

Working but Still Struggling:

THE CASE FOR A NEW YORK CITY
MINIMUM WAGE



NEW YORK CITY COMPTROLLER
JOHN C. LIU

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ABOUT THE NEW YORK CITY COMPTROLLER'S OFFICE

The New York City Comptroller, an independently elected official, is the Chief Financial Officer of the City of New York. The mission of the office is to ensure the financial health of New York City by advising the Mayor, the City Council, and the public of the City's financial condition. The Comptroller also makes recommendations on City programs and operations, fiscal policies, and financial transactions. In addition, the Comptroller manages the assets of the five New York City Pension Funds, performs budgetary analysis, keeps the City's accounts, audits City agencies, manages the City's debt issuance, and registers proposed contracts. His office employs a workforce of more than 700 professional staff members. These employees include accountants, attorneys, computer analysts, economists, engineers, budget, financial, and investment analysts, claim specialists, and researchers, in addition to clerical and administrative support staff.



EXECUTIVE SUMMARY

The federal minimum wage requires that employers in the United States pay their U.S. workers no less than \$7.25 per hour. This hourly rate has remained unchanged since 2009. Currently, the New York City and New York State minimum wage is determined by the federal minimum.

However, the New York State minimum wage is set to increase between 2014 and 2016, up to \$9.00 per hour in 2016. But, the concurrent introduction of a New York State Minimum Wage Reimbursement Credit undermines the benefits of increasing the minimum wage by providing employers with financial incentives to cut the pay of low-wage workers (see page 4 for a full explanation of the New York State Minimum Wage Reimbursement Credit).

Roughly 850,000 New York City residents live in poverty despite having family members that work. The buying power of the federal minimum wage has been eroded by inflation and is low by historical standards. The high cost of living in New York City makes minimum wage earners in New York City poorer than anywhere else in the nation. Elsewhere they earn either higher wages, due to higher state or municipal minimum wages, or enjoy a much lower cost of living, or both. The federal minimum wage and the proposed State minimum wage is too low to lift New York City residents from poverty.

New York City Comptroller John Liu proposes a citywide minimum wage of \$11.50 per hour, phased in to keep it above the state minimum, and indexed for inflation. Doing so would be an effective way to help New York City's working poor. It could also address growing income disparity in the City, avert perverse state incentives for employers to cut wages, and ease the burden on public services, all at acceptable cost.

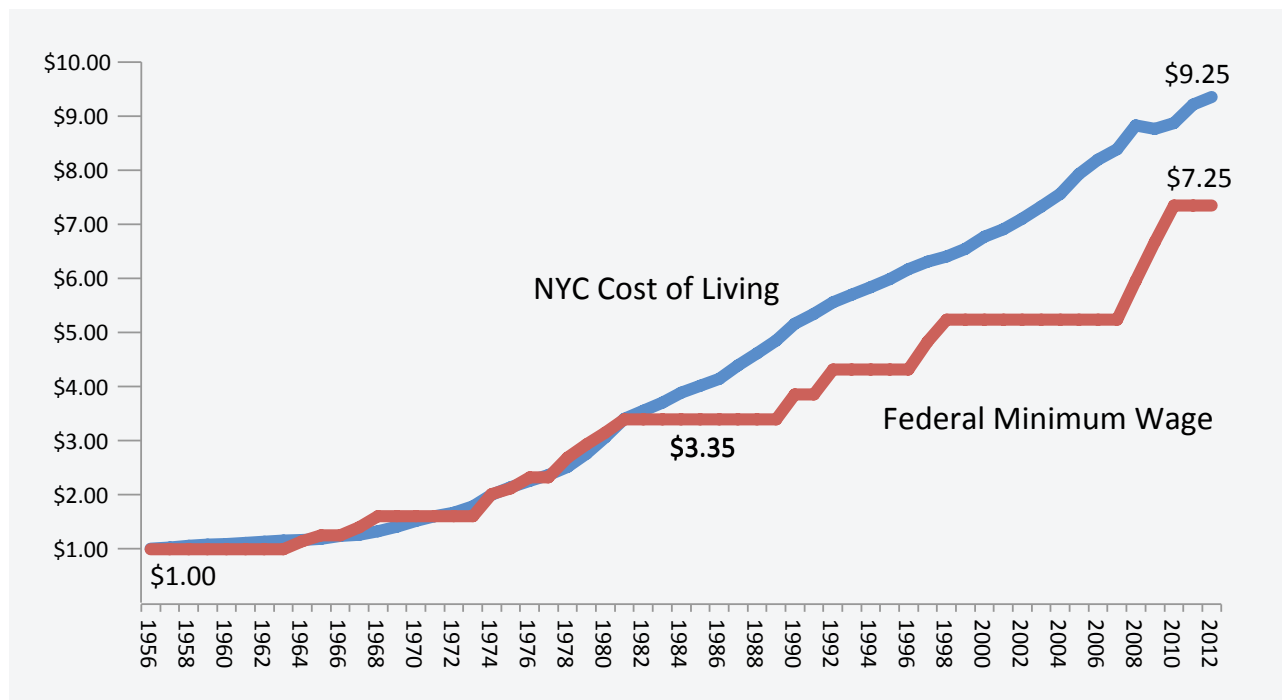


THE FEDERAL MINIMUM WAGE HAS FAILED TO KEEP PACE

The Fair Labor Standards Act of 1938 established many of the workplace rules Americans take for granted: the 40 hour work week, time-and-a-half for overtime, the prohibition of child labor, and the minimum wage. While most of these provisions remain much the same as they were 70 years ago, the minimum wage was originally set at 25 cents per hour. The Fair Labor Standards Act has been amended many times to increase the minimum wage to reflect cost of living increases.

From 1938 through the 1970's, the federal minimum wage largely kept pace with increases in the cost of living, but began falling further and further behind rising prices during the 1980's. In fact, the minimum wage remained fixed at \$3.35 per hour for the duration of the Reagan administration. The figure below illustrates this divergence. In 1956 the federal minimum wage was \$1.00 per hour. Now, it stands at \$7.25. But prices in New York City have risen faster than the minimum wage. What cost \$1.00 in 1956, costs \$9.25 today.

FIGURE 1. THE MINIMUM WAGE HAS FALLEN BEHIND NYC'S COST OF LIVING



Source: BLS minimum wage data, CPI New York-Northern New Jersey-Long Island, NY-NJ-CT-PA, 9/1956 to 9/2012.



Congress increased the federal minimum wage from \$6.55 per hour to \$7.25 per hour in 2009. Although the categories of worker to which the federal minimum wage applies have varied over time, today just a few categories are exempt: tipped employees, seasonal farm workers, seasonal amusement park workers, and workers under age 20 in their first 90 days of employment.

STATE AND MUNICIPAL MINIMUM WAGES BRIDGE THE GAP

As of January 2013, nineteen U.S. states and five municipalities have introduced their own minimum wages to bridge the growing divide between U.S. living costs and the federal minimum wage. Most of these state and local laws index the minimum wage to measures of inflation such as the Consumer Price Index.

TABLE 1. STATE AND CITY MINIMUM WAGES IN 2013

STATES		CITIES	
Washington State	\$9.19	San Francisco	\$10.55
Oregon	\$8.95	Santa Fe	\$10.29
Vermont	\$8.60	San Jose	\$10.00
Conn., Illinois, & Nevada	\$8.25	Albuquerque	\$8.50
California & Mass.	\$8.00	Washington DC	\$8.25
Ohio	\$7.85	New York City (Federal)	\$7.25
Arizona, Montana	\$7.80		
Alaska, Rhode Island	\$7.75		
Florida	\$7.67		
Colorado	\$7.64		
Maine, New Mexico	\$7.50		
Missouri	\$7.35		
New York State (Federal)	\$7.25		

Source: Individual State and City minimum wage laws.



On March 29, 2013 Governor Cuomo approved increasing New York State's minimum wage to \$8.00 per hour in 2014, \$8.75 per hour in 2015, and \$9.00 per hour in 2016 and beyond.¹ While these increases are small steps in the right direction, at the same time the state approved a Minimum Wage Reimbursement Credit² that, ironically, makes the case for a higher New York City minimum wage even stronger.

The Minimum Wage Reimbursement Credit rewards employers of students between the ages of 16 and 19 with a tax credit equivalent to \$0.75 per hour in 2014 (equal to the entirety of the minimum wage increase in 2014), \$1.31 per hour in 2015, and \$1.35 per hour in 2016, if and only if they are paid the New York State minimum wage.

On the surface this looks like a simple incentive to encourage teen employment. However, if a worker is paid slightly more than the state minimum wage, and currently the vast majority of low-wage New York City workers make more, the employer would not get the credit for that worker. In effect, the Minimum Wage Reimbursement Credit will subsidize employers that find ways to reduce their employee's wages to the new "minimum."

We estimate there are roughly 100,000 New York City workers earning wages between \$8.00 and \$9.00 per hour.³ These workers are likely to benefit from an increase in the state minimum wage, although not enough to lift them from poverty. On the other hand, we estimate there are roughly 120,000 New York City workers earning between \$9.00 and \$10.00 per hour.⁴ If their employers were to find ways to replace them with young people paid the minimum of \$9.00 per hour, the state would give them a tax credit worth \$1.35 per hour. For every worker that might see their wages rise, another may see their wages fall or their jobs lost.

State subsidized wage cuts are not an effective way to alleviate poverty. When New York State increased the state minimum wage and passed the Minimum Wage Reimbursement Credit, it undermined both the meaning of the minimum wage and its objective.

The Minimum Wage Reimbursement Credit underscores the necessity of a New York City minimum wage. If New York City employers must pay more than the state minimum, they will no longer be eligible for perverse state incentives to cut their employees' pay.

1 New York State Bill number (S2609D/A3007D).

2 New York State Bill number (S2609D/A3009D).

3 Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

4 Ibid.



Many other states and cities have debated proposals to increase the minimum wage, including the states of New Jersey and Connecticut. A bill raising the New Jersey minimum wage to \$8.50 passed both New Jersey houses in 2012,⁵ but was vetoed by New Jersey Governor Chris Christie. In February 2013, New Jersey lawmakers voted to put an initiative to raise the minimum wage by 1.00 (to \$8.25), and index it to inflation, on the November 2013 ballot. A bill to raise the minimum wage in Connecticut from \$8.25 to \$8.75 passed in the Connecticut House, but died in the state senate.⁶

While New York City does not currently have a minimum wage apart from the federal and pending state requirements, in 2012 the New York City Council passed a living wage bill that would set a minimum wage of \$10.00 per hour (\$11.50 per hour for employees not receiving health benefits) at certain projects receiving City development assistance. However the bill included a number of exceptions. The New York Times estimated it would benefit as few as 400-500 workers.⁷ New York City Mayor Bloomberg vetoed it nonetheless. The City Council overrode the mayoral veto, but the measure is now subject to a court challenge and has not been implemented.

Internationally, many countries set minimum wages, but most of these are much poorer countries with lower costs of living, and lower wages in general. Countries with higher minimum wages include Australia and Ireland. In 2012, the Australian minimum wage increased to \$15.96 Australian dollars per hour,⁸ which is equivalent to \$16.86 U.S. dollars per hour.⁹ Since 2011 the Irish minimum wage has been set at €8.65 per hour¹⁰, equivalent to roughly \$11.60 U.S. dollars per hour.¹¹

5 New Jersey State Assembly bill A2162.

6 Connecticut House bill H.B. 5291.

7 *New York Times*, April 12, 2012, accessed 12/28/2012

<http://www.nytimes.com/2012/04/13/nyregion/ny-living-wage-bill-after-christine-quinns-tweaks-has-shorter-reach.html>.

8 <http://www.fairwork.gov.au/factsheets/EWO-fact-sheet-minimum-wages.pdf>, accessed January 15, 2013.

9 1 AUD = 1.0567 USD, January 15, 2013.

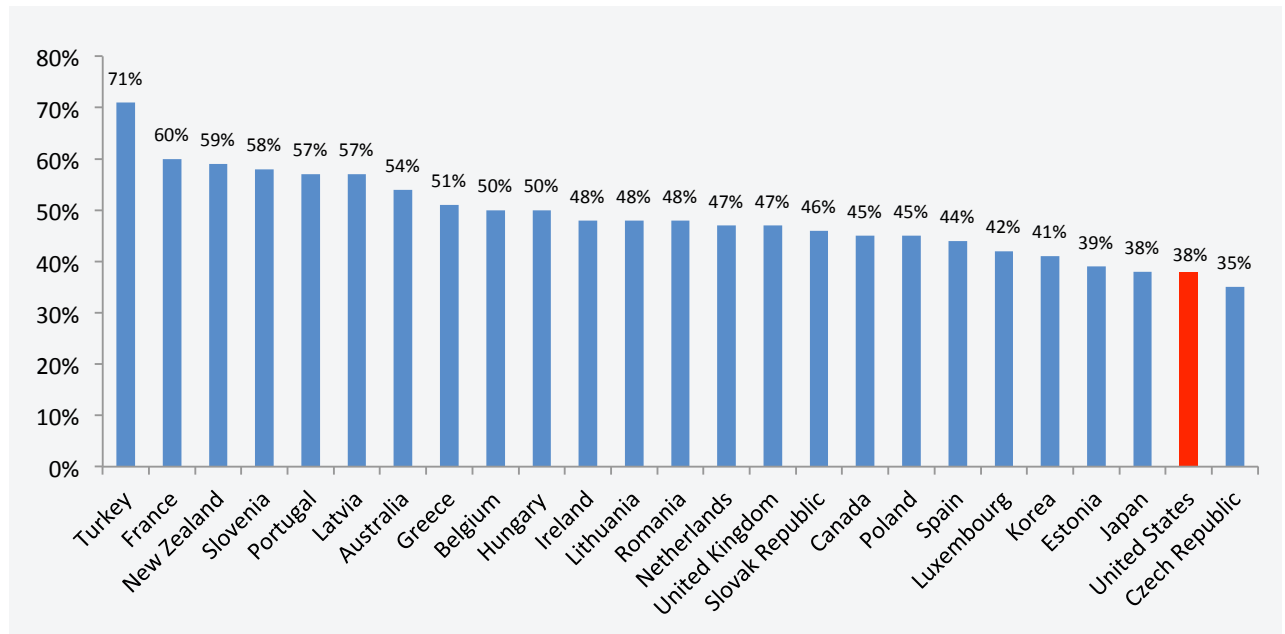
10 <http://www.isme.ie/advice-page53876.html>, accessed January 15, 2013.

11 1 Euro = 1.34 USD, January 15, 2013.



One way to measure the relative prosperity of minimum wage workers, and the fairness of the minimum wage, is to compare it to the wages earned by the median worker. By this measure the U.S. federal minimum wage is the 2nd lowest in the world among developed countries. Minimum wage workers in the United States earn only 38 percent of what the median U.S. worker does.

FIGURE 2. AS A PERCENTAGE OF THE MEDIAN WAGE, THE FEDERAL MINIMUM WAGE IS 2ND LOWEST AMONG DEVELOPED COUNTRIES

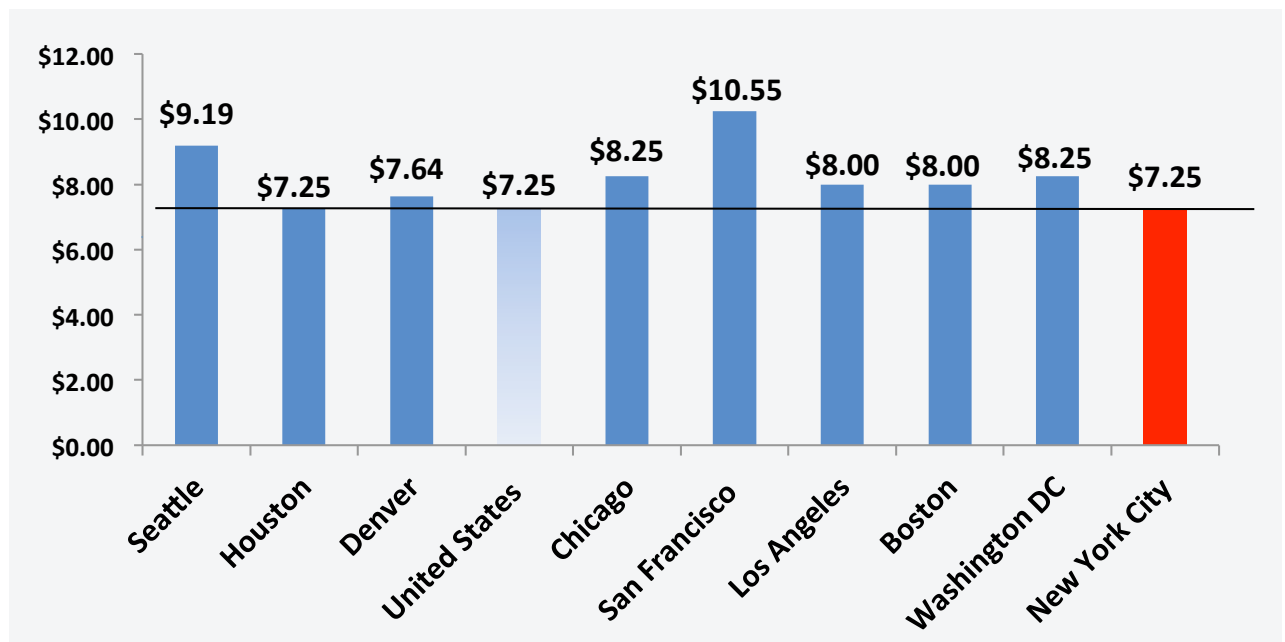


Source: The Organisation for Economic Co-operation and Development.

THE EFFECTIVE MINIMUM WAGE IN NEW YORK CITY IS THE LOWEST IN THE NATION

Although New York State's minimum wage will increase between 2014 and 2016, the Minimum Wage Reimbursement Credit passed concurrently provides employers with the incentive to drive the wages of New York City workers down rather than up. Currently, New York City's minimum wage is the lowest in the nation, equal to the federal minimum of \$7.25 per hour.

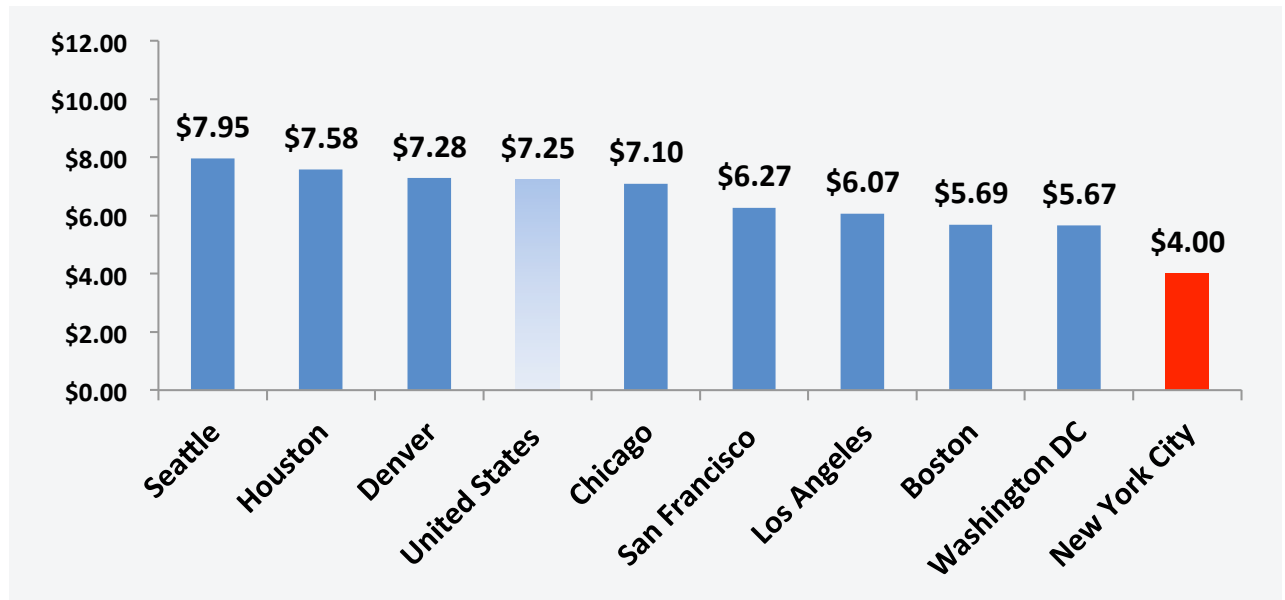
FIGURE 3. NOMINAL MINIMUM WAGE IN SELECT U.S. CITIES, 2013



Source: Individual City and State minimum wage laws.

But New York City has the highest cost of living in the nation. Taking this into account demonstrates that the minimum wage buys less in New York City than anywhere else in the country.

FIGURE 4. EFFECTIVE MINIMUM WAGE IN SELECT U.S. CITIES



Source: Individual State and City minimum wages, ACCRA/COLI 2012Q3 Cost of Living Index.

The figure above takes the minimum wages from the figure on the previous page and adjusts for the cost of living. The ACCRA/COLI Cost of Living index allows city-by-city comparisons of living costs incorporating local differences in the prices of groceries, housing, utilities, transportation, and other items. New York City prices for all of these items are roughly 20 percent to 30 percent higher than the national average and, with respect to housing costs, two to three times the national average (approaching five times the national average in Manhattan).

Taking into account living costs, Seattle's minimum wage of \$9.19 per hour retains much of its buying power. However San Francisco, with a minimum wage of \$10.55 per hour, highest in the nation in nominal terms, is revealed to have a much lower effective minimum wage than a city such as Houston, where the federal minimum wage of \$7.25 per hour is coupled with lower-than-average living costs.

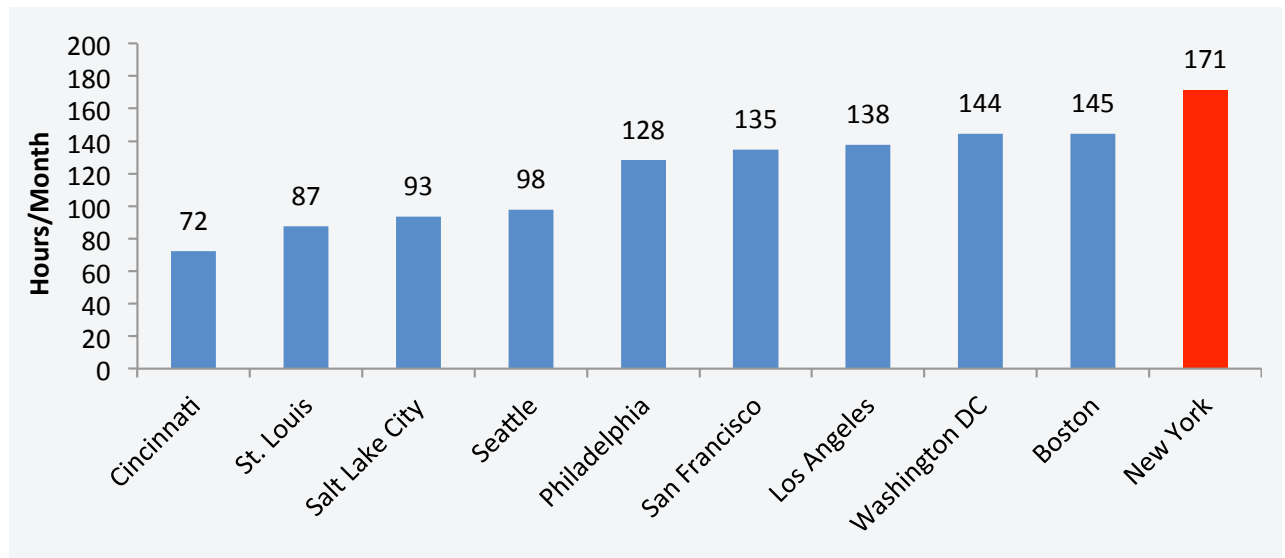
The effective minimum wage in New York City is \$4.00,¹² the lowest in the nation. A minimum wage worker living in New York City is poorer than anywhere else in the country. This poverty becomes even clearer if we look at the cost of housing in isolation.

¹² The ACCRA/COLI Cost of Living Index does not include a composite cost of living index for New York City, but rather individual indices for Manhattan, Brooklyn, and Queens (Staten Island and the Bronx are excluded). We create a composite index for New York City by weighting the indices of the three available boroughs by the proportion of low-wage workers living there, excluding those living in Staten Island and the Bronx, to derive a composite index for New York City of 181.1, ($\$7.25/1.811=\4.00).

The Department of Housing and Urban Development estimates fair market rents for housing across the country. In the figure below, we take the fair market rents for 1-bedroom apartments in different markets and divide that monthly rent by the minimum wage there to derive the number of hours a minimum wage worker would have to work each month just to pay the rent.

Ignoring taxes, a minimum wage worker in New York City would have to work 171 hours per month to pay the rent. This is a recipe for homelessness. As a result, minimum wage workers must depend on government programs, or resort to illegal housing.

FIGURE 5. A NYC RESIDENT EARNING MINIMUM WAGE WOULD HAVE TO WORK 171 HOURS/MONTH JUST TO PAY THE RENT

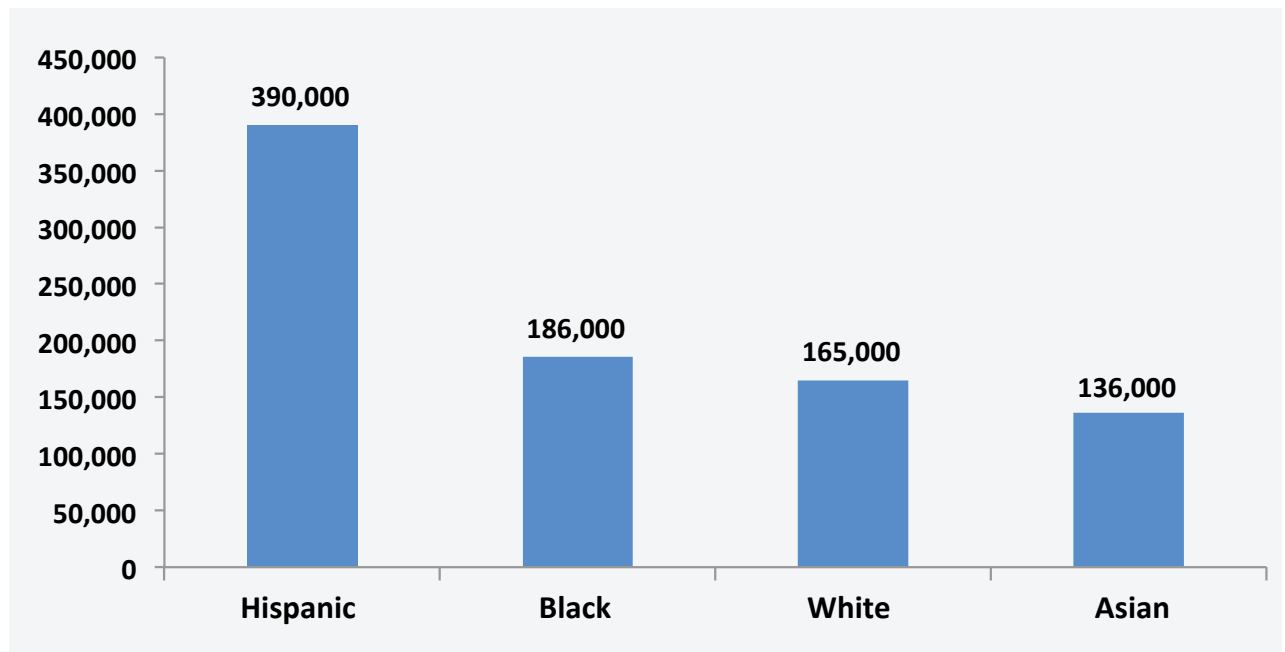


Source: HUD 2013 1-bedroom monthly Fair Market Rents divided by the applicable minimum wage, <http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr13>, accessed 2/14/2013.

LOW-WAGE WORKERS IN NEW YORK CITY

Roughly 875,000 New York City residents are working poor (defined as living in households with at least one household member working, yet with household incomes below federal poverty guidelines).¹³ The figure below shows these individuals are disproportionately black and Hispanic. Almost 400,000 Hispanic New York City residents live in working poor households, as do nearly 200,000 black New York City residents.

FIGURE 6. WORKING POOR NEW YORK CITY RESIDENTS, BY RACE



Source: American Community Survey individuals living in working households with household income below federal poverty levels.

In fact, because New York City's cost of living is so high, using federal guidelines to measure poverty understates the true magnitude of the problem. Federal measures of poverty use the same income guidelines nationwide, despite large differences in living costs between urban and rural areas.

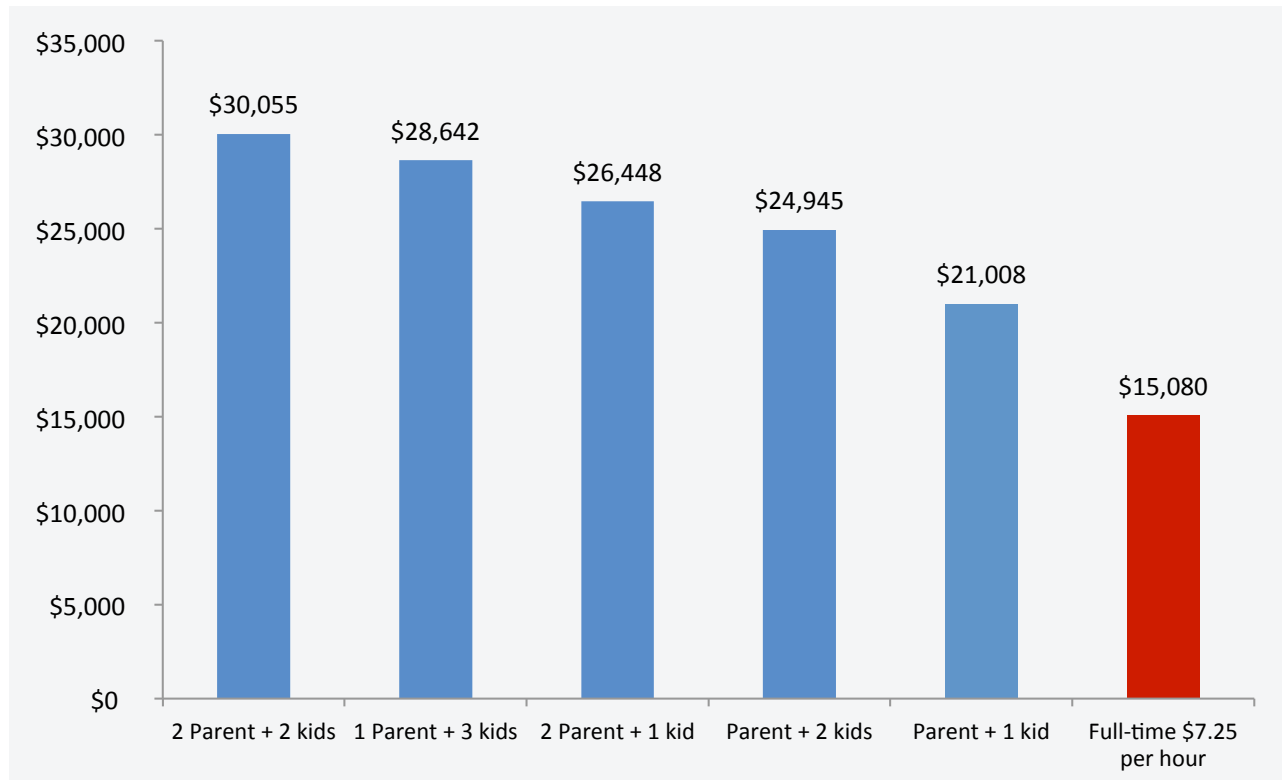
¹³ 2011 American Community Survey, individuals living in households with household income below federal poverty levels.



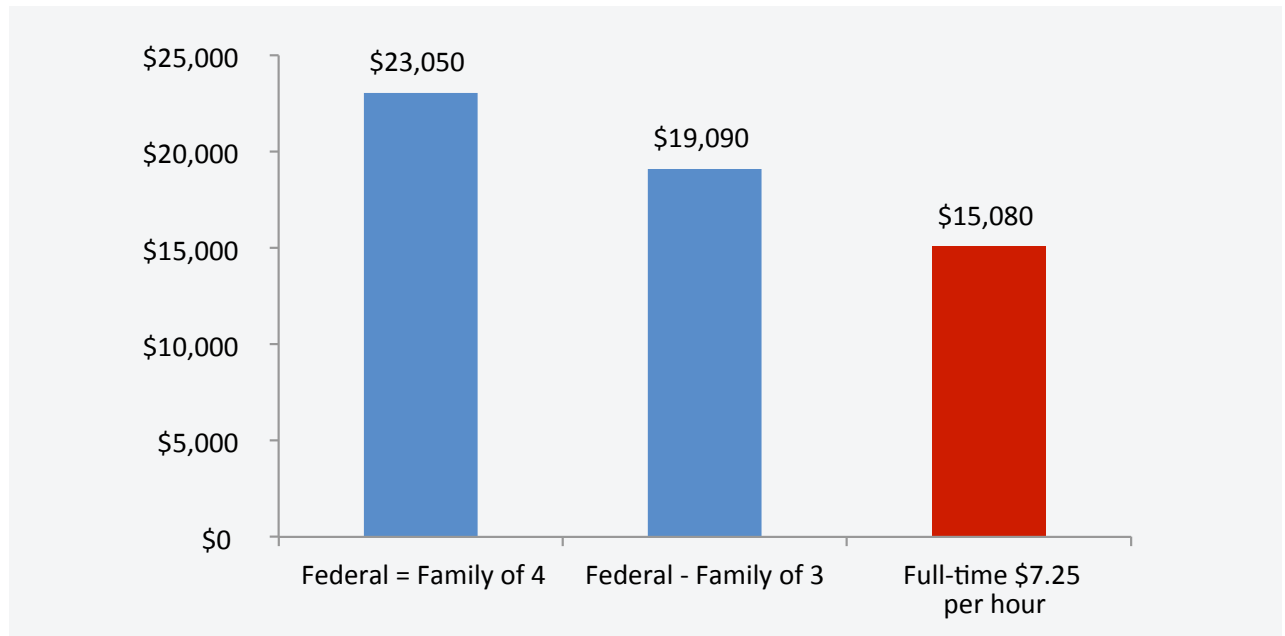
To better account for the burden extreme living costs impose on low-income residents, New York City's Center for Economic Opportunity developed an alternative, New York City specific, measure of poverty that better reflects contemporary spending patterns (today's New Yorkers spend more on housing and less on food), as well as changes in the overall U.S. standard of living over time.

By the Center for Economic Opportunity's benchmarks for poverty, detailed in the figure below, more than 1 million New York City residents live in working poor households.

FIGURE 7A. NEW YORK CENTER FOR ECONOMIC OPPORTUNITY POVERTY MEASURES



Source: NYC Center for Economic Opportunity, April 2012.

FIGURE 7B. FEDERAL POVERTY MEASURES

Source: U.S. Department of Health and Human Services, 2012 Poverty Guidelines.

A minimum-wage worker might bring to mind a young student, living with parents, flipping burgers for a little extra pocket money. In reality, data from the Current Population Survey shows most low-wage workers in New York City are over age 25, out of school, and most lack a college degree. They are likely to be black or Hispanic, and living in outer boroughs.

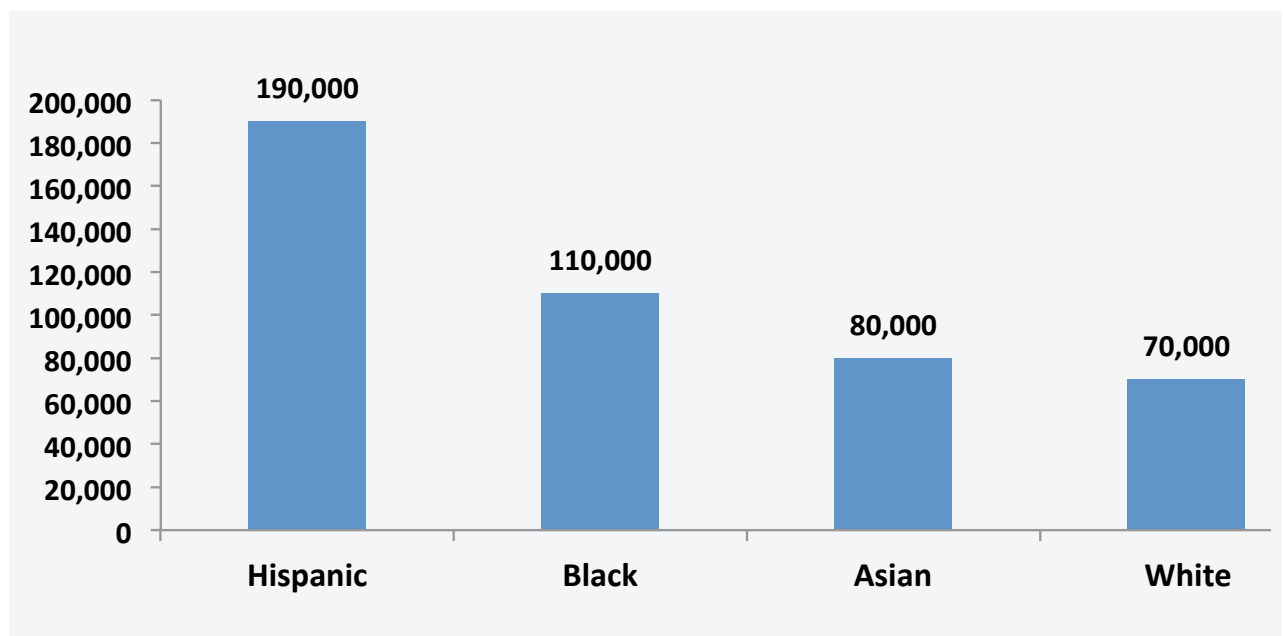
Not all low-wage workers earn the minimum wage. In New York City, workers earning wages well above the minimum are also very likely to be poor. To better understand who these low-wage workers are, we looked at New York City workers earning less than \$11.50 per hour, an amount likely to push earnings above the poverty guidelines.

IMPUTATION METHODOLOGY

We looked at 12 months of data (September 2011 through August 2012) from the Current Population Survey. Although the Current Population Survey is the best source for geographic data on hourly earnings, many survey respondents do not report their hourly earnings, despite providing complete information about their family, education, and other demographic information. To correct for this, it is necessary to impute earnings for non-responders. To do so, we regressed individual earnings on demographic data such as age, sex, race, marital status, education, occupation, as well as employer information to estimate the predicted earnings for CPS survey respondents that are employed, but did not report their hourly earnings. Figures 6 through 10 are based on the total number of NYC residents earning less than \$11.50 per hour, including the imputed earnings of non-responders.

We estimate that roughly 450,000 working New York City residents earn less than \$11.50 per hour. Of them, roughly two-thirds are black or Hispanic. Relatively few are white or Asian.

FIGURE 8. NYC RESIDENTS EARNING < \$11.50/HOUR ARE BLACK AND HISPANIC

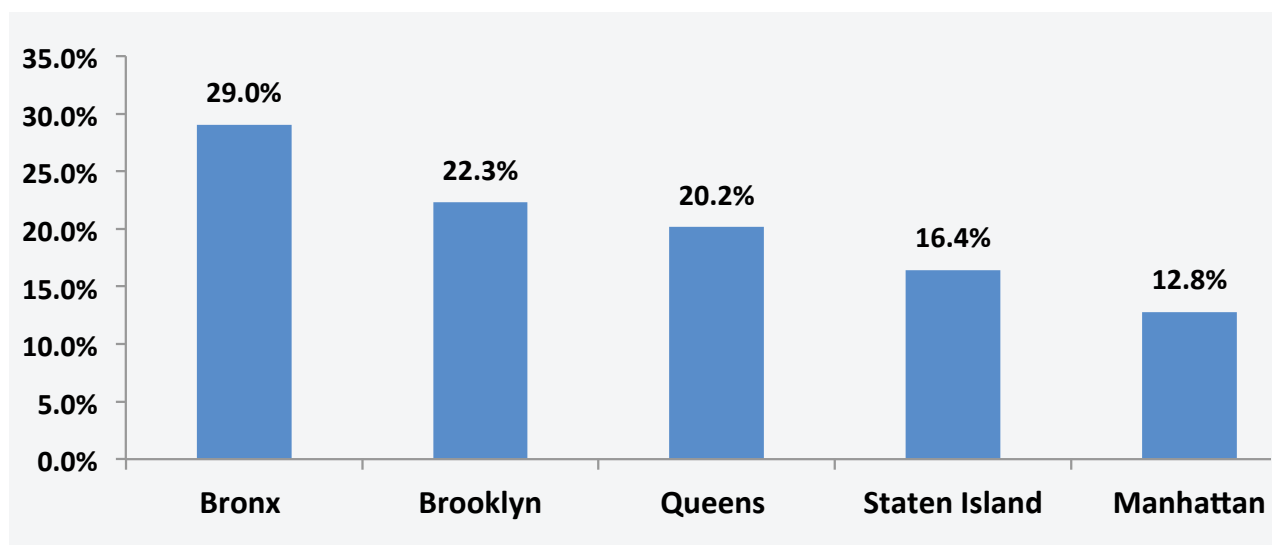


Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.



Proportionally, workers earning less than \$11.50 per hour make up the largest share of workers in the Bronx. Nearly a third of working Bronx residents earn less than that, while less than 15 percent of working Manhattan residents do.

FIGURE 9. NYC RESIDENTS EARNING < \$11.50/HOUR LIVE DISPROPORTIONALLY IN OUTER BOROUGHES

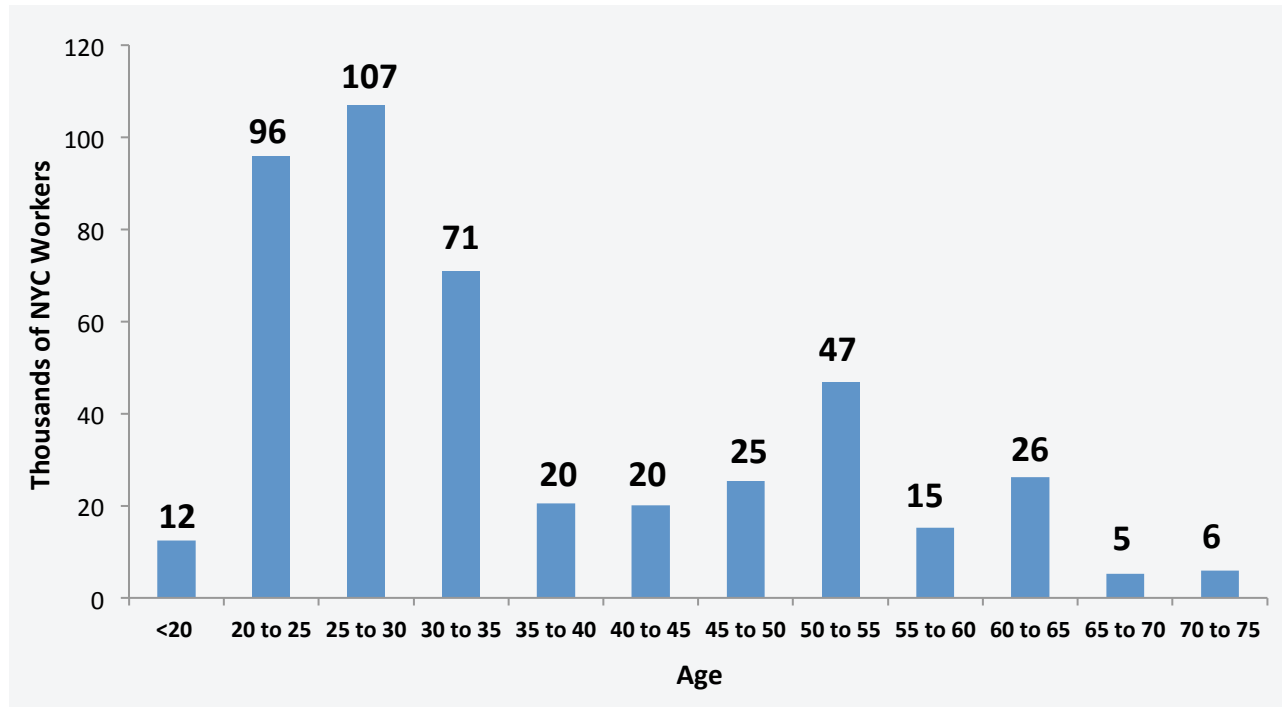


Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

Although the Current Population Survey lacks the longitudinal data that would allow us to look at the wages of individual low-wage workers over time, we can look at their ages, their educational attainment, and whether or not they are enrolled in school, for an indication of whether a minimum wage job is just a transitional phase of life, or if it more likely indicates a life of poverty.

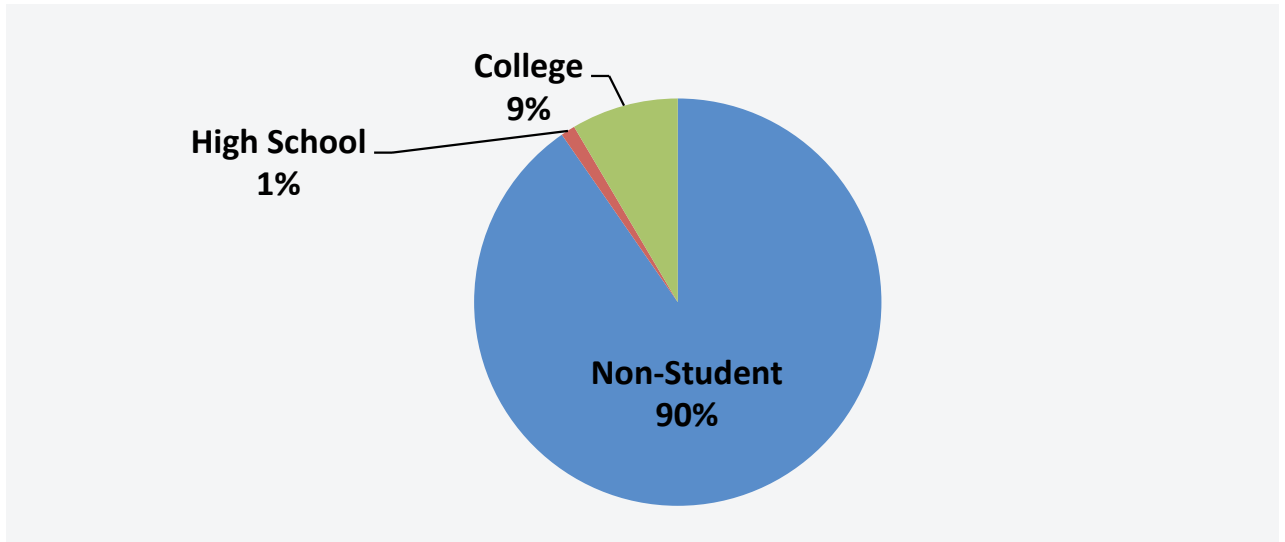
The data show that, although many New York City workers earning less than \$11.50 per hour are in their 20's, most are over age 30. We estimate roughly 40,000 are in their 40's and roughly 60,000 are in their 50's. These older workers' jobs will be put in jeopardy by New York State's Minimum Wage Reimbursement Credit.

FIGURE 10. NEW YORK CITY RESIDENTS EARNING < \$11.50/HOUR ARE NOT TEENAGERS



Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

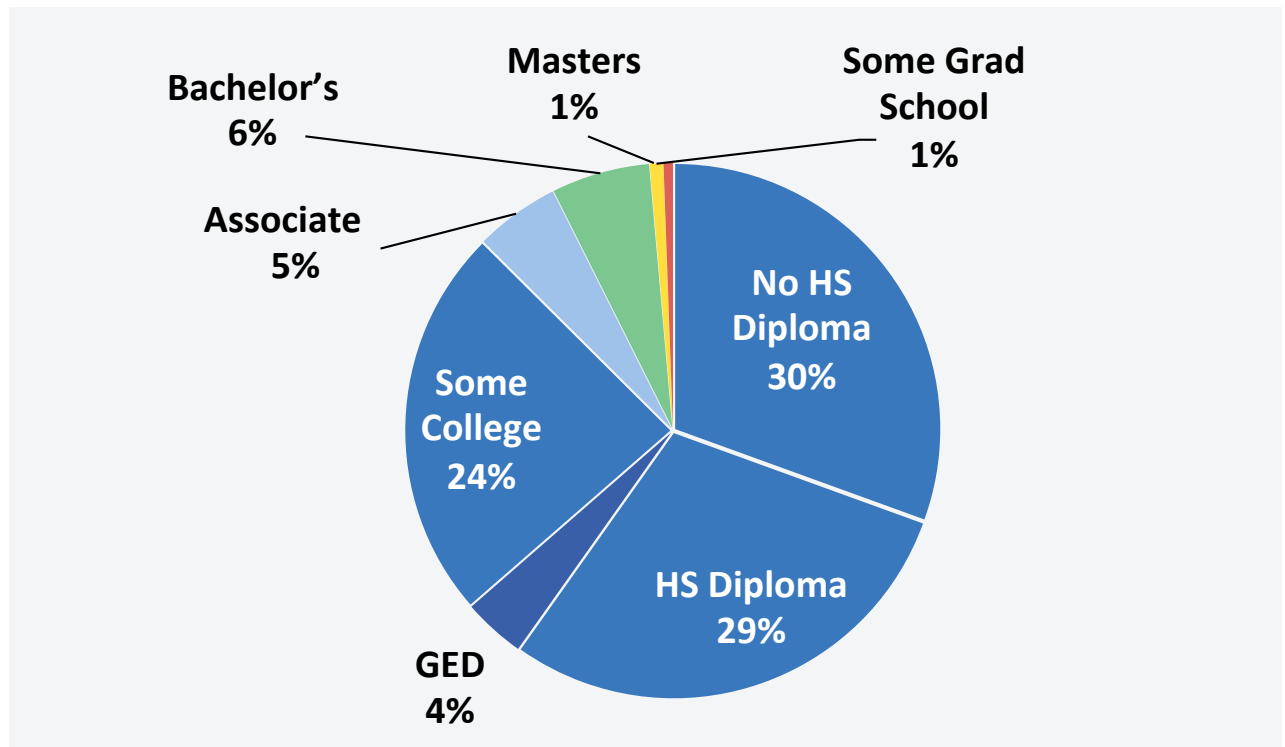
Very few of these low-wage workers are students that can look forward to a college degree and a brighter future. Only 10 percent of New York City workers earning less than \$11.50 per hour are enrolled in school, and for those over age 30 that percentage falls to zero. Overall, this is not a population that has graduation and rapid income growth in its future.

FIGURE 11. NYC RESIDENTS EARNING < \$11.50/HOUR ARE NOT STUDENTS

Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

Low wage workers in New York City have very low levels of educational attainment. However, more than 70 percent of low-wage workers have completed high school. About 13 percent of workers earning less than \$11.50 per hour have a college degree, and only about 7 percent have a 4-year degree.

FIGURE 12. EDUCATION LEVELS OF NYC LOW-WAGE WORKERS



Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

On one hand, these figures are encouraging: relatively few college degree holders are stuck in low-wage work. But for those left behind without a college degree, low-wage work is often permanent.

As might be expected, sales, food service, transportation, and personal care (a category which includes barbers, nail salon workers, and childcare) are some of the most common occupations of low-wage workers. But the most common occupation among New York City workers earning less than \$11.50 per hour is "office and administrative support," a category which includes office jobs such as billing, shipping, bookkeeping, timekeeping, customer service, mailroom, personnel, and secretarial work. Roughly 80,000 of New York City's poor have family members working such white-collar jobs.

**TABLE 2. OCCUPATIONS OF NYC RESIDENTS
EARNING < \$11.50/HOUR**

OCCUPATION	EMPLOYEES	% OF TOTAL
Office and administrative support	79,181	17.5
Sales and related occupations	77,331	17.1
Food preparation and serving	63,652	14.1
Transportation and material moving	48,033	10.6
Personal care and service occupations (barbers, nail salons, childcare)	43,699	9.7
Other	139,520	30.9

Source: Current Population Survey 9/2011-8/2012, NYC Comptroller's Office imputed estimates.

IMPACTS OF MINIMUM WAGES

The best empirical evidence suggests that low-wage workers benefit from state and municipal minimum wage increases, and that significant increases in unemployment do not result. However, the extent to which minimum wage laws have, or have not, benefitted low-wage workers remains an active area of economic research.

We found no published evidence that minimum wage increases cause business failure, but businesses frequently oppose them. Ultimately, increasing the minimum wage offers employers an unwelcome challenge. They must either find ways to make their workers more productive, increase prices, cut costs, or make do with lower profits.

EMPIRICAL EVIDENCE – MINIMUM WAGE AND EMPLOYMENT

Economists have traditionally opposed the minimum wage on the theory that increasing wages above the equilibrium free-market wage would result in unemployment; theoretically, increasing the price of workers ought to cause employers to hire fewer of them. While this logic is difficult to refute, there was little empirical evidence to address the magnitude of the effect: if the price of workers increases how many fewer do employers hire? The proliferation of state and local minimum wage laws in the last 20 years has allowed economists to estimate this relationship empirically.



Doing so is not simply a matter of observing that one place has a high minimum wage and high unemployment, while another has a low minimum wage and low unemployment. To reliably estimate the employment impact of increasing the minimum wage it is necessary to compare two outcomes: (1) what happened to employment when the minimum wage increased and (2) what would have happened had it not increased.

One way to make this seemingly impossible comparison is to look at a place where the minimum wage increased and compare employment changes there with employment changes in someplace nearby where the minimum wage did not change, ideally a place with a similar job market, businesses climate, and economic conditions. Such a place can be used as a proxy of what employment, or unemployment, would have been had the minimum wage not changed.

Card and Krueger (1994)¹⁴ were the first, and most influential, researchers to employ this method, and in so doing challenge the conventional wisdom on the minimum wage and employment. In 1992, New Jersey raised its minimum wage from \$4.25 to \$5.05. Card and Krueger compared employment in New Jersey fast food restaurants along the Pennsylvania border, where the minimum wage increased, to fast food employment in neighboring counties of Pennsylvania, where it did not. They found the minimum wage had no measurable impact on employment.

A number of shortcomings in data and methods undermine the soundness of Card and Krueger's original conclusions, but their results are nonetheless consistent with those of subsequent case studies. Dube, Naidu, and Reich (2007)¹⁵ looked at increases in San Francisco's minimum wage and found little evidence of an impact on employment. Schmitt and Rosnick (2011)¹⁶ looked at San Francisco, as well as Santa Fe, and Washington D.C., and found citywide minimum wages have the potential to increase the earnings of low-wage workers without a discernable impact on employment.

A competing thread of research by Neumark & Wascher (1992¹⁷ and 2007¹⁸) has looked at state-by-state differences in minimum wages and employment over time. Doing so generally shows that states with lower minimum wages experienced somewhat faster employment growth than states with higher minimum wages.

¹⁴ Card, David and Alan B. Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *American Economic Review*, 84, No. 4, September 1994, pp. 772-84

¹⁵ Dube, Arindrajit, Suresh Naidu, and Michael Reich, "The Economic Effects of a Citywide Minimum Wage," *Industrial and Labor Relations Review*, 60, Issue 4, 2007, article 4, pp. 522-43

¹⁶ Schmitt, John and David Rosnick, "The Wage and Employment Impact of Minimum-Wage Laws in Three Cities," CEPR, Center for Economic and Policy Research, March 2011

¹⁷ Neumark, David and William Wascher, "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws," *Industrial and Labor Relations Review*, 46:1 (1992), 55-81.

¹⁸ Neumark, David and William Wascher, "Minimum Wages, the Earned Income Tax Credit and Employment: Evidence from the Post-Welfare Reform Era," The National Bureau of Economic Research (NBER) working paper No. 12915 (2007).



However, the state-by-state evidence linking minimum wages to unemployment appears to be driven by other factors. State-level minimum wage increases occurred primarily in the North and West of the country, while both economic and population growth was faster in the South, where minimum wage increases were largely absent. Neumark & Wascher's research has therefore been criticized on the grounds that minimum wage increases did not cause employment growth to be slower. Rather, state minimum wage increases merely coincided with slower employment growth in some states, growth which was slower for reasons unrelated to differences in the minimum wage.

Perhaps the most compelling and comprehensive approach to the question takes the case study model and scales it up to make use of nationwide data. Dube, et al. (2010)¹⁹ looked at employment data for all neighboring counties in the U.S. where the minimum wage differs across the county border between 1990 and 2006. Doing so allowed them to investigate the extent to which both city and state changes in minimum wages affected employment using the largest possible set of data. They too found minimum wage increases have no measurable impact on employment.

It may also be worth highlighting that, of these different research approaches, the case study model focusing on municipal minimum wages may offer the best estimates of the impact of increasing the minimum wage in New York City. An increase in New York City's minimum wage is likely to have more in common with an increase in the San Francisco minimum wage than with an increase in the minimum wage of Florida or Ohio. These case studies suggest that municipal minimum wage increases do not lead to measurable employment losses.

HOW BUSINESSES ADJUST

We found no published evidence that increased city or state minimum wages cause business failure. Rather, we find evidence that businesses adjust, and do so in a variety of ways.

Reich, Dube, and Naidu (2007)²⁰ investigated the impact of increases in the San Francisco minimum wage on restaurant prices and found large and significant price increases at fast food restaurants. At limited-service restaurants, without waiters or table service, prices in San Francisco increased by a statistically significant 6.2 percent compared to similar restaurants in the East Bay that were not affected by minimum wage increases. Overall, San Francisco restaurant prices, including full-service restaurants with waiters, increased by 2.6 percent, though the results were not statistically significant. They also found that the increase in wages significantly reduced worker turnover.

¹⁹ Arindrajit Dube, T. William Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties," *The Review of Economics and Statistics*, November 2010, 92(4): 945–964.

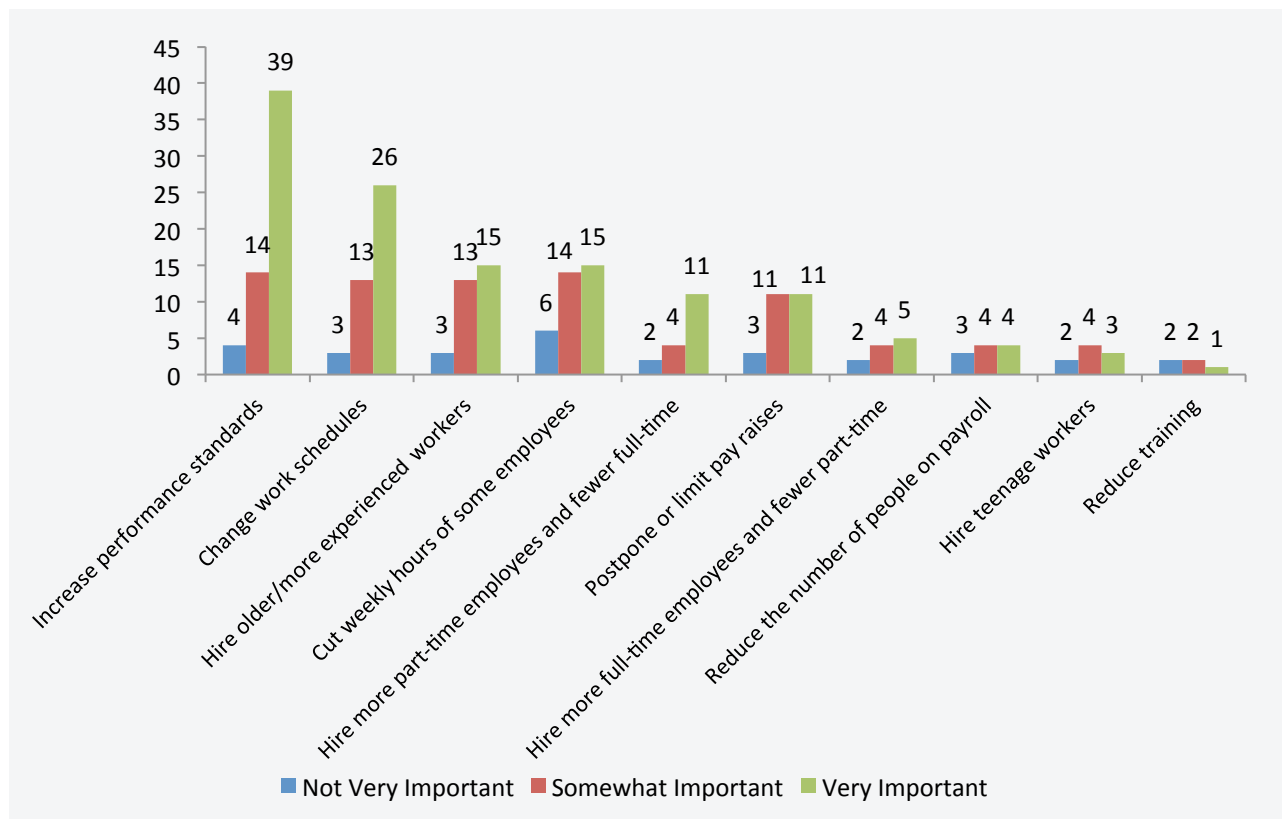
²⁰ Dube, Arindrajit, Naidu, Suresh, and Reich, Michael, "The Economic Effects of a Citywide Minimum Wage," *Industrial and Labor Relations Review*, 60(4), July 2007, pp. 522-43.



Economists might normally calculate the economic impact of price increases such as these by looking at the reduced economic activity associated with them. However, fast food is generally high in fat, low in nutrition, and associated with obesity, diabetes, and cardiovascular disease. Increasing fast food prices therefore should not necessarily be viewed as an economic cost, but rather a potential benefit, and is broadly consistent with Mayor Bloomberg's anti-obesity initiative.

Hirsch, Kaufman, and Zalenka (2011)²¹ surveyed managers of 81 fast food restaurants in Georgia and Alabama to see how they responded to the 2007 to 2009 increases in the federal minimum wage. They estimated these businesses passed roughly two-thirds of their increased costs on to consumers. A summary of their survey responses is presented in the figure below.

FIGURE 13. HOW BUSINESS ADAPTS TO MINIMUM WAGE INCREASES



Source: Hirsch, Kaufman, and Zelensk, Minimum Wage Channels of Adjustment, IZA Discussion Paper No. 6132, November 2011. Adapted from Table 4a.

²¹ Hirsch, Barry T., Kaufman, Bruce E., and Tetyana Zelenska, "Minimum Wage Channels of Adjustment," IZA Discussion Paper, No. 6132, November 2011.



The survey responses show that businesses found a range of ways to adapt to the minimum wage, but firing workers was cited as an important factor by only 4 of the 81 businesses surveyed.

Dube, Kaplan, Reich, and Su (2006) investigated the impact of increases in the municipal minimum wage on San Francisco and Santa Fe businesses. They found no evidence that minimum wage increases led to store or restaurant closures, and no evidence of retail migration.

SPENDING RESPONSE AMONG MINIMUM WAGE WORKERS

Generally, the poor spend more of their income, and save less, than those with higher incomes. So while minimum wages may increase costs for businesses, some businesses may benefit as well.

Aaronson, Agarwal, and French²² investigated the impact of minimum wage hike on the spending of minimum wage households. They found that the average minimum wage increase boosted household income of minimum wage workers by roughly \$250 per quarter, further evidence that minimum wage laws benefit low-wage workers. More surprisingly, they estimate these wage increases led to even larger increases in spending by these households, by almost \$700 per quarter. This suggests minimum wage increases eased credit constraints on low-wage workers that allowed them to make large durable goods purchases, such as cars.

²² Aaronson, Daniel, Agarwal, Sumit, and Eric French, "The Spending and Debt Response to Minimum Wage Hikes," *American Economic Review* 2012, 102(7): 3111-3139.



PROPOSAL: AN \$11.50 MINIMUM WAGE FOR NEW YORK CITY

New York City Comptroller John Liu proposes increasing New York City's minimum wage to \$11.50 per hour, indexing it to the consumer price index, and phasing it in over five years. A wage of \$11.50 per hour is appropriate to New York City's high cost of living, and high enough to have a significant impact on the lives of working poor NYC residents.

Raising the minimum wage to \$9.00, as has been passed in New York State, may make sense in Buffalo, where wages and living costs are lower, but we estimate such an increase would have a much smaller impact on New York City. The figure below, shows a New York State minimum wage of \$9.00, adjusted to reflect the cost of living in different New York regions.

FIGURE 14. EFFECTIVE MINIMUM WAGE OF \$9.00/HOUR IN SELECT NEW YORK AREAS



Source: \$9.00 adjusted to reflect cost of living as measured by ACCRA/COLI 2012Q3 Cost of Living Index for each region.

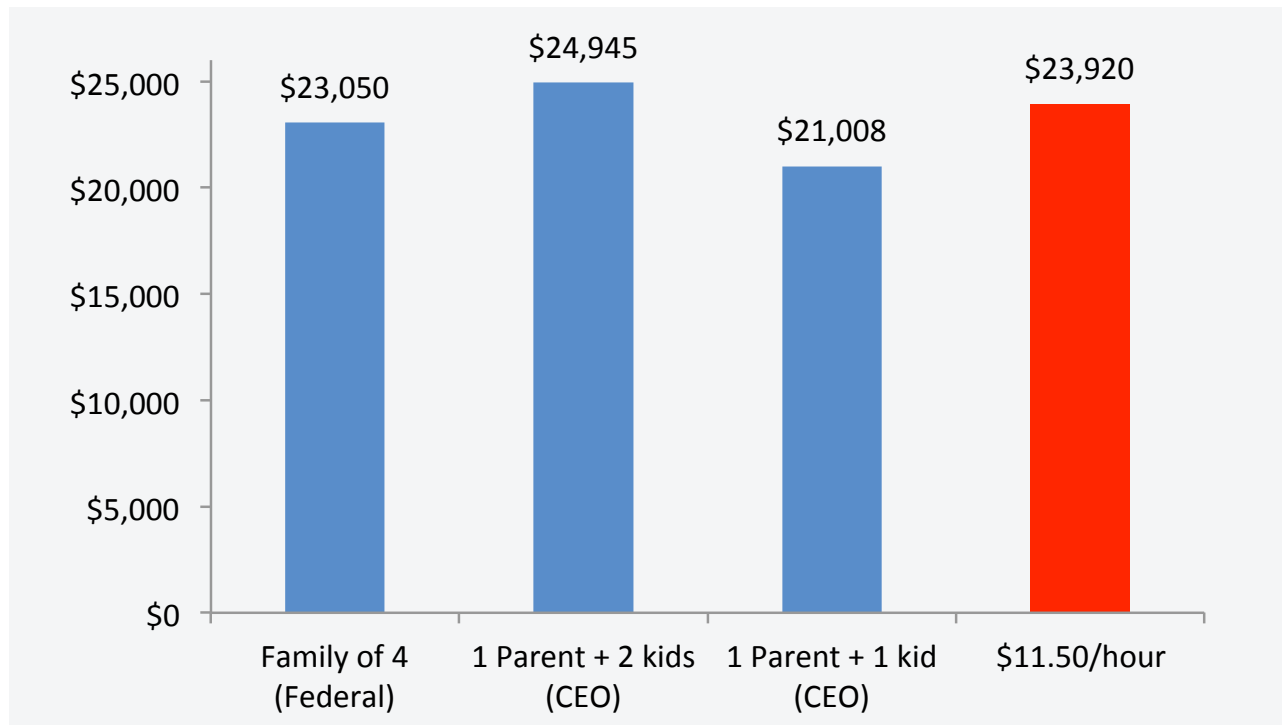


BENEFITS OF AN \$11.50 / HOUR MINIMUM WAGE

An \$11.50/hour minimum wage in New York City would:

- Increase the hourly wage of 450,000 New York City residents, all of whom are food stamp and Medicaid eligible, by \$3.08/hour²³ on average
- Increase the annual income of 450,000 New York City residents by roughly \$5,400 on average
- Put roughly \$2.4 billion annually in the pockets of low-wage New York City workers every year, and likely cause an even larger increase in consumer spending
- Lift roughly 200,000 New York City residents from poverty²⁴
- Prevent state incentives (the Minimum Wage Reimbursement Credit) that give tax credits to employers that cut the pay of their low-wage workers

FIGURE 15. AN \$11.50/HOUR MINIMUM WAGE WOULD LIFT NEW YORKERS FROM POVERTY



Source: Federal Poverty Guidelines, NYC Center for Economic Opportunity.

²³ We estimate the mean wage of New York City residents earning < \$11.50/hour is about \$8.42/hour.

²⁴ Many of the 450,000 New York City residents earning < \$11.50 either work too few hours per week, too few weeks per year, or have families too large for an hourly wage of \$11.50 to lift them from poverty.



Beyond these quantifiable effects, a higher minimum wage has other qualitative benefits. For example, it makes entry level work more appealing. When the first rung of the economic ladder brings in \$450 per week, it is less likely to be viewed with derision by young workers whose best alternative for employment may involve breaking the law or dealing drugs.

COSTS OF AN \$11.50/HOUR MINIMUM WAGE

Case studies of minimum wage increases in San Francisco and Santa Fe offer the most comparable scenarios for what would happen if New York City increased its minimum wage, and they do not suggest New York City would experience significant employment losses.

We anticipate increasing the minimum wage will, however, have a significant impact on fast food and retail employers in New York City. Although we lack firm-specific data on New York City employers, and the number of minimum wage employees on their payrolls, a review of the largest minimum wage employers nationwide yields a list of national chains with large New York City footprints.



TABLE 3. LARGEST EMPLOYERS OF MINIMUM WAGE WORKERS NATIONWIDE

LARGEST EMPLOYERS OF MINIMUM WAGE WORKERS	EMPLOYEES NATIONWIDE
Yum! Brands, Inc., (Taco Bell, Pizza Hut, KFC)	880,330
McDonald's Corp.	859,978
Target Corp.	365,000
Sears	264,000
Subway	250,810
Burger King	191,815
ARAMARK	180,000
Starbucks	176,533
DineEquity, Inc. (Applebee's, IHOP)	173,350
Compass Group	171,596
Macy's, Inc.	171,000
Wendy's	168,672
Darden (Olive Garden, Red Lobster, Capital Grille)	165,475
J. C. Penney	159,000
Kohl's	142,000
Dunkin' Donuts	132,000
TJX Companies (T.J. Maxx, Marshall's)	129,600
Sodexo	117,323
Domino's Pizza, Inc.	98,220

Source: National Employment Law Data Brief, July 2012, http://help.3cdn.net/e555b2e361f8f734f4_sim6btdzo.pdf, accessed 1/15/2013.

CONCLUSION

We anticipate increasing the minimum wage to \$11.50/hour will put upward pressure on the prices charged by these businesses, and by other similar businesses. Nonetheless, given New York City's geographic size, and the costs (time, tolls, and gas), associated with getting out of the City, we do not anticipate price increases will be large enough to drive the average consumer to make retail and fast-food purchases outside the City. Price increases may cause some price-sensitive outer borough residents to shop outside the City, particularly on Long Island.

We anticipate that increasing the minimum wage will put downward pressure on commercial rents. Holding other factors equal, forcing businesses to pay higher wages may ultimately impact the rent those businesses can afford to pay. However, this effect may be obscured by routine changes in the overall business climate.

Due to the likelihood that increasing the minimum wage to \$11.50/hour will have economic impacts that are difficult to project, we recommend the minimum wage be phased in over five years to give both public and private employers time to adjust. We recommend that, as the minimum wage increase is phased in, available data be reviewed on an ongoing basis to identify unforeseen impacts as they emerge. Examples of relevant data may include (but are not limited to) retail employment as measured by the Current Population Survey, and the number of nationwide fast food and retail branches operating in New York City as measured by the Center for an Urban Future's survey: State of the Chains.²⁵

Finally, we recommend that the New York City minimum wage be increased more rapidly than the New York state minimum wage. Keeping the New York City minimum wage above the state minimum wage will make New York City employers ineligible to receive the New York State Minimum Wage Reimbursement Credit, a credit that offers perverse state incentives for employers to cut wages and replace older workers with younger ones.

²⁵ http://nycfuture.org/content/articles/article_view.cfm?article_id=1313&article_type=6, accessed 1/15/2013.

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