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Cost-Benefit Analysis: Los Angeles Minimum Wage Proposal

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EXECUTIVE SUMMARY

Income inequality has become an increasingly important economic and policy issue across the United States. Wage growth, particularly for low skilled workers, remains largely stagnant as a result of a still-weak labor market in the wake of the "Great Recession" and due to the long-term forces of technological change that have increased the use of labor-saving information technology. The situation is particularly acute in California because of the rapidly rising cost of living, which is being driven largely by skyrocketing housing costs. Not surprisingly, policymakers at many levels of government are looking for mechanisms to help families and residents most in need.

The Mayor and City Council of Los Angeles are proposing to increase the minimum wage within the City's borders to \$13.25 per hour as one potential solution. As with any major public policy initiative, the plan should be subjected to a rigorous and unbiased cost-benefit analysis. How well does the initiative help households most in need? Is the plan well targeted towards those groups? What are the costs of the new policy, who pays, and what are the potential negative impacts of those costs on the City's economy and fiscal health? And ultimately, are the costs justified by the benefits?

The efficacy of minimum wage rules has been hotly debated in economics for decades. There are strict ideological thinkers on both sides: those who believe that wage floors can completely cripple an economy's ability to grow or, at the opposite end of the spectrum, those who argue that these polices have a clear, positive net impact. In the former case, it should be noted that most industries already pay the majority of their workers more than the proposed new minimum wage. For these companies changing the level of the minimum wage means little and to claim broad based negative impacts seems hyperbolic at best.

On the other side, arguing that raising the minimum wage will have a net positive impact is the economic equivalent of inventing a perpetual motion machine—the fundamental laws of physics clearly show that such machines cannot exist. Economic fundamentals are also clear: You cannot increase the size of the pie by simply transferring income from one group of individuals to another.¹

The vast majority of economists, however, hold views that are more moderate overall. If carefully crafted, minimum wage policies can have socially beneficial outcomes (less inequality and poverty), which may be sufficient in warranting the economic inefficiencies invariably involved when manipulating the price mechanism. As such, they may be an effective part of a portfolio of policies designed to reduce the incidence of poverty in a nation on a long-term basis.²

This outcome, unfortunately, would not hold true under the current minimum wage plan. While there is little doubt that the City is well intentioned in its effort to help those in need, the proposed plan fails on a cost-benefit basis. The critical issues that make this plan fail (where broader more defined programs may not) have to do with its overly broad application of the rules, the underlying nature of the Los Angeles economy itself, and most significantly the geographical nature of the City.

¹To understand the problematic logic of such a position, carry the hypothesis further: If raising the minimum wage to \$13.25 per hour has strictly a net positive effect on the economy, why not raise it to \$20 per hour? Or \$200 per hour?

²The tradeoff between economic efficiencies and "fairness" in our economy has a long history and would include programs from Social Security to public education.

While the proposed policy would clearly aid some families in need, it would also grant financial gains to many workers who should not be the focus of city policy on inequality issues. These include workers who earn tips and commissions that raise their pay far beyond their wage base, and lower paid workers who live in households earning well over the household median income in the area. Moreover, almost half the workers who would receive a pay increase are not even residents of the City of Los Angeles.³ By Beacon Economics calculations less than one in four dollars paid out by Los Angeles City businesses and consumers through this plan will actually benefit the workers who are targeted.⁴

These issues might not matter as much if the costs of the proposed plan were modest. However, the cost of the current proposal will be quite high for the City of Los Angeles. If certain workers are going to be paid more, the money must come from somewhere else in the economy. In the case of a minimum wage increase, the subsidies will be paid either by consumers through higher prices, by businesses in the form of reduced profits, and by workers who end up losing their jobs (and income) as a result of reduced business and the shift by businesses towards less labor-intensive production technologies.

Herein lies the specific problem for the City of Los Angeles. The City's economy is not an island unto itself. Rather it contains slightly over one-third of the broader Los Angeles County economy, which doesn't recognize the relatively capricious political borders history has created. The City of Los Angeles borders over 30 other cities where the minimum wage will not be raised, and but for the occasional sign, a casual observer would miss moving from the high-wage zone to a low-wage one, and vice versa. To put this in better context, almost 40% of all businesses in the City reside within two miles of the City's border—a five-minute drive or bus ride.

In such a competitive environment, businesses within the City will have limited ability to pass higher labor costs on to their consumers because they vie directly with businesses just outside city boundaries that are not facing similar increases in costs. These businesses will be forced to shift to different employment mixes in order to compete and stay profitable, or equivalently, will find it necessary to move outside the City to avoid the minimum wage altogether. The impact on job levels in the City for low skilled workers will be very real. Those most affected will be the young and the low skilled—the very demographics the proposed minimum wage increase is intended to assist.⁵

Additionally, businesses that employ lower-wage workers and are considering opening or expanding in the broader region will be faced with the choice of locating within the city boundaries at a much higher

³Those who rigorously support increases in the minimum wage often point to the positive feedback effect of increased spending by workers impacted by the pay hike. Under the current proposal's structure, the City of Los Angeles will not receive a large portion of this mitigating impact since the spending will take place largely outside city boundaries.

⁴There is also a fundamental flaw in the plan to increase low-income earner wages as an offset to the high cost of living in Southern California. As noted, the biggest problem in the region for lower income residents is the high cost of housing. But the housing issue is a function of the supply shortage in the area due to the regulatory restrictions on infill and new housing developments. Raising incomes without adding new housing supply implies much of these wage gains will end up only boosting the cost of housing even higher, negating much of the benefit for these families. This undermines the entire idea of promoting a base "living wage" within the city.

⁵Some displaced workers will undoubtedly become re-employed outside city boundaries. However, they will do so at the state minimum wage rather than the higher city level wage, and they will be subjected to losses caused by the period of unemployment prior to finding a new job not to mention potentially longer commute times depending on location.

cost, or locating outside the city boundaries. From a customer proximity standpoint some businesses will open/expand within the City of Los Angeles, but many others will choose not to. For many industries the potential increase in labor costs dwarfs that of the Gross Receipts Tax that the City Council is currently trying to eliminate because of its perceived impact on the City's competitiveness.

Taken together, it is clear that the proposed minimum wage rule, when applied only to the City of Los Angeles, will have significant consequences for job growth. By Beacon Economics' calculations, if the plan is put into place, it will reduce job growth in the City from an expected 1.8% per year for the next five years to less than half that and potentially eliminate growth altogether. In other words, expected job growth would go from 30,000 jobs per year to somewhere between 2,000 to 15,000 jobs.⁶

This, in turn, will have a sharp impact on the growth in revenue streams that support the City's spending. This comes at a period of time when the City is already suffering from years of deficits, underinvestment in infrastructure, and underfunded retirement programs for public employees. Ultimately the proposed minimum wage statute could end up having significantly negative impacts on economically distressed residents by undermining the City's fiscal ability to invest in other programs designed to help those in need.

There is still debate about the net value of minimum wage rules at the state or federal level, in part because it is difficult to directly measure the social "value" of helping low-income families relative to the economic inefficiencies of price floors. But what is truly debatable at the broader level is not at the local level: It is clear that this plan would have significant negative effects on the City's economy with, at best, modest benefits for low-income city residents who do not lose their jobs. As assisting vulnerable populations is the primary focus of the Los Angeles City Council and the Mayor in their policy choices surrounding the minimum wage, we hope that the following report convinces them to abandon this plan in favor of other policy options.

WHO BENEFITS?

Recent work by the Public Policy Institute of California puts the state's current poverty income level at roughly \$32,000 for a family of four.⁷ This implies that two parents would have to work full time, at the \$9 per hour statewide minimum wage, in order to rise above the poverty line. This would still leave a family with little extra to save for tough times or for the future. It would also largely prevent parents from interacting with their children as much on a daily basis, interaction that can end up being so critical to long-term success in school and beyond.

⁶This impact is likely to be larger than it would be for Seattle or San Francisco if conducting a similar study for minimum wage plans in those locations. The reason is because these cities have far fewer minimum wage workers in their workforce as compared to Los Angeles, and because they have political boundaries with less room for spillover effects.

⁷Sarah Bohn, Caroline Danielson, Matt Levin, Marybeth Mattingly, Christopher Wimer, "The California Poverty Measure: A New Look at the Social Safety Net." (2013). *Public Policy Institute of California*. http://www.faccc.org/wp-content/uploads/2014/11/ca_poverty_measure_ppic.pdf.

As such, raising the minimum wage to \$13.25 in the City of Los Angeles seems to make intuitive sense. It would allow one parent to spend more time at home taking care of critical family needs, or give them the ability to save for future needs. But this logic applies only if we believe that the large majority of minimum wage workers fall into this category—a two minimum wage income household, with children.

However, this isn't the case. Consider these basic points about the 25% of workers in Los Angeles County who currently earn less than \$13.25 per hour:⁸

- These workers are not usually the primary income earners, accounting for just 38% of total household income on average.
- 43% of these workers live in households whose total income is greater than \$55,000—the median household income in the County.
- 52% of these workers live in households without children.
- 30% of these workers are less than 26 years old.
- 11% of these workers hold a bachelor's degree or more.
- 19% of these workers are in occupations that very often provide tip or commission income (i.e. waiters or sales positions) that is above and beyond the base hourly pay data.

In short, this is a very blunt tool for helping low income households as it will give a pay raise to many workers who are clearly not in that category. The numbers suggest that only 1 out of every 4 dollars (and likely less) that consumers and businesses in the City will be "taxed" to subsidize the proposed wage increase, will actually end up benefitting those the City is intending to help—namely low income, working households within the City of Los Angeles.

WHAT ARE THE COSTS?

Raising the income of a worker from \$9 to \$13.25 is not insignificant for many businesses, particular those that are relatively labor dependent. The costs go beyond just a base wage increase for two major reasons. The first is that businesses pay other expenses that are linked to increasing the level of wages such as payroll taxes and workers compensation. This will add 10% of more to any wage increase.

More significantly is the wage compression issue. Most firms have a wage ladder, whereby more experienced workers and those who have risen to take on more responsibility are paid a premium above the starting wage. If a firm is required to increase the pay of new workers from \$9 per hour to \$13.25, they must take those who are being paid, say \$10.50, and raise that wage to above \$13.25 in order to maintain the basic hierarchy of pay.

⁸Demographic data at the core of these analyses are based on where people live, not where they work. As such this prevents us from identifying specifically those workers who earn less than \$13.25 per hour within the city itself.

Studies have shown that these issues can end up increasing the wage bill by well over factor of two.⁹ In other words a firm would not only have to pay to increase all workers to a new wage floor, they would have additional cost increases they would need to pay in order to maintain the wage ladder system within the firm's organizational hierarchy.

In order to create an estimate of the increase in labor costs faced by various industries, Beacon Economics has compiled data from a number of sources. The result of the analysis for some of the hardest hit industries is illustrated in the following table. These numbers estimate the increase in labor costs as a share of revenues including non-wage expenses as well as wage compression increases.¹⁰

For many industries the impact is quite small, but for some the impact is dramatic. Restaurants, for example, could see their labor costs go up in total by an amount roughly equivalent to 12% of revenues, holding all else equal. Nursing homes could see their costs rise by 7% of revenues. The increase in costs for the construction and retail industries comes in at a smaller but still significant 4% of revenues. These are substantial costs-in these cases more than 10 times the Gross Receipt Tax that the City is looking to roll back because of its perceived impact on business formation in the City.

It is also important to note how many critical sectors in the

Estimated Increase In Labor Costs from A \$13.25
Minimum Wage: Share Of Revenue For Select Industries

NAICS	Industry	Cost, Low	Cost, High
812	Personal and laundry services	7.7%	11.5%
722	Food services and drinking places	8.1%	12.2%
561	Administrative and support services	7.1%	9.4%
623	Nursing and residential care facilities	5.3%	6.8%
713	Amusement / recreation industries	5.1%	6.9%
624	Social assistance	5.0%	6.8%
314	Textile product mills	3.9%	5.2%
315	Apparel manufacturing	3.4%	5.4%
313	Textile mills	3.2%	5.3%
721	Accommodation	3.2%	4.4%
452	General merchandise stores	2.9%	4.7%
236	Construction of buildings	2.9%	4.3%
493	Warehousing and storage	2.7%	3.5%
712	Museums, historical sites	2.1%	2.5%
445	Food and beverage stores	2.1%	3.0%

Calculations by Beacon Economics

City's economy would be negatively impacted. The apparel industry, already struggling with growing foreign competition, will find costs rising sharply if such facilities choose to stay within city borders. Social

⁹Jeannette Wicks-Lim. (2006). "Mandated Wage Floors and the Wage Structure: New Estimates of the Ripple Effects of Minimum Wage Laws." PERI Working Paper No. 116.

¹⁰Data on the distribution of hourly pay by industry were obtained from the OES and scaled by pay information collected from the American Community Survey. The labor cost to revenue ratios are based on the Economic Census for 2012. The wage compression effect for each industry was calculated by taking the average of two numbers: the increase in labor costs of increasing all workers wages to the new wage floor and the increase in labor costs by increase the wages of everyone under the new wage floor by the same amount. It is worth noting that the average of this methodology is very close to the 2.5 factor referenced in the literature on the topic.

assistance—including many charities—will see costs rise sharply, reducing their ability to support their causes.

These numbers are also higher than what would occur in practice because they assume that the firms would not change how they operate as a result of the mandated pay increase. This isn't realistic because these estimated cost increases as a share of revenues are significantly higher than the gross profit margin on revenues for these businesses. In other words if they did not change how they did business in response to the proposed wage increases, these firms would quickly go out of business.

To survive, businesses facing higher costs will do a number of things. First, they will shift as best they can to a less labor-intensive business model. For example, they may purchase a labor-saving piece of equipment to reduce the number of workers they need to accomplish a certain task. They will additionally have to raise their prices by some amount. This will, by definition, reduce the amount of business they do which will in turn reduce the amount of labor they will hire. In short—a higher minimum wage in this context means fewer jobs.

The negative employment impact of raising the minimum wage not only corresponds with conventional economic theory, it is a given within mainstream economic literature that the effect has been statistically verified, albeit the size of the negative shock varies depending on the size of the minimum wage hike, the geographic nature of the area being studied, and the composition of the local workforce.

In regard to all three issues the City of Los Angeles is particularly exposed to potential negative impacts from the proposed minimum wage increase. It is a very significant increase, 30% over the state minimum wage even when taking into account the pending increase in the state's rate. The Los Angeles region also has a high number of low skilled workers, as compared to places like Seattle or San Jose, who will be affected.

And perhaps most significantly the City of Los Angeles economy, while large, is still less than 40% of the County total, and makes up even less of the Greater Los Angeles region. As mentioned, the City borders over 30 other cities within the County and a significant amount of unincorporated county land that will have far lower wage floor levels. Firms within the city limits will have limited ability to raise prices before they lose business to competitors outside the City. All this implies that the job impact will be significantly greater locally than it would be if the minimum wage were raised at the state or Federal level.

These are the static effects. There is also a dynamic aspect. All economies see the constant formation and ending of firms—particularly small businesses. When new businesses begin they have to make a choice about where to locate both across economies as well as within them. The tradeoffs between location and cost are clear; thus rents for similar types of spaces can be higher in one part of a city relative to another. For industries where the difference could end up being 5% or more of revenues, the decision will be easy to understand. A higher minimum wage will clearly incentivize some new firms who may have chosen to locate inside the City to instead choose a location outside city boundaries.

Beacon Economics has modeled the impact of what an increase in the minimum wage would mean for the City of Los Angeles as a result of the jump in labor costs for minimum wage workers. Overall, the model

does not suggest that, on net, the City would lose jobs. There are many growing sectors in the City's economy that would not be impacted by the higher rate. But there would be a significant impact on the City's ability to grow—and jobs not created are no different than jobs lost.

Beacon Economics' current forecast model for the City predicts that growth over the next five years should average 1.8% annually. This suggests that the City will add roughly 150,000 new jobs in that time period.

Beacon Economics uses industry wage elasticity data from recent empirical work performed by labor economists from MIT and the National Bureau of Economic Research to model how much potential growth will be lost as a result of the proposed minimum wage increase. The numbers predict that growth will slow to 0.9% per year at best or to 0.1% per year at worst—roughly 10,000 to 77,000 new jobs instead of the forecasted 150,000. The proposed minimum wage increases at worst—roughly 10,000 to 77,000 new jobs instead of the forecasted 150,000.

This means that the wage increases will cost the city 73,000 to 140,000 new jobs over the next five years.¹³ The largest job "losses" relative to current trend will occur in the food service and accommodation sector, followed by retail trade and administrative services. Such a change could end up restricting revenue growth in the City to around two-thirds of the expected level.

City of Los Angeles 5-Year Job Impact from the Minimum Wage Increase

			Minimum V	Vage Impact
Industry	Current	Base	Best	Worst
Total	1,628,671	1,778,824	1,705,790	1,639,177
Difference		150,152	77,119	10,506
Accomm. & Food Services	146,412	172,264	153,102	135,684
Difference		25,852	6,689	-10,729
Retail Trade	141,829	154,097	143,695	133,863
Difference		12,268	1,867	-7,965

Source: EDD

Calculations by Beacon Economics

And those who would suffer most from these job losses are the two groups that have the most to lose. By Beacon Economics' calculations over one-third of the losses will accrue to workers under the age of 25. These are formative years and without those jobs there will be a loss of critical job experience, life

¹¹Jonathan Meer and Jeremy West. (2015). "Effects of the Minimum Wage on Employment Dynamics." *Texas A&M University*.

¹²These losses include both the initial static losses from the implementation of the minimum wage as well as dynamic losses from business formation shifting to areas outside city boundaries. After five years the static losses will be complete, and city growth rates will start to accelerate modestly, but not to the no-minimum wage level.

¹³These jobs would not necessarily be lost to Los Angeles County. Many may form in areas outside Los Angeles City boundaries but within the County. The current Los Angeles City minimum wage plan will serve as a booster for job growth in other cities within the County.

learning, and the potential to save for post secondary education. Roughly 30% of the jobs losses will hit workers who have not had the opportunity to earn a high school degree, and who make up some of the lowest income workers. For these workers the loss of a job will be potentially catastrophic in today's still weak labor market.

Conclusion

While the intentions are commendable, based on Beacon Economics' analysis, the minimum wage proposal currently in consideration will, on net, have significantly negative consequences for the City. The benefits will be small, with only one-quarter going to those whom the Mayor and City Council are attempting to target with assistance. Additionally, the costs to the City are very high, and could all but erase potential growth in the City's employment base for the next five years.

This does not imply that the City should not continue pursuing efforts to help families on the edge of poverty. This analysis only states that raising the minimum wage at the city level is not an efficient way of addressing the problem. Programs that more effectively target those who are in the most need would be better solutions. Such programs may be more difficult to implement, given that they are often funded directly by city revenues rather than indirectly through a tax on city business activity as with an increase in the minimum wage. But given the potential negative impact a hike in the minimum wage would have on growth in the City's revenue base, such direct programs might ultimately be cheaper options.

At the very least the City Council should consider that there are a variety of potential changes that could be made to the underlying structure of the minimum wage plan that would help mitigate some of the negative economic consequences to the City. Such mitigating amendments could include the following:

- Reduce the size of the increase, acknowledging that the wage compression effect will still create an impact on wages for some workers beyond this new base level.
- Figure out a legal way of eliminated or reducing the minimum wage increase for workers who receive secondary income such as tips or commissions such as setting a minimum "compensation" level.
- Extend the phase-in period to reduce the potential static shock of the initial increase.
- Eliminate the future CPI adjustment until the full economic impact on the city is better documented.
- Put in controls which reduce the level and speed of the minimum wage hike if the city fails to meet certain benchmarks for economic growth.
- Eliminate the minimum wage for training periods/younger workers/nonprofits/small businesses.
- Give minimum wage "credits" to firms that provide benefits such as healthcare.

The following report lays out the foundations of these results. We end with a more complete description of what some of these potential policy changes might be.

BACKGROUND ON BEACON ECONOMICS' ANALYSIS

THE PROBLEM: LOW-SKILLED WORKERS ARE FALLING BEHIND

Although the economy of Los Angeles is strong and growing, and incomes are higher than in most of the United States, poverty remains a major problem. In Los Angeles County, an estimated 18% of individuals live below the poverty line, which is higher than in the state overall (16%) or the country (15%).¹⁴ The high cost of housing in Los Angeles, due primarily to a constrained supply, makes it even more difficult for many to stay above water. The existing single-family median home price for the Los Angeles metro is \$450,000, the seventh-highest in the nation.¹⁵

Concerns about a "barbell" economy developing in Los Angeles are valid, with many residents at very high incomes, many residents at very low incomes, and a shrinking middle class.

Low-skilled workers in the City of Los Angeles face a very uncertain future, as the labor market becomes more and more specialized. Some of the largest job growth in California during the economic recovery has been in high-skilled industries, such as Professional, Scientific, and Technical Services (20% since 2010). Low-skilled industries such as Retail Trade are growing, as well, but **it will become more difficult for individuals in low-skilled industries to earn a good living in the years ahead.** With the labor market still relatively weak following the "Great Recession," wage growth has remained fairly stagnant, especially for low-skilled workers. With the help of great advancements in technology, businesses in low-skilled industries are investing more in capital and requiring less labor. "Low-skilled" increasingly will mean "low-income" in California.

Los Angeles needs to pursue policies that will prevent these problems from growing, without generating economic inefficiencies that outweigh the socially beneficial outcomes. The Los Angeles City Council and other local leaders deserve a great deal of credit for creating and supporting many policies that do just that. Investments in local education and workforce training have been essential in helping workers adapt to a 21st century economy. Tax incentives to encourage commercial development in struggling areas and incentives to promote residential construction in these areas are valuable as well.

THE CITY COUNCIL REMEDY: RAISING THE MINIMUM WAGE

At the broad state and federal level, policies such as tax credits for low-income families and increases to the minimum wage can indeed help low-income residents from falling behind. For decades, the federal minimum wage rose steadily on an inflation-adjusted basis, reaching its peak in the early 1970s before steadily falling as minimum wage increases became less frequent. The current federal minimum wage has roughly the same purchasing power it had in the early 1950s. ¹⁶ With some exceptions, the California min-

¹⁴Alice Walton and Shana Daloria, "Los Angeles Poverty Rate Greater than California, Nation." KPCC. December 3, 2014.

¹⁵"Median Sales Price of Existing Single-Family Homes Ranked by Median Price Level." National Association of Realtors. February 11, 2015.

¹⁶"History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938-2009." U.S. Bureau of Labor Statistics, Wage and Hour Division.

imum wage has followed a similar trajectory, experiencing larger, more frequent increases until around the late 1970s when the minimum wage started remaining flat for longer periods of time with less overall growth.¹⁷ Like the federal minimum wage, the purchasing power of the state minimum wage has decreased in recent decades.

A host of cities in California have implemented their own local minimum wages in an effort help residents keep up with very high local costs of housing, transportation, and other goods and services. These cities include:

- Oakland
- Pasadena
- Petaluma
- West Hollywood
- Santa Monica
- Emeryville

Major cities in other states, such as Santa Fe, New Mexico, and Seattle, Washington, have implemented comparable living wage ordinances. In Seattle, unlike many local minimum wages, the new citywide minimum wage will apply to businesses of all sizes, as well as nonprofits.

Is this the right step for the City of Los Angeles? Last year, Mayor Eric Garcetti proposed raising the city-wide minimum wage to \$13.25 per hour by 2017, with increases based on growth in the Urban Consumer Price Index thereafter. Late last year, six Los Angeles City Councilmembers countered with a proposal to raise the wage to \$15.25 per hour by 2019. Labor groups are calling for a local minimum wage of \$15 per hour or higher. In late 2014, the City Council passed a \$15.37 per hour minimum wage for workers at Los Angeles hotels with 150 or more rooms. Although the Los Angeles City Council appears to be following the example of several other cities in raising the minimum wage for all workers citywide, Councilmembers should be aware of a number of severe pitfalls that might arise with such a measure.

REVIEWING CURRENT MINIMUM WAGE RESEARCH

WHAT DOES THE EXISTING MINIMUM WAGE LITERATURE SHOW?

Much of the existing literature on minimum wage policy is relatively controversial, showing that increases to the minimum wage will have negative economic impacts. Low-skilled workers will generally be the first to face layoffs.

¹⁷"History of California Minimum Wage." State of California Department of Industrial Relations.

¹⁸David Zahniser and Emily Alpert Reyes, "L.A. Lawmakers Lay Out Path to \$15.25 Minimum Wage by 2019." *LA Times*. October 7, 2014.

¹⁹Ben Bergman, "Why Unions Lead the \$15 Minimum Wage Fight, Though Few Members Will Benefit." KPCC. January 29, 2015.

A January 2015 study from economists Jonathan Meer and Jeremy West finds that a 10% minimum wage increase reduces employment by nearly 1% after three years, with the biggest losses attributed to young and low-skilled workers.²⁰

The U.S. Congressional Budget Office reported in 2014 that an increase in the federal minimum wage from \$7.25 to \$10.10 per hour by 2016 would reduce nationwide employment by 0.3%, as businesses lay off lowwage workers. A 2006 report by economist Joseph Sabia finds that a 10% increase in the nationwide minimum wage is associated with a roughly 1% decrease in employment at small businesses, including a 4.5%-9.0% decrease in *teenage* employment at small businesses.

Local nonprofits may also be at risk. In Seattle, where the citywide minimum wage will reach \$15 per hour this year, nonprofits fear having to cut staff or services to accommodate the wage increase.²³ Because nonprofits receive much of their funding through grants or donations for specific uses, they have difficulty shifting revenue around to meet higher labor costs. Many nonprofit workers already work at wages well below the market rate for their skills.

Researchers have found that wages rise not only for workers at or slightly above the "old" minimum wage, but also for workers above it. This is known as the "ripple effect" of the minimum wage. The ripple effect is a necessary part of a minimum wage increase. Most firms have a wage ladder, in which more experienced workers and those who have risen to take on more responsibility are paid a premium above minimum wage. For example, if a firm is required to increase the pay of new workers from \$9 per hour to \$13.25 per hour, they must take those who are already being paid more than \$9 per hour and raise those wages to above \$13.25 per hour in order to maintain the hierarchy of pay. Workers above the minimum wage need to be rewarded for their skills. If policy mandates increase the wages of low-skilled workers to at or near the level of higher-skilled workers, then the wages of higher-skilled workers also need to increase.

A 2006 report from Jennette Wicks-Lim finds that the ripple effect can add 150% of the cost of a minimum wage increase, with workers up to 23% above the "old" minimum wage earning a bump in their wages.²⁴ The ripple effect is an important cost to labor-intensive businesses—especially businesses with many low-skilled workers.

Many researchers do not believe that raising the minimum wage is actually an effective solution to poverty. A 2010 report by Joseph Sabia and Richard Burkauser found no evidence that statewide increases in the minimum wage reduced those states' poverty rates. A majority of workers earning the min-

²⁰Jonathan Meer and Jeremy West. (2015). "Effects of the Minimum Wage on Employment Dynamics." Texas A&M University. ²¹Congressional Budget Office. (2014). "The Effects of a Minimum-Wage Increase on Employment and Family Income." Pub.

No. 4856.

²²Joseph J. Sabia. (2006). "The Effect of Minimum Wage Increases on Retail and Small Business Employment." Employment Policies Institute.

²³Graham Johnson. "Report: The \$15 Minimum Wage Could Force Seattle Nonprofits to Cut Services to the Poor." KIROTV.COM. February 24, 2014.

²⁴Jeannette Wicks-Lim. (2006). "Mandated Wage Floors and the Wage Structure: New Estimates of the Ripple Effects of Minimum Wage Laws." PERI Working Paper No. 116.

imum wage lived in households with **incomes more than two times above the poverty line**.²⁵ In 1995, economists David Card and Alan Krueger claimed that the minimum wage does not affect poverty because it does not effectively reach those in poverty who are not working.²⁶

Despite what some researchers have claimed, there is no real consensus over whether the impacts of a minimum wage increase will be positive or negative. A 2007 literature review by David Neumark and William Wascher studied the low-wage employment effects of the minimum wage and found no consensus about the overall effects of a minimum wage increase on low-wage employment, although a significant majority of what they examined show negative effects.²⁷

On the whole, the findings of the existing literature are divided, but there appears to be a significant body of research that shows modestly negative economic impacts. This alone does not necessarily negate the merits of a minimum wage increase, however. Governments set many policies that lead to inefficiencies. Tax policy is very often inefficient. Yet, the minimum wage, like many kinds of taxes, is designed to create inefficiencies in the name of economic or social equality. Increasing the local minimum wage could be good for Los Angeles if it furthered equality at an acceptable economic cost.

For Los Angeles, the key question is how high the economic cost will be. At the local level, it is not easy for researchers to determine. Existing literature does not delve deeply into local minimum wage impacts, so there are not many 1:1 comparisons available. We can expect, however, that modestly negative impacts from a minimum wage at the federal or state level **might be larger at the local level** because consumers can buy goods or services in nearby cities and businesses can relocate to nearby cities if their costs grow too high.

As noted above, a number of Los Angeles City Councilmembers, Mayor Garcetti, and local labor unions such as the Los Angeles County Federation of Labor believe that the social benefits outweigh the potential economic costs. Groups such as the Los Angeles Area Chamber of Commerce, BizFed, the Valley Industry and Commerce Association believe that the costs of the proposed wage increase are too high.

SHORTCOMINGS IN THE BERKELEY GROUP'S ANALYSIS

In May 2014, Mayor Garcetti commissioned the Institute for Research on Labor and Employment at the University of California, Berkeley —a group composed of researchers Michael Reich, Ken Jacobs, Annette Bernhardt, and Ian Perry—to assess the impacts of his proposed citywide minimum wage increase to \$13.25 per hour by 2017. Recently, the Los Angeles City Council, after examining the Berkeley group's report, commissioned the group to conduct another independent analysis of a proposed citywide minimum wage increase. In the group's report for Mayor Garcetti, it found that the proposed minimum wage increase would have:

²⁵Joseph J. Sabia and Richard V. Burkhauser. (2010). "Minimum Wages and Poverty: Will a \$9.50 Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal*, Vol. 76, No. 3.

²⁶David Card and Alan B. Krueger. 1995. *Myth and Measurement: The new economics of the minimum wage*. Princeton, N.J.: Princeton University Press.

²⁷David Neumark and William Wascher. (2007). "Minimum Wages and Employment." IZA Discussion Paper No. 2570.

- No significant impact on local employment or hours for existing workers;
- No significant impact on local consumer prices;
- No significant impact on costs for existing local businesses;
- No significant impact on new local business growth; and
- A significant impact on increasing personal income and reducing poverty in Los Angeles.

The group also claimed that the proposed minimum wage increase would have a targeted impact on working poor families and disadvantaged minority workers in the City.

With respect to the Berkeley group's analysis, we believe that there are several shortcomings in the methodology that call its findings into question. The Berkeley group examines data for the County of Los Angeles, rather than the City of Los Angeles, claiming that data for Los Angeles County serves as a proxy for city data. Although the City of Los Angeles contains much of the population of Los Angeles County, there are points of concern in making such a comparison. The economy of the City of Los Angeles makes up less than 40% of the County total, and thus key measurements may vary between the two regions. For instance, the poverty rate and the unemployment rate may be different between the two, making it more difficult to estimate the impact of the minimum wage increase on those variables. The distribution of businesses between the two regions could differ as well. For instance, a minimum wage increase might have an especially large impact on downtown firms in a given industry. This might get lost in county-level data.

The Berkeley group's reliance on county-level data also raises a larger concern about the overall analysis: there is no accounting for the very unique geography of Los Angeles relative to other cities that have implemented a local minimum wage increase. The City of Los Angeles borders over 30 other cities that have vibrant economies of their own and large populations. If consumers face higher prices at Los Angeles businesses due to the minimum wage increase, they can relatively easily buy many of the goods or services they need in neighboring cities. Businesses, especially businesses near the border, can more easily relocate to a nearby city to avoid the increase in labor costs, without losing much of their customer base.

The Berkeley analysis also does not include an examination of the commute patterns of Los Angeles workers. Many workers in the City of Los Angeles commute into the City from more affordable neighboring cities. After an increase in the minimum wage, these workers will spend most of their additional wages close to home, which benefits the economies of those home cities at the expense of businesses in the City of Los Angeles.

The Berkeley group emphasizes the wage and employment effects to Los Angeles workers but puts little emphasis on the profit effect to Los Angeles businesses. The group believes that business costs will not significantly rise as a result of the increase, while prices will not significantly rise for consumers.

Consider, however, the impact that smaller profits will have on some businesses. For small or struggling businesses, any drop in the profit margin may not be sustainable. Some businesses may have to close. For emerging businesses, smaller profits hinder their ability to expand. **This is an obstacle to economic growth in the City**. It also discourages entrepreneurs from starting businesses in Los Angeles. Why risk starting a new business in Los Angeles when operating costs could be lower in a nearby community?

These are just some of the shortcomings in the Berkeley group's analysis, many of which will be assessed in the empirical discussion below. A full review of the identified shortcomings is presented in the literature review of this report's appendix. Below are a series of comments from city leaders and analysts that are critical of the Berkeley group's commissioned analysis for the Los Angeles City Council.

Criticisms Of The Berkeley Group's Study

"How can the public possibly expect a new, unbiased review of the two [minimum wage] proposals when the institute has already concluded that the mayor's proposal will be good for L.A.?" – Los Angeles Times Editorial Board, January 12, 2015

"The selection of U.C. Berkeley, by perception, compromises the possibility of a fair and balanced discussion." – Los Angeles City Councilmembers Mitch O'Farrell and Felipe Fuentes

"It's absurd for the City of Los Angeles to spend taxpayer dollars contracting UC Berkeley's Institute for Research on Labor and Employment to tell them what they've already told them previously, especially when that organization has been helping advocate for the mayor's proposal." – Los Angeles BizFed Chief Executive Tracy Rafter

"These researchers had their minds made up about the minimum wage before they started writing page one of the original Los Angeles study." – **Employment Policies Institute Research Director Michael Saltsman**

"It is inconceivable that they [the researchers] would ever come back and say, 'We were wrong, this will have more impact." – Valley Industry and Commerce Association President Stuart Waldman

COST-BENEFIT OVERVIEW

As with any major public policy initiative, a plan to raise a citywide minimum wage should be subjected to a rigorous and unbiased cost-benefit analysis. The analysis needs to determine how well the new wage is targeted towards those in the most need and how effectively it will accomplish that goal. The analysis also needs to assess who will pay the costs of the policy, what those costs will be, who will receive the benefits of the policy, and how large those benefits will be. Ultimately, the objective is to determine whether the costs of the policy are justified by its benefits.

Every economic policy decision has some sort of cost-benefit trade off. In the case of minimum wage proposals, the benefits are clear and easy to define – these policies raise the wages and incomes of low-income workers. The costs of a minimum wage increase, and the mechanisms by which they are absorbed into an economy, can be much more opaque and travel through several channels. The following infographic breaks down what we consider to be the short-term and long-term costs and benefits.



BENEFITS

- **Higher wages for workers:** Putting employment effects aside for now, an increase in the minimum wage from \$9 per hour to \$13.25 per hour represents a 47.2% nominal increase in the earnings of minimum wage workers. An increase that large will lead to a significant boost in the standard of living for many minimum wage workers in the City of Los Angeles. It will help many of the struggling working families that the City Council is targeting with the proposed policy.
- More local spending: Higher incomes lead to more spending. About half of the workers who would receive a raise under the current minimum wage proposal both work and live in the City of Los Angeles, meaning they are going to spend a significant amount of their higher wages back into the economy. This is going to be a boost for local businesses. The increase in spending will have a positive effect on local revenues as well because higher spending translates into higher taxable sales.
- Other potential gains: Another potential positive is decreased worker turnover. Filling a position and training a new employee is an expensive undertaking for a business. A limited body of economic research has concluded that minimum wage workers tend to remain at positions longer after minimum wage increases, decreasing turnover.

COSTS: SOMEONE HAS TO PAY THOSE HIGHER WAGES

- **Consumers and owners:** The most notable short-term effects will be a decrease in the profit margins of businesses, or alternatively, an increase in the price of products bought by consumers as businesses pass higher payroll costs along to customers.
- A shift to more capital-intensive production: Often, when the costs of labor rise as a result of a minimum wage increase, businesses attempt to move into more capital-intensive goods as they become relatively cheaper in the face of higher labor costs. For example, a business may purchase a piece of equipment that will reduce the number of workers needed to accomplish a certain task in the production process. This, in turn, accounts for some of the disemployment effect that has been identified following minimum wage increases.
- Reduction in demand from higher prices: If the minimum wage increase is large enough, business owners will have to raise prices accordingly to cover the increased costs of labor. If prices rise too high or too fast, businesses will begin to lose customers and the resulting lack of demand will have a negative impact on employment. The lack of demand may not be recouped by an increase in consumer spending (from the wage increase) if workers receiving those wages do not live in, and thus do not spend their money in, the area where the wage increase takes place.
- Movement of firms to other locations over time: A longer-term concern is that certain businesses will locate outside of the City to avoid higher labor costs. The City of Los Angeles borders over 30 other municipalities where the cost of doing businesses would be much less expensive. In addition, future business growth in the City of Los Angeles is likely to be hampered as new businesses opt to open their doors in locations outside the reach of the city's minimum wage ordinance.

COST-BENEFIT ANALYSIS AND OUR FRAME OF REFERENCE

It is critical when developing a cost-benefit analysis for a minimum wage proposal to consider the underlying size and structure of the economy in question and to ensure the corresponding analysis captures the intricacies of the economic area. Broadly speaking, this means making an important distinction between the differing effects of a citywide minimum wage increase as compared to a statewide or national increase. Additionally, the underlying composition of the economy in the City of Los Angeles is much different than that of other municipalities that have recently passed citywide minimum wage increases including the cities of San Francisco and Seattle.

To elaborate, citywide minimum wage increases often expose a city to certain risks that are not usually major factors in statewide increases. As mentioned above, citywide increases leave cities uniquely susceptible to businesses relocating to neighboring municipalities where their labor costs will be diminished. This same dynamic also affects the location decision made by new establishments. The same risks further apply to consumers, who may, due to price increases from owners who have to pass payroll cost increases on to their customers, opt to shop for goods and services in nearby municipalities.

Many researchers have looked at large minimum wage increases in cities such as Seattle, which recently voted to raise its minimum wage to \$15 per hour, and concluded that the proposed increase of \$13.25 per hour in the City of Los Angeles isn't that steep by comparison. However, the distribution of incomes is much different in the City of Los Angeles than it is in the City of Seattle.

The proposed minimum wage increase in the City of Los Angeles will create a minimum wage that is 92% of the current median wage for a full-time worker in the County of Los Angeles. By comparison, a worker making \$15 per hour in Seattle would earn 72.2% of the median wage in King County, and a worker in San Francisco earning \$13.73 per hour would earn 59.4% of the median wage in San Francisco County. This implies that the City of Los Angeles has a much higher proportion of low-wage workers as compared to these other cities, and therefore the wage increase will affect a larger portion of the population. This is a double-edge sword because it implies the scale of both the benefits and the costs will be magnified in the City of Los Angeles as compared to other municipalities.

DIGGING INTO THE NUMBERS

METHODOLOGY

Before diving into the numbers it is important to address how Beacon Economics achieved its results, as well as why we took the steps we did and made the assumptions we made.

The base data utilized in Beacon Economics research came from the U.S. Census American Community Survey (ACS), an annual survey administered to households throughout the nation. This survey, among other things, provided a demographic profile of residents working in Los Angeles County, including their employment characteristics. The ACS Public Use Microdata Sample (PUMS) included the individual response data needed to provide the level of detail necessary for this study.

When building a demographic profile for workers Beacon Economics noticed a significant flaw in the ACS data being used: the distribution of the data didn't fully coincide with what would be seen in the real world. The skewed distribution comes from the under-reporting of incomes and/or over-reporting of hours worked on the low end, and the opposite case on the high end. To remedy this solution Beacon Economics requested and received wage distribution data from the Occupational Employment Statistics (OES) at the industry level and re-weighted the ACS data to match that distribution. This data then formed the base from which we made calculations.

The next step was to apply the insights gained from the adjusted ACS data and apply them to payroll data for each establishment in the City of Los Angeles, data obtained from the Employment Development Department (EDD). After this step was complete, Beacon Economics was able to build in its assumptions about what the effects of a proposed minimum wage increase to \$13.25 per hour would be on employment, business costs, and take-home pay for workers. These figures were calculated for the City of Los Angeles overall, on an industry-by-industry basis, and for each City Council District.

When calculating employment effects, Beacon Economics used as its baseline the fairly conservative wage elasticities that are provided on a sector-by-sector basis in the January 2015 analysis by Jonathan Meer and Jeremy West.²⁸ We also calculate a "worst case scenario" where the elasticities are tripled.

For Beacon Economics' model of cost increases to businesses. we first calculate the initial increase in payrolls caused by the minimum wage and then take it a step further. There is a fair amount of evidence in minimum wage literature indicating wage increases lead to "rippleeffects" that cause workers who are making above the previous minimum wage, but slightly above or below the new minimum wage, to receive pay increases above and beyond the new minimum wage. We use, as the basis of our ripple-effect calculations, the results from a recent analysis by Jennette Wicks-Lim which finds that the rippleeffect of a minimum wage increase boosts payrolls an addi-

NAICS	Industry	Cost, Low	Cost, High
812	Personal and laundry services	7.7%	11.5%
722	Food services and drinking places	8.1%	12.2%
561	Administrative and support services	7.1%	9.4%
623	Nursing and residential care facilities	5.3%	6.8%
713	Amusement / recreation industries	5.1%	6.9%
624	Social assistance	5.0%	6.8%
314	Textile product mills	3.9%	5.2%
315	Apparel manufacturing	3.4%	5.4%
313	Textile mills	3.2%	5.3%
721	Accommodation	3.2%	4.4%
452	General merchandise stores	2.9%	4.7%
236	Construction of buildings	2.9%	4.3%
493	Warehousing and storage	2.7%	3.5%
712	Museums, historical sites	2.1%	2.5%
445	Food and beverage stores	2.1%	3.0%

tional 150% on top of the direct effects. From here, we add in other employee related costs that are shouldered by employees such as FICA/Social Security, Medicare, federal and state taxes, etc. Totaled, these add about 15% to the cost of the increase.

The process for calculating take home pay is very similar, but instead of tacking on the miscellaneous costs, we deduct taxes. It is very important to keep in mind that not all of the take home pay earned by those who work in the City of Los Angeles will be spent in the City. According to the Longitudinal Employer-Household Dynamics (LEHD), about 47.4% of the workers who would be affected by the proposed wage increase live outside of the City of Los Angeles so much of the benefit will be spent elsewhere.

WHICH WORKERS WILL BENEFIT?

Beacon Economics' demographic profile, constructed below, was created as discussed in the methodology section above, but with an important distinction: Our demographic profile only looks at workers who

²⁸Jonathan Meer and Jeremy West. (2015). "Effects of the Minimum Wage on Employment Dynamics." Texas A&M University.

would be *directly* affected by the minimum wage proposal. We make no mention of the demographics of employees influenced by the ripple-effect because they are secondary beneficiaries and not explicitly targeted by the wage proposal.

Los Angeles County - Workers Affected by Proposal by Age (Non-Ripple Effect)

Age	Affected Workers (%)	Total Workers (%)	Total Workers (#)
Under 18	69.70%	0.70%	7,271
18 to 20	80.20%	8.69%	90,262
21 to 25	57.60%	20.46%	212,516
26 to 30	31.40%	13.41%	139,288
31 to 35	24.80%	10.34%	107,400
36 to 40	22.50%	9.47%	98,364
41 to 45	24.20%	9.95%	103,350
46 to 50	22.70%	8.71%	90,470
51 to 55	20.00%	7.13%	74,059
56 to 60	20.80%	5.74%	59,621
61 to 65	20.50%	3.35%	34,796
Over 65	20.50%	2.06%	21,397

Source: ACS (PUMS)

Calculations by Beacon Economics

Los Angeles County - Household Statistics Workers Affected by Proposal (Non-Ripple Effect)

Share of Household Income (%)	Head of Household (%)	Affected Population (%)	Affected Population (#)
0 - 20	11.43%	33.32%	346,143
20 - 40	23.77%	29.05%	301,749
40 - 60	38.14%	16.93%	175,822
60 - 80	51.20%	6.81%	70,705
80 - 100	75 . 97%	13.89%	144,270

Source: ACS (PUMS)

Calculations by Beacon Economics

Educational Distribution by Class of Worker

Education	Count of All Workers	Share of All Workers	Count of Min. Wage Workers	Share of Min. Wage Workers
Less than High School	617,671	17.3%	319,217	30.7%
High School or Equivalent	727,359	20.3%	281,031	27.1%
More than HS, Less than Bachelor's	1,086,674	30.4%	307,002	29.6%
Bachelor's Degree	778,951	21.8%	107,746	10.4%
Prof. or Grad. Degree	365,514	10.2%	23,708	2.3%

Source: ACS (PUMS)

Calculations by Beacon Economics

Distribution of Affected Workers by Hours Worked & Education

Calculations by Beacon Economics

Count of Affected Workers
69,548
192,012
236,103
164,747
14,437
35,339
93,978
79,254
145,362
7,924

Based on OES adjusted demographic data from the ACS, Beacon Economics finds the following in regard to the profile of minimum wage workers in Los Angeles:

- 47.9% of workers affected by the proposed minimum wage increase are female.
- 52% of workers affected by the proposed minimum wage live in households without children.
- Younger workers are much more likely to be minimum wage workers; 80% of workers age 18 to 20 would be affected by the minimum wage increase, with that number decreasing to about 20% among workers age 51 and up.
- 56.2% of workers with less than a high school degree would be affected by the proposed minimum wage increase, versus 10.2% of workers with a bachelor's degree or higher. This suggests that programs geared towards building a more educated workforce, or attracting and maintaining higher skilled workers, would be a more beneficial approach to improving earning outcomes.

- Potentially affected workers are not usually the primary income earners, accounting for just 38.2% of total household income on average.
- 43% of these workers are living in households where the total income is greater than \$55,000—the median household income in Los Angeles County.
- 91% of workers affected by the proposed minimum wage increase are 21 or older, and 30% of these workers are less than 26 years old.
- 57.8% of workers affected by the proposed minimum wage increase have a high school education or less.
- 34.8% of workers affected by the proposed minimum wage increase are part-time workers and 19% of these are in occupations that very often provide tip or commission income (i.e. waiters or sales positions) above and beyond the base hourly pay data.

Though many minimum wage workers are not the primary source of income in their households, the proposed minimum wage increase would no doubt have an impact on some struggling working families in the City of Los Angeles, increasing the household income for primarily adults at very low wage levels. However, will this improve the quality of life for low-income residents or alleviate the problem of working poverty in Los Angeles, two primary goals of the policy?

Consider the high cost of housing in Los Angeles as an example. Lower-income residents are currently struggling to keep up with an already high cost of housing that is certain to grow in the years ahead. This is a problem rooted in the housing market, not the labor market. Housing costs are high because there is a shortage of supply in Los Angeles due to regulatory restrictions on infill and new housing developments. Raising wages without adding new housing supply will only serve to raise the cost of housing even more, eliminating much of the benefit for struggling families. A higher wage will not be more of a "living wage" if the costs of housing continue to rise for lower-income residents.

HOW MUCH WILL THEY BENEFIT? INCREASED SPENDING IN THE CITY

Based on calculations by Beacon Economics, it is estimated that the proposed increase in the minimum wage would lead to an increase in take home pay for employees working in the City of Los Angeles of roughly \$4.4 billion dollars independent of employment effects. This boost in take home pay includes all indirect and induced effects, as they are a function of the dynamic effects being captured in the model. Keep in mind that just over half of these workers live in the City of Los Angeles. Assuming a worst case scenario in which workers living in the City only spend their income gains in the City and vice versa, the amount of that take home pay spent in the City could be as low as \$2.3 billion. This positive increase in spending will provide a boost to revenues for the City by increasing taxable sales. Beacon Economics estimates that the increased revenue will be \$23 million dollars based on the worst-case scenario estimate above.

A LOOK AT THE OVERALL IMPACTS ON FUTURE GROWTH IN THE CITY

As mentioned above, Beacon Economics created a multi-phase analysis using data from the ACS, OES city level payroll data for each establishment from the EDD, and live/work data from the LEHD. Pairing this empirical data with various insights garnered from a variety of academic literature on the minimum wage, our analysis results in the following conclusions.

The spending and employment impacts of the proposed minimum wage increase will be negative overall for the City of Los Angeles.

The employment and output projections listed below were created using the methodology described above that formed the basis of our estimated changes in both increased costs for businesses and increased take home pay by workers affected by the minimum wage proposal. Every multiplier estimate has a low-employment, and high-employment estimate. The low-employment effect is based on the coefficients used in the break-in-trend model laid out in the January 2015 paper by Meer and West. Likewise, the high-employment effect estimate uses the same model, but increases the wage elasticity coefficients by a factor of two.

As mentioned above, there will be a large spending effect, but it is clear that the cost hit taken on by businesses is of a greater magnitude. This decrease in overall spending in the economy

all Employment Effects: 2015 -	2020
Low Disemployment Effect	High Disemployment Effect
-73,034	-139,646
Source: ACS, OES, EDD, LEHI Calculations by Beacon Ecor	

will lead to a reduction in employment between approximately 70,000 and 140,000 jobs. In our baseline assumption we project the City of Los Angeles economy will expand at 1.8% annually and add about 150,000 jobs over the next five years. The low-disemployment scenario then implies growth will be halved, while the high-disemployment scenario implies virtually no job growth.

Revenues will also be negatively affected overall. It was mentioned previously that when viewing the takehome pay increases in isolation revenues increase, but after considering the increased business costs and ensuing disemployment, revenues will actually grow at a slower rate. Beacon Economics is forecasting that if the proposed minimum wage policy were to be enacted, revenue growth in the City of Los Angeles would slow to two-thirds of what it would be if no policy were enacted.

One of our primary concerns requires a forward-looking view of the continued impacts the proposed policy would have on the City of Los Angeles. Increasing the minimum wage to \$13.25 per hour would, as we've established, significantly increase the cost of labor inside the City, making the relative cost of labor in neighboring cities much more affordable.

These negative impacts overall are due to the following factors:

- Only 52.6% of workers that would be affected by the citywide wage increase actually live in the City, meaning a significant amount of the increased spending would benefit other municipalities outside of the City of Los Angeles.
- Payrolls for businesses increase by more than the minimum wage increase. This is often overlooked, but in addition to paying employees an increased salary after a minimum wage increase, employers also face increased costs for line items such as Medicare, Worker's Comp, FICA/Social Security, and California State Disability.
- Taxes remove a portion of what gets spent back into the economy.
- Ripple-effects lead to payroll increases above and beyond the increase in the minimum wage.

IMPACTS ON DIFFERENT INDUSTRIES

An increase in the minimum wage in the City of Los Angeles is going to have differing impacts on various industries based on a variety of factors. The main factors considered when looking at industries are as follows:

- 1. What percent of workers in the industry would be affected by the minimum wage increase?
- 2. What percent of total costs do labor costs account for?
- 3. What percent of business revenues go towards labor costs?
- 4. How important is the industry to the City's economy?

Most U.S. industries pay the majority of their workers an amount higher than the minimum wage. For companies in these industries, the level of the minimum wage means little. On the other hand, we consider industries that make extensive use of low-wage workers and divert a large portion of revenues to cover labor costs, to be industries that will experience larger negative impacts as a result of minimum wage increases. Likewise, industries with higher margins and lower labor costs will experience far fewer negative effects. Net economic impacts for a few select industries are listed in the tables below. The steps taken to model these results are the same as the steps taken for the City of Los Angeles overall. As such this section will focus more on why we feel these industries deserve special attention.

Varying Growth Rate Trajectories By 2-Digit NAICS - City Of Los Angeles

NAICS	Industry	Baseline Growth	Low Minimum Wage Disemployment Effect	High Minimum Wage Disemployment Effect
11	Agriculture & Wildlife	-5.65%	-5.65%	-5.65%
21	Mining	-2.89%	-2.89%	-2.89%
22	Utilities	0.53%	0.53%	0.53%
23	Construction	2.62%	-0.03%	-2.68%
33	Manufacturing	-0.41%	-0.41%	-0.41%
42	Wholesale Trade	1.29%	1.29%	1.29%
45	Retail Trade	1.67%	0.26%	-1.15%
49	Trans. & Warehouse	-0.22%	-2.60%	-4.99%
51	Information Service	0.68%	0.68%	0.68%
52	Finance & Insurance	-0.26%	-0.26%	-0.26%
53	Real Estate	2.25%	2.25%	2.25%
54	Professional Service	1.68%	-0.08%	-1.84%
55	Management	2.50%	2.50%	2.50%
56	Admin Support	3.02%	0.81%	-1.40%
61	Education Related	2.17%	2.17%	2.17%
62	Health Care	2.86%	2.86%	2.86%
71	Arts & Entertainment	2.89%	-1.03%	-4.95%
72	Accommodation & Food	3.31%	0.90%	-1.51%
81	Other Service	2.55%	2.55%	2.55%
92	Public Admin	0.76%	0.76%	0.76%

Source: EDD

Calculations by Beacon Economics

NAICS	Industry	2015 Baseline Employment	2020 Baseline Employment	2020 Employment, Low Disemployment Effect	2020 Employment, High Disemployment Effect
11	Agriculture & Wildlife	1,517	1,134	1,134	1,134
21	Mining	1,172	1,012	1,012	1,012
22	Utilities	13,588	13,954	13,954	13,954
23	Construction	38,502	43,826	38,444	33,604
33	Manufacturing	98,678	96,671	96,671	96,671
42	Wholesale Trade	70,598	75,253	75,253	75,253
45	Retail Trade	141,829	154,097	143,695	133,863
49	Trans. & Warehouse	67,791	67,052	59,411	52,482
51	Information Service	59,781	61,834	61,834	61,834
52	Finance & Insurance	57,204	56,458	56,458	56,458
53	Real Estate	35,022	39,151	39,151	39,151
54	Professional Service	124,697	135,507	124,188	113,638
55	Management	20,579	23,289	23,289	23,289
56	Admin Support	96,485	111,941	100,456	89,934
61	Education Related	55,913	62,247	62,247	62,247
62	Health Care	272,477	313,719	313,719	313,719
71	Arts & Entertainment	37,545	43,293	35,650	29,128
72	Accommodation & Food	146,412	172,264	153,102	135,684
81	Other Service	64,260	72,867	72,867	72,867
92	Public Admin	224,621	233,255	233,255	233,255

FOOD SERVICES & DRINKING PLACES

The Food Services & Drinking Places industry is often used as a centerpiece of debates surrounding minimum wage legislation, and for good reason. In the case of the City of Los Angeles, 43.7% of payrolls in that industry would go towards workers who would be affected by increasing the minimum wage to \$13.25. But not all establishments in this industry are created the same, and some have very different labor market dynamics at play when compared to others.

Consider for a moment a full-service, fine dining establishment. Higher end restaurants usually boast higher profit margins than their counterparts, pay their employees more, and do not generally need to worry about customers experiencing sticker shock. Establishments such as these are not likely to be very negatively affected by the minimum wage increase because they are able to pass through costs by raising prices without losing clientele.

But now consider the franchise fast food restaurant that employs primarily young minimum wage workers who don't receive tips. These are the types of restaurants, along with typical sit-down mom and pop restaurants, that would be affected the most by a minimum wage increase, but not necessarily for the better. As mentioned in the preceding literature review, a large amount of research suggests that lower skilled, and particularly teenage, employment is where most of the disemployment effects lie. This will heavily affect the types of restaurants that typically lean on youth employment. Essentially, the very types of establish-

ments that people often have in mind when they think about helping workers via minimum wage increases are the same establishments that end up being damaged the most.

The estimates in the tables above show the kind of impact that the proposed minimum wage increase will have on employment growth each year between now and 2020. Employment growth over current levels in the Accommodation & Food industry, which contains the Food Services & Drinking Places industry, is expected to be 3.3% per year through 2020. If the disemployment effect of the minimum wage increase is low, we can expect employment growth to fall to 0.9% in 2020. If the disemployment effect is high, we can expect employment growth of roughly negative 1.5%.

For an industry that employs so many workers in the City, these shortfalls, relative to expected growth, represent thousands fewer jobs added over the next several years.

APPAREL MANUFACTURING

Another frequently talked about industry, Apparel Manufacturing, is often considered to be an industry that would have multiple establishments relocate out of the City of Los Angeles due to the fact that the industry doesn't have a client facing aspect that would keep it tethered to any one area, and because such a large percentage of the industry's payroll goes to workers earning less than \$13.25 per hour (38.2%).

However, this industry might not be as negatively impacted as originally thought. In fact, low-wage workers in this industry might be some of the biggest beneficiaries of a minimum wage increase. This thinking arises for a number of reasons. First, over 70% of employees in the industry would be affected by the proposal. Second, as mentioned in the previous paragraph, a large amount of the industry's payroll goes to those employees.

But when looking at revenues earned by companies in the Apparel Manufacturing industry the picture changes. The labor income going to the Apparel Manufacturing workers that would be affected by increasing the minimum wage to \$13.25 per hour accounts for only 6.0% of the revenues earned by companies in the industry.

This is significantly lower than two other often discussed industries – Personal & Laundry Services (23.9%), and Food Services & Drinking Places (18.5%). Simply put, revenues are much larger when compared to labor costs in manufacturing industries versus more service-oriented industries. Pass through costs are of course still a very real possibility, as is the possibility of business relocation due to the fact that apparel manufactures aren't usually client facing and do not generally worry about losing their customer base due to moving outside of the City.

PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES

Professional, Scientific & Technical Services is often considered a high-wage industry, but there are an abundance of low-wage jobs within the industry as well. Thousands of workers in this industry could be

affected by a wage increase in Los Angeles. Law offices and tax preparation services, among other businesses, hire employees at all wage levels, including minimum wage workers. As labor costs go up, these businesses will lay off many of their low-wage employees.

The Professional, Scientific & Technical Services industry is one of the flagship industries of the 21st-century economy, serving as a fundamental support to many high-skilled industries while providing many high-skilled jobs of its own. The industry is expected to continue to grow as the economy of Los Angeles becomes more and more high-tech. However, the proposed minimum wage increase will have a significant impact on that growth over the next several years, if enacted.

As a baseline, employment growth in the Professional, Scientific & Technical Services industry is expected to reach 1.7% per year between now and 2020. With the proposed minimum wage increase, a low disemployment effect is expected to trim that employment growth to 0.1% per year by 2020. A high disemployment effect would push growth into negative territory, with the industry contracting by 1.8% per year. The total estimated impact of the minimum wage increase on jobs would be substantial for this very important driver of growth in the Los Angeles economy.

ADMINISTRATIVE SUPPORT SERVICES

The Administrative Support Services industry is worth closer examination for two reasons. First, it ranks high in terms of revenues paid out in the form of labor income to lower income earners, and second, it is a very diverse and inclusive industry of businesses that are often overlooked in wage policy discussions.

The businesses that fall under the umbrella of Administrative Support Services include employment placement agencies, call centers, document prep companies, collection agencies, travel agencies, guard and armor agencies, and the list goes on. The industry has the third highest number of workers who would be affected by the proposed minimum wage increase. Approximately 49,500 workers in this industry would be affected by increasing the minimum wage to \$13.25 in the City of Los Angeles.

With almost 50,000 workers in this industry set to receive raises if the \$13.25 proposal is passed, the impacts are potentially large. First and foremost is the wage impact. If you assume that the wage increase will lead to no disemployment or negative business relocation, then 26,000 people who work in Administrative Support Services in the City of Los Angeles will receive a raise and will also be living in and spending that money in the City. Of course the diversity of this industry makes it difficult to weigh the positives and negatives a wage increase will ultimately have. The wage impacts will be large and significant for workers and will boost their spending in the local economy, but where will the negative impacts be realized?

Several types of services in this industry possess the characteristics that make them likely relocation candidates as well as vulnerable to decreases in new business formation in the City of Los Angeles. For example, calls centers, employment agencies, and document prep services can all afford to be flexible with regard to their location, and are likely to save a great deal on labor costs by relocating out of the City of Los Angeles and into any one of the many neighboring municipalities. Overall, the majority of establishments listed under the Administrative Support Services industry title are much more nimble than client facing

establishments such as restaurants. This industry as a whole is largely exposed to the risks named above when and if a minimum wage hike is implemented.

Like Professional, Scientific & Technical Services, Administrative Support Services is a large employer in the Los Angeles City economy where jobs would be at risk under the proposed minimum wage increase. For such a large employer in the City, this shortfall in growth translates into thousands fewer jobs added over the next several years.

GENERAL MERCHANDISE STORES

The General Merchandise Stores industry is relatively labor-intensive with many low-skilled, minimum wage jobs, such as cashiers, retail salespersons, and stock clerks. A significant number of workers in this industry will see an uptick in earnings in response to the proposed minimum wage increase. However, businesses in this industry often operate under relatively tight margins, depending on the scale of sales, in order to earn profits.

In addition, because the industry is staffed by a large proportion of low-skilled, low-wage workers, businesses in the industry expand and cut staff fairly quickly, depending on their recent profits. This is why we see a big increase in payrolls in General Merchandise Stores in the winter months, as stores add staff to meet demand during the holidays, then a big decrease in payrolls as stores cut staff after the holiday season.

Employment in General Merchandise Stores is thus very profit-sensitive, and an increase in labor costs will have an impact on total employment in the short run and *employment growth* in the long run. Although the General Merchandise Stores industry itself is somewhat small compared to Food Services & Drinking Places, it is still an important part of the equation when trying to interpret the minimum wage proposal's impacts on the City of Los Angeles economy.

IMPACTS ON WORKERS BY EDUCATION LEVEL

Although the proposed minimum wage increase is intended to help workers most in need (workers with low levels of education and skills who are unlikely to see much growth in earnings over the course of their careers), these workers are also most at risk of losing their jobs as a result of the increase.

Employment Trajectories by Educational Attainme	ent
Education	Employment Elasticity
Less Than High School	-0.0400
High School	-0.0292
Some College	-0.0224
Bachelor's Degree or Higher	-0.0060
Source: EDD	
Calculations by Beacon Econo	omics

The lower the level of education of a worker in Los Angeles, the more likely that worker will face a layoff due to an increase in labor costs. The table above shows the employment elasticities for workers at different education levels in response to an increase in wages. For example, among workers with less than a high school diploma or equivalent certificate, a 10% increase in the minimum wage would lead to a 0.4% decrease in employment. For workers with a high school diploma or equivalent, job loss is expected to be half that, at 0.292%, for a 10% wage increase. For workers with some college education, job losses are expected to be 0.224% in response to a 10% wage increase. For workers with a bachelor's degree or higher, job losses would be fairly low relative to those at lower levels of education, 0.06% in response to a 10% wage increase.

In sum, workers in Los Angeles with the least education, who likely struggle the most, would be those most likely to lose their jobs following a minimum wage increase in the City. There is a balance to be drawn between giving workers with low education more income to support their families and displacing them from the very jobs they depend upon.

IMPACTS ON WORKERS BY AGE

The employment effects that stem from minimum wage increases also bear disproportionately negative consequences for younger workers. Like workers with less education, younger workers have less experience and fall into the category of "unskilled workers" who are hurt the most by minimum wage increases. The fact that younger employees make up a small share of the workforce helps dampen the negative effects of the policy, but nevertheless the results are striking. Beacon Economics estimates that the City of Los Angeles currently employees 95,635 workers age 21 or younger. If the proposed minimum wage were to be enacted we estimate that this number would fall to somewhere between 91,600 and 77,800 employees by 2020, a potential decrease of up to 8.6% annually.

Growth Rates Under Different Employment Trajectories by Age

Age	Baseline Growth	Baseline Low	Baseline High
18 & Under	2.4%	-3.1%	-8.6%
19-21	2.2%	-0.4%	-3.1%
22-24	2.1%	0.2%	-1.7%
25-34	1.9%	0.7%	-0.6%
35-44	1.8%	1.4%	1.0%
45-54	1.7%	1.3%	1.0%
55-64	1.8%	1.3%	0.8%
65 & Over	1.9%	0.9%	-0.2%

Source: ACS (PUMS), OES

Calculations by Beacon Economics

Employment Outcomes Under Different Trajectories by Age

Age	2015, Baseline Emplt.	2020, Low Emplt.	2020, Low Emplt. Diff.	2020, Lower Emplt. Diff.
18 & Under	17,806	15,208	-4,844	-8,702
19-21	77,829	76,182	-10,803	-20,505
22-24	108,169	109,301	-10,599	-20,434
25-34	418,287	432,114	-26,922	-52,565
35-44	385,812	414,004	-7,650	-15,187
45-54	348,088	371,857	-6,207	-12,332
55-64	217,256	231,667	-5,403	-10,705
65 & Over	55,423	57,840	-2,950	-5,783

Source: ACS (PUMS), OES

Calculations by Beacon Economics

A DISTRICT-BY-DISTRICT LOOK

The impacts on individual council districts are similar to our results for the City of Los Angeles overall and for the same reasons mentioned above. However, some council districts have economies in which higher proportions of jobs are in industries that employ larger shares of low-wage workers compared to the City overall. For this reason, the minimum wage may disproportionally affect some districts as compared to the City of Los Angeles as a whole.

As can be seen, some districts actually swing to negative growth based on our worst-case estimates above. District 11's economy experiences the largest negative impacts both on a percentage and absolute basis. This result is largely driven by the fact that big portions of the jobs in District 11 are in Transportation & Warehousing, Accommodation & Food, and Professional Services, all of which are industries with greater than average amounts of low-skilled workers.

District 8's economy will see the most rapid expansion post minimum wage increase, although growth in the district is still ex-

Growth Rates Under Different Employment
Trajectories By City Council District

District	Baseline Growth	Low Growth	High Growth
1	1.92%	1.26%	0.65%
2	2.03%	1.10%	0.23%
3	2.04%	1.09%	0.18%
4	2.16%	1.10%	0.10%
5	2.16%	1.25%	0.39%
6	1.91%	1.07%	0.27%
7	1.77%	1.09%	0.45%
8	2.31%	1.72%	1.16%
9	1.76%	1.14%	0.56%
10	2.34%	1.31%	0.33%
11	1.68%	0.23%	-1.16%
12	1.94%	1.09%	0.28%
13	2.32%	1.59%	0.91%
14	1.51%	0.88%	0.29%
15	1.76%	0.84%	-0.03%

Source: EDD

Calculations by Beacon Economics

pected to decrease by about 50% in the District under our worst-case scenario, falling from 2.31% annual growth to 1.16%.

District	2015, Baseline Employment	2020, Baseline Employment Growth	2020, Low Employment Growth	2020, Lowest Employment Growth
1	99,433	8,886	5,454	2,319
2	61,770	6,543	3,330	394
3	98,834	10,605	5,275	392
4	100,646	11,368	5,504	162
5	184,308	20,902	10,853	1,663
6	74,852	7,427	3,911	693
7	49,230	4,478	2,568	821
8	20,469	2,494	1,765	1,095
9	51,149	4,460	2,408	542
10	66,709	8,234	4,315	736
11	149,540	12,999	1,370	-9,206
12	98,303	9,892	5,084	677
13	94,384	11,529	7,621	4,059
14	418,959	28,812	17,508	7,264
15	60,084	5,412	2,353	-440

WHERE OUR RESULTS DIFFER

Our conclusions on the impacts of the minimum wage proposal differ from the conclusions presented by the Berkeley group for several reasons. From different empirical methodologies to differing interpretations on the consensus view on minimum wage effects from the literature, the following list provides examples of what we did differently and why.

1. **Different treatment of the underlying data.** From the onset of analysis, we found many problems in the wage distribution of the ACS data. The ACS is a self-reported survey and a disproportionate amount of the hourly wage numbers we calculated from the data were **below** the minimum wage. To remedy this, we adjusted the population weights of the ACS data using wage distribution data obtained from the OES, which has much more "normal" distribution with less variability. The Berkeley group did not take this step. When considering output and employment impacts, we accounted for increased payroll expenses that occur in addition to the wage increase, FICA/SS, Medicare, etc. Likewise, we considered the fact that many workers who work within the City of Los Angeles live and spend a majority of their incomes in other nearby cities. This led to cost-benefit figures that are very different when compared alongside Berkeley's figures.

- 2. **Broader scope of minimum wage literature considered.** As mentioned in the literature review, the Berkeley group claims that there is a consensus view in the minimum wage literature that minimum wage increases do not have any disemployment effects. We believe this is not the case at all and that the general consensus is that while disemployment effects are not very large, they do occur.
- 3. **City specific data was used.** One advantage Beacon Economics has in conducting our analysis is that we have access to data for each establishment in the City of Los Angeles from the Employment Development Department. Most data sources only have county level data, and we believe our ability to drill down to the City level with more certainty strengthens the reliability of our figures.
- 4. A belief that future growth will be negatively impacted. Berkeley's research does not address the concern that the higher labor costs in the City of Los Angeles as a result of the minimum wage increase will hamper future growth. When faced with much higher labor costs many future business owners may opt to open their doors outside of the City. Likewise, as discussed above, there is a possibility of existing businesses relocating out of the City to avoid the higher payroll costs.

In all, the Berkeley group's claims that raising the Los Angeles minimum wage can have a net positive impact on the economy is the economics equivalent of inventing a perpetual motion machine. The rules of the science just don't work that way. As a general rule, economics shows that you cannot increase the overall size of the pie by simply transferring wealth from one group of individuals to another. The smaller the transfer, the more true this rule holds. In this case, real economic benefits—including higher wages for many workers in Los Angeles, some level of new citywide consumer spending, and possibly reduced worker turnover—come with real economic costs—including job losses, business relocations, and, more generally, forgone citywide economic growth.

MITIGATING NEGATIVE IMPACTS OF A MINIMUM WAGE INCREASE: POLICY ALTERNATIVES

The Los Angeles City Council could mitigate some of the likelier negative effects of a minimum wage increase with some limits or adjustments. First, and perhaps most easily, the City Council could omit the stipulation that each year the minimum wage would grow in line with the Urban Consumer Price Index for the Los Angeles region. This would not only slow the growth of the minimum wage but also make it easier for business-owners to keep up with the wage. An annual readjustment could become a bureaucratic mess in attempting to enforce the minimum wage.

The City Council could prolong the phase-in period, to give businesses more time to adjust to the wage increase. The minimum wage increase under consideration would bump the local minimum wage by over one-third in just two years. For labor-intensive industries, this would be a steep increase in payroll costs with little time to adapt. Seattle has implemented a staggered phase-in period for businesses of different sizes, as well as businesses that offer benefits for their employees. For example, businesses with 500 or more employees (nationwide) that do not offer medical benefits for employees must pay a minimum wage of \$15 per hour by 2017. For businesses with 500 or more employees that offer medical benefits

to full-time employees, that \$15 per hour minimum wage is pushed back until 2018. For businesses with fewer than 500 employees, the \$15 per hour minimum wage is pushed back until 2021. A more gradual increase would be especially beneficial to small businesses, where payrolls represent a more substantial percentage of total operating costs.

These are the institutions most likely to struggle in the event of a minimum wage increase. When the City Council enacted a \$15.37 per hour minimum wage for hotel workers in Los Angeles, hotels with fewer than 150 rooms were exempted, under the assumption that the resulting increase in labor costs would be far too onerous for what are presumably "small" hotels. The City Council could similarly exempt businesses below a certain amount of annual revenue from the proposed citywide minimum wage increase. It could also exempt nonprofit organizations of all or even some types because they depend so heavily on grants or donations that are often inflexible in how they can be spent.

The City Council could also implement an ordinance establishing minimum compensation, rather than a minimum wage, such that the minimum wage is adjusted down for workers receiving benefits or tips. A blanket minimum wage increase discourages businesses from offering benefits to employees, as the benefits add up to a significant additional labor cost. A mandatory minimum wage that is equal for all categories of workers would significantly raise labor costs for businesses in industries such as leisure and hospitality, where workers earn a significant proportion of their income through tips. Some businesses in these industries would likely lay off workers, while others would have a strong incentive not to bring in new workers. Take Seattle, for instance. Under the city's new minimum wage ordinance, businesses with fewer than 500 employees that offer tips, bonuses, commissions, or money toward medical plans must reach \$15 per hour in minimum compensation by 2019.

The City Council could establish a 90-day "training period" that establishes a lower minimum wage for a worker's first three months at a new place of employment. This provision has two goals: it prevents employers from having to pay a high wage to employees that may not generate much (or any) revenue as they train. Some employers, like retailers, have mandatory training for several days in which new employees spend no time on the floor. This 90-day provision would also work well for summer or seasonal employees. By the time that these employees get fully trained for their jobs, they move on. Under the higher citywide minimum wage, employers may not have an incentive to bring in these sorts of workers because of the time it would take employers to recoup the costs of training them. A two-stage minimum wage with a lower minimum during the training period might be one important measure to help sustain job growth under a new local minimum wage.

The optimal course of the City Council might be to simply pressure state government to implement a higher minimum wage. The City Council could use its status as the largest municipal governing body in the state to pressure the State of California to raise its minimum wage, thus avoiding altogether the possibility of business relocations, higher prices for consumers, or job losses as Los Angeles businesses have to compete with businesses in neighboring cities. Rather than implement a tax on business activity, as the citywide minimum wage would do, the City could continue to support struggling families directly by

implementing programs directly targeted at those most in need, such as worker training or social services. These will generally be programs that require city revenue to implement, but they will likely have less of an overall adverse impact on the City of Los Angeles revenue base than a higher minimum wage. The size of the California economy combined with a business-friendliness that makes producers and consumers reluctant to do business elsewhere makes the State of California much better equipped than the City of Los Angeles to handle a significant increase in the minimum wage.

APPENDIX - EXTENDED LITERATURE REVIEW

INTRODUCTION

The proposed minimum wage increase in the City of Los Angeles has the goals of increasing earnings for low-income workers and bringing families in Los Angeles out of poverty, while avoiding any negative impacts on employment. Existing literature on mandated wage increases suggests that while wages may rise, due to the mandated increase itself and a "ripple effect" on higher wage earners, it is unclear whether the proposed Los Angeles minimum wage increase will succeed in bringing families out of poverty or avoid some disemployment, especially among low-skilled workers.

THE IMPACT OF MINIMUM WAGE INCREASES ON WORKER WAGES

Although it may seem self-evident that worker wages would grow in response to a mandated wage increase, a significant decrease in employment would eliminate any effect on aggregate earnings. Studies generally agree that minimum wage increases lead to a noticeable impact on earnings in a region. A 2010 report from Arindrajit Dube, T. William Lester, and Michael Reich—Reich is a coauthor of the report on Mayor Garcetti's proposed increase in the minimum wage in Los Angeles—that examines the restaurant industry, where many minimum wage jobs are concentrated, shows that earnings increase by roughly 2% for every 10% increase in the minimum wage (a 0.2 earnings elasticity).²⁹ The report built upon the cross-state contiguous counties method of examining minimum wages made prominent by a 1993 report from David Card and Alan Krueger at Princeton University.³⁰ Whereas Card and Krueger compared wages in New Jersey and Pennsylvania in response to a minimum wage increase in New Jersey, Dube et al. examine the wage impacts of border counties throughout the country in response to minimum wage increases.

A report by Yusuf Soner Baskaya and Yona Rubenstein from 2012 focuses on the impact of minimum wage increases on teenage workers, who, as low-skill workers, are believed to face the steepest impacts of a minimum wage increase. The authors find that the earnings elasticity of teenage wages in response to a minimum wage increase is 0.9—teenage earnings rise by 9% for every 10% increase in the minimum wage. A 2013 report from the Institute for Research on Labor and Employment at the University of California, Berkeley, reaffirms that minimum wage increases have a significant impact on teenage worker wages, as well as the workers in the restaurant industry (roughly 2% for every 10% increase in the minimum wage). Teenagers and workers in the restaurant industry represent a substantial proportion of minimum wage workers. This suggests that minimum wage increases have a significantly positive impact on raising the wages of minimum wage workers. The impact is not mitigated by other factors.

²⁹Arindrajit Dube, T. William Lester, and Michael Reich. (2010). "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." IRLE Working Paper No. 157-07. http://irle.berkeley.edu/workingpapers/157-07.pdf.

³⁰David Card and Alan B. Krueger. (1993). "Minimum Wages and Employment: A Case of the Fast Food Industry in New Jersey and Pennsylvania." NBER Working Paper No. 4509.

³¹Yusuf Soner Baskaya and Yona Rubenstein (2012), "Using Federal Minimum Wages to Identify the Impact of Minimum Wages on Employment and Earnings across the U.S. States." University of Chicago.

³²Sylvia Allegretto, Arindrajit Dube, Michael Reich, and Ben Zipperer. (2013). "Credible Research Designs for Minimum Wage Studies." IRLE Working Paper No. 148-13. http://irle.berkeley.edu/workingpapers/148-13.pdf.

THE RIPPLE EFFECT OF A MINIMUM WAGE INCREASE

Minimum wage workers are not the only workers that should expect to see an increase in earnings as a result of a minimum wage increase. Some proportion of workers above the minimum wage should expect to see some increase in their wages, as well. Otherwise, workers at different skill and experience levels would be making the same wage, reducing morale among higher-skilled workers. This increase in wages beyond the mandated minimum wage increase is called the "ripple effect" of the minimum wage. Yet, studies suggest that while the ripple effect has an impact on worker wages above the minimum, the ripple effect only exists for workers at relatively low income levels.

A 2006 report from Jeannette Wicks-Lim found that the ripple effect added 150% of the cost of a minimum wage increase, in the form of wages for workers beyond the mandated minimum wage increase.³³ Wicks-Lim also noted that the range of the ripple effect is rather small. Workers earning no more than 123% of the minimum wage prior to the increase receive a bump in earnings.

A 2014 report by Brian J. Phelan affirms that the ripple effect diminishes in subsequent years and for higher-wage workers. He finds that workers that earn less than 5% above the minimum wage prior to an increase see wage growth of 6% immediately following a 10% increase in the minimum wage.³⁴ One year after the wage increase, these workers earn roughly 7% more than workers in states where the wage increase did not occur. For workers in the 5th to 15th percentile above the minimum wage, the impact varies: an estimated 2% bump one year *before* the increase, with earnings rising to 5% above that of workers in states where no minimum wage increase occurred one year after the increase, then settling at 3% above that of workers in states where no wage increase occurred two years after the increase. Those in the 15th to 50th percentile have wages at roughly 2% above workers where no minimum wage increase occurred. For workers earning two or more times the minimum wage, there appears to be no ripple effect.

An increase in the minimum wage appears to generate a ripple effect on workers at higher-than-minimum wages. Additionally, the ripple effect does not appear to benefit workers at wage levels significantly higher than the minimum wage.

THE IMPACT OF MINIMUM WAGE INCREASES ON EMPLOYMENT

Most minimum wage analyses focus on the impact of a minimum wage increase on employment, either in the aggregate or among certain groups, such as teenagers. Neoclassical theory suggests that an increase in the minimum wage should lead to a decrease in employment among low-skilled workers, as it represents an increase in labor costs for employers. A model used in a January 2015 study from economists Jonathan Meer and Jeremy West suggests that a 10% minimum wage increase reduces employment by nearly 1% after three years, with the biggest losses comprised of young and low-skilled workers. In 2014, the United States Congressional Budget Office (CBO) released a report claiming that a gradual increase in the federal

³³Jeannette Wicks-Lim. (2006). "Mandated Wage Floors and the Wage Structure: New Estimates of the Ripple Effects of Minimum Wage Laws." PERI Working Paper No. 116.

³⁴Brian J. Phelan. (2014). "Labor Supply Substitution and the Ripple Effect of Minimum Wages."

³⁵Jonathan Meer and Jeremy West. (2015). "Effects of the Minimum Wage on Employment Dynamics." *Texas A&M University*.

minimum wage from \$7.25 to \$10.10 by 2016 would reduce employment nationwide by roughly 0.3%, as businesses would have to lay off many low-wage workers. The report estimates a roughly two-thirds probability that the employment effect of such a wage increase would range between a slight reduction in jobs to a roughly 0.6% reduction in jobs. Although the proposed wage increase analyzed by the CBO is slightly lower than the first-stage minimum wage increase proposed for the City of Los Angeles – a 39.3% increase from 2014 to 2016 nationwide compared to a 47.2% increase, \$9 per hour to \$13.25 per hour, from 2015 to 2017 in Los Angeles – and the geographical scope of the CBO's study is much larger than the City of Los Angeles, the estimated impacts in the CBO's study are worth some reflection.

A 2014 report from David Neumark, J.M. Ian Salas, and William Wascher showed that a 10% increase in the minimum wage generates an estimated 2% decrease in teenage employment.³⁷ In 2007, Neumark and Wascher conducted an extensive literature review in which they claimed a majority of studies of the employment effects of minimum wages indicate that an increase in the minimum wage of 10% leads to a decrease in employment among youths or other low-skill workers of 1%-4%.³⁸ A 2012 study from Joseph J. Sabia, Richard V. Burkhauser, and Benjamin Hansen finds much more significant adverse impacts of minimum wage increases on low-skilled young workers.³⁹ The authors found that following a New York State minimum wage increase from \$5.15 to \$6.75 per hour, employment among low-skilled 16-to-29-year-olds fell by 20.2%-21.8%—roughly 7% for every 10% increase in the minimum wage. This is above the range of most studies' estimates. The conclusions drawn from each of these studies give reason to believe that the proposed minimum wage increase in Los Angeles will have some negative impact on employment among low-skilled workers, most prominently youths.

These studies are not without a fair number of dissenters, though. Several studies claim that there are no significant disemployment effects from an increase in the minimum wage. The aforementioned 2010 report from Dube, Lester, and Reich stands out among them. The report finds that while earnings are significantly impacted in response to a minimum wage increase, employment is not. In their words, "implied labor elasticities are also, as expected, close to 0 and insignificant at conventional levels" in examinations of all private sector employees and specifically of restaurant employees.⁴⁰

The 2010 report examines employment at the county level. A more useful study for our purposes is a 2007 report from Dube, Suresh Naidu, and Reich that examines the economic impacts of a citywide minimum wage in San Francisco.⁴¹ Although the group studies county-level QCEW data between Alameda County and San Francisco County, San Francisco County and the City of San Francisco are equivalent. The group

³⁶Congressional Budget Office. (2014). "The Effects of a Minimum-Wage Increase on Employment and Family Income." Pub. No. 4856.

³⁷David Neumark, J.M. Ian Salas, and William Wascher. (2014). "More on Recent Evidence on the Effects of Minimum Wages in the United States." NBER Working Paper 20619. http://www.nber.org/papers/w20619.

³⁸David Neumark and William Wascher. (2007). "Minimum Wages and Employment." IZA Discussion Paper No. 2570.

³⁹Joseph J. Sabia, Richard V. Burkhauser, and Benjamin Hansen. (2012). "Are the Effects of Minimum Wage Increases Always Small? New Evidence from a Case Study of New York State." *Industrial and Labor Relations Review*, Vol. 65, No. 2.

⁴⁰Arindrajit Dube, T. William Lester, and Michael Reich. (2010). "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." IRLE Working Paper No. 157-07. http://irle.berkeley.edu/workingpapers/157-07.pdf.

⁴¹Arindrajit Dube, Suresh Naidu, and Michael Reich. (2007). "The Economic Impacts of a Citywide Minimum Wage." *Industrial and Labor Relations Review*, Vol. 60, No. 4.

uses a difference-in-difference model to estimate the impacts of a minimum wage increase in the City of San Francisco on wages and employment at restaurants, relative to wages and employment at restaurants in nearby Alameda County. The group finds that while earnings for low-income workers at both fast food and table service restaurants experience an uptick in response to a minimum wage increase, employment does not decrease.

Much of the existing literature appears to show that a minimum wage increase would have a negative impact on employment, especially among low-skilled workers, but clearly the debate among researchers is ongoing.

THE IMPACT OF MINIMUM WAGE INCREASES ON REDUCING POVERTY

One of the biggest motivations for enacting a minimum wage increase in Los Angeles is to reduce poverty in the city. The existing literature is less divided in this case. Although a minimum wage increase may boost earnings for low-wage workers, studies suggest that it may not have a very significant impact on reducing poverty.

David Card and Alan Krueger posit that the minimum wage may not effectively reduce poverty because it does not reach those in poverty that are not working.⁴² A 2010 study from Sabia and Burkhauser yields similar findings.⁴³ The authors examine data from the U.S. CPS from 2003 to 2007, finding no evidence that increases in the minimum wage reduced state poverty rates. The authors determine that 63.2% of minimum wage workers live in households with incomes over twice the poverty line, and 42.3% of minimum wage workers live in households with income over three times the poverty line. Many minimum wage workers are likely dependents, such as teenagers, or living in households in which another member of the household earns significantly more than the minimum wage.

If the minimum wage does not have a significant impact on reducing poverty, what would? Research from Neumark and Wascher suggests that the U.S. Earned Income Tax Credit (EITC) might work. 44 Although the authors find little evidence that the federal credit increases the amount of earned income among poor families, they do find that the state credit strongly impacts the amount of increased earned income among poor families. The EITC targets workers, just as the minimum wage does, but the authors suggest that the EITC induces families that do not initially have an adult worker into joining the work force, while the minimum wage helps families with adults already in the work force. From this basis, it is important to consider whether a state policy in the form of a tax credit to working families may be more effective at reducing poverty at the local level than a local minimum wage increase.

⁴²David Card and Alan B. Krueger. 1995. *Myth and Measurement: The new economics of the minimum wage*. Princeton, N.J.: Princeton University Press.

⁴³Joseph J. Sabia and Richard V. Burkhauser. (2010). "Minimum Wages and Poverty: Will a \$9.50 Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal*, Vol. 76, No. 3.

⁴⁴David Neumark and William Wascher (2001). "Using The EITC to Help Poor Families: New Evidence and a Comparison with the Minimum Wage." *National Tax Journal*, Vol. 54, No. 2.

THE IMPACT OF MINIMUM WAGE INCREASES ON SMALL BUSINESSES AND NONPROFITS

One of the biggest concerns about a significant increase in the minimum wage is that it could have a significant adverse impact on employment at small businesses and nonprofit institutions, which often exist on very low margins and for whom labor costs are substantial business expenses. A widely cited 2006 report from the Fiscal Policy Institute ("FPI") allayed some concerns about the impact on small businesses, claiming that U.S. data comparing 1998 and 2003 small business employment illustrated that states in which the minimum wage exceeded the federal minimum wage had experienced not only no negative employment growth among small businesses but rather positive small business employment growth. The study suggests that employers respond to a minimum wage increase by improving the skills of their workers and becoming more efficient, such that reduced turnover and increased productivity offsets increased labor costs.

The FPI study would seem to belie the neoclassical theory that small businesses would respond to a labor cost increase by laying off low-skilled workers. However, the questionable methodology of the study leaves serious doubt about its findings. A study by Joseph Sabia later in 2006 claims that a more thorough examination of data shows a significantly negative impact of the minimum wage on small business employment. Sabia writes that the FPI study uses a very small window of observation, comparing employment in 1998 and 2003. In addition, the FPI study does not control for any cross-state variations among states during that time period, which could influence employment growth in those states. Indeed, Sabia adds that the FPI study does not run any significance tests on its findings. In short, the differences that the study finds between employment in states with or without a minimum wage higher than the federal level could be due to statistical noise rather than to substantive economic realities.

Sabia examines a much more robust dataset of CPS employment from 1979 through 2004 that shows employer size among small businesses nationwide. He finds that, holding all else equal, a 10% increase in the minimum wage is associated with a 0.8% to 1.2% decrease in small business employment and a 10% increase in the minimum wage is associated with a 4.6%-9.0% decrease in teenage employment in small businesses. If these data apply at the local level, we might expect to see significant job losses at small businesses in Los Angeles in the event of a local minimum wage increase.

Nonprofits often generate much of their operating budget through government grants, and these grants and the money they receive through donations may only allow these businesses to hire the bare minimum number of employees. Employees may work at near-minimum wages in order to allow the nonprofit to grow or perhaps even subsist. A minimum wage increase could prevent some of these institutions from sustaining their positive work. In Seattle, where the minimum wage will reach \$15 per hour this year, non-

⁴⁵Fiscal Policy Institute. (2006). "States with Minimum Wages above the Federal Level have had Faster Small Business and Retail Job Growth." http://www.fiscalpolicy.org/FPISmallBusinessMinWage.pdf.

⁴⁶Joseph J. Sabia. (2006). "The Effect of Minimum Wage Increases on Retail and Small Business Employment." Employment Policies Institute.

profits fear having to cut staff or services to accommodate the wage increase. 47 Accordingly, it might make sense for an ordinance raising the Los Angeles minimum wage to provide some form of an exemption for nonprofits.

As a 2005 report from Mark D. Brenner and Stephanie Luce notes, funding for many nonprofits comes from state and federal sources at fixed rates, so these nonprofits cannot easily pass on higher labor costs. 48 The authors surveyed firms in Boston following implementation of a living wage and found that many nonprofits were forced to simply operate at a lower surplus. The city implemented a waiver process to support nonprofits facing hardship due to the higher minimum wage. Cities such as Boston may also enforce a minimum wage on nonprofits carrying above a certain number of employees. A 2005 study of the impact of Detroit's 1999 living wage law on nonprofits finds that the wage increase, from \$6 per hour to either \$8.35 per hour or \$10.44 per hour depending on benefits provided, did not impose a significant financial impact on most nonprofits, though some faced significant challenges. 49 Primarily, these nonprofits had difficulty reallocating funds to accommodate the wage increase, as much of their funds could not be reallocated to other purposes. They also struggled to adjust internal pay scales. Many high-skilled workers at these nonprofits earned significantly less than they would have earned at other firms for equivalent work. The minimum wage increase boosted the wages of low-skilled workers to nearly equal levels as those of the higher-skilled workers, reducing the value of those additional skills. Nonprofits in the City of Los Angeles would face similar challenges if the proposed minimum wage increases were implemented.

How Los Angeles' Proposal Compares to Proposals in Other California Cities in The Past

The City Council motion on October 7, 2014, calls for a draft ordinance to establish a minimum wage that will increase from \$9 per hour at present to \$13.25 per hour by 2017. The motion also calls for a study of how to raise the minimum wage to \$15.25 an hour by 2019. The proposal is a replica of the proposal introduced by Mayor Garcetti in mid-2014, and thus it is not yet substantive. Nonetheless, the proposal, if passed would implement a nearly 50% increase in the citywide minimum wage above current levels in two years and a nearly 70% increase in four years (though the state minimum wage will increase to \$10 per hour in 2016). As noted in the study commissioned by Mayor Garcetti last year assessing the impact of his proposed minimum wage increase, the 14 extant local minimum wage laws in the United States have implemented an average wage increase of 41.3%, with a range of between 13.3% and 84.5%. This infor-

⁴⁷Graham Johnson. "Report: The \$15 Minimum Wage Could Force Seattle Nonprofits to Cut Services to the Poor." KIROTV.COM. February 24, 2014.

⁴⁸Mark D. Brenner and Stephanie Luce. (2005). "Living Wage Laws in Practice: The Boston, New Haven, and Hartford Experiences." Political Economy Research Institute.

⁴⁹David Reynolds, Ph.D. and Jean Vortkamp. (2005). "The Effect of Detroit's Living Wage Law on Non-Profit Organizations." *Economic Development Quarterly*. Vol. 19. No. 1.

⁵⁰"Establishment of Minimum Wage in Los Angeles/Ordinance." Los Angeles City Council. Council File 14-1371. Accessed January 20, 2015.

⁵¹Annette Bernhardt, Ken Jacobs, Ian Perry, and Michael Reich. (2014). "The Mayor of Los Angeles' Proposed City Minimum Wage Policy: A Prospective Impact Study." IRLE Policy Brief.

mation alone allows us to draw some comparisons with relevant local minimum wage laws implemented over the past several years.

Here in California, in 1999, the City of San Francisco passed a living wage ordinance that required employees at all city contractors and property leaseholders to receive a minimum wage of \$11 per hour. The policy was established with the goal of reducing poverty and increasing the quality of life for workers in the city, as well as broader goals such as improving public health among the city's working population. The minimum wage set in San Francisco was a sharp increase (the state minimum wage stood at \$5.75 per hour at the time) from the minimum wage levels set in Los Angeles in 1997 (\$7.99 per hour), San Jose (\$8 per hour), and Oakland (\$8 per hour) for firms with city contracts. In terms of the wage increase resulting from the implementation of the policy, the San Francisco living wage ordinance was larger than that proposed by the Los Angeles City Council, but its breadth was much smaller, generating no direct impact on any private firms in the city.

In 2001, following the precedent of large minimum wage increases set by San Francisco, Santa Monica implemented a living wage of \$10.50 an hour for workers at roughly 40 businesses on the beachfront and in downtown. The wage increase received special attention because, in contrast to living wage ordinances in Los Angeles or cities in the Bay Area, it was not limited to city employees or employees of firms contracted with the city, but rather it applied truly private establishments. The state minimum wage in January 2002 stood at \$6.75, so the wage increase was significant, but the scope was relatively limited—the businesses subject to the wage were primarily high-end hotels in extremely business-friendly neighborhoods. The Santa Monica ordinance was relatively small in its scope, but it helped to further a movement started in Los Angeles toward implementing living wages in much of the rest of California. The ordinance also set the stage for similar proposals for hotel workers in Los Angeles. In 2007, the City of Los Angeles passed an ordinance establishing a mandatory living wage for hotel workers at 12 LAX-area hotels that currently stands at \$10.30 per hour for employees with benefits or \$14.80 for employees without benefits. In September 2014, the City of Los Angeles passed an ordinance expanding the living wage to workers at some 87 hotels throughout the city with 150 or more rooms while increasing the wage to \$15.37 per hour. For hour and the sum of the proposal states at \$10.30 per hour.

Some local living wage ordinances are notable for some of their exemptions. In late 2006, Petaluma implemented a minimum wage of \$11.70 per hour with benefits and \$13.20 per hour without benefits for city employees and employees contracted with the city (by comparison, the California minimum wage reached \$7.50 per hour in January 2007). The city exempted nonprofits from the ordinance. ⁵⁵ The Petaluma ordinance affected a relatively small number of workers, but even then, the exemption for nonprofits reflected the tenuous position of some nonprofit organizations in the face of such wage increases.

⁵²Rajiv Bhatia and Mitchell Katz. (2001). "Estimation of Health Benefits from a Local Living Wage Ordinance." *American Journal of Public Health*. Vol. 91. No. 9.

⁵³Oscar Johnson and Bob Pool. "Santa Monica OKs 'Living Wage' Law." Los Angeles Times. May 24, 2001.

⁵⁴Rick Orlov. "Los Angeles City Council Members Seek Living Wage of \$15.37 for Hotel Workers." *Los Angeles Daily News*. February 18, 2014.

⁵⁵Noelani Garcia. "Petaluma Joins 'Living Wage' Cities." *North Bay Business Journal*. November 20, 2006.

Around the same time, the Emeryville City Council passed its own living wage ordinance similar to the ordinance passed in Petaluma. The Emeryville living wage was limited to city employees and businesses contracting with the city, set at \$12 per hour including benefits. The policy had a number of exemptions, however, that demonstrated the city's interest in targeting the living wage toward working families while maintaining the status of labor unions in setting wages for their members. The living wage did not apply to workers under the age of 18. From a policy standpoint, if the City of Los Angeles seeks to target its own ordinance to struggling families, with the goal of eliminating poverty while reducing negative consequences to businesses and potentially some workers, it may be useful to introduce such stipulations into its own proposal for a minimum wage increase.

Minimum wage ordinances across California have clearly broadened in scope and impact over time, but the latest proposal from the Los Angeles City Council will likely have the greatest impact of any of these ordinances, due to the size of the proposed wage increase and the number of workers and businesses affected by the wage increase. Certain exemptions may help to limit the impact on businesses that may struggle under the proposed minimum wage (as well as the workers that may face layoffs as a result), but the wage increase seems certain to have a bigger impact on the local economy than any comparable wage increase in California cities to date.

REVIEWING THE BERKELEY GROUP'S STUDY OF THE IMPACTS OF THE PROPOSED LOS ANGELES MINIMUM WAGE INCREASE

As noted above, in mid-2014, Mayor Garcetti commissioned the Institute for Research on Labor and Employment at the University of California, Berkeley, to conduct a study of his proposed minimum wage increase in the City of Los Angeles. The Berkeley group consisted of Ken Jacobs, Annette Bernhardt, and Ian Perry—researchers at the Institute—and Michael Reich, Director of the Institute, whose research on the minimum wage is discussed in detail above. The study affirms some of the findings described above, such as the expected increase in aggregate earnings among low-wage workers, but there are several short-comings in the analysis that raise questions about its central findings.

Most notably, the group examines data for the Los Angeles County, rather than the City of Los Angeles. The authors claim that data for the Los Angeles County serves as a good proxy for data for the City of Los Angeles. While the City of Los Angeles contains much of the population of Los Angeles County, there are clear weaknesses in using this approach, as opposed to using, for instance, city-level data from the California Employment Development Department. The distribution of workers across industries varies between cities in Los Angeles County and the City of Los Angeles. We would expect, for instance, some specialty manufacturing sectors, such as apparel manufacturing, to be concentrated heavily in the City of Los Angeles but distributed more sparsely in the rest of the county. Furthermore, the distribution of businesses affected by the minimum wage could differ depending upon whether the study examines the impacts of a minimum wage increase from the perspective of the city or the county. Other variables such as the un-

 $^{^{56}\}mbox{Emeryville}$ Municipal Code. Title 5, Chapter 31.

employment rate may vary between the City of Los Angeles and Los Angeles County, which make it more difficult to identify the workers affected by the minimum wage policy.

The City of Los Angeles has a very unique geography relative to cities such as Seattle that have also sought to increase the minimum wage citywide. Los Angeles borders over 30 cities, many of which have a substantial number of businesses and residents of their own. It might be much easier for businesses facing the new minimum wage to relocate—perhaps even a matter of blocks—to nearby cities where demand for their goods or services would likely remain unchanged in order to avoid the proposed minimum wage increase. Alternatively, because there are so many dense cities surrounding the City of Los Angeles, consumers in the City of Los Angeles should be able to find alternative suppliers in neighboring cities with relative ease should such suppliers relocate in response to the new minimum wage. Mayor Garcetti's commissioned study does not address the uniqueness of the City of Los Angeles' geography and how it may impact consumers and businesses affected by the minimum wage.

In addition, the study relies heavily on data from the ACS, which has known problems. The ACS, while beneficial for the study of demographic and economic variables for relatively small populations, such as counties, is a self-reported survey. Participants provide their own information on earnings and hours worked, as well as how they identify themselves demographically. It is common knowledge among researchers that workers tend to overestimate their hours worked and underestimate their incomes. In the context of Mayor Garcetti's commissioned study, this could mean that the ACS overrepresents the proportion of workers earning the minimum wage. It could also mean that the ACS misrepresents important factors such as the proportion of adults earning the minimum wage or the proportion of minimum wage workers that have families.

Because the study examines data from the perspective of Los Angeles County, it overlooks a serious concern about the impact of a citywide minimum wage: the migration patterns of workers in and out of the City of Los Angeles. Most workers in Los Angeles County live in Los Angeles County, though some may commute from areas like Riverside or San Bernardino Counties or possibly Orange County. The same cannot be said of workers in the City of Los Angeles in specific. Many of the cities that surround Los Angeles are more affordable. Residents of those cities commute into the City of Los Angeles for work. Many of these workers are low-wage workers who find work in Los Angeles due to better job prospects.

A minimum wage increase for workers that do not live in the City of Los Angeles is effectively a subsidy for the economies of neighboring cities from the revenues of City of Los Angeles businesses. Workers commute into the City of Los Angeles, collect their earnings, and then spend those earnings at grocery stores, restaurants, or retail stores in their home cities, generating no spending impact in the City of Los Angeles itself.

The authors claim that the economic stimulus of higher consumer spending from a minimum wage increase "is likely one of the factors that explains the consistent finding in the literature of no significant net employment effects of minimum wage increases." Besides the fact that much of this literature is coauthor Michael Reich's own research, while studies from David Neumark and others have in fact found negative employment effects, there is very little reason to assume that the City of Los Angeles would re-

ceive a significant benefit from consumer spending generated by the minimum wage increase, for reasons as explained above. The mandated extra wages will come from the revenues of businesses within the City of Los Angeles, leaving less revenue for those businesses to spend themselves, or those costs will be passed on to consumers, leaving less money for those consumers to spend elsewhere in the city. This is a transfer, not a surplus.

Moreover, even if businesses in the City of Los Angeles would receive some benefit from an increase in consumer spending due to the minimum wage increase, for many of these businesses, that spending would come long after the new minimum wage were to be implemented. Much of the stimulus effect occurs far down the supply chain, when businesses spend their extra revenue—due to the increase in consumer spending from the wage increase—at other businesses, and when those businesses in turn spend their extra revenue at other businesses. These transactions would take place well after the minimum wage increase comes into effect. By that time, those businesses that would consider laying workers off rather than pay higher labor costs due to the minimum wage have likely already reduced their work force. The positive impact on employment would likely come long after the negative impact on employment.

The study emphasizes the wage effect and employment effect of a minimum wage increase in the City of Los Angeles, but it puts no emphasis on the profit effect of the wage increase. What would a mandated wage increase do to businesses in the City of Los Angeles? After a minimum wage increase goes into effect, businesses that employ minimum wage workers must either pass some or all of the labor costs from the wage increase onto their consumers, as the study notes, which will encourage some of those consumers to take their business elsewhere, or absorb all of the labor costs and reduce their profits.

Profits would likely fall by some measure in either circumstance. Businesses may have to pay some of their workers making above the minimum wage a raise to reflect their skills or experience, reducing profits even more. It is important to consider the impact that profit losses will have on some businesses in the City of Los Angeles. Lower profits mean less spending on goods or services that may help businesses grow, and it also means less spending at other businesses in the city. This is an obstacle to economic growth in the city. It also discourages new business formation. Businesses will have less of an incentive to move to Los Angeles if they face lower profits, especially if these businesses can start up in neighboring cities with lower minimum wages.

The study suggests that turnover may decrease and productivity may increase in response to a minimum wage increase, offsetting some of the increase in costs to labor for businesses, but the evidence is sparse, limited to a short literature review primarily from co-author Michael Reich's own research. This is far too scant an analysis from which to assume that the City of Los Angeles proposed minimum wage increase will not have a significant impact on business profits.

Similarly, the study does little to justify the claim that there are no disemployment effects from a minimum wage increase. The study provides a brief quasi-estimate of the potential employment impact on the restaurant industry, using the Bay Area as an example, but with regard to other industries the study relies on a brief review of findings from existing literature—once again, many of which come from the study's co-author Michael Reich. Understanding critical issues related to increasing the minimum wage, such as

employment effects, requires a level of analysis more thorough than a literature review of mostly internal sources.

The study conducts too narrow an analysis of the relocation effect of the minimum wage on industries in Los Angeles. The study discusses the potential for relocation in the apparel industry, but considering that the City of Los Angeles is not the only major commercial center in the region – rather, it is at the center of many major commercial centers – it is important to also consider whether businesses in other industries may relocate to nearby cities. Indeed, for some businesses, it might make more sense to move just a few blocks to another city rather than face higher labor costs. One need only look at the relocation of Yahoo's Santa Monica office to Playa Vista to see how convenient it may be for some businesses to move less than a few miles away to take advantage of lower operating costs.

Ultimately, the Berkeley group's study is too narrow, depending too heavily on existing, more easily accessible data and research that attempts to serve as a proxy for more micro-level analysis, but does not present a precise or accurate picture of the impacts of the proposed minimum wage increase.

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