The Regional Impact of a Minimum Wage Increase

Increasing the minimum wage would 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 2013, about $5,000 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 $10.72, or $21,440 a year, in today's dollars). Increasing the minimum wage to $10.50 by 2016 would raise the wages of approximately 568,000 workers. For demographic information on the workers who would be helped by a minimum wage increase see here: http://massbudget.org/tool_window.php?loc=minimum_wage_effects_new.html#tool

While these 568,000 workers live throughout Massachusetts, some cities and towns have higher concentrations of the labor force employed in low-wage work than others. Raising the minimum wage would tend to have a greater impact in these areas, particularly since workers who receive wage increases are likely to spend a portion of those increases locally. 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 could expect to see their wages increase if the state minimum wage were to rise in two steps to $10.50 per hour on January 1, 2016.

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 $10.50 per hour will have two types of effects. Workers who currently earn less than $10.50 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 $10.50 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, there is a fair amount of variation in terms of the portion of wage earners who will be affected—directly or indirectly—by an increase in the minimum wage to $10.50 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 $10.50 per hour—more than double the proportion in higher-income suburbs.

Workers Affected by a Minimum Wage Increase to $10.50 by City/Region

City or Region*	Directly Affected	Indirectly Affected	Total	% Workforce
MASSACHUSETTS	**443,700**	**124,000**	**567,700**	**18%**
NORTH	**Directly Affected**	**Indirectly Affected**	**Total**	**% Workforce**
City of Lowell	9,200	2,700	11,900	24%
Greater Lawrence	9,500	3,700	13,200	21%
Greater Lynn	8,200	2,900	11,100	22%
Eastern Essex (Salem, Beverly, Marblehead)	8,000	2,500	10,500	17%
Northeastern Essex (Gloucester, Newburyport)	5,400	1,900	7,300	17%
Central Essex (Peabody, Danvers, Lynnfield)	6,900	2,100	9,000	16%
North Central Essex (Haverhill, N. Andover, Boxford)	7,300	2,100	9,400	16%
Northeastern Middlesex (Wakefield, Reading)	5,600	1,300	6,900	12%
Northern Middlesex (Billerica, Chelmsford)	9,900	2,800	12,700	13%
GREATER BOSTON	**Directly Affected**	**Indirectly Affected**	**Total**	**% Workforce**
City of Boston**	45,500	11,200	56,700	18%
Chelsea, Revere & Winthrop	7,000	2,800	9,800	22%
Malden-Medford	13,800	1,500	15,300	21%
Somerville-Everett	15,200	1,800	17,000	22%
Cambridge	5,200	2,500	7,700	15%
Newton-Brookline	4,200	1,300	5,500	8%
Milton-Quincy	7,200	2,100	9,300	16%
Northern Suburban (Woburn , Melrose, Stoneham)	7,400	1,300	8,700	14%
Northwestern Suburban (Waltham, Arlington)	9,700	3,100	12,800	14%
Western Suburban (Needham, Wellesley)	3,400	900	4,300	9%
SOUTH/CAPE	**Directly Affected**	**Indirectly Affected**	**Total**	**% Workforce**
Greater Weymouth	9,100	2,500	11,600	16%
Greater Brockton	9,400	2,100	11,500	22%
Greater Taunton	10,400	2,200	12,600	21%
Greater Attleboro	10,600	2,500	13,100	21%

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

* 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 25 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 the last two quarters of 2012 and the first two quarters of 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 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 $10.50 per hour.

Indirectly affected
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 $9.25 per hour to $10.50 per hour (the second step of the two-step process being modeled), as pay scales are adjusted in response to the increase.