. William Even (Miami University) and David Macpherson (Trinity University) use Census Bureau data to calculate how much the minimum wage increase will cost state and local governments who employ people at the minimum wage. The data show that roughly 13,000 state and local employees would be directly affected by a minimum wage increase to \$8.25 (78 percent work for local government, and 22 percent work for state government.) Proponents argue that a \$1 wage increase would indirectly affect employees earning up to \$9.25, which increases the number of affected state and local government employees to roughly 25,000.

Drs. Even and Macpherson estimate that the additional direct wage cost of a \$1 minimum wage increase totals \$11.2 million yearly. Because an increase in wages also requires additional contributions for payroll taxes, the total cost to New Jersey taxpayers is \$12.3 million per year. Adding in employees who are indirectly affected, the annual wage cost increases to \$19.7 million and the total compensation cost increases to \$21.6 million. Either estimate would increase in most years thereafter due to the inflation indexing provision included in the ballot question.

These cost estimates assume that government payrolls aren't reduced as a direct consequence of the higher labor costs. Should this occur, the cost to taxpayers would be reduced only at the expense of job opportunities for the New Jerseyans who filled these jobs.

The tax burden in New Jersey is already considered one of the highest in the nation, and local property taxes in particular are famously burdensome. In addition to the potential consequences for less-experienced jobseekers,

New Jerseyans should also weigh carefully the fiscal consequences of altering the state constitution to raise the minimum wage.

Michael Saltsman

Research Director, Employment Policies Institute

Data

Data from the U.S. Census Bureau's Current Population Survey (CPS) is used in this report to calculate the increase in labor costs to state and local government entities in New Jersey. Using monthly data from the Outgoing Rotation Groups (ORG) between August 2007 and July 2013, we estimate that about 13,000 state and local government workers would be directly affected by an increase in the minimum wage from \$7.25 to \$8.25.¹ (This number is consistent across the 84 most recent monthly surveys from August 2009 through July 2013).²

The data show that roughly 78 percent of the covered employees work for county/municipal government, and 22 percent work for state government. The top three occupation categories are Service Occupations (50.2% of employees), Professional and Related Occupations (23.7%), and Office and Administrative Support Occupations (12.2%).

Estimation Method

The earnings weights provided in the CPS are designed to allow researchers to estimate variables for the population. For example, to estimate the number of state and local workers affected by the minimum wage hike, we sum the earnings weights across all affected workers in the CPS after scaling the weights to reflect the fact that we have multiple months of data.³ To estimate the in-

crease in annual payroll cost resulting from an increase in the minimum wage to \$8.25, we estimate the increase in annual cost for each worker as

$$(\$8.25 - \text{current wage}) \times \text{weekly hours} \times 52$$

We then multiply the increase in annual cost by the earnings weight for each worker and sum across workers.⁴ Since an increase in wages also requires increased employer contributions for mandatory payroll taxes, we apply an estimate of the payroll tax rate for these mandatory programs to calculate the additional cost for these programs.⁵

Past research has found that workers earning slightly above the new minimum may experience "ripple" effects as employers attempt to maintain the relative wage structure of their workers. In fact, a recent paper from proponents of a New Jersey minimum wage hike speculates that workers earning between \$8.25 and \$9.25 would experience ripple effects.⁶ Based on empirical evidence in research by David Neumark, Mark Schweitzer, and William Wascher,⁷ we assume that workers earning between \$8.25 and \$8.70 would experience a 4.1 percent increase in wages for each 10 percent increase in the minimum wage; and those earning between \$8.71 and \$9.25 would experience a 3.6 percent increase. After estimating the ripple effects for the hourly wage, we estimate the weekly cost of increased wages by multiplying by weekly hours, and convert to annual cost by multiplying by 52. We also estimate the increase in mandatory payroll taxes associated with the ripple effects.

Results

Table 1 summarizes the results and provides 95 percent confidence intervals for the number of affected workers, the annual increase in wage costs, and the increase in compensation costs (which adds the cost of additional

payroll taxes to the wage cost).⁸ Estimates are provided for different sample periods. The longer sample period has the advantage of a larger sample size, but the disadvantage of using data that is less current.

Based on the estimates that combined data from 8/2007 through 7/2013 (our preferred specification), approximately 13,000 state and local workers are expected to be directly affected by a minimum wage hike to \$8.25. This would cost state and local government approximately \$11.2 million annually in terms of increased wages, and an additional \$1.1 million in mandatory fringe benefits. A comparison of these estimates to those obtained with alternative sample periods reveals that the estimates are fairly robust to the choice of sample period.

Table 2 provides estimates that include the cost for workers directly affected by the hike (i.e. those earning between \$7.25 and \$8.24) and ripple effects for workers who originally earned between \$8.25 and \$9.25. If ripple effects are

added, the number of affected workers nearly doubles to approximately 25,000. (The local/state breakdown is 76% and 24% respectively, similar to the breakdown in the original sample.) With ripple effects added, our preferred specification using the longest sample period implies that the annual wage cost rises to approximately \$20 million and the increase in total compensation jumps to nearly \$22 million.

It is worth noting that our estimates of the cost to taxpayers of the minimum wage increase would be an over-statement of the cost to state and local government if workers are laid off or hours are cut in response to this minimum wage hike. While there is strong evidence that minimum wage increases reduce employment and/or hours in the private sector, the public sector may not respond the same way. At the same time, the estimates would be an under-statement of the cost to the state government if ripple effects extend to workers earning beyond \$9.25 per hour.

Table 1: The Impact of an Increase in NJ Minimum Wage to \$8.25 Per Hour

95 percent confidence interval

	Sample Period: 8/2007-7/2013			
	Mean	Lower Bound	Upper Bound	Sample Size
Affected Workers	13,268	5,481	21,054	71
Wage Cost (in \$million)	11.2	4.3	18.1	71
Compensation Cost (in \$million)	12.3	4.7	19.8	71

	Sample Period: 8/2008-7/2013			
	Mean	Lower	Upper	
Affected Workers	13,244	6,143	20,346	59
Wage Cost (in \$million)	10.6	4.3	17.0	59
Compensation Cost (in \$million)	11.6	4.7	18.6	59

	Sample Period: 8/2009-7/2013			
	Mean	Lower	Upper	
Affected Workers	12,457	6,473	18,440	44
Wage Cost (in \$million)	9.3	5.1	13.5	44
Compensation Cost (in \$million)	10.2	5.6	14.8	44

	Sample Period: 8/2010-7/2013			
	Mean	Lower	Upper	
Affected Workers	13,096	7,170	19,023	34
Wage Cost (in \$million)	9.4	4.9	13.9	34
Compensation Cost (in \$million)	13.1	7.2	19.0	34

Table 2: The Impact of an Increase in the NJ Minimum Wage to \$8.25 Per Hour with Ripple Effects for Those Originally Earning \$8.25 to \$9.25

95 percent confidence interval

	Sample Period: 8/2007-7/2013			
	Mean	Lower Bound	Upper Bound	Sample Size
Affected Workers	25,140	13,465	36,816	135
Wage Cost (in \$million)	19.7	9.2	30.2	135
Compensation Cost (in \$million)	21.6	10.0	33.1	135

	Sample Period: 8/2008-7/2013			
	Mean	Lower	Upper	
Affected Workers	24,179	14,195	35,244	110
Wage Cost (in \$million)	18.8	9.3	28.3	110
Compensation Cost (in \$million)	20.6	10.2	31.0	110

	Sample Period: 8/2009-7/2013			
	Mean	Lower	Upper	
Affected Workers	24,283	15,574	32,992	85
Wage Cost (in \$million)	17.5	10.7	24.4	85
Compensation Cost (in \$million)	19.2	11.7	26.7	85

	Sample Period: 8/2010-7/2013			
	Mean	Lower	Upper	
Affected Workers	25,398	15,778	35,018	65
Wage Cost (in \$million)	18.3	10.2	26.3	65
Compensation Cost (in \$million)	20.0	11.2	28.9	65

Tables 1 and 2 Source: Estimates from authors using
August 2007-July 2013 Outgoing Rotation Groups from
the Current Population Survey

1. For a description of the CPS data, see <http://www.census.gov/cps/>. We use the Outgoing Rotation Groups which make up one-quarter of the CPS sample since these respondents answer questions about wages whereas the other rotation groups do not.
2. Restricting to hourly workers in the 2007-2013 dataset yields 11,110 affected workers. Dropping the restriction to hourly workers yields 13,628 affected workers. Because minimum wage law would also apply to lower-salaried workers, we choose to use the larger sample.
3. For example, if we have 60 months of data, we divide the weights in the monthly data by 60.
4. For workers paid by the hour, the reported hourly wage was used. For workers who are not paid by the hour, we calculate the hourly wage by dividing usual weekly earnings by usual weekly hours. Overtime pay was calculated as time and one-half for hours above 40 hours for hourly workers. Also, while the NJ minimum wage is \$7.25 over our sample period, many workers report an hourly wage between \$7.25. Since workers often round their answers to questions about wages (e.g. report \$7.00 when they actually earn \$7.25), we assume that anyone who reports between \$7.00 and \$7.25 actually earned \$7.25 per hour.
5. The assumed payroll tax for Medicare and Social Security is 7.65 percent. To estimate the payroll tax for workers compensation and unemployment insurance, we use unpublished data from the 2010 Employer Cost of Employee Compensation data base for state and local workers in the Middle Atlantic Region in 2010. While approximately one quarter of public employees nationwide are exempt from Social Security, a report from the Congressional Research Service finds that 92 percent of NJ state and local employees are covered. Since we don't know the distribution of that coverage, we assume that all state and local workers are covered for the purpose of this analysis. In any case, it would not substantially affect our final estimate.
6. Jon Whiten, "The Stimulus New Jersey Needs: Raising the Minimum Wage Would Boost the Economy While Providing Better Opportunities for Hundreds of Thousands of Working New Jerseyans." New Jersey Policy Perspective Report, May 2013.
7. Neumark, David, Schweitzer, Mark, and Wascher, William. "Minimum Wage Effects throughout the Wage Distribution." *Journal of Human Resources* 39 (Spring 2004): 425-450.
8. The confidence intervals are bootstrapped because the variables of interest are not normally distributed (e.g. the annual cost estimates are non-negative). The bootstrapping accounts for the survey design used by the CPS for stratified random sampling. Bootstrap estimates were based on 1,000 replications and performed using Stata's tools for bootstrapping survey data.