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Contra Costa County's Proposed Minimum Wage Law: A Prospective Impact Study

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EXECUTIVE SUMMARY

The Ensuring Opportunity Campaign to Cut Poverty in Contra Costa has introduced a plan to establish a \$15 per hour minimum wage in Contra Costa County, California, by 2020. The proposal would phase in the minimum wage increase over five steps. This study examines the effects of the proposed minimum wage increase on Contra Costa workers and businesses (assuming that all of the cities in the county, as well as the county itself, enact the proposed law). Drawing on a variety of government data sources, we find the following:

About 111,000 workers—or about 33 percent of Contra Costa’s workforce—would receive a pay raise under the proposal.

Workers’ hourly wage and annual income would rise, resulting in a total increase in aggregate earnings of \$418 million (in 2014 dollars) by 2020.

- Hourly wages of affected workers would rise by an average of \$2.40.
- Average annual earnings would increase by about \$3,800 per year.

Adults, workers of color, and working poor families would receive significant benefits.

- We estimate that 94 percent of affected workers are in their twenties or older, and more than half of the workers receiving raises are in their thirties or older.
- Workers of color (black, Latino/a, Asian, and other) make up approximately two-thirds of the workers receiving raises.
- Workers of all education levels will benefit from the proposed increase, with less educated workers benefitting the most.
- Fully 89 percent of working poor families will receive a pay increase.
- Median annual earnings of affected workers are about \$16,200 (in 2014 dollars), which is 38 percent of the overall workforce median.

The proposed minimum wage increase would have a moderate impact on restaurant operating costs and prices, and a negligible impact on prices in the rest of the economy.

- More than half of all affected workers are employed in four industries: retail trade (19.9 percent), food services (17.9 percent), health services (9.4 percent), and administrative and waste management services (8.4 percent), a classification that includes building services contractors and employment agencies.
- Operating costs would increase by 6.9 percent for restaurants by 2020, 0.6 percent for retail, and 0.5 percent for the overall economy.
- Restaurant prices would increase by 6.0 percent by the time the law is fully implemented. A \$10 meal would increase by 60 cents, to a total of \$10.60. This increase would be spread over five years,

ranging from 0.2 to 1.9 percent annually. There would be negligible price increases for the retail industry and the rest of the economy.

- While higher prices may reduce consumer demand, economic models suggest that this will be offset at the county level by the increased purchasing power of low-wage workers receiving the pay increase.
- The best economic research on past minimum wage increases does not find statistically significant effects on employment or hours worked. It is important to note, however, that the minimum wage increases studied in this broader literature were generally smaller in magnitude—and affected a smaller share of the workforce—than the laws recently passed in California and the proposal being contemplated by Contra Costa County.

The size of the proposed minimum wage increase lies within the range of local minimum wage increases passed to date, as well as other measures of a local economy’s capacity to absorb higher wage standards.

- Compared to existing state law, the proposal would raise Contra Costa’s minimum wage by 36 percent (in inflation-adjusted terms). The 27 local minimum wage laws passed to date have mandated increases ranging from 11.7 to 76.5 percent.
- The proposal would increase the minimum wage to 50.1 percent of the Contra Costa median full-time wage, well within the historical range of the ratio for the federal minimum wage to the national median full-time wage.
- Cities in Contra Costa would maximize the economic benefits and minimize the risk of adverse effects by coordinating in passing higher wage standards—if not for the County as a whole, at least for sub-regions of the County.

In sum, we estimate that the proposed minimum wage increase would provide significant gains in income to Contra Costa’s low-wage workers and their families. Most businesses would be able to absorb the increased costs, and consumers would see a moderate increase in restaurant prices spread over five years. The proposal’s impact on overall employment is therefore not likely to be significant. However, since any prospective impact study has a level of inherent uncertainty, the actual effects of the proposed minimum wage law should be closely monitored during implementation.

1. INTRODUCTION

The Ensuring Opportunity Campaign to Cut Poverty in Contra Costa has put forth a proposal to establish a \$15 per hour minimum wage by 2020 throughout Contra Costa County. For the proposal to cover all of Contra Costa, each of the nineteen cities and towns as well as the county itself would need to enact it. The minimum wage would be raised to \$10.20 on January 1, 2016; to \$11.40 on January 1, 2017; to \$12.60 on January 1, 2018; to \$13.80 on January 1, 2019; and to \$15.00 on January 1, 2020 (see Table 1). The minimum wage would cover all workers in Contra Costa County except for federal, state, and local school district employees. For the purposes of this report, we assume that all cities and the county enact the same proposal at the same time.

In this report, we first estimate the effects on workers including: the number of workers affected by the proposal, the size of the wage increases, and the demographics and job characteristics of the affected workers. We next examine the industry distribution of workers affected by the proposal and the effects on business operating costs and prices in highly-impacted industries. We then review the economic research literature on the effects of minimum wage increases on employment. Finally, we compare the proposal to existing local minimum wage laws and examine unique features of the Contra Costa County economy. We conclude with review of additional policy design questions and an overall assessment of the proposed increase.

Table 1. Wage Schedule for the Proposed Minimum Wage Policy

Year	Nominal Dollars	Percentage Increase from Previous Year	Constant 2014 Dollars	Percentage Increase from Previous Year
2015 (actual)	\$9.00		\$8.80	
2016	\$10.20	13.3	\$9.74	10.8
2017	\$11.40	11.8	\$10.64	9.2
2018	\$12.60	10.5	\$11.49	8.0
2019	\$13.80	9.5	\$12.30	7.0
2020	\$15.00	8.7	\$13.06	6.2

Note: Constant dollar values are calculated using the average annual change for the past ten years of the San Francisco-Oakland-San Jose Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

2. BACKGROUND

Like other cities and counties in the Bay Area, Contra Costa County, situated across the bay from San Francisco, has recovered from the Great Recession. In fact, the East Bay Economic Development Alliance (2015) forecasts that the East Bay “is poised for steady growth in 2015 as the local economic engine continues firing on all cylinders.” The labor market in Contra Costa is strong with unemployment at just 4.7 percent, lower than the state’s rate (6.1 percent) and the county’s unemployment rate prior to the recession.¹ Employment in the county has nearly regained its pre-recession levels. As another sign of the region’s growth, Contra Costa’s population has increased by 9 percent since 2007. A uniquely large share of

Contra Costa's population commutes outside of the county for work—46.4 percent in 2013, up from 41.2 percent in 2007.²

But even as the local economy has rebounded, wages for Contra Costa's workers have declined in real terms. Between 2007 and 2013, median annual earnings (adjusted for inflation) fell by 12.1 percent for those who work in the county.³ Over the same period, income inequality (as measured by the Gini coefficient) rose by 3.9 percent, a larger increase than in neighboring San Francisco and the U.S. as a whole.⁴

By enacting a local minimum wage law throughout the county, Contra Costa would join a growing number of cities that are setting wage standards to reflect local economic conditions and living costs. To date, 27 cities and counties have approved local minimum wage laws, eventually reaching \$15 an hour in Los Angeles, San Francisco, and Seattle. In Contra Costa, the city of Richmond already enacted a local minimum wage in 2014. Other California cities that have recently enacted local minimum wage laws are Oakland, Berkeley, Emeryville, San Jose, Mountain View, Sunnyvale, and San Diego.

3. EFFECTS ON WORKERS

Estimated Number of Affected Workers

To estimate the number of workers affected by the proposed minimum wage increase, we analyze the wage distribution of workers in Contra Costa County using the 2012-2013 American Community Survey (ACS), scaled to approximate more accurate employment counts for Contra Costa from the 2013 U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages.⁵ We exclude federal, state, and local school district employees as well as the self-employed from our analysis, since those groups of workers would not be covered by the proposal.⁶ Again, we assume that each city in Contra Costa as well as the county itself will enact the proposed minimum wage schedule at the same time.

After simulating the wage distribution in Contra Costa just before the proposed minimum wage increase would go into effect on January 1, 2016, we estimate, for each annual phase-in step, the number of workers affected by the increase and the additional wages they would receive. We also simulate what the wage distribution would be if the proposal were not enacted, adjusting for increases in the state minimum wage. Our impact estimates are therefore a comparison of workers' wages under the proposed minimum wage increase to workers' wages under state minimum wage law only. We also adjust for expected employment and wage growth (see Perry and Bernhardt 2015 for more detail).⁷

We are unable to account for the existing local minimum wage law passed by the city of Richmond in 2014 because the ACS does not allow us to identify place of work at the city level; the smallest geographic area for measuring place of work in the ACS is the county. Therefore, our impact estimates will be slightly overstated. The overstatement should be small because Richmond only represents 8.5 percent of total Contra Costa employment,⁸ and because the Richmond law excludes businesses that have fewer than 800 employee hours over a two-week period and sets a lower minimum wage for businesses that generate more than half of their income from sales outside of the city. In addition, the minimum wage in the Contra Costa proposal would exceed the Richmond minimum wage by 2018.

Our impact simulation model produces a low and a high estimate to account for measurement error in the ACS wage distribution. Both estimates include a directly affected group (workers making less than the proposed minimum wage) and an indirectly affected group (workers making 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 current minimum wage). More information on our methodology is available in the online technical report (Perry and Bernhardt 2015). In this report we present the average of the two estimates in all tables.

Table 2 shows the estimated number and percentage of covered workers affected by the proposed minimum wage increase in Contra Costa County. By 2020, we estimate that 111,000 workers will receive a pay raise, or about 32.7 percent of the covered workforce. Of these, 93,000 workers, or 27.7 percent of the covered workforce, are directly affected workers (earning less than \$15 per hour when the proposal would be fully implemented in 2020) and 17,000, or 5.1 percent of the covered workforce, are indirectly affected (earning slightly more than \$15 per hour when the proposal would be fully implemented in 2020).

Table 2. Cumulative Number of Workers Affected by Proposed Minimum Wage Policy

Year	Number of Affected Workers (cumulative)	Number of Directly Affected Workers (cumulative)	Number of Indirectly Affected Workers (cumulative)	Percent of Covered Workforce (cumulative)
2016	64,000	51,000	13,000	20.2
2017	80,000	63,000	17,000	24.7
2018	92,000	71,000	21,000	28.0
2019	101,000	83,000	17,000	30.3
2020	111,000	93,000	17,000	32.7

Source: Authors' analysis of ACS, OES, and QCEW data. See Perry and Bernhardt (2015) for details.

Note: The proposed minimum wage proposal will not cover self-employed workers or state and federal workers. Directly affected workers are those with wages below the proposed new minimum wage in each year. Indirectly affected workers are those with wages slightly above the proposed new minimum wage, who will receive an increase via the ripple effect. The number of directly affected workers and indirectly affected workers may not sum to the total number of affected workers due to rounding.

Estimated Size of Wage Increases

We also estimate the additional earnings that affected workers would receive as a result of the proposed minimum wage increase, relative to their earnings under state minimum wage law. Table 3 (page 8) shows the estimated cumulative increase in affected workers' hourly wages, annual earnings, and percentage increase in annual earnings, as well as the cumulative total earnings increase for all affected workers. By full implementation in 2020, we estimate that the wages of affected workers will have risen by about \$2.40 per hour. That amounts to an estimated additional \$3,800 in earnings per year. In total, we estimate that affected workers in Contra Costa will earn an additional \$418 million by 2020. All estimates are listed in 2014 dollars.⁹

Some policymakers have expressed concern that affected workers and their families could ultimately be worse off after the minimum wage increase if they are no longer eligible for means-tested social assistance programs. The vast majority of workers will come out well ahead financially, however, because the benefits from most social assistance programs phase out as recipients' income rises. This means that as the earnings of affected workers rise, the benefits they receive will gradually decline instead of being eliminated all at once.¹⁰ In fact, the Congressional Budget Office (2012) has estimated that the average marginal tax rate for low-and moderate-income workers is 34.8 percent, meaning that affected workers will keep 65.2 cents of each additional dollar they earn. So while taxes and reductions in social assistance benefits will erode some of the additional earnings for affected workers, most families will still see significant gains in income from the proposed minimum wage increase.

Table 3. Cumulative Pay Increases for Workers Affected by the Proposed Minimum Wage Policy (in 2014 dollars)

	2016	2017	2018	2019	2020
Average Cumulative Hourly Wage Increase	\$0.15	\$0.81	\$1.37	\$1.91	\$2.40
Average Cumulative Annual Earnings Increase	\$200	\$1,300	\$2,100	\$3,000	\$3,800
Average Cumulative Percent Annual Earnings Increase	1.7	9.7	16.2	22.4	27.8
Total Aggregate Cumulative Increase In Earnings (millions)	\$14	\$100	\$195	\$301	\$418

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

Note: Results are cumulative across the phase-in years.

Demographics and Job Characteristics of Affected Workers

In Table 4 (page 9), we show the demographic and job characteristics of the affected workers. In the first column, we display the characteristics of all covered workers in Contra Costa County. For example, 51.1 percent of Contra Costa workers are men and 48.9 percent are women. In the second column, we show the *distribution of affected workers* by 2020. For example, we estimate that 48.7 percent of affected workers are men and 51.3 percent are women. In the third column, we present the *share of each demographic group that will receive a wage increase*. For example, 31.1 percent of male workers and 34.4 percent of female workers covered by the proposed increase will receive a raise.

Contrary to the common perception that minimum wage workers are mainly teens, we estimate that 94 percent of affected workers are in their twenties or older and 55 percent are in their thirties or older. The proposed minimum wage increase will benefit workers of color, who make up 67 percent of affected workers. The proposal will be particularly beneficial to Latino/a workers, as more than half of these workers (55 percent) will receive a raise. Workers of all education levels will benefit from the proposed increase, with less educated workers benefitting the most.

Over a third of affected workers have children (35 percent) and 36 percent are married. Affected workers disproportionately live in low-income families, with 45 percent at or below 200 percent of the federal

Table 4. Demographic and Job Characteristics of Workers Affected by the Proposed Minimum Wage Policy by 2020
(all figures are percentages unless otherwise noted)

	Percent of Covered Workers	Percent of Covered Workers Getting Raises	Percent of Group That Is Getting a Raise
Gender			
Male	51.1	48.7	31.1
Female	48.9	51.3	34.4
Median Age	40	32	
Age			
16-19	2.5	6.4	83.6
20-29	22.1	39.0	57.8
30-39	23.1	21.1	29.7
40-54	36.5	23.8	21.3
55-64	15.7	9.7	20.2
Race/Ethnicity			
White	48.5	32.9	22.2
Black	7.6	7.9	34.4
Latino/a	24.2	40.6	54.8
Asian	16.4	15.2	30.3
Other	3.3	3.4	33.3
Education			
Less than High School	10.1	20.8	66.9
High School or G.E.D.	19.6	27.8	46.3
Some College	26.3	30.8	38.4
Associate's Degree	9.2	7.2	25.7
Bachelor's Degree or Higher	34.8	13.4	12.7
Country of Birth			
U.S. Born	69.6	59.9	28.2
Foreign Born	30.4	40.1	43.2
Family Structure			
Married	52.1	36.2	22.7
Has Children	44.1	35.1	26.0
Family Income Relative to Poverty Level (FPL)			
Less than 100% of FPL	5.7	15.6	88.9
100% to 150% of FPL	5.8	14.2	79.4
150% to 200% of FPL	7.1	14.7	67.7
Greater than 200% of FPL	81.4	55.5	22.3
Average Worker Share of Family Income	60.3	47.1	
Median Individual Annual Earnings (2014 Dollars)	\$42,300	\$16,200	
Full-Time / Part-Time Worker			
Full-Time (35 or More Hours per Week)	76.4	57.7	24.7
Part-Time (Fewer than 35 Hours per Week)	23.6	42.3	58.6
Full-Year / Part-Year Worker			
Full-Year (50-52 Weeks per Year)	85.1	78.5	30.2
Part-Year (Fewer than 50 Weeks per Year)	14.9	21.5	47.4
Health Insurance Provided by Employer			
Yes	74.8	52.8	23.1
No	25.2	47.2	61.3

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

Note: Only workers covered by the proposed minimum wage law are included in this table. See note for Table 2.

poverty level. Fully 89 percent of working poor families will receive a pay increase. On average, affected workers bring home 47 percent of their family's income.

We estimate that the median annual earnings of affected workers (\$16,200 in 2014 dollars) is less than half (38 percent) of the median earnings for all workers in Contra Costa. Affected workers are disproportionately employed in part-time or part-year jobs, and are much less likely to have health insurance provided by their employer than the overall Contra Costa workforce.¹¹

4. EFFECTS ON BUSINESSES

To analyze the impact of the proposed minimum wage increase on Contra Costa County businesses, we first identify the industries that will be highly affected by the proposal. In those industries, we then estimate the impact of the proposed law on firms' operating costs, taking into account savings from reduced turnover and higher productivity. We next examine the channels through which business are likely to absorb those increased costs, by estimating price increases in highly affected industries and reviewing the economic research literature on changes in employment and hours.¹²

Industry Distribution of Affected Workers

Minimum wage increases do not affect all industries equally. We therefore begin with an analysis of the impact of the proposed minimum wage increase at the industry level. Table 5 shows the estimated distribution of affected workers across Contra Costa County's industries by 2020. In the first column, we show the percentage of the overall covered Contra Costa workforce in each industry. The second column displays our estimate of *the distribution across industries* of workers getting a raise under the proposed increase. The third column presents our estimate of the percentage of workers getting a raise *within each industry*.

Over half of affected workers are employed in just four service sector industries: retail trade (19.9 percent), food services (17.9 percent), health services (9.4 percent), and administrative and waste management services (8.4 percent), which is comprised mainly of building services contractors and employment agencies. The service sector also dominates the list of industries that have high rates of low-wage work—that is, industries where we estimate a high share of workers will get a raise (for example, 77.8 percent in food services and 50.2 percent in retail trade).

We also examine the sectoral distribution of affected workers in Table 5 (page 11). Our estimates show that affected workers are largely employed in the private, for-profit sector. Nonprofit and public sector workers are less likely to be affected than the overall Contra Costa workforce.

Table 5. Impact Estimates for Major Industries by 2020
(all figures are percentages)

	Percent of Covered Workers	Percent of Covered Workers Getting Raises	Percent of Industry That Is Getting a Raise
All Sectors			
Agriculture, Forestry, Fishing, Hunting, and Mining	1.5	2.0	
Construction	6.5	5.2	26.3
Manufacturing	8.1	4.8	19.3
Wholesale Trade	2.3	1.6	22.5
Retail Trade	12.9	19.9	50.2
Transportation, Warehousing, and Utilities	3.9	2.1	17.6
Information	3.0	0.8	9.0
Finance, Insurance, Real Estate, and Rental and Leasing	11.2	5.7	16.7
Professional, Scientific, and Management	7.8	3.0	12.6
Administrative and Waste Management Services	5.7	8.4	48.3
Educational Services	3.3	3.4	34.3
Health Services	14.0	9.4	22.1
Social Assistance	2.5	3.3	42.2
Arts, Entertainment, Recreation, and Accommodation	3.1	5.4	58.0
Food Services	7.5	17.9	77.8
Other Services (except Public Administration)	4.3	6.6	50.7
Public Administration	2.6	0.6	7.9
Total	100.0	100.0	
By Sector			
Private, For-Profit	84.8	89.1	34.4
Private, Non-Profit	9.5	8.0	27.4
Public	5.7	2.9	17.0
Total	100.0	100.0	

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

Notes: Blank value for "Percent of Group Getting a Raise" indicates insufficient sample size for that category. Only workers covered by the proposed minimum wage law are included in this table. See note for Table 2.

Adjustments to Higher Costs by Businesses

Effect of Higher Wages on Turnover and Productivity

Economic research suggests that some of the increased labor costs that businesses face as a result of a higher minimum wage can be offset through lower turnover and increased worker productivity. Turnover is high in low-wage industries—up to 75 percent in some restaurant classifications (National Restaurant Association 2010). Workers often leave for higher-wage jobs, or are unable to remain in their jobs because of poverty-related problems such as difficulty with child care, transportation, or health.¹³ These high turnover rates are costly for firms. Boushey and Glynn (2012) find that the median cost to replace a worker earning \$30,000 or less is 16 percent of the worker's salary. Pollin and Wicks-Lim (2015) and Dube, Lester, and Reich (forthcoming) find that 15 to 20 percent of the costs of a minimum wage increase are offset through reductions in turnover resulting from the higher pay.

In our calculations below, we take the midpoint of those estimates and assume that 17.5 percent of increased labor costs are absorbed via turnover savings and increased productivity in the first year.¹⁴ These savings are likely to accrue at smaller rates as wage levels go higher; we therefore assume that by 2020 the marginal increase in earnings relative to 2018 no longer yields any additional turnover savings. As a result, we estimate that the total savings from turnover and increased productivity at a \$15 minimum wage in 2020 would be 9.7 percent of increased labor costs.

Effect of Proposed Law on Restaurant and Retail Operating Costs

Table 6 (page 13) shows our estimates of the increase in business operating costs (net of savings from reduced turnover) in retail and restaurants, the two industries with the largest number of workers receiving a raise under the proposed minimum wage law. By 2020, we estimate that businesses in the restaurant industry will see their payroll costs rise by 18.8 percent and businesses in the retail industry will see their payroll costs rise by 5.2 percent, compared to payroll costs under state minimum wage law; these cost estimates include payroll taxes and workers' compensation insurance expenses.¹⁵ Across the entire Contra Costa economy, we estimate that payroll costs will rise by 2.2 percent by 2020.

However, operating costs will rise by a much smaller amount, because labor costs only make up a portion of the 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 22 percent for the overall economy (these percentages will increase over time as labor costs rise faster than other costs due to the proposed minimum wage increase).¹⁶ We therefore estimate that by 2020, total operating costs will rise by 6.9 percent for restaurants, 0.6 percent for retail, and 0.5 percent for the overall economy.

Table 6. Cumulative Impact of the Proposed Minimum Wage Policy on Business Operating Costs for Select Industries and the Overall Economy

	2016	2017	2018	2019	2020
Food Services					
% Change in Payroll Costs*	0.7	4.8	9.0	13.7	18.8
Labor Costs as % of Operating Costs	30.7	30.8	31.9	33.8	36.7
% Change in Operating Costs	0.2	1.5	2.9	4.6	6.9
Retail Trade					
% Change in Payroll Costs*	0.2	1.2	2.3	3.7	5.2
Labor Costs as % of Operating Costs	10.8	10.8	10.9	11.2	11.5
% Change in Operating Costs	0.0	0.1	0.3	0.4	0.6
Overall Economy					
% Change in Payroll Costs*	0.1	0.5	1.0	1.5	2.2
Labor Costs as % of Operating Costs	22.1	22.1	22.2	22.4	22.6
% Change in Operating Costs	0.0	0.1	0.2	0.3	0.5

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

Note: % Change in Payroll Costs is net of savings from reduced turnover expenses, and includes additional payroll tax and workers' compensation expenses.

Impact on Restaurant and Retail Prices

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

Research by Aaronson, French, and MacDonald (2008) found that every percentage point increase in the minimum wage raises restaurant prices by 0.072 percent. A new study (Allegretto and Reich 2015) of San Jose's recent minimum wage increase (from \$8 to \$10 in March 2013) yields a similar estimate. An earlier study (Lee, Schluter, and O'Roark 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). Lee et al., however, do not take into account costs savings resulting from reduced turnover costs. These studies together suggest that at least 80 percent of net cost increases are passed on as higher restaurant prices.

In Table 7 (page 14) we provide our estimates of the impact on restaurant and retail prices under the proposed minimum wage increase for Contra Costa County.¹⁷ For restaurants, we predict a cumulative increase in inflation adjusted prices of 6.0 percent by 2020. The price of a \$10 menu item would thus increase to \$10.60. However, it is important to note that this increase would be spread out over the five year phase-in period; the increase will take the form of five annual price increases beginning with a 0.2 percent increase in 2016 and eventually rising to a final 1.9 percent price increase in 2020. To put these

Table 7. Percentage Price Increases Under the Proposed Minimum Wage Policy

	2016	2017	2018	2019	2020
Food Services					
Year over Year Price Increase	0.2	1.1	1.2	1.5	1.9
Cumulative Price Increase	0.2	1.3	2.5	4.0	6.0
Retail Trade					
Year over Year Price Increase	0.0	0.1	0.1	0.1	0.2
Cumulative Price Increase	0.0	0.1	0.2	0.4	0.5
Overall Economy					
Year over Year Price Increase	0.0	0.1	0.1	0.1	0.1
Cumulative Price Increase	0.0	0.1	0.2	0.3	0.4

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

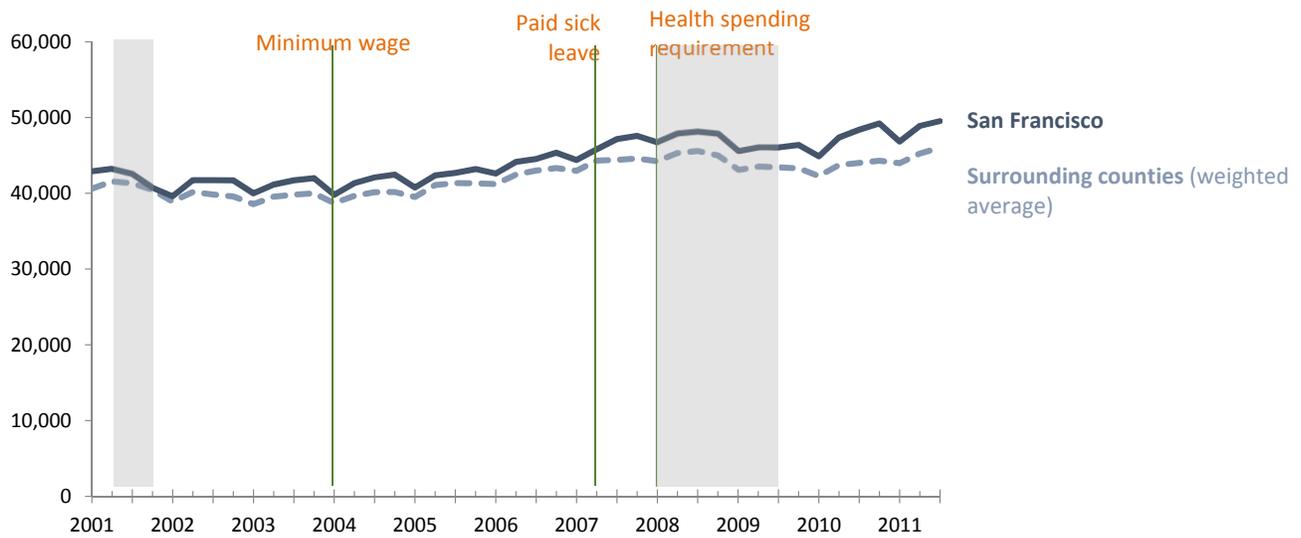
annual prices increases in context, recent inflation in restaurant prices has been 2.1 percent per year. Price increases for retail and the overall economy would be negligible, at 0.5 and 0.4 percent, respectively, spread over five years.

Effect on Employment and Hours

There is an extensive body of economic research on the effects of minimum wage laws on employment and work hours. Belman and Wolfson (2014) provide the most extensive recent summary of the minimum wage research literature, and conclude that employment effects in the U.S. to date have been “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 discernable effect on the employment prospects of low-wage workers.” The above research on prices and turnover helps to explain why existing research has found little impact on employment from minimum wage increases.

Several rigorous studies have analyzed the impact of local minimum wage laws in particular, and found no evidence of negative employment effects.¹⁸ Dube, Naidu, and Reich (2007) studied the impact of San Francisco’s first minimum wage law after it raised the city’s minimum wage from \$6.75 to \$8.50 per hour in 2004. The authors surveyed a sample of restaurants before and after the wage increase, in San Francisco as well as in neighboring East Bay cities that were not covered by the policy. They found no statistically significant effects on either employment or the proportion of full-time jobs as a result of the San Francisco law. This finding held for both full-service and fast-food restaurants (one might expect more sensitivity to a higher minimum wage in the latter). As shown in Figure 1 (page 15), restaurant employment in San Francisco rose slightly faster than in surrounding counties after the minimum wage increase, and again after the implementation of paid sick leave and health spending mandates.

Figure 1. 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.

Potter (2006) studied the impact of Santa Fe’s minimum wage increase from \$5.15 to \$8.50 in 2004 by comparing changes in employment at Santa Fe businesses before and after the increase to changes in employment in nearby Albuquerque over the same time period. Potter found no statistically significant negative impact of Santa Fe’s minimum wage increase on total employment in the city. The finding also held for accommodation and food services (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 on employment in fast-food restaurants, food services, retail trade, and other low-wage industries. They compared employment trends in these cities before and after their minimum wage increases to control groups of surrounding suburbs and metropolitan areas, and found no discernable negative employment effects, even three years after the ordinances were implemented.

Broader studies of state and federal minimum wage increases confirm and strengthen the findings of these local case studies. Dube, Lester, and Reich (2010 and forthcoming) looked at every state and federal minimum wage increase in the U.S. between 1990 and 2011 and identified several hundred pairs of adjacent counties that were located on different sides of a state border with a minimum wage difference. By comparing the employment trends of the most affected groups (teens and restaurants) across adjacent counties that had different minimum wage levels, this research design is an excellent test of whether businesses relocate employment outside county borders to avoid being subject to a higher minimum wage. Following this approach, Dube, Lester, and Reich (2010 and forthcoming) and Allegretto, Dube, Reich, and Zipperer (2013) find no statistically significant effects of minimum wage increases on either employment or hours worked in restaurants and other low-wage industries, nor among teens. Allegretto, Dube, and Reich (2011) use a similar strategy and find no employment effects among teens.

We highlight these studies because they combine state-of-the-art econometric methods with the most detailed datasets available, allowing researchers to control for differences in local economic conditions that

could confound the analysis. These studies therefore produce the most accurate estimates of the effect of previously implemented minimum wage increases on employment.

In summary, the best research on past minimum wage increases does not find statistically significant effects on employment or worker hours. It is important to note, however, that the minimum wage increases studied in this broader literature were generally smaller in magnitude—and affected a smaller share of the workforce—than the laws recently passed in Seattle and California cities as well as the Contra Costa proposal. Therefore, the findings from this body of research cannot be taken as definitive evidence for what will happen at higher wage rates.

Impact on Consumer Spending

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. While not all of the increased spending would be captured in Contra Costa (because a significant portion of the county's workforce are commuters), it would have a positive impact on consumer demand in the economic region.¹⁹

As discussed above, a higher minimum wage is also likely to lead to price increases, particularly in the restaurant industry. These price increases will tend to diminish consumer spending. A full analysis of the net consumer spending impact in Contra Costa is beyond the scope of this report. However, in their analysis of Los Angeles' proposed minimum wage law, Reich, Jacobs, Bernhardt, and Perry (2015) found that these counterbalancing forces—the stimulus effect of higher incomes for low-wage workers and the reduction in spending from price increases—are of roughly similar size, helping to explain the consistent finding in the literature of no significant net employment effects of minimum wage increases.

5. ASSESSMENT OF CONTRA COSTA COUNTY'S PROPOSED POLICY

Like other recent city minimum wage laws passed in Los Angeles, San Francisco, and Seattle, the Contra Costa County proposal would eventually raise the local minimum wage to \$15 per hour, a level not seen in existing, fully implemented increases. Therefore, we assess how the proposed Contra Costa increase compares to these past city-level increases as well as recently-passed local increases that are still being implemented. We also consider how the economic characteristics of Contra Costa County might affect the outcome of the proposed increase.

Comparison to Other Local Minimum Wage Laws

As shown in Table 8 (page 17), at the point of full implementation in 2020, the proposed law will have raised Contra Costa's minimum wage by 36.2 percent in inflation-adjusted terms. This is just slightly

Table 8. Proposed Contra Costa Minimum Wage Increase Compared to Local Minimum Wage Increases Passed to Date

Proposed Contra Costa Increase (real)	EXISTING LOCAL MINIMUM WAGE LAWS	
	Average Increase (real)	Range of Increases (real)
36.2	35.0	11.7–76.5

Source: Authors' analysis of statutory increases in 27 existing local minimum wage laws.

Note: Wage increases are calculated by deflating the final wage level to the time of the initial increase and then calculating the percentage increase over the existing minimum wage before the law was implemented. Inflation is measured using the index used to calculate cost-of-living increases for each city. If a city does not have cost of living increases, the appropriate geographical index is used.

above the average of the 27 local minimum wage increases passed to date in other cities and counties in the United States (35.0 percent) and lies within the range of those increases (11.7 to 76.5 percent).

The ratio of the minimum wage to the median full-time wage is another measure used by economists to determine the ability of an economy to absorb higher minimum wage levels. The proposed final 2020 wage of \$15 per hour (converted to 2014 dollars) equals 50.1 percent of Contra Costa County's 2014 median full-time wage of \$25.37. This ratio is well within the historical range of the federal minimum wage to median full-time wage ratio, which peaked at 55 percent in 1968 (Dube 2013). Contra Costa's ratio is less than the projected ratio for Seattle's 2014 law (53.3 percent) and Los Angeles' 2015 law (63.8 percent) (Reich, Jacobs, Bernhardt, and Perry 2015). It would be very similar to the ratio for California as a whole after the scheduled state minimum increase to \$10 per hour on January 1, 2016, which is projected to fall just below 50 percent (Allegretto, Reich, and West 2014).

Another way to assess the impact of the proposed law is the share of workers projected to receive wage increases. In Table 2, we estimated that the Contra Costa proposal would raise wages for 32.7 percent of the workers in the county. This is slightly smaller than the projected impact of a \$13 state minimum wage, which would affect an estimated 35.2 percent of the workforce (Allegretto, Reich, and West 2014), and falls in between our estimates of the share of workers receiving increases under the policies passed in San Francisco (23.4 percent) and Los Angeles (41.3 percent).

Finally, Table 9 (page 18) shows the wage increase schedules for the other Bay Area cities that have raised their minimum wages. It also shows the median annual earnings for workers in those cities, the California Budget Project's self-sufficiency wage for a two-working adult, two-child family, and the fair market rent for a one-bedroom apartment in each location.

By 2020, the Contra Costa proposed minimum wage would be higher than the minimum wage levels in Berkeley, Richmond, and Oakland, and below the rates in Emeryville and San Francisco.²⁰ The median earnings and cost-of-living measures in Contra Costa are similar to these East Bay cities, and about 20 percent less than San Francisco.

Table 9. Minimum Wage Increase Schedules, Earnings, and Cost-of-Living in Bay Area Cities

	Minimum Wage Increase Schedule										Projected 2020 Minimum Wage	Median Annual Earnings of Workers (2013 Dollars) ¹	2013 Self-Sufficiency Hourly Wage ²	2015 Fair Market One-Bedroom Monthly Rent ³
	1st Step		2nd Step		3rd Step		4th Step		5th Step					
	New minimum wage	Date of increase	New minimum wage	Date of increase	New minimum wage	Date of increase	New minimum wage	Date of increase	New minimum wage	Date of increase				
Contra Costa County Proposal	\$10.20	1/1/16	\$11.40	1/1/17	\$12.60	1/1/18	\$13.80	1/1/19	\$15.00	1/1/20	\$15.00	\$40,800	\$20.81	\$1,260
Berkeley ⁴	\$10.00	10/1/14	\$11.00	10/1/15	\$12.53	10/1/16					\$12.53	\$39,845	\$20.87	\$1,260
Emeryville <i>large businesses (more than 55 employees)</i>	\$14.44	7/1/15									\$16.30	\$60,043	\$20.87	\$1,260
Emeryville <i>small businesses (55 or fewer employees)</i>	\$12.25	7/1/15	\$13.00	7/1/16	\$14.00	7/1/17	\$15.00	7/1/18	Same rate as large businesses	7/1/19				
Mountain View	\$10.30	7/1/15									\$11.63	\$80,160	\$22.34	\$1,419
Oakland	\$12.25	3/1/15									\$13.83	\$44,625	\$20.87	\$1,260
Richmond ⁵	\$9.60	1/1/15	\$11.52	1/1/16	\$12.30	1/1/17	\$13.00	1/1/18			\$13.64	\$41,581	\$20.81	\$1,260
San Francisco	\$12.25	5/1/15	\$13.00	7/1/16	\$14.00	7/1/17	\$15.00	7/1/18			\$15.74	\$51,990	\$23.48	\$1,635
San Jose	\$10.00	3/11/13									\$11.63	\$45,923	\$22.34	\$1,419
Sunnyvale	\$10.30	1/1/15									\$11.63	\$77,619	\$22.34	\$1,419

Note: All laws except Berkeley's include cost-of-living adjustments after the final legislated step.

¹ American Community Survey 5-Year Estimates 2009-2013 Table 08521, California Budget Project, U.S. Department of Housing and Urban Development

² Self-Sufficiency Wage is determined by the California Budget Project and based on a 2-adult and 2-child family with both adults working full-time.

³ Fair Market Rent is determined by the U.S. Department of Housing and Urban Development and defined as the 40th percentile gross rent (including utilities) in a county.

⁴ Berkeley's minimum wage law exempts nonprofit organizations for the first year.

⁵ Richmond's minimum wage law allows employers that derive more than 50% of their income from transactions where goods and services produced in Richmond are shipped outside the city to pay an "intermediate" minimum wage that is the midpoint between the state and the city minimum wages. In addition, it exempts businesses that pay for less than 800 hours of employee labor during any two-week period.

Characteristics Specific to Contra Costa County

Commuting Patterns of Contra Costa Workers and Residents

As discussed above, the stimulus effect of increased spending from a minimum wage increase (and its effectiveness in mitigating the effects of increased labor costs) will be determined by the share of workers receiving the wage increase who live within the local area. A large majority (72.8 percent) of the workers in Contra Costa County also live within the county, and an even greater percent (79.8) of workers affected by the proposed minimum wage increase live in the county. Thus a majority of the increased spending by these workers and their families is likely to occur within the county's borders, helping to stimulate the Contra Costa economy and offsetting any effects of increased labor costs.

Likewise, businesses in Contra Costa will also benefit from the minimum wage policies in San Francisco, Oakland, Emeryville, and Berkeley, given the large share of Contra Costa residents who work outside of the County. In 2013, 46.4 percent of employed Contra Costa residents commuted to jobs outside of the county.²¹

Income Patterns of Contra Costa Workers and Residents

In the previous section, we estimated that firms in highly-impacted industries—primarily restaurants—would pass on the majority of their cost increases to consumers in the form of modest price increases. It is therefore useful to analyze both the earnings of those who work in the local area and the incomes of area residents who make up the consumer base. As shown in Table 10 (page 20), Contra Costa residents working outside of the County earn more on average than those who work within the county. This pattern holds in all four Census sub-county regions, with Central Contra Costa showing the biggest difference in the incomes of its residents versus its workforce (\$61,800 for residents and \$45,600 for workers). Central Contra Costa also contains the majority of the county's jobs (68.2 percent of total county employment).²² In nine of the ten Contra Costa cities with the largest workforces, the residents of those cities have higher incomes than the workers in the cities. Countywide, of the 26 cities with available income data for both residents and workers, 21 have a residential population that earns more than the workforce. Since demand for local services, especially restaurants, is driven more by the residents of an area than its workforce, this pattern may make it easier for the Contra Costa economy to bear modest price increases.

**Table 10. Median Earnings in Contra Costa County Cities of Workers and Residents
(all figures are in 2013 dollars)**

	Median Earnings of Workers	Median Earnings of Residents	Employment
Contra Costa County	\$40,800	\$45,900	366,600
East Contra Costa	\$28,500	\$46,300	19,100
Antioch-Pittsburg	\$31,800	\$34,300	31,500
Central Contra Costa	\$45,600	\$61,800	254,100
West Contra Costa	\$37,500	\$39,300	62,000
Alamo CDP	\$39,400	\$81,500	3,300
Antioch city	\$31,500	\$36,200	21,100
Bay Point CDP	\$28,900	\$24,300	1,700
Brentwood city	\$28,000	\$48,700	13,200
Clayton city	\$26,300	\$71,200	1,700
Concord city	\$39,500	\$40,600	55,000
Crockett CDP	\$44,400	\$51,200	1,300
Danville town	\$36,700	\$85,500	13,100
Discovery Bay CDP	\$25,400	\$58,400	1,600
El Cerrito city	\$30,500	\$48,400	6,900
Hercules city	\$47,400	\$54,100	4,700
Kensington CDP	\$36,900	\$75,500	700
Lafayette city	\$35,600	\$81,300	10,100
Martinez city	\$47,700	\$51,100	16,500
Oakley city	\$27,300	\$41,000	3,700
Orinda city	\$44,000	\$97,500	5,200
Pacheco CDP	\$38,600	\$30,000	1,800
Pinole city	\$23,700	\$44,600	4,800
Pittsburg city	\$32,500	\$33,700	14,500
Pleasant Hill city	\$31,200	\$52,200	14,600
Richmond city	\$41,600	\$32,600	37,400
Rodeo CDP	\$53,400	\$36,700	1,700
San Pablo city	\$22,200	\$25,700	6,900
San Ramon city	\$60,800	\$79,400	41,200
Vine Hill CDP	\$62,400	\$35,200	1,300
Walnut Creek city	\$47,300	\$61,100	53,600

Source: American Community Survey 5-Year Estimates 2009-2013 Tables B08521, B08121, and B08406

Effect on Sub-Regions of Contra Costa County

While the ACS does not provide information on place of work at the sub-county level, it does have more detailed data on place of residence. We can therefore estimate where the workers affected by the proposed minimum wage law live in Contra Costa County. However, we emphasize that these estimates only show where workers live, so it is not possible to draw any conclusions about impacts on businesses at the sub-county level.

Table 11 shows the distribution of affected workers by their place of residence, as well as the share of residents in each area that are estimated to receive a raise under the proposed minimum wage increase. Contra Costa workers who live in the western and eastern ends of the county will disproportionately benefit from the proposed increase. In the west, 47.1 percent of Contra Costa workers who live in Richmond, San Pablo, El Cerrito, and Hercules will receive a raise. To the east, 39.4 percent of Contra Costa workers living in Antioch, Brentwood, and Oakley will see their pay rise. Contra Costa workers living in the north-central area of the county are estimated to receive raises roughly in line with the county as a whole. Workers commuting into Contra Costa from other areas are less likely than the average Contra Costa worker to receive a pay increase.

Table 11. Place of Residence of Workers Affected by Proposed Minimum Wage Policy

	Percent of Covered Workers	Percent of Covered Workers Getting Raises	Percent of Region That Is Getting a Raise
Richmond, San Pablo	11.6	16.7	47.1
Concord, Martinez, Pittsburg, Walnut Creek	37.8	39.3	34.0
Danville, San Ramon	6.6	3.6	17.6
Antioch, Brentwood, Oakley	16.7	20.2	39.4
Outside Contra Costa County	27.2	20.2	24.4
Total	100.0	100.0	

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

Why Coordinate Among Cities?

Contra Costa County's authority to set minimum wage standards is limited to unincorporated areas and County employees. Attaining the full workforce coverage assumed by the analysis in this research brief would therefore require action by each of the county's cities as well as the county itself.

Coordination among the county's cities to adopt the same minimum wage law would simplify compliance for businesses and enforcement of the laws. It would also maximize the positive economic effects from increased spending by low-wage workers and their families, as discussed above.

Most of the cities that have passed minimum wage laws to date have been larger cities, or small to mid-sized cities located in proximity to other cities with their own higher wage laws (for example, Mountain View and Sunnyvale, California, near San Jose). Other localities have acted together at the same time. For

example, in 2014, Montgomery County and Prince George’s County in Maryland passed minimum wage laws at the same time as neighboring Washington, DC. And six cities in Santa Clara County, including San Jose, recently agreed to explore coordinating minimum wage increases to \$15 an hour.

Contra Costa already benefits from higher minimum wages in San Francisco and cities in Alameda County, as well as in Richmond. Given the size of the proposed minimum wage increase, cities in Contra Costa County would maximize the economic benefits and minimize the risk of adverse effects by coordinating in passing higher wage standards—if not for the county as a whole, at least within sub-regions of the county.

6. ADDITIONAL POLICY DESIGN QUESTIONS

In addition to setting wage levels and a phase-in schedule, policymakers contemplating a local minimum wage law are typically faced with several other policy design questions. In what follows, we give a brief overview of policy design questions surrounding enforcement, nonprofits and small businesses, treatment of total compensation, and teenage workers.

Enforcement

An essential element of the successful implementation of any local minimum wage law is robust enforcement, given the prevalence of wage theft in low-wage industries. Significant and extensive minimum wage violations have been documented in cities around the country. For example, in a large representative survey of low-wage workers in Los Angeles in 2008, 30 percent were found to have been paid below the minimum wage during the previous week, and 88 percent had at least one pay-related violation in the previous week (Milkman, Gonzalez, and Narro 2010). Effectively raising the minimum wage will require robust enforcement language in the law, creating a local enforcement agency, and implementing good enforcement practices and policies (see Yoon and Gebreselassie [2015] for a more in-depth treatment).

Enforcement-Related Provisions in the Law Itself

A standard set of enforcement provisions has emerged for California local minimum wage laws. This core legal framework commonly includes the following:

Private right of action: This provision allows victims of wage theft to privately pursue their own court cases against employers, supplementing public enforcement resources. In addition, local ordinances include provisions awarding reasonable attorneys’ fees and costs to employees whose rights have been violated, a necessary provision to encourage attorneys to take cases.

Damages and penalties: Employers have little incentive to comply with minimum wage laws if the only consequence of violation is payment of wages due (Meyer and Greenleaf 2011). Citations that carry penalties or fines, as well as “liquidated damages” (sums of money awarded to workers in addition to the underlying wages owed), increase the cost of noncompliance. Penalties that accrue over time can provide an incentive for speedier repayment.

Anti-Retaliation protection: Fear of employer retaliation is a significant reason that violations go unreported (Bernhardt et al. 2009). Most California local minimum wage ordinances include a rebuttable presumption of retaliation if an employer takes broadly defined “adverse action” against an employee who has recently asserted his or her rights (NELP 2011).

Notice posting and record keeping: California local minimum wage laws recognize the importance of informing employers and employees of the minimum wage. Cities must publish the updated minimum wage rates, and employers must post the minimum wage in relevant languages for workers to see. Employers are also required to keep payroll records and provide access to investigators as needed. In the absence of payroll records, an employee’s report of wages and hours is presumed to be correct.

Business license revocation: One strategy to increase compliance and prompt repayment included in most California local minimum wage ordinances is to involve other city and county departments or agencies in revoking or suspending business licenses and permits until any wage violation is remedied (NELP 2011). Consequences for employers convicted of wage theft or with unpaid wage claims can include being barred from winning city contracts, renting city-owned space, or receiving city business permits (Gleeson, Taube, and Noss 2014).

Wage liens: Even when a violation has been found and employers are ordered to provide back pay to workers, actual payment of wages is not guaranteed, and indeed in California only a fraction of wages found due are ever paid (Cho, Koonse, and Mischel 2014). A wage lien—a claim on property owned by the employer so that it cannot be sold without payment going to the worker—is one tool used to secure payment from recalcitrant employers found to owe back wages.

The Creation of an Enforcement Agency

Creating, funding, and staffing a local government office dedicated to enforcement is vital for implementing an effective law; the private bar is not enough to protect the rights of low-wage workers. A dedicated local office serves as a centralized place to educate workers and employers, receive complaints, investigate compliance, issue citations, and collect wages due. State and federal enforcement offices are already understaffed and struggle to provide robust investigations and timely collections (Government Accountability Office 2009; Su 2013), let alone deter wage theft with proactive enforcement and a credible expectation of a compliance check (Fine and Gordon 2010; Ichikawa and Smith 2014).

Cities with sufficient resources and administrative infrastructure should establish a local enforcement agency to realize the economic and social benefits from raising the minimum wage. However, many cities may be too small to create and fund an entire enforcement agency, while still having a vested interest in strong enforcement of their minimum wage law. Few proven models exist to guide small-city enforcement, so this largely unexplored policy terrain needs to be developed as smaller cities increasingly adopt local minimum wage laws. Here we briefly review several options; see Koonse, Dietz, and Bernhardt (forthcoming) for an in-depth discussion.

Small cities can simply choose to rely on state enforcement to investigate, adjudicate, and collect workers’ claims. But experience suggests that localities should not rely solely on state enforcement, both because of state resource constraints and because local knowledge—of businesses, industries, community groups,

and local officials—is a valuable tool in effective enforcement. Functions that small cities can perform include responding to workers’ claims and directing them to legal services groups and/or the state enforcement agency; educating and notifying employers about the city’s minimum wage law; funding and partnering with local community groups to conduct worker outreach and education; coordinating media campaigns to educate the public; and partnering with the state enforcement agency to strategize pro-active enforcement.

Contra Costa policymakers in particular might consider regional collaborations on enforcement. For example, two smaller cities in California (Sunnyvale and Mountain View) have contracted out enforcement of their minimum wage provisions to San Jose. Alternatively, several smaller cities may pool resources to fund a county-wide enforcement agency.²³ Regional collaboration on enforcement will be easier if cities also align the content of their ordinances (i.e., the wage levels, the dates on which increases occur, phase-ins, and any exemptions).

Best Enforcement Practices

As cities and states experiment with increases in minimum wage, enforcement strategies are evolving to meet the challenges of 21st century workplaces given constrained funding. Strategies to consider at the local level include.

Company-wide investigations: When responding to a worker complaint, agencies should investigate the entire workplace on behalf of all workers. This allows the worker who came forward to remain anonymous for longer, which may provide some protection from retaliation. Because violations are rarely concentrated on a single employee, this approach allows investigators to recover back wages for more employees (Dietz, Levitt, and Love 2014).

Proactive investigations: Enforcement of wage and hour laws in many jurisdictions is solely complaint-driven, even though the most vulnerable and exploited workers are among the least likely to complain (Weil and Pyles 2005). In response, federal, state, and city enforcement offices are increasingly moving beyond a complaint-driven approach and engaging in targeted, proactive investigations of industries and employers (NELP 2011).

Community partnerships: Building trust with workers is fundamental to successful enforcement of labor laws. Many of the most vulnerable workers—low-wage workers from immigrant communities and communities of color—are wary of government institutions but do trust organizations within their community (Gleeson 2009). Enforcement agencies can leverage the complementary strengths of community-based organizations (CBOs) in order to increase effectiveness and reach. The linguistic, cultural, and industry knowledge within CBOs make them valuable partners in educating workers about their rights, building trust between workers and investigators, and providing knowledge of the particular industry dynamics at play (Fine 2014). San Francisco, Los Angeles, and Seattle have dedicated resources to fund outreach and education to workers and employers; Oakland and San Diego plan to do the same.

Nonprofits and Small Businesses

Nonprofit Organizations

As shown in Section 4 above, workers at nonprofits are less likely than the overall workforce to be affected by the proposed minimum wage law. However, nonprofits comprise a wide range of organizations. Some are large institutions (universities, hospitals, large services providers) that have sizeable annual budgets with varied funding streams and that are therefore able to absorb minimum wage increases. At the same time, other nonprofits may face real constraints on their ability to adjust to minimum wage increases. These are typically smaller nonprofits dependent on a few public funding streams that are fixed over the short or even medium term, and over which they have little leverage.

Local minimum wage policy offers an opportunity to address the problem of low-wage work in certain nonprofit service-providing sectors—a problem that impacts the well-being of both workers and program clients through the quality of care provided. Exempting groups of nonprofit organizations from a minimum wage increase, conversely, could have negative effects on the quality of care by increasing employee turnover. If certain nonprofits pay lower wages than the rest of the market, it will make it harder for them to attract and retain workers. But requiring higher wages without addressing the need to increase funding streams, or without providing sufficient phase-in time, is likely to result in cuts to services.

Ultimately, the solution is to increase public funding for the services provided by these nonprofits. We recognize that this is a difficult policy challenge, given the complex matrix of local, state, and federal funding streams for social services combined with budgetary constraints and the inevitable time lags involved in moving approval through the governmental process. An innovative solution is San Francisco's C-Wages program, which provides County wage subsidies to child care centers and family child care providers that meet certain quality measures and enroll at least 25 percent of their children from low-income families. Funding for this program was increased to assist providers in meeting the city's higher minimum wage in 2015. Cities can also engage with private philanthropy to help support nonprofit agencies through the transition; this should include both financial aid and technical assistance and management support in adjusting to the higher wage rate.

In the short term, it is likely some nonprofits will need a longer time period to adjust to the proposed minimum wage increase. San Francisco, Berkeley, and Santa Fe's minimum wage laws have provided for slower phase-ins for nonprofit organizations. If Contra Costa policymakers decide to consider a longer phase-in schedule for some nonprofits, a key policy design question will be which nonprofits would qualify for the slower phase-in. We have not identified a robust test that differentiates nonprofit institutions with sufficient margins and diversified funding streams from nonprofits that will struggle to comply on the proposed timeline.²⁴

Small Businesses

Several city minimum wage laws have provided slower phase-ins for small businesses. San Francisco's 2003 law delayed implementation by one year for businesses with fewer than 10 employees. Santa Fe initially exempted small businesses (fewer than 25 employees) from its 2003 law, but in 2007 amended the law to cover all establishments regardless of size. Seattle's 2014 law establishes slower phase-ins for

small businesses (defined as 500 or fewer employees); the phase-in schedule varies depending on total compensation.²⁵ Three local laws exempt some small businesses altogether: Montgomery County’s 2013 law exempts businesses that employ fewer than two employees, Richmond’s 2014 law exempts employers who pay for less than 800 hours of employee labor during a given two-week period, and Kansas City’s 2015 law exempts businesses that employ 15 or fewer employees.

Several policy design questions should be considered if Contra Costa policymakers wish to implement a slower phase-in for small businesses. First, there is a lack of consistent definitions of “small businesses” in public policy, as evidenced in the above examples from other cities. A second consideration is whether to define businesses as firms or establishments. Large firms often operate via multiple small establishments (i.e., retail clothing stores or bank branches); therefore, a small business definition based on establishment size will erroneously include large national or multinational firms. We would therefore recommend a definition based on firm size. The same principle holds in the case of franchises—i.e., all franchises or other businesses owned by a given owner or group of owners should be counted toward firm size. Finally, economic theory suggests that wholesale exemptions based on firm size will result in perverse incentives, and so we generally do not recommend them. An alternative strategy is to seek ways to assist small businesses through the minimum wage implementation, including assisting access to small business loans and technical assistance and training.

Total Compensation

Four localities allow employers to include some or all of their payment of health benefits and child care benefits in the calculation of wages paid. Albuquerque’s and Bernalillo County’s minimum wage laws allow a health care or child care credit of \$1.00 per hour, and Richmond allows a health care credit of up to \$1.50 per hour. Santa Fe’s (2003) law states that the value of health and child care benefits are considered part of wages. Seattle allows certain forms of compensation to be counted during a phase-in period. Four cities (San Francisco, San Jose, Seattle, and Sunnyvale) allow commissions and/or non-discretionary bonuses to be counted as compensation. (Current California state law pre-empts localities from instituting a tip credit or excluding tipped workers, so we do not address tips here).

One rationale for including all or some of the costs of certain benefits in the wage calculation is to avoid creating an incentive for employers to cut benefits in order to meet the higher wage threshold. However, studies of past minimum wage increases have not found associated reductions in fringe benefits (Schmitt 2013), though it is difficult to predict with certainty whether this would change as a greater share of the workforce is affected by the policy. We estimate that just over a quarter (25.2 percent) of the workers who would receive wage increases under the proposal have health insurance through their own employer (see Table 4). More important, crediting health benefits towards a minimum wage creates challenges for policy design and enforcement. This includes determination of which health expenditures are eligible to be credited towards the wage rate and valuation of those expenditures.²⁶

The value of many benefits does not appear on worker’s paychecks, creating another substantial challenge for enforcement. We also know that large firms are more likely to provide benefits than small firms; counting total compensation would therefore mainly assist large firms.

Teens

Local minimum wage laws typically incorporate state definitions of which employees are covered by state minimum wage law. Four of the California cities with local minimum wage laws exempt subsidized summer or short-term youth employment programs. Two local ordinances, Montgomery and Prince George's Counties, go beyond state law and exclude employees under the age of 19 who work no more than 20 hours per week. Bernalillo County exempts employees under age 16 and Kansas City exempts employees under age 18. California regulation allows for youth "learner" employees to be paid 85 percent of the minimum wage during their first 160 hours of employment in occupations in which the employee has no previous similar or related experience.²⁷ When state or federal law has included a subminimum wage for teens, very few employers made use of it (Card and Krueger 1995).²⁸

The goal behind exempting young workers from minimum wage requirements is to avoid creating disincentives for hiring such workers. However, a large body of research suggests that the effect of minimum wage laws on teen employment is either negligible or very small. Moreover, we estimate that teens will constitute only 3 percent of workers affected by the Contra Costa proposal (see Table 4). On the downside, subminimum or training wages for teens may create an incentive to hire middle-class teenagers over low-wage adult workers in high-turnover industries such as food-fast restaurants. To summarize, it appears that differential treatment for teens beyond what is already permissible in California law is not necessary and may be counter-productive.

7. CONCLUSION

Drawing on a variety of government data sources, we estimate that 111,000 workers in Contra Costa County would benefit from the proposed minimum wage increase to \$15.00 by 2020, with the average affected worker earning an additional \$3,800 per year once the proposal is fully implemented. Our analysis of existing economic research suggests that businesses will adjust to increased operating costs mainly through reduced employee turnover, improved work performance, and a moderate increase in restaurant prices spread over five years. While higher prices may reduce consumer demand, economic models suggest that this will be offset on a County level by the increased purchasing power of low-wage workers receiving the pay increase. As a result, potential adverse effects on employment growth are likely to be outweighed by the stimulus benefits of the wage increases.

Any prospective impact study has a level of inherent uncertainty. This uncertainty is greater the farther into the future that we predict. While the proposed minimum wage increase in Contra Costa County lies within the range of other recent city laws, most of the existing economic research is based on state and federal minimum wage increases between 1990 and 2012 that did not reach levels now being considered. Therefore the actual effects of the proposed minimum wage law should be closely monitored during implementation.

REFERENCES

- Aaronson, Daniel and Eric French. 2013. "How Does a Federal Minimum Wage Hike Affect Aggregate Household Spending?" *Chicago Fed Letter 313*, Federal Reserve Bank of Chicago. <https://www.chicagofed.org/-/media/publications/chicago-fed-letter/2013/cflaugust2013-313-pdf.pdf>
- Aaronson, Daniel, Eric French, and James MacDonald. 2008. "The Minimum Wage, Restaurant Prices, and Labor Market Structure." *Journal of Human Resources*, 43(3): 688-720.
- Allegretto, Sylvia, Arindrajit Dube, and Michel Reich. 2011. "Do Minimum Wages Really Reduce Teen Employment? Accounting for Heterogeneity and Selectivity in State Panel Data." *Industrial Relations*, 50(2): 205-40.
- Allegretto, Sylvia, Arindrajit Dube, Michael Reich, and Ben Zipperer. 2013. "Credible Research Designs for Minimum Wage Studies." Working Paper No. 148-13. Institute for Research on Labor and Employment, UC Berkeley. <http://www.irl.berkeley.edu/workingpapers/148-13.pdf>
- Allegretto, Sylvia and Michael Reich. 2015. "Are Minimum Wages Absorbed by Price Increases? Estimates from Internet-based Restaurant Menus." Working Paper. Institute for Research on Labor and Employment, UC Berkeley.
- Allegretto, Sylvia, Michael Reich, and Rachel West. 2014. "Ten Dollars or Thirteen Dollars? Comparing the Effects of State Minimum Wage Increases in California." Center on Wage and Employment Dynamics Policy Brief. <http://www.irl.berkeley.edu/cwed/briefs/2014-02.pdf>
- Belman, Dale and Paul Wolfson. 2014. *What Does the Minimum Wage Do?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Benner, Chris and Saru Jayaraman. 2012. "A Dime a Day: the Impact of the Harkin/Miller Proposal on the Price of Food." University of California Berkeley Food Labor Research Center, Food Chain Workers Alliance and Restaurant Opportunities Center. http://laborcenter.berkeley.edu/foodlabor/price_food12.pdf
- Bernhardt, Annette, Ruth Milkman, Nik Theodore, Douglas Heckathorn, Mirabai Auer, James DeFilippis, Ana Luz Gonzalez, Victor Narro, Jason Perelshteyn, Diana Polson, and Michael Spiller. 2009. "Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities." Center for Urban Economic Development; National Employment Law Project; UCLA Institute for Research on Labor and Employment. <http://www.nelp.org/page/-/brokenlaws/BrokenLawsReport2009.pdf?nocdn=1>
- Boushey, Heather and Sarah Glynn. 2012. "There are Significant Business Costs to Replacement Employees." Center for American Progress. <http://www.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf>
- Card, David and Alan Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton: Princeton University Press.
- Cho, Eunice Hyunhye, Tia Koonse, and Anthony Mischel. 2014. "Hollow Victories: A Crisis in Collecting Unpaid Wages for California's Workers." National Employment Law Project; UCLA Labor Center. http://nelp.3cdn.net/f6fc363a30266f0cd3_pzm6id1xa.pdf

Congressional Budget Office. 2012. “Effective Marginal Tax Rates for Low- and Moderate-Income Workers.” U.S. Congress. <https://www.cbo.gov/sites/default/files/11-15-2012-MarginalTaxRates.pdf>

Cooper, David and Doug Hall. 2012. “Raising the Federal Minimum Wage to \$10.10 Would Give Working Families, and the Overall Economy, A Much-Needed Boost.” Economic Policy Institute. <http://www.epi.org/publication/bp357-federal-minimum-wage-increase>

Dietz, Miranda, Donna Levitt, and Ellen Love. 2014. “Enforcement of Labor Standards.” In Michael Reich, Ken Jacobs, and Miranda Dietz (eds.) *When Mandates Work: Raising Labor Standards at the Local Level*, pp. 229-255. Berkeley CA: University of California Press.

Dube, Arindrajit. 2013. “Minimum Wages and the Distribution of Family Incomes.” Unpublished paper. https://dl.dropboxusercontent.com/u/15038936/Dube_MinimumWagesFamilyIncomes.pdf

Dube, Arindrajit, T. William Lester, and Michael Reich. Forthcoming. “Minimum Wage Shocks, Employment Flows and Labor Market Frictions.” *Journal of Labor Economics*. Working Paper, Institute for Research on Labor and Employment, University of California Berkeley. <http://escholarship.org/uc/item/76p927ks>.

Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. “Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties.” *Review of Economics and Statistics*, 92(4): 945-964.

Dube, Arindrajit, Suresh Naidu, and Michael Reich. 2007. “The Economic Effects of a Citywide Minimum Wage.” *Industrial and Labor Relations Review*, 60(4): 522-543.

East Bay Economic Development Alliance. 2015. “East Bay Economic Outlook 2015-16.” <http://www.eastbayeda.org/business-services/economic-reports.page>

Fine, Janice. 2014. “Co-Producing Labor Standards Enforcement.” Presentation to the LIFT convening, September 11, 2014.

Fine, Janice, and Jennifer Gordon. 2010. “Strengthening Labor Standards Enforcement through Partnerships with Workers’ Organizations.” *Politics & Society*, 38(4):552-585.

Gleeson, Shannon. 2009. “From Rights to Claims: The Role of Civil Society in Making Rights Real for Vulnerable Workers.” *Law & Society Review*, 43(3): 669-700.

Gleeson, Shannon, Ruth Silver Taube, and Charlotte Noss. 2014. “Santa Clara County Wage Theft Report.” Santa Clara County Wage Theft Coalition. <http://www.sccgov.org/sites/owp/Documents/pub/WageTheftReportFinal-2014.pdf>

Government Accountability Office. 2009. “Department of Labor: Wage and Hour Division’s Complaint Intake and Investigative Processes Leave Low Wage Workers Vulnerable to Wage Theft.” Testimony Before the Committee on Education and Labor, House of Representatives. U.S. Government Accountability Office, March 25, 2009. <http://www.gao.gov/assets/130/122107.pdf>

Hirsch, Barry T., Bruce Kaufman, and Tetyana Zelenska. 2015. “Minimum Wage Channels of Adjustment.” *Industrial Relations*, 54(2): 199-239.

Ichikawa, Diego Rondon and Rebecca Smith. 2014. “Delivering \$15: Community-Centered Wage and Hour Enforcement in Seattle.” National Employment Law Project. <http://www.nelp.org/page/-/Justice/Delivering-15-Community-Centered-Wage-and-Hour-Enforcement-Seattle.pdf?nocdn=1>

Koonse, Tia, Miranda Dietz, and Annette Bernhardt. Forthcoming. “Enforcing City Minimum Wage Laws in California: Best Practices and City-State Partnerships.” California: UCLA Labor Center and UC Berkeley Center for Labor Research and Education.

Lee, Chinkook, Gerald Schluter, and Brian O’Roark. 2000. “Minimum Wage and Food Prices: An Analysis of Price Pass-Through Effects.” *International Food and Agribusiness Management Review*, 3: 111–128.

Meyer, Jacob and Robert Greenleaf. 2011. “Enforcement of State Wage and Hour Laws: A Survey of State Regulators.” Columbia Law School, National State Attorneys General Program. http://web.law.columbia.edu/sites/default/files/microsites/attorneys-general/files/Wage%20and%20Hour%20Report%20FINAL_0.pdf

Milkman, Ruth, Ana Luz Gonzalez, and Victor Narro. 2010. “Wage Theft and Workplace Violations in Los Angeles: The Failure of Employment and Labor Law for Low-Wage Workers.” UCLA Institute for Research on Labor and Employment. <http://www.irle.ucla.edu/publications/documents/LAwagetheft-Milkman-Narro-110.pdf>

National Employment Law Project. 2011. “Winning Wage Justice: An Advocates’ Guide to State and City Policies to Fight Wage Theft.” National Employment Law Project. <http://www.nelp.org/page/-/Justice/2011/WinningWageJustice2011.pdf?nocdn=1>

National Restaurant Association and Deloitte & Touche LLP. 2010. “Restaurant Industry Operations Report 2010 Edition.”

Perry, Ian and Annette Bernhardt. 2015. “Data and Methods for Estimating the Impact of Proposed Local Minimum Wage Laws.” Center on Wage and Employment Dynamics, Institute for Research on Labor and Employment, UC Berkeley. <http://irle.berkeley.edu/cwed/briefs/2015-02-data-and-methods.pdf>

Pollin, Robert and Jeannette Wicks-Lim. 2015. “A \$15 U.S. Minimum Wage: How the Fast-Food Industry Could Adjust Without Shedding Jobs.” Political Economy Research Institute, University of Massachusetts Amherst, Working Paper 373. http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_351-400/WP373.pdf

Pollin, Robert and Jeannette Wicks-Lim. 2005. “Comments on Aaron Yelowitz, ‘Santa Fe’s Living Wage Ordinance and the Labor Market’.” Political Economy Research Institute, University of Massachusetts Amherst, Working Paper 108. http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1085&context=peri_workingpapers

Potter, Nicholas. 2006. “Measuring the Employment Impacts of the Living Wage Ordinance Santa Fe, New Mexico.” University of New Mexico, Bureau of Business and Economic Research. <https://bber.unm.edu/pubs/EmploymentLivingWageAnalysis.pdf>

Reich, Michael, Peter Hall, and Ken Jacobs. 2005. “Living Wage Policies at the San Francisco Airport: Impacts on Workers and Businesses.” *Industrial Relations* 44(1): 106-138.

Reich, Michael, Ken Jacobs, and Annette Bernhardt. 2014. “Local Minimum Wage Laws: Impacts of Workers, Families, and Businesses.” Working Paper No. 104-14. Institute for Research on Labor and Employment, UC Berkeley. <http://www.irlle.berkeley.edu/workingpapers/104-14.pdf>

Reich, Michael, Ken Jacobs, Annette Bernhardt, and Ian Perry. 2015. “The Proposed Minimum Wage Law for Los Angeles: Economic Impacts and Policy Options.” Center on Wage and Employment Dynamics, Institute for Research on Labor and Employment, UC Berkeley. <http://irlle.berkeley.edu/cwed/briefs/2015-01.pdf>

Schmitt, John. 2013. “Why is There No Discernable Employment Effect of the Minimum Wage.” Washington, DC: Center for Economic and Policy Research. <http://www.cepr.net/documents/publications/min-wage-2013-02.pdf>

Schmitt, John and David Rosnick. 2011. “The Wage and Employment Impact of Minimum-Wage Laws in Three Cities.” Center for Economic and Policy Research. <http://www.cepr.net/documents/publications/min-wage-2011-03.pdf>

Su, Julie. 2013. “2012-2013 Fiscal Year Report on the Effectiveness of the Bureau of Field Enforcement.” State of California, California Department of Industrial Relations. https://www.dir.ca.gov/dlse/BOFE_LegReport2013.pdf

Weil, David and Amanda Pyles. 2005. “Why Complain? Complaints, Compliance, and the Problem of Enforcement in the U.S. Workplace.” *Comparative Labor Law & Policy Journal*, 27(1): 59-92.

Yelowitz, Aaron. 2012. “The Labor Market Effects of Citywide Compensation Floors: Evidence from San Francisco and other “Superstar” Cities.” Employment Policies Institute. https://www.epionline.org/wp-content/uploads/2014/07/EPI_SanFrancisco_Studyv4.pdf

Yelowitz, Aaron. 2005a. “Santa Fe’s Living Wage Ordinance and the Labor Market.” Employment Policies Institute. https://www.epionline.org/wp-content/studies/yelowitz_09-2005.pdf

Yelowitz, Aaron. 2005b. “How Did the \$8.50 Citywide Minimum Wage Affect the Santa Fe Labor Market?” Employment Policies Institute. https://www.epionline.org/wp-content/studies/yelowitz_12-2005.pdf

Yoon, Haeyoung and Tsedeye Gebreselassie. 2015. “Building Robust Labor Standards Enforcement Regimes in Our Cities and Counties.” National Employment Law Project. New York, NY. <http://www.nelp.org/content/uploads/2015/03/Building-Robust-Labor-Standards-Enforcement-Regimes-in-Our-Cities-and-Counties-.pdf>

ENDNOTES

- 1 U.S. Census Bureau, Local Area Unemployment Statistics.
- 2 Authors' calculations based on ACS data.
- 3 U.S. Census Bureau, American Community Survey, 2007 and 2013, 1-Year Estimates, Table B08521. For 2007, earnings were adjusted to 2013 dollars using the average annual change for the past ten years of the San Francisco Oakland-San Jose Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).
- 4 U.S. Census Bureau, American Community Survey, 2007 and 2013, 1-Year Estimates, Table B19083.
- 5 Using the ACS allows us to examine the wage distribution based on workers' place of work as opposed to their place of residence. This is important in Contra Costa County, where 46.4 percent of residents worked outside of the county in 2013 (according to our analysis of the ACS data).
- 6 We assume that Medicaid-funded home health care workers would be covered by the proposed minimum wage increase, but the county would need to specifically raise their wages when enacting the proposal in order for them to be covered.
- 7 We assume a nominal wage growth rate of 2.4 percent, which is similar to the mid-range scenario projection we used in our prospective study of Los Angeles' local minimum wage law (Reich, Jacobs, Bernhardt and Perry 2015). If a recession occurs and wage growth stalls, actual effects would be larger; conversely, if wage growth exceeds our projection, the effects of the proposed increase would be smaller.
- 8 U.S. Census Bureau, On The Map , 2011 (<http://onthemap.ces.census.gov>).
- 9 Constant dollar values are calculated using the average annual change for the past ten years of the San Francisco-Oakland-San Jose Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).
- 10 One exception is child care assistance, which does have a maximum income threshold that, once exceeded, results in the immediate loss of benefits. However, there is a substantial waiting list for child care assistance benefits, so any affected workers who lose eligibility are likely to be replaced by lower-wage workers not currently receiving benefits. Workers who are no longer eligible for Medi-Cal will be eligible for subsidized health care through Covered CA. While most families will come out well ahead financially, the change in costs for specific families will depend on income and health care utilization.
- 11 This analysis is based on data gathered before the full implementation of the Affordable Care Act.
- 12 See Reich, Jacobs, and Bernhardt (2014) for a more detailed literature review on the mechanisms by which businesses adjust to minimum wage increases.
- 13 Since workers often increase their wages by moving from one employer to another, we cannot assume that the correlation between wages and turnover indicates that low wages are causing higher turnover. However, policy experiments with living wages and minimum wages have provided the evidence needed to determine that wages do, in fact, affect turnover.
- 14 Hirsch, Kaufman, and Zelenska (2015) and Reich, Hall, and Jacobs (2005) found improvements in worker productivity following higher wage mandates.

15 We use a payroll tax rate of 7.65 percent (6.2 percent for Social Security and 1.45 percent for Medicare). Workers' compensation insurance rates vary by industry (see Table 6: http://www.wcirb.com/sites/default/files/documents/state_of_the_wc_system_report_140815.pdf).

16 To determine the labor share of operating costs in retail trade and grocery stores, we use the [U.S. Census 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 payroll taxes, employer paid insurance premiums, and employer benefits (excluding health insurance and retirement benefits) to annual payroll to estimate total labor costs. Health and retirement 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 using the Annual Retail Trade Report to obtain labor cost data.

17 Table 7 shows the average of the low and high estimates. 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 that estimate for increases in operating costs, but assumes that 100 percent of the costs are passed through to consumers.

18 Aaron Yelowitz of the Employment Policies Institute found an increase in the probability of unemployment for low-skilled workers and evidence of replacement of low-skilled adults by teens in Santa Fe (Yelowitz 2005a, 2005b), as well as a decrease in teen work hours and no discernable effect on overall employment in San Francisco (Yelowitz 2012). There are serious flaws in both analyses, however. Higher wages are likely to increase labor supply, which can mechanically cause the unemployment rate to rise even when more people have jobs. Pollin and Wicks-Lim (2005) replicated Yelowitz's first Santa Fe study and found no negative impact on employment. Furthermore, even if the reported results for each of his studies held, total compensation for teens and low-wage workers still would have increased because any employment or hours reductions would have been more than offset by the increase in hourly earnings (Pollin and Wicks-Lim 2005).

19 Businesses in Contra Costa will also benefit from the increased spending by residents who work in surrounding cities with local minimum wage laws (San Francisco, Oakland, Emeryville, San Jose, Sunnyvale, and Mountain View). For example, 28 percent of Contra Costa residents who do not work in the county are employed in San Francisco, and 47 percent are employed in Alameda County where Oakland, Berkeley, and Emeryville are located.

20 Berkeley is currently considering an increase in its minimum wage rate.

21 Authors' analysis of ACS data.

22 U.S. Census Bureau, On The Map , 2011 (<http://onthemap.ces.census.gov>).

23 Unfortunately, very little research exists to help estimate the ideal number of enforcement staff for a given city or geography. San Francisco, the city with the most robust enforcement regime, has approximately 20,000 low-wage workers per investigator. But this ratio should be treated only as a rough benchmark, because San Francisco has not been able to evaluate what proportion of total violations its agency is able to address.

24 The 2015 Los Angeles minimum wage law delays implementation for small businesses (25 or fewer employees) by one year, and allows nonprofits with more than 25 employees to apply for the delayed schedule. Criteria to qualify are any of the following: the CEO earns a salary less than five times the lowest wage paid by the nonprofit; the nonprofit is a transitional employer; the nonprofit is a childcare provider; or the nonprofit is funded primarily by City, County, State, or Federal grants or reimbursements.

25 See <http://murray.seattle.gov/minimumwage/#sthash.cYmSPbdt.dpbs> for the full implementation schedule.

26 Cities that decide to credit health benefits will need to develop clear regulations governing these matters and should allocate sufficient administrative resources to assist employers and employees in understanding the rules and adjudicating disputes.

27 See Industrial Welfare Commission wage order section 4(A) at <https://www.dir.ca.gov/IWC/IWCArticle4.pdf>.

28 Federal law permits a 90-day subminimum wage for workers under the age of 20.

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