

CONSIDERING MINIMUM WAGE
POLICY IN LOS ANGELES COUNTY:
REVIEWING RECENT RESEARCH AND ASSESSING POTENTIAL IMPLICATIONS

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# CONSIDERING MINIMUM WAGE POLICY IN LOS ANGELES COUNTY: 

## REVIEWING RECENT RESEARCH <br> AND ASSESSING POTENTIAL IMPLICATIONS

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The LAEDC Institute for Applied Economics specializes in objective and unbiased economic and policy research in order to foster informed decision-making and guide strategic planning. In addition to commissioned research and analysis, the Institute conducts foundational research to ensure LAEDC's many programs for economic development are on target. The Institute focuses on economic impact studies, regional industry and cluster analysis and issue studies, particularly in workforce development and labor market analysis.

Every reasonable effort has been made to ensure that the data contained herein reflect the most accurate and timely information possible and they are believed to be reliable. This report is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

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## EXECUTIVE SUMMARY

The Los Angeles County Board of Supervisors, representing the unincorporated areas of Los Angeles County, is considering adopting a minimum wage policy congruent with the City of Los Angeles, and has asked the Los Angeles County Economic Development Corporation (LAEDC) to study the issue.

## REVIEW OF STUDIES

The LAEDC reviewed four studies pertaining to the minimum wage ordinance proposed by the City of Los Angeles. Results from the four studies lie on a continuum of economic impacts from the very positive to the very negative.

- Berkeley-IRLE-1 and Berkeley-IRLE-2 find that all minimum wage workers will benefit from increased earnings. There may be some job losses because price increases will dampen some demand, but while City of Los Angeles job impacts will be marginally negative, the overall regional impact will be positive because increased spending will more than offset any possible reduced demand.
$>$ Beacon finds that while there will be an increase in earnings and a stimulative effect on the City, over time there will be job losses (reduction in job growth) and a loss of activity as businesses reduce future hiring and/or relocate and/or cease operations.
- ERT-UCLA-IRLE finds that not only will all minimum wage workers benefit from increased earnings, but the stimulus to the economy will create many new jobs.

None of the teams directly address impacts on alleviating poverty or reducing income inequality.

## LAEDC'S ASSESSMENT

In our reading of the current literature, our review of the existing studies related to the City of Los Angeles, and the results of an independent survey of businesses in Los Angeles County commissioned by the LAEDC, the LAEDC concludes that:

Regardless of which political jurisdiction finally implements the proposed policy (such as the City of Los Angeles alone, the unincorporated areas of Los Angeles County along with the City of Los Angeles, or the entire County of Los Angeles), many workers will be immediately impacted. If implemented countywide, this could impact 1.2 million to 1.6 million workers.
$>$ Although many workers will see wage increases, employers that currently have minimum wage employees or employees who will be impacted by future increases will likely respond to their increased labor costs using one or more of the following strategies:

- Cutting back on employment (either reducing hours or jobs) or on future employment growth (choosing to hire fewer workers), as nineteen percent of employers with minimum wage workers responding to our survey believe is likely;
- Substituting the lowest-skilled workers with employees that are more productive, which would primarily affect those most difficult to place (such as ex-offenders) and those with the least skills, as almost half (48 percent) of employers of minimum wage workers responding to the survey say they will expect their employees to work harder;
- Increasing prices, as almost all businesses with minimum wage workers ( 96 percent) responding to our survey stated was likely;
- Absorbing cost increases through reduced profits, as 87 percent of employers with minimum wage workers responding to our survey say is likely.
$>$ In the absence of widespread regional implementation, these responses will be accentuated due to the fractured political boundaries of the County. Smaller firms are more likely to employ minimum wage employees and will be most impacted while having the fewest options for managing cost increases.
$\rightarrow$ Over the long-term, the relative costs or capital and labor may encourage more automation. At the time the LAEDC survey was fielded, 44 percent of employers of minimum wage workers were undecided about the likelihood of substituting capital for labor. If this were to occur, transitioning displaced workers into other occupations may be challenging if such workers face skills mismatch.
- In the aggregate:
- Many prices will increase, including those that lower-income households commonly face;
- Wages will rise for those in minimum wage jobs that remain employed;
- Employment opportunities for those at the bottom of the skills ladder will be diminished;
- Employment growth will slow;
- There will be little impact, if any, on poverty in Los Angeles.


## IMPACT ON THE COUNTY BUDGET

The County of Los Angeles has many minimum wage employees on its staff that would be affected by the proposed ordinance. In addition, the County contracts with a large number of private sector firms for the delivery of goods and services that the County is in need of. Such vendors may also be subject to the proposed ordinance. Increased costs of both employees and vendors will have an impact on the County's budget:
$>$ EMPLOYEES: Given the small number of job classifications and positions that will be affected by minimum wage adjustments and ripple effect adjustments, the proposed minimum wage ordinance will result in a relatively small impact on the County's total budget for wages and salaries, benefits and retirement.

CONTRACTORS: To assess the impact of requiring firms doing business with the County of Los Angeles to adhere to the proposed ordinance (regardless of their business location), a survey will be conducted of all County contractors. At time of submission of this report, the survey had not been administered and as such this analysis remains pending.

## MINIMUM WAGES AND THE AFFORDABLE CARE ACT

We constructed several scenarios are constructed to illustrate the potential impact of minimum wage increases on disposable incomes and access to subsidies under the Affordable Care Act. Although not comprehensive, we find that an increase in wages generally results in rising disposable income after accounting for the costs of health insurance. However, it is possible that those on the brink of subsidy loss may be adversely affected by such a wage increase as they are pushed beyond the threshold for access to subsidies resulting in lower net disposable income.

- Ultimately, in terms of health insurance, many will gain from this policy, and some may be marginalized.


## INTRODUCTION

0n May 19th, 2015, after months of consideration, discussion and public hearings-eight months and 18 days after the Labor Day announcement of Mayor Garcetti to pursue an increase in the citywide minimum wage to $\$ 13.25$ per hour-the LA City Council voted to draft an ordinance raising the minimum wage in a number of steps beginning in July 2016 to reach $\$ 13.25$ by 7/1/2018 and $\$ 15.00$ by $7 / 1 / 2020$, settling on a schedule that went beyond Garcetti's original proposal.

The Los Angeles County Board of Supervisors, representing the unincorporated areas of Los Angeles County, is considering adopting a policy congruent with the City, and has asked the Los Angeles County Economic Development Corporation (LAEDC) to study the issue and report its findings in a number of areas, including:

- A review and assessment of the four studies prepared to evaluate an early incarnation of the City's proposal
- How the findings of these studies, if valid, might relate to the unincorporated areas, especially:
o Impacts on employees, business, non-profits
o Movement of jobs and workers across boundaries
- The fiscal impact of the proposed policy on the County budget
- An analysis of the potential fiscal impact if County vendors are required to adhere to the proposed policy
- Discussion of the impacts of wage increases on those covered by Affordable Care Act (ACA)

This report is submitted by the LAEDC Institute for Applied Economics in response to the Board's request. It has been prepared in three parts:

Part 1 addresses the Board's interest in reviewing and assessing current literature on minimum wage policy and, in particular, the research and analysis provided to the Los Angeles City Council and Mayor's office. We begin with a discussion of the possible responses by employees, employers and the economy itself to an increase in the mandated minimum wage, and how each of the four studies arrives at their conclusions. In this section, we also assess the validity of the findings of these studies within the larger scope of the County and its attendant cross border impacts, and provide some thoughts on policy options that have been considered.

Part 2 examines the impact of the proposed policy on the County budget if it is adopted for unincorporated areas of the County. This section provides an estimate of the potential increase in labor costs for the County based on its own direct employees. Also included is a preliminary discussion of the potential impact on County vendors who might be subject to the ordinance, although the analysis of these contracts had not yet been conducted at the time of the submittal of this report.

Part 3 provides a brief theoretical discussion of how raising the wages of particular individuals might impact their premiums and subsidy support under the Affordable Care Act. Several scenarios are constructed to illustrate the potential impact of minimum wage increases on disposable incomes and access to subsidies.

It should be noted that the analysis contained in this report is based on a schedule of minimum wage increases that was considered during the summer of 2014. This envisioned a number of incremental increases beginning in 2015 reaching $\$ 13.25$ on July 1, 2017 and $\$ 15.25$ on July 1, 2019. While this departs from the final ordinance approved by the City of Los Angeles, the overall findings remain applicable.

Appendices provide details of the survey of businesses reported in Part 1 and a list of literature consulted during research for this report.

## PART 1: MINIMUM WAGE ANALYSIS

A$s$ the City of Los Angeles was reviewing the various minimum wage proposals, several consultants were retained to provide economic analysis and opinion of the expected net impacts of an increase in the minimum wage on the residents, workers and economy of Los Angeles City. The proposed policy envisioned an increase in steps reaching $\$ 13.25$ in 2017. Other proposals suggested further annual increases reaching $\$ 15.25$ by 2019 . The policy that was finally recommended by the Economic Development Committee at its meeting on May 19, 2015 was slightly different - to become effective one year later, reaching $\$ 15.00$ per hour in 2020, and allowing an additional year at each step for firms with 25 or fewer employees:

| TABLE 1-1 <br> Final Proposed Minimum Wage Schedule for the City of Los Angeles |  |  |  |
| :--- | ---: | ---: | :---: |
| Effective Date | Firms with more than <br> 25 employees | Firms with 25 or <br> fewer employees |  |
| July 1, 2016 | $\$ 10.50$ |  |  |
| July 1, 2017 | $\$ 12.00$ | $\$ 10.50$ |  |
| July 1, 2018 | $\$ 13.25$ | $\$ 12.00$ |  |
| July 1, 2019 | $\$ 14.25$ | $\$ 13.25$ |  |
| July 1, 2020 | $\$ 15.00$ | $\$ 14.25$ |  |
| July 1, 2021 | Annual increases based on CPI <br> July 1, 2022 and each July 1 <br> thereafter $\mathbf{l}$ |  |  |

Initially, in preparation for the Mayor's Labor Day announcement, the Mayor chose a team of researchers from the Institute for Research on Labor and Employment at the University of California (UC) Berkeley and the UC Berkeley Labor Center to study his proposed policy and comment on expected impacts (prospective study). This original report is referenced as "Berkeley-IRLE-1" in the discussion that follows.

Once announced, and upon the request of Los Angeles City Council members to undertake additional study of the issue, the City retained the services of the same research team to provide a more comprehensive report. This report is referenced as "Berkeley-IRLE-2."

Two additional teams were retained by third parties and submitted reports for consideration:

- Beacon Economics, a Los Angeles-based economic research and consulting firm, was retained by the Los Angeles Area Chamber of Commerce. Hereinafter, their study is labeled "Beacon."
- The Economic Roundtable, a Los Angeles-based nonprofit public policy research organization, in conjunction with researchers from the Institute for Research on Labor and Employment at the University of California Los Angeles (UCLA) and the UCLA Labor Center, was retained by the Los Angeles County Federation of Labor AFL-CIO. Hereinafter, the study produced by this team is labeled "ERT-UCLA-IRLE."

Each of these reports is discussed in the context of theory suggesting potential effects of minimum wage policy, and with reference to the study's data, methodology and underlying assumptions.

In addition to the four studies, the LAEDC commissioned an independently-conducted survey of businesses in Los Angeles County. This survey was fielded during the week of April 13, 2015 and asked respondents to assess how they expected to respond to the proposed policy. The data is to a maximum sampling error of $+/-3.2$ percent, and results are statistically significant at a 95 percent confidence level. Details of the survey are provided in Appendix A.

In reviewing the studies, we have also surveyed much of the current literature on the subject, in particular the research since the early 1990s which is commonly referred to as "new minimum wage research." Most of the citations listed by each study were consulted, and two authoritative compendium volumes were read. Additionally, numerous articles published in the popular press and by private entities were included in our scan of the literature. A partial listing of the literature reviewed is given in Appendix B.

Results from the four studies lie on a continuum of economic impacts from the very positive to the very negative:

- Berkeley-IRLE-1 and Berkeley-IRLE-2 find that all minimum wage workers will benefit from increased earnings. There may be some job losses because price increases will dampen some demand, but while City job impacts will be marginally negative, overall the regional impact will be positive because increased spending will more than offset any possible reduced demand.
- Beacon finds that while there will be an increase in earnings and a stimulative effect on the City, over time there will be job losses (reduction in job growth) and a loss of activity as businesses reduce future hiring and/or relocate and/or cease operations.
- ERT-UCLA-IRLE finds that not only will all minimum wage workers benefit from increased earnings, but the stimulus to the economy will create many new jobs.

None of the teams directly address impacts on alleviating poverty or reducing income inequality-the stated motivations of the policy.

How can these studies have concluded such different impacts? How are policymakers to make an informed decision when the forecasted outcomes are so divergent?

The complex interplay between workers and the organizations that hire them, both facing a competitive global marketplace, and each constituency's responses to mandated wages amid other regulations deserves careful examination. The ambiguity of definitive outcomes has provided much fodder for economic analysis, becoming one of the most studied and examined policy issues of our time. The difficulty of reading and interpreting results and then attributing them specifically and only to particular
responses is much challenged. The economic models used in empirical research have changed over time (and differ among geographies) as methods have improved and as new and richer data sources become available. And with new government-led policy experiments arising across the nation and globe, the study of minimum wage policy has only intensified.

What can be said with some certainty is that increasing the minimum wage will increase the hourly payroll rate paid to employees who are affected. What happens next as a result is more uncertain, and depends on the responses of employers, employees and non-working job seekers and how these in turn generate downstream impacts.

In what follows, we summarize the most commonly predicted responses by employees and by employers to minimum wage increases, and how these predicted responses aggregate to an overall impact on the economy. We summarize how each study approaches each of these responses and their conclusions based on their approaches. We follow this with our assessment of the studies, and how these findings relate to the potential impacts at the County level.

First, though, it is important to think about how many workers in Los Angeles earn less than the proposed minimum wage of $\$ 13.25$.

## WHICH WORKERS WILL THE POLICY IMMEDIATELY IMPACT?

It is clear that a large slice of workers will be potentially impacted. This is likely because the first step reported on of the proposed increase $(\$ 13.25)$ is almost 150 percent of the current minimum wage, which will reach much higher up the wage scale and encompass a larger share of workers than, say, the initial expected step of $\$ 10$ —the statewide minimum which will become effective January 1, 2016.

The three teams use different approaches and data sources (and growth estimates) to estimate the proportion of the workforce that would be impacted since actual data on jobs that pay minimum wages at the City level are not directly available:

- Berkeley-IRLE-1 estimates (in its mid-range estimate) that by 2017, 36.9 percent of all workers in the City (567,000 workers) would be affected. (This estimate includes ripple effects, which are discussed below.) Berkeley-IRLE-2 refines this estimate somewhat to 37.8 percent ( 542,000 ; also including ripple effects) in 2017 and 609,000 in 2019.
- Estimates are provided in Beacon for some characteristics, but it appears that the percentages are based on Los Angeles County data and not isolated to the workers in the City of Los Angeles. (These may not be materially different.) Beacon states (on page 4 ) that 25 percent of the workforce would be affected in 2017, while its exhibit on page 20 suggests that number to be 29 percent. (These estimates do not include ripple effects.)
- ERT-UCLA-IRLE estimates that 35 percent of all jobs (or 632,138 workers) would be affected in 2017, and 39 percent of all jobs (723,426 workers) in 2019. These estimates are larger than either Berkeley-IRLE study, possibly because Berkeley-IRLE takes into account the pending increase in the statewide minimum wage from $\$ 9.00$ to $\$ 10.00$ in 2016 and provides its increment based on that stepped-up wage. It is also not clear that ERT-UCLA-IRLE excluded government workers from its sample (which would not be impacted by the ordinance).

Whichever estimate is closest, the proportion of the workforce that will be subject to the minimum wage policy is clearly significant.

There is broad agreement as well about the characteristics of the workers that are likely to be affected. According to Berkeley-IRLE-1, almost 97 percent are adult workers with a median age of 33 years, and 16.1 percent have a family income less than the current federal poverty limit (again, these estimates are somewhat refined in Berkeley-IRLE-2).

The age variable deviates markedly from the common belief that minimum wages are typically paid to teenagers. This could be a consequence of the higher premium being considered over the current minimum wage, but it could also be a consequence of the higher proportion of all workers in Los Angeles County that are minimum wage workers. We compare City-level and County characteristics with national averages below.

In Beacon, it is estimated that 9.4 percent of all affected workers are under age 21, a proportion which is not directly comparable to the Berkeley-IRLE-1 estimates since Beacon's age category includes 20 year-
olds. ERT-UCLA-IRLE does not provide demographic characteristics of all affected workers, instead providing selected characteristics of specific wage categories of jobs.

The proportion of affected workers that are teens may be an important statistic because much of the literature investigating the employment impacts of minimum wage policies examines teen workers (often used as a proxy for the least skilled). In the samples we are reviewing, however, teen workers are not representative of the affected workforce.

Industries that employ higher proportions of minimum wage workers are most likely to be most impacted. There is agreement among the studies that these include food services, personal services, administrative and waste management, retail trade, accommodation, social assistance and child day care services and personal services.

| TABLE 1-2 <br> Estimates of number and selected characteristics of affected workers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Berkeley-IRLE-1 } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { Berkeley-IRLE-2 } \\ 2017 \text { / } 2019 \end{gathered}$ | $\begin{gathered} \text { Beacon } \\ 2017 \end{gathered}$ | ERT-UCLA-IRLE $2017 / 2019$ |
| Estimated percentage of workforce (includes government or not?) | $36.9 \%$ <br> (includes ripple effect) | $\begin{aligned} & 31.1 \% ~ / ~ 34.6 \% ; \text { and } \\ & 37.8 \% / 41.3 \% \\ & \text { with ripple effect } \end{aligned}$ | $25 \%$ in narrative on p 4 , but 29\% in Exhibit on p20 | 35\% / 39\% <br> Possibly includes govt |
| Estimated number of workers | 567,000 | 542,000 / 609,000 | 1,038,704 (LA County) | 632,138 / 723,426 |
| Average increase in pay | Annual increase 21.4\% $\$ 1.89$ per hour | $\begin{gathered} 20.4 \% / 30.2 \% \\ \$ 1.82 / \$ 2.73 \text { per hour } \end{gathered}$ | Not quantified | Not quantified |
| Percentage of affected workers: |  |  |  |  |
| Teens | 3.2\% (ages 18-19) | 3.3 / 3.1 (ages 16-19) | 9.4 (ages 16-20) | Not isolated |
| Median age | 33 | $33 / 33$ | $30 \%$ are less than 26 | Not isolated |
| Less than HS | 27.8\% | 28.6\% / 27.8\% | 30.7\% | Not reported |
| HS only | 26.0\% | 26.5\% / 26.5\% | 27.1\% | Not reported |
| Full time workers | 67.4\% | 68.9\% / 70.2\% | 65.2\% | 59.3\% / 59.2\% (derived from Exhibit 3.6) |
| Below poverty (FPL) | 16.1\% | 16.6\% / 15.4\% | Not reported | Not reported |
| 1-2X poverty (FPL) | 35.3\% | 36.7\% / 35.6\% | Not reported | Not reported |
| Share of family income | 51.0\% | 51.9\% / 52.7\% | 38.2\% |  |

## WHAT THE LAEDC SURVEY REVEALS

The LAEDC survey was administered to randomly-selected businesses in the Los Angeles region, soliciting employers' opinions as to how they would respond to the proposed minimum wage increases. Completed responses numbered 1,000. To learn about the extent of coverage of the proposed policy, several questions were asked of employers about their current workforce.

QUESTIONS 1-3:
Do you currently have minimum wage workers?


Results derived from the number of employers answering "no" to the three survey questions. Sampling error +/- 3.2\%.

QUESTION 1: If you have minimum wage workers ... What percentage of your current workforce is paid the current minimum wage?


The mean response of those who currently have minimum wage workers was 17.9 percent. Sampling error +/- 3.2\%.

QUESTION 4: Of your minimum wage workers ... What percentage are full-time workers?


The mean response of those who currently have minimum wage workers was 70.5 percent. Sampling error +/- 3.2\%.

## WHAT THIS TELLS US:

Approximately 64 percent of all employers will be impacted by the minimum wage of $\$ 13.25$, and 79 percent will be impacted by the policy at its highest proposed minimum wage.

How these responses differ by company size is discussed below.

## WHAT THIS TELLS US:

Of employers who report having minimum wage employees, almost half say these employees account for ten percent or less of their workforce.

A small number of employers report that half of their workforce is minimum wage workers.

The overall mean response of these employers was 17.9 percent.

## WHAT THIS TELLS US:

Of employers who report having minimum wage employees, most of these workers are full-time employees.

The overall mean response of these employers was 70.5 percent.

QUESTION 6: Of your minimum wage workers ... What percentage are teenagers?


The mean response of those who currently have minimum wage workers was 3.4 percent. Sampling error + /- $3.2 \%$.

## WHAT THIS TELLS US:

Of employers who report having minimum wage employees, few hire teenaged workers.

The overall mean response of these employers was 3.4 percent.

Although we asked about seasonal and temp employees, even fewer employers report hiring these individuals at minimum wages, with a mean response of 1.9 percent.

The survey responses confirm some of the estimates and findings of the data analysis of the studies regarding the affected workforce. First, the minimum wage policy is more likely to impact full-time, adult workers. Second, minimum wage workers really do not account for a large percentage of most firms' workforces. The responses differ by company size. Still, by 2019 (or when the $\$ 15.25$ wage level is implemented), almost 80 percent of employers in Los Angeles County will be impacted.

## EMPLOYEE REPONSES

## WHAT THEORY SUGGESTS

Unambiguously, employed workers who are currently earning less than the mandated minimum wage (at each step) and who retain their positions will clearly receive a higher hourly rate for their work.

Estimation of the increase in hourly wage rates, the number of affected workers, and so on (if one was to assume that existing employment conditions and composition were to remain fixed and no other adjustments were made in the economy) involves for the most part basic arithmetic calculations. These have been estimated by the studies as noted above.

However, as with any regulatory change, this policy will induce responses from all economic actors in the region-including motivating changes in employee and worker behavior that may have secondary effects. These include: working more productively to "earn" the higher wage; inducing non-working residents to join the labor market; and allowing existing or new employees to accept wages below the new minimum in exchange for informal employment when formal employment is not available. To the extent that these responses occur, they may affect the overall effectiveness of the proposed minimum wage policy. These are discussed here, and how they are addressed by each of the studies is summarized.

## Improving productivity:

The literature related to the expected response of employees to an increase in the minimum wage is quite extensive as it is related to other widely-studied policies influencing work incentives, such as welfare reform and the Earned Income Tax Credit. The theory of efficiency wages offers guidance on how employees might respond to increased wages. This theory holds that the productivity of workers is dependent on their wages, and paying employees a wage higher than the market rate will induce higher levels of productivity (or, equivalently, less shirking). This increase in productivity raises the value of the employee. Alternatively, reducing pay will impact morale and increase turnover and hence increase labor costs. Both shirking and turnover represent costs to employers. While here it is a mandated increase in wages rather than an employer making a conscious decision to pay wages that are higher than market-clearing wages, the expected employee response would be similar. Workers who are paid more than their market-clearing wage may feel more valued at work, be more productive and be less likely to quit.

## Increasing job search incentives:

A second response is related not only to current employees but to others outside the current labor market. The prospect of higher wages may heighten the incentive to work for individuals that had not previously been in the labor force (because of school commitments, childcare, geographic remoteness or other cost-benefit calculations). It may also draw additional labor force participants from outside the region that would be able to offset increased commuting costs with higher pay levels.

## Increasing incentives to accept subminimum wages:

A third (although indirect) response might be seen in currently unemployed workers that are having difficulty finding employment at the new minimum wage, perhaps because their productivity level is less
than desired. Such workers may be willing to engage in informal labor at wages below the mandated minimum. A variant of this would be an increase in unpaid labor such as interning.

## - Voluntarily reducing labor supply to retain means-tested benefits:

Eligibility for many government-paid benefits, such as CaIWORKs, CalFresh, EITC, ACA subsidies and so on are based on household income. An increase in household income from earnings may edge some individuals beyond their eligibility thresholds. For some, the loss of or reduction in such benefits may not be offset by their increased income, and as such workers may voluntarily reduce their working hours in order to maintain eligibility.

## WHAT THE STUDIES FIND

All four studies agree that all affected workers will see an increase in hourly wages. Berkeley-IRLE and ERT-UCLA-IRLE assume an increase in employee morale and hence productivity and a decrease in the incentive for employees to quit (and thus lower turnover costs). None of the studies address the possibility that labor supply may be affected. While ERT-UCLA-IRLE discusses informal labor at some length, this is in the context of complementary policies that would decrease informal labor practices.

| TABLE 1-3 <br> Employee responses |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Berkeley-IRLE-1 | Berkeley-IRLE-2 | Beacon | ERT-UCLA-IRLE |
| Workers see increase in <br> pay | Yes | Yes | Yes | Yes |
| Workers improve their <br> morale and job <br> performance | Yes | Yes | Not discussed | Yes |
| Additional workers join <br> the labor force | Not discussed | Not discussed | Not discussed | Not discussed |
| Increase in informal labor | Not discussed | Not discussed | Not discussed | No |
| Voluntary labor supply <br> reduction | Not discussed | Not discussed | Not discussed | Not discussed |

## WHAT THE LAEDC SURVEY REVEALS

The LAEDC survey was not fielded to employees and offers no guidance as to the expected responses of employees to increases in the minimum wage. The single question that might apply (asked of employers about their employees) is the following:

QUESTION 9: What is the likelihood that ...
Your minimum wage workers will be happier at work and probably do a better job because they are being paid more?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.1.

## WHAT THIS TELLS US:

Approximately 72 percent of all respondents believe it is likely that their minimum wage employees will be happier and more productive.

The mean response for small businesses (less than 5 employees) was especially higher at 4.9 (where 5.0 is "very likely.")

Employers of Minimum Wage Workers


Mean responses were 4.4, 3.9 and 4.3, respectively. Sampling error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


Mean responses were 4.9, 3.8, 4.3, 3.8 and 3.7, respectively. Samping error of $+/-7.1 \%$.

## EMPLOYER RESPONSES

## WHAT THEORY SUGGESTS

Equally as certain, employers who currently pay some of their workforce hourly wages below the mandated minimum wage and who continue to employ the same number of workers (and hours) in those positions will face an increase in their payroll costs. In addition to the mandated hourly pay increases, payroll costs such as workers compensation, unemployment insurance, disability insurance and other contingent payroll costs will also increase.

It is also argued that employers are likely to retain an earnings ladder for current workers at pay rates above the minimum, so that workers who are not currently affected will receive an increase, perhaps not proportional to the change in the minimum wage, but enough to maintain a differential from those previously earning lower hourly wages. Pay scale bumps for these additional workers (which are commonly called "spillover" or "ripple" effects) will add to the incremental labor costs facing employers.

Employers and businesses facing increased labor costs will be motivated to respond to minimize the impact (or maximize the benefit) of this change in their cost structure. Potential responses include: reducing employment (either jobs or hours); reducing other payroll-related costs; recouping mandated labor cost increases by reducing wage growth of unaffected employees or reducing other payroll-related costs; replacing affected employees with more productive employees that are better able to "earn" the mandated wage; replacing workers through automation or technological improvements; passing cost increases through to their customers by increasing prices; accepting lower profits and returns to capital; and relocation or closure. These responses are discussed here, and how they are addressed by the four studies is summarized.

## Reducing employment:

In economic theory, when the price of a good in a competitive market rises, the demand for it falls. It is often assumed that this theory can be fully applied to the labor market, but there are many departures from this theory. The labor market may not be competitive, there may be constraints to reducing demand for labor, and there may be more than a single labor market with highly-substitutable labor. Still, it seems likely that employers would respond to higher labor costs by attempting to cut back on employment. The possible means to reduce labor costs include reducing hours of employment, reducing jobs and relying on informal labor.

## Reallocating labor costs across the payroll distribution:

Employers may otherwise attempt to compensate for the increase in payroll costs at the lower levels of the pay scale by reducing pay (or minimizing pay increases) of higher-paid employees, thus maintaining a similar overall labor bill. Employers may also choose to reduce benefits that are not mandated (or restrain growth of such benefits).

## Labor-labor substitution:

If employers reduce hours of existing employees, the loss of this work would have to be compensated by increased productivity of those employees (or others). Existing employees may simply be expected to work harder to produce the same output in fewer hours. If employees are not able to increase their
productivity, they may be replaced by employees that are already more productive. This is especially more likely if, as suggested below, the pool of labor available to employers enlarges due to employee responses.

## - Capital-Iabor substitution:

Over time, employers may invest in labor-saving devices or processes in order to replace higher cost labor with capital. This requires investment and a favorable cost-benefit analysis, but it is certainly conceivable that at some minimum wage level capital-labor substitution will occur. The current balance between labor and capital used in production is based on prevailing prices (i.e., wages and interest rates), and changing relative prices will tip the scales in favor of one or the other.

## Increasing prices:

If labor cost increases cannot be contained, employers may pass these costs on to their customers through increased prices. The evidence is fairly consistent that firms do pass on at least some of their increased costs to consumers. However, the ability of firms to raise prices depends on how reactive their customers are to price increases (the price elasticity of demand for their goods) and the competitive nature of their marketplace. It may be more difficult for firms to raise prices in competitive markets where not all businesses are similarly constrained, such as, for example, where larger companies have more ability to absorb cost increases, in export markets or where competition is with firms in nonimpacted jurisdictions that are in close proximity. As a second order effect, if a firm is able to raise its prices, demand for its output will fall.

## Reducing profits:

Firms that are unable (or unwilling) to contain labor cost increases and unable (or unwilling) to pass cost increases through by increasing prices will necessarily face reductions in operating profits. As profits are typically distributed to owners, reduction in profits will constitute a negative stimulus to the economy, which will offset to some extent the positive stimulus from any increased labor earnings. There is no reason to believe that employers will not maximize profits under the new institutional arrangement using whatever response mechanisms they can deploy, and choosing to tolerate lower returns to capital would be a last-best option.

## Relocation or closure:

Employers that cannot adjust their business models or otherwise reallocate costs and that are at the margin of profitability-or find a more attractive alternative in which to invest their capital-will close. Relocation, a response discussed more fully below, is in effect a closure in the local market and a reopening in another market (evidently a more attractive alternative).

## WHAT THE STUDIES FIND

The research teams come to different conclusions about how employers will respond:

- Berkeley-IRLE assumes that employers will make no effort to reduce employment, and do not engage in labor-labor substitution. (The team does recognize reductions due to demand respond from price increases, as discussed in the following section.) The outcome of these two assumptions is that all currently affected employees will experience increased hourly wages and increased overall earnings. Increased earnings are of course paid by employers, who will experience an increase in labor costs. The Berkeley-IRLE team assumes that firms will enjoy cost
savings as affected workers will be less likely to quit and turnover costs will fall. Any net difference between the cost increases from wage gains and the costs savings from reduced turnover will be entirely passed though to consumers via price increases.
- Beacon makes a different set of assumptions. In its report, it is assumed that firms are constrained in their ability to raise prices because of competition with firms in bordering cities that are not subject to the proposed ordinance. In order to survive, businesses will have to change their operations through employment reductions, or they may choose to relocate to escape the mandated wage increases. Similarly, new firms will be hesitant to locate in the City of Los Angeles if lower cost options are available nearby. Either of these options will result in a slowdown in employment growth and thus a loss of jobs from what has been forecast.
- ERT-UCLA-IRLE make assumptions similar to Berkeley-IRLE regarding employer responses. In their view, employment reductions will not occur, nor will labor-labor substitution, hence all currently affected employees will enjoy increased overall earnings. The ERT-UCLA-IRLE team recognizes that increased labor costs may pressure firms in some industries, but, using a number of metrics, assert that many industries are "resilient" and will accommodate increased coststhough price increases, capital-labor substitution, improved business productivity, and increased demand for their products.

| TABLE 1-4 <br> Employer responses |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Berkeley-IRLE-1 | Berkeley-IRLE-2 | Beacon | ERT-UCLA-IRLE |
| Labor costs increase | Yes, quantified as \% <br> increase in operating <br> costs | Yes, quantified as \% <br> increase in operating <br> costs | Yes, quantified as \% of <br> revenue | Yes, but not estimated |
| Ripple effects | Yes, estimated | Yes, estimated |  |  |
| Raise prices | Yes, in some industries <br> (restaurants and retail <br> estimated) | Yes, estimated | Possibly, but limited ability <br> to do so | Possibly, but not <br> estimated |
| Reduce profits | Possible | Yes, but not estimated | Yes, but not estimated |  |
| Reduce employment <br> (hours or positions or <br> growth of these) | No, except restaurants <br> and apparel <br> manufacturing | No, not as a response |  |  |
| from wage increases | Yes, estimated re: growth | Possibly, for industries <br> with higher \% of <br> revenues paid in labor <br> income |  |  |
| Reduce non-payroll costs | Not discussed | Not discussed | Yes, but not quantified | Possibly, for industries <br> with low levels of <br> profit/workers |
| Capital substitution | Not discussed | Not discussed | Yes, but not quantified | Possibly |
| Labor substitution | Not discussed | Not discussed | Not discussed | Not discussed |
| Relocation | No, except possibly <br> apparel manufacturing | Yes, but not quantified |  |  |

All teams agree that the industries that would be most impacted by cost increases are those that employ a larger proportion of minimum wage workers, such as food services, apparel manufacturing, health care and social assistance, retail industries and administrative services.

## WHAT THE LAEDC SURVEY REVEALS

Fifteen questions asked respondents to rate the likelihood of a particular response. Of these, nine addressed immediate responses within their own companies.

QUESTION 8: If you will be subject to the ordinance ... What will happen to your overall labor costs?


No employer anticipates a fall in labor costs.

## WHAT THIS TELLS US:

Employers understand that if they are subject to the ordinance and they have minimum wage employees, their labor costs will undeniably rise.

Still, 40 percent of employers who believe they are not subject to the ordinance expect their labor costs to rise. Also, 57 percent of employers with no minimum wage employees expect their labor costs to rise.

These findings suggest a border effect, or an expectation of ripple effects-or simply an expectation of general cost increases.

QUESTION 11: What is the likelihood that ... You will reduce the number of your existing minimum wage employees?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 2.3.

## WHAT THIS TELLS US:

Overall, employers are unlikely to reduce their minimum wage staffing numbers. A full 59 percent say this is not likely, and only 6 percent consider it somewhat likely.

Employers with current minimum wage employees suggest it is somewhat more likely that they will cut back on staffing, with 19 percent considering it somewhat likely.

Eleven percent of businesses with fewer than 5 employees say they are also more likely to reduce their number of employees.

## Employers of Minimum Wage Workers



Mean responses were 2.8, 2.1 and 2.0, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


[^0]QUESTION 12: What is the likelihood that ...
You will reduce the hours of your existing minimum wage employees?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 1.9.

## Employers of Minimum Wage Workers

## WHAT THIS TELLS US:

Almost three-quarters (71 percent) of employers do not think it likely that they will cut the hours of their minimum wage workers. Only 2 percent think this is at all likely.

Employers of minimum wage workers are somewhat more likely to reduce the hours of their current minimum wage workers, with 7 percent of these employers saying they would be somewhat likely to do so.

This is also more likely for small businesses and employers in the arts and entertainment industry (mean response of 3.0).


Mean responses were $2.3,1.8$ and 1.8, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


Mean responses were 2.1, 2.0, 1.9, 1.8 and 1.9, respectively. Samping error of $+/-7.1 \%$.

QUESTION 13: What is the likelihood that...
You will require current employees to take on


## WHAT THIS TELLS US:

Approximately 45 percent of respondents will expect their employees to work a bit harder, while 55 percent are undecided.

Employers in the health care and social assistance industry are especially likely to expect increased productivity (with a mean response of 4.9).

On a scale of 1 to 5 , with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 3.6.

## Employers of Minimum Wage Workers



Mean responses were 3.6, 3.6 and 3.5, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


[^1]QUESTION 14: What is the likelihood that ... You will invest in labor-saving or labor-replacing devices or processes?


On a scale of 1 to 5 , with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 2.1.

## WHAT THIS TELLS US:

This response speaks to firms' capitallabor substitution response.

Seventy-two percent of respondents do not think this option is likely. Only 2 percent think it is somewhat likely.

Employers with current minimum wage workers are more undecided about the likelihood of substituting capital for labor than all other employers.

## Employers of Minimum Wage Workers



Mean responses were 2.3, 2.0 and 1.9, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


Mean responses were 2.1, 2.1, 2.1, 2.0 and 2.0, respectively. Samping error of $+/-7.1 \%$.

QUESTION 15: What is the likelihood that ...
Your costs of employee turnover will decrease because employees will be less likely to quit?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.1.

WHAT THIS TELLS US:

About two-thirds of respondents (66 percent) think it likely they will save in turnover costs because their employees are likely to stay put. This holds for those with or without minimum wage employees, but smaller businesses are more likely to expect this.

This is more likely for employers in professional, scientific and technical services (mean response of 4.4).

Employers of Minimum Wage Workers


Mean responses were 4.2, 4.1 and 4.2, respectively. Sampling error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


Mean responses were 4.2, 4.3, 4.1, 4.0 and 4.1, respectively. Samping error of $+/-7.1 \%$.

QUESTION 16: What is the likelihood that ...
You will ask your customers to pay more for your goods or services to cover your increased labor costs?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.0.

## WHAT THIS TELLS US:

Almost 62 percent of respondents are likely to set their prices higher, while 37 percent are undecided.

Almost all respondents with current minimum wage employees (96 percent) say they are likely to pass on their increased labor costs to their customers (mean response of 4.4).

Almost all respondents in the laborintensive professional, scientific and technical services expect to raise their rates (mean response of 5.0).

Employers of Minimum Wage Employees


Mean responses were 4.4, 3.8 and 3.8, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


Mean responses were 4.1, 4.1, 4.1, 3.9 and 3.9, respectively. Samping error of $+/-7.1 \%$.

QUESTION 17: What is the likelihood that ...
Your profits will increase?


## WHAT THIS TELLS US:

A super-majority (87 percent) of businesses say that it is unlikely that their profits will increase.

These responses are consistent across employers whether they are subject to the ordinance or not and whether they currently have minimum wage workers or not.

On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 1.6.

## Employers of Minimum Wage Workers



Mean responses were 1.5, 1.7 and 1.8, respectively. Sampling error of $+/-5.8 \%$.

QUESTION 167: NEEDS DATA


Mean responses were 1.6, 1.6, 1.6, 1.7 and 1.7, respectively. Samping error of $+/-7.1 \%$.


QUESTION 19: What is the likelihood that ...
You will have to close your business?

On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 1.3.

## WHAT THIS TELLS US:

Employers do not expect to go out of business.

There was no difference in responses among those with minimum wage workers and those without such employees, or among those that may or may not be subject to the ordinance.

All large companies (those with more than 500 employees) responded that this is not at all likely.

## Employers of Minimum Wage Workers



Mean responses were 1.4, 1.3 and 1.3, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


The survey responses confirm many of the expected strategies that employers will engage in once they are required to pay higher minimum wages. None of the surveyed employers expect their labor costs to decline, and many of those that do not believe they will be required to pay higher wages expect they will have to. Employers appear reluctant to replace current minimum wage employees or cut their hours, but they will make their current worker work harder to "earn" their higher pay levels. Many employers expect to pass their cost increases on to their customers, and although few expect their profits to increase, there is little expectation of going out of business.

Other potential strategies are surveyed below.

## AGGREGATE ECONOMIC RESPONSE

## WHAT THEORY SUGGESTS

As we have discussed above, the responses of employees and employers will impact overall economic conditions-often in opposite directions. For example, workers with higher wages can produce a stimulative effect if the aggregate of all workers have more income to spend. At the same time, if employers cut hours or jobs, then workers will have less income, offsetting the stimulative effect. Employers themselves, having to pay higher labor costs, may reduce their own regional purchases, also dampening any stimulative effect. The net effect on the economy is the result of adding up both sides of the ledger and comparing which side is larger. It is also worthwhile to remember that the overall net effect may hide negative impacts on some classes of workers or businesses, and positive impacts on other classes of workers or businesses.

We summarize how individual responses can be offset by others:

- Workers who have been paid minimum wages will be paid higher wages than prior to implementation
- The increased earnings of these workers may produce a stimulative impact on the economy unless:
o Their hours, jobs or non-payroll earnings are cut back such that overall earnings fall
o They are replaced by other (more productive) workers who had been earning those higher wages already
o Employers reduce their local spending
- Employers will face higher costs
- They may adjust operations and experience cost savings
o This might reduce employment or labor earnings to those affected
- They may pass increased costs through to customers by increasing prices - unless:
o Their current competitive landscape makes this difficult
- In any event, price increases will dampen any potential stimulative impact on the economy and:
o May disproportionately impact low-wage workers if the industries that are able to increase prices are those that are mostly frequented by low-wage workers

The potential transfer of funds from owners to employees may reduce inequality (all other things being equal) - unless:

- The firms most affected are those with local owners whose spending patterns are similar to those of their employees

The increase in earnings may decrease poverty - unless:

- Workers who experience an increase in wages were not members of families in poverty
- Those in poverty are not in the labor force or do not work
- Workers in poverty are replaced (i.e., lose their jobs)
- Workers in poverty lose access to government benefits which offsets their potential increase in earnings
- Families in poverty now face higher prices for goods they typically purchase


## WHAT THE STUDIES FIND

The research teams come to different conclusions on the net effects on the economy, which, again, are the result of their assumptions:

- Berkeley-IRLE assumes that employers will not reduce employment due to wage increases, and will not engage in labor-labor substitution. The outcome of these two assumptions is that all affected employees will experience higher hourly wages and higher overall earnings. Earnings are spent in the local economy, creating a stimulus effect. At the same time, employers will experience an increase in labor costs. After some cost-savings from reduced turnover, the remainder will be entirely passed through to consumers via price increases. Price increases will reduce demand for their products, offsetting to some extent the stimulus effect of the local spending of increased earnings, yet there will be an overall increase in activity at the County level and attendant job creation. According to Berkeley-IRLE, the overall net increase in earnings at the City level will be $\$ 1.4$ billion in 2017 and $\$ 2.4$ billion in 2019, with overall job growth.
- Beacon concludes that firms will face increased labor costs and will be unable to pass them on to consumers. Cost increases make the region an unattractive alternative to firms wishing to locate in the region or expand operations. Either of these options will result in a slowdown in employment growth and thus a loss of jobs of between 73,000 and 140,000 over five years from what has been forecast. Still, Beacon does predict that affected workers will enjoy increased earnings and generate a stimulus effect in the City (generating tax revenues).
- ERT-UCLA-IRLE make assumptions similar to Berkeley-IRLE regarding employer responses. In their view, all currently affected employees will enjoy increased overall earnings, generating a stimulative effect and causing net job creation of almost 30,000 in 2017 and 46,400 by 2019. Firms will recoup their increased costs through increased sales without any offsetting reduced demand due to price increases.

None of the teams directly address impacts on poverty or inequality.

| TABLE 1-5 <br> Net Aggregate Economic Effects |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Berkeley-IRLE-1 } \\ 2017 \end{gathered}$ | $\begin{gathered} \hline \text { Berkeley-IRLE-2 } \\ 2017 \text { / } 2019 \end{gathered}$ | $\begin{gathered} \text { Beacon } \\ 2017 \end{gathered}$ | $\begin{gathered} \hline \text { ERT-UCLA-IRLE } \\ 2017 / 2019 \end{gathered}$ |
| Increased aggregate earnings | $\$ 1.831$ billion (includes ripple) | $\$ 1.832$ bi / \$3.256 bi (includes ripple) | Not isolated | \$3.768 bi / \$5.900 bi |
| Reduced demand due to higher prices |  | Yes | Not discussed | No |
| Net increased aggregate earnings |  | $\$ 1.361$ bi / $\$ 2.381$ bi (net) of reduced public assistance and loss of worker income from reduced demand Without multiplier impacts | $\$ 4.4$ billion with multiplier impacts | $\$ 4.1$ billion / $\$ 6.5$ billion with multiplier impacts |
| Increased City tax revenues | Not estimated | \$2.64 million / \$4.74 million | \$23 million | Not isolated |
| Compositional changes of MW workers | Not discussed | Not discussed | Not discussed | Not discussed |
| Employment change | None reported | $\begin{gathered} \text { LA City: }-1,552 \text { / }-3,472 \\ \text { LAC: } 3,666 / 5,262 \end{gathered}$ | LA City: Between -73,000 and -140,000 over five years | $\begin{aligned} & 29,635 / 46,400 \\ & \text { (LA City and LAC } \\ & \text { together) } \end{aligned}$ |
| Decrease in poverty |  |  |  | By assumption |
| Decrease in inequality |  |  |  | By assumption |

## WHAT THE LAEDC SURVEY REVEALS

As the survey questions employers on their potential responses, it does not address overall impacts. However, one question provides insight into the stimulative expectation of minimum wage increases.

QUESTION 10: What is the likelihood that ...
You will sell more goods or services because your customers will now have more pay?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 3.3.

## WHAT THIS TELLS US:

More than a third (35 percent) of businesses believes it is likely that increased earnings of minimum wage employees will provide a stimulus to their firms.

Current minimum wage employers felt more optimistic about this possibility (mean response of 3.5).

Still, 65 percent are unsure or undecided. This is especially true for employers in the accommodation and food services industry, with a mean response of 2.7.

Employers of Minimum Wage Workers


Mean responses were 3.5, 3.3 and 3.1, respectively. Sampling error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


Mean responses were 3.4, 3.4, 3.4, 3.1 and 3.2, respectively. Samping error of $+/-7.1 \%$.

## LAEDC'S ASSESSMENT

## OUR READING OF THE EVIDENCE REGARDING THE IMPACT OF MINIMUM WAGE POLICIES

Our reading of the evidence regarding the minimum wage policy provides the basis for our assessment of the studies. In our review, we have surveyed much of the current new minimum wage research. Most of the citations listed by each study were consulted, and two authoritative compendium volumes were read. Additionally, numerous articles published in the popular press and by private entities were included in our scan of the literature. A partial listing of the literature reviewed is given in Appendix B.

It must be noted at the outset that all four reports take a static and short-term approach to considering the impacts of the policies. For example, in spite of accounting for employment growth in the interim, they assume that today the policy is not in effect, and at a single date in the future, the policy takes effect with no intervening response or advance adjustment. Similarly, they assume that all initial response adjustments are fixed and unchanging, and no longer term adjustments occur. Only one team (Beacon) addresses employment growth and longer term business responses.

Further, the reports give very little attention to the geographic complexity of the County and its 89 individual jurisdictions as it relates to employer responses. Here we assess the findings of these reports with an eye on regional dynamics, considering how both time and geography will impact the responses of the various economic agents. We find that the combination of longer time horizons and interregional impacts can lead to quite a difference in conclusions.

## REGIONAL DYNAMICS

Our motivation to consider regional dynamic responses arises not only from our reading of current literature but from the responses to our survey questions. With respondents aware of the proposed timeline of mandated wage increases, they were asked what they expected their horizons to be for responding to the wage changes.

QUESTION 24:
When will any changes you do decide to make occur?


Employers of Minimum Wage Workers


Mean responses were 3.3, 3.3 and 3.3, respectively. Samping error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


[^2]Knowing that some responses will occur over a longer horizon is supported by literature showing that longer term responses will be more impactful. Such impacts include, among other results, larger disemployment responses, labor-labor substitution, capital-labor substitution and slower business and employment growth.

In addition to time horizons, the question of the how employees and employers are likely to respond to policy changes in neighboring cities has not been addressed in much detail, other than trying to isolate the impacts of the policy on the City of Los Angeles by noting that many jobs in the City are held by outside residents.

While the research teams were tasked with estimating the impacts of the proposed policy only on the City of Los Angeles and not on the broader regional economy, it is nevertheless quite limiting not to consider the regional economy and how cross border effects of both employees and employers would impact the expected effects within the borders of the City of Los Angeles. With only a politically-defined line between them, the 89 separate jurisdictions in Los Angeles County are virtually indistinguishable to workers and firms alike. Firms will be competing across unnoticed borders for workers and customers, and employees will be competing for jobs across imaginary lines.

Beacon notes that there may be business flight, or at least slower business growth or job creation in the City of Los Angeles compared to other lower-cost neighboring cities, while Berkeley-IRLE-2 states that business location decisions are more likely to be based on real estate conditions than on labor markets and concludes that therefore this is not a considering factor.

Here we turn to several responses that cannot be viewed in narrow geographic or time dimensions but need a wider understanding.

## REGIONAL DYNAMICS

## - Labor responses:

First, given the geographic proximity of many other cities that are not adopting similar wage increases, one can expect that there will be a labor supply response, as discussed above, since higher wages may heighten the incentive to work for individuals that had not previously been in the labor force (because of school commitments, childcare or geographic remoteness) across the region, adding to the local labor supply and generating competition for higher minimum wage jobs between neighboring jurisdictions.

This will leave lesser candidates competing for jobs in other regions, adding to those labor markets and perhaps further depressing wages elsewhere, and increasing unemployment rates of those cohorts. The least qualified minimum wage workers, such as new labor force entrants, teens, ex-offenders and the lower-skilled, will likely have a more difficult time finding employment at the higher minimum wage level.

## - Employer responses:

On the flip side of that market, firms in neighboring jurisdictions will face defections of their bestperforming minimum wage workers and will need to compete in the labor market. While wage differentials are not likely to disappear, wages will rise in bordering cities as a consequence of this competition.

Should firms in neighboring cities raise their minimum wages to compete for better minimum wage labor, they will face similar cost increases to affected employers and will be similarly faced with absorbing cost increases or raising prices (or a combination of both).

While Beacon asserts that firms will be constrained from raising prices because of competition from neighboring cities, and in competitive market theory this idea seems supported, it is also possible that firms in neighboring cities will be forced to raise their own prices to recoup their voluntary wage increases. Even if they are not facing increased costs, it is also possible that unaffected employers will match their prices as a free-riding response and gain a profit edge over their higher cost competitors.

## - Labor-labor substitution:

Still, whatever the net impact, the compositional makeup of minimum wage workers must be addressed and yet was overlooked in all of the studies produced for this discussion. Regional dynamics will enlarge the pool of labor available to employers, allowing employers to be more selective in their employment choice. Given more choice, employers will be more able to replace current (or departing) lower-skilled employees with others who have higher levels of skills or productivity. While employers may well have some loyalty to current employees and these adjustments may not occur immediately, over longer horizons such labor-labor substitutions will become more palatable as employees leave voluntarily.

Hence the assumption of the research teams that all existing employees will remain in their current positions with their current hours and reap a wage increase without employers seeking to maximize productivity of each of these positions or minimize costs is not supportable. This necessarily means that labor-labor substitution (and, in the longer term, capital-labor substitution) will occur, and the very constituency that the minimum wage policy is intended to benefit will be the one to be most negatively impacted-meaning the lower-skilled, less productive individual who is most likely to be at the bottom of the earnings scale and one with the fewest options.

## LONGER TERM

## Relocations and closures:

Firms will weigh costs and benefits in their relocation and closure decisions. Any changes in prices will impact these decisions. Certainly, at some labor price, relocations and closures will occur. Not all businesses can pass their cost increases through to their consumers. Not all businesses will be capable of absorbing remaining cost increases. At the margin, increased costs will impact business profitability and will result in some business failure-independent of future growth of other firms. Whether or not these losses are offset by expected increases, the overall employment trajectory will be reduced and jobs will be lost.

While the costs of relocation may be too high for current firms to consider moving (and this will depend on the business), such costs do not fall on new firms and thus the issue does not speak to the likelihood of firms choosing where to locate in the future-or where to expand operations.

One final thought on the question of relocation: in large unincorporated areas of the County with few settled areas but in proximity to incorporated cities that are not raising minimum wages in their jurisdictions, one option for large employers or large centers of employment that are relatively far removed from the City of Los Angeles and its labor and product markets would be to pursue annexation-joining an adjacent incorporated city and avoiding the new minimum wage mandate if it
was implemented in unincorporated areas. Of course, the plausibility of this option depends on the potential costs to the firm or employment center of adhering to the new mandate versus the costs of organizing and effecting such action. Time is also a factor, as wages may well rise in the targeted destination city either in response to the proposed ordinance or simply over time as labor markets tighten and inflation occurs.

## - Capital-labor substitution:

As noted above, the balance between labor and capital in production is based on prevailing prices, such as wages and interest rates. Changing relative prices will favor using one factor over the other. Both labor and capital has start-up costs, however, as does change in production processes. Over time, such costs are easier to absorb and amortize, and initial investment costs will be less of a barrier. With a longer time horizon, and at some cost of labor, employers will invest in capital to replace labor. Indeed, the story of the 20th century was one of capital-labor substitution in the United States, with capital equipment and automated processes replacing the need for a multitude of positions, including assembly line workers, office workers, drafters, secretaries, accountants, and others. Technological improvements will continue to reach into the occupational distribution of labor and will reach even those that are commonly thought to be irreplaceable, such as food servers, apparel manufacturers, drivers, dogwalkers, personal assistants, and many more. While it is true that capital-labor substitution yields higher productivity and in the long run improves standards of living and incomes, transitions from laborintensive to more capital-intensive production have the potential to dislocate many workers as those that are replaced may not be well-matched in skills and experience to alternate occupations.

## WHAT THE LAEDC SURVEY REVEALS

Many of these above-described expected responses are confirmed by our survey results.

QUESTION 20: What is the likelihood that ... You will increase the minimum wages you pay to match those paid in other cities or regions nearby?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.0.

## WHAT THIS TELLS US:

Almost two-thirds (66 percent) of employers appear ready to increase their minimum wages to match those paid elsewhere. This speaks to the competition employers will face in the labor market.

This held more for those not subject to ordinance (mean response of 4.4).

Employers in retail trade are less likely than the average to match wages (mean response of 3.8).

Employers of Minimum Wage Workers


Mean responses were 4.2, 3.9 and 3.9, respectively. Sampling error of +/- 5.8\%.

By Size of Business (\# of Employees)


Mean responses were 4.1, 4.0, 4.1, 4.0 and 3.8, respectively. Samping error of $+/-7.1 \%$.

QUESTION 21: What is the likelihood that ...
You will increase the minimum wages you pay at least somewhat to compete with those paid elsewhere?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.0.

## WHAT THIS TELLS US:

If not matching wages paid elsewhere, more than two-thirds (69 percent) of employers may be more willing to at least raise their minimum wages somewhat to compete with nearby labor markets.

This was again more true for employers not subject to the ordinance (mean response of 4.4), and for employers in the health care and social assistance industry (mean response of 4.2).

## Employers of Minimum Wage Workers



Mean responses were 4.2, 3.9 and 3.9, respectively. Sampling error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


Mean responses were 4.1, 4.0, 4.2, 4.0 and 3.9, respectively. Samping error of $+/-7.1 \%$.

QUESTION 22: What is the likelihood that ...
You will lose your minimum wage or lower-paid employees to areas that pay higher wages?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.2.

## WHAT THIS TELLS US:

Increasing the wages of their lower-paid employees may be a response to employers' fear of losing employees to high-wage areas. Of all respondents, 77 percent believe that their employees will shop around.

The responses were consistent across employers, including those with or without minimum wage employees or those subject to or not subject to ordinance, and across industries.

## Employers of Minimum Wage Workers



Mean responses were 4.2, 4.3 and 4.2, respectively. Sampling error of $+/-5.8 \%$.

## By Size of Business (\# of Employees)



[^3]QUESTION 23: What is the likelihood that ...
You will raise the price of your goods and services to match those charged in areas that pay higher minimum wages?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 4.0.

## WHAT THIS TELLS US:

More than two-thirds (70 percent) of businesses are expecting to raise their prices to match those paid elsewhere.

Likelihood was higher for accommodation and food services (mean response of 4.4) and lower for retail (mean response of 3.8).

## Employers of Minimum Wage Workers



Mean responses were 4.0, 4.0 and 4.1, respectively. Sampling error of $+/-5.8 \%$.

## By Size of Business (\# of Employees)



Mean responses were 3.9, 4.1, 4.0, 4.1 and 4.0, respectively. Samping error of $+/-7.1 \%$.

QUESTION 18: What is the likelihood that ...
You will move your business to a community with a lower minimum wage?


On a scale of 1 to 5, with 1 being "not at all likely," 3 being "neither likely nor unlikely" and 5 being "very likely," the mean of all responses was 2.0.

## WHAT THIS TELLS US:

While 28 percent do not believe relocation is at all likely, 73 percent of respondents nevertheless think relocation might be possible.

Responses differ very little among respondents, but are least likely for administrative and waste management, arts and entertainment, professional and scientific services, and somewhat more likely for retail industries.

## Employers of Minimum Wage Workers



Mean responses were 1.9, 2.0 and 1.7, respectiively. Sampling error of $+/-5.8 \%$.

By Size of Business (\# of Employees)


Mean responses were 2.0, 1.9, 2.0, 2.0 and 2.0, respectively. Samping error of $+/-7.1 \%$.

## OUR CONCLUSIONS

In our reading of the literature, our review of the existing studies related to the City of Los Angeles, and the results of our survey of businesses in Los Angeles County, lead us to conclude:

- Regardless of which political jurisdiction finally implements the proposed policy (such the City of Los Angeles alone, the unincorporated areas with the City of Los Angeles, or the entire County of Los Angeles), many workers will be immediately impacted:
- Between 30 and 40 percent of the workforce will be subject to wage increases up to $\$ 13.25$
- For the City of Los Angeles, this could impact 450,000 to 600,000 workers
- For the unincorporated area, this could impact 100,000 to 150,000 workers
- If implemented countywide, this could impact 1.2 million to 1.6 million workers
- Employers that have minimum wage employees or employees who will be impacted by future increases may respond using one or more of the following strategies:
- Cutting back on employment (either reducing hours or jobs) or on employment growth
- Substituting the lowest-skilled workers with employees that are more productive, which would primarily affect those most difficult to place and those with the least skills
- Increasing prices
- Absorbing cost increases through reduced profits.
- In the absence of widespread regional implementation, these responses will be accentuated due to the fractured political boundaries of the county
- Smaller firms are more likely to employ minimum wage employees and will be most impacted while having the fewest options for managing cost increases
- Over the long term:
- The relative costs of capital and labor may encourage more automation
- Firms that can no longer compete may relocate (if they are able) or close
- Economy-wide results:
- Many prices will increase, including those that lower-income households commonly face
- Wages will rise for those in minimum wage jobs that are still employed
- Employment opportunities for those at the bottom of the skills ladder will very likely be diminished
- Employment growth may slow
- There will likely be little impact, if any, on poverty in Los Angeles


## FINDINGS IN RELATION TO LOS ANGELES COUNTY

The four studies come to quite different conclusions. If any of these divergent findings are valid, how would the unincorporated areas of Los Angeles County be impacted if a similar policy would be enacted?

The answer depends not only on the findings, but also on the potential differences between the City of Los Angeles and Los Angeles County unincorporated areas regarding employees and businesses, since we would expect the employers and employee responses would be similar regardless of their geography-provided similar conditions, such as multiple political jurisdictions and competing product and labor markets.

We first identify any significant differences in the characteristics of employers and employees.


The unincorporated areas of Los Angeles County, while accounting for a large geographic region currently accounts for less than ten percent of all jobs in the County. The City of Los Angeles accounts for the lion's share of jobs with almost 40 percent of all payroll jobs in the County. The distribution of employment by industry in the three geographies is shown in Table 1-6.

| TABLE 1-6 <br> Distribution of Employment by industry (2013) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | LAC | City of LA | Unincorporated areas of LAC |
| Natural resources | 0.2\% | 0.2\% | 0.5\% |
| Construction | 2.8\% | 2.4\% | 3.7\% |
| Manufacturing | 9.0\% | 6.2\% | 8.1\% |
| Wholesale Trade | 5.3\% | 4.4\% | 4.9\% |
| Retail Trade | 9.9\% | 8.7\% | 9.1\% |
| Transportation and Warehousing | 3.7\% | 3.4\% | 4.6\% |
| Information | 4.8\% | 4.1\% | 1.6\% |
| Financial services | 5.2\% | 5.9\% | 4.1\% |
| Prof and bus services | 8.3\% | 8.8\% | 6.8\% |
| Administrative and Support and Waste Management | 6.3\% | 5.7\% | 6.8\% |
| Educational Services | 2.6\% | 3.1\% | 2.5\% |
| Health Care and Social Assistance | 14.5\% | 14.4\% | 17.4\% |
| Arts, Entertainment, and Recreation | 1.8\% | 1.8\% | 1.2\% |
| Accommodation and Food Services | 8.9\% | 8.9\% | 8.5\% |
| Other Services | 3.4\% | 3.8\% | 3.2\% |
| Government | 12.9\% | 18.1\% | 15.6\% |
| Non-classified | 0.4\% | 0.3\% | 1.5\% |
| TOTAL | 100.0\% | 100.0\% | 100.0\% |
|  |  |  |  |
| TOTAL EMPLOYMENT | 4,074,240 | 1,578,670 | 389,570 |
| Percent of Los Angeles County | 100.0\% | 38.7\% | 9.6\% |

In general, the mix of industries is quite similar between the City of Los Angeles and the unincorporated areas of the County, with a slightly larger proportion of health care and social assistance jobs in the unincorporated areas and a larger proportion of both professional services and government employment.

Table 1-7 provides a picture of smaller employers by industry, showing the proportion of businesses in each industry that has less than 20 employees.

| TABLE 1-7 <br>  <br>  <br> Percentage Share of Industry of Businesses with Less than 20 Employees in Los Angeles County |  |  |  |
| :---: | :--- | ---: | ---: |
| NAICS | Industry Sector Description | County Total | Unincorporated |
| 11 | Agriculture, Forestry, Fishing and Hunting | $99.1 \%$ | $100.0 \%$ |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | $80.8 \%$ | $90.9 \%$ |
| 22 | Utilities | $55.6 \%$ | $57.7 \%$ |
| 23 | Construction | $91.5 \%$ | $91.6 \%$ |
| 31 | Manufacturing | $74.3 \%$ | $70.5 \%$ |
| 42 | Wholesale Trade | $88.8 \%$ | $86.6 \%$ |
| 44 | Retail Trade | $85.7 \%$ | $86.4 \%$ |
| 48 | Transportation and Warehousing | $82.4 \%$ | $87.7 \%$ |
| 51 | Information | $87.9 \%$ | $85.5 \%$ |
| 52 | Finance and Insurance | $89.2 \%$ | $91.2 \%$ |
| 53 | Real Estate and Rental and Leasing | $95.3 \%$ | $96.8 \%$ |
| 54 | Professional, Scientific, and Technical Services | $93.1 \%$ | $94.2 \%$ |
| 55 | Management of Companies and Enterprises | $61.9 \%$ | $61.8 \%$ |
| 56 | Administrative and Support and Waste Management Services | $82.9 \%$ | $84.6 \%$ |
| 61 | Educational Services | $75.0 \%$ | $77.4 \%$ |
| 62 | Health Care and Social Assistance | $88.9 \%$ | $86.2 \%$ |
| 71 | Arts, Entertainment, and Recreation | $94.8 \%$ | $90.9 \%$ |
| 72 | Accommodation and Food Services | $73.7 \%$ | $73.7 \%$ |
| 81 | Other Services (except Public Administration) | $91.8 \%$ | $92.9 \%$ |
|  | Total for all sectors | $87.3 \%$ | $86.3 \%$ |

Overall, these businesses account for 87.3 percent of all establishments in the County and 86.3 percent of all businesses in unincorporated areas. The share by industry between the County and its unincorporated areas are also very similar. Remember that the unincorporated areas account for less than 10 percent of all employment (and approximately 6 percent of all establishments) in the County.

On the employee side, we produce descriptive statistics for all workers in Los Angeles County similar to those estimated by the three research teams to again look for areas where workers might be different. Data are drawn from the outgoing rotation group files of the Current Population Survey (CPS) for August through December 2014 and January through March 2015. The samples are restricted to all workers aged 16 and over. Poverty thresholds are based on federal guidelines for 2014 and are adjusted for family size. We do not isolate the unincorporated areas of the County given its geographic complexity.

Descriptive statistics for all workers in Los Angeles County and in the United States are shown in Table 18. These are compared to those reported in Berkeley-IRLE-2.

|  | TABLE 1-8 |  |  |
| :--- | :---: | :---: | :---: |
|  | Selected Descriptive Statistics of all Workers |  |  |
|  | $2.4 \%$ | All workers in US | All workers in LA City <br> from Berkeley-IRLE-2) |
| Teens | 40 | $3.4 \%$ | $1.4 \%$ |
| Median age | 41 | 39 |  |
|  | $16.0 \%$ |  |  |
| Less than HS | $41.7 \%$ | $8.6 \%$ | $15.6 \%$ |
| HS only <br> (or with some college) | $33.8 \%$ | $45.6 \%$ | $42.9 \%$ |
| BA or above |  | $35.1 \%$ | $33.4 \%$ |
|  | $68.6 \%$ |  |  |
| Full time workers | $50.0 \%$ | $66.4 \%$ | $80.3 \%$ |
|  |  | $16.7 \%$ | $44.9 \%$ |
| Hispanic | $17.1 \%$ | $10.1 \%$ |  |
|  | $22.7 \%$ | $17.0 \%$ | $7.2 \%$ |
| Below poverty (FPL) |  |  | $18.4 \%$ |
| $1-2 \mathrm{X}$ poverty (FPL) | $30.0 \%$ | $22.6 \%$ |  |
|  | $52.0 \%$ | $56.0 \%$ | $31.1 \%$ |
| Share of workers that <br> earn < $\$ 13.25$ |  |  | $46.1 \%$ |
| Married |  |  |  |
|  |  |  |  |

We find similarity between workers in Los Angeles County and those in the City of Los Angeles, with a few exceptions:

- A higher percentage of workers in the City of Los Angeles have less than a high school diploma than countywide
- The proportion of workers that are teen workers is lower in City of Los Angeles than in both the County and nationwide
- There are more part-time workers as a proportion of all workers in Los Angeles County than the City of Los Angeles, and this is much closer to the national average
- The distribution of family incomes by poverty level is quite different, with fewer workers living in poverty in the City of Los Angeles
- More workers are single in the City of Los Angeles than across the County.

When isolating just those workers that would be directly affected by a minimum wage of $\$ 13.25$, there are differences, but these are related to the characteristics found in Table 1-8.

| TABLE 1-9 <br> Descriptive Statistics of Directly Affected Workers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LAC in 2017 | LA City in 2017 | Affected as \% of all in category in LAC | Affected as \% of all in category in LA City (from Berkeley-IRLE2) |
| Teens | 6.6\% | 3.3\% | 82.7\% | 80.8\% |
| Median age | 35 | 33 * |  |  |
| Less than HS | 28.5\% | 28.6\% | 53.3\% | 69.4\% |
| HS only (or with some college) | 52.5\% | 26.5\% | 37.7\% | 52.3\% |
| BA and above | 10.4\% | 13.7\% | 11.5\% * | 15.5\% |
| Full time workers | 59.7\% | 68.9\% | 23.5\% | 32.0\% |
| Hispanic | 68.0\% | 63.0\% | 40.8\% | 52.2\% |
| Below poverty (FPL) | 27.6\% | 16.6\% | 48.5\% | 86.7\% |
| 1-2X poverty (FPL) | 35.4\% | 34.7\% | 46.6\% | 81.6\% * |
| Married | 43.2\% | 34.9\% | 24.9\% | 28.6\% |

We find similarity between affected (minimum wage) workers in Los Angeles County and those in the City of Los Angeles, with a few exceptions:

- A higher percentage of minimum wage workers in the County have a high school diploma than in the City of Los Angeles
- A higher percentage of minimum wage workers in the City of Los Angeles are full-time workers
- There are more part-time workers as a proportion of all workers in Los Angeles County than the City of Los Angeles, and this is much closer to the national average
- A higher percentage of minimum wage workers across the County have family incomes below the poverty line
- A higher percentage are married.

Also in Table 1-9, we show the proportion of all workers with each characteristic that will be affected by the minimum wage ordinance. For example, of all teen-aged workers in Los Angeles County, 82.7 percent will be affected by the ordinance.

While many of these characteristics are common between the County of Los Angeles and Los Angeles City, note the significant difference in the proportion of workers who live in families in poverty. In Los Angeles County, almost half of all families in which there is a minimum wage worker will be affected by the minimum wage would be directly affected, while in the City of Los Angeles, Berkeley-IRLE-2 reports that proportion to be 86.7 percent.

## POLICY CONSIDERATIONS

## MINIMUM WAGES AND POVERTY

The literature regarding net positive impacts on earnings in the economy or on net positive employment impacts is sparse. Although it seems straightforward to make the correlation between raising hourly wages in general and lifting people out of poverty, in reality the connection is much more tenuous.

That poverty may not be impacted by increases in the minimum wage is due to several factors:

- Workers who may be affected by an increase in hourly wages are not members of families in poverty;
- Those in poverty are not in the labor force or do not work, which means that these families will not be affected by an increase in the minimum wage;
- The working poor are more likely to be replaced (i.e., lose their jobs);
- The working poor lose access to government benefits as their increased earnings exceed eligibility thresholds; and
- Those in poverty now face higher prices for goods they typically purchase.

To assess how valid any of these assertions are in Los Angeles County, we turn to the data. The first three bullet points can be examined using demographic data, which shows why minimum wage increases may not reach those in poverty as effectively as hoped.

## Workers by family poverty status



## WHAT THIS TELLS US:

Of all workers in Los Angeles County, only 17 percent live in families with incomes under the federal poverty level (FPL). More than 80 percent live in families with incomes more than the FPL, and 61 percent are in families with incomes more than twice the FPL.

Of minimum wage workers with wages under $\$ 13.25$ (who would be affected by the minimum wage increase), only 28 percent currently live in families in poverty.

More than 70 percent of minimum wage workers (up to $\$ 13.25$ ) live in families that are not in poverty.

## Employment Status of Individuals in Poverty



Families in Poverty by the Number of Workers


## WHAT THIS TELLS US:

Of all working age civilians who have had their incomes fall below the poverty line in the prior twelve months, those individuals, only 32 percent were employed.

Exactly 68 percent of all working age civilians in poverty are not working.

Over 55 percent were not in the labor force at all, meaning the majority of this population will not be affected by changes in the minimum wage.

## WHAT THIS TELLS US:

In Los Angeles County in 2013, almost 30 percent of families living below the poverty level had no workers in their households. More than half of these were headed by a single female.

These households will not be affected by changes in the minimum wage.

## Educational Attainment of Individuals in Poverty



Source: 2013 ACS

## WHAT THIS TELLS US:

Many individuals living in poverty are those with the lowest levels of education. In Los Angeles County in 2013, more than 41 percent of those aged 25 years and older living in poverty had less than a high school education.

To the extent that these individuals are working, they will be among the most vulnerable to labor-labor substitution.

## PHASED IMPLEMENTATION

The justification of phased implementation is predicated on the need to allow firms to "adjust" or "prepare" for the impending change in policy to minimize the potential negative impacts on their businesses.

How are firms expected to prepare for an increase in costs? As discussed in detail above, adjustments that firms are most likely to make are those that involve cost reductions, such as employment reductions, labor-labor substitution, capital-labor substitution and, in the extreme, relocation or closure. A phased implementation will allow firms to make such adjustments in anticipation of the policy without their costs actually increasing. These costs increases would have been the increased earnings of minimum wage employees, which a phased implementation will postpone-hence the benefits of the policy (increased earnings) will be delayed while the costs (employment losses, employment changes) will be immediate. Rather than some minimum wage employees earning a raise at the expense of others potentially losing their jobs, phased implementation suggests that some minimum wage workers will lose their jobs before any raises are mandated.

## INDEXING

The justification of indexing is based on real wage erosion and growing inequality. Allowing the minimum wage to be adjusted regularly by a standard measure of inflation prevents its real value from declining as the cost of living rises. From a fairness perspective, this seems to make some sense. It also removes the issue from repeated exhausting political battles in ever divisive legislative bodies.

Empirical evidence on the effects of minimum wage increases is largely based on policies that were onetime changes in the nominal minimum wage. The effects of these policy changes erode over time-not only because firms adjust but because the real value of the wage erodes and labor cost structures return to earlier conditions.

Indexing, in effect, makes the increase policy permanent, which has implications for an employer's longer term responses in that it makes permanent real increases in labor costs while other input costs may or may not increase, altering the balance of relative costs in the firm's production decisions.

## PART 2: IMPACT ON COUNTY BUDGET

## COUNTY EMPLOYEES


#### Abstract

This section evaluates the budgetary impact on staffing costs to the County that may result from increasing the minimum wage. The overall budgetary impact has two components: the change in budgeted costs associated with raising the minimum wage across the County labor pool, and the change in budgeted costs because of wage compression, where wage compression refers to pay adjustments to positions with an hourly rate higher than the current minimum wage but may be subject to adjustment relative to a given proposed minimum wage. (In the literature and as used above, this is more commonly called the "ripple" effect.)


## DATA

Confidential data on County job classifications were provided to the LAEDC by County of Los Angeles staff. One data set contained data on job classifications with budgeted hourly rates ranging from the current minimum wage of $\$ 9.00$ per hour up to $\$ 15.25$ per hour (the higher of the proposed minimum wage rates being contemplated by the Board of Supervisors).

A second data set showed information for job classifications with budgeted hourly rates that were somewhat higher than the current and proposed hourly rates. These positions would be subject to ripple effect adjustments if the minimum wage were increased as contemplated by the Board of Supervisors. County of Los Angeles staff estimated the pay adjustments that would likely be implemented to offset wage compression. Both data sources included job classifications (job title), hourly rate, bargaining unit, as well as the number of full-time and part-time positions in the current budget.

## ANALYSIS

## Baseline:

The current budget is assumed to be the baseline. A total of 53 job classifications in the baseline County budget pay between $\$ 9$ per hour and $\$ 21.99$ per hour. The County budget includes a total of 3,388 fulltime and part-time positions across these job classifications for a budgeted total in wages and salaries, benefits and retirement (henceforth, staffing costs) of $\$ 112$ million, which is equal to 1.1 percent of the County's annual staffing cost of approximately $\$ 10$ billion.

Thirty-nine of these classifications representing 1,572 positions will be subject to wage adjustments under the minimum wage proposal being contemplated by the Board of Supervisors. Staffing costs for these classifications under the baseline amounts to $\$ 46.3$ million. The remaining 14 jobs classifications with 1,816 positions-more than half of the 3,388 positions in the analysis-will be subject to wage increases due to ripple effect adjustments as described above. This includes six classifications for which the proposed minimum wage increases would be superseded by larger ripple effect adjustments. Staffing costs for these classifications under the baseline amounts to $\$ 65.8$ million.

A summary of the positions is shown in Table 2-1.

| TABLE 2-1 <br> Los Angeles County Job Classifications Subject to Minimum Wage Pay Adjustments |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Job Classifications Subject to Minimum Wage Adjustments |  | Job Classifications Subject to Ripple Effect Adjustments |  | Total Job Classifications Subject to Wage Adjustments |  |
| Prevailing Wage Range | Job Classifications | Number of Positions | Job Classifications | Number of Positions | Job Classifications | Number of Positions |
| \$9.00 and \$9.99 | 16 | 273 | 0 | 0 | 16 | 273 |
| \$10.00 and \$13.24 | 11 | 457 | 2 | 329 | 13 | 786 |
| \$13.25 and \$15.24 | 12 | 842 | 6 | 1,393 | 18 | 2,235 |
| \$15.25 and higher | 0 | 0 | 6 | 94 | 6 | 94 |
| Total | 39 | 1,572 | 14 | 1,816 | 53 | 3,388 |

The statewide minimum wage will increase from $\$ 9.00$ per hour to $\$ 10.00$ per hour on January $1,2016$. While the impact of this increase is outside the scope of this analysis, it is important to note that sixteen of the 53 current minimum wage job classifications will receive an increase of $\$ 1.00$ per hour as result of this law.

## - Effects of Minimum Wage Increases on the Los Angeles County Budget:

With an increase of the minimum wage to $\$ 13.25$ per hour, 27 of the 53 job classifications will experience a wage increase and the corresponding budgeted staffing cost will be $\$ 49.8$ million, an increase of $\$ 3.5$ million from the baseline budget at $\$ 9$ per hour.

In addition, six job classifications will be subject to ripple effect adjustments. These job classifications currently have hourly wages between $\$ 11.09$ and $\$ 16.74$. With ripple effect adjustments, the new range for these job classifications will fall between $\$ 14.77$ and $\$ 17.68$ per hour. The budgeted staffing cost for job classifications subject to ripple effect adjustments will increase to $\$ 71.1$ million, an increase of $\$ 5.4$ million from the baseline budget.

Thus, at a minimum wage of $\$ 13.25$ per hour, the budgeted staffing cost across the 53 job classifications will be $\$ 120.9$ million, an increase of $\$ 8.9$ million (or 7.9 percent) from the baseline.

With an increase to $\$ 15.25$ per hour, all 39 minimum wage job classifications will be affected and the associated budgeted staffing cost will be $\$ 55.1$ million. In addition, all 14 ripple effect classifications will
see wage adjustments with new hourly rates falling between $\$ 17.00$ per hour and $\$ 23.54$ per hour. The budgeted staffing cost for these positions will increase to $\$ 81.4$ million, an increase of $\$ 15.6$ million from the baseline budget.

Thus, at a minimum wage of $\$ 15.25$ per hour, the budgeted staffing cost across the 53 job classifications will be $\$ 136.5$ million, an increase of $\$ 24.4$ million (or 21.8 percent) from the baseline.

To put these increases in perspective, it is helpful to note that the baseline (current) budgeted staffing cost of $\$ 112.0$ million in this analysis is equal to 1.1 percent of the approximately $\$ 10$ billion the County has budgeted in fiscal year 2014-15 and fiscal year 2015-16 for wages and salaries, benefits, and retirement across its entire payroll. With a minimum wage of $\$ 13.25$ per hour, the share increases marginally to 1.2 percent of the total, and at $\$ 15.25$ per hour the share increases to 1.4 percent. These results are summarized in Table 2-2, with the incremental changes summarized in Table 2-3.

| Budgetary Impact for Los Angeles County of Classifications Subject to Wage Adjustments |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |


| Incremental Budgetary Impact for Los Angeles County Relative to Baseline at \$9.00 per hour |  |  |  |  |  |
| :---: | ---: | ---: | ---: | :---: | :---: |

## CONCLUSION

Given the small number of job classifications and positions that will be affected by minimum wage adjustments and ripple effect adjustments, the proposed minimum wage ordinance will result in a relatively small impact on the County's total budget for wages and salaries, benefits and retirement.

## COUNTY CONTRACTORS

The County of Los Angeles contracts with a large number of private sector firms for the delivery of goods and services that the County is in need of. To assess the impact of requiring firms doing business with the County of Los Angeles to adhere to the proposed ordinance, a survey of county contractors will be conducted.

Based on raw data from LA County staff, the county has 5,413 contracts with 3,778 contractors valued at approximately $\$ 6$ billion in the aggregate. Approximately 3,100 contractors ( 81 percent of all contractors) have a single contract with the County. At the other end of the spectrum, two contractors hold 23 contracts with the County. Most others hold between 2 and 10 contracts.

A draft survey questionnaire has been developed by LAEDC staff to gather information from the contractors who respond to the survey. The survey responses from those contractors will be used to make inferences about the entire population of contractors and contracts, which can then be used to broadly estimate the budgetary impact of possible increases in the minimum wage.

At time of submission of this report, the survey questions and structure had not been finalized. However, it is anticipated that an online survey platform will be used.

To ensure the best possible response rate, contractors will be contacted by their contract administrator within each County department via email. The email will describe the purpose of the survey and the type of information required to complete the survey and will contain a hyperlink to the survey platform. The online survey platform will capture the responses from each respondent and aggregate them to allow data analysis.

Once the responses are received by the County, analysis will be conducted by the LAEDC. It is expected that this analysis will be completed within 30 days of receipt of a sufficient sample of responses.

## PART 3: MINIMUM WAGES AND THE ACA

## COVERED CALIFORNIA

In 2010, California was the first state in the nation to enact a health-benefit exchange under the provisions of the Patient Protection and Affordable Care Act (ACA). Covered California (CC), the statewide implementation of those provisions, supplies consumers with a diverse range of care plans, as well as subsidies made available for low-income households.

## COVERAGE LEVELS

In the California marketplace, consumers are primarily offered plans which fall into a four-tiered system: bronze, silver, gold and platinum. Lower-tiered plans offer lower monthly premiums in exchange for higher out-of-pocket costs for care. This means that consumers of higher-tiered plans pay larger monthly premiums, but are given greater coverage when receiving care. The amount paid by each individual depends on his/her age, coverage region (which is based on zip-code), household size, household income and preferred plan.

The estimated average out-of-pocket payment breakdowns for each plan are shown in the exhibit.

In addition to these plans, the Minimum Coverage and Enhanced Silver plans exist in order to provide care to young or low-income individuals, respectively. The Minimum Coverage plan provides individuals younger than thirty years old, or those experiencing provable hardship, with lower premiums in return for lower coverage, which primarily includes worstcase scenarios.

Estimated Cost Sharing by Plan Type


Low-income individuals may be eligible for a tax credit (entitled Premium Assistance), as well as CostSharing Reduction subsidies, which give the consumer the option to purchase the Enhanced Silver Plan. Through the Enhanced Silver plan, low-income households pay the lower monthly premium of a Silver plan yet receive the benefits of a Gold or Platinum plan in the form of lower co-pays, deductibles, coinsurance, and out-of-pocket maximums. On average, and depending on the household's income level,
the provider will pay 94 percent, 87 percent or 73 percent of the cost, with the individual paying the remainder.

During the application process, monthly household income is estimated in order to determine monthly premiums. While shopping for and comparing plans on the Covered California website, applicants enter their household income and zip code, as well as the ages of each member in the household. In the event that the applicant qualifies for Medi-Cal, the page displays an informative message on how the applicant can acquire healthcare through that service. Otherwise, if the applicant is eligible for the Premium Assistance subsidy, the total monthly cost, tax credit and applicant's monthly payment are displayed. In the event that the consumer is also eligible for Cost-Sharing Reductions, Enhanced Silver plans are offered.

All plans must provide the comprehensive package of items and services referred to as "essential health benefits," which includes such care as: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services; chronic disease management; and pediatric services, including dental and vision.

## AVAILABLE PREMIUM SUBSIDIES

Covered California provides healthcare subsidies to U.S. citizens, U.S. nationals, and lawfully-present immigrants who meet income eligibility requirements, are California residents and purchase coverage through CC. Aside from Medi-Cal, CC also offers its Premium Assistance and Cost-Sharing Reduction subsidies. Individual consumers are made aware of which subsidies they qualify for once the full application is completed.

## Medi-Cal:

Medi-Cal provides zero- or low-cost healthcare to California residents living beneath 138 percent of the federal poverty level (FPL). Children younger than 19 years of age living in households which earn below 266 percent of the FPL are also covered by Medi-Cal. Undocumented immigrants with California residency may be eligible for emergency- and pregnancy-related services, as well as state-funded longterm care, when needed.

## - Premium Assistance:

Premium Assistance is a tax credit made available to those who meet eligibility criteria, and have an income between 138 percent and 400 percent of the FPL. When shopping for care, those eligible for Premium Assistance will notice an additional line added to the descriptions of each care option. The description for each plan contains: Total Monthly Premium, Monthly Premium Assistance (Tax Credit), and Your Total Monthly Payment (which equates to the total minus the tax credit). Because Premium Assistance is based on annual income, eligible consumers may opt to receive their full tax credit after filing taxes for the previous year. This approach leaves fewer margins for error, which would result in the household having to collect additional or pay back credits due to an inaccurate income estimate. Individuals who qualify for Premium Assistance must also file taxes whilst receiving benefits; they will be denied eligibility if they already have access to other public health coverage or affordable, minimum value health care provided by an employer (see below for discussion of employer-provided health insurance).

## Cost-Sharing Reduction:

Those eligible for Premium Assistance with an income between 138 percent and 250 percent of the FPL may also receive Cost-Sharing Reduction subsidies, which lessen an individual's out-of-pocket costs through lower copays, co-insurance, deductibles, and out-of-pocket maximums. Though qualifying households may choose any type of plan, they will only gain the benefits of this subsidy by selecting an Enhanced Silver plan. This plan is offered in three tiers based on income: Enhanced Silver 94, Enhanced Silver 87 and Enhanced Silver 73, where the values represent the percentage of cost that a provider will cover.

The three tiers provide greater coverage than the Platinum, Gold and Silver plans, respectively. For this reason, those who fall within the 94 percent tier have no incentive to purchase a Gold or Platinum plan, just as those who fall into the 87 percent tier have little incentive to purchase a Platinum level plan, and no incentive to purchase a Gold plan. Those who fall into the 73 percent tier still gain from the subsidy, but may choose to forego the Enhanced Silver plan for a Gold or Platinum plan if they wish additional coverage.

## - Employer Provided Health Insurance:

Under the ACA, many employers are required to provide affordable, minimum value health insurance to full-time employees. Employer-provided insurance is considered to be affordable if it costs the individual less than 9.5 percent of the household's income, and is considered minimum value if it pays at least 60 percent of the average cost of covered benefits.

As of January 2016, Applicable Large Employers (ALE), those with more than 50 full-time or equivalent (FTE) employees, will be required to provide minimum essential coverage to 95 percent of full-time employees or pay a shared-responsibility payment to the IRS. According to the US Treasury Department, as of 2015, "Approximately 96 percent of employers are small businesses and have fewer than 50 workers and are exempt from the employer responsibility provisions."

Businesses with less than 50 full-time employees may provide health insurance to their workers by participating in the Small Business Health Options Program (SHOP) marketplace. By doing this, small businesses are able to select which healthcare plans they would like to provide, what portion of the cost they will cover, and when their employees are able to enroll. For small businesses with less than 25 FTE employees, a Small Business Health Care Tax Credit may be available, which will subsidize up to 50 percent of the employer's healthcare costs. In order to be eligible for this tax credit, employers must have fewer than 25 FTE employees with an average salary of $\$ 50,000$ or less, cover at least 50 percent of healthcare premium costs, and provide health insurance through the SHOP Marketplace. The size of the tax credit is based on the number of employees and their average salaries-smaller businesses receive larger credits.

In 2012, 95 percent of establishments in Los Angeles County employed fewer than 50 workers, yet the remaining 5 percent (which would now be considered as ALE) accounted for 54 percent of the county's total employment. Although the actual number of full-time, minimum wage earning employees is unknown for the County and within each group, it should be noted that many of them (including their dependents), may now have access to affordable, essential coverage health care through their employers. What is more, in 2013, 42.5 percent of Los Angeles County residents received some form of employer-based health insurance, with 21.3 percent of residents being completely uninsured.

Some employers may be capable of dodging ALE status by reducing the hours of their full-time workers to part-time employment. This would allow them to lose their ALE designation and subsequent requirement to provide health insurance to 95 percent of their full-time employees. Those employees who would be impacted by this situation would have to either seek out an alternate full-time position elsewhere, or add another-part time job in order to compensate for the reduction in their working hours. The former situation could leave the worker without employer-provided health insurance if he/she finds work in an establishment with fewer than 50 full-time employees, leaving the worker completely without employer-provided health insurance and pushing him/her to subsidized care through Covered California.

In either situation, the worker will have access to affordable health insurance.

## PRICING REGIONS OF LOS ANGELES COUNTY

California contains 19 pricing regions; Los Angeles County accounts for regions 15 and 16. During the first open enrollment period in 2014, these regions experienced the second-largest and largest number of enrollees in the state, respectively. The following exhibits display the breakdown of enrollment distribution, as well as examples for pricing within each region.

| Region | Signed up in first Open <br> Enrollment Period | Receive Premium <br> Assistance |
| :---: | :---: | :---: |
| 15 | 177,797 | $90 \%$ |
| 16 | 223,092 | $85 \%$ |
| Combined | 400,889 | $87 \%$ |

An overwhelming majority of applicants qualified for Premium Assistance. This is likely due to two major factors, the first being that healthcare became immediately more affordable, and the second being that a monetary penalty would be imposed on those who remained uninsured. Since 87 percent of all enrollees received premium assistance, it can be assumed that nearly 350,000 residents who enrolled in this period had incomes between 138 percent and 400 percent of the federal poverty level.

Most applicants enrolled in the Silver plan.

There are a variety of providers in the California Care system. Their rates for coverage vary

Enrollment by Plan (Los Angeles County)
 substantially, but the premium assistance paid by the federal government is determined by household income. Table 3-1 provides current rates offered by participating providers and the share of each that must be paid by the insured. These sample rates are for an individual of 40 years of age.

| TABLE 3-1 <br> 2015 Rates \& Premium Assistance for 40-Year Old Individual |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Providers | Share | $\begin{gathered} \$ 17,505 \\ (150 \% \mathrm{FPL}) \end{gathered}$ | $\begin{gathered} \$ 23,340 \\ (200 \% \text { FPL }) \end{gathered}$ | $\begin{gathered} \$ 29,175 \\ (250 \% \mathrm{FPL}) \end{gathered}$ | $\begin{gathered} \$ 46,680 \\ (400 \% \text { FPL }) \end{gathered}$ |
| Region 15 |  |  |  |  |  |
| Anthem EPO <br> Anthem HMO <br> Blue Shield PPO | Individual | \$32-\$98 | \$96-\$162 | \$169-\$235 | \$230-\$296 |
| Health Net HMO Kaiser Permanente HMO L.A. Care HMO Molina Healthcare HMO | Federal Gov't | \$198 | \$134 | \$61 | \$0 |
| Region 16 |  |  |  |  |  |
| Anthem EPO <br> Anthem HMO <br> Blue Shield PPO | Individual | \$46-\$135 | \$111-\$200 | \$-184-\$273 | \$247-\$336 |
| Health Net HMO Kaiser Permanente HMO L.A. Care HMO Molina Healthcare HMO | Federal Gov't | \$201 | \$136 | \$63 | \$0 |

## SCENARIOS INVOLVING MINIMIMUM WAGE INCREASES

The current minimum wage of $\$ 9$ per hour yields an annual income of $\$ 18,720$ for full-time, full-year work. An increase to $\$ 13.25$ per hour would bring that annual income up to $\$ 27,560$. By looking at the 2015 FPL alongside annual pay at the current and proposed minimum wages, we produce estimates of how the proposed increase will affect those currently earning the minimum wage.

Because the FPL varies based on household size, we select representative family scenarios consisting of an individual with no children, a single parent with two children, and a dual-income household with two children. All adults are 33 years of age and children were 4 and 8 years of age. Premiums for each scenario were calculated using the "Shop and Compare Tool" provided by on the Covered California website. The zip code for each household was 90033, which incorporates the region northeast of the I-10/l-110 interchange.

Due to the innumerable tax and subsidy options available to low-income individuals and families, our analysis focuses on income before taxes in order to reduce the likelihood of over-specifying our estimates. Nevertheless, it is important to remember that low-income families are eligible for various government subsidies outside the realm of healthcare and the ACA, which may account for higher-thanexpected disposable income. Furthermore, even though an increase in wage may not make consumers ineligible for their current subsidies, it will result in an increased monthly premium. For those living on the margin, a rise in wages could simultaneously increase monthly premiums whilst reducing access to subsidies and tax credits.

## - Individual with No Children

Currently, minimum wage earners in Los Angeles County working less than 35 hours per week qualify for Medi-Cal. What is more, those working less than 25 hours per week fall beneath the federal poverty line. By 2016, when the minimum wage is increased to $\$ 10$, this group will still have to work more than 23 hours per week to stay above the federal poverty level, or more than 31 hours per week to pass the point of eligibility for Medi-Cal and enter into Cost-Sharing Reduction and Premium Assistance eligibility. Given the proposed increase to $\$ 13.25$ in 2017, individuals will have to work more than 17 hours or more than 25 hours per week to remain above the poverty level or become eligible for Cost-Sharing Reductions and Premium Assistance. At $\$ 15.25$, weekly hours decrease to 15 and 20.5, respectively.

Ultimately, this means that today, an individual minimum wage earner working 40 hours per week qualifies for an Enhanced Silver 87 plan, and will continue to do so until the proposed wage increases to $\$ 13.25$ per hour, at which point such an individual will be eligible for the Enhanced Silver 73 plan. As noted above, the Enhanced Silver 87 plan provides almost 90 percent of the coverage of a Platinum Level plan, and much more than the 80 percent of the coverage of a Gold plan. Hence, when given the option of an Enhanced Silver 87 plan, the consumer is likely to purchase it over the Gold and Platinum plans in order to receive optimal coverage for the price. When choosing between an Enhanced Silver 73 and alternate plans, on the other hand, a consumer has more incentive to opt for the higher-tiered plans which offer greater coverage, if desired.

With the increase to $\$ 15.25$, this earner's income will exceed 250 percent of the FPL, therefore making him/her eligible only for Premium Assistance. This change in subsidization could adversely affect this individual further if he/she was enrolled in an Enhanced Silver plan. In that case, the individual would either have to receive fewer benefits if remaining with the Silver or reducing to a Bronze plan, or pay an even higher premium to retain the benefits of a Gold or Platinum plan.

| TABLE 3-2 |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hourly Wage | Coverage Plan |  |  |  |  |  |
|  | Bronze | Silver | Gold | Platinum | Enhanced Silver <br> Coverage Rate |  |
| $\$ 9.00$ | $\$ 25-\$ 76$ | $\$ 57-\$ 141$ | $\$ 86-\$ 212$ |  | $87 \%$ |  |
| $\$ 10.00$ | $\$ 46-\$ 98$ | $\$ 79-163$ | $\$ 108-\$ 234$ | $\$ 139-\$ 300$ | $87 \%$ |  |
| $\$ 13.25$ | $\$ 128-\$ 179$ | $\$ 161-\$ 245$ | $\$ 189-\$ 315$ | $\$ 220-\$ 382$ | $73 \%$ |  |
| $\$ 15.25$ | $\$ 183-\$ 235$ | $\$ 216-\$ 300$ | $\$ 245-\$ 371$ | $\$ 276-\$ 437$ |  |  |

A similar individual working part-time at 20 hours per week currently falls beneath the FPL, and is therefore eligible for Medi-Cal. Such an individual will remain eligible for Medi-Cal regardless of the proposed wage increases.

## Individual with Two Children

A minimum wage earning single parent working 40 hours per week with two children currently falls below the FPL, and is therefore eligible for Medi-Cal. By 2016, this individual will have risen above the

FPL, and by 2017, he/she will trade Medi-Cal eligibility for Cost-Sharing Reductions, though the children will still be covered under Medi-Cal. This will remain unchanged with the increase to $\$ 15.25$.

| TABLE 3-3 <br> Estimated Monthly Premiums for Individuals with Two Children (Net of Subsidies) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hourly Wage | Coverage Plan |  |  |  |  |
|  | Bronze | Silver | Gold | Platinum | Enhanced Silver Coverage Rate |
| \$9.00 | Medi-Cal |  |  |  |  |
| \$10.00 |  |  |  |  |  |
| \$13.25 |  |  |  |  |  |
| \$15.25 | \$71-\$123 | \$104-\$188 | \$135-\$258 | \$164-\$325 | 87\% |

## - Two Parents with Two Children

The following scenario highlights a dual-minimum-wage-income family working a combined total of 60 hours per week with two children. Such a family is currently eligible for Medi-Cal, and will trade this for Cost-Sharing Reductions with the proposed increase to $\$ 13.25$. Though the parents will switch to CSR with the final wage increases, the children will remain eligible for Medi-Cal.

| TABLE 3-4 <br> Estimated Monthly Premiums for Families with Two Parents and Two Children (Net of Subsidies) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hourly Wage | Coverage Plan |  |  |  |  |
|  | Bronze | Silver | Gold | Platinum | Enhanced Silver Coverage Rate |
| \$9.00 | Medi-Cal |  |  |  |  |
| \$10.00 |  |  |  |  |  |
| \$13.25 | \$81-\$184 | \$147-\$315 | \$204-\$456 | \$266-\$589 | 87\% |
| \$15.25 | \$154-\$257 | \$219-\$387 | \$277-\$528 | \$337-\$661 | 87\% |

## MONTHLY RATES AND DISPOSABLE INCOME

In Table 3-5, we provide estimates of the proportion of monthly income that premiums represent for each scenario. Plans with higher monthly premiums require less out-of-pocket cost when seeking medical attention. As we have seen above, increasing wages perpetuate higher monthly premiums for each plan; however, this increase is not proportional to the given rise in income. The four standard plans in general require an increased portion of a consumer's income as income rises. There are two exceptions to this rule; the first being that the most expensive Platinum plans (see the upper bound) become slightly more affordable as income rises. The other exception is the Minimum Coverage plan, which varies less among scenarios and between income levels, resulting in greater affordability as income rises.

| TABLE 3-5 <br> Estimated Ranges of Monthly Payment as \% of Monthly Income |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monthly Income | Bronze | Silver | Gold | Platinum | Enhanced Silver Coverage Rate |
|  | \$1,560 | 1.6\%-4.9\% | 3.7\%-9.0\% | 5.5\%-13.6\% | 7.5\%-17.8\% | 87\% |
| Individual, No | \$1,733 | 2.7\%-5.7\% | 4.6\%-7.8\% | 6.2\%-13.5\% | 8.0\%-17.3\% | 87\% |
| Children | \$2,297 | 5.6\%-7.8\% | 7.0\%-10.7\% | 8.2\%-13.7\% | 9.6\%-16.6\% | 73\% |
|  | \$2,643 | 6.9\%-8.9\% | 8.2\%-11.3\% | 9.3\%-14.0\% | 10.4\%-16.5\% |  |
| Individual, Two Children | \$1,560 | Medi-Cal |  |  |  |  |
|  | \$1,733 |  |  |  |  |  |
|  | \$2,297 |  |  |  |  |  |
|  | \$2,643 | 2.7\%-4.7\% | 3.9\%-7.1\% | 5.1\%-9.8\% | 6.2\%-12.3\% | 87\% |
| Two Parents, Two Children | \$2,340 | Medi-Cal |  |  |  |  |
|  | \$2,600 |  |  |  |  |  |
|  | \$3,445 | 2.4\%-5.3\% | 4.3\%-9.1\% | 5.9\%-13.2\% | 7.7\%-17.1\% | 87\% |
|  | \$3,965 | 3.9\%-6.5\% | 5.5\%-9.8\% | 7.0\%-13.3\% | 8.5\%-16.7\% | 87\% |

These results may be problematic for two main reasons. First, an increase in a consumer's income, which might be expected to result in an increase in disposable income, causes the consumer to pay a disproportionately higher monthly premium, resulting in plans that are decreasingly affordable. Furthermore, this situation is adversely compounded by a potential loss of access to previously available subsidies. This chain reaction could wind up making consumers on the threshold of subsidization worse off than they were before the wage increase.

However, effects such as these were not evident in the scenarios presented above. Table 3-6 shows monthly pre-tax income net of premiums. As can be seen, the remaining income continues to increase with each boost in wage, regardless of the chosen plan.

| TABLE 3-6 <br> Pre-Tax Monthly Income Minus Monthly Premium |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bronze | Silver | Gold | Platinum | Enhanced Silver Coverage Rate |
|  | \$1,560 | \$1,484-\$1,535 | \$1,419-\$1,503 | \$1,348-\$1,474 | 1,282-\$1,443 | 87\% |
| Individual, No | \$1,733 | \$1,635-\$1,687 | \$1,597-\$1,654 | \$1,499-\$1,625 | \$1,433-\$1,594 | 87\% |
| Children | \$2,297 | \$2,118-\$2,169 | \$2,052-\$2,136 | \$1,982-\$2,108 | \$1,915-\$2,077 | 73\% |
|  | \$2,643 | \$2,408-\$2,460 | \$2,343-\$2,427 | \$2,272-\$2,398 | \$2,206-\$2,367 |  |
| Individual, Two Children | \$1,560 | Medi-Cal |  |  |  |  |
|  | \$1,733 |  |  |  |  |  |
|  | \$2,297 |  |  |  |  |  |
|  | \$2,643 | \$2,520-\$2,572 | \$2,455-\$2,539 | \$2,385-\$2,508 | \$2,318-\$2,479 | 87\% |
| Two Parents, Two Children | \$2,340 | Medi-Cal |  |  |  |  |
|  | \$2,600 |  |  |  |  |  |
|  | \$3,445 | \$3,261-\$3,364 | \$3,130-\$3,298 | \$2,989-\$3,241 | \$2,856-\$3,179 | 87\% |
|  | \$3,965 | \$3,708-\$3,811 | \$3,578-\$3,746 | \$3,437-\$3,688 | \$3,304-\$3,628 | 87\% |

Translating incomes into working hours, Table 3-7 illustrates the minimum number of household working hours per week required at each minimum wage in order to exceed the subsidy thresholds for Covered California. Despite the fact that all calculations are performed in 2015 dollars, as the proposed wages decrease in value with inflation, the FPL will likely be adjusted to match a similar trend.

| TABLE 3-7 <br> Minimum Working Hours per Week Needed to Exceed FPL Thresholds |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Family Size |  | \$9.00 | \$10.00 | \$13.25 | \$15.25 |
| 1 | 100\% | 25.1 | 22.6 | 17.1 | 14.8 |
|  | 138\% | 34.7 | 31.2 | 23.6 | 20.5 |
|  | 250\% | 62.9 | 56.6 | 42.7 | 37.1 |
|  | 400\% | 100.6 | 90.5 | 68.3 | 59.4 |
| 2 | 100\% | 34.0 | 30.6 | 23.1 | 20.1 |
|  | 138\% | 47.0 | 42.3 | 31.9 | 27.7 |
|  | 250\% | 85.1 | 76.6 | 57.8 | 50.2 |
|  | 400\% | 136.2 | 122.5 | 92.5 | 80.4 |
| 3 | 100\% | 42.9 | 38.6 | 29.2 | 25.3 |
|  | 138\% | 59.2 | 53.3 | 40.2 | 35.0 |
|  | 250\% | 107.3 | 96.6 | 72.9 | 63.3 |
|  | 400\% | 171.7 | 154.5 | 116.6 | 101.3 |
| 4 | 100\% | 51.8 | 46.6 | 35.2 | 30.6 |
|  | 138\% | 71.5 | 64.4 | 48.6 | 42.2 |
|  | 250\% | 129.5 | 116.6 | 88.0 | 76.5 |
|  | 400\% | 207.3 | 186.5 | 140.8 | 122.3 |
| 5 | 100\% | 60.7 | 54.6 | 41.2 | 35.8 |
|  | 138\% | 83.8 | 75.4 | 56.9 | 49.4 |
|  | 250\% | 151.8 | 136.6 | 103.1 | 89.6 |
|  | 400\% | 242.8 | 218.5 | 164.9 | 143.3 |
| 6 | 100\% | 69.6 | 62.6 | 47.3 | 41.1 |
|  | 138\% | 96.0 | 86.4 | 65.2 | 56.7 |
|  | 250\% | 174.0 | 156.6 | 118.2 | 102.7 |
|  | 400\% | 278.4 | 250.5 | 189.1 | 164.3 |
| 7 | 100\% | 78.5 | 70.6 | 53.3 | 46.3 |
|  | 138\% | 108.3 | 97.5 | 73.6 | 63.9 |
|  | 250\% | 196.2 | 176.6 | 133.3 | 115.8 |
|  | 400\% | 313.9 | 282.5 | 213.2 | 185.3 |
| 8 | 100\% | 87.4 | 78.6 | 59.3 | 51.6 |
|  | 138\% | 120.6 | 108.5 | 81.9 | 71.2 |
|  | 250\% | 218.4 | 196.6 | 148.4 | 128.9 |
|  | 400\% | 349.5 | 314.5 | 237.4 | 206.3 |

## CONCLUSION

Although not comprehensive, the scenarios outlined here suggest that an increase in wages results in slightly higher disposable income for each of the respective scenarios. This stands in contrast to an identical case study performed in an earlier draft of this report using the 2014 FPL, which found greater evidence of marginalization and subsidy shifting for each scenario with certain plans. The difference in these is due to the adjusted FPL. Such a result is evidence that marginal increases in the FPL from year to
year are pushing those at the current minimum wage closer to the edge of defined poverty whilst concurrently approaching the annual earnings of the proposed minimum wages. As the gap narrows between the FPL and the potential earnings from a full-time position at the proposed minimum wages, there will be a cushioning effect on the number of earners marginalized by the wage increases that are at risk of losing access to benefits. This is because coverage benefits through Covered California are pinned to the FPL, and are therefore prone to annual changes.

Similar studies by other institutions have reached similar conclusions. In a November 2012 paper entitled "Effective Marginal Tax Rates on Low- and Medium-Income Workers," the CBO examined how different financial situations would affect a family of one parent and one child. This report states that disposable income including tax credits and transfers generally exceeds earnings from employment for low-income families. This means that benefits received by these individuals not only reduces the size of mandatory payments, but could actually supplement their income beyond wages earned from hours worked. Ultimately, their results showed that disposable income rises more slowly than earnings as a result of positive marginal tax rates. Such rates are affected by income and payroll taxes, tax credits, and means-tested transfer payments, and are therefore responsible for levels of disposable income incurred by individuals. This is because increased earnings can lead to higher tax rates, which could be coupled with a loss of tax credits or means-tested transfer payments, which could result in a reduction of disposable income.

Generally, rising incomes result in rising disposable incomes. However, for those on the brink of losing subsidies, choosing to reduce the amount of hours worked at a higher mandated minimum wage could keep them from losing subsidies and being at risk of a diminishing net disposable income. These are the types of individuals who will be most adversely affected by a sweeping rise in wages. Though many will gain from the proposed ordinance, some will be marginalized, and some cost burden be shifted to the state. Fortunately, such cases are likely to be rare, leaving the majority of minimum wage-earning healthcare consumers better off.

## APPENDIX A: SURVEY OF BUSINESSES

We report the findings of an independently-conducted survey commissioned by the LAEDC. This survey was conducted by Market Enhancement Group, Inc. (MEG).

The survey was conducted via telephone interview during normal business day hours on an appointment basis. Respondents were offered confidentiality as to their individual responses and identity. The LAEDC was not disclosed as the sponsor of the survey.

Survey respondents were selected on a random probability basis. The company reports that it achieved a completion rate of 74.9 percent of all members who were contacted.

One thousand surveys were completed during the week of April 13, 2015. The data is subject to a maximum sampling error of $+/-3.2$ percent, and results are projectable with a confidence level of 95 percent.

The survey consisted of twenty-four questions, which were designed jointly by MEG and the LAEDC. The complete survey instrument is provided on the following pages.

The company notes that the survey measures respondents' perceptions, which may or may not be factual.

The survey was segmented as follows:

| Survey Completions by Size of Business |  |
| :--- | :---: |
| Number of Employees | Survey <br> Completions |
| $1-4$ | 200 |
| $5-19$ | 200 |
| $20-99$ | 200 |
| $100-499$ | 200 |
| 500 or more | 200 |
| TOTAL Completions | 1,000 |


| Survey Completions by Industry Sector |  |
| :--- | :---: |
| Industry Sector | Survey <br> Completions |
| Accommodation and Food Services | 100 |
| Administrative and Support and Waste Management | 100 |
| Arts, Entertainment and Recreation | 100 |
| Health Care and Social Assistance | 100 |
| Information | 100 |
| Manufacturing | 100 |
| Professional, Scientific and Technical Service | 100 |
| Retail Trade | 100 |
| Transportation and Warehousing | 100 |
| Wholesale Trade | 100 |
| TOTAL Completions | $\mathbf{1 , 0 0 0}$ |

## MINIMUM WAGE SURVEY INSTRUMENT

## Preamble:

As you may be aware the Los Angeles County Board of Supervisors voted unanimously Tuesday, March 31, to authorize a study to analyze and prepare for a potential minimum wage hike in Los Angeles County. The current minimum wage in Los Angeles County is $\$ 9.00$ an hour, set by state law, which will increase to $\$ 10.00$ an hour next January. The proposed increase in the City minimum wage would be to $\$ 10.25$ next year, $\$ 11.75$ the following year, and $\$ 13.25$ in 2017. Other proposals will then raise the minimum wage by $\$ 1$ for the following two years.

1. What percentage of your current workforce is paid the current minimum wage?
2. What additional percent of your current workforce is paid above the minimum but below $\$ 13.25$ ?
3. $\$ 13.25$ to below $\$ 15.25$ ?
(If Q1.>0 then ask: Q4-Q6)
4. Of your minimum wage workers, what percentage are full-time workers?
5. Of your minimum wage workers, what percentage are seasonal or temp workers?
6. Of your minimum wage workers, what percentage are teenagers?
7. Will you be subject to the proposed ordinance?

1=Yes
2=No
3=Don't know/unsure
8. If you will be subject to the mandated increase in the minimum wage as proposed, what will happen to your overall labor costs?
1=They will decrease
2=They will remain about the same
$3=$ They will increase
4=Don't know/unsure

If you will be subject to the mandated increase in the minimum wage as proposed please rate the likelihood of each of the following on a 5-point scale, where " 5 " is very likely, " 3 " is neither likely nor unlikely, and " 1 " is not at all likely. (Read - Rotate Order - Q9-Q23)
9. Your minimum wage workers will be happier at work and probably do a better job because they are being paid more
10. You will sell more goods or services because your customers will now have more pay
11. You will reduce the number of your existing minimum wage employees
12. You will reduce the hours of your existing minimum wage employees
13. You will require current employees to take on additional duties
14. You will invest in labor-saving or labor-replacing devices or processes
15. Your costs of employee turnover will decrease because employees will be less likely to quit
16. You will ask your customers to pay more for your goods or services to cover your increased labor costs
17. Your profits will increase
18. You will move your business to a community with a lower minimum wage
19. You will have to close your business
20. You will increase the minimum wages you pay to match those paid in other cities or regions nearby
21. You will increase the minimum wages you pay at least somewhat to compete with those paid elsewhere
22. You will lose your minimum wage or lower-paid employees to other areas that pay higher minimum wages
23. You will raise the price of your goods and services to match those charged in areas that pay higher minimum wages
24. In any case, any changes you make will occur (Read)

1 = Immediately
$2=$ Within 6 months, before the state minimum wage increase kicks in
$3=$ Within one year, before the $\$ 11.75$ rate is implemented
$4=$ Within two years, before the $\$ 13.25$ rate is reached
5 = l'll wait and see/Don't know/No changes

## APPENDIX B: LITERATURE REVIEWED

The LAEDC surveyed much of the new minimum wage research. Most of the citations listed by each study were consulted (see below), and two authoritative compendium volumes were read. Additionally, numerous articles published in the popular press and by private entities were included in our scan of the literature. Individual papers which were found to be helpful in addition to the literature cited by the studies are listed below.

## Comprehensive literature reviews:

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[^0]:    Mean responses were 2.4, 2.4, 2.3, 2.2 and 2.2, respectively. Samping error of $+/-7.1 \%$.

[^1]:    Mean responses were 3.5, 3.5, 3.7, 3.6 and 3.4, respectively. Samping error of $+/-7.1 \%$.

[^2]:    Mean responses were 4.1, 4.1, 4.1, 3.9 and 3.9, respectively. Samping error of $+/-7.1 \%$.

[^3]:    Mean responses were 4.2, 4.2, 4.3, 4.3 and 4.0, respectively. Samping error of $+/-7.1 \%$.

