The Seattle Minimum Wage Ordinance October 2017 Update:
Report on Employer Adjustments, Worker Experiences, and Price Changes

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Executive Summary

Seattle City Council Resolution 31524, adopted June 2\textsuperscript{nd} 2014, requested that the Office of the City Auditor “contract with academic researchers who have a proven track record of rigorous analysis of the impacts of minimum wage laws to conduct an evaluation of the economic impacts of the local minimum wage in 2017 and 2019, after two and four years of implementation.” The Office of the City Auditor, in turn, issued a Request for Proposals (RFP) on July 23\textsuperscript{rd}, 2014, imposing a response deadline of August 22\textsuperscript{nd}, 2014.

The group authoring this report submitted the sole response. The University of Washington and the City of Seattle executed an evaluation contract on December 3\textsuperscript{rd}, 2014. The contract’s scope of work included four broad categories of data collection and and analysis:

1. **State administrative data** analysis on the causal impacts of the law on employment, hours, wage, and earnings.
2. **Surveys and interviews to collect employer perspectives** on responding to the law.
3. **In-depth interviews to collect worker perspectives** on the law and living in Seattle on low wages.
4. **Price data collection** in the Seattle area and nearby (unaffected) areas to assess whether the law affected prices.

These different activities reflected the City of Seattle’s request in the July 2014 RFP that the evaluators examine a broad set of outcomes for workers, firms, and the local economy. Each component has its strengths and limitations: For instance, employer surveys and interviews with workers are designed to capture the details of how individuals and firms in the Seattle area experience the law and the changing local economy. Neither of those components uses a comparison group to identify whether the law caused those experiences, but the experiences themselves are important and informative. In contrast, the analysis of state administrative data uses sophisticated techniques to isolate the effects of the law, but cannot say very much about how those effects occurred or were experienced by individuals and firms. Sometimes the different components may produce seemingly contradictory evidence. These differences can reflect different methods or samples, but they can also reflect real differences between perceptions and actual effects. In the report, we work to reconcile the findings across components or acknowledge when we cannot.

Prior reports and papers submitted by the team to the City of Seattle summarized findings from component 1, the administrative data analysis, and early results from the other three.\textsuperscript{2} Our most recent publication on the administrative data analysis (Jardim et al., 2017) covers all of the state administrative data currently prepared for evaluation, so we will not present additional information in this report about that component. This report focuses on activities

\textsuperscript{2} See previous reports here: https://evans.uw.edu/policy-impact/minimum-wage-study
conducted in 2016-2017 in components 2-4. During that time, we completed surveys with employers and conducted a small number of one-on-one interviews with employers affected by the Ordinance. We completed our third wave of interviews with workers who were earning less than $15 per hour at the passage of the Ordinance to understand worker perspectives. Lastly, we completed food price data analysis to examine whether the Ordinance affected restaurant prices and grocery store prices since 2015. Below we summarize updates from each of those three components.

**Updates from In-Depth Employer Interviews**

As part of the Seattle Minimum Wage Study’s efforts to examine the implementation and impacts of the Ordinance on employers, study team members completed one-on-one in-depth interviews with 28 local employers, half of whom represented immigrant- or minority-owned firms. These business owners and managers told us what they knew about the wage mandate and how they were adjusting their business practices to meet it. They also volunteered their thoughts and opinions about the Ordinance and possible effects on Seattle businesses.

- All interviewed employers knew about the Ordinance and the majority (about 7 in 10) understood it well. A minority seemed not to fully understand the phase-in schedule or how to treat tips. We did not expect these face-to-face conversations to reveal any willful or accidental non-compliance, and they did not.

- Most employers have adjusted some part of their business model to absorb increased labor costs. About half of the firms interviewed (13 of 28) have raised prices. Other adjustments are more idiosyncratic and include changing service or product offerings, workforce reductions through attrition or active cuts, and changes in owners’ hours or profits.

- Employers’ opinions about the Ordinance ranged from mixed to strongly negative. Many understand why the City made this change but fear its effects.

**Updates from Employer Survey**

The SMWS Team has surveyed a randomly sampled group of firms and non-profit organizations employing low-wage workers every year since 2015. The sample is drawn from the Seattle Business License Directory and the same employers have been surveyed every year. This report presents data on wage and business strategy responses to the Ordinance among employers who responded to all three waves of the survey (N=382). Key findings include:

- The percentage of employers who raised wages increased over time. In 2015, only a little over half of respondents had raised wages of Seattle employees, whereas a majority (86%) had done so by 2017.
• Employers most commonly reported raising prices or adding/increasing fees as a way of adapting to the higher labor costs. Price increases became more likely over time, increasing from 30% of employers reporting this approach in 2015 to 65% in 2017.

• Reducing employment through cutting hours or lowering employee headcount comprises the second most common adjustment strategy. In 2017, 29% of employers reported reducing employment. Analysis of administrative data corroborates this result, with estimates suggesting a 9% reduction in employee hours attributable to the minimum wage ordinance in 2016.

• Firms in the food and accommodation sector more commonly reported raising both wages and prices relative to other sectors. As will be noted below, price data collected from restaurants in 2016 and 2017 do not corroborate this result; however earlier price collection efforts suggest significant restaurant price increases between 2015 and 2016.

• Overall, immigrant- or minority-owned firms responded very similarly to native-born, non-minority-owned firms.

Updates from Worker Interviews

The SMWS included an in-depth qualitative study of 55 workers who had low-wage jobs during the initial implementation of the Ordinance. This study component captured worker perspectives on and experiences with work, budgets, family life, and the minimum wage. In early 2015, we recruited adults working in Seattle and earning no more than $15 per hour, who had family income of less than $50,000 per year and at least one child under the age of 18 years living with them. The worker also had to be formally employed (not self-employed or working “off-the-books”). The sample was majority female and immigrant, and racially diverse.

We conducted three in-depth interviews, and four short phone surveys, over two years. Eighty percent of the study participants completed all three in-depth interviews and one or more phone calls. The key findings were:

• Steady employment and increasing wages were common but not universal. Seventy-seven percent of workers studied were employed every time we contacted them across the 2 years of the study; approximately 17% of participants were unemployed on at least half of the dates we contacted them. Average hourly wages increased sizably for the employed workers in this study, from $11.83 in wave 1 to $14.99 in wave 3. The distribution of workers across types of work appeared to shift away from caregiving/teaching and food service, toward administration and retail. Schedule instability was common among the workers in this study: 35% reported having a variable work schedule at some point.

• Worker knowledge of the Ordinance was often vague. Many expected it to go to $15 immediately in 2016 and expressed surprise and confusion about why it was not yet at
$15 for all employers. Even two years after the law took effect, many of our study participants had not seen the Office of Labor Standards compliance poster in their workplaces or did not know the accurate minimum wage for their employer.

- Growing inequality in Seattle was felt sharply. For the workers in this study, specific ways in which the city is changing were blended and attributed to the minimum wage. Many workers in the study mentioned the rising cost of living and a specific pattern of migration in which low-income families are having to move out of the city and high-income families are moving in.

**Price Analysis**

The SMWS also conducted direct analyses of trends in consumer prices, with a specific emphasis on grocery and restaurant prices. These analyses employ a difference-in-differences strategy to compare menu prices for different types of restaurants and grocery prices from supermarkets inside Seattle and in the surrounding King County, before and after Seattle’s most recent minimum wage increase on January 1, 2017. This analytical strategy is potentially compromised by the increase in the state minimum wage which occurred on the same date.

- Sampled restaurant prices in both Seattle and the surrounding areas increased by 2% between late 2016 and early 2017, with most of the increases happening in full service restaurants. Thus in contrast to earlier findings of an 8 to 9% increase in Seattle restaurant prices between 2015 and 2016, there is little evidence to suggest a continuing trend here.

- Market basket grocery store prices for Seattle and King County remained relatively stable from March 2015 to May 2017, declining by 0.4% overall, and there was no detectable impact of the Ordinance. As most area grocery chains are unionized, it is likely that the impact of the ordinance on wages was small, and labor reflects a relatively small share of costs in the grocery industry.

The price collection activities conducted by this team have been small in scope and have not necessarily focused on representative samples of businesses. Other studies employing larger datasets (e.g., grocery scanner data rather than hand-collected market basket prices) have reported larger effects.
Table of Contents

1. Introduction
2. Interviews with Seattle Employers
3. Updates from Survey of Seattle Employers
4. Updates from Interviews with Seattle Workers
5. Price Analysis
6. Appendix A: Employer Study Sample Selection, Survey Response, and Eligibility
7. Appendix B: Employer Interviews Opinion-Analysis
8. Appendix C: Employer Survey Responses by Year, Industry, and Ownership
9. Appendix D: Worker Study Timeline and Response Rates
10. Appendix E: Study Personnel and Partners

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**Introduction**

The City of Seattle contracted with a team of University of Washington researchers to evaluate the Minimum Wage Ordinance (the “Ordinance”) on December 3, 2014. The contract’s scope of work included four broad categories of data collection and analysis:

1. **State administrative data** analysis on the causal impacts of the law on employment, hours, wage, and earnings.
2. **Surveys and interviews to collect employer perspectives** on responding to the law.
3. **In-depth interviews to collect worker perspectives** on the law and living in Seattle on low wages.
4. **Price data collection** in the Seattle area and nearby (unaffected) areas to assess whether the law affected prices.

These different activities reflected the City of Seattle’s request that the evaluators examine a broad set of outcomes for workers, firms, and the local economy. Each component has its strengths and limitations: For instance, employer surveys and interviews with workers are designed to capture the details of how individuals and firms in the Seattle area experience the law and the changing local economy. Neither of those components uses a comparison group to identify whether the law caused those experiences. In contrast, the analysis of state administrative data uses sophisticated techniques to isolate the effects of the law, but cannot say very much about how those effects occurred. In addition, sometimes the different components produce seemingly contradictory evidence. We have endeavored to reconcile the findings across components or acknowledged when we cannot.

Prior reports and papers submitted by the team to the City of Seattle summarized findings from component 1, the administrative data analysis, and early results from the other three.³ Our most recent publication on the administrative data analysis (Jardim et al., 2017) covers all of the state administrative data currently available for evaluation, so we will not present additional information in this report about that component. This report focuses on activities conducted in 2016-2017 in components 2-4. During that time, we completed surveys with employers and conducted a small number of one-on-one interviews with employers affected by the Ordinance. We completed our third wave of interviews with workers who were earning less than $15 per hour at the passage of the Ordinance to understand worker perspectives. Lastly, we completed food price data analysis to examine whether the Ordinance affected restaurant prices and grocery store prices since 2015. Below we summarize updates from each of those three components.

The report is organized as follows: the first section summarizes the employer interviews, the second section reports updates from the employer survey, the next section details the worker interviews, and the last section discusses food price trends.

³ See previous reports here: https://evans.uw.edu/policy-impact/minimum-wage-study
INTERVIEWS WITH SEATTLE EMPLOYERS

This section summarizes key findings from interviews with Seattle employers subject to the Ordinance. This study activity is distinct from the employer survey fielded annually since 2015. Whereas the survey follows a strict protocol where all respondents are expected to answer the same questions, interviews are more free-form, allowing respondents more leeway to focus on areas of interest to them. Surveys and interviews are complementary methodologies; a survey is easier to administer to a large number of respondents, but interviews capture more depth and may address subject areas not incorporated into a pre-designed survey.

The UW research team developed and pilot-tested a set of interview questions in August 2016. Between September and December 2016, study team members interviewed 28 employers randomly selected from two samples, immigrant- or minority owned firms and general businesses. In a resolution accompanying the Ordinance, the City Council designated the evaluation to examine specifically how immigrant-owned businesses responded to the Ordinance as this was an employer group that “argued that the minimum wage change in Seattle will affect them differently from other businesses.”

Certainly, 28 employers is a very small percentage of the nearly 30,000 entities that hold City of Seattle business licenses. By talking at length with a small number of affected employers, we aimed to better understand the range of employer responses to the Ordinance as well as employers’ reasoning behind their reactions. Qualitative research standards hold that a sample size is sufficient, when “saturation” is reached; that is, when the data gathered from new respondents is highly similar to that already gathered. Our interviewees’ experiences overlapped substantially, suggesting saturation was met. Appendix A contains further details about the sampled employers, interview methods, and findings.

The following analysis of themes that emerged from these interviews depicts only some of the ways in which Seattle area employers have reacted and responded to the Ordinance. We put some prominent opinions in this next section and include a full report of the various in-depth opinions expressed by employers in Appendix B. Because we did not find any dramatic differences between immigrant- and minority-owned firms and general businesses, we report findings of these two groups together unless otherwise noted.

Adjusting to the Ordinance

Our interviews revealed how employers adjusted their business practices to accommodate any changes in labor costs due to the Ordinance. Some employers we talked with had only a small proportion of low-wage workers whose hourly wage would be affected; others had large workforces subject to the Ordinance. Employer adjustment strategies also varied, and interviewees collectively noted over a dozen different ways in which they planned to adjust.

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4 This section was authored by Cynthia Moreno, Jennie Romich, and Anne K. Althauser.
Some firms relied primarily on one mode of adjustment while other employers pursued several strategies simultaneously.

*Exposure to the Ordinance*

We defined level of exposure as the proportion of a firm’s workforce that received higher wages as a result of the Ordinance. According to the owners and managers interviewed, the level of exposure in Seattle varied widely: Eleven firms reported that 50% or more of their employees have received higher wages because of the Ordinance. Fifteen reported 0-50% of their workers who received higher wages because of the Ordinance, and two did not disclose.

It should be noted that the level of exposure reported by employers did not necessarily dictate the number of adjustments a business made to absorb the cost of higher wages. For example, a food distributing business reported 75% of its workforce received higher wages as a result of the Ordinance, yet only turned to one business adjustment (taking in less profit for itself) to absorb costs. A restaurant affected at 14%, on the other hand, resorted to three adjustment methods (taking in less profit, increasing prices, and implementing automation) to offset higher wage costs.

It should be further noted that employers may lack the perspective to fully disentangle the impact of the minimum wage ordinance from background labor market trends. Our analysis of administrative employment and wage data suggests that the minimum wage was increased in a general environment of escalating labor costs. Wages for low-paid work in Seattle began increasing well before the ordinance was implemented, and wage rates outside the city rose significantly in 2015 and 2016. These interviews capture employer perceptions, which should be considered distinct from quantitative impact estimates that compare Seattle to counterfactual regions.

*Adjustment Strategies*

Seattle businesses responded to higher labor costs in multiple ways. Table 1 displays the set of business changes mentioned by employers when asked about how they adjusted. Overall, 22 (79%) employers mentioned at least one type of change. Six employers (21%) shared that they are not yet experiencing a need to adjust their businesses in response to a higher minimum wage. Four of these six employers had low exposure to the Ordinance (at 25% or fewer employees affected). The remaining two employers who did not attribute business adjustments to the Ordinance had high exposure (at 100% of employees affected). However, each had only one low-wage worker, thus creating a minimal rise in labor costs and no perceived need for adjustments.
Table 1: Adaptations Identified by Interviewees

<table>
<thead>
<tr>
<th>Employer's Adjustment</th>
<th>Number (%)</th>
<th>Employer's Adjustment</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price increases</td>
<td>13 (46%)</td>
<td>Absorb costs/less profits</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>No adjustment</td>
<td>6 (21%)</td>
<td>Cut business hours</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>Production efficiency/less on utilities</td>
<td>4 (14%)</td>
<td>Cut low quality/low price products</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>Added products</td>
<td>4 (14%)</td>
<td>Shifted hours for more part time workers</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>Grow customer base</td>
<td>3 (11%)</td>
<td>Not replacing workers after they leave (attrition)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Automation (i.e: coin machine)</td>
<td>3 (11%)</td>
<td>Cut benefits</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Cut employee hours</td>
<td>2 (7%)</td>
<td>Owners work more hours</td>
<td>1 (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any adjustment at all</td>
<td>22 (79%)</td>
</tr>
</tbody>
</table>

The most common response—stated by 13 employers (46%)—was to raise prices on products or services. The employers who cited raising prices as a way to absorb higher labor costs did not always provide detailed information as to which or what kind of products and services they changed. Some interviewees, like the owner of a retail store, expected continued changes in the prices of their products. When asked if he anticipated business changes in the next few years, he stated:

Yeah. Oh yeah. Oh boy! That’s a tough one. I think retail is, I think the buying patterns are changing. I think the fact that we do have to push our price points up, and we have to continue to push our price points up because uh... you know... we also have to try to grow. We have to do all those things at the same time.

The owner of a restaurant saw that raising prices in an area like Seattle was only made possible by his opinion that the “Seattle area economy has been good.” However, he acknowledged a concern those higher prices are “extreme.” He shared:

Interviewer: Ok, and how do you plan to address—or how do you currently absorb the costs of rising labor costs?

Owner: I think what is great is that the Seattle area economy has been good, that’s one reason that we’ve managed to increase our prices to cover 75% of the increase labor costs, 70-75% or so. Then again, we are not done with the cycle, 2017 is the last--one of the biggest increases.

Interviewer: How do you anticipate responding to that increase in 2017?

Owner: Actually, this time around we are just going to increase prices but not as much. We might absorb 50% of the cost increase, and increase prices to absorb
or to cover the other 50%, because if you look at the 3-year span, our prices are going to have gone up by 30-35%, which is extreme.

This response, in particular, corroborates restaurant price data collected separately by our study team, which indicates significant price increases between 2015 and 2016 but only modest increases between 2016 and 2017.

The manager of a manufacturing business described how the increased prices of his business saw some pushback from his customers, but feels that this consequence is necessary if his business is going to provide the wages and benefits his employees deserve. When asked about how he absorbs higher labor costs, he reported:

_We absorb most of them internally by becoming efficient as possible in our continuous improvement plans. We did have a price increase in the beginning of 2016, so we passed some of those costs along to our customers. You know, we had some pushback where we actually lost business. I wouldn’t say that the increase was a 100% result of a wage increase, but just the overall cost of doing business with wages and benefits and but those are things that we have to maintain. I mean, we have a social responsibility, right? I think I said before these people [employees] commit themselves to you, we owe it to them._

Not all employers saw raising prices as a viable strategy. The manager at a distributing firm said that 76% of his workforce has received higher wages due to the Ordinance. However, he did not turn to price increases as a way to absorb higher labor costs:

_No. No, you can’t increase your prices because it a competitive market. I mean, the market drives the prices. You can’t. I’m a [type of good] company. If you look in the phone book, there’s 15 other [companies that sell the same kind of good]. No, I mean, all I can do to tighten it up as far as, like, maybe making runs more efficient. You know, day-to-day operations, but it’s just really hard. We’re pretty thin as it is, I mean, I keep things pretty thin as it is. I try to control the overtime and things like that. I have no problems with overtime, but I think that it’s not productive hours. Things like that, I guess._

To remain competitive with other firms selling their products at market price, the manager at this firm saw raising prices as something to avoid. Other adjustments to avoid raising prices included cutting business hours, advertising to grow the customer base, cutting benefits, hiring more part time workers, or simply taking home less profits as owners.

Many of the 15 firms that did not raise prices looked to other business changes to either offset the new costs (by having owners take in less profit or work more hours themselves) or focusing on increasing revenue (by adding products, expanding hours, increasing customer base).
Prominent Employer Opinions

While the owners and managers discussed many different effects of the Ordinance, a few commonly held opinions stood out. First, there was a strong desire from employers to control what they pay employees. Next, many employers anticipate negative outcomes from the Ordinance for Seattle businesses, and many believe that city government does not understand the impacts of higher wages. Lastly, some small business owners reported facing unique challenges compared to large business owners.

Concerning the desire to control pay, 16 employers stated either that how much they pay employees should be left to their discretion or expressed concern over compression, having similar or equal wages for new and experienced employees. A concern that came up for 12 employers was the ability to sustain business in Seattle. They speculated that enforcing higher minimum wages would lead to losing businesses to other areas, reduced hours for overall business or employees, and a harder job market to enter for inexperienced workers.

Five employers that had concerns about the Ordinance specifically stated that higher minimum wages should be mandated only for large businesses. Reasons behind this viewpoint often resulted from seeing large businesses as better equipped to implement higher wages due to perceived higher capacity. Employers stated that smaller businesses are tasked with a responsibility that large companies can (and should) be the businesses providing higher wages. Employers said that larger businesses have more revenue and resources to shift their finances to incorporate higher wages with fewer consequences to the business as a whole. Mandated higher wages also left 11 small employers feeling as though there is little support with how to best implement them. Additionally, the lack of support has left 10 employers feeling as through City officials and political proponents of the Ordinance do not understand the impacts of such a policy on Seattle businesses.

Additionally, we analyzed interviews for the employer’s general opinion about the Ordinance and found that just over half, 15, expressed a neutral opinion. A neutral response often sounded similar to this quote from a restaurant owner:

There are certainly pros for [the Ordinance], and I totally understand the cost of inflation and the effect it has had on families… but at the same time there are probably different ways, better ways.

These responses were categorized as neutral due to the mix of positive and critical sentiments employers shared about the Ordinance and its impact. The remaining 13 employers broke down into 9 who disliked the Ordinance and 4 who strongly opposed it.

In sum, in the one-on-one interviews employers indicated they have been and will continue to comply with higher mandated hourly wages, but overall uncertainty and ambiguity about the effects of the Ordinance remain. Opinions expressed by employers suggest they seek clear
communication between Seattle businesses and City officials about how best to implement a higher minimum wage. More detailed responses from employers can be found in Appendix B.

UPDATES FROM THE SURVEY OF SEATTLE EMPLOYERS 5

We conducted the final round of the Survey of Seattle Employers (SSE) between April and August 2017. In total, 382 businesses completed the survey all three years (2015, 2016, 2017). This count includes for-profit firms and non-profit organizations randomly sampled from the set of Seattle Business License holders. For additional information on survey sampling and methodology, please refer to our previous report.6

In the survey, we asked respondents whether they have raised wages and how they have otherwise changed or plan to change their business strategy in response to the Ordinance. The specific wording of the question is “Have you made or do you intend to make any of the following changes to accommodate the Seattle Minimum Wage Ordinance?” Survey responses hence represent employers’ attributions about reasons for their business changes. In future analyses, we plan to link survey data with administrative data in order to triangulate survey responses with other evidence; however that work is not within the scope of this report. The caveat stated above regarding employer interviews -- that they reflect perceptions and not causal impact estimates based on comparing Seattle to a counterfactual -- applies here as well.

This section reports results about reported changes already made for the full sample. Appendix C contains tables showing parallel results by industry sector (retail, food and accommodation, manufacturing, or other) and selected ownership characteristics (immigrant- and minority-owned firms).

Figure 1 shows the percentage of employers who raised wages increased over time. In 2015, only a little over half of respondents had raised wages of Seattle employees, whereas a majority (86%) had done so by 2017. For multi-jurisdiction businesses with employees both in and outside Seattle, 30% have raised wages for employees working outside of Seattle by 2017 (n=110). Across all three years, the food and accommodation sector reported raising wages of Seattle employees more than the other sectors.

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5 This section was authored by Jennie Romich, Anne K. Althauser and Scott W. Allard, with research assistance from Anita Rocha, James Buszkiewicz, and Emmi Obara.

6 See Appendix A: https://evans.uw.edu/sites/default/files/MinWageReport_April2016.pdf
Note. Sample includes eligible respondents participating in wave 1, wave 2, and wave 3. n = 382
Raise hourly wage rate for employees working outside the City of Seattle who are paid the state minimum wage - only applies to multi-jurisdiction firms. Only 60 firms responded to this question in W1, but 110 multi-jurisdictional firms answered this question in all other waves of the survey.
Source. Survey of Seattle Employers.

When looking at reported responses by ownership characteristics, immigrant and minority-owned firms do not significantly vary in response. In wave 2, minority and immigrant-owned firms reported raising wages of employees outside of Seattle more than other businesses (P=0.04), although the reported responses were no longer statistically significant in wave 3.

When asked about their 2016 non-labor costs, 78% (297/382) stated that these costs had risen over the past year. The most commonly reported non-labor cost increases included rent/lease (28%), inputs/raw materials (25%), and other (10%), which often included food costs, taxes, insurance, and legal fees.

How did employers adjust to the higher hourly wage costs? Survey respondents reported several strategies including raising prices, adding fees, reducing employee hours, reducing employee headcount, eliminating benefits, contracting out work, or withdrawing business from Seattle. The majority of employers reported taking at least one of these steps and these responses were more common at the third year of implementation than in the second year. By 2017, 73% of firms reported having adopted any one of the business strategies we tracked compared to 68% in 2016 (P=0.10) and 41% of firms reported having adopted more than one strategy compared to 33% in 2016 (P=0.01). Figure 2 highlights the most common changes
made in response to the Ordinance. Raising prices or adding fees (65%) are the most common adjustments, followed by reducing hours or headcounts (29%). Both raising prices or adding fees (65% v. 58%, \(P=0.08\)) and reducing hours or headcounts (29% v. 24%, \(P=0.10\)) are up modestly in 2017 relative to 2016. Fewer than one in five firms reduced wage progression as of 2017.

Our analysis of 2016 administrative employment data indicated an estimated 9% reduction in hours for low-wage workers attributable to the ordinance (Jardim et al. 2017). While this estimate is not directly comparable to the reported 29% of employers who reported reducing hours or headcount -- the former is a causal impact estimate, the latter is a perception -- it is not inconceivable that action by roughly 3 in 10 affected businesses would result in a 9% reduction to low wage worker hours overall.

Across industry types, raising prices or adding fees was the most common. This strategy was particularly common among food and accommodation firms (82% raised prices or added fees). When looking at reported responses by industry (food/accommodation, retail, manufacturing, all other), 39% of food and accommodation and 33% of retail reduced hours or headcount. By comparison, only 12% of manufacturing firms adjusted staffing.

As will be noted below, this evidence contrasts to some extent with our team’s efforts to track restaurant price increases from 2016 and 2017, which shows a relatively modest 2% increase that is also observable outside the City of Seattle. The sampled set of restaurants is not designed to be representative of all City of Seattle establishments, while the employer survey is. Moreover, the restaurant price data collection would not capture surcharges or fees added to a customer’s total bill.
Note. Sample includes eligible respondents participating in wave 1, wave 2, and wave 3. n = 382
Adjustments with fewer than 10% reported adjustment not included in figure. These adjustments include contracting out work (range 3.5%-5.2%), withdrawing business from Seattle (range 2%-4.3%), and eliminating a benefit (range 4.9%-6.1%).
Source. Survey of Seattle Employers.
**UPDATES FROM INTERVIEWS WITH SEATTLE WORKERS**

The SMWS included a longitudinal, in-depth study of 55 workers who had low-wage jobs during the initial implementation of the minimum wage law. The goal of this study was to capture diverse worker perspectives on and experiences with working in low paying jobs, monthly budgeting, family life, and the Ordinance. This component of the overall evaluation was given high priority by the City Council and the Auditor’s Office because they wanted to understand the lived experiences of workers in Seattle. City leaders were particularly interested in collecting the perspectives of immigrant and non-English speaking workers, and provided funding to increase the size of the sample in the first year to accomplish this goal.

**Study Design**

The worker interview study followed workers in low-paying jobs for three years during the implementation of the Ordinance. We included adults working in Seattle and earning no more than $15 per hour in 2015, who had a yearly family income of less than $50,000 and at least one child under the age of 18 living with them. These criteria focused the study on families with children who were relying on one or more minimum wage workers to make ends meet.

Beginning in February 2015, we recruited volunteers to the study at community organizations and in public spaces (see Appendix F for a list of recruitment partners). Over a two-year period, we conducted three in-depth interviews, and four short phone surveys, with each person in the study (see Appendix D Figure D1 for a timeline of study activities). In wave 1, we interviewed 61 individuals, but only 55 were eligible for the study. Of those 55, we maintained high response rates throughout the study, but particularly for the in-depth interviews. The majority of study participants (80%) completed all three in-depth interviews and at least 1 of the 4 phone calls (see Appendix D Figure D2 for response rates).

Interviews were conducted at the participant’s home or another location of their choice. Depending on the spoken language preferences of the participant, we interviewed workers in English and Spanish, or in English with live interpretation to Cantonese, Vietnamese, or Somali. The interviews lasted 60-120 minutes and were audio recorded. We used an interview guide with a set of open-ended questions and suggested probes about work conditions, family budgets, family life, and the minimum wage. Our interviewers were trained to keep the interviews conversational and to give the participants a role in guiding the course of the conversations. The participants also filled out short demographic surveys at each interview.

There are two important limitations to the design of this study. First, although the sample is diverse in many ways, it is not statistically representative of low-wage workers in Seattle. Compared to population estimates from the U.S. Census Bureau, our sample is somewhat more likely to be female and unmarried (see Appendix Table 1 in the April 2016 report). Because we recruited formally employed adults, we did not talk to the most vulnerable workers who may

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7 This section was authored by Heather Hill with research assistance from Angela Bruns and Tori Rockwell.
be unemployed, working “under the table,” or working without legal status. Second, because there is no comparison group for the workers in this component, the study was not designed to estimate the impacts (i.e. causal effects) of the minimum wage law, but rather the perspectives and experiences of workers during the law’s implementation. Despite these limitations, the results of this component are far more than anecdotes; they are scientifically-collected and analyzed opinions of the workers that the law was designed to benefit.

Study Participants

Figure 3 shows the key demographic characteristics of the study participants and their jobs at the time of the first interview. Our sample was majority female and immigrant, with a nearly even split of married or cohabiting versus single participants. The self-reported racial/ethnic identity of our sample included substantial proportions of Whites, Hispanics, African-Americans, as well as African and Asian immigrants. Nearly half the sample had a child under 6 in the home at the start of the study. In each wave, we conducted 10-12 interviews in a language other than English.

Results

Below we summarize findings in two major areas: 1) employment and 2) knowledge and opinions of the minimum wage. We focus on the findings across the entire study, rather than from a single wave of data collection.

Steady employment and increasing wages were common but not universal.

How did the conditions of work change for workers during this study? Table 2 describes the average employment rates, hours, and wages at each interview wave for the full sample. Hourly
wages at the time of the first interview ranged from the state minimum wage of $9.47 to $14.95. Most remained employed throughout the study, but 16% of participants were not working at the time of the second interview and 11% were not working at the time of the third interview. For those who were employed in the subsequent waves, their jobs had generally improved in terms of hours and hourly pay. By wave 3, the percentage of employed study participants working 30 or more hours had increased by 11 percentage points, from 56 to 67%. Average hourly wage had also increased from $11.83 to $14.99 – a sizable 27% gain. When unemployed participants are included (treated as having zero hours and zero wage), however, these increases are reduced to a 4 percentage point increase in full-time hours and a 13% increase in average wages. The distribution of workers across different types of work had also changed: Reception/administration and retail/sales had become more common while caregiving, teaching and food service had become less common (not shown in table).

At first glance these findings may seem simultaneously more positive and more negative than the findings we reported regarding employment and wage impacts in administrative data (Jardim et al. 2017). The 27% improvement to (not-inflation-adjusted) wages among these workers, ignoring the unemployed, exceeds the 3% (inflation-adjusted) effect estimate in that analysis. On the other hand, the double-digit unemployment rates exceed estimates based on administrative data. The contrasts reflect a central caveat of the worker interviews: they occurred in an environment where wages were already on an increasing trend, and employment trajectories reflect much more than just the impact of the minimum wage ordinance. Nonetheless, the interviews show that employment outcomes are improving for most, but not all, of the workers studied.

| Table 2. Employment Status and Job Characteristics of Worker Interview Sample, by Wave |
|---------------------------------|----------------|----------------|----------------|
|                                 | Wave 1 (n=55) | Wave 2 (n=49) | Wave 3 (n=47) |
| Employed                        | 98%           | 84%           | 89%           |
| If employed,                    |               |               |               |
| Covered by law\(^a\)           | 94%           | 93%           | 90%           |
| 30+ hours                       | 55%           | 55%           | 67%           |
| Average hourly wage             | $11.83        | $13.64        | $14.99        |

*Source:* SMWS Worker Interview Component, Demographic Surveys.

*Notes:* \(^a\)Reasons that a worker might not be covered is that their job is outside the City of Seattle or that they are an independent contractor.

Figure 4 shows more details about the employment stability for the workers during the study. Most of the workers in this study (77%) were employed at each point that we spoke with them (interviews and phone calls). Twenty-one of the workers in the sample (40%) worked for the same employer throughout the study. Most of those workers were in the same position
throughout the study, but a small number (4) received promotions. Another 20 (38%) were employed at every contact point, but made one or more job-to-job transitions. Twelve workers (23%) in this study were not working in at least one of our interviews or phone calls across two years. Among those, nine were not working at least 50% of the times that we talked with them.

Figure 4: Employment Stability During Study Period (n=53)

<table>
<thead>
<tr>
<th>Same employer, same job</th>
<th>Same employer, new jobs</th>
<th>Between-job transitions</th>
<th>Less than half the time</th>
<th>Half or more of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>19, 36%</td>
<td></td>
<td>18, 34%</td>
<td></td>
<td>9, 17%</td>
</tr>
<tr>
<td>4, 8%</td>
<td></td>
<td></td>
<td>3, 6%</td>
<td></td>
</tr>
<tr>
<td>Always Employed (41, 77%)</td>
<td>Experience Unemployment (12, 23%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SMWS Worker Interview Component

Immigrant workers in this study experienced less upward economic mobility than did U.S.-born workers. The wages of immigrant workers increased less on average than those of U.S.-born workers ($2.63 compared to $4.31). In addition, immigrant workers were more likely than U.S.-born workers to remain with the same employer in the same job throughout the study and to experience unemployment. In contrast, U.S.-born workers were more likely to experience promotions or job-to-job transitions. Interestingly, among the immigrant workers in this study, those who opted to conduct their interview in English were more likely to have been unemployed during the study than those who opted to be interviewed in a language other than English. There were no differences in average wage change by interview language.

Adey, Kang, and Neka provide examples of workers employed by the same employer throughout the study. Adey is an African immigrant living with three of her five children, one adolescent and two adults. Shortly before we interviewed Adey for the first time, she started a job as a childcare provider for a social service agency. During the two years she was in this job, her wage went up from $11 to $13 per hour and her hours increased, although they always fell short of full time. In each wave she reported being on call or filling in at other jobs to earn extra income. Adey said that nothing about her job responsibilities have changed in that time.

A Chinese immigrant and father of five children, Kang, saw even less change in his job characteristics. He worked consistently in the same janitorial job throughout the study and saw
his wage increase from $10.15 to $11.30 per hour. As the primary caretaker for his children, he felt that the flexible hours partially balanced out the low pay. In his words,

*There’s nothing bad about the job for my family life other than the pay is low and it’s not really reasonable because of the of the part-time workers they get paid more than $13.00 an hour and I only get like $11.33.*

An example of employment stability and advancement comes from Neka, a Native-American mother of four. She worked full-time for a retail store and attended school during the study. She received one promotion and several wage increases; overall, her hourly wage increased from $12.60 to $15.75. However, her health insurance premiums increased dramatically near the end of our study and mostly offset her higher wages.

Some workers with job-to-job changes were advancing as well. Lei is a Chinese immigrant mother of two who has lived in Seattle for over 15 years. During our study she moved from a non-profit job to a public-sector job and saw a wage increase of $2 from nearly $13 per hour to $15 per hour. For other workers, the transitions did not translate to higher wages or income. For instance, an African-American single mother of two children, Celine, was earning $14.25 at a fast food company at the start of this study. By wave 2, she had taken a new job as a receptionist in a social service agency after undergoing some on-the-job training. The job offered fewer hours at a lower pay rate than her fast food position but she liked the mission of the organization and the type of work she was doing better. In subsequent months, she cycled through several more receptionist jobs but never earned an hourly wage above $12. When we talked with Celine in our final interview, she and her children were homeless.

Overall, the group of workers with the same employer but new jobs and the group with job-to-job transitions did the best in terms of improvement in wages over time. Those two groups, respectively, saw an average $6.00 and $4.20 increase in wages between waves 1 and wave 3. In comparison, the group that held the same job with the same employer throughout the study had an average increase of $2.30, and those with periods of unemployment, just $1.30.

In the phone surveys conducted between interviews, we asked our study participants whether their work schedules were consistent or variable. Among those who completed at least one phone call, 35% reported having a variable schedule at some point during the study. This is an important source of instability for workers even if their employment is stable.

**Worker knowledge of the Ordinance was vague.**

In our April 2016 report, we noted that at the time of our first interview most workers in the study had only vague knowledge of the law. Many workers referenced the ordinance as the “$15 per-hour wage” but were confused about the starting date of implementation and why they were not receiving $15 per hour in their paycheck yet. Others confused national or union campaigns with the city law, and a few mistakenly referenced the City of SeaTac minimum wage.
In the second and third waves of interviewing, we asked an additional set of questions to capture understanding of the law. We asked workers whether they had seen the Office of Labor Standards’ (OLS) compliance poster for the minimum wage (which employers are required to post) at their place of employment. We asked what the minimum wage rate is currently at their employer. We then determined whether they had selected one of two correct rates for their employer’s size. Finally, we asked whether they had interacted with any of the community organizations that the city contracts with to conduct outreach about the law.

Table 3. Worker Knowledge of the Minimum Wage Ordinance

<table>
<thead>
<tr>
<th></th>
<th>Wave 2 (n=49)</th>
<th>Wave 3 (n=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>Employed in position covered by the law</td>
<td>39</td>
<td>80%</td>
</tr>
<tr>
<td>If yes, had seen compliance poster at work&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>49%</td>
</tr>
<tr>
<td>No or don't know</td>
<td>20</td>
<td>51%</td>
</tr>
<tr>
<td>If yes, knew current minimum wage for employer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>21%</td>
</tr>
<tr>
<td>No or don't know</td>
<td>29</td>
<td>74%</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Talked with community outreach organizations&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: SMWS Worker Interview Component, Demographic Surveys

Notes:<sup>a</sup>Participants were shown a picture of the poster on the survey.

<sup>b</sup>The demographic survey included a list of the contracted community organizations.

Table 3 shows the results from these questions. Of those employed in a position covered by the law (about 80% of all study participants), about half had seen the compliance poster at wave 2 interview and that number did not change in wave 3 (although the percentage increases with a smaller sample). In wave 2, 21% of the workers covered by the law could report the prevailing minimum wage at their employer; at wave 3, that percentage had increased to 34%. For workers who were employed in a job covered by the law in both waves (n=30), we were able to look at whether their knowledge of the law improved. Eight workers who could not report the prevailing wage for their employer at wave 2 were able to do so at wave 3 (not shown in table). Notably, there was little change in contact with community outreach organizations between waves. About a dozen of the workers in our sample had interacted with the community organizations that OLS contracts with for outreach.
Some workers give the minimum wage law credit for increasing their wages.

Among the workers in this study that experienced increases in hourly wages over the three-year study period, many saw that change as a direct result of the minimum wage law. These perceptions are important to understand even if they do not fully disentangle the effect of the minimum wage from other factors because decisions about work, housing, and family can be influenced by our subjective experiences. For instance, workers in lower-paying jobs may be encouraged to stay in Seattle despite the high cost of housing if they feel that the Ordinance is helping them to make ends meet.

Svetlana, an Eastern-European immigrant mother of two, was employed as a caregiver at the same facility for seniors throughout the study. Her wage increased nearly 50% from $11 per hour at our first interview to $16.25 at our last interview. When asked whether the minimum wage law changed her life, she said:

Yeah, I mean they gave me raise. Now I started, after they gave me raise, now I started to think about buying my own place. So, I didn’t have those thoughts before... but now I can think about it.... I can afford more things, I can make more savings, I can put some money in my mortgage. So, yeah I mean it’s definitely helped me.

Gina, a mixed-race mother of one child who transitioned from retail to caregiving over the course of the study, saw a much smaller wage increase from $11 to $12 per hour, but still gave considerable credit to the minimum wage law:

It makes sure that I get a good wage so that at the very least my daughter and I can get by. I don’t want to think about where I would be if there was not minimum wage laws. I don’t want to think -- I don’t even want to think about where we would be if we were still at -- well, $9.00 an hour, I mean, in the long run it adds up, but at the same time it, you know, expenses happen. I mean, it makes it so I can put more gas in my car. It makes it so we can travel around more or get to appointments better. I can book appointments at farther out locations than what they may have available. It makes it so that we can afford the membership to the zoo so she can learn about the animals and actually see them. It makes it so that we have play money and I have money that I can put towards braces or getting teeth pulled if it’s not covered by the insurance.

Nicole, a White, non-Hispanic mother of two children under 3 years old, gives the law credit for improving her family’s financial well-being:

...I feel, because of this $15.00 minimum wage, that means there’s a lot more job creation, which created a job for my partner, who has never worked in his
life. So, he found something that he can do to make money to contribute to my children.

One hope for the minimum wage law is that it would improve the value that workers and employers assign to minimum wage jobs. Shanae, a mixed-race mother of two, lives with her youngest and worked steadily during the study as a receptionist. She described the empowerment that the minimum wage law provided her:

*It changed my life because, when I was making the $12.00 or $13.00 an hour, and that new thing kicked in, I was able to go to them and say I’ve been here two years now. You need to pay me at least more than $15.00 an hour because, basically, people at McDonald’s…So, I literally had to advocate for myself…and I got a raise.*

A few felt positively that they were receiving less public assistance and attributed that change to the law. Jacey, a 40-year-old African-American woman supporting her three children and a grandchild, says, “I think it’s helping me not to need the food stamps as much…Not a really big change. Except just the shifting of the money.” Finally, two people in the study were happy that they could reduce their work hours after their wages increased.

*...but many say that the cost of living is rising much faster than wages.*

Many workers in this study reported that increases in wages (due to the minimum wage, promotions, or other factors) were offset by increases in rent and other expenses in the area. These comments suggest that is hard for the Ordinance to make as much difference in people’s lives when the cost of living in rising so quickly. Alisha is a 46-year-old Hispanic and African-American single mother of six children, two of whom live with her. She describes living in the Seattle area this way,

*Everybody that I know is doing multiple things as far as employment. People are really hustling to be able to get by. I’m knowing a lot of people in lower income brackets. It’s a struggle for survival. It doesn’t seem like their struggle has gotten any easier…*

She goes on to say about the minimum wage law:

*...if you look at the minimum wage increase but you have to contrast and put it into context with the rest of what’s happening here as far as the price of housing and goods and everything. Then I don’t know how could – are people’s lives, are they really seeing that their life is easier? I don’t get that impression.*

Throughout the study, participants expressed doubt that the minimum wage increase would alter their financial circumstances. Some of their doubts come from lived experiences making
ends meet in a high-priced city, and managing the instability of mean-tested benefits, which often decrease as earned income goes up. Here are some quotes that illustrate that pessimism:

Just because we got a raise, everyone else has raised everything...People’s taxes, people’s rent. My rent went up $180 because of this. You know? And I noticed that a lot went up. Things went up. Things went up. My car insurance went up. Everything that I had that was a certain amount went up. Everything went up. So, it’s not like I made no extra money. (Sheila, African-American, apartment manager)

Well, there is something good and something bad. The good thing is that it can be reflected in our paycheck because we are making more money than before. We are affected by this because we make $200.00 extra dollars but rents have gone up. So, on one side we are doing better but then on the other hand things stay the same because whatever you are making you have to pay. (Alejandro, Hispanic, assistant waiter)

I feel like the wage increase (at her job) has helped me out a little bit, but not that much. (Adey, African immigrant, child care provider)

As Latoya, a 51-year-old African-American mother and grandmother who works as a grocery clerk, says: “[I]t just seems like each time that the minimum wage has increased, so has insurance, so has everything else that comes with it. You know? It’s still keeping you right at the poverty level.” Research on subjective financial well-being suggests that the attitudes expressed in quotes like these are created through a combination of actual, objective circumstances and relative comparisons to other people and to one’s own past history. They are not evidence of the effects of the Ordinance but rather evidence of the feelings and attitudes of workers.

Growing inequality in Seattle is sharply felt.

For the workers in this study, specific ways in which the city is changing blend and get attributed to the minimum wage. When asked whether the law had changed Seattle in any way, many workers mentioned the rising cost of living and a specific pattern of migration in which low-income families are having to move out of the city and high-income families are moving in. The higher minimum wage in Seattle “speaks for the extreme amount of people with money coming in, so you need more low-income jobs to cater to them...” said Nicole. Evelyn, an African-American mother of one, struggled with homelessness and unemployment throughout the study. She said, “I know a lot of people that are moving out. They have to. They just cannot afford it. Rent is going up so much.” Fatimah, 49 years old, is an African refugee and single mother of three, working part-time and going to school part-time. She said:

[the minimum wage law] made more people come in to Seattle...it seems a lot more people are investing in Seattle, but not for the low income. They’re not interesting for the low-income, they’re investing for well-to-do, and rich
people. Houses are being built left and right, but we cannot afford them. So, who are they for? I have several buildings coming up at Othello, right where I live, but I can’t live there; I can’t afford them.

The law is also seen as a positive for workers, however. Sean, a White non-Hispanic father of three, moved between work and receiving disability payments during the study period. He captures poignantly how the minimum wage law can stir dreams of mobility for workers outside the region:

I was reading just the other day that it’s like 4,000 people a week right now are moving to King County. It’s insane. And I’m pretty sure that a good percentage of those people did just like I did, okay? The pay is better up there, and there is a building going up everywhere. Where you see a crane, there’s work. That’s why I moved here. It’s common sense, you know? There’s always work at the bottom of the crane. You’re starting with the shovel, you know?

In sum, the workers with whom we spoke seemed to view the minimum wage increase as a partial but inadequate bulwark against rapidly increasing housing costs, the dramatic influx of higher earners, and a general perception of rising regional inequality. Of course, worker perspectives on their own rising cost of living cannot tell us whether the minimum wage is the cause. That question is better answered with quantitative data and a comparison group. The next section turns to the price data analysis.

**PRICE ANALYSIS**

As the first major city to implement a $15 minimum wage, Seattle’s Minimum Wage Ordinance provides a unique opportunity to examine the effects of a large minimum wage increase on consumer prices. To do so, we analyzed changes in restaurant and grocery prices.

**Methods for Restaurant Price Collection**

We collected menu prices from a convenience sample combining limited-service (fast food) and full-service restaurants inside and outside Seattle, beginning in late 2016 and continuing into 2017. This sample allows us to identify restaurants with more than one location (chains) as well as single location (independent) restaurants. We collected price data from online menus whenever possible. In cases where restaurants did not post menus online, including large fast-food establishments such as McDonalds and Subway, we collected prices by visiting the establishments in person. From the 238 restaurants in the analysis, we collected an average of five menu prices, a total of 1,148 prices. We collected prices from the same menu items over

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8 This section of the report is authored by Caitlin Aylward, James Buszkiewicz, Jennifer Otten, and Emma van Inwegen.
four waves of data collection. When available, we recorded prices for a restaurant’s signature item, typically designated by the name of the restaurant in the item name. After selecting for signature and common menu items, we typically also selected menu items from different categories of the menu. An important limitation of this analysis is that the Washington State minimum wage increased from $9.47 to $11.00 on the same day that the Seattle minimum wage increased from $13 to $15. Additionally, no information was collected regarding whether restaurants add surcharges to a diner’s total bill. For the analysis, we use a classic difference-in-difference approach to isolate the effect of the minimum wage by comparing the changes in Seattle restaurant prices before and after the new minimum wage hike went into effect to those of restaurants outside of the city but within King County.

This price collection activity extends price analysis reported in earlier reports, covering the period between 2015 and early 2016. That analysis found no evidence that the minimum wage ordinance had increased apartment rents, gasoline prices, or prices in retail establishments. It did find a significant increase in Seattle restaurant prices, on the order of 8-9%.

Results from Restaurant Price Collection

Menu item prices increased an estimated 2.1 percent for restaurants inside and outside Seattle (\(P=.01\)), with price increases most concentrated in full-service restaurants. However, findings reveal no statistically significant difference in the percentage price increase between restaurant menu items inside and outside Seattle after the January 1, 2017 minimum wage increase (\(P=.509\)), even when controlling for number of locations (\(P=.824\)) and service level type (\(P=.135\)).

As noted above, this finding of no significant price increases in Seattle restaurants relative to outlying King County would appear to contradict employer reports that they are raising prices in response to the minimum wage increase. Several caveats apply. First, the sample of restaurants included in this analysis is not designed to be representative of Seattle business establishments; the employer survey is designed to be representative. Second, some price increase strategies might be overlooked by our data collection methods, which do not capture surcharges and do not collect every price on a menu. Third, some survey respondents may be referring to price increases implemented before 2017, a period when our price collection efforts have revealed larger menu price increases. Fourth, we provide no data here on price increases in businesses other than restaurants and -- as we shall see -- grocery stores.
Methods for Grocery Price Collection

We have annually tracked grocery store food prices in Seattle and King County supermarkets, starting before the minimum wage went into effect. The UW Center for Public Health Nutrition market basket was used to collect the lowest priced version of 106 food items per store, not including sales or discounts, in 6 national and regional chain supermarkets located in Seattle and 6 same-chain supermarkets located in King County, but outside of Seattle. Four out of six of the chains were unionized. This market basket was developed using the United States Department of Agriculture’s Thrifty Food Plan and the Bureau of Labor Statistics’ Consumer Price Index market baskets as models. A complete-case, multi-level, linear difference-in-differences model was used to detect the changes in average item-level prices that could be attributed to the Ordinance.

Results from Grocery Price Collection

Prices for both Seattle and King County stores remained relatively stable from baseline, March 2015, to two years post implementation, May 2017, declining by approximately 0.4%. There were no significant differences in item-level price, attributable to the Ordinance, at one month (−$0.01, 95% CI = -$0.10 to $0.08, P=0.884), one year (−$0.02, 95% CI = -$0.19 to 0.14, P=0.775), or two years ($0.01, 95% CI = -$0.22 to $0.25, P=0.923) post-policy implementation. Adjustment for unionization had no significant effect on these estimates.

Conclusions

This report summarizes the final updates on the activities of the Seattle Minimum Wage Study conducted under contract with the City of Seattle between 2014 and 2017. From March 31st, 2015 to January 1st, 2017, the statutory minimum wage in Seattle increased from $9.47 per hour to as much as $15.00 per hour, a 58% increase without adjusting for inflation. We presented evidence here on the attitudes and responses of employers and workers during those first two years of the law. We also reported on the analysis of price data from a sample of restaurants and grocery stores inside and outside Seattle.

A key finding across all the components of this study is that the Ordinance was phased into a local economy marked by high and continually escalating housing costs, and a pronounced shortage of low-wage labor. The labor shortage, evident in administrative employment data starting around 2012, is likely a direct reflection of Seattle’s housing affordability problem. In this light, the minimum wage ordinance is just one of many factors affecting the state of Seattle’s economy over the past three years. This makes it difficult to attribute changes that employers and workers report directly to the law. Our previously reported analysis of administrative data using rigorous quasi-experimental techniques was best suited to estimating the impacts of the law (Jardim et al., 2017). In brief, those analyses found that in jobs paying less than $19 per hour at businesses definitively reporting whether their employees worked in Seattle, the law increased wages but decreased hours and earnings.

Raising prices and cutting hours were the two most common adjustments reported by the firms in our random sample of Seattle employers. Notably, we found no evidence of increased prices when we collected price data directly from establishments inside and outside the city. This difference could reflect the limitations of either the employer survey or the price data collection, but it also may reflect actual differences between perceptions and behavior. We cannot resolve that tension in these data.

Most employers know the specifics of the law, which should be viewed by the City as a success in terms of communicating a complicated law. There is still room, however, to improve workers’ knowledge of the law. In our interviews with workers, many were unaware of their employer’s prevailing minimum wage, which could make it difficult for them to report wage theft or advocate for themselves in the workplace.

One thing that is clear from the worker interviews is that Seattle is a challenging place to live on low wages. The workers we talked with value the Ordinance both in principle and for the actual wage increases that many of them experienced. But they also feel the growing inequality in the city very sharply and they wonder whether the Ordinance is enough to stem those tides.

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10 Case-Shiller repeat sales price data for owner-occupied homes show that the Seattle metro area experienced an 80% home price increase between February 2012 and August 2017. American Community Survey data show a 20% increase in median rents between 2012 and 2016, and that 80% of Seattle households earning under $50,000 per year pay more than 30% of their income in rent.
Importantly, the SMWS continues with funding from multiple foundations. There are many important questions that remain to be answered, including how the impacts of the law varied for different types of workers and firms, and how the law affected public assistance receipt, income, and poverty rates. In addition, the middle- and long-term effects of the law may differ from the short-term.
APPENDIX A: EMPLOYER INTERVIEWS RECRUITMENT, INTERVIEWS, & ANALYSIS

To recruit participants, study team members called and physically visited businesses from the sample. Team members handed out recruitment and study information cards that included an overview of interview questions, predicted length of interviews, and contact information (see following pages for information sheet and recruitment card). Recruitment cards and information sheets included below. We hired Dynamic Languages to translate the recruitment cards and information sheets into eight different languages: Amharic, Korean, Simplified Chinese, Somali, Spanish, Tagalog, Traditional Chinese, and Vietnamese. In total the study team contacted 143 firms. Many employers declined to participate citing that management did not have time for an interview at the time they were contacted, were planning on closing or moving (not necessarily in response to the Ordinance), did not have hourly or low-wage workers, did not believe their participation would benefit the study, or simply did not have interest.

Of the completed interviews, two employers completed the interview via phone, three were outside their place of business such as a nearby coffee shop, and the rest (23) completed their interview at the employer’s place of business. Interviews typically lasted between 20-60 minutes. The study team audio-recorded the interviews. Interviewers sent post-interview thank-you notes to all study participants, which we also translated into the same eight different languages noted above.

Analysis

Following each interview, interviewers wrote notes describing the interview to include any contextual or non-verbal information not recorded in audio form. Next, graduate research assistants transcribed the audio files, removed all identifiable information from interviews, and imported them into Dedoose, a qualitative analysis application, for coding and analysis. The study team summarized all cases and developed a set of codes to organize and index the content after independently reading three transcripts each. A graduate research assistant applied the coding scheme to the full set of interviews. Throughout the coding process, the study team kept track of new emerging themes and ideas voiced by businesses and discussed them as a team. After the team came to consensus on new emerging themes, a graduate research assistant went back through all transcripts to apply codes accordingly.
SEATTLE MINIMUM WAGE STUDY
EMPLOYER INTERVIEWS

Study Information

Who and What?
University of Washington Social Work and Public Policy faculty members and graduate students are conducting research on local business owners and Seattle’s minimum wage policy. Associate Professor Jennifer Romich leads these interviews. Seattle’s minimum wage ordinance, which when fully implemented will establish the highest minimum wage in the country, may have significant implications for Seattle business owners who employ low-wage workers.

The UW researchers will interview Seattle business owners and managers to learn more about how local businesses are affected by and adjusting to the wage mandates. The kinds of questions they will ask include:

- *How many employees do you have? How many workers are paid minimum wage?*
- *What are your hiring and workforce strategies?*
- *What are some of your challenges or concerns regarding profitability?*
- *How do you think the minimum wage ordinance has affected, or will affect, your business?*

How and When?
Each interview will be one-on-one with a business owner or manager and last approximately 30-45 minutes. Interviews will be scheduled at times convenient for the participant. Interviews will be transcribed but no names will be used, and comments will be confidential.

How will the information be used?
The information gathered from these interviews will be summarized and results will be written up for distribution to policy makers, students, and academics. Pseudonyms will be used for all reports based on these interviews, and identifying information will be disguised or kept confidential.

Further Questions?
Please feel free to contact:
Anne Althauser, Research Coordinator
aka17@uw.edu
(206) 658-1947
How is Seattle’s $15 minimum wage affecting your business?

SEEKING BUSINESS OWNERS AND MANAGERS FOR A MINIMUM WAGE STUDY

Who can volunteer to participate?
Business owners or managers that employ workers who earn less than $15 per hour.

What does the study involve?
A 30-minute one-on-one interview about your business practices, hiring strategies, and bottom line – and how Seattle’s wage ordinance affects your business model.

How will information be used?
Participant information will be confidential, and your responses will be anonymously combined with others for distribution to policy makers, students, and academics.

Why should you volunteer?
Participants will have the opportunity to voice opinions about the minimum wage ordinance to further a meaningful local and national policy debate.

To participate or find out more, contact Anne Althauser at (206) 685-1947 or aka17@uw.edu.
APPENDIX B: EMPLOYER INTERVIEWS OPINION-ANALYSIS

When evaluating the sentiments of the 28 employers interviewed, we found that 15 expressed a neutral opinion. A neutral response often sounded similar to the response from a restaurant owner who stated, “There are certainly pros for it, and I totally understand the cost of inflation and the effect it has had on families...but at the same time there are probably different ways, better ways.” These responses were categorized as neutral due to the mix of positive and critical sentiments employers shared about the Ordinance and its impact on Seattle businesses.

The remaining 14 employers broke down into 9 who disliked the Ordinance and 4 were strongly opposed it. The reasons behind employers’ stance revealed distinct but related sentiments of disappointment with how the policy affects their autonomy in setting wages, relationships with employees, the City’s priorities, and the future of businesses in Seattle.

The following sections present prominent reactions we received about how the Ordinance has affected the different aspects of running a business. Many interviewees shared their opinions on the higher minimum wage in direct response to our request for their thoughts on the Ordinance as a whole. In some instances, opinions about the Ordinance emerged as employers discussed other topics such as their ability to provide higher wages for senior employees, opening more locations, or hiring new employees.

<table>
<thead>
<tr>
<th>Neutral (pros and cons) (15)</th>
<th>Dislike (9)</th>
<th>Strongly opposed (4)</th>
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<tbody>
<tr>
<td>“The minimum wage, there’s some good things and bad things about it. It’s really putting a lot of companies in a tight position because they’re forced to do things they might not be able to do because of the business that they’re in...we’re just lucky that we’re still, you know, we’re still able to pay our employees that wages that are required.” – Grocery Company Owner</td>
<td>“I’m not for the increase of minimum wage...once it does hit $15, everybody will increase prices because they’ll have to. I think people will stop going out as much...I don’t think it will be a positive effect on us. I think $15 is too much, but I would’ve kept it the same if I could.” – Restaurant Owner</td>
<td>“[The Ordinance] just has limitations. It’s not because of the economics. Federal government makes minimum wage, the state government sets a minimum wage, too. Seattle City has no reason to set up a new minimum wage. This is terrible for business. Terrible for employer and employee both.” – Restaurant Owner</td>
</tr>
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</table>
Freedom to Decide: Pay & Compression

The Ordinance required most interviewed employers to increase the wages of their hourly employees. Of the twenty-eight interviewed employers, sixteen expressed a desire to decide the rates of compensation they offer their workers. Some stated that how much they pay employees should be left to their discretion. Others expressed concerns about compression, the reality of having similar or equal wages for new and experienced, senior employees.

Pay

Many employers shared that the wage Ordinance requires them to provide wages they do not agree with. For instance, fourteen employers expressed that they should be allowed to set different wages during training or for less experienced employees. Others noted wanting flexibility to best determine the mix of compensation or advancement.

One retail storeowner explained how she felt the Ordinance restricted her options for attracting and retaining good workers by mandating large yearly raises. She would rather give more frequent smaller raises, and she then enumerated other ways that she tries to create workplace that workers find attractive:

> One, we have incredibly flexible scheduling... Two, we would give bonuses, we give clothing allowances, we do other things. Those things don’t count for anything anymore. They have no value. They weren’t even calculated in the process, so you have to pay and you still have to do the other things because that is part of employee retention. So it’s, I have chosen, my approach is to give them small incremental raises twice a year, you know, so that [employees] see there is always progress.

This employer believes smaller raises multiple times a year would be more beneficial for her business and that she would be paying her employees close to what the Ordinance requires even if it did not exist. When asked about whether she would have implemented gradual wage increases without the Ordinance she stated, “On some level, but probably not as forced” and “I liked the idea, I don’t like being driven to it I guess.”

Another employer stated that he has had to raise the wages of his restaurant employees, as well. When asked if he would have implemented raises without the Ordinance he shared, “No, just because of the Ordinance. Increases should be based on performance. It should not be mandated”. For both employers quoted above, raise based on ability should be the norm and feel that this Ordinance inhibits them from upholding this standard.

Compression

In addition to the concern about setting their own wages, a minority of employers shared that they must carefully consider how to provide wages for senior employees who receive higher than the mandated minimum wage. These employers state that their more experienced
workers are now earning closer to what minimum wage is or feel greater financial burden to increase wages of all workers.

**Vignette: Restaurant Owner Unable to Pay Kitchen Staff Higher Wages**

“Tim” is the owner of an upscale restaurant that employs 40 people (closer to 60 during the summer). The restaurant’s staff is a mix of immigrants, students, and non-students—most of the kitchen employees are immigrants who live outside of Seattle. He has owned and run this business since 2002 and shared that different Seattle policies, such as paid sick leave and the minimum wage ordinance, have made running his business difficult.

One of the most pressing concerns Tim has is the different amounts he seeks to pay “front of the house” staff versus kitchen staff based on the higher skill set kitchen staff requires.

*Interviewer:* And all of your workers are currently paid the minimum wage? Or are there others that are paid a little bit more?

*Tim:* Well, there is a lot paid more. The kitchen is obviously paid more.

*Interviewer:* How much is your current kitchen staff paid right now?

*Tim:* Anywhere from about $14 to $18.

*Interviewer:* And that’s based on—

*Tim:* All sorts of things, time with us, skill set.

Tim goes on to state how higher minimum wages restricts him from paying kitchen workers higher wages and point to better tip credits as a way to mitigate this issue.

*I mean, you don’t have to pay a server that’s already made $50 an hour [in tips] that night another $15 an hour, that’s stupid. If you can do that, then you can’t pay the guy in the kitchen $24 per hour because you’ve got—to run a restaurant, you’ve got twice as many people to run the front of the house as you do in the kitchen. So, you’re paying 18 year-old bus boys, 16 year-old hostesses the $15 an hour plus tips. You’re paying servers who make hundreds of dollars a night $15 an hour and then the guy in the kitchen who’s got 3 kids and lives in Burien—well there’s no money left! You paid it all to the people that don’t need it. So without a tip credit, it’s an uneven scale.*

With his commitment to pay kitchen workers higher wages, Tim stated that labor is his highest expense (at 33-34% of his costs). He addresses this growing cost by raising prices and cutting salaried management positions, but has not yet seen business suffer because of it. He sees applying a tip credit as a way to allow him to pay kitchen staff higher wages.

For example, an owner of a manufacturing firm shared that only 10% of workers receive the then-current minimum of $10.50 because they were new hires. Long-term or senior employees
earn more than the minimum wage, but he stated that he will give raises to minimum wage and higher-paid workers on January 2017. He stated:

You can’t pay somebody who has been working for me for 15 years $10.50, I mean they’re going to say, “I’ve been with you all these years and here comes Joe Fresh and he’s making the same as me, where’s my seniority?”

The Ordinance has put pressure on this owner to raise wages of all employees stating, “otherwise, my workers would be very unhappy.” Thus, he feels the need to raise wages of all employees to maintain morale. A coffee shop owner expressed a similar concern when considering his long-term employees and providing them with raises in addition to the mandated raises for minimum wage workers. He stated:

The gap of like the people who just show up to work and collect their paycheck, you know, they’re going to be at the bottom and then the rung that’s really critical people that have been around and worked a ton of shifts, their gap was always more. But now like, because the minimum wage has been going up and I can’t rate increase those top people as fast because the cost overall has been going up with taxes and this, and all the new people that come in get paid a little bit higher, that gap has closed a little bit more. And so that’s the unfortunate part, is that some people are like, “Well I’ve been here for five years”, and I was like, “Well, I paid you more but these guys are catching up faster.” I would have to pay these guys like $20-$25 an hour potentially, you know, once we hit $15.

Higher minimum wages have led some to reevaluate hiring criteria, as well. One retail owner shared that she is now unwilling to hire inexperienced employees because she cannot afford to pay an incoming employee the wages she provides her senior, experienced workers.

You know, I don’t want to deny people a good wage, but I don’t know that legislating it is in the end the way that it’s going to be achieved. Clearly, the first people to suffer are going to be young people trying to get in, because how can any of us afford to train someone at that wage? So we’re going to... I’m always looking for someone with experience. I can’t afford to pay an extra person that doesn’t know what they’re doing. Not at that level. We would never, we couldn’t take... We used to employ high school kids, sometimes in the summer. Sometimes at Christmas. We won’t be doing that again, not at that price.

Each of these employers saw higher minimum wages as a challenge when considering their other workers. Having to pay new and potentially inexperienced workers a higher wage than what they are accustomed to providing has created some tensions in their businesses. Deciding how much to pay long-term or more experienced workers may jeopardize their relationship with senior employees or restrict their hiring pool to workers they do not have to train.
Large Businesses Should Pay Higher Wages

A handful of employers that had concerns about the Ordinance stated that wage Ordinances should be mandated of large businesses. Reasons behind this viewpoint often resulted from seeing large businesses as better equipped to implement higher wages due to perceived higher capacity.

Vignette: Coffee Shop Owner States Large Businesses Have More Capacity for the Minimum Wage Ordinance (6)

“Eric”, an owner of several coffee and Asian teashops in Seattle, has a total of 50 employees. The majority of workers are students with half full-time and half part-time. He pays hourly employees along the Ordinance guidelines at $10.50 plus tips when they start. Including tips, Eric estimates that they all make more than $15 an hour. He gives the same raises to his employees in and out of Seattle to remain fair and competitive.

He feels pressure from long-time employees who will be making closer to what incoming staff is given because it would be difficult for Eric to raise everyone’s wage according to the Ordinance and then the senior employees even more. As the owner of small businesses, Eric feels that large businesses are better prepared to adhere to wage Ordinances and retain or attract employees:

I don’t think people realize that small businesses don’t have the resources – we don’t have an HR, we don’t have a training staff, we don’t have all these different resources to keep up with all of these laws and be in compliance and do this type of stuff. Whereas a bigger company has departments that do all this type of stuff.

Eric disagrees with the Ordinance on the basis that larger businesses have the better ability to provide higher wages. Corporations, for example, may have resources such as an HR department that is specifically tasked with how to shift a business’ budget so that higher wages do not harm the business overall. He goes on to state that he understands the need for higher wages, but only for employees who may get overworked at larger businesses, stating, “I understand that workers at big companies like a McDonalds or Starbucks or those types of places are getting screwed over. I totally agree with that, I totally understand those things.”

One retail store owner combined the idea of requiring corporate businesses to adhere to strict rules on wages instead of applying it to small businesses with the opinion that low wage workers should receive more social benefits to compensate for their low wages. He stated:

Employer: I don’t mind to pay more to the employees, but the Ordinance itself, for me, is: why do we have to pick on the employers to do this kind of wealth redistribution. I think there should be welfare that everybody has to be taking part to increase the wage or increase the income for those people.

Interviewer: When you say everybody, do you mean everybody more nationally or...
Employer: I think it could be nationally. Ok, when you’re under certain income, there should be some help. But who gives the help? Why pick on the small employers? Why not pick on the CEO of a million dollar [business] who could also contribute, or improve the overall income of those people who need it.

A resulting opinion of the Ordinance is that smaller businesses are tasked with a responsibility that large corporate companies can (and should) be the businesses providing higher wages. Employers expressed thoughts that larger businesses have more revenue and resources to shift their finances to incorporate higher wages with fewer consequences to the business as a whole.

**No Support for Small Businesses**

Mandated higher wages have left eleven employers feeling as though there is little support with how to best implement them. One restaurant owner shared his disappointment with the lack of presence the City has had in regard to the Ordinance. In response to a question about whether his business has support from the City, he simply stated, “zero” and went on discuss that he has had to lower wages of his kitchen staff and raise menu prices in order to provide a higher minimum wage to his servers.

Some interviewees shared concern over their ability to implement higher wages in a way that does not put their businesses in jeopardy of failing. One grocer shared:

> The minimum wage, there’s some good things and bad things about it. It’s really putting a lot of companies in a tight position because they’re forced to do things they might not be able to do because of the business that they’re in. I just feel like a lot of businesses may not continue doing business in Seattle because of all these Ordinances – it just makes it very difficult for them to stay here. We’re just lucky that we’re still, you know, we’re still able to pay our employees the wages that are required.

While this employer cited luck as the reason they are able to keep their small business going, a seafood restaurant owner shared that small restaurants are “hurt” and cited his creativity as what has helped to combat the effects of the minimum wage Ordinance and the secure scheduling Ordinance, as well. In response to a question about his opinion on the Ordinance he stated:

> Because all these little things – the minimum wage, the secure scheduling, they all amount to – overall they’ll say it’s better for the workers that work in the city of Seattle and live in the city of Seattle. But like I said, about half of our employees already come from outside, at least half. And overall the small businesses are going to be – they’re hurt by it. Because these little costs, they add up quite a bit. You’re asking, ‘Have you seen costs go up?’ Well, the only way to combat this is to be as creative as possible, doing the things I’m doing to offset the costs.
In addition to feeling the strain on business and relying on luck or creativity to offset costs, other employers called for more interaction and support from the City itself. An owner of multiple tea and coffee shops called for more support in terms of conversations between the City and business owners.

“Yeah, and again, that’s all I really ask for is that you know, I don’t expect the city or the mayor or the average person to know what it’s like to run a business with employees and product costs like a restaurant. But you know, I really wish that they would sit down with honest business owners and just honestly listen and try to understand. We’re willing to pull our numbers out and show you, but not like saying, ‘Ok, that was great, got another meeting, see ya.’ And they probably forgot everything we said. There are some authentic conversations we can have.

While concerns about a lack of support for smaller businesses have left some employers to look internally, this last employer named an opportunity for support to come through the City.

Government Does Not Understand

The lack of support has left ten employers feeling as through City officials and political proponents of the Ordinance do not understand the impacts of such a policy on Seattle businesses.

Vignette: Tavern Owner Feels City Officials Lack Sufficient Knowledge of the Ordinance’s Impacts

“Peter” has owned and managed a small restaurant tavern with his wife for two years. Their customer base is mostly upper-middle class locals that Peter often knows by name. He currently has 10 employees with a mix of immigrants and college graduates/students. Everyone, including himself and his wife, are paid hourly and start at $15 once they are hired.

He did share that if he wasn’t already paying workers over $15, he would probably absorb the costs of the Ordinance through higher menu prices and changing production of certain foods so as to require less labor. It is his priority to keep his workers and give them the hours they want. He is aware about City legislation and believes the city is not in touch with how businesses run and what their concerns are—especially the smallest ones.

The other thing is, too, we were at a Seattle Restaurant Association meeting a few months ago and one of the representatives there, she is a representative of many businesses in town, and we were getting a little feedback from the city council—not feedback but pushback from the city council member at the time—who at one point said she was feeling the squeeze because, obviously, she was one person and she was—this was before $15—and she was defending and explaining $15 to us and of course we all know our businesses and this person does not know our businesses at all and just, well you know, in a very condescending way said, “You know I represent all the constituents in my area,” and [restaurant owners] said, “Well, I employ 125 of your constituents, so if you put us out of business, you’ve now taken a job away from 125 of your constituents”. So, that was a phrase to me that really kind of rang true to
me. And the same thing with finding solutions to problems that don’t exist, it’s like a full time jobs for these guys.

The experiences Peter had with City representatives has left him feeling as though the City does may have difficulties hearing and understanding the concerns of restaurant owners. He went on to say, “It’s like, ‘Walk a mile before you start making decisions’” when referencing the way representatives promote the wage Ordinance.

A co-owner for a wholesale business shared his thoughts specifically in regards to how small and large businesses are required to raise wages at different rates, and how competition for reliable workers plays a role.

*In order to be competitive, to get quality workers, you got to be above the minimum. I mean, I had someone come in from the City talking about how I was exempt from the $15 an hour wages because I was not a larger business and I told him, ‘You know, you have no clue because the minute you changed it for any size business, it raised the bar for everybody else’. Even the better workers, you have to bring everything up, it’s ridiculous.*

Although smaller businesses are given a slower timetable to reach $15 an hour, some employers see competition for Seattle workers as a more powerful force that drives wages faster than the Ordinance requires.

Other employers shared that they see this Ordinance as a result of politicians trying to secure votes in Seattle. When sharing what he thought of higher minimum wages, one restaurant owner stated:

*[It’s] terrible for the employer, the owner, and the employee. It kills both way. The reason why, you know that before, everything looks like [Inaudible]. People were paid based on their ability. If we can make more money because you have power, you do that. Like the rest of the small business, this is very hard to do. We pay a lot for labor, work. A lot more attention for me, I have to watch the market changing, right? Before Washington state minimum wage was higher than the federal already. But we still can’t do something. And if the politician, for vote, he said, “I give you $15 right now”, but he cannot really. He doesn’t know how to do business.*

The same owner went on to say, “Politics and economics are totally different things; you cannot mix [them] together just for vote.”

In addition to the concern about using the wage Ordinance as a method to gather votes, one retail owner called the Ordinance “ill conceived.” She shared:

*I mean these city council guys… where is the public policy coming from? How is it being vetted? I don’t think that’s a process. I think there is a bandwagon*
Anticipation of Negative Outcomes

A concern that came up for many employers was the ability to sustain business in Seattle. Twelve employers speculate that enforcing higher minimum wages would lead to losing businesses to other areas, reduced hours for overall business or employees, and a harder job market to enter for inexperienced workers. Some employers expressed general pessimistic views about the impact of higher minimum wages. The owner of a pizza shop stated:

I’m not for the increase of minimum wage. I would’ve kept it the same if I could. I think it’s going to—I think it’s a temporary thing, honestly. Washington State is one the—I think might be the first to do that, a $15 minimum wage. And all the other states are looking at Washington State and how it kind of rolls out. So I don’t think it’s going to be a permanent thing, honestly. Once it does hit $15, everybody will increase prices because they’ll have to. I think people will stop going out as much. It won’t be like a 2008 kind of thing, but I think it won’t—I don’t think it will be a positive affect on us. I think $15 is too much, but I would’ve kept it the same if I could.

An Asian food restaurant in the downtown Seattle area expressed a similar concern about rising prices in the city overall, “It’ll affect the prices and the food, and the market, too, might rise”. Both of these employers shared their concerns about the Seattle economy and how all community members may be affected by the Ordinance. Providing higher minimum wages may partially fall on the shoulders of customers who may see higher prices of goods and services.

Other employers expect a different impact as a result of mandated wages: fleeing businesses. A coffee shop owner stated:

So I just want to have a little more dialogue around, not just the $15, it’s all the other stuff – the taxes, you know, the competitive advantages that Bellevue
might have, or Renton. Those cities don’t have to pay those things, you know. Not that employees are going to work there, it’s just that people are going to start opening up businesses around there. You know, Bellevue is starting to get a ton of new businesses there. Um, [restaurant name] is opening up a new restaurant over there, a ton of new businesses are opening up. And restaurants and other cool businesses are going to start to say, “Why am I opening up in Seattle, when it’s not only the minimum wage issue, it’s all these things I’ve gotta deal with when I could just open up in Bellevue is a pretty hot market right now, Renton is starting to grow”. You know, those cities have not passed any Ordinances, and we’re just like 10, 15, 20 minutes away, you know.

A Mexican food restaurant owner shared a similar sentiment that he has discussed with others who are hesitant about expanding their business in Seattle. In response to a question about whether higher wages is a worry for him he stated:

Oh yeah, definitely. I was speaking with other bar owners and a lot of them are considering doing another venue in Seattle, but it’s just not a good formula when you look at the wages and incoming goods and stuff like that. When you do the math backwards it doesn’t work really.

One manufacturing owner also identified the possibility of losing businesses, but shared that it could be solved if all businesses in the nation adhered to one minimum wage expectation.

Employer: I’m just guessing, if it was $15 an hour throughout the whole system—

Interviewer: The whole state?

Employer: The whole country. I think it’ll fall on Capitol Hill and then that’s ok. Everybody kind of, is kind of moving up at the same—but if you’re doing this, people are just going to jump ship to Kent where you don’t have to pay $15 an hour.

Conclusion

Interviews with 28 business owners and managers show that the Seattle Minimum Wage Ordinance is raising many different concerns. While employers established that they have been and will continue to comply with mandated wages, overall hesitation about how positive the Ordinance is for the city remains.

Fifteen employers were categorized as “somewhat supportive” of the Ordinance as they acknowledged that a higher minimum wage for their employees was fair in an expensive area such as Seattle. However, a majority (22) expressed at least one of the concerns explained above with how the Ordinance was constructed and how it has affected their businesses. As seen in some of their responses, some employers shared their perspectives about how the
Ordinance has affected their communities and employees. However, this report’s analysis is solely reflective of the experiences and opinions of the employers interviewed.

The opinions of these employers suggest that they seek clear communication between Seattle businesses and City officials about how to best implement a higher minimum wage with employers’ input and officials’ dedication to implementing a fair minimum wage.
APPENDIX C: EMPLOYER SURVEY RESPONSES BY YEAR, INDUSTRY, AND OWNERSHIP CHARACTERISTICS

Table C1. Reported responses of firms who "have done" or "have done some plan to do more" to each wage and firm respond to MWO by survey year

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<td></td>
<td></td>
<td>Diff</td>
<td>P-value</td>
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<td>Raise wages of Seattle employees</td>
<td>52.6%</td>
<td>81.2%</td>
<td>85.6%</td>
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<td>4.5</td>
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<td>Decompress high**</td>
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<td>31.6%</td>
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<td>Raise wages of employees outside Seattle**</td>
<td>15.0%</td>
<td>21.8%</td>
<td>30.0%</td>
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<tr>
<td>Limit wage progression</td>
<td>8.6%</td>
<td>13.1%</td>
<td>19.1%</td>
<td>4.5</td>
<td>0.048</td>
<td>6.0</td>
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<tr>
<td>Reduce hours</td>
<td>11.0%</td>
<td>19.4%</td>
<td>24.3%</td>
<td>8.4</td>
<td>0.001</td>
<td>5.0</td>
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<td>Reduce headcount</td>
<td>7.3%</td>
<td>19.4%</td>
<td>20.2%</td>
<td>12.0</td>
<td>&lt;0.001</td>
<td>0.8</td>
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<tr>
<td>Reduce hours / headcount</td>
<td>13.6%</td>
<td>24.1%</td>
<td>29.3%</td>
<td>10.5</td>
<td>0.000</td>
<td>5.2</td>
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<tr>
<td>Withdraw from city*</td>
<td>2.0%</td>
<td>3.8%</td>
<td>4.3%</td>
<td>1.7</td>
<td>0.173</td>
<td>0.6</td>
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<td>Contract out*</td>
<td>4.3%</td>
<td>5.2%</td>
<td>3.5%</td>
<td>0.9</td>
<td>0.593</td>
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<td>Raise prices</td>
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<td>58.1%</td>
<td>64.1%</td>
<td>29.6</td>
<td>&lt;0.001</td>
<td>6.0</td>
</tr>
<tr>
<td>Add fees</td>
<td>8.1%</td>
<td>11.8%</td>
<td>15.7%</td>
<td>3.7</td>
<td>0.091</td>
<td>3.9</td>
</tr>
<tr>
<td>Raise prices / add fees</td>
<td>30.4%</td>
<td>58.4%</td>
<td>64.7%</td>
<td>28.0</td>
<td>&lt;0.001</td>
<td>6.3</td>
</tr>
<tr>
<td>Eliminate a benefit*</td>
<td>6.1%</td>
<td>5.5%</td>
<td>4.9%</td>
<td>-0.6</td>
<td>0.745</td>
<td>-0.6</td>
</tr>
<tr>
<td>Any response</td>
<td>37.2%</td>
<td>67.8%</td>
<td>73.3%</td>
<td>30.6</td>
<td>&lt;0.001</td>
<td>5.5</td>
</tr>
<tr>
<td>More than one response</td>
<td>18.8%</td>
<td>32.5%</td>
<td>41.4%</td>
<td>13.6</td>
<td>&lt;0.001</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Total n (questions in both short/long surveys)       | 382  | 382  | 382  |
Total n (questions only in long survey)              | 345  | 345  | 345  |
Total n (raise wages outside Seattle)**              | 60   | 110  | 110  |

* question not asked in W3 short survey

Note: MWO = minimum wage ordinance. Plan to do, do not plan to do, don’t know, refuse, logical skip, and does not apply are included as not done.
a. Increase hourly earnings for employees earning between $13.00 and $15.00 per hour.
b. Increase hourly earnings for employees making more than $15/hour. Only asked in 2016.
c. Raise hourly wage rate for employees working outside the City of Seattle who are paid the state minimum wage - only applies to MJ firm. Only 60 firms responded to this question in W1, but 110 multi-jurisdictional firms answered this question in all other waves of the survey.
Table C2. Reported Responses to MWO in 2015, 2016, and 2017 by industry type

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>P-values for Industry Type Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2015 awareness and wage responses</strong></td>
<td></td>
</tr>
<tr>
<td>Aware of MWOa</td>
<td>0.103</td>
</tr>
<tr>
<td>Raise wages</td>
<td>0.010</td>
</tr>
<tr>
<td><strong>2016 wage responses</strong></td>
<td></td>
</tr>
<tr>
<td>Raise wages</td>
<td>0.034</td>
</tr>
<tr>
<td>* Decompressb</td>
<td>0.184</td>
</tr>
<tr>
<td>* Decompress highc</td>
<td>0.225</td>
</tr>
<tr>
<td>Raise wages of employees outside Seattled</td>
<td>0.770</td>
</tr>
<tr>
<td><strong>2016 firm response to MWO</strong></td>
<td></td>
</tr>
<tr>
<td>Limit wage progression</td>
<td>0.512</td>
</tr>
<tr>
<td>Reduce hours</td>
<td>0.806</td>
</tr>
<tr>
<td>Reduce headcount</td>
<td>1.000</td>
</tr>
<tr>
<td>Reduce hours / headcount</td>
<td>0.816</td>
</tr>
<tr>
<td>* Withdraw from city</td>
<td>0.541</td>
</tr>
<tr>
<td>* Contract out</td>
<td>0.280</td>
</tr>
<tr>
<td>Raise prices</td>
<td>0.001</td>
</tr>
<tr>
<td>Add fees</td>
<td>0.182</td>
</tr>
<tr>
<td>* Eliminate a benefit</td>
<td>0.012</td>
</tr>
<tr>
<td>Any of the 2016 responses</td>
<td>0.517</td>
</tr>
<tr>
<td>More than one of the 2016 responses</td>
<td>0.195</td>
</tr>
<tr>
<td><strong>2017 wage responses</strong></td>
<td></td>
</tr>
<tr>
<td>Raise wages</td>
<td>0.642</td>
</tr>
<tr>
<td>* Decompressb</td>
<td>0.079</td>
</tr>
<tr>
<td>* Decompress highc</td>
<td>0.110</td>
</tr>
<tr>
<td>Raise wages of employees outside Seattled</td>
<td>0.035</td>
</tr>
<tr>
<td><strong>2017 firm response to MWO</strong></td>
<td></td>
</tr>
<tr>
<td>Limit wage progression</td>
<td>0.183</td>
</tr>
<tr>
<td>Reduce hours</td>
<td>0.370</td>
</tr>
<tr>
<td>Reduce headcount</td>
<td>0.673</td>
</tr>
<tr>
<td>Reduce hours / headcount</td>
<td>0.329</td>
</tr>
<tr>
<td>* Withdraw from city</td>
<td>0.882</td>
</tr>
<tr>
<td>* Contract out</td>
<td>0.859</td>
</tr>
<tr>
<td>Raise prices</td>
<td>0.001</td>
</tr>
<tr>
<td>Add fees</td>
<td>0.150</td>
</tr>
<tr>
<td>* Eliminate a benefit</td>
<td>0.150</td>
</tr>
<tr>
<td>Any of the 2017 responses</td>
<td>0.930</td>
</tr>
<tr>
<td>More than one of the 2017 responses</td>
<td>0.032</td>
</tr>
<tr>
<td>Total n (questions in both short/long surveys)</td>
<td>382</td>
</tr>
<tr>
<td>Total n (questions only in long survey)</td>
<td>345</td>
</tr>
<tr>
<td><strong>Total n (raise wages outside Seattle)</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

* question not asked in W3 short survey
** Only 60 firms responded to this question in W1, but 110 multi-jurisdictional firms answered the other questions included in all waves of the survey
Note: non-profits logically skipped out of answering ownership questions - coded as not immigrant nor minority owned
Includes only for-profits and non-profits from randomized sample
### Table C3. Reported Responses to MWO in 2015, 2016, and 2017 by ownership characteristics

<table>
<thead>
<tr>
<th>Ownership characteristics</th>
<th>All</th>
<th>Minority or Immigrant (Mi/I)</th>
<th>Majority/Native (Ma/N)</th>
<th>Mi/I v. Ma/N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2015 awareness and wage responses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of MWO&lt;sup&gt;a&lt;/sup&gt;</td>
<td>94.3</td>
<td>95.3</td>
<td>93.9</td>
<td>0.636</td>
</tr>
<tr>
<td>Raise wages</td>
<td>52.6</td>
<td>56.5</td>
<td>51.5</td>
<td>0.420</td>
</tr>
<tr>
<td><strong>2016 wage responses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raise wages</td>
<td>81.2</td>
<td>82.4</td>
<td>80.8</td>
<td>0.748</td>
</tr>
<tr>
<td>* Decompress&lt;sup&gt;b&lt;/sup&gt;</td>
<td>53.0</td>
<td>53.3</td>
<td>53.0</td>
<td>0.955</td>
</tr>
<tr>
<td>* Decompress high&lt;sup&gt;c&lt;/sup&gt;</td>
<td>31.6</td>
<td>33.3</td>
<td>31.1</td>
<td>0.714</td>
</tr>
<tr>
<td>Raise wages of employees outside Seattle&lt;sup&gt;d&lt;/sup&gt;</td>
<td>15.0</td>
<td>50.0</td>
<td>12.5</td>
<td>0.042</td>
</tr>
<tr>
<td><strong>2016 firm response to MWO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limit wage progression</td>
<td>13.1</td>
<td>16.5</td>
<td>12.1</td>
<td>0.294</td>
</tr>
<tr>
<td>Reduce hours</td>
<td>19.4</td>
<td>23.5</td>
<td>18.2</td>
<td>0.271</td>
</tr>
<tr>
<td>Reduce headcount</td>
<td>19.4</td>
<td>23.5</td>
<td>18.2</td>
<td>0.271</td>
</tr>
<tr>
<td>Reduce hours / headcount</td>
<td>24.1</td>
<td>29.4</td>
<td>22.6</td>
<td>0.193</td>
</tr>
<tr>
<td>* Withdraw from city</td>
<td>3.8</td>
<td>2.7</td>
<td>4.1</td>
<td>0.571</td>
</tr>
<tr>
<td>* Contract out</td>
<td>5.2</td>
<td>2.7</td>
<td>5.9</td>
<td>0.262</td>
</tr>
<tr>
<td>Raise prices</td>
<td>58.1</td>
<td>63.5</td>
<td>56.6</td>
<td>0.251</td>
</tr>
<tr>
<td>Add fees</td>
<td>11.8</td>
<td>14.1</td>
<td>11.1</td>
<td>0.448</td>
</tr>
<tr>
<td>Raise prices / add fees</td>
<td>58.4</td>
<td>64.7</td>
<td>56.6</td>
<td>0.179</td>
</tr>
<tr>
<td>* Eliminate a benefit</td>
<td>5.5</td>
<td>5.3</td>
<td>5.6</td>
<td>0.941</td>
</tr>
<tr>
<td>Any of the 2016 responses</td>
<td>67.8</td>
<td>76.5</td>
<td>65.3</td>
<td>0.052</td>
</tr>
<tr>
<td>More than one of the 2016 responses</td>
<td>32.5</td>
<td>37.7</td>
<td>31.0</td>
<td>0.247</td>
</tr>
<tr>
<td><strong>2017 wage responses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raise wages</td>
<td>85.6</td>
<td>84.7</td>
<td>85.9</td>
<td>0.790</td>
</tr>
<tr>
<td>* Decompress&lt;sup&gt;b&lt;/sup&gt;</td>
<td>62.3</td>
<td>54.7</td>
<td>64.4</td>
<td>0.122</td>
</tr>
<tr>
<td>* Decompress high&lt;sup&gt;c&lt;/sup&gt;</td>
<td>44.1</td>
<td>34.7</td>
<td>46.7</td>
<td>0.064</td>
</tr>
<tr>
<td>Raise wages of employees outside Seattle&lt;sup&gt;d&lt;/sup&gt;</td>
<td>21.7</td>
<td>25.0</td>
<td>21.4</td>
<td>0.867</td>
</tr>
<tr>
<td><strong>2017 firm response to MWO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limit wage progression</td>
<td>19.1</td>
<td>22.4</td>
<td>18.2</td>
<td>0.388</td>
</tr>
<tr>
<td>Reduce hours</td>
<td>24.4</td>
<td>20.0</td>
<td>25.6</td>
<td>0.290</td>
</tr>
<tr>
<td>Reduce headcount</td>
<td>20.2</td>
<td>17.7</td>
<td>20.9</td>
<td>0.513</td>
</tr>
<tr>
<td>Reduce hours / headcount</td>
<td>29.3</td>
<td>28.2</td>
<td>29.6</td>
<td>0.803</td>
</tr>
<tr>
<td>* Withdraw from city</td>
<td>4.4</td>
<td>5.3</td>
<td>4.1</td>
<td>0.636</td>
</tr>
<tr>
<td>* Contract out</td>
<td>3.5</td>
<td>4.0</td>
<td>3.3</td>
<td>0.780</td>
</tr>
<tr>
<td>Raise prices</td>
<td>64.1</td>
<td>67.1</td>
<td>63.3</td>
<td>0.524</td>
</tr>
<tr>
<td>Add fees</td>
<td>15.7</td>
<td>17.7</td>
<td>15.2</td>
<td>0.577</td>
</tr>
<tr>
<td>Raise prices / add fees</td>
<td>64.7</td>
<td>69.4</td>
<td>63.3</td>
<td>0.299</td>
</tr>
<tr>
<td>* Eliminate a benefit</td>
<td>4.9</td>
<td>4.0</td>
<td>5.2</td>
<td>0.675</td>
</tr>
<tr>
<td>Any of the 2017 responses</td>
<td>73.3</td>
<td>77.7</td>
<td>72.1</td>
<td>0.304</td>
</tr>
<tr>
<td>More than one of the 2017 responses</td>
<td>41.4</td>
<td>42.4</td>
<td>41.1</td>
<td>0.833</td>
</tr>
<tr>
<td>Total n (questions in both short/long surveys)</td>
<td>382</td>
<td>85</td>
<td>297</td>
<td></td>
</tr>
<tr>
<td>Total n (questions only in long survey)</td>
<td>345</td>
<td>75</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>** Total n (raise wages outside Seattle)</td>
<td>60</td>
<td>4</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

* question not asked in W3 short survey  
** Only 60 firms responded to this question in W1, but 110 multi-jurisdictional firms answered the other questions included in all waves/versions of the survey  
Note: non-profits logically skipped out of answering ownership questions - coded as not immigrant nor minority owned  
Includes only for-profits and non-profits from randomized
APPENDIX D: WORKER INTERVIEW TIMELINE AND RESPONSE RATES

Figure 1. Timeline of Worker Interviews and Phone Calls

<table>
<thead>
<tr>
<th>Interviews</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone calls</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>April</th>
<th>July</th>
<th>Oct</th>
<th>Jan</th>
<th>April</th>
<th>July</th>
<th>Oct</th>
<th>Jan</th>
<th>April</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2015</td>
<td></td>
<td></td>
<td>2016</td>
<td></td>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure D2. Completed Worker Interviews and Response

Source: SMWS Worker Interview Component
Notes: W = in-person interview wave; P = phone check-in
APPENDIX E: STUDY PERSONNEL & PARTNERS

UW Minimum Wage Study Team:

Investigators
Jacob Vigdor, Evans School of Public Policy & Governance, Principal Investigator
Mark Long, Evans School of Public Policy & Governance, Co-Principal Investigator
Jennifer Romich, School of Social Work, Co-Principal Investigator
Scott W. Allard, Evans School of Public Policy & Governance, Co-Investigator
Heather D. Hill, Evans School of Public Policy & Governance, Co-Investigator
Jennifer J. Otten, School of Public Health, Co-Investigator
Robert Plotnick, Evans School of Public Policy & Governance, Co-Investigator

Research Staff
Anne Althauser, Evans School of Public Policy & Governance, Research Coordinator
Emma van Inwegen, Evans School of Public Policy & Governance, Research Analyst
Ekaterina Jardim, Evans School of Public Policy & Governance, Research Associate
Miranda Vargas, Evans School of Public Policy & Governance, Research Analyst

Research Assistants
Angela Bruns, Sociology PhD student
Caitlin Aylward, Evans School MPA student
Cynthia Moreno, Social Work MSW student
Emmi Obara, Public Policy PhD student
Hilary Wething, Evans School PhD student
James Buszkiewicz, Public Health PhD student
Kate Bartholomew, Evans School MPA student
Talia Kahn-Kravis, Evans MPA student
Tori Rockwell, Evans MPA student

Social Development Research Group (SDRG):
Danielle Woodward, Survey Research Division Director
Tim Sanders, Data Collection Supervisor
Adam Livengood, Data Collection Supervisor/Research Study Coordinator
Sascha Demerjian, Data Collection Supervisor
Mary Grassley, Data Manager/Programmer
Lorelei Lin, Data Collection Supervisor
Shirley Alcantara, Administrative Support
Collene Gaolach, Survey Programmer
Interviewers:
Adam Livengood
Alicia Silva-Santisteban
Ariel Li
Benjamin Johnson
Calla Natzke
Carly Lauck
Casey Chandler
Christine-Marie Youssef
Clinton Attaway
Danielle Jacobs
David Fong
Deborah Cohen
Dien-Hien T. Hoang (interpreter)
Herb Krohn
Hibo Hassan (interpreter)
Hilary Wething
Howard Chou (interpreter)
Ifrah Dhoble (interpreter)
Inaki Martinez-Creel
Juanita Baker
Laura Hogan
Laura Smales
Lorelei Lin
Marlene Chamonica
Melinda Tsuchiya
Nina Kaseberg
Sheherezad Krzyzaniak
Stacey Shively
Tara Ogilvie
Tasha Cummings

Washington State Employment Security Department:
Scott Bailey, Regional Economist
Anneliese Vance-Sherman, Regional Labor Economist

UW Students and Seattle Community Members:
Abdulahi Osman
Kathleen Finneran
Liyuan Zhang
Qingqing Sun
Tranngthanh Pham
Van Thi Bao Tran
Worker Study Recruitment Partners:
The study team greatly appreciates the organizations and individuals that helped connect us to eligible workers in Seattle. The following organizations allowed our worker study team to actively recruit and screen potential participants in or directly outside their facilities:

- Asian Counseling and Referral Service
- Bellwether Housing
- Boys & Girls Clubs (multiple sites)
- Catholic Community Services, Catholic Housing Services (multiple sites)
- Centerstone
- Delridge Community Center
- El Centro de la Raza
- Goodwill
- Neighborhood House Head Start programs (multiple sites)
- Northwest Chinese School
- Rainier Beach Community Center
- Seattle Housing Authority
- Seattle Public Libraries (multiple sites)
- Seattle Public Schools
- Somali Community Services
- South Park Community Center
- Southwest Youth and Family Services
- Target
- Vietnamese Friendship Association
- West Seattle Food Bank
- YWCA

In addition, we provided flyers to managers or staff at 6 libraries, 4 affordable housing buildings, 13 social service agencies, and 40+ restaurants, bars and hotels.