







A Fair Deal for Chicago's Working Families

A Proposal To Increase the Minimum Wage









Recommendations of Mayor Rahm Emanuel's Minimum Wage Working Group



Background on the Minimum Wage Working Group

On May 20th, 2014, Mayor Emanuel appointed a diverse group of community, labor and business leaders and tasked them with evaluating options for developing a balanced proposal to raise the minimum wage for Chicago's workers.

Working Group Members:

- · John Bouman, President, Sargent Shriver Center on Poverty Law (co-chair)
- Will Burns, Alderman of the 4th Ward (co-chair)
- Deborah Bennett, Senior Program Officer, Polk Bros. Foundation
- Matt Brandon, Service Employees International Union Local 73
- Carrie Austin, Alderman, Alderman of the 34th Ward and Chairman of the City Council
 Committee on the Budget and Government Operations
- Walter Burnett, Alderman of the 27th Ward and Chairman of the City Council Committee on Pedestrian and Traffic Safety
- Sol Flores, Executive Director, La Casa Norte
- Theresa Mintle, CEO, Chicagoland Chamber of Commerce
- Emma Mitts, Alderman of the 37th Ward and Chairman of the City Council Committee on License and Consumer Protection
- Joe Moore, Alderman of the 49th Ward and Chairman of the City Council Committee on Special Events, Cultural Affairs and Recreation
- Ameya Pawar, Alderman of the 47th Ward
- Maria Pesqueira, President and CEO, Mujeres Latinas en Accion
- Ariel Reboyras, Alderman of the 30th Ward and Chairman of the City Council Committee on Human Relations
- JoAnn Thompson, Alderman of the 16th Ward
- Sam Toia, President, Illinois Restaurant Association
- Tanya Triche, Vice President and General Counsel, Illinois Retail Merchants Association
- Andrea Zopp, President and CEO, Chicago Urban League



Public Engagement Process:

To ensure that its recommendations reflected the broadest range of input, the Working Group held five public meetings attended by hundreds of residents from across the city and consulted an array of experts and stakeholders. In addition, the Group received more than 200 comments via its online portal at www.cityofchicago.org/MinimumWage.

Following years of inaction by the Congress, it is long past time for cities and states to raise the minimum wage to lift more families out of poverty and stimulate the economy. Cities like Seattle and Washington DC have already acted, while a coalition of advocates and elected officials including Governor Pat Quinn are leading an effort in Springfield to raise the Illinois minimum wage. Raising the Illinois wage is critical, but due to Chicago's higher cost of living a state increase alone is not enough. The Raise Chicago coalition has helped shape the public debate in Chicago, creating an opening for establishing a Chicago minimum wage higher than the rest of the state.

Mayor Rahm Emanuel created the Minimum Wage Working Group to develop a balanced proposal to establish a Chicago minimum wage that will help the city's working families keep up with rising costs of living. Following a comprehensive review of data and research, and after an extensive public engagement process in public meetings held across the city, the Minimum Wage Working Group recommends that the Mayor introduce an ordinance that would raise the minimum wage for workers in the City to \$13 by 2018. Our proposal will increase the earnings for approximately 410,000 Chicagoans and inject nearly \$800 million into the local economy over four years. The proposal would also help the minimum wage keep up with cost of living by indexing it to inflation.



- \$13 by 2018
- 45% Increase in the Minimum Wage
- 410,000 workers to benefit
- Nearly \$800 million in economic stimulus

The Working Group recommends that this increase phase in over four years to ensure the City's business owners have time to adjust. By phasing the increase over this time period, the proposal would ensure that the impact on overall business expenses during the phase in would be an increase ranging from 1-2 percent each year depending on the industry. Our analysis focused on the industries that typically employ low-wage workers: food service and hospitality, health care, and retail.

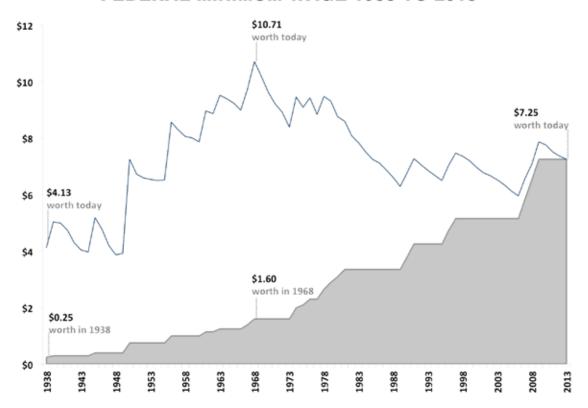
Furthermore, the Working Group recommends that the Mayor and City Council not pass an ordinance that implements its recommendation until the Illinois General Assembly has had the opportunity to raise the statewide minimum wage during the next veto session at the end of 2014.



Why a Minimum Wage Increase is Needed

By historical standards, the value of the current minimum wage is fairly low. Rising inflation has outpaced the growth in the minimum wage, leaving its true value at 32 percent below the 1968 level of \$10.71 in 2013 dollars. Additionally, the value of the minimum wage has declined by 21.5% from its 20-year average between 1960 and 1980 of \$9.23 in 2013 dollars with comparatively small increases in the 1990s and in 2007 failing to keep up.

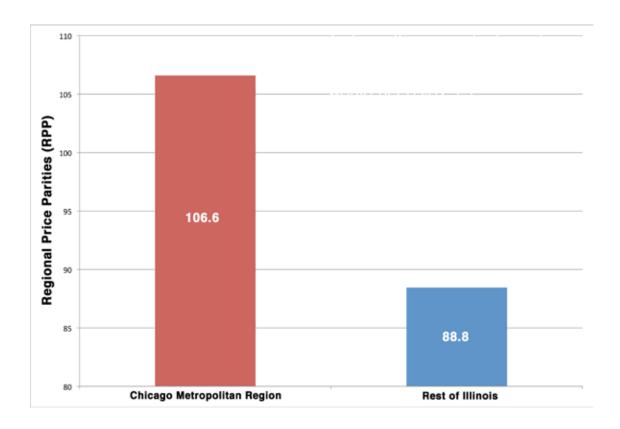
FEDERAL MINIMUM WAGE 1938 TO 2013



As the value of the minimum wage declines, the Great Recession has brought more families to the brink. According to the US Census, 22.1 percent of Chicagoans live below the poverty level. By comparison, 13.7 percent of the overall Illinois population and 14.9 percent of the national population lives below the federal poverty level.

This decline in wealth is taking place as cost of living is going up. In Chicago, rent as a percentage of income has risen to 31 percent, from a historical average of 21 percent. In addition, according to federal Commerce Department data, the Chicago metro region has the highest cost-of-living of any other city in the Midwest, and is also the only metropolitan region in Illinois that ranks above the national average in cost-of-living expenses.

The same data also reveal that the Chicago metro region's cost of living is 20.1 percent higher than the rest of Illinois:



A significant percentage of Chicago workers earn low wages. Nearly 31 percent of the Chicago workforce makes \$13 per hour or less. The median age of a worker making \$13 per hour is 33, and two-thirds of these workers are over the age of 25.

Additionally, women and minorities make up a disproportionate share of low-wage workers in Chicago.

CHICAGOANS MAKING UNDER \$13 AN HOUR

Race		Gender		Age	
Asian	7%	Female	55%	Under 18	2%
Black	27%	Male	45%	18-25	28%
Hispanic	38%			25-40	35%
White	27%			40-65	32%
Other	1%			65+	3%



These data demonstrate the importance of a Chicago minimum wage above the Illinois minimum that accounts for the City's higher costs of living and larger concentrations of low-wage workers.

It is important to be clear that none of the minimum wage increases under public consideration – including the \$15 increase passed by the Seattle City Council – represent a living wage. According to a recent report by the National Low Income Housing Coalition, a worker in the Chicago metro region must make \$18.83 an hour to afford a two-bedroom apartment at Fair Market Rent (FMR) values. This reality heightens the importance of income supports like the Earned Income Tax Credit (EITC), which lifts millions out of poverty each year.

The Working Group's **Recommendation**

A Minimum Wage of \$13 by 2018

The Working Group recommends that the City establish a Chicago minimum wage of \$13, phase in the increase over four years, and index it to inflation going forward. We also recommend that the City increase the minimum wage for tipped employees by \$1 above the tipped minimum set by state law - currently \$4.95 - over two years and index it to inflation.

Proposed Minimum Wage Increase Over Time

Year	Non-Tipped	Tipped
2014	\$8.25	\$4.95
2015	\$9.50	\$5.45
2016	\$10.75	\$5.95
2017	\$12.00	\$6.08*
2018	\$13.00	\$6.23*
2019	\$13.31*	\$6.38*
2020	\$13.63*	\$6.53*

^{*}Increase due to inflation

What is the Tipped Minimum Wage?

Under Illinois law, employers are allowed to pay tipped employees a minimum wage equivalent to 60 percent of the state minimum. The current tipped minimum wage is \$4.95 an hour, but on average tipped employees in the Chicago region earn \$10.50 an hour once tips are factored into their income. State law mandates that employers ensure that all employees take home at least the state minimum of \$8.25, requiring businesses to compensate employees who failed to reach \$8.25 in tips during a given pay period.





Why **\$13?**

A minimum wage of \$13 takes into account higher costs of living in Chicago as compared to the rest of the state and would increase the earnings for 31% of Chicago workers. The Working Group anticipates that a \$13 minimum wage would boost the local economy by \$800 million. By setting the Chicago minimum wage at \$13 following a statewide increase to \$10.65, the City would be accounting for the fact that the metro region's cost of living is 20 percent higher than the rest of the state. In fact, a Chicago minimum wage of \$13 is roughly equivalent to a wage of \$10.65 in the rest of the state when costs of living are factored into the amount.

Exemptions

Our proposal includes a number of exemptions to prevent the minimum wage increase from having unintended negative consequences on other important policy priorities. In most cases, we recommend simplifying the compliance process for businesses by adopting existing exemptions in Illinois state law. We recommend that the language adopting state exemptions be drafted to incorporate any future changes to state law.

The Working Group discussed other issues that appear to be best handled at the state or federal level, there being no compelling reason to differentiate Chicago from other parts of the state and nation. One example of this was the question of whether to repeal the exception to the Federal Labor Standards Act that allows a sub-minimum wage for supported work for people with disabilities. While there was substantial support for recommending such a change amongst Working Group members, we recommend that the decision be left to state or federal government.

Youth and Transitional Employment Programs

We recommend that the Mayor's proposal include an exemption from the Chicago minimum wage for (i) transitional subsidized employment programs and (ii) nonprofit programs that employ youth under the age of 25 as part of a youth employment program. These programs are designed to provide youth and hard-to-employ individuals with the training, experience, and other support to help them develop emotionally and professionally. The exemption should not apply to youth that are employed by private or nonprofit employers in permanent or temporary positions outside of the scope of a youth employment program.

Youth Wage

The Working Group also recommends that the Chicago minimum wage ordinance adopt the existing state exemption for youth under the age of 18. Under state law, youth under 18 can be paid a wage that is 50 cents below the state minimum wage. We believe this exemption is appropriate because employees under 18 are not yet adults and unlikely to be heads of household with families to support. To prevent the Chicago minimum wage increase from have a negative impact on youth employment, we believe it is necessary to adopt the state exemption.

Training Wage

To continue to allow employers to train workers during a limited probationary period, the Working Group recommends that the City maintain the current state exemption that allows employers to pay leaners a wage no less than 70 percent of the state minimum. Employers must apply to the Illinois Department of Labor (DOL) for authorization to pay a learner's wage for a period not to exceed six months.

Disabled Workers

We recommend that the City minimum wage ordinance retain the existing state authorization for employers to provide a subminimum wage to disabled workers when authorized by the DOL.

Other State Exclusions

The Working Group recommends that the City retain the exclusions from the definition of "employee" in 820 ILCS 205/3(d). These exclusions include:

- An exclusion for small businesses that allows the employer to pay a subminimum wage where the business has less than 4 employees not counting the employer's parent, spouse, child, or other members of immediate family. This exemption exists to allow the smallest businesses that rely upon family to get off of the ground and make ends meet.
- An exclusion for members of religious organizations or corporations. Under state law, this exemption applies to individuals who perform religious or spiritual functions such as priests, rabbis, nuns, imams, and pastors, but does not include laypersons who otherwise work for these entities.
- Authorization for students in work-study programs to be paid a sub-minimum wage.



Impact on Business

In evaluating options for potential minimum wage increases, the Working Group analyzed the potential impact on different types of businesses. Our analysis indicated that a minimum wage of \$13 phased in over four years would result in increases in overall costs ranging from 1-2 percent each year. Overall, our proposal, when adjusted for inflation, will increase the minimum wage by 45 percent over four years - a proportion on par with the most recent federal minimum wage increase of 34.1 percent over three years from 2007-09.

How Will Businesses Respond

While each business will respond to increased personnel costs in its own way, the Working Group reviewed a wide range of studies that suggest that the impact on jobs and costs from prior minimum wage increases has been small. Generally, the studies reviewed found small impacts on employment generally under 1 percent with a few outliers. In addition, some studies showed a heightened, though small, impact on young workers with associated price increases of less than 10 percent. It is important to note that these studies reviewed minimum wage increases of the past few decades, which resulted in real value wage increases ranging from 34.1 percent over three years from 2007 to 2009 to 19 percent over two years from 1990 to 1991. Our proposed increase is on par with the 2007 increase in that it would increase the value of the wage by 45 percent over four years, leading us to believe that these studies provide a reasonable predictor of how businesses would respond. The Working Group anticipates that the anticipated \$800 million in economic activity will blunt or reverse potential job losses. For example, a study performed on San Francisco's minimum wage increase showed an overall growth in private employment during the same period as the increase.

We have included a listing and summary of the studies in Appendix B.

Other Recommendations

Cracking Down on Wage Theft

Although a minimum wage is crucial for securing the economic future of Chicago's workers, the Working Group acknowledges that much can still be done to ensure that Chicagoans are receiving the wage they have rightfully earned. A recent study by the University of Illinois-Chicago's Center for Urban Economic Development found that approximately \$7.3 million in employee wages are stolen in Cook County each week. In response to this issue, City Council and Mayor Emanuel worked together in January of 2013 to pass an ordinance that made Chicago a national leader in the protection of employee wages. Co-sponsored by Aldermen. Ameya Pawar (47), Danny Solis (25) and Ald. Emma Mitts (37), along with Mayor Emanuel, the ordinance enabled the City to ensure that businesses convicted of violating state and federal consumer protection or labor laws such as wage theft will come into compliance with the law, or risk City license denial or revocation. However, the Group urges that the State join the City by taking more action to address this urgent issue for Chicago's workers and ensure that Chicagoans are safeguarded from wage theft.

Expanding the Earned Income Tax Credit

The EITC is the nation's largest and most successful bipartisan anti-poverty program that provides critical funds for working families and individuals, particularly those with children. Each year, the EITC lifts more than 6 million families out of poverty by enabling them to receive a tax credit of more than \$6,000, and an Illinois EITC of more than \$600. The average EITC recipient receives a refund of \$2,200. This money often makes a significant difference for the recipients and their ability to meet essential daily expenses.

The Working Group supports efforts to expand the EITC. Currently the EITC is unavailable to childless workers under the age of 25, and for childless workers older than 25, the credit is less than one tenth the average credit for filers with children. The Illinois General Assembly should expand the EITC by lowering the childless eligibility age to 21 and doubling the maximum credit available to childless filers. In addition, the Working Group applauds recent efforts to double the portion of the Illinois state EITC from 5 percent to 10 percent, and calls for the state portion to be doubled again to 20 percent.

Study of Chicago Minimum Wage Impact Going Forward

To inform future policy making of the City of Chicago and other governments, we recommend the impact of the minimum wage increase on Chicago residents and its businesses be studied over the next several years. To that end the Polk Bros. Foundation has graciously offered to contribute \$25,000 to fund such work.

Benefits Credit

The Working Group considered the potential incorporation of a benefits credit for employers that provide health insurance, paid sick leave, child care support, or pension benefits. While we did not include a benefits credit in our final recommendation, we urge the City Council to consider the issue further.

A Progressive Income Tax

A majority of Working Group members also supports implementing a progressive income tax for the state of Illinois. The state remains an outlier nationally by continuing to impose a flat income tax. Reforming the Illinois tax code by making it progressive would help reduce income inequality by reducing taxes for low-income families and increasing them for the highest earners and also ensure that the state generates the revenue needed for programs that support work and a fair opportunity for upward mobility, such as education and an expanded state EITC.

Achieving Pay Equity

A majority of Working Group members also supports efforts to address structural barriers to women's progress that contribute to long-standing gender-based wage gaps nationally and in Illinois. Women today earn only 77 cents for every dollar earned by men, and this is reflected in the finding that women make up 55 percent of all wage earners making \$13 per hour or less in Chicago. In addition, black women earn 69.5 percent, and Hispanic women 60.5 percent, compared to the earnings of their white male counterparts. Tackling this enduring social issue will require several important policy changes, such as efforts to ensure workers have access to paid sick leave, and proposals at the federal level to create paid family and medical leave programs.

Final Vote on the Minimum Wage Proposal

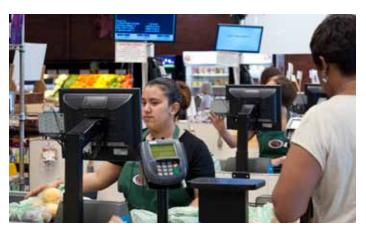
Working Group Member

Vote on Proposal

John Bouman	Yes
Will Burns	Yes
Carrie Austin	Yes
Deborah Bennett	Yes
Matt Brandon	Yes
Walter Burnett	Yes
Sol Flores	Yes
Theresa Mintle	No
Emma Mitts	Yes
Joe Moore	Yes
Ameya Pawar	Yes
Maria Pesqueira	Yes
Ariel Reboyras	Yes
JoAnn Thompson	Yes
Sam Toia	No
Tanya Triche	No
Andrea Zopp	Yes
· · · · · · · · · · · · · · · · · · ·	

Appendix A

Methodology





Business Impact

The Working Group developed a series of case studies to quantify the impact of a minimum wage increase on selected industries – primarily restaurants, retail merchants, hotels, and health care providers. The basis of our wage data was the May 2013 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates for the Chicago-Joliet-Naperville, IL Metropolitan Division. These estimates provided wage rates at the 10th, 25th, 50th 75th, and 90th percentiles.

Using industry reports and interviews with business owners, we constructed wage models for various businesses, detailing the number of employees per business by occupation and assigning a wage percentile to the business depending on its wage structure. We then modeled the estimated increase in wages both with and without a change to the minimum wage beginning in 2015 and continuing through 2025. We then excluded the impact on inflation to show figures in real (2014) dollars.

Importantly, we assumed that not only would wages increase but also that a series of wage-based benefits and taxes would increase as well, including payroll taxes, workers compensation, unemployment insurance, and vacation/sick leave. However, we did not increase payroll costs to account for non-wage based benefits such as health insurance, free food, or uniforms. For all case studies we assumed an additional 19 cents in non-wage costs on top of every dollar a business spent directly on wages.

We increased wages not only for employees whose wages were below the minimum wage but also for those who are slightly above the minimum wage, accounting for a "spillover effect" cited in numerous studies. After a review of the academic research we incorporated into our calculations an assumption that any worker making within 10% of the new minimum wage would see an increase of double the CPI in a given year. We are already assuming every employee receives an increase of the CPI annually, so the spillover effect is added on to the already inflation-adjusted wage. For example, assuming a \$13 minimum wage, an employee in 2018 who would make \$14.00 (7.7% above the minimum wage), would then make \$14.34, or 2.4% above what they normally would have made. This assumption held constant through all of our case studies.

Lastly, we looked at the impact of these increases on both the personnel and overall business expenses. We have more confidence about our projected impact on personnel expenses – the overall expenses estimates are based on commonly reported estimates of the proportion of overall expenses represented by personnel costs. These numbers can vary significantly from business to business, from the 20 percent range in the fast food industry to the 45 percent range in the hotel industry.

Economic Stimulus

To calculate the economic stimulus resulting from a minimum wage increase, the Working Group:

- Used Census Bureau and Bureau of Labor Statistics data to derive the distribution of wages and income for Chicago workers.
- Totaled the increased wages for this distribution of wages and translated them into 2014 dollars
- Assumed no job loss in these figures
- Assumed all workers would receive a wage increase equivalent to CPI and subtracted that increase from the total
- Reduced the stimulus number by anticipated amount of additional taxes paid by individuals - approximately 25 percent - giving us the net wages associated with the proposed minimum wage increase.
- Used a multiplier of 0.38 based upon the work of Mark Zandi of Moody Analytics, with downward adjustments based on changes in the national economy since his original study and assumptions that some of the spending would take place outside of Chicago.

Appendix **B**

Summary of Academic Research

The Working Group assembled the following listing and summary of the studies on the topic of minimum wage increases and their impacts. Although not an exclusive list, the following has provided useful context to the Group on impacts of minimum wage increases on employment, price pass -throughs, and overall consumer spending.

Study	Authors	Year	Findings
The Effects of a Minimum-Wage Increase on Employment and Family Income	Congressional Budget Office	2014	 With minimum wage increase (either \$10.10 option or \$9.00 option), most low-wage workers would see increase in income (16.5 million workers for \$10.10 option and 7.6 million for \$9.00 option) Employment would fall slightly (\$10.10 option – 0.3% decline, \$9.00 option – >.1% decline)
Local Minimum Wage Laws: Impacts on Workers, Families and Businesses	Michael Reich, Ken Jacobs, Annette Bernhardt	2014	 A meta-analysis shows minimum wage laws lead to positive income effects and reduces pay inequality Costs to businesses are absorbed by reduced turnover costs and by small restaurant price increases Price increases outside the restaurant industry are largely negligible 1 to 2 percent increase in restaurants' operating cost and .7% one-time increase in price for every 10 percent increase in minimum wage
The Paychex IHS Small Business Jobs Index	Paychex/IHS	2014	 In survey of employment in small businesses, found that the state with the highest percentage of annual job growth was Washington, the state with the highest minimum wage in the nation, \$9.32 an hour The metropolitan area with the second highest percentage of annual job growth was San Francisco — the city with the highest minimum wage in the nation, at \$10.74
Raise Chicago: How a higher minimum wage would increase the wellbeing of workers, their neighborhoods, and Chicago's economy	The Center for Popular Democracy (CPD)	2014	Report finds that a targeted \$15 minimum wage would: Increase wages: \$1.47 billion in new gross wages Stimulate Chicago's economy: \$616 million in new economic activity and 5,350 new jobs Increase city revenues: Almost \$45 million in new sales tax revenues Decrease labor turnover: as much as 80% less annual turnover Slightly increase some consumer prices: 2% price hikes at covered firms and franchises Evidence shows manufacturing will be the most impacted sector
Raising the Minimum Wage: Reviewing the Evidence on Why Minimum Wage Increases Boost Incomes Without Reducing Employment	National Employment Law Project (NELP)	2014	 Reviews research on the impact of raising the minimum wage, drawing three conclusions: Raising the minimum wage – including at the citywide level – boosts incomes for low-paid workers without reducing overall employment Opponents of raising the minimum wage rely on outdated studies that use imprecise methodologies and fail to take advantage of the

Out of Reach 2014	National Low Income	2014	 most recent advancements in economic research Businesses are able to pay higher wages without reducing employment due to a range of factors, including higher productivity and reductions in employee turnover that consistently result from minimum wage increases A full-time worker needs to earn \$18.92 an hour
	Housing Coalition		to afford a two-bedroom rental in the U.S., without spending more than 30 percent of income toward rent, according to an annual report by the National Low Incoming Housing Coalition In Chicago, you'd need to make between \$18.25 and \$19.25 an hour to afford a typical two-bedroom rental
Raising Chicago's Minimum Wage: Background on the Proposal for a \$15 City Minimum Wage for Chicago	National Employment Law Project (NELP)	2014	 Provides background on characteristics of Chicago workforce earning less than \$15 an hour and summary of economic evidence on impact of wage increase: 38% of Chicago's workers earn less than \$15 per hour, including disproportionate numbers of female, black, and Hispanic workers Over half of workforce earning less than \$15 per hour is estimated to be employed by large companies with annual revenue of \$50 million or more Research on the impact of other cities' minimum wage increases indicates that they have boosted earnings without reducing employment
Minimum Wage, Maximum Benefit	Illinois Economic Policy Institute (ILEPI); University of Illinois Labor Education Program	2014	 Report finds that raising the Illinois minimum wage to \$10 would: Increase labor income by \$1.9 to \$2.3 billion for intended beneficiaries and by \$5.4 to \$7.2 billion for all workers; Cause either a small drop or small gain in employment (between -70,000 and 32,000 jobs); Have no impact or a small impact on weekly hours worked (between -0.7 and 0.0 hours per worker); Generate \$141.2 to \$192.2 million in new annual state income tax revenue; and Further raise total labor income by up to \$414.2 million annually if sub-minimum wage workers are actually paid the new minimum wage, increasing ten-year tax revenues by another \$63.0 million for Illinois' state and local governments and \$89.2 million for the federal government
When Mandates Work: Raising Labor Standards at the Local Level	Michael Reich	2014	 In San Francisco County, median family income increased from \$63,545 to \$85,778 between 1999 and 2006-2010, during a time when the minimum wage increased During this same time period, household Income in SF relative to the United States increased from 1.31 to 1.37 and relative to California increased from 1.16 to 1.17 The 10th percentile wage jumped in 2004, when the new minimum wage went into effect, and has remained constant, despite a decline in 10th percentile wage in surrounding counties

	T		1
Raising The Federal Minimum Wage To \$10.10 Would Lift Wages For Millions And Provide A Modest Economic Boost	David Cooper (Economic Policy Institute (EPI))	2013	 Key findings include raising the federal minimum wage to \$10.10 by 2016 would return the federal minimum wage to roughly the same inflationadjusted value it had in the late 1960s An increase to \$10.10 would either directly or indirectly raise the wages of 27.8 million workers, who would receive about \$35 billion in additional wages over the phase-in period Across the phase-in period of the increase, GDP would grow by about \$22 billion, creating roughly 85,000 net new jobs over that period Among affected workers, the average age is 35 years old, nearly 88 percent are at least 20 years old, and more than a third (34.5 percent) are at least 40 years old Of affected workers, about 54 percent work full time, about 69 percent come from families with family incomes less than \$60,000, and more than a quarter have children The average affected worker earns half of his or had family incomes.
			her family's total income
How does a federal minimum wage hike affect aggregate household spending? Why Does Minimum	Federal Reserve Bank of Chicago John Schmitt	2013	 Article finds that a federal minimum wage hike would boost the real income and spending of minimum wage households The impact could be sufficient to offset increasing consumer prices and declining real spending by most non-minimum-wage households and lead to an increase in aggregate household spending The authors calculate that a \$1.75 hike in the hourly federal minimum wage could increase the level of real gross domestic product (GDP) by up to 0.3 percentage points in the near term, but with virtually no effect in the long term In study of over hundred minimum wage studies,
Wage Have No Discernable Effect on Employment?			most since 1990s conclude that minimum wage has little/no discernable effect on employment prospects of low-wage workers • Most likely reason is cost shock of minimum wage
Minimum Wago	Barry T. Hirsch, Bruce	2013	is small relative to firms' costs
Minimum Wage Channels of Adjustment	E. Kaufman, Tetyana Zelenska		 Some evidence that minimum wage increases compress wages for higher paid workers Following a federal wage increase, found that nearly half of employers interviewed would limit pay increases or bonuses for more experienced employees No evidence of employment or hours effects
Minimum Wages:	David Neumark and	2013	Strongly condemns the work of Dube et al. 2010
Evaluating New	J.M. Ian Salas		and Allegretto et al. 2011 as having flawed
Evidence on			methods • Invalidates their findings that there are no
Employment Effects			employment losses from minimum wage increases
Minimum Wage Effects on Employment, Substitution, and the Teenage Labor Supply: Evidence from Personnel Data	Laura Giuliano	2013	Examining large US retail firm's response to 1996 federal minimum wage increase, found increase in average wage had negative (but statistically insignificant) effects on employment (01% to09%) Found increase in relative employment of

			teenagers, especially among younger, more affluent teens
Effects of the Minimum Wage on Employment Dynamics	Jonathan Meer and Jeremy West	2013	Using state panel data, found that minimum wage reduces net job growth by about 0.5 percentage points while employment level remains unchanged Effects are most pronounced for younger workers and industries with a higher proportion of lowwage workers
Minimum Wage Channels of Adjustment	Barry Hirsch, Bruce Kaufman, Tetyana Zelenska	2013	Small to no statistically significant impact of the federal minimum wage increase on restaurant employment and employee hours in Georgia and Alabama
Are the Effects of Minimum Wage Increases Always Small?: New Evidence from a Case Study of New York State	Joseph Sabia, Richard V. Burkhauser, Benjamin Hansen	2012	Using Current Population Survey data for 16-to- 29-year-olds without a high school diploma found evidence that minimum wage increase from \$5.15 to \$6.75 was associated with 20.2 to 21.8% reduction in employment
Revisiting the Minimum Wage- Employment Debate: Throwing Out the Baby with the Bathwater?	David Neumark and J.M. Ian Salas	2012	 Reviewing recent minimum wage research, concludes research showing positive employment effects flawed Concludes evidence still shows minimum wages pose tradeoff of higher wage for some against job losses for others 4.2% decline in youth employment
Do Minimum Wages Really Reduce Teen Employment?	Sylvia Allegretto, Arindrajit Dube, and Michael Reich	2011	Using Current Population Survey data on teens for 1990-2009, find no statistically significant employment effects of minimum wage Finds that employment effects do not vary by business cycle
Using Federal Minimum Wages to Identify the Impact of Minimum Wages on Employment and Earnings Across the U.S. States	Yusef Soner Baskaya and Yona Rubinstein	2011	Using CPS data for 1977-2007, found notable wage impacts and large corresponding disemployment effects (-1%), yet only when utilizing the differential influences of federal minimum wages to instrument for state wage floors
Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties	Arindrajit Dube, T. William Lester, and Michael Reich	2010	 Among contiguous county-pairs over 10 years, there are no adverse employment effects to minimum wage There are strong positive earnings effects
The Teen Employment Crisis: The Effects of the 2007-2009 Federal Wage Increases on Teen Employment	William E. Even and David A. Macpherson	2010	Using state-level data for 2007 federal wage hike, there was a 6.9% decline in employment for teens and 12.4% decline in employment for teens with less than 12 years of education
Using Local Labor Market Data to Re- Examine the Employment Effects of the Minimum Wage	Jeffrey P. Thompson	2009	 Using quarterly Census data for 1996-2000 on county level, no evidence of employment effects In counties where minimum wage increase was binding, some evidence for negative impact Suggests regional variation in minimum wage effects

The Effects of Minimum Wage Increases on Retail Employment and Hours: New Evidence from Monthly CPS Data The Economic Effects of a Citywide Minimum Wage	Joseph J. Sabia Arindrajit Dube, Suresh Naidu, Michael Reich	2008	 Monthly CPS data from 1979-2004 shows 10% increase in minimum wage associated with 1% decline in retail trade employment and weekly hours worked Larger negative employment and hours effects for least experienced workers in retail sector San Francisco's indexed minimum wage increased worker pay and compressed wage inequality Did not create any detectable employment loss among affected restaurants 6.2% increase (statistically significant) in fast-food restaurant prices compared to neighboring area that did not raise minimum wage 2.8% increase (not statistically significant) in overall restaurant prices compared to neighboring
The Minimum Wage, Restaurant Prices, and Labor Market Structure	Daniel Aaronson, Eric French, and James MacDonald	2007	area that did not raise minimum wage No evidence that prices fall in response to a minimum wage increase Price increase effects more pronounced among fast food restaurants
Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research	David Neumark, William Wascher	2006	 In study of 90 minimum wage studies from 1996- 2006, majority points to slight negative employment effects Concludes no consensus on overall effects of minimum wage
The Dissipation of Minimum Wage Gains for Workers Through Labor-Labor Substitution	David Fairris and Leon Fernandez Bujanda	2005	 Find evidence of labor-labor substitution by city contractors in response to the Los Angeles living wage ordinance – substitution for workers with more years of schooling, prior formal training, etc. Intended wage gain for workers is dissipated by roughly 40% through labor-labor substitution
The Effects of Minimum Wages Throughout the Wage Distribution	David Neumark, Mark Schweitzer and William Wascher	2004	 Evidence for low-wage workers experiencing wage gains and high-wage workers experience little effects Low-wage workers experience hours and employment decline - "adverse consequences, on net, for low-wage workers"
Living Wages and Economic Performances	Michael Reich, Peter Hall, Ken Jacobs	2003	Study of San Francisco airport workers showed turnover dramatically fell after pay rose from \$5.75 to \$10 No evidence of significant reduction in employment Turnover rate dropped by a statistically significant amount
Minimum Wage Effects on Hours, Employment, and Number of Firms: The Iowa Case	Peter F. Orezem and J. Peter Mattila	2002	Analysis of county-level data of lowa minimum wage changes in 1990, 1991, and 1992 suggests negative employment elasticities (3 to85) and reduced number of firms
The effect of the minimum wage on employment and hours	Madeline Zavodny	2000	 Using state and individual level panel date, found evidence of some potential employment loss among teens No evidence for negative effect on hours worked in teens
Employment and the	Donald Deere, Kevin	1995	Comparing the year before and after a federal minimum wage hike in 1990, employment of men

1990-1991 Minimum Wage Hike	M. Murphy, Finis Welch		 25-64 fell 2.5% while women fell 0.3% Reduction among low wage workers is greater than expected in the period after a minimum wage increase (4.8% for teenagers, 6.6% for teenage black females 7.5% for teenage black males)
Minimum Wage Laws and the Distribution of Employment	Kevin Lang	1995	Found evidence of increase in employment but displacement of low-skill workers in favor of higher-skill workers
The Employment Effect in Retail Trade of California's 1988 Minimum Wage Increase	Taeil Kim and Lowell J. Taylor	1995	Evaluating California's 1988 minimum wage increase in retail trade industry, found evidence suggesting that employment growth may have been tempered by wage increase
Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania	David Card and Alan B. Krueger	1994	No indication that the 1992 NJ rise in minimum wage reduced employment
Comment on David Neumark and William Wascher, 'Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws.'	David Card, Lawrence F. Katz, Alan B. Krueger	1994	Argues that Neumark and Wascher's findings are invalid due to flaws in empirical analysis and that their data does not support negative employment effects
Employment Effects of Minimum and Subminimum Wages	David Neumark and William Wascher	1992	Using panel data of state minimum wage laws, a 10% increase in minimum wage causes a decline of 1-2% in teenage employment and 1.5-2% decline for young adults
Using Regional Variation in Wages to Measure the Effects of the Federal Minimum Wage	David Card	1992	Evaluating 1990 increase in federal minimum wage, found evidence for increase in teenagers' wages Found no corresponding losses in teenage employment or in teenage school enrollment

