To: National Association of Counties (NACo)
From: Dan Apfel and Abdel-Rahman Hamed, Maxwell School at Syracuse University
Subject: Evaluating the Economic Development Impact of Minimum Wage Increases

Abstract

Minimum wage laws have typically been discussed in the context of poverty and increasing wages, and what critics argue are the negative effects on business. This policy brief examines the impact of local minimum wage laws on economic development and suggests that increasing the minimum wage may be a viable economic development tool for counties around the United States. First, it defines economic development and explores the background and history of the minimum wage. Then, it looks at the current push for local minimum wage laws. An analysis of the thinking and research on minimum wage laws in general helps us understand the risks and possible outcomes of implementing these laws. Most research finds that there is no significant correlation between raising the minimum wage within historical ranges and job gains or losses. Finally, this paper provides guidance for elected officials considering passing a minimum wage ordinance with an eye towards economic development. We find that a well-informed minimum wage decision can ensure the best case: approximately zero impact on employment levels with a substantial positive impact on wages—a positive economic development effect. Two cases model implementation of these guidelines.

Introduction

There are a several reasons why a local government might increase the minimum wage if it is permitted by their state. The reasons that most municipalities cite for increasing the minimum wage relate to poverty and equality. Local governments, who must consider the broader impacts of any policy, should also seriously consider minimum wage ordinances in the context of economic development. While many people casually refer to economic development simply as "increasing the number of jobs" we use a slightly broader definition, "a sustained community effort to improve both the local economy and the quality of life."[1] Specifically, this definition includes *both the quantity and quality* of jobs available and the long-term prospects of those jobs. By law, the minimum wage is the lowest amount an employer is allowed to pay a worker. However, the minimum wage does not necessarily constitute a *living wage*, which allows full-time workers to provide a decent quality of life for themselves and their families. Minimum wage ordinances, like taxes and mandates, have the potential for a variety of impacts. To explore the positive potential of increasing the minimum wage on a locality's economic development, this policy brief addresses the likely effects of an increased minimum wage on employment levels in both local and export jobs.

Background and History

The History of Minimum Wage Laws in the United States

The federal minimum wage was first introduced in the United States in 1938 by the Fair Labor Standards Act. The goal of that act was to give "all our able-bodied working men and women a fair day's pay for a fair day's work" and to eliminate a race to the bottom among employers.[2] That minimum wage, which covered workers engaged in interstate commerce, was first set at $0.25 per hour. It has since been raised 29 times, most recently to $7.25 per hour in July 2009, and expanded to cover most of the U.S. workforce.[3] Most states also have their own minimum wage laws. Twenty-nine states and the District of Columbia currently have minimum wages set higher than the federal minimum, including California, Washington, D.C. and Massachusetts which are all at or above $10 per hour.[4] While some companies and classes of employees are exempted from minimum wage laws, the laws are colloquially considered to be the standard baseline for wages in the United States.

The Value of the Minimum Wage over Time

In 2013 dollars, the original 1938 minimum wage of $0.25 is equivalent to $3.40. The 2013 minimum wage—which remains unchanged since 2016 is $7.25. The federal minimum wage peaked in inflation-adjusted value in the late 1960s and is essentially worth the same today as it was in 1980.[5] At the same time, GDP per capita has increased in the U.S. since 1960 from $17,747 to $48,282 (2011 U.S. Dollars).[6] According to per capita GDP indicators, the value of the federal minimum wage has been eroding at a greater rate than inflation.

Who are Minimum Wage and Low-Wage Workers?

About 3.3 million workers, or 2.6% of all wage and salary workers, currently make the federal minimum hourly wage or less in the United States.[7] More than half of these workers (50.4%) are between the ages 16 and 24. By far, the largest industries that they work in are food preparation and serving and sales, among other similar occupations.[8]

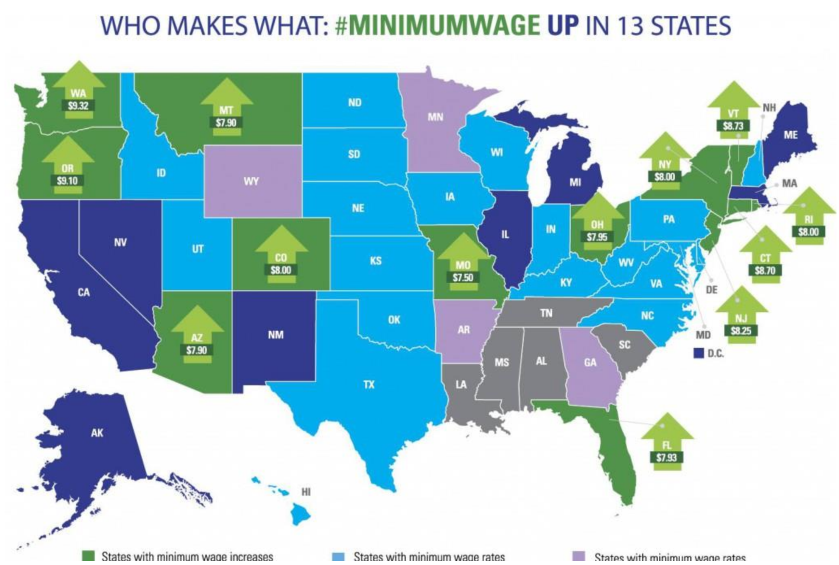


Figure 1: Source. U.S. Department of Labor Blog, Jan 15, 2014. https://blog.dol.gov/2014/01/15/3-out-of-4-americans-agree-its-time-to-raise-the-wage/

While only 2.6% of workers make the federal minimum wage or less, many more make a wage less than or close to $12, an increase proposed in Congress by the 2015 Raise the Wage Act. According to research by the Economic Policy Institute, a left-leaning but well respected think tank, raising the minimum wage to $12 would increase wages for 35.1 million workers. The workers affected would be disproportionately black and Hispanic. Further, an increase would especially effect single parents and workers with an average age of 36.[9]

Recent History of Local Minimum Wage Ordinances

Minimum wage standards vary in scope. Over 130 municipalities have separate standards for firms doing business with the municipality.[10] Fewer, though still a substantial number, have a broader minimum wage law. Since 2012, 27 counties and municipalities have passed minimum wage increases while only five laws predate that year.[11] In states where local governments are allowed to create minimum wage laws, there has been a large movement encouraging them to do so. This movement has been spearheaded by the "Fight for Fifteen," a labor-led organizing campaign, which has targeted state and local minimum wages, with a primary goal similar to the original minimum wage: to ensure that working people get a decent pay for a day's work, making a "living wage." While the minimum wage has not kept pace with inflation, advocates for higher wages argue that worker productivity and corporate profits have increased dramatically and that more of the benefits should accrue to workers. Raising the minimum wage is one way of addressing this problem and inequality more broadly. Additionally, advocates argue that increasing the minimum wage will help low-wage workers deal with the increasing costs of living, especially in metropolitan areas that are experiencing substantial economic growth and cost increases like New York City, the Bay Area, and Washington, D.C.

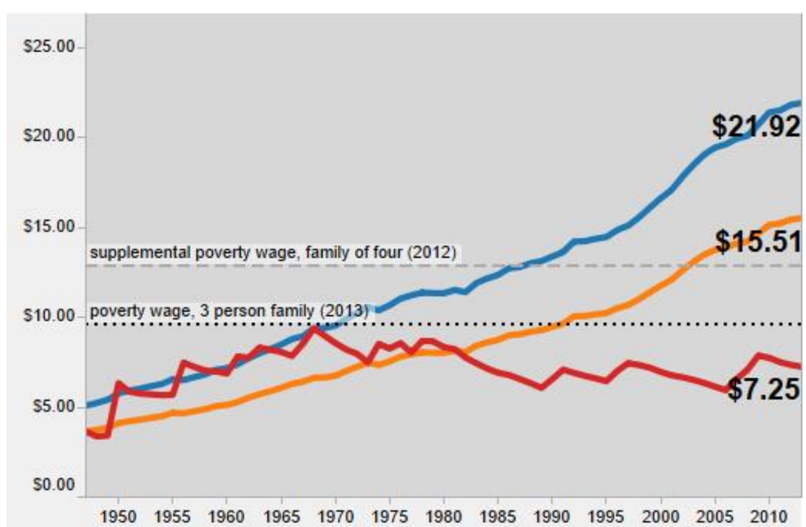
Determining Minimum Wage Rates

Arguments for Local Minimum Wages

Many arguments have been made about the equity and cost of raising the minimum wage, but local governments must consider the possible impacts of raising the minimum wage as they would with any other policy. One of the main drivers of local government policy is typically the "creation" and retention of jobs. When attempting to increase jobs, local governments typically focus on taxation, spending, and other incentives. Yet, local governments already impose many mandates on business that have impacts on economic development. From business permits to building and food safety requirements, mandates have costs and benefits. A local minimum wage is not substantially different in that it is a mandate with costs and benefits. For example, while building codes may increase the capital costs for developers, they also guarantee for tenants the building's quality, safety, and energy performance—increasing efficiency and investment value. Similarly, health and safety codes may raise operating costs for restaurants, but they also ensure for patrons the quality of the establishment's cleanliness and food safety.

A successful regulation is a law that produces value that offsets, if not exceed, its cost. A common impression among detractors is that the cost of minimum wage laws is higher than the benefits of added worker productivity. However, the facts do not match this mistaken impression. According to the U.S. Department of Labor, if the minimum wage was at pace with productivity since 1947, it would be $15.51 per hour. If it was at pace with productivity since 1968, it'd be $21.92 per hour. Economically, if productivity is higher than the cost of the minimum wage increase, firms will maintain or increase levels of employment.

Therefore, the fundamental question for local governments from an economic development context is whether the policy of increasing the minimum wage will have a positive effect on economic development, or will the costs of such a policy harm businesses and cause unemployment? This brief will focus primarily on this question.



Minimum Wage Laws: Magnitude and Impact on Economic Development

There has been much research been done on the impact of minimum wage laws at varying scales ranging from cities to countries. This research on minimum wage ordinances can be classified in two categories: prospective and retrospective. The first addresses the likely impacts of minimum wage ordinances.[12] The second addresses the impacts of minimum wage ordinances after they have taken effect by estimating impacts that either (1) provide a national outlook over time that generalize to the nation's urban areas, or (2) focus on one urban area over time.

Below, we summarize the retrospective findings to provide guidance for elected officials considering setting a minimum wage. Critics worry that the real effects of minimum wage ordinances are negative. They argue that these ordinances may reduce the number of firms, raise prices on consumers, and lead to unemployment due to a downsized labor market. However, the vast majority of research suggest a substantial impact in wages in the form of an increased wage with no significant effect on jobs. In fact, the most comprehensive survey of the research, a book titled *What Does the Minimum Wage Do,* states that what we do know about increasing the minimum wage is that it substantially benefits workers without having major impacts on employment.[13]

The Effects of Minimum Wages on Employment

To understand the effects of a minimum wage, economists created three theoretical labor market models. First, the simple competitive model assumes there are many firms and employees, none of which are large enough to have a detectible effect on wage or employment. In this model, economists predict that an increase in the minimum wage may cause job losses because of increases in the costs of production—more people will want jobs, but fewer firms will want to employ as many. Second, the monopsony model assumes that firms have an effect on wages through knowledge of other employers pay in an industry. To attract an additional worker, monopsony firms must pay a higher wage to attract additional workers and raise wages for all current employees. Therefore, monopsony firms, in an unregulated wage market, drive wages down below the equilibrium wage to offset the cost of attracting and retaining workers. In this model, a minimum wage increases both wages and employment.[14]

Finally, the search model—which closely corresponds with most real world research—assumes that prospective workers and employers cannot find each other without some cost. The logic is that not all individuals willing to work at wages that firms are willing to pay can find employment. In this model, a minimum wage increase results in an increase in wages and employment because of: (1) higher participation rate in the labor force, (2) the relatively ease of hiring offsets the cost of employment for firms, and (3) decreased turnover.[15] One of the most referenced recent studies looked at the effect of minimum wage differences across neighboring counties on restaurant employment and found that minimum wage increases had "strong [positive] earnings effects and no employment effects."[16]

The effect of minimum wage ordinances on the number of jobs available to low-wage workers depends upon several factors. Early literature drew similar conclusions.[17] Specifically, it concluded that employment may fall at firms (1) where low-wage workers constitute a large fraction of input costs, (2) that can readily substitute other inputs for low-wage workers, or (3) that operate in markets with consumers that are very sensitive to price increases, resulting in large reductions in demand.[18] However, recent studies find that employment was not adversely affected by minimum wage increases and that, in some cases, it actually increased.[19] For example, in a study of California, where the minimum wage was raised to $4.25 per hour in 1988, economists predicted an employment decline of between 3-8 percent. Instead, they found a 4 percent employment increase.[20] Similar studies of Texas,[21] and New Jersey and Pennsylvania[22], which used survey data from fast-food restaurants, also found increases in employment after a minimum wage increase—in one case almost 13 percent. Both studies found that firms most affected by the increase had the greatest employment gains.

Research, and logic, estimates that workers who earn a minimum wage and those who earn slightly more than the new minimum wage are likely to be affected by minimum wage ordinances. Some firms try to preserve differentials in pay that existed before the passage of minimum wage ordinances. Thus, a minimum wage increase also raises the wages of workers earning a slightly more than the minimum wage.[23] Some studies suggest that the costs of the minimum wage increases are partially offset by reductions in firm profitability.[24] Others argue that perhaps firms should account for their distorted compensation structures and lower high wages to offset the cost of the minimum wage increases.[25]

There are also counteracting forces. For example, minimum wage ordinances lower the additional cost of hiring new workers. Firms incur costs when hiring new workers—recruiting costs in the form of advertising and training, paying new workers at the minimum wage, and retaining existing workers by boosting their pay.[26] A minimum wage ordinance would have firms pay existing workers more. Retaining workers means fewer hires, leading to decreased spending on recruitment and hiring, and less supervisor time spent training new employees.[27] According to Arindrajit Dube, an economist at the University of Massachusetts, "Labor economists increasingly recognize that the presence of search frictions makes the magnitude and the direction of minimum wage effects ambiguous."[28]

The increased costs of minimum wage ordinances to firms can also be mitigated by higher worker productivity—manifested in two ways: a decrease in employee turnover and a decrease in absenteeism.[29] Higher wages attract more stable employees who are less likely to leave voluntarily and more likely to work harder to keep their better-paying jobs. As a result, the quality of low-wage workers appreciates. The lower turnover makes them more experienced, more skilled, and reduces their supervision. The decreased turnover rates reflect the potential productivity gains and cost savings for firms.[30]

Similarly, the cost of absenteeism to workers increases as wages rise. Low-wage workers value their jobs more highly after a minimum wage ordinance. Accordingly, they are less likely to risk losing employment by unexpectedly being absent from work. The more stable workforce that the minimum wage ordinance attracts is less likely to be absent without giving notice and advance scheduling.

The Effects of Minimum Wages on Pay and Benefits

While minimum wage ordinances increase cash wages, it is possible they could decrease total compensation for low-wage workers.[31] This could happen by firms responding to minimum wage ordinances by reducing other costs, including worker benefits—health insurance, pensions, travel subsidies, paid meals, or formal training.[32] However, we expect this effect to be modest, if not negligible, because most low-wage workers already receive limited benefits.

Again, it is important to emphasize that for the most part available research shows the limited impacts of increasing the minimum wage on employment. These studies suggest that labor markets may not work in a standard competitive framework that would lead to reductions in jobs. Instead, other factors may exert substantially more influence. Employers may gain offsetting benefits from reductions in turnover, or increasing prices.[33] They also may find more efficiencies, reduce wages of higher paid employees, reduce profits, or benefit from gains in worker productivity.[34]

The Benefits of a Multiplier Effect

The multiplier effect can be an important factor in growing an economy. Minimum wage increases can shift profits from firms, who are less likely to spend immediately, to low-wage workers, who are more likely to spend immediately. This stimulates demand for goods and service, which increases consumption and leads to a "multiplier effect."[35] A rise in demand for goods and services will reflect the increased consumption, and firms will respond by increasing production, which will fuel job creation. In a paper estimating the multiplier effect of minimum wage increases, the Economic Policy Institute's Josh Bivens found that $115,000 in additional economic activity results in the creation of one new full-time-equivalent job.[36]

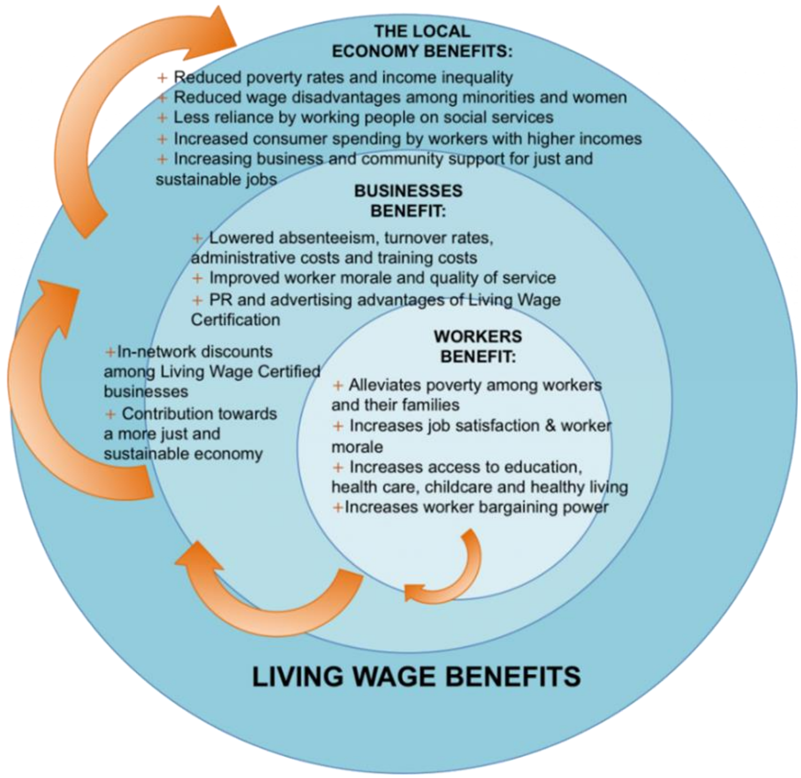


Figure 3: Living Wage Benefits. Source: Just Economics, http://justeconomicswnc.org/about-living-wage/

An increase in pay for low-wage workers can have a particularly strong multiplier effect. Low-wage workers cannot afford to save their income because they spend it on basic necessities. Thus, an increase in minimum wages takes firms' saved profits and turns it into income for low-wage workers, which will be spent at rates at or near 100%. This can help the overall economy to grow. One dollar of spending by a low-wage worker does not simply raise GDP by one dollar. Instead, the low-wage worker's spending becomes someone else's income that that individual can spend. Therefore, the initial $1 in spending ends up creating an increase of more than $1 in economic benefit.

Recommendations: Implementing Minimum Wage Laws as a Tool for Economic Development

Traditional competitive market models often predict substantial negative impacts from implementing a minimum wage ordinance. However, research on real-world implementation of minimum wage laws show that the laws' positive effects are likely to outweigh any negative ones. Although this literature is convincing, the research is limited to the size and scope of existing wage differentials. It is therefore possible or even likely that some limited negative effects on jobs or business could manifest in certain situations, especially at higher minimum wages.

Business impacts could manifest at higher levels of a minimum wage. On the other hand, multiplier effects and other benefits are likely to increase with higher wages. Therefore, we recommend a minimum wage with limited adjustments to account for what we believe to be the most important aspects of the economic situation in a given area.

The aim is that a well thought out minimum wage law will maximize the economic development impacts and minimize any negative ones. To do so we recommend legislators interested in the economic development outcomes of a minimum wage (1) start from a simple starting point of 50% of the area's median full-time wage and then (2) consider the size of the geography impacted by the new wage, (3) estimate the types of businesses and workers the minimum wage law will effect and their possible responses to an increased minimum wage, and (4) phase in the minimum wage over time. This process, followed by a consideration of the technical implementation of the law, including timed phase-ins and applicability rules—can help limit the risks and improve the likelihood of positive impacts of a minimum wage increase.

1. Setting the Wage: Starting at 50% of the Median Full-Time Wage

It is difficult to set a minimum wage without a starting point that incorporates the context. Starting points might be the current minimum wage or some measure of a "living" wage. From an economic development perspective neither is quite appropriate because they do not take into direct consideration the context of the current wage environment. *We recommend starting at fifty percent of the area median full-time wage.* Andrajit Dube, a leading scholar on minimum wages, proposes this wage is appropriate for states and economic regions, and his and other research shows this level poses few risks. For context, the current national minimum wage is 38% of the national median full-time wage. The minimum hovered around fifty-percent level from the 1960's through 1979, after a peak of 55% in 1968. This level is comparable to the average in OECD countries.[37] This wage naturally takes into partial consideration important factors including area costs of living and the broad state of the local economy.

After using Census data to calculate this number we recommend that counties consider factors to adjust the wage, setting a minimum wage a maximum of five points higher or lower. This minor level of adjustments is chosen because research shows the impacts are likely to be limited, and the final range of 45%-55% of the median is well within real-world minimum wage experience. This 5% is divided between two effects for simplicity.

2. Setting the Wage: The Effects of Geography on Price and Business

We recommend adjusting the minimum wage approximately 2.5 percentage points in either direction from the fifty percent level, based on the size of the geography and how much of the regional economic activity it covers. Regions covering larger areas and greater portions of area economic activity may increase the minimum wage by 2.5 percentage points. Smaller and more integrated areas should consider decreasing the minimum wage from the index by this amount. As discussed earlier, research has shown that wage increases do not typically lead to business flight, but may lead to small price increases. Yet the simplest theoretical models on price differentials suggest that the smaller the geography and the larger the price changes, the more likely it will be for consumers to alter their behavior towards lower price areas. While research does not show this playing out on average, the logic may hold for an individual firm's choice of location. These risks should be smaller for governments covering more economic activity of an area, and those that are relatively isolated. For this reason, county governments, or larger regions working together, may be the most appropriate local site for wage increases. We recommend increasing the minimum wage by up to 2.5 percentage points for the areas with the least other options, or decreasing it by the same amount for highly interconnected areas or smaller, interconnected localities.

3. Setting the Wage: Estimating Primary Business Effects

We recommend adjusting the minimum wage to similar amounts—5 percentage points up or down—based on the likely magnitude of the effects on business. These effects are not simple to parse, but counties should consider the types and distribution of jobs among industries, and size of businesses, or by using census data on wages. In general, an increase in the minimum wage is more likely to affect businesses that pay low wages, including retail, food service, and other service jobs including cleaning and security. As discussed earlier, many studies show that higher wages also save business costs on turnover and increased productivity.

To best set the minimum wage, we recommend wage adjustments based on an understanding of the types of businesses in the area. Some possible scenarios based on the market theories that might take place in certain scenarios include:

- Small firms operating in a single jurisdiction may face substantially higher labor costs, with a substantial impact on their bottom line. National firms may have a larger profit base to draw from.
- Firms with jobs competing in the regional or national economy often have substantially larger payrolls and many more high-paying jobs. Increases for the small percentage of low-wage workers should have limited effects on their business models, allowing a larger increase.
- Firms and organizations with large capital investments are less likely to move and are likely to absorb higher increases.
- Firms with low-wage workers and limited capital investments, like call centers, may be more likely to leave.

Evidence shows that most employers facing minimum wage increases are likely to stay and benefit from decreased turnover and increased productivity. In fact, in the short-term, research shows that higher minimum wages may lead to slower separations, hires, and turnover rates.[38] This effect is likely to hold true especially for those businesses with large capital investments. Over time, job creation will continue at a normal pace for businesses that stay, and the benefits of the minimum wage increase will at least offset any losses.[39] We recommend increasing the minimum wage 2.5 percentage points for areas that face fewer likely impacts, and decreasing it 2.5 percentage points for those that estimate substantial business impacts. Similarly, counties may increase the wage to impact more workers in areas with higher wages or decrease it in areas with lower wages.

4. Implementing the Wage: Setting Phase-Ins and Applicability

Finally, we recommend that governments considering the economic development aspects of a minimum wage law consider phasing in increases over a number of years. This should reduce short-term impacts on businesses including job flight and closure. The benefits to businesses from increased productivity and a stable workforce should increase directly in step with increased costs, protecting businesses from the possible turmoil of large increases. Many communities that have many small businesses might consider phasing in minimum wages at a slower rate for businesses below threshold number of employees.[40] In San Francisco, for example, the minimum wage was originally raised substantially less for firms with less than twenty employees yet it eventually met the citywide wage. *Legislatures may consider setting different minimum wages as one mechanism for ensuring that small businesses or nonprofits without the resources to deal with short-term impacts are not disproportionately affected.*

Applying the Principles: Onondaga County, NY and Durham County, North Carolina

Onondaga County, NY

Onondaga County is relatively contained metropolitan area, with 467,000 people in the county out of 662,000 people in the metropolitan area as of 2010.[41] 219,556 of those people are employed. The largest industries by employment are education, health care, and social assistance, followed by retail. Accommodation and food service, typically an area of low wage workers, has approximately 15,000 workers.[42] Figure 1 shows a calculation for a new minimum wage based on the above criteria.

Total Full-time Workers	Median Earnings	Median Wage	50% of Median	Recommended Adjustments	With Adjustments	Current Wage	Increase
148,785	$ 45,977	$ 22.99	$ 11.49	2.50%	$ 11.78	$9.00	21%

Figure 4: Adjusted minimum wage based on 50% median income standard for Onondaga County, New York. Calculations based on ACS 2010-2014 data.

We recommend no adjustment for geography and a 2.5% increase for an expectation of limited business effects. This leads to a calculated recommend minimum wage of $11.78. We recommend increasing the minimum wage over two years to limit the immediate impacts on businesses and prices, and indexing the wage to the regional consumer price index with changes annually thereafter.

Durham County, NC

Durham County is located in the Piedmont area of North Carolina with a growing population of about 282,000 residents. It is part of a large economic region which includes the cities of Durham, Durham County's seat, Raleigh, Cary, and Chapel Hill, which are all outside of Durham County. There are 139,643 people currently employed. Approximately 50% of people are employed in occupations in "management, business, science and arts" an only 17% in the services. The largest industries are education and health care (36%) and professional scientific and management (15%). The median full-time earnings for year round workers is approximately $45,000.

Total Full-time Workers	Median Earnings	Median Wage	50% of Median	Recommended Adjustments	With Adjustments	Current Wage	Increase
102,345	$ 42,288	$ 21.14	$ 10.57	0%	$ 10.57	$7.25	46%

Figure 5: Adjusted minimum wage based on 50% median income standard for Durham County, North Carolina. Calculations based on ACS 2010-2014 data.

Figure 2 shows the recommended wage for Durham County. Durham is part of a much larger economic region, including a number of other cities. The population of Durham-Chapel Hill MSA is 542,710, nearly twice the size of Durham County, and the combined statistical area which includes Raleigh, has 2,075,126 residents. Durham only makes up a fraction of this area. In Durham County, we recommend using 50% of the area-median full-time wage after adjusting up 2.5 percentage points for type of jobs and down 2.5% for geographical factors.

Conclusion

A review of the available research shows that effects of minimum wage ordinances are much less deleterious than is commonly suggested by critics of raising wages. Most studies show that raising the minimum wage has a substantial positive impact on wages for workers, with no positive or negative consequences in terms of employment levels. This suggests that counties and other localities in general interested in pursuing a minimum wage law for equity and justice reasons may do so with limited concern for the impact on jobs. We advise considering the guidance above when setting the wage level. Similarly, counties interested in pursuing economic development through pay mandates may find that minimum wage laws can increase the quality of life for working residents at the lower end of the pay scale and the overall quality of life in the region. An increase in the minimum wage, to a level up to 55% of the median wage, may serve as a limited, but low-cost, strategy for pursuing economic development. Additionally, higher wages may have added benefits not addressed in this brief, such as reducing demand and cost for social services.

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