

## The Regional Impact of an \$11 per Hour Minimum Wage

Updated December 18, 2014

Increasing the minimum wage to \$11 per hour will give hundreds of thousands of Massachusetts workers a raise and provide them and their families with additional resources to pay for basic necessities. A full-time minimum wage worker in Massachusetts makes \$16,000 in 2014, over \$5,500 less (when adjusted for inflation) than he or she would earn if the minimum wage had maintained its value since 1968 (which was equal to about \$10.86 per hour, or \$21,720 a year, in today's dollars). Increasing the minimum wage to \$11 by 2017 will raise the wages of approximately 605,000 workers. For demographic information on the workers who will be helped by a minimum wage increase see MassBudget's Factsheet, [Rewarding Work: The Data on an \\$11 Minimum Wage](#).

While these 605,000 workers live throughout Massachusetts, some cities and towns have particularly high concentrations of the labor force employed in low-wage work. Raising the minimum wage will tend to have a greater impact in these areas, especially because workers who receive wage increases are likely to spend a portion of those increases locally, thereby supporting local businesses and boosting the local economy. This fact sheet builds on the previous MassBudget statewide analysis by providing estimates of the number of workers in specific cities and regions of the state who can expect to see their wages increase if the state minimum wage is raised in three steps to \$11 per hour on January 1, 2017.

### Calculating the Regional Impact of a Minimum Wage Increase

Like our earlier estimates of the statewide effect of a minimum wage increase, the projections contained in this fact sheet come from a model developed by the Economic Policy Institute, a national, non-partisan research organization. This model uses data from two separate Census surveys, the American Community Survey and the Current Population Survey and looks at specific geographic areas called Public Use Microdata Areas (PUMAs) – areas that are large enough so that the sample size used in the survey is sufficient to produce reliable estimates. The analysis assumes that an increase in the minimum wage to \$11 per hour will have two types of effects. Workers who currently earn less than \$11 per hour will be directly affected by the change because they will receive an automatic pay increase when the new minimum wage goes into effect. Other workers, who currently earn slightly above \$11 per hour, will be indirectly affected because their wages can be expected to increase somewhat as overall pay scales rise in response to the minimum wage increase. *(See note at the end of this fact sheet for more details on the methodology used.)*

Low-wage workers in all parts of the state will be affected by an increase in the minimum wage. As the table on the next page shows, however, there is significant variation in the portion of wage earners who will be affected – directly or indirectly – by an increase in the minimum wage to \$11 per hour. In cities such as Springfield and Lowell, and in the greater New Bedford and Pittsfield areas, about one in four workers is estimated to see his or her wages rise if the minimum wage is increased to \$11 per hour – more than double the proportion in higher-income suburbs.

### Workers Affected by a Minimum Wage Increase to \$11 by City/Region

City or Region*	Directly Affected	Indirectly Affected	Total	% Wage Earners
<b>MASSACHUSETTS</b>	<b>473,000</b>	<b>132,000</b>	<b>605,000</b>	<b>20%</b>
<b>NORTH</b>	<b>Directly Affected</b>	<b>Indirectly Affected</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Lowell	9,400	3,700	13,200	26%
Greater Lawrence	11,700	3,300	15,000	22%
Greater Lynn	9,500	2,900	12,300	23%
Eastern Essex (Salem, Beverly, Marblehead)	9,300	2,600	12,000	19%
Northeastern Essex (Gloucester, Newburyport)	7,200	2,100	9,300	19%
Central Essex (Peabody, Danvers, Lynnfield)	7,900	1,700	9,600	17%
North Central Essex (Haverhill, N. Andover, Boxford)	7,500	2,000	9,500	17%
Northeastern Middlesex (Wakefield, Reading)	6,100	1,900	8,000	14%
Northern Middlesex (Billerica, Chelmsford)	11,200	3,100	14,200	15%
<b>GREATER BOSTON</b>	<b>Directly Affected</b>	<b>Indirectly Affected</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Boston**	46,300	13,100	59,400	19%
Chelsea, Revere & Winthrop	8,600	2,200	10,800	23%
Malden-Medford	10,600	2,300	12,900	22%
Somerville-Everett	13,200	3,100	16,300	25%
Cambridge	6,500	2,200	8,800	15%
Newton-Brookline	5,700	2,100	7,800	11%
Milton-Quincy	7,700	2,300	10,000	17%
Northern Suburban (Woburn, Melrose, Stoneham)	6,100	1,500	7,600	14%
Northwestern Suburban (Waltham, Arlington)	11,200	3,100	14,300	15%
Western Suburban (Needham, Wellesley)	4,300	700	4,900	11%
<b>SOUTH/CAPE</b>	<b>Directly Affected</b>	<b>Indirectly Affected</b>	<b>Total</b>	<b>% Wage Earners</b>
Greater Weymouth	10,000	4,000	14,100	20%
Greater Brockton	10,300	2,200	12,500	25%
Greater Taunton	10,400	2,800	13,200	24%

**FACTS AT A GLANCE**

Greater Attleboro	9,800	2,600	12,500	21%
Greater Fall River	9,600	2,600	12,300	24%
Greater New Bedford	15,000	5,100	20,200	26%
Greater Plymouth	9,600	2,800	12,400	16%
Southwest (Franklin, Foxborough)	7,100	1,200	8,300	15%
Central Norfolk (Norwood, Walpole)	4,600	1,900	6,500	12%
Southeastern Norfolk (Braintree, Randolph)	8,700	3,200	11,900	19%
Western Plymouth (Bridgewater, Easton)	10,200	2,700	12,900	17%
Western & Eastern Cape; Islands	5,800	1,200	7,000	16%
Central Cape	11,500	3,700	15,200	26%
<b>CENTRAL</b>	<b>Directly Affected</b>	<b>Indirectly Affected</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Worcester	17,000	3,300	20,300	25%
Suburban Worcester	7,000	1,500	8,500	15%
Framingham-Natick Area	7,600	2,200	9,800	18%
Greater Milford	6,000	1,700	7,700	14%
Central Middlesex (Acton, Concord, Sudbury)	4,300	1,100	5,400	11%
Western Middlesex (Marlborough, Hudson)	8,200	2,200	10,400	18%
Central Worcester (Westborough, Northborough)	8,500	2,100	10,600	20%
North Central (Leominster, Fitchburg)	10,300	3,700	14,000	22%
South Central (Southbridge, Webster, Oxford)	9,400	3,700	13,100	20%
<b>WEST</b>	<b>Directly Affected</b>	<b>Indirectly Affected</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Springfield	13,400	2,500	15,900	29%
Chicopee-Holyoke Area	8,800	3,100	12,000	25%
West Central Hampden (Westfield, Agawam)	10,700	3,600	14,300	25%
Greater Amherst Area	9,400	2,300	11,700	23%
Eastern Hampden and Hampshire (Ludlow, Long Meadow)	8,300	1,600	9,900	19%
Greater Pittsfield Area	11,000	2,600	13,500	27%
Western Massachusetts (Greenfield, Athol, Montague)	10,200	2,500	12,600	23%

\* In most cases an area includes more than one city or town (for example, Greater Lawrence includes Methuen and Andover). For large areas, the two or three biggest cities or towns are noted.

\*\*The number of workers affected in Boston varies greatly within areas of the city. The city is divided into five broad census areas, and the percentage of workers who would be affected by a minimum wage increases ranges from 15 percent to 28 percent, depending on area.

The minimum wage increase to \$11 per hour will occur in three, annual steps of one dollar each, with each increase occurring on January 1<sup>st</sup>. The first increase, to \$9 per hour, will occur on January 1<sup>st</sup>, 2015

and will affect some 280,000 Massachusetts workers and their families. The regional impacts of this first wage increase are shown in the table, below.

### Workers Affected by a Minimum Wage Increase to \$9/hr., by City/Region

City or Region*	Total	% Wage Earners
<b>MASSACHUSETTS</b>	<b>280,000</b>	<b>9%</b>
<b>NORTH</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Lowell	5,900	12%
Greater Lawrence	6,500	10%
Greater Lynn	5,500	11%
Eastern Essex (Salem, Beverly, Marblehead)	5,200	8%
Northeastern Essex (Gloucester, Newburyport)	3,600	8%
Central Essex (Peabody, Danvers, Lynnfield)	4,400	8%
North Central Essex (Haverhill, N. Andover, Boxford)	4,600	8%
Northeastern Middlesex (Wakefield, Reading)	3,400	6%
Northern Middlesex (Billerica, Chelmsford)	6,300	6%
<b>GREATER BOSTON</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Boston**	28,000	9%
Chelsea, Revere & Winthrop	4,800	11%
Malden-Medford	7,500	10%
Somerville-Everett	8,400	11%
Cambridge	3,800	7%
Newton-Brookline	2,700	4%
Milton-Quincy	4,600	8%
Northern Suburban (Woburn, Melrose, Stoneham)	4,300	7%
Northwestern Suburban (Waltham, Arlington)	6,300	7%
Western Suburban (Needham, Wellesley)	2,100	4%
<b>SOUTH/CAPE</b>	<b>Total</b>	<b>% Wage Earners</b>
Greater Weymouth	5,700	8%
Greater Brockton	5,700	11%
Greater Taunton	6,200	10%

**FACTS AT A GLANCE**

Greater Attleboro	6,500	10%
Greater Fall River	4,600	10%
Greater New Bedford	9,900	12%
Greater Plymouth	6,500	8%
Southwest (Franklin, Foxborough)	4,800	7%
Central Norfolk (Norwood, Walpole)	3,100	6%
Southeastern Norfolk (Braintree, Randolph)	5,200	9%
Western Plymouth (Bridgewater, Easton)	6,800	9%
Western & Eastern Cape; Islands	2,800	8%
Central Cape	6,500	11%
<b>CENTRAL</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Worcester	8,600	11%
Suburban Worcester	3,700	6%
Framingham-Natick Area	4,200	8%
Greater Milford	3,400	6%
Central Middlesex (Acton, Concord, Sudbury)	2,500	4%
Western Middlesex (Marlborough, Hudson)	5,300	9%
Central Worcester (Westborough, Northborough)	3,900	8%
North Central (Leominster, Fitchburg)	6,400	10%
South Central (Southbridge, Webster, Oxford)	5,400	8%
<b>WEST</b>	<b>Total</b>	<b>% Wage Earners</b>
City of Springfield	8,800	14%
Chicopee-Holyoke Area	5,900	12%
West Central Hampden (Westfield, Agawam)	7,500	13%
Greater Amherst Area	4,900	11%
Eastern Hampden and Hampshire (Ludlow, Long Meadow)	5,000	9%
Greater Pittsfield Area	6,100	12%
Western Massachusetts (Greenfield, Athol, Montague)	6,000	10%

\* In most cases an area includes more than one city or town (for example, Greater Lawrence includes Methuen and Andover). For large areas, the two or three biggest cities or towns are noted.

\*\*The number of workers affected in Boston varies greatly within areas of the city. The city is divided into five broad census areas, and the percentage of workers who would be affected by a minimum wage increases ranges from about 7 percent to about 13 percent, depending on area.

Source: Economic Policy Institute analysis of American Community Survey and Current Population Survey data for 2012 and 2013.

## Note on Methodology

### *Regional Calculations*

The EPI model which produced the estimates in this paper uses data from the Current Population Survey (CPS) Outgoing Rotation Group (ORG) survey for 2013 on the total number of workers at different hourly wage levels in Massachusetts and the number of hours they work in order to estimate the total number of workers affected by a specific minimum wage increase and the average pay increase. While the CPS ORG data provide the best information on wage levels for different demographic groups on the state level, the survey is based on sample sizes that are generally too small to produce meaningful information on specific cities or regions within the state.

In order to look at areas within the state, researchers generally use the data from the Census Bureau's American Community Survey (ACS). The ACS data allow analysis of geographic areas, called Public Use Microdata Areas (PUMAs), each of which has at least 100,000 people. Some PUMAs correspond to a single city, and others contain multiple cities and towns and can represent metropolitan areas, clusters of towns, or broader regions. However, the ACS provides less wage-related information than the CPS ORG survey and appears to undercount low-wage workers, making it difficult to accurately estimate the number of potentially affected workers. Thus, for the purpose of producing the local estimates contained in this fact sheet, the EPI model uses 2010/2011 ACS data to estimate the distribution of affected workers across the state (i.e., the percentage of all affected workers living in a particular area), and then applies the percentage to the statewide total generated from the CPS. Estimates of the percentage of the local workforce that will receive a wage increase in each area are based on this number, divided by the total labor force estimated for each area by the ACS.

### *Directly affected workers*

Directly affected workers are those who earn an estimated hourly amount that is lower than a given minimum wage amount. For instance, someone who reports an hourly wage of \$9.50 or a weekly salary of \$380 and works 40 hours per week (corresponding to an hourly wage of \$9.50) would be directly affected if the minimum wage were increased to \$10 per hour.

### *Indirectly affected workers*

Workers who earn just above a given minimum wage amount would also see their wages increase in the period following a minimum wage increase. The EPI model estimates indirectly affected workers as those with reported wages between the new minimum wage and the sum of the new minimum plus the size of the minimum wage increase. For example, using this model, someone who reports an hourly wage of \$11.50 (or a weekly salary of \$460 and works 40 hours per week) would be indirectly affected if the minimum wage were increased from \$10 per hour to \$11 per hour (the third step of the three-step process being modeled), as pay scales are adjusted in response to the increase.