# Economic and Equity Outcomes of a \$15/hr Minimum Wage in Seattle 

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AUTHORS<br>Nicole Vallestero Keenan, Senior Research and Policy Analyst, MSW<br>Howard Greenwich, Research and Policy Director, MPP

## ABOUT SAGE

Puget Sound Sage works to promote good jobs, quality employment opportunities, a cleaner environment and affordable housing for low/moderate income families in the Seattle metropolitan area. Our mission is to ensure that all families benefit from economic growth, and that local and regional policy decisions meet the social and environmental needs of our communities. Sage provides timely, critical research on issues of the regional economy, jobs, housing and the environment. Find more information at our website, www.pugetsoundsage.org, and our blog, soundprogress.wordpress.com.

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## Summary and Introduction

In this policy brief, we explore implications of a $\$ 15$ minimum wage for the City of Seattle. Specifically, we examine the potential outcome of a $\$ 15$ minimum wage on our local economy, assess outcomes by industry sector, and demonstrate that a $\$ 15$ minimum wage would create large scale benefits to women and communities of color. We conclude that the net benefits to low-wage workers, the local economy and to race and gender equity make a compelling case to adopt a minimum wage in Seattle.

## Key Findings:

A $\$ 15$ minimum wage will have a wide and positive impact on our local economy.

- We estimate that 102,000 employees in Seattle make less than $\$ 15$ an hour.
- Workers covered by a minimum wage could see an average increase of $\$ 3.05$ an hour. This represents a $26 \%$ actual increase above their average wage of $\$ 11.95$.
- The additional earnings would result in a \$526 million stimulus to low-wage worker households in Seattle and the region.
- The $\$ 526$ million dollar wage increase represents a marginal change of only $2 \%$ in the total payroll of affected industries. Employers in certain industries, such as food and accommodations, would see a higher rate of increase (6\%).
- Low-income households are likely to spend more of their paychecks, increasing demand for goods and service. Households with incomes between $\$ 30,000$ and $\$ 39,999$ spend all of their pre-tax income. In contrast - households with incomes over $\$ 70,000$ spend only $63 \%$ of their pre-tax income.

A minimum wage increase will greatly benefit women and people of color working in Seattle.

- Women and people of color living in Seattle earn between $44 \%$ and $71 \%$ of what white men earn in Seattle, respectively.
- The over-representation of women and people of color in low-wage industries explains much of the gender and race pay gap. For example, in the food service industry nearly $63 \%$ of workers earn below $\$ 15$ an hour. People of color comprise $45 \%$ of those low-wage workers, despite making up 30\% of Seattle's total workforce.

Evidence from other cities with higher minimum wages indicates that a simple minimum wage increase makes good policy.

- Two independent studies of San Francisco and Santa Fe found no discernible effect on employment after implementation of their minimum wage laws.
- San Jose increased the minimum wage by $\$ 2.00$ in 2013 . Just one year later, registered businesses in San Jose have increased by 3\%. Registration of small retailers increased by 19\%.
- Unemployment in San Jose decreased by one percent since the wage hike went into effect, and in the sector most influenced by the wage increase, restaurants and hospitality, more than 4,000 jobs were created.


## Why is Everyone Talking About \$15?

## Structural Changes to the Economy Leave Many People Behind, Despite Prosperity

Over the last several decades, compounding factors have led to an income inequality crisis in the U.S.: median wages remain stagnant, the cost of living has outpaced earnings, and the majority of new jobs are low-wage, service-sector occupations.

More importantly, wages have not tracked with productivity. For decades, economists assumed that rising productivity corresponded with rising wages for everyone. Beginning in the 1970s, we saw this was no longer true - productivity gains that could have gone to workers were going somewhere else (see Figure 1). If the minimum wage tracked with productivity, as it had until around 1973, the current minimum wage would have been $\$ 21.72$ in $2012 .{ }^{1}$ If hourly wages had tracked with the wages of the top $1 \%$, it would be $\$ 33$ per hour. ${ }^{2}$

Figure 1 - Productivity and Wage Gap ${ }^{3}$


2012 Economic Policy Institute Analysis

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This national trend will likely continues, with income inequality leading to more and more people facing economic hardship. Throughout the U.S., the fastest growing jobs are predominately low-wage jobs (see Table 1). Many of these fastest-growing, but also low-wage occupations, are disproportionately held by women and people of color, which contributes to our perpetual race and gender pay gaps (something we explore in more detail in the second half of this brief).

Table 1: Occupations with the Most Job Growth, United States ${ }^{4}$

| Occupation | Job Growth, <br> $\mathbf{2 0 1 2 - 2 0 2 2}$ | Median <br> annual <br> wage, 2012 | Estimated <br> Hourly <br> Wage |
| :--- | ---: | ---: | ---: |
| Personal care aides | 580,000 | $\$ 19,910$ | $\$ 9.57$ |
| Registered nurses | 526,800 | $\$ 65,470$ | $\$ 31.48$ |
| Retail salespersons | 434,000 | $\$ 21,110$ | $\$ 10.15$ |
| Home health aides | 424,000 | $\$ 20,820$ | $\$ 10.01$ |
| Combined food preparation and serving workers, <br> including fast food | 421,000 | $\$ 18,260$ | $\$ 8.78$ |
| Nursing assistants | 312,200 | $\$ 24,420$ | $\$ 11.74$ |
| Secretaries and admin. assist., except legal, <br> medical, and executive | 307,800 | $\$ 32,410$ | $\$ 15.58$ |
| Customer service representatives | 298,700 | $\$ 30,580$ | $\$ 14.70$ |
| Janitors and cleaners, except maids and <br> housekeeping cleaners | 280,000 | $\$ 22,320$ | $\$ 10.73$ |

Author's calculations from Bureau of Labor Statistics Data

## High Cost of Living In Seattle Makes Inequality Worse

While wages have remained stagnant over this period of time, the economy has continued to grow resulting in the cost of living outpacing earnings. In fast growing cities like Seattle, costs have skyrocketed. Over just the last 18 months, from September 2012 to March 2014, rental housing costs will have climbed 10.5 percent. The average asking rent for a one-bedroom unit in or near downtown Seattle is $\$ 1,438$, and on the Eastside it's $\$ 1,262 .{ }^{5}$ If you have children, the cost of living jumps significantly: child care in Washington State costs roughly $\$ 12,000$ per year, which is over half of a minimum wage earners' income. ${ }^{6}$ Given this high cost of living, one study estimates that a livable wage for a single adult in King County is $\$ 17.55$. $^{7}$

How can we foster an economy that works for everyone? Raising the minimum wage is a critical first step, to be followed by other important solutions, such as tax reform. ${ }^{8}$ We show in the rest of this brief that by raising the minimum wage to $\$ 15$ an hour, Seattle can swiftly and effectively stimulate our economy and address the gender and race pay gap.

## Building a Better Economy through Boosting the Minimum Wage

## A Seattle Minimum Wage Will Lift Up Over 100,000 Workers

Under a policy that requires all employers to pay a minimum of \$15 an hour, we estimate that over 102,000 workers would receive a wage boost upon full implementation (see Table 3) ${ }^{9}$ This represents over one in five ( $22 \%$ ) of the estimated 483,000 workers employed by Seattle businesses. ${ }^{10,11}$

Table 2 shows that the largest numbers of workers below $\$ 15$ an hour are concentrated in three industry groups: accommodations and food services, health care and social assistance, and retail. Workers in accommodations and food services comprise the largest group affected by a minimum wage policy $(29,000)$ and the highest concentration within an industry $(61 \%)$. Health Care and Social Assistance and the combined Retail cluster both employ 16,000 workers below $\$ 15$ an hour.

Table 2: Industries with the Largest Number of Low-wage Workers in Seattle (ranked high to low) ${ }^{12}$

| Industry by 2 Digit NAICS Code | Total Jobs in Seattle (Including Full and Part Time) | Total Jobs <br> Compensated Under \$15 per Hour | Percent of <br> Total Jobs <br> Compensated <br> Under \$15 |
| :---: | :---: | :---: | :---: |
| All Industries | 483,318 | 102,177 | 21\% |
| 72 - Accommodation and Food Services | 46,468 | 28,565 | 61\% |
| 62 - Health Care and Social Assistance | 67,270 | 16,306 | 24\% |
| 44, 45 - Retail | 41,497 | 16,040 | 39\% |
| 81 - Other Services | 22,922 | 7,483 | 33\% |
| Government | 81,885 | 4,884 | 6\% |
| 56 - Administrative and Waste Services | 12,811 | 4,730 | 37\% |
| 71 - Arts, Entertainment and Recreation | 9,241 | 3,943 | 43\% |
| 31-33 Manufacturing | 25,644 | 3,405 | 13\% |
| 54 - Professional and Technical Services | 54,929 | 3,399 | 6\% |
| 52- Finance and Insurance | 21,477 | 2,633 | 12\% |
| 48-49 - Transportation and Warehousing | 12,994 | 2,551 | 20\% |
| 53 - Real Estate | 10,139 | 2,475 | 24\% |
| 42 - Wholesale Trade | 15,652 | 2,166 | 14\% |
| 61- Education | 10,116 | 1,398 | 14\% |
| 23-Construction | 15,712 | 1,052 | 7\% |
| 55 - Management | 13,704 | 966 | 7\% |
| 51-Information Technology | 19,938 | 552 | 3\% |
| 11-Agricultural | 712 | 282 | 40\% |

[^0]We estimate that the 102,000 Seattle-based employees earning below $\$ 15$ an hour make an average wage of $\$ 11.95$ an hour (see Table 3). ${ }^{13}$ With a minimum wage of $\$ 15$ an hour, workers would receive an average boost of $\$ 3.13$ per hour, or about $\$ 6,510$ per year if they work full time hours (2080 hours per year).

In policy debates over minimum wage, critics frequently over-estimate the total wage increase by assuming all workers below the new threshold are at the current minimum wage. As noted above, the average wage currently paid to employees below $\$ 15$ an hour is significantly higher than the minimum wage. Rather than an often claimed $60 \%$ increase in costs for businesses (the difference between $\$ 15$ and the current minimum wage), the average worker will receive only a $26 \%$ wage bump.

In total, workers employed in Seattle, across all industries, could make an additional \$526 million in new, gross earnings. ${ }^{14}$ Accommodation and Food Service workers would earn $\$ 63$ million more, Health Care and Social Assistance workers would earn $\$ 72$ million more and Retail workers would earn $\$ 62$ million more.

Table 3: Wage Estimations Before and After Implementation of a \$15 Minimum Wage

| Industry by 2 Digit NAICS Code | Estimated <br> Wage for <br> Employees <br> Below $\$ 15$ | Estimated <br> Average <br> Wage <br> Increase | Total Jobs <br> Under \$15 | Aggregate <br> Wage <br> Increase** |
| :--- | ---: | ---: | ---: | ---: |
| All Industries | $\$ 11.95$ | $\$ 3.05$ | 102,000 | $\$ 526,100,000$ |
| 11 - Agricultural | $\$ 12.58$ | $\$ 2.42$ | 280 | $\$ 1,138,000$ |
| $23-$ Construction | $\$ 11.29$ | $\$ 3.71$ | 1,100 | $\$ 6,917,000$ |
| $31-33$ Manufacturing | $\$ 11.64$ | $\$ 3.36$ | 3,400 | $\$ 23,991,000$ |
| 42 - Wholesale Trade | $\$ 11.85$ | $\$ 3.15$ | 2,200 | $\$ 13,590,000$ |
| 44,45 - Retail | $\$ 12.57$ | $\$ 2.43$ | 16,000 | $\$ 62,069,000$ |
| $48-49$ - Transportation and Warehousing | $\$ 12.01$ | $\$ 2.99$ | 2,600 | $\$ 14,219,000$ |
| $51-$ Information Technology | $\$ 10.85$ | $\$ 4.15$ | 600 | $\$ 4,586,000$ |
| $52-$ Finance and Insurance | $\$ 11.51$ | $\$ 3.49$ | 2,600 | $\$ 17,885,000$ |
| 53 - Real Estate | $\$ 12.46$ | $\$ 2.54$ | 2,500 | $\$ 10,880,000$ |
| 54 - Professional and Technical Services | $\$ 11.14$ | $\$ 3.86$ | 3,400 | $\$ 24,546,000$ |
| 55 - Management | $\$ 11.26$ | $\$ 3.74$ | 1,000 | $\$ 7,088,000$ |
| 56 - Administrative and Waste Services | $\$ 13.02$ | $\$ 1.98$ | 4,700 | $\$ 16,295,000$ |
| 61 - Education | $\$ 11.71$ | $\$ 3.29$ | 1,400 | $\$ 5,516,000$ |
| 62 - Health Care and Social Assistance | $\$ 12.22$ | $\$ 2.78$ | 16,000 | $\$ 72,340,000$ |
| 71 - Arts, Entertainment and Recreation | $\$ 12.72$ | $\$ 2.28$ | 3,900 | $\$ 9,740,000$ |


|  | Estimated <br> Wage for <br> Employees <br> Below \$15 | Estimated <br> Average <br> Wage <br> Increase | Total Jobs <br> Under \$15 | Aggregate <br> Wage <br> Increase** |
| :--- | ---: | ---: | ---: | ---: |
| 72 - Accommodation and Food Services | $\$ 13.38$ | $\$ 1.62$ | 29,000 | $\$ 62,882,000$ |
| 81 - Other Services | $\$ 12.54$ | $\$ 2.46$ | 7,500 | $\$ 18,455,000$ |
| Government | $\$ 11.25$ | $\$ 3.75$ | 4,900 | $\$ 26,741,000$ |

Authors Calculations from the Quarterly Census of Employment and Wages, obtained from Employment Security Department and the Puget Sound Regional Council. Mining and Utilities categories are not specified due to suppression by ESD, but they are included in the total number of jobs. **Aggregate Wage Increase = (Wage Increase * Total Jobs Under \$15 * 1680 Hours)

## A \$15 Minimum Wage Will Have a Real and Positive Effect on the Regional Economy

A $\$ 15$ minimum wage will boost the regional economy by providing $\$ 526$ million in additional gross income to those who earn the lowest wages. A major effect of raising paychecks for earners at the bottom of the wage scale is that these earners are likely to spend more of their income on local goods and service than higher-income earners. ${ }^{15}$ In turn, these households will increase patronage of area businesses, giving a boost to their community's overall prosperity. To understand the scale of this effect, we estimate how increased spending by workers will ripple out through the local economy by calculating a multiplier effect, a common method to assess economic impacts.

We use the RIMS II model provided by the Bureau of Economic Analysis (BEA) for the Seattle Metropolitan Region to estimate this multiplier effect. Using this multiplier to assess the ripple effect of increased household wages, we estimate that every dollar in additional wages generates 1.2 dollars of economic output. With a wage boost of \$526 million dollars, worker spending and re-spending would contribute roughly $\$ 625$ million dollars to the regional economy. ${ }^{16}$

While a $\$ 15$ minimum wage policy results in a significant increase in earnings for low income families, it amounts to a marginal increase in employer costs. A boost of $\$ 526$ million for Seattle's low wage workers represents less than half a percent of Seattle's regional GDP ${ }^{17}$ and $2 \%$ of the total wages paid in Seattle ( $\$ 31.8$ billion) ${ }^{18}$ in industries employing minimum wage workers. According to economist Michael Reich, labor costs are generally 40\% of operating costs that are relevant for firms' price setting behavior, thus an average $2 \%$ increase in total wages to minimum wage employers can be estimated to increase total operating costs less than $1 \%$ for these employers. ${ }^{19}$

Table 4: Total Wage Increase Compared to Total Labor Costs (in millions) ${ }^{20}$

| Industry by 2 Digit NAICS Code | Aggregate Wage Increase | Current Total Wages For Workforce | \% Wage Increase Compared to Total Labor Costs |
| :---: | :---: | :---: | :---: |
| All Industries | \$526.1 | \$31,815 | 1.7\% |
| 72 - Accommodation and Food Services | \$62.9 | \$1,022 | 6.2\% |
| 62 - Health Care and Social Assistance | \$72.3 | \$3,530 | 2.0\% |
| 44, 45-Retail | \$62.1 | \$1,708 | 3.6\% |
| 81 - Other Services | \$18.5 | \$730 | 2.5\% |
| Government | \$26.7 | \$4,930 | 0.5\% |
| 56 - Administrative and Waste Services | \$16.3 | \$642 | 2.5\% |
| 71 - Arts, Entertainment and Recreation | \$9.7 | \$307 | 3.2\% |
| 31-33 Manufacturing | \$24.0 | \$2,076 | 1.2\% |
| 54 - Professional and Technical Services | \$24.5 | \$4,951 | 0.5\% |
| 52- Finance and Insurance | \$17.9 | \$2,076 | 0.9\% |
| 48-49-Transportation and Warehousing | \$14.2 | \$744 | 1.9\% |
| 53 - Real Estate | \$10.9 | \$528 | 2.1\% |
| 42 - Wholesale Trade | \$13.6 | \$1,232 | 1.1\% |
| 61- Education | \$5.5 | \$370 | 1.5\% |
| 23-Construction | \$6.9 | \$961 | 0.7\% |
| 55 - Management | \$7.1 | \$1,542 | 0.5\% |
| 51- Information Technology | \$4.6 | \$3,070 | 0.1\% |
| 11 - Agricultural | \$1.6 | \$58 | 2.8\% |

Author's Analysis of data from Table 4 and the Quarterly Census of Employment and Wages for King County, 2012. Mining and Utilities categories are not specified due to suppression by ESD, but they are included in the total wage increase.

## Other Cities Thrive After Increases to the Minimum Wage

Three cities with minimum wage laws - San Francisco, Santa Fe and San Jose - offer insights into how local economies and businesses fared after implementation.

San Francisco increased the minimum wage by $26 \%$ and Santa Fe increased the minimum wage by $65 \%$ over their respective state minimum wages. Two independent studies found that implementation of these wage policies had no discernible effect on employment in the two cities. ${ }^{21}$

When the Santa Fe implemented a $65 \%$ wage increase in 2004, from $\$ 5.15$ per hour to $\$ 8.40$ per hour, overall employment levels at firms did not change, and employment levels in the city increased compared to Albuquerque, which had a lower wage. Just last year, San Jose implemented a wage increase from $\$ 8.00$ to $\$ 10.00$ per hour (a $25 \%$ increase). Despite claims that businesses would flee and
cause massive job loss, the opposite occurred. Just one year later, registered businesses in San Jose are up by $3 \%$, and in the retail sector, the number of registered small businesses increased by $19 \%$. Unemployment in San Jose decreased by one percent since the wage hike went into effect, and in the sector most influenced by the wage increase, restaurants and hospitality, more than 4,000 jobs were created. ${ }^{22}$

There are key explanations why local businesses and employment thrive when minimum wages are increased. The first reason may be the increased buying power of a large share of the workforce. When more money is in the pockets of earners at the lowest wages, they are more likely to spend it at local businesses. For example - households with incomes in the $\$ 30,000$ to $\$ 39,999$ range spend $106 \%$ of their pre-tax income. In contrast - households with incomes over \$70,000 (the median income in King County is roughly $\$ 72,000$ ), spend only $63 \%$ of their pre-tax income. ${ }^{23}$ Table 6 illustrates how increased buying power resulting from boosting low-wage households can be seen in their spending at restaurants. When households at lower wages ( $\$ 15,000-\$ 19,999$ per year) move to more livable wages ( $\$ 30,000-\$ 39,000$ per year), their spending at restaurants increases by nearly $45 \%{ }^{24}$ More local economic stimulus occurs when money is in the pockets of lower-income workers than when it is in the pockets of higher income earners or stockholders.

Table 5: Average Spending at Restaurants Based on Household Income ${ }^{25}$

|  | Annual Household Income |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{\$ 1 5 , 0 0 0}$ to \$19,999 | $\mathbf{\$ 2 0 , 0 0 0}$ to \$29,999 | $\mathbf{\$ 3 0 , 0 0 0}$ to \$39,999 |
| Annual expenditures at <br> restaurants and eateries | $\$ 1,197$ | $\$ 1,394$ | $\$ 1,746$ |

Bureau of Labor Statistics, 2012 Consumer Expenditure Survey

Another reason there is little evidence of employment dropping after minimum wage increases is because many employers choose to adjust to minimum wage increases through wide and varied strategies, or "channels of adjustment." A recent (2013) paper by John Schmitt at the Center for Economic Policy Research provides a thorough overview of this research, which we discussed in depth in our previous report, Economic Impact of a Living Wage for Transportation and Hospitality workers in the City of SeaTac. ${ }^{26}$ We'll summarize these options below:

Price Increases: In our previous study of the effects of Proposition 1 (the $\$ 15$ minimum wage in SeaTac), we projected that employers absorb the new costs through marginal price increases. With an immediate jump to $\$ 15$ per hour written into the initiative, we estimated that prices could soon increase between $.5 \%$ and $1.5 \% .{ }^{27}$ Shortly after Proposition 1 was implemented, parking lots implemented a . 50 cent service charge to cover increased labor costs, reflecting a price increase of roughly $1 \%{ }^{28}$

Savings from Reduced Turnover: Employee turnover for jobs paying less than \$30,000 a year typically cost an employer $16 \%$ of an employee's annual salary. ${ }^{29}$ The relationship between wages and turnover can be seen in the often-made comparison of Sam's Club and Costco. Costco's wages are $40 \%$ higher than at Sam's Club. However, turnover at these two retail giants are $17 \%$ and $44 \%$ respectively, resulting in cost savings for Costco.

Increase Productivity: With higher wages, employers may expect increased productivity. A survey of employers after implementation of San Francisco Airport's living wage policy revealed that many firms experienced performance improvements, with no significant changes in staffing after the living wage was implemented. ${ }^{30}$

Change in Employment Composition: Critics of minimum wage increases often claim that employers required to pay higher wages will replace their workforce entirely with new, more skilled or desirable workers. A recent academic article on the minimum wage (2012) finds no discernible effect on workforce composition in terms of age, gender and race. ${ }^{31}$ Research on the San Francisco Airport Living Wage did show that for the occupation that received the highest bump, nonFederalized security screeners, there was a small displacement effect for education, e.g., fewer people with less than a high school education. (It should be noted that this group of workers received a $75 \%$ increase in compensation and were subject to new quality service rules). However, there was no discernible effect on the age and racial composition of the workforce.

Equalize Wages for Higher Paid Employees: In order to increase wages for employees at the bottom of the wage scale, employers may delay increases in compensation for employees at the higher end. This effect is sometimes called "wage compression." One recent study of restaurants in Southern states concluded that workers at the higher level of the wage distribution received smaller pay increases after a minimum wage increase. ${ }^{32}$ The overall effect was an increase in the average wage within the firm combined with an overall reduced wage gap.

## A Seattle Minimum Wage Will Reduce Race and Gender Pay Disparities

## Women and People of Color Are At the Low-End of the Pay Range

One of the most significant indicators of racial, economic and gender inequality in our region is the difference in wages based on gender and race. If you are a white male in the City of Seattle, you are likely earning more than twice as much as a woman of color (see Figure 2). If you are a woman or a person of color living in Seattle, you are likely to earn between $44 \%$ and $71 \%$ of what white men earn. On the low end, median earnings for black or African women is $\$ 23,000$, nearly half that of white men at $\$ 52,000$. Black or African men fare little better, with median earnings of $\$ 24,000$. Across race and ethnicity, except for Native Americans, women earn less than men, a difference more pronounced for white women than women of color.

Figure 2: Median Annual Earnings for Seattle Residents by Race and Gender ${ }^{33}$


Authors Analysis of 2006-2010 American Community Survey - Adjusted to 2012 dollars
The recent study conducted by University of Washington researchers for the City of Seattle bears these disparities out by examining the racial composition of low-wage workers in Seattle. ${ }^{34}$ Table 6 shows that people of color disproportionately make less than $\$ 15$ per hour compared to white people. The flip side of this analysis is that workers of color will disproportionately benefit from a wage increase.

Table 6: Percent Workers Who Earn Below \$15, by Race and Ethnicity

|  | Percent <br> who earn <br> \$9.32 or <br> less | Percent who <br> earn between <br> $\mathbf{\$ 9 . 3 3 - ~ \$ 1 2 - 1 2 ~}$ | Percent who <br> earn <br> between <br> $\mathbf{\$ 1 2 . 1 3 - \$ 1 5 ~}$ | Total <br> Percentage <br> Earning $<\mathbf{\$ 1 5}$ |
| :--- | ---: | ---: | ---: | ---: |
| Latino | $17 \%$ | $17 \%$ | $14 \%$ | $49 \%$ |
| Native American | $11 \%$ | $29 \%$ | $29 \%$ | $70 \%$ |
| Asian/Pacific Islander | $22 \%$ | $9 \%$ | $9 \%$ | $41 \%$ |
| Black | $17 \%$ | $15 \%$ | $12 \%$ | $43 \%$ |
| Other | $13 \%$ | $12 \%$ | $0 \%$ | $26 \%$ |
| White | $10 \%$ | $7 \%$ | $8 \%$ | $25 \%$ |

University of Washington Study

The reasons for these gaps are well researched. One of the biggest factors in earnings disparities is occupational segregation: people of color and women are more likely to work in fields or jobs that simply pay less. A recent national report on the gender pay gap shows that segregation by occupation
and industry accounts for nearly $50 \%$ of disparity in earnings. ${ }^{35}$ Our analysis of Census data and data from the Employment Security Department confirms that over-representation of women and people of color in low-wage industries likely explains much of the pay gap for women and people of color in our region. For example, in food service across King County, nearly $63 \%$ of workers earn below $\$ 15$ an hour (see Table 3). People of color comprise $45 \%$ of those low-wage workers, despite making up $30 \%$ of Seattle's total workforce (see Table 7).

Table 7: Occupation Groups with Overrepresentation of Women or People of Color (POC), Seattle

| White | White <br> Wen | Women | POC Men | POC <br> Women | All POC | All <br> Women |
| :--- | :---: | :---: | ---: | :---: | :---: | :---: |
| Occupation Group | $38 \%$ | $32 \%$ | $16 \%$ | $15 \%$ | $30 \%$ | $46 \%$ |
| All Occupations | $28 \%$ | $12 \%$ | $35 \%$ | $25 \%$ | $\mathbf{6 0 \%}$ | $37 \%$ |
| Building Maintenance <br> and Services | $26 \%$ | $29 \%$ | $24 \%$ | $21 \%$ | $\mathbf{4 5 \%}$ | $\mathbf{5 0 \%}$ |
| Food Service <br> Occupations | $22 \%$ | $53 \%$ | $8 \%$ | $17 \%$ | $25 \%$ | $\mathbf{7 0 \%}$ |
| Health Care |  |  |  |  |  |  |
| Practitioners | $23 \%$ | $46 \%$ | $14 \%$ | $20 \%$ | $\mathbf{3 4 \%}$ | $\mathbf{6 6 \%}$ |
| Community and Human <br> Services |  |  |  |  |  |  |

Author's analysis of Census Equal Employment Opportunity Tabulation data from American Fact Finder. Occupation groups defined by the Census.

With higher concentrations of people of color and women in low-wage jobs, a Seattle minimum wage would create a disproportionate benefit to these groups. In particular, the policy could reduce the earnings gap for women of color who face a double challenge in pay disparity.

## Conclusion and Recommendations

Is a $\$ 15$ minimum wage right for Seattle? If the question is "what policy could have the largest effect on income inequality and race and gender earnings disparities?" the answer is yes. A minimum wage for Seattle will result in a triple bottom line, consistent with the values of Seattle residents and public officials.

First, lifting the wages of over 100,000 workers will have a profound, positive effect on economic hardship resulting from the high cost of living in Seattle. Although some Seattle prices for goods and services are marginally higher than the rest of the region, the real driver of skyrocketing costs is housing - which has little relationship to the minimum wage. Most of that benefit will go to Seattle residents, who make up a disproportionately large part of the low-wage labor force. This will allow low-income communities threatened with displacement to find a living wage job that allows families to prosper in place.

Second, a minimum wage policy will have a net positive effect on the local economy. Increased household earnings will result in more money spent on local goods and services. With the aggregate wage increase representing only $2 \%$ of all payroll costs in affected industries, it is unlikely that the policy will dramatically change the business climate. A net effect of $\$ 625$ million in economic output and 5,000 new jobs will outweigh marginal changes to employment, if any. Furthermore, experiences in other cities demonstrate that minimum wage increases result in net economic benefits.

Third, the disproportionate benefits that will flow to workers of color and women are immense. The City's nine-year old Race and Social Justice Initiative requires Council and the Mayor to begin creating equity outcomes through policy - to which both the City Council and the Mayor are committed to implementing. It is unlikely that any other policy the City of Seattle could institute would have such a large-scale equity effect in the near future.

Some concerns about the effect of a $\$ 15$ minimum wage on specific industries are valid. In particular, individual business in industries like food services, accommodations, retail and human services will need to allocate larger amounts of their revenues to wages. However, common sense solutions for smaller establishments and non-profits can greatly ease the change to their costs. These include a phase-in for small businesses and additional public revenue for non-profits contracted with the City for human services.

## Appendix A: Low-wage Occupations in King County and Their Median Wages

The following table is derived from the Washington State Employment Secutiry Department's Occupational Wage Data. The list represents all occupations with a median wage below $\$ 15$ an hour. Because the wage is a median, some workers in these occupations may make more than $\$ 15$ an hour and some workers in higher wage occupations may receive less.

| Occupational title | Median Wage |
| :---: | :---: |
| Graders \& Sorters, Agricultural Products | \$9.30 |
| Baggage Porters \& Bellhops | \$9.46 |
| Dining Room \& Cafeteria Attendants \& Bartender Helpers | \$9.57 |
| Comb Food Preparation \& Serving Wkrs, Inc Fast Food | \$9.61 |
| Packers \& Packagers, Hand | \$9.70 |
| Cooks, Fast Food | \$9.86 |
| Counter Attendants, Cafeteria, Concession, Coffee Shop | \$10.10 |
| Food Preparation \& Serving Related Wkrs, A/O | \$10.15 |
| Dishwashers | \$10.16 |
| Hosts \& Hostesses, Restaurant, Lounge, \& Coffee Shop | \$10.29 |
| Amusement \& Recreation Attendants | \$10.45 |
| Personal Care \& Svc Wkrs, All Other | \$10.70 |
| Building Cleaning Wkrs, All Other | \$10.75 |
| Lifeguards, Ski Patrol, Recreational Protective Svc Wkrs | \$10.76 |
| Locker Room, Coatroom, \& Dressing Room Attendants | \$10.84 |
| Child Care Wkrs | \$10.87 |
| Manicurists \& Pedicurists | \$10.89 |
| Parking Lot Attendants | \$10.95 |
| Food Servers, Nonrestaurant | \$11.01 |
| Demonstrators \& Product Promoters | \$11.03 |
| Taxi Drivers \& Chauffeurs | \$11.12 |
| Photographers | \$11.13 |
| Ushers, Lobby Attendants, \& Ticket Takers | \$11.14 |
| Svc Station Attendants | \$11.15 |
| Tour Guides and Escorts | \$11.19 |
| Personal \& Home Care Aides | \$11.25 |
| Entertainment Attendants \& Related Wkrs, A/O | \$11.26 |


|  |  |
| :--- | ---: |
| Occupational title | Median Wage |
| Nonfarm Animal Caretakers | $\$ 11.34$ |
| Cooks, All Other | $\$ 11.41$ |
| FarmWkrs \& Laborers, Crop, Nursery, \& Greenhouse | $\$ 11.44$ |
| Maids \& Housekeeping Cleaners | $\$ 11.44$ |
| Telemarketers | $\$ 11.57$ |
| Meat, Poultry, \& Fish Cutters \& Trimmers | $\$ 11.58$ |
| Food Preparation Wkrs | $\$ 11.61$ |
| Home Health Aides | $\$ 11.77$ |
| Cashiers | $\$ 11.78$ |
| FarmWkrs, Farm \& Ranch Animals | $\$ 11.78$ |
| Hotel, Motel, \& Resort Desk Clerks | $\$ 11.78$ |
| Sewing Machine Operators | $\$ 11.80$ |
| Slaughterers \& Meat Packers | $\$ 11.90$ |
| Laundry \& Dry-Cleaning Wkrs | $\$ 12.10$ |
| Waiters \& Waitresses | $\$ 12.15$ |
| Retail Salespersons | $\$ 12.23$ |
| Cleaners of Vehicles \& Equipment | $\$ 12.24$ |
| Cooks, Short Order | $\$ 12.27$ |
| Motor Vehicle Operators, All Other | $\$ 12.27$ |
| Gaming Dealers | $\$ 12.30$ |
| Bicycle Repairers | $\$ 12.37$ |
| Food Cooking Machine Operators \& Tenders | $\$ 12.40$ |
| Recreation Wkrs | $\$ 12.45$ |
| Bartenders | $\$ 12.58$ |
| Library Assistants, Clerical | $\$ 12.69$ |
| Driver/Sales Wkrs | $\$ 12.72$ |
| Gaming Change Persons \& Booth Cashiers | $\$ 12.72$ |
| Extruding/Forming Machine Set/Op/Tend, Synthetic/Glass | $\$ 12.74$ |
| Veterinary Assistants \& Laboratory Animal Caretakers | $\$ 12.76$ |
| Cooks, Restaurant | $\$ 12.97$ |
| Food Batchmakers | $\$ 12.98$ |
| Production Wkrs, All Other | $\$ 13.15$ |
| Social \& Human Svc Assistants | $\$ 13.24$ |
| Gaming Cage Wkrs | $\$ 13.26$ |
|  |  |


|  |  |
| :--- | ---: |
| Occupational title | Median Wage |
| Production Worker Helpers | $\$ 13.26$ |
| Gaming Svc Wkrs, All Other | $\$ 13.29$ |
| Textile, Apparel, \& Furnishings Wkrs, All Other | $\$ 13.31$ |
| Upholsterers | $\$ 13.37$ |
| Psychiatric Aides | $\$ 13.44$ |
| Shoe \& Leather Wkrs \& Repairers | $\$ 13.53$ |
| Physical Therapist Aides | $\$ 13.58$ |
| Counter \& Rental Clerks | $\$ 13.67$ |
| Office Machine Operators, Not Computer | $\$ 13.68$ |
| Religious Wkrs, All Other | $\$ 13.70$ |
| Bakers | $\$ 13.74$ |
| Photographic Process Workers \& Machine Operators | $\$ 13.76$ |
| Tellers | $\$ 13.77$ |
| Packaging \& Filling Machine Operators \& Tenders | $\$ 13.78$ |
| Electrician Helpers | $\$ 13.80$ |
| Mail Clerks \& Mail Machine Ops, Not Postal Svc | $\$ 13.86$ |
| Preschool Teachers, Not Special Education | $\$ 13.88$ |
| Janitors \& Cleaners, Not Maids \& Housekeeping Cleaners | $\$ 13.91$ |
| Textile Cutting Machine Setters, Ops, \& Tenders | $\$ 13.92$ |
| Pourers \& Casters, Metal | $\$ 13.93$ |
| Concierges | $\$ 13.94$ |
| Painter, Paperhanger, Plasterer, Stucco Helpers | $\$ 13.94$ |
| Laborers \& Freight, Stock, \& Material Movers, Hand | $\$ 14.00$ |
| Stock Clerks \& Order Fillers | $\$ 14.03$ |
| Fiberglass Laminators \& Fabricators | $\$ 14.08$ |
| Team Assemblers | $\$ 14.08$ |
| Pipelayer, Plumber, Pipefitter, Steamfitter Helpers | $\$ 14.11$ |
| Pharmacy Aides | $\$ 14.15$ |
| Construction \& Related Wkrs, All Other | $\$ 14.16$ |
| Security Guards | $\$ 14.19$ |
| Machine Feeders \& Offbearers | $\$ 14.20$ |
| Orderlies | $\$ 14.30$ |
| Drilling/Boring Machine Tool Setters/Ops/Tenders | $\$ 14.35$ |
| Residential Advisors | $\$ 141$ |
|  |  |

Economic \& Equity Outcomes of a SeaTac Living Wage

|  |  |
| :--- | ---: |
| Occupational title | Median Wage |
| Merchandise Displayers \& Window Trimmers | $\$ 14.45$ |
| Hairdressers, Hairstylists, \& Cosmetologists | $\$ 14.48$ |
| Landscaping \& Groundskeeping Wkrs | $\$ 14.53$ |
| Construction Trades, All Other Helpers | $\$ 14.55$ |
| Floral Designers | $\$ 14.56$ |
| Forest \& Conservation Technicians | $\$ 14.56$ |
| Cutters \& Trimmers, Hand | $\$ 14.59$ |
| Transportation Inspectors | $\$ 14.59$ |
| Nursing Assistants | $\$ 14.60$ |
| Broadcast Technicians | $\$ 14.61$ |
| Couriers \& Messengers | $\$ 14.64$ |
| Mold/Coremaking/Casting Mach Set/Op/Tend, MtI/Plastic | $\$ 14.64$ |
| Musical Instrument Repairers \& Tuners | $\$ 14.65$ |
| File Clerks | $\$ 14.67$ |
| Tax Preparers | $\$ 14.67$ |
| Assemblers \& Fabricators, All Other | $\$ 14.82$ |
| Print Binding and Finishing Workers | $\$ 14.82$ |
| Prepress Technicians and Workers | $\$ 14.92$ |
| Furnace, Kiln, Oven, Drier, \& Kettle Ops/Tenders | $\$ 14.97$ |
| Cooks, Institution \& Cafeteria | $\$ 15.00$ |

## APPENDIX B: Jobs Paying Less Than $\mathbf{\$ 1 5}$ Per Hour by Seattle Industry

The table below is based on an unpublished analysis of wages by industry in King County which we requested from the Washington State Employment Security Department. ESD provided us with the number of jobs that paid less than $\$ 12$ per hour and $\$ 15$ per hour, broken out by industries at the three digit NAICS level. This allows for an unusual level of detail for dozens of discreet sectors. For the bulk of the policy brief, we provide information by two digit NAICS code, which contains the least amount of data suppression, and therefore a more comprehensive understanding of low-wage workers. For the appendix, however, we present all of the industries made available to us. Due to data suppression, there is a larger margin of error for each industry. This analysis is based on quarterly reporting to the Employment Security Department for unemployment insurance in the region. Finally, the number of jobs are in Full Time Equivalents (FTE), e.g., they don't represent the true number of jobs, but the hours of all jobs combined and divided by a full year of hours (ESD used 2,088 hours for 2012).

To estimate jobs below $\$ 15$ per hour in Seattle, we first had to convert these FTE jobs to actual jobs. Using an estimate of actual jobs by 3 digit NAICS from the Puget Sound Regional Council, we calculated the ratio of FTEs to actual jobs for each industry throughout the County. We then applied this ratio to the number of jobs below $\$ 12$ and $\$ 15$ an hour provided by ESD. Following this we assumed that the overall portion of King County jobs in Seattle (42\%) was true for each industry to arrive at Seattle figures. The table below represents the results of these calculations.

Note that the Puget Sound Regional Council data varies slightly from the ESD data, in that certain industries are distributed across industry codes differently. The most significant difference is that PSRC distributes temp workers throughout all relevant industries, whereas ESD assumes that temp workers are in the administrative industry code. Given these variations and the level of data suppression for the 3 digit industry level, the estimates of low-wage jobs in Seattle are rough estimations.

| NAICS <br> Code | Industry description | Total Jobs in <br> Industry | Jobs earning <br> less than \$12 | Jobs earning <br> less than \$15 |
| :--- | :--- | :--- | ---: | ---: |
|  | All Industries | $\mathbf{4 8 3 , \mathbf { 3 1 8 }}$ |  |  |
| 111 | Crop production | 42 | 21 | 30 |
| 112 | Animal production | 20 | 8 | 13 |
| 113 | Forestry and logging | 66 | 1 | 2 |
| 114 | Fishing, hunting and trapping | 580 | 67 | 128 |
| 115 | Agriculture and forestry support activities | 4 | 1 | 2 |
| 211 | Oil and gas extraction | $*$ | $*$ | $*$ |
| 212 | Mining, except oil and gas | $*$ | $*$ | $*$ |
| 213 | Support activities for mining | $*$ | $*$ | $*$ |
| 236 | Construction of buildings | 5,709 | 94 | 327 |
| 237 | Heavy and civil engineering construction | 1,824 | 12 | 47 |

Economic \& Equity Outcomes of a SeaTac Living Wage

| NAICS Code | Industry description | Total Jobs in Industry | Jobs earning less than $\$ 12$ | Jobs earning less than $\$ 15$ |
| :---: | :---: | :---: | :---: | :---: |
| 238 | Specialty trade contractors | 8,179 | 204 | 656 |
| 311 | Food manufacturing | 6,236 | 1,437 | 2,443 |
| 312 | Beverage and tobacco product manufacturing | * | * | * |
| 313 | Textile mills | * | * | * |
| 314 | Textile product mills | 453 | 106 | 180 |
| 315 | Apparel manufacturing | 861 | 333 | 486 |
| 316 | Leather and allied product manufacturing | 27 | 6 | 11 |
| 321 | Wood product manufacturing | 141 | 31 | 46 |
| 322 | Paper manufacturing | 115 | 3 | 14 |
| 323 | Printing and related support activities | 1,344 | 87 | 245 |
| 324 | Petroleum and coal products manufacturing | 64 | 3 | 10 |
| 325 | Chemical manufacturing | 222 | 8 | 25 |
| 326 | Plastics and rubber products manufacturing | 169 | 27 | 56 |
| 327 | Nonmetallic mineral product manufacturing | 1,369 | 55 | 168 |
| 331 | Primary metal manufacturing | 560 | 13 | 89 |
| 332 | Fabricated metal product manufacturing | 1,592 | 110 | 344 |
| 333 | Machinery manufacturing | 729 | 6 | 38 |
| 334 | Computer and electronic product manufacturing | 1,620 | 55 | 157 |
| 335 | Electrical equipment and appliance mfg. | 724 | 36 | 99 |
| 336 | Transportation equipment manufacturing | 7,435 | 85 | 273 |
| 337 | Furniture and related product manufacturing | 324 | 40 | 105 |
| 339 | Miscellaneous manufacturing | 1,318 | 80 | 212 |
| 423 | Merchant wholesalers, durable goods | 8,435 | 375 | 1,080 |
| 424 | Merchant wholesalers, nondurable goods | 4,566 | 329 | 825 |
| 425 | Electronic markets and agents and broker | 2,651 | 87 | 263 |
| 441 | Motor vehicle and parts dealers | 2,214 | 386 | 730 |
| 442 | Furniture and home furnishings stores | 1,274 | 219 | 401 |
| 443 | Electronics and appliance stores | 1,242 | 274 | 444 |
| 444 | Building material and garden supply stores | 2,117 | 528 | 918 |
| 445 | Food and beverage stores | 8,096 | 2,523 | 3,718 |
| 446 | Health and personal care stores | 2,133 | 462 | 977 |
| 447 | Gasoline stations | 659 | 409 | 518 |
| 448 | Clothing and clothing accessories stores | 3,221 | 1,291 | 1,778 |
| 451 | Sporting goods, hobby, book and music stores | 2,535 | 953 | 1,602 |
| 452 | General merchandise stores | 5,312 | 1,273 | 1,920 |

Economic \& Equity Outcomes of a SeaTac Living Wage

| NAICS Code | Industry description | Total Jobs in Industry | Jobs earning less than \$12 | Jobs earning less than \$15 |
| :---: | :---: | :---: | :---: | :---: |
| 483 | Water transportation | 2,910 | 101 | 375 |
| 484 | Truck transportation | 835 | 49 | 141 |
| 485 | Transit and ground passenger transportation | 1,793 | 395 | 735 |
| 486 | Pipeline transportation | * | * | * |
| 487 | Scenic and sightseeing transportation | 4,812 | 495 | 1,238 |
| 488 | Support activities for transportation | * | * | * |
| 491 | Postal service | * | * | * |
| 492 | Couriers and messengers | 1,637 | 346 | 505 |
| 493 | Warehousing and storage | 418 | 18 | 60 |
| 511 | Publishing industries, except Internet | 6,990 | 18 | 62 |
| 512 | Motion picture and sound recording industries | 1,241 | 330 | 441 |
| 515 | Broadcasting, except Internet | 2,051 | 76 | 167 |
| 517 | Telecommunications | 2,739 | 15 | 72 |
| 518 | ISPs, search portals, and data processing | 1,772 | 207 | 303 |
| 519 | Other information services | 5,144 | 33 | 129 |
| 521 | Monetary authorities - central bank | * | * | * |
| 522 | Credit intermediation and related activities | 5,962 | 766 | 1,398 |
| 523 | Securities, commodity contracts, investments | 6,044 | 95 | 280 |
| 524 | Insurance carriers and related activities | 9,347 | 118 | 444 |
| 525 | Funds, trusts, and other financial vehicles | 134 | 0 | 0 |
| 531 | Real estate | 8,477 | 764 | 1,873 |
| 532 | Rental and leasing services | 1,602 | 320 | 555 |
| 533 | Lessors of nonfinancial intangible asset | 60 | 2 | 4 |
| 53 | Professional and technical services | 54,929 | 1,444 | 3,399 |
| 54 | Management of companies and enterprises | 13,704 | 359 | 966 |
| 561 | Administrative and support services | 11,622 | 2,327 | 4,429 |
| 562 | Waste management and remediation service | 1,189 | 86 | 159 |
| 61 | Educational services | 10,116 | 615 | 1,398 |
| 621 | Ambulatory health care services | 23,652 | 930 | 2,699 |
| 622 | Hospitals | 20,706 | 170 | 436 |
| 623 | Nursing and residential care facilities | 9,340 | 2,617 | 5,061 |
| 624 | Social assistance | 13,572 | 4,492 | 7,311 |
| 711 | Performing arts and spectator sports | 4,037 | 729 | 1,177 |
| 712 | Museums, historical sites, zoos, and parks | 1,572 | 313 | 550 |
| 713 | Amusements, gambling, and recreation | 3,632 | 1,190 | 1,813 |
| 721 | Accommodation | 6,781 | 2,111 | 3,763 |
| 722 | Food services and drinking places | 39,687 | 17,252 | 24,890 |


| NAICS <br> Code | Industry description | Total Jobs in <br> Industry | Jobs earning <br> less than \$12 | Jobs earning <br> less than \$15 |
| :--- | :--- | ---: | ---: | ---: |
| 722511 | Full-service restaurants | 21,845 | 6,607 | $\mathbf{1 1 , 0 7 5}$ |
|  | Limited-service restaurants, cafeterias, |  |  |  |
| $722513-5$ | snack \& beverage bars | 8,077 | 5,301 | 6,615 |
| 811 | Repair and maintenance | 2,654 | 351 | 675 |
| 812 | Personal and laundry services | 6,369 | 2,114 | 3,363 |
| 813 | Membership associations and organization | 8,194 | 690 | 1,474 |
|  | Government | 81,885 | 1,308 | 4,884 |

## Endnotes

${ }^{1}$ Schmitt, John, The Minimum Wage is Too Damn Low, Center for Economic and Policy Research (March 2012). Available at: http://www.cepr.net/documents/publications/min-wage1-2012-03.pdf, accessed on April 3, 2014.
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${ }^{4}$ Bureau of Labor Statistics, Occupations with the most job growth (2012). Available at: www.lbls.gov/emp/ep_table_104.htm, accessed on April 8, 2014.
${ }^{5}$ Bhatt, Sanjay, "Local apartment rents continue climbing," The Seattle Times (9/23/13). Available at: http://seattletimes.com/html/businesstechnology/2021884449_rents24xml.html\#, accessed on April 3, 2014.
${ }^{6}$ Henry, Ben, "2013 Job Gap Report, King County, WA, 2013 Findings." Alliance for A Just Society. Available at: http://allianceforajustsociety.org/wp-content/uploads/2014/03/King.County.WA_2013-wage-report.pdf, accessed on April 7, 2014.
${ }^{7} \mathrm{Ibid}$.
${ }^{8}$ With low-wage earners paying 4.5 times more of their earnings in taxes than the highest income earners, our state needs comprehensive tax reform to directly address income inequality.
${ }^{9}$ Recently, researchers at the University of Washington released a study of low-wage workers in Seattle based on 2007 data. Our analysis, which uses 2012 Employment Security Department data, confirms much of their findings regarding the City of Seattle's current workforce.
${ }^{10}$ Note that this estimate is derived from 2012 State data on workers covered by unemployment insurance laws and does not include the self-employed.
${ }^{11}$ Calculating jobs below $\$ 15$ an hour required combining two data sets. First, we obtained the total number of jobs paying under $\$ 15$ and under $\$ 12$ an hour in King County (parsed out into two and three digit industry codes) from ESD. However, as ESD does not provide the data at a city level, we used another source to adjust the King County data. We obtained the total number of jobs in Seattle only (also parsed out by two and three digit industry codes) from the Puget Sound Regional Council. Both data sets are based on unemployment insurance records processed by the Employment Security Department and include information on all employees. We applied the percentage of jobs below $\$ 12$ and $\$ 15$ an hour from ESD's King County data to PSRC's Seattle data, by industry. Given that $42 \%$ of all jobs in King County are located in the City of Seattle, we assumed that the proportions of lowwage workers are the same. (See Appendix B for more discussion of this method, including how we transformed

FTE to actual jobs). Source: Lower-wage jobs, King County, 2012 Employment Security Department, Industry Employment. Employment Estimates per Industry, Puget Sound Regional Council, 2012.
${ }^{12} \mathrm{lbid}$.
${ }^{13}$ The average wage estimate is based the total number of lower-wage FTE jobs obtained from the Employment Security Department. (Note that the ESD data is not a sample, but represents all employees and their wages as reported by employers.) We assumed an even distribution along the wage scale and thus used a mid-point wage estimate for each of the two wage bands. For workers below $\$ 12$ an hour, the midpoint between the ceiling and minimum wage is $\$ 10.66$ per hour. For workers earning between $\$ 12$ and $\$ 15$ an hour, the mid-point is $\$ 13.50$ per hour. We then calculated an average wage using the two mid-points and the number of workers in each band. To the extent that an industry has employment more heavily weighted towards minimum wage or more heavily weighted towards $\$ 12$ or $\$ 15$, the average estimated wage per industry could be higher or lower than actual. Source: Lower-wage jobs, King County, 2012 Employment Security Department, Industry Employment.
${ }^{14}$ We derived the total wage increase estimates by multiplying the estimated hourly wage increase by the total number of hours worked by low wage workers. See endnote 11 for source and more detailed methodology. For the purposes of understanding the full potential impact of a $\$ 15$ minimum wage, we assume no changes in hours worked or job dislocation after implementation of the minimum wage. Based on existing research and that no city has adopted a $\$ 15$ minimum wage, the best one could estimate for reduced hours or dislocation would be zero to some theoretical number. Instead, our effort here is to show the full potential of the economic impact of a minimum wage.
${ }^{15}$ Bureau of Labor Statistics, 2012 Consumer Expenditure Survey.
${ }^{16}$ Bureau of Economic Analysis, RIMS II model for the Seattle Metropolitan Region, 2011 multiplier for households.
${ }^{17}$ According to a joint project of the Brookings Institute and JPMorganChase, the Seattle Metropolitan area's GDP in 2012 was over $\$ 230$ billion dollars ( $\$ 231,559,530,650$ ). A $\$ 526$ million dollar wage boost for the lowest wage earners represents . $2 \%$ of the regional GDP. The 10 Traits of Globally Fluent Metro Areas, Global Cities Initiative, Available at: http://www.brookings.edu/~/media/Multimedia/Interactives/2013/tentraits/Seattle.pdf, accessed on April 7, 2014.
${ }^{18}$ We calculated total payroll costs by multiplying the average wage per industry, based on the Quarterly Census of Employment and Wages for 2012 (ESD), by the total number of jobs in each industry (Puget Sound Regional Council). See endnote 20.
${ }^{19}$ Reich, Micheal, Increasing the Minimum Wage: Benefits and Costs, Center on Wages and Employment Dynamics (2012). Available at http://www.irle.berkeley.edu/cwed/briefs/2012-01.pdf, accessed on April 4, 2014.
${ }^{20}$ We estimated total payroll costs in Seattle by multiplying the average annual wage per industry (QCEW) in King County by total number of jobs in each industry in Seattle (PSRC). Keep in mind that the total wage bill is an estimation of payroll only and does not include total labor costs, which may include benefits, employer taxes, etc. We calculated the increase under a $\$ 15$ minimum wage by multiplying the average wage increase for the industry by the total number of workers, and then the average hours per job $-1,682$ hours per year. We obtained the average hours worked per year by dividing the total hours worked in each industry - which we imputed from the FTE dataset from ESD - by the total number of jobs. Also note that the wage increase calculations do not calculate any vertical or horizontal ripple effects like giving raises to employees who currently make over $\$ 15$ an hour or effects on the regional labor market.
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${ }^{23}$ Bureau of Labor Statistics, 2012 Consumer Expenditure Survey.
${ }^{24}$ Ibid.
${ }^{25}$ Ibid.
${ }^{26}$ Schmitt, John, Why Does the Minimum Wage Have No Discernible Effect on Employment? Center for Economic and Policy Research (February 2013). Available at: http://www.cepr.net/documents/publications/min-wage-201302.pdf, accessed on August 13, 2013. And Dube, et al., Do Businesses Flee Citywide Minimum Wages? IIR Policy Brief (September 2006). Available at:
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${ }^{28}$ Martinez, Amy, "\$15 wage floor slowly takes hold in SeaTac," Seattle Times (February, 2014). Available at: http://seattletimes.com/html/localnews/2022905775_seatacprop1xml.html, accessed on April 7, 2014.
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${ }^{31} \mathrm{Ibid}$.
${ }^{32}$ Hirsch, Barry, Bruce Kaufman and Tetyana Zelenska, "Minimum Wage Channels of Adjustment," Industrial Relations forthcoming. (November 2013). Available at:
http://www2.gsu.edu/~ecobth/IZA_HKZ_MinWageCoA_dp6132.pdf, accessed on April 4, 2014.
${ }^{33}$ 2006-2010 American Community Survey, table B20002. We used 2010 census data, as a more recent breakdown by race and gender was not available on AmericanFactFinder
${ }^{34}$ Klawitter, Marieka, Mark Long, and Robert Plotnick, Who Would be Affected by an Increase In Seattle's Minimum Wage?, Evans School of Public Affairs and the West Coast Poverty Center (2014). Available at: https://s3.amazonaws.com/s3.documentcloud.org/documents/1096119/uw-evans-report-on-15-minimumwage.pdf, accessed on April 6, 2014.
${ }^{35}$ Farrell, Jane and Sarah Jane Glynn, "What Causes the Gender Wage Gap?", Center for American Progress (April 2013). Available at http://www.americanprogress.org/issues/labor/news/2013/04/09/59658/what-causes-the-gender-wage-gap/, accessed on March 21, 2014.


[^0]:    * For a breakdown of estimated jobs below \$15 by 3 digit industry code in Seattle see Appendix B. We do not include Mining and Utilities categories, as the data is suppressed by ESD for confidentiality. However, they are included in total jobs.

