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# The Mayor of Los Angeles' Proposed City Minimum Wage Policy: A Prospective Impact Study

by Michael Reich, Ken Jacobs, Annette Bernhardt and Ian Perry

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This report was prepared at the request of the Mayor of Los Angeles

*Michael Reich is a Professor at UC Berkeley and Director of the UC Berkeley Institute for Research on Labor and Employment; Ken Jacobs is the Chair of the UC Berkeley Center for Labor Research and Education; Annette Bernhardt is a visiting professor of sociology and visiting researcher, Institute for Research on Labor and Employment; Ian Perry is a researcher at the UC Berkeley Center for Labor Research and Education.*

*This report draws on material in Reich, Jacobs and Bernhardt (2014) and Reich, Jacobs, Bernhardt and Perry (2014), as part of a continuing series of policy briefs that the Center on Wage and Employment Dynamics is issuing on local minimum wage policies.*

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## Executive Summary

The Mayor of Los Angeles has requested that UC Berkeley's Institute for Research on Labor and Employment conduct an impact study of his proposal to establish a city-wide minimum wage of \$13.25 an hour by 2017, phased in over three steps. This report therefore examines the effects of the minimum wage policy on Los Angeles workers, businesses and the overall economy. Drawing on a variety of government data sources, we find the following:

**About 567,000 workers – or 37 percent of workers covered by the policy – would receive a pay raise under the proposed law by 2017.**

- 39 percent of female workers and 35 percent of male workers would receive pay increases.

**Workers' hourly wages and annual incomes would rise, resulting in a total increase in aggregate earnings of \$1.8 billion (in 2014 dollars) by 2017.**

- Hourly wages of affected workers would rise by an average of \$1.89 per hour.
- Average annual earnings would increase by 21 percent, or about \$3,200 per year.

**Adults, workers of color, and working poor families would see significant benefits from the proposed policy.**

- 97 percent of affected workers are in their twenties or older, and 59 percent of the workers receiving raises are in their thirties or older.
- The average worker who would benefit from the law contributes 51 percent of his or her family's income.
- Workers of color (black, Hispanic, Asian and other) will disproportionately benefit from the law, representing about 83 percent of affected workers.
- The affected workers have a wide range of educational backgrounds—46 percent have at least some college and 14 percent have a bachelor's degree or higher.
- Over 80 percent of Los Angeles workers who are in low-income families will receive an increase in income from the proposed law.
- The current median annual earnings of affected workers is about \$16,000, or 44 percent of the median annual earnings in Los Angeles (\$36,000).

**Previous economic research on federal, state and local minimum wage increases has found little to no measurable effect on employment or hours from minimum wage policies.**

- Instead, research evidence indicates that the costs of minimum wage increases are absorbed through reduced worker turnover, improved worker performance and small one-time increases in restaurant prices. Increased costs may also be offset by the additional spending by low-wage workers and their families, acting as an economic stimulus in local economies.

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**The proposed minimum wage law would have a modest impact on business operating costs and consumer prices.**

- About half of all affected workers are employed in four industries: restaurants (17.4 percent); retail trade (13.9 percent); health services (11.7 percent); and administrative and waste management services (9.5 percent).
- Operating costs would increase by 0.6 percent for retailers, by 4.7 percent for restaurants, and by 0.4 percent in the manufacturing sector by the time the proposed law is fully implemented in 2017.
- Restaurant prices would increase by 4.1 percent by the time the law is fully implemented. A \$10 meal would increase by 41 cents, to a total of \$10.41. For retail and the local economy as a whole, price increases would be negligible.
- We cannot rule out the possibility that the restaurant industry might experience small reductions in growth (about 560 fewer jobs a year) over the three year phase-in of the proposed law, and that some apparel manufacturing jobs might relocate outside the city.

**The percentage increase in the proposed minimum wage policy is above the average of existing local minimum wage laws, but within their range.**

- The proposal would raise Los Angeles' minimum wage by 47.2 percent over 3 years, in nominal dollars (adjusted for inflation, the percentage increase is 36.7 percent). When fully implemented in 2017, Los Angeles' minimum wage would be 32.5 percent higher than the state minimum wage of \$10. The 14 existing local minimum wage laws in the U.S. have mandated an average total increase of 41.3 percent, with a range of 13.3 percent to 84.5 percent.
- The proposed policy would increase the minimum wage to 59 percent of the Los Angeles median wage for full-time workers. This ratio is similar to the ratio for Seattle, and somewhat above the 55 percent historical peak for the ratio of the federal minimum wage to the national median wage.

**In sum, the proposed policy would provide significant gains in income to Los Angeles' low-wage workers and their families. Most businesses would be able to absorb the increased costs, and consumers would see a small one-time increase in restaurant prices. The policy's impact on overall employment is not likely to be significant.**

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## Introduction

The Mayor of Los Angeles has requested that UC Berkeley’s Institute for Research on Labor and Employment conduct an impact study of his proposed minimum wage law for the city of Los Angeles. The proposal under consideration would establish a minimum wage of \$13.25 an hour for businesses operating in the city by 2017. The minimum wage would be raised to \$10.25 an hour in 2015; to \$11.75 in 2016; and to \$13.25 in 2017 (see Table 1). It would then be indexed to inflation in subsequent years. The proposed law would cover everyone who works in Los Angeles (except state and federal government employees and the self-employed).

In this report, we first estimate the number of workers that would be affected by the law and describe their demographic and job characteristics. We next estimate the resulting increase in wages and analyze their likely impacts on business costs, prices and employment, drawing in part on previous research. We then compare the magnitude of the proposed increase to those in existing local minimum wage laws.

**Table 1. The Mayor of Los Angeles’ Proposed Minimum Wage Policy**

Year	Nominal Dollars	Constant 2014 Dollars
2015	\$10.25	\$10.00
2016	\$11.75	\$11.18
2017	\$13.25	\$12.30

*Notes: Constant dollar values are calculated using the average annual change for the past ten years of the Los Angeles-Anaheim-Riverside Consumer Price Index for All Urban Consumers (CPI-U).*

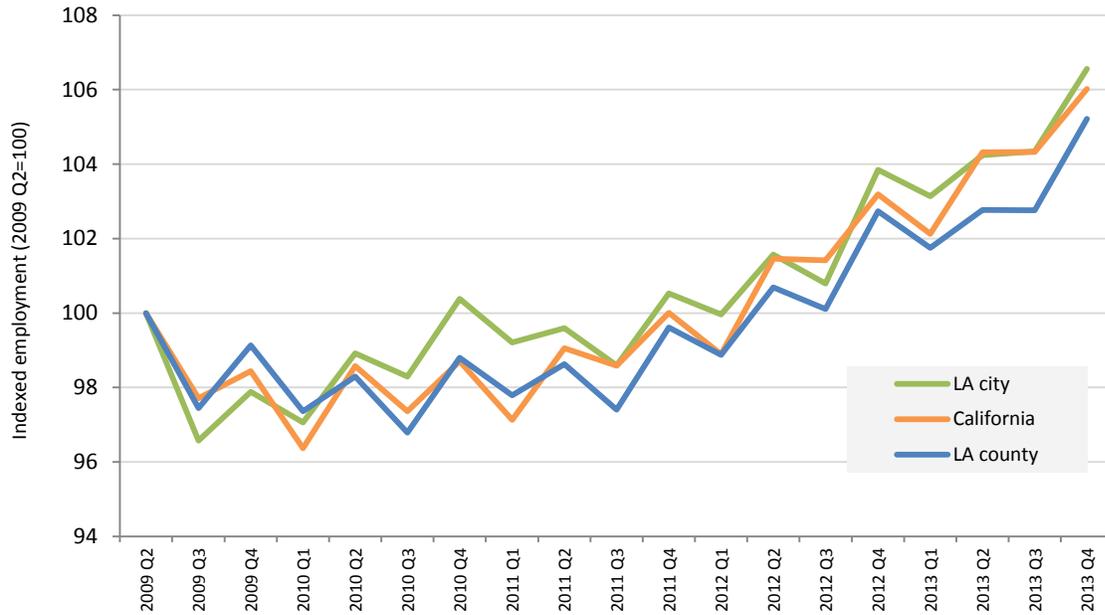
## Background

Although Los Angeles experienced significant job losses and unemployment during the Great Recession, its recovery is well on track. Employment growth during the recovery has matched that of California and Los Angeles County (see Figure 1). During the past year (July 2013 to July 2014), the city’s employment growth rate of 2.7 percent has outpaced California’s of 1.6 percent.<sup>1</sup> And while the city’s current unemployment rate of 9.1 percent is higher than California’s (7.4 percent), it has been declining at about the same rate as the state’s.<sup>2</sup> In particular, analysts point to the recent rebound of the construction sector in projecting continued economic growth in the coming years (Beacon Economics 2014; Kleinhenz 2014).

By contrast, workers’ wages have not recovered. Between 2007 and 2012, median annual earnings (adjusted for inflation) fell by 11.3 percent for those who work in the city of Los Angeles.<sup>3</sup> And according to a recent Brookings Institution report, household income inequality in Los Angeles ranks ninth among U.S. cities and has increased since the start of the recession (Berube 2014).

Los Angeles is one of many localities looking to set their minimum wages at levels that reflect local economic conditions and living costs. To date, 14 cities and counties have approved local minimum wage laws, with Seattle capturing national attention this spring when it approved a minimum wage of \$15 an hour, to be phased in over several years. In California, San Jose voters approved a minimum wage initiative in 2012, and San Diego, Berkeley and Richmond all adopted city minimum wage laws this summer. Oakland will vote on a \$12.25 minimum wage in November, and San Francisco will vote on a \$15 minimum wage.

**Figure 1. Change in Employment Since Start of Recovery**  
(Indexed to 2009 Q2)



Source: Quarterly Census of Employment and Wages and UCLA Anderson Forecast (2014). Data are not seasonally adjusted.

## Impacts on Workers

### Estimated Number of Affected Workers

To estimate the number of workers affected by the proposed minimum wage increase, we obtain the wage distribution of workers in Los Angeles County using the 2012 American Community Survey (ACS), scaled to approximate employment counts for the city of Los Angeles.<sup>4</sup> This step is necessary because the ACS does not allow us to identify individuals who work in the city of Los Angeles; the smallest geographic area for measuring place of work is the county. (Using place of work data is critical for analyzing wages because 54.4 percent of those who work in the city of Los Angeles live outside the city).<sup>5</sup> Our analysis suggests that the Los Angeles County wage distribution serves as a good proxy for the city of Los Angeles wage distribution. For example, 2012 median annual earnings were \$31,754 for workers employed in Los Angeles County and \$31,746 for workers employed in the city of Los Angeles.<sup>6</sup> We do not include self-employed workers or federal or state government employees in our sample, since these groups of workers are not covered by the proposed Los Angeles law (the latter because of limits on city authority to regulate state and federal employers).

After simulating the wage distribution in the city of Los Angeles just before the proposed minimum wage law would go into effect in 2015, we estimate, for each yearly phase-in step, the number of workers that would be affected by the increase and the additional wages they would receive as a result. We also project

the wage distribution if the proposed law is not adopted; our impact estimates are therefore a comparison of wages under the proposed minimum wage law to wages under the state minimum wage law. In constructing these estimates, we also adjust for expected employment growth and wage growth (see Welsh-Loveman, Perry and Bernhardt (2014) for more details).

Our model produces a low and a high estimate to account for measurement error. Both estimates include a directly affected group (workers who make less than the proposed minimum wage) and an indirectly affected group (workers who make slightly more than the proposed minimum wage, but who are also likely to receive a small raise via what is known as the “ripple effect”). The two estimates differ in their assumptions about the size of the ripple effect and the number of very low-wage earners (workers making less than the minimum wage). More information on our methodology is available in the online technical appendix (Welsh-Loveman, Perry and Bernhardt 2014). In this report we present the average of the two estimates, unless otherwise noted.

Table 2 shows the estimated number and percent of workers affected by Los Angeles’ proposed minimum wage increase.<sup>7</sup> By 2017, 36.9 percent of covered workers will receive pay raises, or about 567,000 workers. The majority of the affected workers are directly affected workers – that is, those earning less than \$13.25 when the law is fully implemented in 2017.

**Table 2. Number of Workers Affected by Los Angeles’ Proposed Minimum Wage Increase**

Year	Average Estimate		Low Estimate		High Estimate	
	Number of Workers	Percent of Covered Workers *	Number of Workers	Percent of Covered Workers *	Number of Workers	Percent of Covered Workers *
2015	413,000	27.7	390,505	26.1	436,389	29.2
2016	510,000	33.7	489,823	32.3	530,944	35.0
2017	567,000	36.9	544,500	35.4	589,900	38.4

Source: Authors’ analysis of ACS, OES, and QCEW data.

\* The proposal does not cover self-employed and state and federal workers.

Note: The average estimate is the average of the low and high estimates.

## Estimated Size of Wage Increases

We also estimate the additional earnings that affected workers would receive as a result of the proposed city minimum wage law, relative to their earnings under the state’s minimum wage law. Table 3 presents four measures: the average increase in hourly wages, the average increase in annual earnings, the average percentage increase in annual earnings, and the total projected increase in earnings. By full implementation in 2017, we estimate that hourly wages of affected workers will have risen by about \$1.89 and that their annual earnings will have risen by about \$3,200, an increase of about 21.4 percent. In total, workers will earn about \$1.8 billion more in the first year of full implementation as a result of the higher wage rate. All estimates are expressed in 2014 dollars.<sup>8</sup>

**Table 3. Cumulative Pay Increases for Workers Affected by Los Angeles' Proposed Minimum Wage Law (in 2014 dollars)**

	2015	2016	2017
Average Hourly Wage Increase	\$0.72	\$1.08	\$1.89
Average Annual Earnings Increase	\$1,100	\$1,800	\$3,200
Average Percent Annual Earnings Increase	8.1	12.3	21.4
Total Increase In Earnings (millions)	\$442	\$936	\$1,831

Source: Authors' analysis of ACS, OES, QCEW, and BLS data.

Notes: Results are cumulative across the phase-in years. Estimates are the average of low and high estimates.

### Demographics of Affected Workers

Table 4 profiles key demographic characteristics of the workers affected (both directly and indirectly through the ripple effect) by the proposed Los Angeles minimum wage law.

The first column of Table 4 displays the distribution of affected workers among demographic groups. For example, 50.7 percent of affected workers are women and 49.3 percent are men. Column 2 shows the same breakdown for all covered workers in Los Angeles. The last column shows the percentage of workers in each demographic group that will be affected by the proposed law. For example, 38.6 percent of female workers and 35.2 percent of male workers will receive a wage increase under the proposed law.

Contrary to the common perception that minimum wage workers are mainly teens, we estimate that 97 percent of affected workers are in their twenties or older, and that 59 percent of the workers receiving raises are in their thirties or older. Over one-third (36.4 percent) of affected workers have children and 35 percent are married. On average, affected workers contribute 51.0 percent of family income.

Workers of color will disproportionately benefit from the law, representing about 83 percent of affected workers. Over half of affected workers are immigrants (51.8 percent). The families of affected workers are disproportionately low-income (with 51.3 percent at or below 200 percent of the federal poverty level). Over four-fifths of working poor families will receive an increase in income from the proposed law. Compared to the overall workforce, affected workers are less likely to hold a Bachelor's degree.

### Job Characteristics of Affected Workers

In Table 5, we profile the job characteristics of workers affected by the proposed minimum wage law. The median of annual earnings among the affected workers is less than half of the median for the Los Angeles workforce as a whole. Affected workers are also more likely to work part-time and part-year than the overall workforce, and are less likely to have health insurance provided by their employer.

The industry breakdown is also instructive. About half of all affected workers are employed in four industries: restaurants (17.4 percent); retail trade (13.9 percent); health services (11.7 percent); and administrative and waste management services (9.5 percent). (The latter set of industries includes building services contractors and employment agencies). Several smaller industries also have a disproportionate number of affected workers, such as accommodation, apparel manufacturing, social assistance and other services.

**Table 4. Demographic Characteristics of Workers Affected by Los Angeles’ Proposed Minimum Wage Increase**  
*(all figures are percentages unless otherwise noted)*

	% of All Affected Workers	% of All Covered Workers	% of Group Affected
<b>Gender</b>			
Male	49.3	51.6	35.2
Female	50.7	48.4	38.6
<b>Median Age</b>			
	33	39	
<b>Age</b>			
18-19	3.2	1.4	83.2
20-29	38.0	23.8	58.9
30-39	21.7	25.1	31.8
40-54	27.2	35.7	28.1
55-64	9.9	14.0	26.3
<b>Race/Ethnicity</b>			
White (Non-Hispanic)	17.2	29.0	21.9
Black (Non-Hispanic)	5.8	7.4	28.9
Hispanic	62.6	44.9	51.4
Asian (Non-Hispanic)	12.1	16.1	27.7
Other (Non-Hispanic)	2.2	2.6	32.2
<b>Education</b>			
Less than High School	27.8	14.6	70.0
High School or G.E.D.	26.0	18.5	51.8
Some College	26.1	23.5	41.0
Associate’s Degree	5.7	7.8	27.0
Bachelor’s Degree or Higher	14.5	35.6	15.0
<b>Country of Birth</b>			
U.S. Born	48.2	57.5	31.0
Foreign Born	51.8	42.5	44.9
<b>Family Structure</b>			
Married	35.0	46.6	27.7
Have Children	36.4	42.8	31.4
<b>Family Income Relative to Poverty Level (FPL)</b>			
Less than 100% of FPL	16.1	6.8	87.2
100% to 150% of FPL	18.6	8.4	81.3
150% to 200% of FPL	16.7	9.0	68.1
Greater than 200% of FPL	48.7	75.8	23.6
<b>Average Worker Share of Family Income</b>	51.0	62.4	

Source: Authors’ analysis of ACS, OES, and QCEW data.

Notes: Estimates for affected workers are the average of low and high impact estimates.

**Table 5. Job Characteristics of Workers Affected by Los Angeles' Proposed Minimum Wage Increase**  
*(all figures are percentages unless otherwise noted)*

	% of All Affected Workers	% of All Covered Workers	% of Group Getting a Raise
<b>Median Individual Annual Earnings (in 2014 Dollars)</b>	\$16,000	\$36,000	
<b>Full-Time / Part-Time Worker</b>			
Full-Time (35 or More Hours per Week)	67.4	80.3	31.0
Part-Time (Fewer than 35 Hours per Week)	32.6	19.7	61.0
<b>Full-Year / Part-Year Worker</b>			
Full-Year (50-52 Weeks per Year)	82.1	86.0	35.2
Part-Year (Fewer than 50 Weeks per Year)	17.9	14.0	47.1
<b>Sector</b>			
Private Sector Employer	87.6	78.2	41.3
Non-Profit Employer	5.8	7.9	27.2
Local Government	6.6	13.9	17.6
<b>Health Insurance Provided by Employer</b>			
Yes	42.0	66.4	23.3
No	58.0	33.6	63.7
<b>Industry</b>			
Agriculture, Forestry, Fishing, Hunting, and Mining	0.2	0.2	50.0
Construction	2.5	2.7	34.5
Manufacturing	7.2	6.6	39.9
Wholesale Trade	4.5	4.5	36.4
Retail Trade	13.9	9.3	54.9
Transportation, Warehousing, and Utilities	3.6	5.4	24.8
Information and Communications	1.9	3.8	18.3
Finance, Insurance, Real Estate, and Rental and Leasing	3.7	6.3	21.8
Professional, Scientific, and Management	3.8	9.4	15.0
Administrative and Waste Management Services	9.5	6.3	55.6
Educational Services	5.9	8.1	26.8
Health Services	11.7	14.5	29.8
Social Assistance	3.9	3.2	44.4
Arts, Entertainment, Recreation	2.2	2.2	37.0
Accommodation	1.6	1.3	46.4
Restaurants and food services	17.4	8.3	77.3
Other Services	5.8	3.7	57.9
Public Administration	0.7	4.2	6.5

Source: Authors' analysis of ACS, OES, and QCEW data.

Notes: Estimates for affected workers are the average of low and high impact estimates.

## Impacts on Businesses

### Impact on Costs for Business Owners

We next estimate the impact of Los Angeles' proposed minimum wage law on the operating costs of businesses. Our analysis compares the estimated increase in total labor costs resulting from the proposed law to the existing labor costs paid by employers, drawing on our estimates in Table 2 and Table 3 above.

**Table 6. Cumulative Impact of Los Angeles' Proposed Minimum Wage Increase On Business Operating Costs**

	2015	2016	2017
<b>Restaurant Industry</b>			
% Change in Payroll Costs	4.2	7.6	14.0
Labor Costs as % of Operating Costs*	31.0	31.9	33.5
% Change in Operating Costs	1.3	2.4	4.7
<b>Retail Industry</b>			
% Change in Payroll Costs	1.3	2.7	5.2
Labor Costs as % of Operating Costs*	11.0	11.1	11.4
% Change in Operating Costs	0.1	0.3	0.6
<b>Manufacturing Sector</b>			
% Change in Payroll Costs	0.8	1.6	3.0
Labor Costs as % of Operating Costs*	13.0	13.1	13.3
% Change in Operating Costs	0.1	0.2	0.4

Source: Authors' analysis of ACS, OES, QCEW, Economic Census, U.S. Census Monthly and Annual Retail Trade and BEA data.

\* Labor costs exclude health insurance.

Table 6 shows our analysis of the estimated increase in business operating costs in three industries that play a key role in the Los Angeles economy and that have significant numbers of low-wage workers. By 2017, businesses' total payroll costs will increase by 14.0 percent in the restaurant industry, 5.2 percent in the retail industry, and 3.0 percent in the manufacturing sector, compared to payroll costs under state minimum wage law. However, operating costs will rise by a much smaller amount, since labor costs only make up a portion of total operating costs that businesses face. Labor costs excluding health benefits currently account for 31 percent of restaurant operating costs, 11 percent of retail operating costs and 13 percent of manufacturing operating costs (these percentages will increase over time as labor costs rise due the proposed minimum wage increase).<sup>9</sup> We therefore estimate that by 2017, total operating costs will increase by 4.7 percent for restaurants, by 0.6 percent for retail and by 0.4 percent for manufacturing, as a result of the proposed minimum wage law.

### Offsets to Increased Business Costs

As reviewed in detail by Reich, Jacobs and Bernhardt (2014), businesses absorb the costs of a higher minimum wage in a variety of ways. One mechanism, discussed next, involves increases in prices. Others

include improved worker performance and reduced turnover. We also summarize what the research evidence shows in terms of impacts on employment and hours, and briefly discuss possible responses in apparel manufacturing in particular. Finally, we review the potential benefits from increased spending by affected workers and their families.

### *Impact on Restaurant and Retail Prices*

Firms may adjust to increased costs by passing on some or all of the increases to consumers through higher prices. Since the minimum wage applies to all employers, individual firms such as restaurants that serve the local market will be able to pass costs through to consumers without experiencing a competitive disadvantage within their industry.

Research by Aaronson, French and MacDonald (2008) has found that for every percentage point increase in the minimum wage, restaurant prices rise by 0.072 percent. Preliminary results from a study of San Jose’s recent minimum wage increase (from \$8 to \$10 in March 2013) arrive at a similar estimate (Allegretto and Reich 2014). An earlier study (Lee et al. 2000) showed that restaurant operating costs increase by about 0.1 percent for each percentage increase in the minimum wage (see also Benner and Jayaraman 2012). These studies together thus suggest that 70 to 75 percent of cost increases are passed on as higher restaurant prices.

In Table 7 we provide our estimates of the impact on restaurant and retail prices under the proposed Los Angeles minimum wage law.<sup>10</sup> (We do not estimate likely price adjustments for manufacturing because the minimum wage research literature does not offer guidance on how this sector will adjust.) For restaurants, we predict a cumulative increase in prices of 4.1 percent by 2017, which is very similar to the prediction from the research literature above. The price of a \$10 menu item would thus increase very modestly, to \$10.41. (Prices in the restaurant industry overall have increased about 2.1 percent per year in recent years.) For retail trade and the local economy as a whole, price increases would be negligible.

**Table 7. Cumulative Percentage Increase of Restaurant and Retail Prices Under Los Angeles’ Proposed Minimum Wage Law**

	2015	2016	2017
Restaurant Industry	1.1	2.1	4.1
Retail Industry	0.1	0.3	0.5

*Source: Authors’ analysis of ACS, OES, QCEW, U.S. Census Monthly and Annual Retail Trade and BEA data.*

*Note: Estimates are the average of low and high estimates.*

### *Impact on Turnover and Productivity*

Increasing the minimum wage can also reduce the high levels of job churning that characterize low-wage labor markets. The National Restaurant Association estimates that annual employee turnover in restaurants approaches 75 percent in some restaurant classifications (National Restaurant Association 2010). Turnover levels are high because workers often leave to find a higher-wage job, or because they are unable to stay in their jobs due to poverty-related problems such as difficulties with transportation, child

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care, or health. Dube, Naidu and Reich (2007) found that worker tenure increased substantially in San Francisco restaurants after the 2003 minimum wage law, especially in fast-food restaurants. Dube, Lester and Reich (2013) found that a 10 percent increase in the minimum wage results in a 2.1 percent reduction in turnover for restaurant workers. Turnover can be quite costly to firms, even for low-wage workers. Boushey and Glynn (2012) find that the median cost of replacement for a job paying \$30,000 a year or less is 16.1 percent of an employee's annual earnings. As a result, raising the minimum wages can reduce turnover and increase job stability. The associated reduction in employers' recruitment and retention costs offsets about 20 to 25 percent of the costs of minimum wage increases (Dube, Lester and Reich 2013).<sup>11</sup>

Paying workers more can also affect morale, absenteeism, the number of grievances, customer service, and work effort among other metrics (Reich, Jacobs and Dietz 2014; Hirsch, Kaufman and Zelenska 2011).

### *Impact on Employment and Hours*

The above research on prices, turnover, and work performance helps to explain why an extensive body of research has found few to no measurable impacts on employment or hours from minimum wage increases in the United States. Belman and Wolfson (2014) provide the most extensive recent summary of the minimum wage research literature. They conclude that minimum wage employment effects in the U.S. are “both vanishingly small and not statistically significant in even the most generous test” (p. 168). A separate review of minimum wage research by Schmitt (2013) similarly finds “the minimum wage has little or no discernible effect on the employment prospects of low-wage workers.”

Allegretto, Dube, Reich and Zipperer (2013) looked at every state and federal minimum wage increase in the U.S. between 1990 and 2012 and identified several hundred pairs of adjacent counties that were located on different sides of a state border with a minimum wage difference. This research design compares the employment trends of the most affected groups – teens and restaurants – across adjacent counties with different minimum wage levels. The comparison across county borders provides a close proxy for what can be expected from local minimum wage laws. The study finds no statistically significant effects of minimum wage increases on either employment or hours in restaurants and other low-wage industries, controlling for a range of regional and local differences. Using the border county pair method, Aaronson, French and Sorkin (2013) obtained similar results.

Several rigorous studies have analyzed the impact of local minimum wage laws, with similar results. Dube, Naidu and Reich (2007) studied the impact of San Francisco's minimum wage law after it increased from \$6.75 to \$8.50 an hour in 2004. The authors surveyed a sample of restaurants before and after the wage increase. The sample included restaurants from San Francisco as well as neighboring East Bay cities that were not covered by the policy.

The authors found no statistically significant negative effects on either employment or the proportion of full-time jobs as a result of the San Francisco law. This finding holds for both full-service and fast-food restaurants (one might expect more sensitivity to a higher minimum wage in the latter). Figure 2 shows the results from their follow-up study (Reich, Jacobs, and Dietz 2014). Restaurant employment in San Francisco rose slightly faster than in surrounding counties after the minimum wage increase, and again after San Francisco implemented two additional policies (paid sick leave and a health spending requirement).

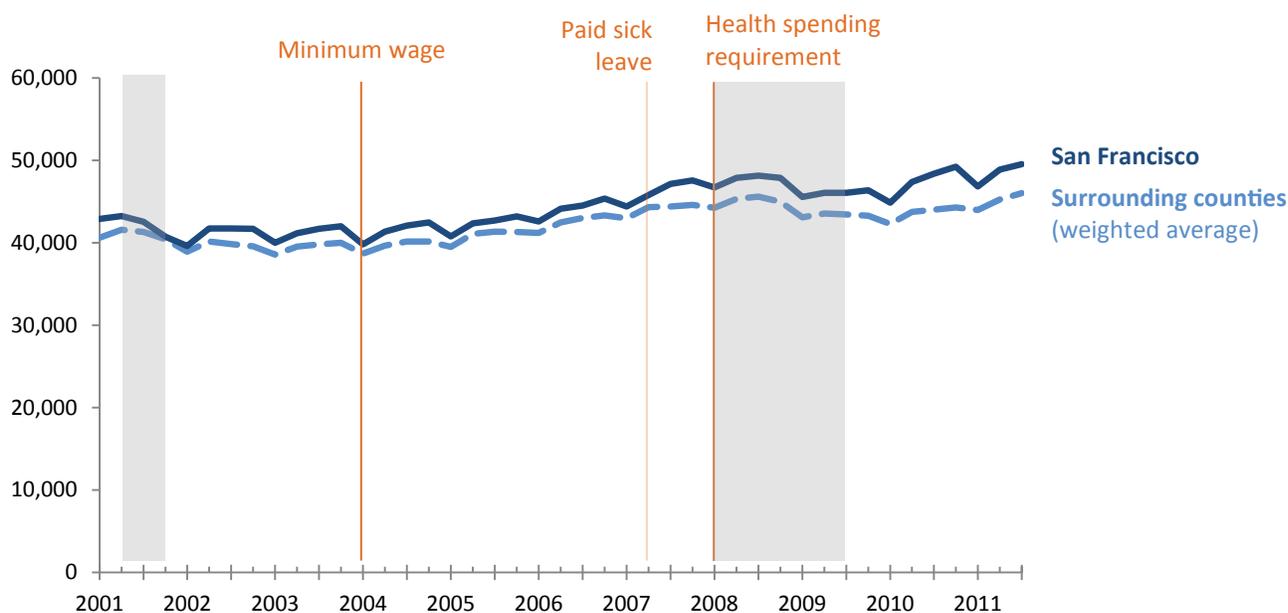
Potter (2006) studied the impact of Santa Fe's minimum wage law after it increased from \$5.15 to

\$8.50 in 2004, a substantial increase of 65 percent. Potter compares changes in employment at Santa Fe businesses before and after the ordinance went into effect, and to changes in employment in nearby Albuquerque over the same time period. (Albuquerque did not have a city minimum wage law at that time.) Potter found no statistically significant negative impact of Santa Fe’s minimum wage increase on the city’s employment. This finding also held for accommodation and food services, the industries with the highest proportion of minimum wage workers.

Schmitt and Rosnick (2011) studied the impact of city minimum wage laws in San Francisco and Santa Fe, comparing employment trends in these cities before and after their minimum wage increases to control groups of surrounding suburbs and nearby metropolitan areas. The authors focused on fast-food restaurants, food services, retail trade, and other low-wage industries, and found no discernible negative employment effects, even three years after the ordinances were implemented.<sup>12</sup>

In summary, the best research studies find that minimum wage mandates (in the range implemented to date) do not have a statistically significant negative effect on employment or hours. However, the minimum wage increase proposed for Los Angeles is higher than the range studied in existing research. We therefore cannot rule out limited disemployment effects in highly affected industries. The most affected industries are likely to be restaurants (and apparel manufacturing, to which we turn below). To illustrate the potential magnitudes involved, we have modeled a scenario that uses high-range estimates of restaurant employment losses due to minimum wage increases (Allegretto et al. 2013; Zipperer 2014). Under this scenario, the proposed law might reduce restaurant employment growth in the city of Los Angeles by about 560 jobs per year – or 0.5 percent of annual employment – over the next three years. To place this estimate in context, consider that the Los Angeles restaurant industry grew by 3.5 percent from February 2013 to February 2014 (Beacon Economics 2014). This estimate can also be compared to the large number of Los Angeles’ restaurant workers – 77 percent – who will receive significant wage increases.

**Figure 2. Bay Area Restaurant Employment**



Source: Reich, Jacobs and Dietz (2014)

Notes: Shaded areas indicate recessions. Surrounding counties include San Mateo, Santa Clara, and Alameda Counties.

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### *Impact on the Location of Apparel Manufacturing*

Wages in the Los Angeles manufacturing sector range from very low in apparel manufacturing to much higher in aerospace and biotech manufacturing. As seen in Table 6, the impact on operating costs for the city's manufacturing sector as a whole is relatively small, but this estimate averages across very different industries. In particular, for apparel manufacturing, the impact of the proposed minimum wage law on operating costs by 2017 is larger, at 3.3 percent. Unfortunately, the existing research literature does not give guidance on how apparel firms are likely to adjust to minimum wage increases. We do know that employment in the Los Angeles apparel industry exhibits a long-term downward trend due to the globalization of production, and that the industry currently represents 1.7 percent of employment (28,000 jobs in the third quarter of 2013). Two scenarios are possible for the firms that remain.<sup>13</sup> On the one hand, the apparel manufacturers that still operate in Los Angeles are there because of specific location advantages, serving just-in-time markets or specializing in higher-end segments of the industry – and those advantages might outweigh the impact of a minimum wage increase. If all manufacturers in the city fit this description, employment would not decline because of the proposed law, but prices might increase by as much as 3.3 percent. On the other hand, smaller garment contractors in particular are quite mobile and therefore might move from the city of Los Angeles to other locations within the county, where the minimum wage would remain lower. The actual effect is likely to be somewhere between these two scenarios.

### *Impact on Consumer Spending*

Finally, a higher minimum wage will boost consumer spending by low- and moderate-income households whose workers receive pay increases, which in turn can act as a modest economic stimulus (Cooper and Hall 2012). Low-wage workers spend a greater share of their income than do other income groups. As with other forms of economic stimulus, the increased spending would have a multiplier effect resulting in additional benefits to economic growth (Aaronson and French 2013; Cooper and Hall 2012). The industries that would gain the most from increased consumer spending include those that are also more highly affected by the minimum wage increase – such as restaurants and retail.<sup>14</sup> While not all of the increased spending would be captured in the city, it would have a positive impact on consumer demand in the economic region. A full estimation of the consumer spending impact in Los Angeles is beyond the scope of this paper. But this stimulus effect is likely one of the factors that explains the consistent finding in the literature of no significant net employment effects of minimum wage increases.

## **The Overall Impact on the Los Angeles Economy**

Given the above analysis, how will the proposed minimum wage increase affect the Los Angeles economy as a whole? There will be both positive and negative effects, and a key question is which will be larger. On the positive side, as Table 3 reports, by the time the law is fully implemented, Los Angeles' low-wage workers would receive about \$1.8 billion more in pay, beyond what they would receive under scheduled increases in the state's minimum wage law. These workers and their families will in turn spend this amount, some of it in Los Angeles, some of it in the rest of the county, and some elsewhere. The spending that takes place in Los Angeles will increase the level of economic activity. Also on the positive side, employer turnover costs will fall and worker productivity will increase. On the negative side, there may be a small reduction in restaurant growth during the law's phase-in period, some apparel jobs may relocate outside the city, some companies may earn lower profits, and we can expect a modest one-time price

increase, mainly in the restaurant industry. For moderate minimum wage increases, the findings in the minimum wage research literature indicate that these positive and negative effects on the overall economy balance each other out, without measurable net effects either way.

Still, the economic research summarized above is necessarily limited to studying the minimum wage laws that have been implemented to date. While these studies are suggestive, they cannot tell us definitively what might occur when minimum wages are increased significantly beyond existing local, state, or federal mandates. It is therefore useful to ask how Los Angeles’ proposed minimum wage increase compares to those that have been implemented in the past.

### Comparison to Other Minimum Wage Increases

As shown in Table 8, at the point of full implementation in 2017, the proposed ordinance will increase Los Angeles’ minimum wage by 47.2 percent, in nominal dollars, over the current state minimum wage of \$9. However, in 2016 current law will raise the state minimum wage to \$10. Using this level as the more pertinent benchmark, in 2017 the Mayor’s proposal would set Los Angeles’ minimum wage 32.5 percent higher than the state minimum wage of \$10.

This percentage increase in the minimum wage is within the range of other local minimum wage laws. The 14 other local minimum wage laws in the U.S. have mandated a total average increase of 41.3 percent in their minimum wage, with a range of 13.3 to 84.5 percent.<sup>15</sup> A number of these laws were also phased in over time. Across all existing local laws, first-year increases ranged from 6.7 to 65.0 percent, with an average of 22.0 percent. The first-year increase in Los Angeles would be 13.9 percent, so again, Los Angeles’ proposed increase falls within the range of other cities’ laws.

**Table 8. Proposed Los Angeles Minimum Wage Increase Compared to Existing Local Minimum Wage Increases**

	Proposed Los Angeles Increase	Existing Local Minimum Wage Laws	
		Average Increase	Range of Increases
Overall Increase	47.2	41.3	13.3 – 84.5
First-Year Increase	13.9	22.0	6.7 – 65.0

*Source: Authors’ analysis of statutory increases in 14 existing local minimum wage laws.  
Note: Increases calculated in nominal dollars*

The ratio of the minimum wage to the median full-time wage provides another measure used by economists to determine the ability of an economy to absorb higher minimum wage levels. The proposed final 2017 wage of \$13.25 (converted to 2014 dollars) equals 59 percent of the 2014 median full-time wage in Los Angeles of \$20.81 an hour. This ratio is above the historical range of the federal minimum wage/median ratio, which reached 55 percent in 1968 (Dube 2013) and it is equal to the 59 percent ratio in the new Seattle law (Weissman 2014). New research by Zipperer (2014) shows that the overall effects of past minimum wage increases have been no greater at up to 55 percent of the median wage than at lower percentages. The Los Angeles proposal can also be compared to current California minimum wage law. The minimum wage/median wage ratio will increase to just under 50 percent when California’s minimum wage increases to \$10 on January 1, 2016 (Allegretto, Reich and West 2014).

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While these perspectives on past increases are instructive, the share of workers projected to receive wage increases under the proposed law (37 percent), is higher than found in research on other laws. Caution is therefore required. As we have mentioned in the context of the restaurant industry, Los Angeles' proposed minimum wage increase could increase restaurant prices by about 4.1 percent, which in turn might have a small effect on restaurant industry growth. We also cannot estimate how low-wage manufacturing industries such as apparel will be affected. Nonetheless, the effect on employment overall in Los Angeles is not likely to be significant. The phase-in period would provide additional information on this issue.

## Conclusion

Drawing on a variety of government data sources, we estimate that 567,000 workers would benefit from the proposed minimum wage law, with the average worker earning an additional \$3,200 a year (once the law is fully implemented). Our analysis of the existing economic research literature suggests that most businesses will adjust to modest increases in operating costs through reduced employee turnover costs, improved work performance, and a small, one-time increase in restaurant prices. A few industries might experience slower growth or some relocation of jobs outside the city; these effects would be far outweighed by the income increases of the low-wage workforce as a whole.

The existing research evidence is based upon minimum wage increases between 1990 and 2012, which did not reach the levels now being proposed or enacted by Los Angeles, San Francisco, Seattle and other localities. Prudence therefore suggests that the actual effects of the law should be monitored.

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## Endnotes

<sup>1</sup> Current Employment Statistics, retrieved from <http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1006>.

<sup>2</sup> Bureau of Labor Statistics, Local Area Unemployment Statistics and U.S. Census Bureau, Quarterly Workforce Indicators. Data are not seasonally adjusted.

<sup>3</sup> U.S. Census Bureau, American Community Survey, 2007 and 2012, 1-Year Estimates, Table B08521. For 2007, earnings were adjusted to 2012 dollars using the average annual change for the past ten years of the Los Angeles-Anaheim-Riverside Consumer Price Index for All Urban Consumers (CPI-U).

<sup>4</sup> According to the Quarterly Census of Employment and Wages, the city of Los Angeles accounted for 37.6 percent of Los Angeles County employment in the third quarter of 2013.

<sup>5</sup> Inflow/Outflow Report, Los Angeles City, 2011, OnTheMap (<http://onthemap.ces.census.gov>). Accessed August 27, 2014.

<sup>6</sup> U.S. Census Bureau; American Community Survey, 2012 1-Year Estimates, Table B08521; <<http://factfinder2.census.gov>>; accessed 26 August 2014.

<sup>7</sup> The sampling margin of error for the percent of workforce affected is +/- 0.8 percent for the average estimate.

<sup>8</sup> Constant dollar values are calculated using the average annual change for the past ten years of the Los Angeles-Anaheim-Riverside Consumer Price Index for All Urban Consumers (CPI-U)..

<sup>9</sup> To determine the labor share of operating costs in retail trade, we use data from the [U.S. Census Monthly and Annual Retail Trade Reports](#), which provide data on retail sales, payroll costs, merchandise purchased for resale, and detailed operating expenses. We add operating expenses and purchases together to determine total operating costs. We add the costs of fringe benefits (minus health insurance) to annual payroll to estimate total labor costs. Health benefits are excluded since, unlike payroll taxes and workers' compensation insurance, the costs of the benefits will not change if wages are increased. Dividing labor costs by operating costs gives us the labor share in retail trade. For the restaurant industry, we use industry data on gross operating surplus available from the [Bureau of Economic Analysis Input-Output Account Data](#) (Use Table, 2012, Before Redefinitions, Producer Value). We subtract gross operating surplus from sales to get total restaurant operating costs, and then proceed as was done for retail. For manufacturing industries we use data from the [2012 Economic Census \(Table EC123111\)](#). To determine operating expenses we add together payroll costs and fringe benefits, total cost of materials, total capital expenditures, depreciation, rental or lease payments, and all other operating expenses. To determine labor costs we add together payroll costs and fringe benefits excluding health insurance.

<sup>10</sup> The table shows the average of the low and high estimate. The low estimate uses the estimated increase in operating costs from Table 6, and assumes that 75 percent of those costs are passed through to consumers. The high estimate also uses the estimate for increases in operating costs, but assumes that 100 percent of the costs are passed through to consumers.

<sup>11</sup> An increased minimum wage may also lead to greater firm turnover in the time period immediately following the increase as well. A recent study at the Chicago Federal Reserve Board (Aaronson, French and Sorkin 2013) estimates that while a larger number of restaurants exit the industry after a minimum wage increase, they are replaced by an equal number of new and similarly-sized entrants, and that overall employment does not change.

<sup>12</sup> The restaurant industry-backed Employment Policies Institute has produced three studies of Santa Fe and San Francisco (Yelowitz 2005a; 2005b; 2012). In our assessment, these studies suffer from serious methodological

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problems that make the results unreliable. They also offer contradictory results; see Reich, Jacobs and Bernhardt (2014) for details.

<sup>13</sup> This discussion has benefited greatly from conversations with Goetz Wolff, Luskin School of Public Affairs, UCLA.

<sup>14</sup> Based on author's analysis using IMPLAN 3.0, 2010.

<sup>15</sup> These calculations include recent laws passed in Seattle, Richmond, Berkeley, San Diego and Las Cruces. We have confirmed that the average increase is similar when dropping very high and very low observations.

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## **Center on Wage and Employment Dynamics**

Institute for Research on Labor and Employment  
University of California, Berkeley  
2521 Channing Way #5555  
Berkeley, CA 94720-5555  
(510) 643-8140  
<http://www.irle.berkeley.edu/cwed>

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