An Industry at the Crossroads:
Energy Efficiency Employment in Massachusetts

MARCH 2010
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GREEN JUSTICE COALITION, the Massachusetts Apollo affiliate, is a statewide partnership of almost 50 community groups, labor unions, environmental groups and other organizations united in support of a sustainable, equitable, and clean energy economy. Green Justice works to put lower-income communities and communities of color, which have been particularly overburdened by our unsustainable economy, at the forefront of the growing green, sustainable economy. Green Justice was initiated by Community Labor United, a coalition of community and labor organizations that run joint campaigns to counteract the growing gap between rich and poor, while highlighting the connections between jobs and community issues.

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Executive Summary

The United States building energy efficiency market is projected to double in size over the next 20 years. Massachusetts, a national leader in this field, has already earmarked $1.4 billion to create thousands of jobs in the construction sector retrofitting more than 100,000 residential units and 20,000 commercial and municipal structures over the next three years. In meeting new demand for building retrofits, Massachusetts is faced with a critical moment of opportunity. Not only can the state achieve environmental and energy savings goals, it can also build a high road industry that offers good jobs and equitable access to economic opportunities in the efficiency industry.

In the past, residential energy efficiency work in Massachusetts has followed the low road model prevalent in the residential construction sector, relying on a part-time, seasonal workforce and investing relatively little in developing worker skills or in creating equitable pathways for worker recruitment and advancement. But taking the low road has many hidden costs. If we break down the true cost of low road work, we find that an industry structure that makes residential energy efficiency jobs low wage and low benefit exacts a social and fiscal cost on workers, businesses, and taxpayers.

Costs of the Low Road

Residential weatherization work has traditionally drawn on the same pool of workers as the broader residential construction sector, which has a high proportion of “low road” jobs that pay extremely low wages and fail to provide health, pension, or other benefits.

While on the surface these jobs appear to save money for ratepayers and the public, examining all their costs reveals that “low road” jobs are a bad bargain for employers and the state, as well as workers and their families. They force workers and their families to rely on public safety net programs as their employers shift their traditional responsibilities onto the public sector and taxpayers.

While recently issued prevailing wage standards for residential weatherization workers are an improvement over the low wages typically paid in this industry, they are much lower than rates for the skilled trades and below levels needed for family economic security. These levels are still so low – from $11.26 to $17.59 per hour depending on location – that even those weatherization workers earning prevailing wage will qualify for the Weatherization Assistance Program’s low-income eligibility level (earning less than 60% of State Median Income).

Benefits of the High Road

At the same time, we find that high road jobs paying decent wages and providing benefits result in significant positive social and economic benefits. By establishing high road standards in the rapidly growing energy efficiency industry, Massachusetts can:

- Invest to grow a stable, highly skilled workforce that will allow the industry to carry out high quality energy efficiency programs that achieve greenhouse gas reduction and cost savings goals;

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• Ensure high road standards for the residential energy efficiency sector, where the opportunities to add new jobs are greatest;

• Build economic security for thousands of weatherization workers and their families, who would otherwise be forced to depend on the social safety net, and save taxpayers more than $28,000 annually per employee;

• Save the state millions of dollars in low-income health insurance premiums for workers whose employers do not provide health plans or pay into the state’s Commonwealth Care Plan;

• Generate millions of dollars in unemployment insurance contributions, workers compensation premiums, and income tax revenues;

• Decrease costs to employers and ratepayers from poor-quality work and employee turnover, which costs construction employers an average of $14,500 for each new hire – almost half of a year’s average wages.

**Recommended Strategies**

In this report, the National Apollo Alliance and Massachusetts Apollo offer five recommended strategies that can help Massachusetts grow a high road energy efficiency industry:

• **AGGREGATE INDIVIDUAL RETROFIT JOBS**, via community-based organizing, as in the Chinatown weatherization pilot program in Boston and the Community Mobilization Initiative (CMI) pilots in other Massachusetts cities, to create larger “bundled” contracts that allow responsible contractors to successfully bid, raise wage and benefit levels;

• **INCORPORATE RESPONSIBLE EMPLOYER REQUIREMENTS** in utility and city retrofit programs to mandate compliance with workplace laws, fair wages and benefits, proper classification of workers, local hiring, comprehensive safety and health plans, and connection to training;

• **SUPPORT LOCAL CONTRACTORS**, particularly small women- and minority-owned businesses, to meet responsible employer requirements and qualify to participate in retrofit programs;

• **ADOPT A COMMUNITY WORKFORCE AGREEMENT** for all utility and city retrofit programs that enforce specific standards for wages and benefits, health and safety, training and certification requirements, as well as local recruitment and hiring from communities of color and other low income communities;

• **WORK THROUGH ESTABLISHED STATE, MUNICIPAL AND COMMUNITY BODIES** such as the Joint Task Force on the Underground Economy, the EEAC Equity Committee and the Boston Urban Asthma Coalition to identify and address low road practices in the retrofit industry.
Introduction: Energy Efficiency at the Crossroads

Massachusetts is faced with a critical moment of opportunity. The state and its utilities have made a bold commitment to reducing energy consumption by investing in renewable energy and energy efficiency. New energy efficiency programs seek to retrofit the majority of the state’s homes and buildings, starting with more than 100,000 residential units and 20,000 commercial and municipal structures over the next 3 years. In meeting new demand for building retrofits, policymakers and program administrators face a choice as they attempt to grow the industry to its full potential. On one side are the costs of building a ‘low road’ industry that creates low-wage jobs with little opportunity for training or advancement. On the other are the benefits of taking the ‘high road’ by investing in a skilled and diverse workforce and maximizing quality, energy savings, and community buy-in.

The state’s commitment to improving energy efficiency is codified within the Green Communities Act of 2008, which directs Regional Greenhouse Gas Initiative (RGGI) auction proceeds toward a range of municipal and utility energy conservation projects. The Green Communities Act also mandates Least-Cost Procurement, requiring that electric and natural gas utilities invest in all energy efficiency measures that are cost-effective, or less expensive than new energy supply. The Green Communities Act also mandates “equitable distribution of program benefits to all customers, and particularly low-income customers.” In January 2010, Massachusetts adopted three-year electric and gas energy efficiency plans, which will invest close to $1.4 billion to improve commercial and residential energy efficiency over the next three years. The City of Boston has advanced a particularly ambitious energy efficiency and climate action agenda, including the country’s first municipal green building code. Boston is also one of five Massachusetts cities that are currently engaged in designing neighborhood-scale weatherization pilot programs which...

by making home-grown energy efficiency the first fuel to meet our energy needs, we will create local jobs, cut this state’s dependence on imported fossil fuels, and reduce pollution that causes global warming.

— DEPARTMENT OF ENERGY RESOURCES, Energy Efficiency in Massachusetts, Our First Fuel, Commonwealth of Massachusetts, February 2010

Methodological Note: Individual quotations included in this report are drawn from interviews with workers, union representatives, and a contractor in the Massachusetts residential construction interviews were conducted by Community Labor United staff and Green Justice Coalition leaders between February 9 and March 2, 2010.

3 Green Communities Act Section 116(b)(3)
4 Ibid.
5 In January 2007, Boston became the first major U.S. city to require that all development projects over 50,000 square feet meet the US Green Building Council’s LEED (Leadership in Energy and Environmental Design) standards. Boston’s Green Building Code (Article 37) can be found at: http://www.cityofboston.gov/environmentalandenergy/pdfs/1-1-07_art_37Boarddraft.pdf
seek to achieve high levels of penetration into the residential market and greater energy savings through deeper retrofits.\textsuperscript{6}

The scale of these investments will dramatically expand the building energy efficiency industry in Massachusetts, providing opportunities for businesses, workers and consumers. The state Department of Energy Resources estimates that energy efficiency investments will create 4,000 green jobs across the Commonwealth.\textsuperscript{7} We estimate that the three-year, $1.4 billion investment in building efficiency has the potential to create more than 23,300 jobs, including 6,000 direct and 8,300 indirect jobs in the construction sector.\textsuperscript{8} This is in addition to new construction jobs already being created by energy efficiency investments funded through the American Recovery and Reinvestment Act – more than $220 million in Weatherization Assistance Program, State Energy Program, and Energy Efficiency and Conservation Block Grant funds in Massachusetts.

\textsuperscript{6} Weatherization and energy efficiency retrofits are often used interchangeably to refer to improvements made to a home or building that will reduce energy consumption. In this paper, we differentiate between weatherization, which refers to simple improvements to the building envelope, like changing light bulbs, caulking, sealing, and insulating; and retrofits, which refer to greater investment in deeper improvements, like combining weatherization with replacement of heating systems and appliances, which achieve higher levels of energy savings.

\textsuperscript{7} Energy Efficiency in Massachusetts: Our First Fuel (Massachusetts Department of Energy Resources, January 2010).

\textsuperscript{8} Apollo job-creation estimates are based on job creation estimates in: Pollin, R.; Heintz, J.; and Garrett-Peltier, H. The Economic Benefits of Investing in Clean Energy (Center for American Progress, June 2009). Each job created represents one-year of full-time (40 hour) employment.
Good Jobs + Equity = A High Road Industry

Dramatic expansion of the efficiency industry creates an important opportunity for Massachusetts to achieve energy savings goals while also creating good jobs and making sure those jobs are accessible to un- and under-employed workers and historically marginalized communities. If retrofit programs are to achieve significant market penetration and maximum energy savings while contributing to social equity and economic prosperity, efficiency must grow as a high road industry that creates high-quality jobs and gives active attention to eliminating racial and economic disparities.

There are two key components to a high road construction industry: 1) Investing in workers by creating quality, career-track jobs that pay self-sufficiency wages and provide decent benefits, and; 2) Adopting policies that ensure access to job and contracting opportunities for groups that have historically been excluded from good jobs in the construction industry, including people of color, speakers of other languages, women, and people with barriers to employment.

In the past, residential energy efficiency work in Massachusetts has followed the low road model prevalent in the residential construction sector, relying on a part-time, seasonal workforce and investing relatively little in developing worker skills or in creating equitable pathways for worker recruitment and advancement. When the American Recovery and Reinvestment Act (ARRA) passed with a prevailing wage requirement that applies to the long-standing, publicly-subsidized Weatherization Assistance Program, as well as new ARRA-funded energy efficiency retrofit programs, there was concern that higher wages would mean fewer households served and fewer workers hired. Now, as Massachusetts works to develop an innovative large-scale energy efficiency retrofit program, the same arguments – that quality jobs cost too much – have begun to resurface.

But taking the low road has many hidden costs. If we break down the true cost of low road work, we find that jobs paying minimal wages and lacking benefits exact a fiscal and social cost on workers, businesses, the state, and taxpayers. At the same time, we find that high road jobs paying decent wages and providing benefits result in significant positive social and economic effects. The process to implement the state’s efficiency plans has reached a critical juncture: Will Massachusetts build a new and expanded energy efficiency industry based on a flawed model, with low-wage employers delivering low-quality efficiency work and few channels for the economic benefits of efficiency to flow to poor communities and communities of color? Or will Massachusetts build an equitable high road industry that delivers both energy savings and quality green-collar jobs that provide pathways to sustainable futures for low-income workers and communities?

Massachusetts, among other states, has decided not to create lousy jobs with public money [by paying] prevailing wage. Ratepayers’ money that the utilities collect for energy efficiency work should also be treated as public resources, and that funding stream should create good jobs ... We don’t use public money to create lousy jobs.

—— STEVE FALVEY, New England Regional Council of Carpenters
Weatherization jobs have been around for years, with workers in this industry representing a small portion of those employed in the residential construction sector. The Massachusetts official average monthly building construction sector employment was around 30,000 people in 2008, with a little more than half employed in residential construction.\(^9\) State low-income weatherization and residential conservation programs employed an estimated 800 construction sector workers in 2008.\(^10\) Average wage data for residential and commercial construction show that both sectors can offer high road jobs paying self-sufficiency wages, though the average weekly wage for commercial building construction was almost twice that of residential construction in 2008. Wages for construction workers in non-building sectors (roads, bridges, infrastructure) were also higher than for residential construction workers.

<table>
<thead>
<tr>
<th>NAICS Industry Selector</th>
<th>2008 Average Monthly Employment</th>
<th>2008 Average Weekly Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Construction</td>
<td>144,233</td>
<td>$1,178 ($29.45/hr)</td>
</tr>
<tr>
<td>Total – Building Construction</td>
<td>29,594</td>
<td>$1,288 ($32.20/hr)</td>
</tr>
<tr>
<td>Nonresidential Building</td>
<td>13,033</td>
<td>$1,681 ($42.02/hr)</td>
</tr>
<tr>
<td>Residential Building Construction</td>
<td>16,561</td>
<td>$978 ($24.45/hr)</td>
</tr>
</tbody>
</table>

Source: Massachusetts Department of Labor and Workforce Development

But these figures only include employment and wages reported to the Commonwealth. They do not reflect the high proportion of Massachusetts residential construction work that is done via the ‘underground economy’ or with workers misclassified as independent contractors, both of which pull down wages well below the rates reported here. Stepping back to look at national trends, it is clear that state construction employment data only tells part of the story. An analysis of the construction sector at the national level by the Economic Policy Institute found that, among non-union laborers, carpenters, painters, and roofers, a majority make less than $12.50 an hour and a third make less than the federal poverty wage for a family of four ($10.19 an hour).\(^11\) In one of the few detailed studies of residential construction, the Fiscal Policy Institute found that wages among New York City residential construction workers averaged $10 an hour, and Jorge, a Springfield siding installer who was being paid $28.75 an hour, discovered that his employers were classifying him as a laborer and collecting $36.75, the prevailing wage rate for carpenters when they billed the state for the work. The Alliance to Develop Power, a community, tenant, and worker organization in western Massachusetts, sued the employer and recovered $130,000 for Jorge and his co-workers.

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\(^9\) Massachusetts Department of Labor and Workforce Development, 2008. This number only reflects those workers who are listed on employer payrolls, and does not include undocumented or misclassified workers. The problem of worker misclassification is discussed in more detail later.


\(^11\) High Road, Low Road: Job Quality in the New Green Economy (Good Jobs First, February 2009).
that a typical worker is seasonal and only works the equivalent of 46 weeks each year. In addition to lower wages, worker abuse, such as failure to pay for hours worked beyond a standard work week, failure to provide breaks or sick leave, and employee misclassification, is also prevalent in residential construction.

There are many forces pushing residential construction along a low road path. The small-scale and short-term nature of residential construction work leaves little incentive for employers to invest in their workers. Historically low rates of union membership and high rates of misclassification have created a downward drag on residential construction wages. Very few residential construction projects are subject to prevailing wage rates, which help level the playing field and standardize the wage that workers earn. Residential construction is subject to less federal and state regulation than other sectors in the construction industry, making it easier for low road contractors to compete and put responsible contractors at a disadvantage. The result is a failed model which creates low-wage jobs performing low-quality work with little opportunity for advancement.

The following are some key factors that define the low road residential construction sector:

**Employee Misclassification**

One of the most critical factors defining low road residential construction jobs is employee misclassification. Misclassification occurs when employers treat workers who would otherwise be official employees as self-employed, independent contractors. Misclassification of construction workers as independent contractors denies them the protections that a full time, formally employed worker receives. For low road employers, misclassification is one way to reduce costs so they can under-bid responsible contractors trying to provide a decent living for their workers. Not only does this force competition on an unfair playing field, it also allows low road contractors to avoid taking responsibility for their employees and to shift substantial costs to the public sector and taxpayers.

Misclassified workers are typically not covered by workers’ compensation or unemployment insurance and are liable for the full Social Security and Medicare payroll taxes, equivalent to 15.3% of wages. They also lose access to employer-provided health and other benefits, such as a retirement plan and paid time off. Since misclassified

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12 The Underground Economy in the New York City Affordable Housing Construction Industry (Fiscal Policy Institute, April 2007).

13 Prevailing wage applies to all public works construction projects in Massachusetts.

workers are not considered employees, they are not protected against employment-related discrimination and do not have the right to form a union or bargain collectively. Independent contractor status also precludes a construction worker’s access to union apprenticeship training opportunities.

According to a report by the Harvard Schools of Law and Public Health, up to 15,790 Massachusetts construction workers are misclassified each year, a number equal to nearly 50% of the entire building construction workforce.\(^\text{15}\) In 2008–2009, more than one in five complaints to the Massachusetts Joint Task Force on the Underground Economy and Employee Misclassification came from the construction sector, a sign that this problem has not diminished.\(^\text{16}\) Comparing across races and ethnicities, Latino workers are particularly likely to be misclassified – one study found that more than half of Latino construction workers were paid in cash, as opposed to 94% of white construction workers who received a company check.\(^\text{17}\) Abuse of undocumented workers goes hand-in-hand with misclassification as part of a deliberate strategy to avoid compliance with labor, employment, tax, insurance and regulatory requirements that the Massachusetts Joint Task Force on Misclassification and the Underground Economy was established to enforce.\(^\text{18}\)

Off-the-books and misclassified workers, including both documented and undocumented workers, are highly susceptible to workplace violations and worker abuse, including ‘wage theft’ or non-payment of wages for the full number of hours worked, payment at rates below minimum wage, and failure to provide breaks as required by law. A 2008 survey of over 4,000 workers in three major U.S. cities found these workplace violations were particularly acute in the residential construction sector. The survey found that:

- 12.7% of residential construction workers were being paid less than minimum wage
- 72.2% of residential construction workers were not being paid for hours worked beyond their normal eight hour day
- 54.9% of residential construction workers were denied meal breaks.

I got the job by waiting in front of the Dunkin Donuts [where workers wait for contractors to hire them]. I did not have any contract, it was a verbal agreement, I was paid in cash. I was not eligible for any workers’ compensation and I had no benefits – sick days, vacation, pension, or health.

— Josè, construction worker

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According to the survey, violations such as these cost minimum wage workers an average of $2,634 per year, or almost 15% of their annual wages.¹⁹

Historically Low Unionization

Just 25 years ago, one third of all u.s. construction workers in the private sector belonged to a union. But union density in construction has declined significantly in recent years, and has always been lower on the residential side. Today, just 15% of workers in the construction sector are union members. In Massachusetts, this number is a little higher – 20% of all construction workers in the private sector are union members, but most work in commercial construction.²⁰

Higher ‘density’ – or a higher proportion of workers in a given industry who are members of a union or worker organization – means more worker power in wage and benefit negotiations. According to 2007 data from the Bureau of Labor Statistics, union construction workers earn about one-third more than their non-union counterparts. Not surprisingly, historically low unionization has led to a rapid deterioration in wages, working conditions, and benefits in the residential sector.²¹

Not every good construction job is a union job, but unions play an important role in providing high quality training, ensuring that workers are paid fair wages with benefits, and guaranteeing protection from workplace violations. Other kinds of worker organizations, including employee-owned cooperatives like United for Hire in Springfield, Mass., can also help raise wage and work standards, but they usually operate on a much smaller scale than unions.²²

Lack of Coverage by Prevailing Wage

Prevailing wage laws establish wage standards for specific trades when working on publicly funded projects. But prevailing wage rarely covers workers in the residential construction sector, where most workers are employed by non-union contractors on small-scale, privately-funded job sites. Those residential construction workers who are covered by prevailing wage earn between $28 and $44 per

The way the industry works is that the agencies giving out the work are dictating the prices. The prices are so low, somebody has to be cheating to make up the difference. The low prices are potentially encouraging illegal contractor behavior: not paying taxes, not paying unemployment insurance and workers compensation.

— Alan Aulson, contractor

¹⁹ Broken Laws, Unprotected Workers (Center for Urban Economic Development; National Employment Law Project; and UCLA Institute for Research on Labor and Employment, 2009).
²² For more on cooperatives and employee-owned businesses, see: Alperovitz, G.; Howard, T.; and Williamson, T. “The Cleveland Model,” The Nation (February 11, 2010).
hour plus benefits, rates far higher than average wages elsewhere in the residential construction sector.\(^\text{25}\)

For the first time, the American Recovery and Reinvestment Act included a requirement that extended a special prevailing wage to residential weatherization to make sure that significant new federal investments in energy efficiency created good jobs for weatherization workers. As a result, the Department of Labor made new wage rate determinations for each state and region. Prevailing wage rates for weatherization workers were determined by surveying existing contractors across the energy efficiency sector, including those already participating in the Weatherization Assistance Program. While these wage rates are a marked improvement over the state minimum wage, they are much lower than rates for the skilled trades and below levels needed for family economic security. Rates for residential weatherization workers in Massachusetts range from $11.26 to $17.59 per hour, including between $2.6 and $1.38 in benefits, depending on the county.\(^\text{24}\) But these wage levels are so low that even those weatherization workers earning prevailing wage fall below the Weatherization Assistance Program’s low-income eligibility standard of 60% of State Median Income, which is $47,409 for a family of three.

**Smaller Project Sizes Prevents the Creation of a Stable, Skilled Workforce**

Residential construction work usually consists of small-scale, short-term projects contracted by individual property owners. Because of this, larger union contractors are rarely interested in putting forth a bid. Smaller contractors often can only hire workers for specific projects, rather than place them on a payroll and provide benefits. Workers may be hired by a number of different contractors over the course of a year, each with their own varying levels of wages and benefits. While union contractors hire workers under a formal contract and pay into a training fund which supports apprenticeship programs in the building trades, and employee-owned cooperatives also tend to have aggressive training programs for their workers, low road contractors often have no formal relationship with their workers and thus have little incentive to invest in their skills. As a result, training for residential construction is usually informal and piecemeal, without curriculum standards or industry-recognized certifications.

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\(^\text{23}\) Prevailing wage rates vary by trade and by county. For more information about prevailing wage rates, see: http://www.dol.gov/whd/recovery/dbsurvey/weather.htm

\(^\text{24}\) Massachusetts Residential Weatherization Wage Determination (U.S. Department of Labor, August 2009).
Calculating the Costs of Taking the Low Road

While some may argue that a low road approach is essential to keeping project costs down, this argument fails to take into account the economic and social costs of low wages. These costs can be broken down into direct costs to workers and their communities, costs to employers and the industry, indirect costs to local governments and taxpayers, and displaced costs to cities and the state.

Direct Costs to Workers and Communities

By paying unsustainably poor wages, low road employers make it impossible for their employees to support themselves and their families. As a result, low-wage workers continue to depend on the social safety net, with significant, negative long-term and community-level impacts.

ECONOMIC INSTABILITY

Construction workers, in particular, are subject to economic instability, as most jobs are seasonal. Low-paid construction workers with families are more likely to qualify for food stamps, MassHealth subsidized health care, subsidized housing, childcare vouchers, fuel assistance, and other public programs that help low-income families make ends meet. And years without stable work, or years spent working for cash in the underground economy, result in lower Social Security contributions. Combined with a lack of employer-provided pensions, low-paid construction workers who are ready to retire are left out in the cold. For many, this means depending on social services and publicly subsidized programs for the elderly.

The long-term and community-level impacts of a lifetime of low-wage work are well documented. Over the long term, low-income families suffer a range of social, health, educational, and wealth disparities.25 Levels of educational attainment, particularly high school graduation rates, are significantly lower in communities with high rates of poverty.26 Over the long term, this affects individuals’ ability to access higher-skill jobs paying higher wages, pushing low-income workers and their families back into a cycle of poverty.27

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25 Neckerman, K., ed. Social Inequality (Russell Sage Foundation, March 2004); Kaplan, G. The Poor Pay More: Poverty’s High Cost to Health (University of Michigan, September 2009).
26 Haveman, R. et al. Trends in Children’s Attainments and Their Determinants as Family Income Inequality has Increased (Russell Sage Foundation, n.d.)
27 Austin, A. Getting Good Jobs To America’s People Of Color (Economic Policy Institute, November 2009)

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The last residential project I worked on, the verbal agreement was $125 per day. The problem was that I worked seven days and my boss received a check of $5,000. I thought he would pay me that same day, but he didn’t. I went to ask for the money eight times and he told me that he wasn’t going to pay me and he threatened to hit me.

– JOSÉ, construction worker

Mr. Yu, who works for a window company in Boston, says the all-Chinese speaking workforce is pushed to work fast and many have been injured while handling sheets of glass, with deep cuts in their shoulders, forearms, and wrists that can take a year to recover, and back strain from packing large windows.
PERSISTENT RACIAL INEQUALITY

Low road industries disproportionately harm workers of color, their families and communities. Latinos are less than half as likely as Whites to hold jobs that pay at least twice the minimum wage and have health and pension benefits, and African Americans are less than two-thirds as likely.28 Twice as many African Americans and three times as many Latinos as Whites are without employer-provided health insurance. Median earnings for workers of color in Massachusetts continue to be significantly lower than median earnings for White workers – in 2008, African-American workers earned on average 69 cents for every dollar a White worker earned, while Latino workers earned only 61 cents.29 Perpetual employment in low-wage jobs has intensified the impact of the recession on communities of color, who now suffer significantly higher rates of unemployment and poverty.30

2008 MEDIAN EARNINGS FOR ALL MASSACHUSETTS WORKERS AGE 16 AND ABOVE

People of color trapped in low-wage jobs find it virtually impossible to accumulate wealth and assets. In 2007, median family wealth among people of color was only 16% of median wealth for White families.31 A study by the Kirwan Institute found a direct link between income levels and geography, finding that low-income people of color are concentrated in neighborhoods with limited access to opportunity.32

28 Ibid.
29 American Community Survey 2008
31 Ibid.
32 Reece, J. and Gambhir, S. Geography of Opportunity: Building Communities of Op-
The Kirwan Institute found that 95% of low-income Latinos and 93% of low-income African-Americans in Massachusetts are concentrated in low-opportunity neighborhoods, compared to only 42% of low-income White households.\textsuperscript{13}

Costs to Employers and the Industry

Low road jobs also mean costs for employers in the form of higher turnover and lower-quality work. This impacts contractors’ performance, and may inhibit their ability to participate in energy efficiency programs with Responsible Employer Requirements and other contractor qualification standards.

HIGHER TURNOVER

Each employee that has to be replaced exacts a cost on the employer to recruit, hire, and train a new worker. According to one construction contractors’ association, employee turnover costs construction employers an average of $14,500 for each new hire – almost half of a year’s average wages in the construction sector.\textsuperscript{34} Firms that pay low wages frequently also fail to provide paid sick leave, resulting in higher rates of employee turnover, more employee absences, and lower productivity. According to one study, the value of lost productivity among workers who are on the job when not fully healthy is greater than the combined cost of employee absence and health and disability benefits.\textsuperscript{35}

LOWER-QUALITY WORK

Low-wage employers are less likely to invest in worker training or reward skill development, and as a result are more likely to have a workforce that is lower-skilled. This affects contractors’ performance, and may limit their capacity to win bids on projects. For example, a survey of construction contractors in New York City found that low road contractors were more than five times as likely to have a low performance rating as compared to other contractors.\textsuperscript{16} In the case of energy efficiency programs, contractor performance is critical to both achieving energy savings and proving success of the model. Low-performing contractors will likely be quickly pushed out and replaced by those that can deliver high-quality work.

At the end of the housing boom in 2007, many new homes were being built in a hurry and there were a lot of issues with … bad materials and bad workmanship. A lot of these units were being done not energy efficiently and homeowners were spending a lot of money on heating and air conditioning. We got homeowners to complain about some of these non-union projects and the quality of the union work was a lot better.

— HECTOR FUENTES,
Laborers International Union of North America, Local 55

The quality of our work suffered because of lack of training, and because he pushed us to work faster, there was pressure. Work that needed 15 days was done in four or five.

— MARTÍN, construction worker


\textsuperscript{36} Adler, M. Prequalification of Contractors: The Importance of Responsible Contracting in Public Works Projects (Fiscal Policy Institute, May 2003).
Indirect Costs to the State

Growing a low-wage energy efficiency workforce would exact significant costs on the state and on taxpayers in the form of lost tax revenue and inefficient use of ratepayer funds.

LOST STATE TAX REVENUE

Any income and payroll taxes generated by low road employers are offset by Earned Income Tax Credits that supplement the wages of the working poor. In 2008, Massachusetts paid out an estimated $91.3 million dollars in state Earned Income Tax Credits (EITC), on top of the $668 million in federal EITC dollars, much of it to working people.37 Paying workers wages so low that they need the EITC not only costs Massachusetts taxpayers, it diverts support from other important public safety net programs.

Employee misclassification is particularly costly in terms of lost tax revenue. The Harvard School of Public Health report estimates that misclassification of construction workers results in a loss of $1.3 million per year in unemployment insurance contributions, $4 million in income tax revenues, and $7 million in workers compensation premiums.38 The Massachusetts Joint Task Force on the Underground Economy and Employee Misclassification found that workers at companies without workers’ compensation insurance additionally cost the state and taxpayers millions of dollars each year in payouts from the Department of Industrial Accidents’ Uninsured Employers Trust Fund.39

INEFFICIENT USE OF PROJECT FUNDS

Low road practices also cost utility ratepayers who are helping to fund energy efficiency programs. Low wages are connected to poor quality work, which results in inefficient use of project funds. A study of nine states that had repealed their prevailing wage laws found that the resulting drop in wages for construction workers resulted in significant cost overruns and project delays.40 And a 1980s audit of projects funded by the federal Department of Housing and Urban Development (HUD) found that low road employers tended to do poor quality construction, and that the quality defects on project sites contributed to excessive maintenance costs. The HUD Inspector General concluded that:

Construction contracting is the most competitive industry in our economy. Typically four or five prices are on the table for every contract. Fixed costs (materials, insurance, equipment, energy) compete with human costs and the only item that ends up being negotiated is wages. The cost of labor – which is a bigger part of the final price than in any other industry – is consistently driven down by all construction bidding activity. Contractors win and lose based on their wages.

— STEVE FALVEY, New England Regional Council of Carpenters

37 Massachusetts Tax Expenditure Budget for FY2010, Item 1.605.
40 Philips, P.; Mangum, G.; Waitzman, N.; and Yeagle, A. Losing Ground: Lessons From the Repeal of Nine ‘Little Davis-Bacon’ Acts (University of Utah Economics Department, February 1995).
“[T]his systematic cheating costs the public treasury hundreds of millions of dollars, reducing workers’ earnings, and driving the honest contractor out of business or underground.”

Displaced Costs to the State

Building energy efficiency as a low road industry will also increase ‘displaced costs’ - that is, costs traditionally borne by the employer that get shifted to the public sector and taxpayers.

INCREASED PUBLIC HEALTH CARE COSTS

The most significant and immediate displaced cost of low road employment is related to health care. Construction, by nature, is a dangerous industry, with a high risk of injury on the job. Massachusetts' highest occupational injury and illness incidence rates consistently occur in construction. In 2007, there were 6.1 occupational injury cases per 100 full-time construction employees, 50% more than the average for all industry sectors. Among on-the-job injuries, rates for serious musculoskeletal disorders like back strains and muscle pulls are 30 percent higher for construction workers than the average for all private industries.

Though Massachusetts employers are required to provide workers compensation, low-paid workers are rarely encouraged to file a claim when injured on the job. A 2008 survey of low-wage workers in three cities nationwide found that only 8% of those injured on the job were encouraged by their employer to file workers compensation claims.

Nationally, only 61% of all construction workers are covered by employer-sponsored medical benefits. With no health insurance or workers compensation to cover the cost of work-related injuries, public health care is the only recourse. In Massachusetts, most adults are required to have health insurance. Workers earning less than $15.63 per hour and without employer-provided health benefits qualify for Commonwealth Care, which provides free health insurance to low-income individuals and families. Workers at higher wage

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43 Dying for Work in Massachusetts (Massachusetts Coalition of Occupational Safety and Health, 2008).

44 Broken Laws, Unprotected Workers (Center for Urban Economic Development; National Employment Law Project; and UCLA Institute for Research on Labor and Employment, 2009).


The safety was in my hands because it was my life that was in danger. On one job there was no safety equipment. I never asked because I knew they didn’t have any safety equipment.

— JOSÉ, construction worker

One of my co-workers was injured in the eye and the company never paid for his injury. They claimed he never worked for them. Through the Alliance to Develop Power we started fighting for his case and the company ended up paying for two eye surgeries.

— JORGE, construction worker
levels who do not qualify for Commonwealth Care can access health insurance through the state at graduated subsidy levels. Because the cost of Commonwealth Care is partially supported by contributions from adequately compensated workers, low road employers are shifting the cost of their workers’ health care back onto the public, increasing premiums for other state health care program participants, both employers and workers.

COSTS OF PUBLIC HOUSING, FOOD, AND CHILDCARE PROGRAMS

Even with one or two adults employed full time, families of low-wage workers still must depend on public subsidies. Of the families with children in Massachusetts that have incomes below 200 percent of the federal poverty level 74% include a working adult. A total of 37,685 Massachusetts households with children received Section 8 housing vouchers in 2004. As of October 2009, Massachusetts distributed food stamp benefits to 712,389 people, at a cost of $6.4 million. In 2009, approximately 57,000 children were served each month on average by the state’s child care financial assistance program – an employment support program that cost the state more than $510 million in 2007.

The chart below shows how subsidy costs add up when employers fail to pay family-sustaining wages and provide health care and other benefits. For a family of three supported by one full-time, year-round worker earning $11/hour (with 2 children, 1 in childcare), the total public benefit costs (federal and state) are $2,399 – $2,649 per month depending on the children’s ages, or between $28,788 – $31,788 per year.

47 Massachusetts Section 8 Housing Vouchers (National Center for Children in Poverty, 2010).
48 Wagner, J. Food Security and Food Stamp Participation in Massachusetts (Massachusetts Department of Transitional Assistance, 2010).
### 'SAFETY NET' Displaced Employer Costs for a Low-Wage Worker with 2 Children\(^5\)

\(\text{($11/hour wage} = $22,880\text{ annual, with no employer-paid health or pension benefits})\)

<table>
<thead>
<tr>
<th>Income Eligible?</th>
<th>Public Subsidy or Credit</th>
<th>Income Eligibility (gross)</th>
<th>Monthly Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Food Stamps (SNAP)</td>
<td>$23,808 (^*)</td>
<td>$110</td>
</tr>
<tr>
<td>Yes</td>
<td>Public Health Insurance /Parent</td>
<td>$54,936 (300% FPS)</td>
<td>$161 (^\dagger)</td>
</tr>
<tr>
<td>Yes</td>
<td>Public Health Insurance/Child for 2 children</td>
<td>$54,936 (300% FPS)</td>
<td>$554 (2 children @ $297 minus $20 premium) (^\ddagger)</td>
</tr>
<tr>
<td>Yes</td>
<td>Section 8 Housing Voucher</td>
<td>50% of Area Median Income ($33,450 – $44,050 depending on location in MA)</td>
<td>$621 (^$)</td>
</tr>
<tr>
<td>Yes</td>
<td>Fuel Assistance/ LIHEAP $400 – $700 total grant, depending on fuel; &amp; Utility Discounts of 20 – 35% depending on company</td>
<td>$44,000</td>
<td>$67 average</td>
</tr>
<tr>
<td>Yes</td>
<td>Child Care Voucher for one child in care</td>
<td>(60% of State Median Income, adjusted for family size)</td>
<td>$495 – $745 depending on child’s age (|)</td>
</tr>
<tr>
<td>Yes</td>
<td>Federal Earned Income Tax</td>
<td>$34,680 (^\star)</td>
<td>$340 (^\star)</td>
</tr>
<tr>
<td>Yes</td>
<td>State Earned Income Tax</td>
<td>$40,295 (^\star)</td>
<td>$51 (^\star)</td>
</tr>
<tr>
<td><strong>Total Monthly Public Cost</strong></td>
<td></td>
<td></td>
<td>$2399 – $2649</td>
</tr>
<tr>
<td><strong>Total Annual Public Cost</strong></td>
<td></td>
<td></td>
<td>$28,788 – $31,788</td>
</tr>
</tbody>
</table>


\(^\dagger\) Adults with family incomes between 200 and 250% of Federal Poverty Standard (FPS) pay a premium of $77/mo for the least costly Commonwealth Care publically subsidized health care plan. (Source: www.mass.gov) Massachusetts Medicaid Payment per Enrollee by Population Group shows that the average public subsidy for a non-elderly, non-disabled adult is $2856/year or $238/month (Source: StateHealthFacts.org.) The public subsidy/benefit is calculated as the total cost minus the premium. This chart does not attempt to estimate public subsidy costs for those who remain uninsured and seek care through the Commonwealth’s hospital uncompensated care system.

\(^\ddagger\) Working parents with incomes between 200 and 250% of Federal Poverty Standard (FPS) pay a monthly premium of $20/child to enroll children in MassHealth/Children’s Health Insurance Program. (Source: www.mass.gov) Medicaid/CHIP Payment per Enrollee by Population Group shows that the average public subsidy for a child is is $355/year or $297/month. (Source: StateHealthFacts.org.) The public subsidy/benefit is calculated as total cost minus premium.

\(^\$\) The National Low Income Housing Coalition reported that across Massachusetts, the average Fair Market Rent (FMR) for a two-bedroom apartment is $1,193 a month (it is much higher in some regions--in Greater Boston it is $1,353. (Source: www.nlhcc.org) The public benefit/subsidy amount is calculated as the $1193/month average Fair Market Rent for a 2 bedroom apartment, minus the 30% of monthly income that voucher recipients must pay ($357).

\(\|\) Calculated as $667–$917/month depending on age of child, minus 30% of income ($172) = $495–$745. NOTE: limitations on the number of available vouchers and on the number and location of units accepting vouchers means that this benefit is not available to all eligible residents.

\(^\star\) EITC determined using IRS guidelines & calculator. (Source: www.irs.gov) The many workers who are paid in cash and/or misclassified as independent contractors would not qualify for EITC at the same level.

\(^\star\) Massachusetts EITC is 15% of Federal EITC

\(^5\) This annual wage equals 211% of Federal Poverty Level and 49% of State Median Income. Our interviews and direct contacts with weatherization workers and contractors throughout the industry indicated that, in the absence of reliable labor market data, $10 hourly wages with no health or pension benefits is a fair proxy for ‘low road’ compensation. In addition, the lowest Davis-Bacon weatherization worker prevailing wage in Massachusetts is also close to $11/hour. For these benefit calculation, we assumed that this worker and her or his family were not disabled, and not subject to other conditions that would incur additional costs. NOTE: undocumented workers would not be able to receive any of these benefits except a minimal level of the Massachusetts health care plan.
Benefits of Taking the High Road

Although expanding investment in energy efficiency is an important local job creation strategy, current conditions in the industry have kept most residential energy efficiency jobs as low-paid, dead-end jobs. Instead of saving money, low road energy efficiency jobs exact a huge cost that must be absorbed by businesses, the state, and taxpayers. High road jobs, by contrast, offer both social and economic benefits for workers, employers, and their communities. Rather than taking a singular focus on reducing costs by lowering wages and increasing productivity, a high road approach balances cost with quality and other measurable goals in order to build a highly-productive, high-wage economy.51 And a high road approach meets the needs of both workers and employers by not only helping firms remain competitive, but also connecting workers to employment that offers higher wages, better benefits, and opportunities to advance into satisfying careers.52

High Road is Good for the State and Taxpayers

Paying workers higher wages has broad economic benefits for the state. Research has shown that, in states with a minimum wage above the federal standard, indicators of economic performance, such as an increase in the number of small businesses and a faster rate of job growth, were consistently better than in states where minimum wage is set at the federal level.53 If energy efficiency workers earn a living wage with full health, pension, and other benefits, Massachusetts will avoid having to pay out millions of dollars in public subsidies and health care costs. In addition to these savings, Massachusetts would raise additional revenues through income taxes. For example, if all of the state’s energy efficiency workers earned a starting wage of at least $22 per hour including benefits — a full $14 more than the state minimum wage and almost $11 more than the low-end weatherization prevailing wage - Massachusetts would raise an additional $11.9 million in income tax revenues.54 Paying energy efficiency workers a starting wage of $22 per hour would also result in up to $6.5 million in annual unemployment insurance contributions and $13.8 million in workers compensation insurance premiums.55

52 Economic and Workforce Development (Center on Wisconsin Strategy, 2009).
53 Facts at a Glance: Facts and Claims on Raising the Massachusetts Minimum Wage (Massachusetts Budget Policy Center, 2006).
54 Based on estimation of 6,000 full-time, year-round weatherization workers earning a base wage of $18 per hour with a $4 benefit package, and state income tax rate of 5.3%.
55 Based on UI rate of 7.84% for the first $14,000 of income and WC average contribution of $6.17 per $100 of income for 6,000 full-time, year-round weatherization workers.
High Road Delivers High Quality Work

Massachusetts has already invested a lot in improving building energy efficiency, and it is essential that these investments pay off. The state’s large-scale energy efficiency program is innovative and, with public, private, and ratepayer investment topping $1.4 billion over the next three years, it could be a national model. To effectively win the buy-in of homeowners that is necessary to bring the program to scale, it is of utmost importance that retrofit work is of highest quality and results in real energy savings.

Because high road industries invest in employee skills, they result in safer and higher-quality work. Research relating to ‘responsible contracting,’ or public procurement practices that ensure job quality, shows that giving preference to those businesses which pay good wages and provide benefits creates both good jobs and higher quality, more reliable services. A recent article from Construction Lawyer on prequalification policies, which set standards that contractors must meet to bid on public projects, found that such standards prevent problems such as poor workmanship, delays, and cost overruns.

Everybody should be entitled to a livable wage. It’s pretty evident, you can’t get by on $11/hour. I’m not trying to be a saint, but we cannot go out in good conscience and hire employees at that wage.

– ALAN AULSON, contractor

Ratepayers’ money that the utilities collect for energy efficiency work should also be treated as public resources, and that funding stream should create good jobs... We don’t use public money to create lousy jobs.

– STEVE FALVEY, New England Regional Council of Carpenters

<table>
<thead>
<tr>
<th>Wage Level</th>
<th>Total State Income Tax Revenues</th>
<th>Total Unemployment Insurance Contributions</th>
<th>Total Workers Compensation Insurance Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>State minimum wage ($8.00/hr)</td>
<td>$5.3 million</td>
<td>Up to $6.5 million</td>
<td>$6.1 million</td>
</tr>
<tr>
<td>Weatherization prevailing wage (starts at $11.26/hr plus $.26 benefit contribution)</td>
<td>$7.4 million</td>
<td>Up to $6.5 million</td>
<td>$8.6 million</td>
</tr>
<tr>
<td>High road energy efficiency wage ($18.00/hr plus $4.00 benefit contribution)</td>
<td>$11.9 million</td>
<td>Up to $6.5 million</td>
<td>$13.8 million</td>
</tr>
</tbody>
</table>

*Based on estimation of 6,000 energy efficiency workers

57 Sonn, P. and Gebresellassie, T. The Road to Responsible Contracting (National Employment Law Center, June 2009).
High Road Improves Employee Performance and Reduces Turnover

Paying higher wages and providing benefits is ultimately good for employers. Where workers earn higher wages, firms experience lower rates of turnover and absences, which helps improve efficiency. Boston’s living wage law, passed in 1998, covers most city service contracts. Currently, the ordinance covers more than 21,000 employees, and guarantees a minimum wage of $12.79 per hour. A study of the similar Los Angeles Living Wage Ordinance, passed in 1997 and affecting more than 22,000 workers, found that increasing wages had a positive impact on employers by decreasing labor turnover and saving a significant amount in replacement costs. A study of the San Francisco Airport living wage policy found that annual turnover among security screeners fell from 95 percent to 19 percent when their hourly wage rose from $6.45 to $10 an hour.

Paying higher wages also improves employee performance. A study of the Boston living wage ordinance found that firms affected by the ordinance reported improved morale and increased work effort among their employees. The San Francisco Airport study found that, as a result of wage increases, 35 percent of airport employers reported improvements in employee work performance, 47 percent reported better employee morale, 44 percent reported fewer disciplinary issues, and 45 percent reported that customer service had improved. Another study found that skilled construction workers who receive higher wages are about 20 percent more productive than less skilled workers. And according to a 2004 study conducted by Dean Findley of Independent Analysis, union projects are almost 17% more productive than non-union jobs because of the skills and safety training workers receive, better on-site management, and job stability.

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59 City of Boston Living Wage Ordinance, 1998
61 Michael Reich, Peter Hall, and Ken Jacobs, Living Wages and Economic Performance: The San Francisco Airport Model (Berkeley, CA: Institute of Industrial Relations at the University of California, Berkeley, 2003).
63 Michael Reich, Peter Hall, and Ken Jacobs, Living Wages and Economic Performance: The San Francisco Airport Model (Berkeley, CA: Institute of Industrial Relations at the University of California, Berkeley, 2003).
64 The Economic Development Benefits of Prevailing Wage (Fiscal Policy Institute, 2004).
65 Findley, Dean. Understanding Labor Productivity in High Wage Regions: A Three-Year Study by Independent Project Analysis (IPA). Presented at the Construction Users Round Table Annual Conference, 2004. This study surveyed 1,185 construction projects.
High road firms invest in their workers by creating opportunities for employees to advance their skills and collaborating with city and community-based job training programs. Union employers contribute to a training fund which supports apprenticeship programs. These contractors then hire apprentices, who learn the trade through a mix of on-the-job training and coursework. Other types of high road contractors, including community-owned and cooperative firms, invest in worker training in order to improve both wages and competitiveness. Investment in a highly-skilled workforce helps firms achieve higher rates of innovation and productivity, which in turn allows firms to pay higher wages. Growing a high road industry will also increase the supply of apprenticeship placements, which generates more opportunities for more workers to access middle class careers.

**High Road is Good for Workers, Their Families, and Communities**

When workers have access to jobs that pay decent wages, their families and communities benefit. Higher-paid workers help grow the local economy by spending more, and are able to support their families without public subsidies for food, health care, childcare or housing. Over time, workers who earn decent wages are better off, and able to maintain a higher standard of living for their families. And neighborhoods where the majority of workers earn good wages see better educational attainment, lower levels of crime, better health outcomes, and improved access to opportunity.

The high road is particularly important for marginalized communities – women, people of color, low-income individuals, and those with barriers to employment. A high road energy efficiency industry will actively work to eliminate employment barriers faced by marginalized communities and ensure equitable distribution of the social, environmental, and economic benefits of efficiency investments. Guarantees of equitable access to jobs in the energy efficiency sector, such as local and targeted hiring requirements and connection with training programs, assures that those who have been hardest hit by the recession have access to jobs that offer real pathways out of poverty and into economic prosperity.

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**High Road Contractor Works With Union to Train an Energy Efficiency Workforce**

The 32-year-old Aulson Company, a signatory with the Painters’ Union (IUPATDC35), provides industrial and environmental specialty contracting services for commercial, industrial, and institutional clients. Aulson is now negotiating a residential energy efficiency retrofit pilot project in Boston’s Chinatown with the Painters, the Chinese Progressive Association, and several other partners.

“...There is a lot of this work to be done and they will need a workforce that they don’t have,” says company owner Alan Aulson. “Right now energy efficiency work is typically what I call a cottage industry: a guy and his son, maybe they hire a temp guy. Not having the workforce is suppressing the industry – all that work will never get done without a bigger, more skilled workforce.

But Aulson says that pilot projects like the one in Chinatown will help train the energy efficiency workforce that Massachusetts needs, thanks to collaboration with union training programs. Says Aulson, “For the unions and for us, the pilots are a way of training people and getting them to work. The unions are going above and beyond, bending over backwards trying to make this work.”
Benchmarks for a High Road Industry

The following are some of the key characteristics and benchmarks that serve as markers for high road jobs:

Wages

Decent, family-supporting wages are critical to pathways out of poverty and into economic prosperity. The federal minimum wage of $7.25 an hour barely gets workers above the federal poverty level of $14,570 for a family of two if one member is working full time. The Massachusetts state minimum wage of $8.00 an hour is a slight improvement, but still fails to reach the federal poverty level for a family of three. By contrast, the Crittendon Women’s Union has developed a self-sufficiency index, which takes into account the real cost of living for Massachusetts families. Self-sufficiency wages help families move beyond the “cliff effect,” where wages are too high to qualify for public work supports like food stamps, housing, and child care subsidies, but not enough to exit poverty. For example, a single parent with one child living in Boston must earn between $16.22 and $23.58 per hour to be self-sufficient, depending on the age of the child. In a household with one preschool and one school age child, and two working adults, each must earn at least $14.70 per hour to be self-sufficient. The differences between minimum and self-sufficiency wages are stark.

<table>
<thead>
<tr>
<th>Family Size</th>
<th>MA Minimum Hourly Wage</th>
<th>Davis-Bacon Entry-Level Weatherization Worker Hourly Wage (varies by county)</th>
<th>60% of State 2010 Median Income (LIHEAP Weatherization Income Eligibility Level)</th>
<th>Family Self-Sufficiency Hourly Wage* (varies by county and age of children)</th>
<th>Commonwealth Care Income Eligibility Level 2010 (hourly wage)</th>
<th>State Median Household Income 2008† (hourly wage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Adult, Two Children</td>
<td>$8.00</td>
<td>$22.62</td>
<td>$20.94–$27.53</td>
<td>$26.41</td>
<td>$31.40</td>
<td></td>
</tr>
<tr>
<td>One Adult, Three Children</td>
<td>$8.00</td>
<td>$11.26–$17.59</td>
<td>$26.93</td>
<td>$23.94–$30.84</td>
<td>$31.80</td>
<td>$31.40</td>
</tr>
<tr>
<td>Two Adults, Three Children</td>
<td>$8.00</td>
<td>$31.24</td>
<td>$13.54–$16.15 per adult</td>
<td>$26.41</td>
<td>$31.40</td>
<td></td>
</tr>
</tbody>
</table>

* Economic Self-Sufficiency Calculator (Crittendon Women’s Union, 2006).  
http://liveworkthrive.org/calculator.php
† American Community Survey, 2006.

68 The “Cliff Effect” Experience: Voices of Women on the Path to Economic Independence (Crittendon Women’s Union, n.d.).
Energy efficiency workers should earn a decent wage from the beginning. But the energy efficiency industry should offer more than just high-wage entry level positions. Career pathways similar to those established in the construction sector are defined by a clear and logical progression in skills and increasing responsibility. In the unionized construction sector, workers’ wages are directly tied to the number of years of training and on-the-job experience they possess. Over time, construction workers see their wages increase as they build their skills and experience, and advance to higher-level positions. Energy efficiency should offer the same kind of career pathway.

Benefits

Wages alone are not enough to ensure self-sufficiency. Quality jobs must offer benefits to full and part-time employees, including health care and retirement contributions, and insurance against lost income due to disability. Nearly two dozen Massachusetts cities and towns have adopted health benefits requirements for public construction contracting. 69 Employers may also offer child care or transportation subsidies, flexible spending accounts, or life insurance as additional benefits to full time workers. Prevailing wage determinations build in the cost of benefits to the employer as a way of requiring they be provided. Benefits contributions generally represent between 45% and 55% of hourly wage for residential construction, and include both health care and retirement contributions. 70

Hours and Paid Time Off

Besides wages, the duration and intensity of employment is a very important job condition, particularly for physical labor. Quality jobs guarantee enough work hours to earn a steady wage and qualify for benefits that require full-time status, while compensating for hours beyond a standard work week. Workers should also receive paid time off. The federal Healthy Families Act, which is widely supported by both unions and community-based organizations, would guarantee full time workers at least seven days of paid sick leave per year, and prorated sick leave for part-time workers. 71 Federal law requires employers with 50 or more employees to provide twelve weeks of unpaid Family Medical Leave, and Massachusetts law expands this requirement to require employers with six or more employees to offer eight unpaid weeks leave to care for a new child. 72 In many cases, however, workers...

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69 Foundation for Fair Contracting of Massachusetts. Compendium of Cities and Towns in Massachusetts with “Responsible Employer” Ordinances (on file with the National Employment Law Project).
71 S. 910, The Healthy Families Act of 2009
72 In addition to the guidelines of the federal Family and Medical Leave Act, the Massachusetts Maternity Leave Act allows female employees to take 8 weeks paid or unpaid leave for the birth or adoption of the child without any change of pay or status upon return. However, Massachusetts does not allow such leave for male employees, nor does the law require that the time off be paid. In addition, the Massachusetts Employee Leave for Certain Family Obligations law gives employees the right to 24 hours leave during any 12-month period to attend a child’s school functions or take a child or elderly relative to a medical or dental appointment.

Making the Industry Fair for Everyone

United for Hire (UFH), a worker-controlled cooperative of the Alliance to Develop Power in Springfield, Mass., started over eight years ago. It provides light construction and landscaping services in ADP’s tenant-controlled housing cooperatives and recruits workers from ADP’s membership. “We want to expand United for Hire to benefit all workers,” says Jorge Funes, a member of the worker cooperative, “We want to hire more workers.”

The cooperative pays novice workers a minimum of $15 an hour to start, and its profit-sharing plan gives workers a share of each contract. The average worker at UFH makes $40,000 to $50,000 a year. “You get really good wages,” he says, “and you also get great benefits like the legal clinic, trainings in worker rights, leadership, and skills.

“While we consider ourselves to be a high road contractor in that we create a company that provides jobs that are sustainable, long term, and respect the whole person,” says Tim Fisk, United for Hire’s director, “We raise the wage floor in whatever industry we’re working in... We think investment in our workers helps alay the hidden costs... We hope to change the industry. We know people are being paid substandard wages in weatherization.”

Joel Rodriguez, a carpenter, is working at the Vermont Yankee power plant making $50 an hour, but he plans to return to United for Hire. “We need to organize this industry,” he says, “not only to raise the wages and standards but also to identify the unscrupulous contractors and expose them. Once you identify the unscrupulous contractors and get rid of them you can bring in good contractors with high road jobs – it levels the playing field...you want to make the industry fair for everyone.”
this law would not apply to a construction firm because of the low number of employees. High road employers of any size should offer family leave to both female and male employees to care for newly born or adopted children or ill parents and, where possible, this leave should be paid.

Health and Safety

Protecting workers’ health and safety is critical to job quality, especially in the residential construction industry in which workers experience higher rates of injury and are frequently exposed to hazardous materials. Energy efficiency workers should be protected by a comprehensive safety and health plan identifying task specific hazards, and workers should receive environmental health and safety training in their native language as a prerequisite to starting any other training or entering a job site. Mandated training should include, at a minimum, OSHA 10, with ‘Right to Know’ hazardous chemicals training and understanding Materials Safety Data Sheets. Training should also mandate ‘elective’ components specific to job tasks such as identification and abatement of asbestos and lead. All workers should be provided fall protection and safety equipment to prevent exposure to toxic substances such as mold, lead, or asbestos, and should know how to recognize and respond to these and other hazards. Contractors must be bonded and insured, and must offer both workers compensation and disability insurance to assist workers who are injured on the job and ensure that they can access health care and rehabilitation with minimal salary disruption.

Targeted Hiring and Procurement

A high road industry seeks to generate local benefits by hiring local and low-income workers, people of color, and those with barriers to employment on all projects. To ensure local benefit, program design should include both local and targeted hiring requirements. For example, the Community Workforce Agreement that governs Portland’s new residential retrofit program requires that 80% of work hours be performed by local residents, and that 30% of work hours be performed by historically disadvantaged and low-income residents. To ensure that all contractors participating in the program should be required to report on work hours performed, broken out by income, race, gender, age, language, and residence. Systems should be put into place to monitor compliance with these requirements, and those who fail to comply should be removed from participation in the program.

To truly ensure broad access to weatherization jobs, contractors should adopt policies that prevent discrimination against workers with criminal records who seek stabilizing long-term employment.

73 To read the full Community Workforce Agreement, visit: http://apolloalliance.org/rebuild-america/clean-energy-portland/
opportunities. Such policies limit criminal background (CORI) checks unless relevant to the position; if a check is conducted, contractors must consider the applicant’s qualifications before conducting a CORI check and allow the applicant to rebut any concerns surrounding his or her criminal record.74

Training and Advancement

Beyond providing initial orientation and training, high road jobs should offer opportunities to learn and improve skills that will help workers advance to higher-skill, higher-paid positions. Employers should identify opportunities for advancement, and help workers gain the skills they need to access these opportunities by offering on-the-job training, paid time off to attend classes, or tuition reimbursement. Contractors should also partner with union apprenticeships or other registered training programs to provide on-the-job training to program participants, and continued training to incumbent workers that will allow them to advance their skills and increase pay.

Record of Compliance with Existing Laws

Many existing laws protect workers by establishing work hours and conditions, setting minimum wage standards, and ensuring fairness and equality. Minimum qualifications for contractors wishing to bid on weatherization work should include a record of compliance with state and federal labor, tax, and workplace safety laws. In 2004, Massachusetts adopted a contractor prequalification system that is mandatory for public works projects with budgets of over $10 million, and optional for those with budgets between $100,000 and $10 million. The system requires that contractors achieve a threshold prequalification score before they are able to bid on public works projects. Scores are based on references, capacity to complete, and management experience, which includes consideration of the firm’s safety record and compliance with workplace and other laws.75

Respecting Workers’ Right to Organize

Labor unions play a critical role in establishing and guaranteeing job quality standards. Union workers earn significantly more – $2.26 per hour more, on average – than their non-union counterparts, and union employers are more likely to provide benefits like health insurance and pensions. For workers from historically marginalized groups, the impact is deeply felt – for African-American workers, unionization raises wages by an average of 12%; for Latino workers it raises wages by more than 17%; and both women and younger workers are at least 20% more likely to have health insurance and a

Taking the High Road in New Jersey

Hector Fuentes is the business agent for Laborers Local 55, a new residential construction union in New Jersey. In publicly-funded weatherization projects there, he says, many workers have been earning $8 to $10 an hour, and working without proper safety equipment – for example, installing dense pack insulation in attics without masks. “A lot of workers complain,” he says, “but it’s an invisible market because it’s done in private homes and unions have no access.”

When American Recovery and Reinvestment Act funds arrived, the state of New Jersey started requiring weatherization contractors to acquire licenses. As a result, almost all the existing low-road contractors disappeared. State regulations also require contractors to hire at least 50% of their workforce from certified training facilities and those contractors to acquire licenses. As a result, almost all the existing low-road contractors disappeared. State regulations also require contractors to hire at least 50% of their workforce from certified training facilities and meet those requirements by recruiting and training local workers of color.

The Laborers are also negotiating wages of $17.40 an hour with a total package of $22 including health insurance. Sick days and pensions are not yet included in this initial contract. The union training program stresses safety with courses in CPR, first aid, OSHA 10, OSHA Confined Space, asbestos awareness, and mold awareness. Local 55 has trained 21 workers in OSS 30 (30 hours of safety training) and, says Fuentes, responsible contractors are very happy because this makes the workplace safer and lowers the employers’ insurance rates.

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74 See sample CORI-friendly policy at the Executive Office of Health and Human Services: http://www.mass.gov/hhs/cori
75 810 Mass. Code Regs. § 9.05(4)
pension if they belong to a union. And where they exist in sufficient density, unions can drive up wages for all workers in an industry.

A unionized workplace creates a set of organizing conditions that improve employees’ leverage and help them negotiate for better wages, benefits, and other conditions of labor. All workers should have the right to organize and form a union, and bargain collectively. While many employees have the theoretical right to organize, if the employer is willing to sign a neutrality or card check agreement, the union formation process becomes less adversarial.

Conclusion

Planned investments in energy efficiency represent significant potential for economic growth for Massachusetts; yet, this growth will be hindered, and the economic promise of the green economy left unfulfilled, if jobs created by these investments follow the low road pattern prevalent in the residential construction sector. Now is the time to make sure that Massachusetts’ rapidly expanding energy efficiency industry is built on strong legs, generating real social and economic benefits. A high road weatherization industry is not just good for the environment; it is also good for workers, good for employers and the industry, and good for the state.

Taking the high road in Massachusetts’ building energy efficiency industry will also set efficiency workers and their families on the road to economic security. Creating pathways into these jobs for workers from marginalized communities will assure equity in sharing the benefits of energy efficiency, as the Green Communities Act mandates. This high road approach will serve as a model that can then be replicated, not just in Massachusetts, but nationwide.

Recommendations

Massachusetts should take an equitable, high road approach in designing energy efficiency programs at the state and city level that will create quality jobs for local workers, prioritizing workers of color and other historically disadvantaged groups. Now is the time to do things right.

There are a number of measures and steps that will help ensure that Massachusetts weatherization jobs are quality jobs:

1. **Bundling and Community-Based Outreach**: Utility and city energy efficiency retrofit programs should bundle homes and buildings within geographic areas to aggregate demand for weatherization and achieve the economies of scale that will attract high road contractors. They should also anchor this work in partnerships with community-based organizations that have an established history with local constituents and will recruit a certain number of home- and building-owners in a specified neighborhood to participate in the program. Bundling these projects together will help increase the number of potential bidders, and allow high road firms to offer a competitive bid for completion of all retrofit work in that bundle. The community-based organization would also recruit qualified local workers, including those who speak languages other than English, for additional training and hiring. This model will be applied in the Chinatown weatherization pilot program in Boston and the Community Mobilization Initiative (CMI) pilots in other Massachusetts cities.

2. **Contractor Certification & Responsible Employer Requirements**: Utility and city retrofit programs should incorporate job quality standards into program design through contractor certification requirements at all levels, from program ‘lead’ contractors, installation contractors and their subcontractors. Responsible Employer Requirements (RER) should be a condition of bidding on neighborhood ‘bundles.’ Requirements should include compliance with workplace laws, fair wages and benefits, proper classification of workers, local hiring, a comprehensive safety and health plan, and connection to registered apprenticeships or other training programs. This model will be applied in the Community Mobilization Initiative (CMI) programs that the Green Justice Coalition and Massachusetts utility companies are piloting in Boston’s Chinatown and in a number of other Massachusetts cities.

3. **Help Small Local Contractors to Get Established and Qualify for Program Participation**: The state should establish a program to assist smaller contractors in fulfilling the Responsible Employer Requirements so they can bid on neighborhood ‘bundles.’ The program should consist of business skills training and technical assistance, combined with a low-interest loan program with alternative collateral requirements to help smaller contractors obtain the licenses and insurance necessary to become high road employers. The program should specifically target women- and minority-owned firms, as well as community-owned firms and cooperatives, wishing to scale up to enter the energy efficiency market. The federal Department of Transportation’s Office of Small and Disadvantaged Business Utilization, for example, has several model programs offering financial and technical assistance to small- and minority-owned construction contractors interested in working on federal highway projects.

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77 An example of a Responsible Employer Requirement can be found at: the National Association for Fair Contracting, Inc. [http://www.faircontracting.org/pdf/SectionA.htm](http://www.faircontracting.org/pdf/SectionA.htm)
4. **ADOPT A COMMUNITY WORKFORCE AGREEMENT**: Utility and city retrofit programs should adopt a Community Workforce Agreement that reflects the specific standards in Boston’s Pilot Memorandum of Understanding. This Community Workforce Agreement should include high road standards for:

- **WAGES AND BENEFITS**: Wages should be consistent with the Massachusetts Family Economic Self-Sufficiency Standard or another established quality wage benchmark.

- **HEALTH AND SAFETY**: All energy efficiency audit and installation workers should be required to complete health and safety training, in their own languages, including OSHA 10 mandatory components, with Right to Know, plus training components on environmental hazards they will encounter such as lead and asbestos. All contractors should be required to have a comprehensive health and safety plan.

- **LOCAL RECRUITMENT AND HIRING FROM LOW INCOME COMMUNITIES AND COMMUNITIES OF COLOR**: Programs should create pathways to ensure that new employees in the expanding industry will be drawn from communities and demographic groups that are currently underrepresented in the construction and energy efficiency workforce. Programs should include local, targeted, and CORI-friendly hiring policies, as well as other elements that address barriers to access for candidates from underrepresented groups.

- **TRAINING AND CERTIFICATION**: The state should work with utility, community, labor and other partners to develop comprehensive training and certification for weatherization workers that is consistent with equitable high road goals. It should assure that workers who invest time and resources in training are put on pathways to high road employment and careers. It should also assure that workers from historically disadvantaged groups have targeted opportunities to attain required training and certification.

5. **WORK WITH ESTABLISHED STATE, MUNICIPAL AND COMMUNITY BODIES** to identify and address low road and inequitable practices in the energy efficiency industry.

- At the state level, this would include working with the Commonwealth’s Joint Task Force on the Underground Economy and Misclassification, the Commission on the Unemployed and Underemployed, and the Energy Efficiency Advisory Council’s Equity Committee to monitor the enforce existing labor, prevailing wage, non-discrimination and health and safety laws in all public and rate-payer funded efficiency retrofit projects.

- At the municipal level, this would include working with city governments, community-based organizations, including environmental justice, labor and health coalitions, to assure that local hiring, local procurement, prevailing wage, labor and health and safety laws are enforced in municipal retrofits and ARRA-funded energy efficiency projects.

- State and city energy efficiency program planners should develop clear sets of job quality standards and indicators, and devise a centralized reporting system that is open and accountable. If this is done well, local governments and community organizations can work together to track increases in energy efficiency jobs and hiring from disadvantaged communities, as well as ensuring that these are quality jobs.
Promising High Road Practices in Energy Efficiency

Clean Energy Works, Portland Oregon

Green for All and the Oregon Apollo Alliance partnered with the City of Portland to develop Clean Energy Works Portland (“CEWP”), a pilot program launched in June 2009 that will upgrade 500 homes by autumn 2010. After the pilot phase, the program will ramp up to retrofit an estimated 100,000 qualifying homes.

HIGH ROAD ELEMENTS: COMMUNITY WORKFORCE AGREEMENT (CWA)

CEWP is the first retrofit program to include a Community Workforce Agreement. Portland’s Community Workforce Agreement

• Ensures high-quality jobs with good wages, benefits, and training to create career-path employment;

• Improves access to employment opportunities for local workers and businesses, including historically disadvantaged individuals and businesses. It also ensures that low-income homeowners have access to the weatherization program;

• Establishes contractor qualifications and requirements and identifies a pool of qualified contractors that can meet program standards and produce community benefits as high road employers;

• Was signed by a broad array of stakeholders who helped craft it, including the City and the state Energy Trust. Then the mayor drafted and the city council passed a resolution endorsing the cwa and putting city agencies in motion to help implement the agreement;

• Is legally enforceable, with its standards included in legally binding documents that contractors must sign to be eligible to do the work;

• Establishes a Stakeholder Evaluation and Implementation Committee (SEIC) to work alongside the City and the state Energy Trust to implement the cwa in the pilot program.

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78 Clean Energy Works Portland: A National Model for Energy Efficiency Retrofits (Green for All, 2010).
New York State Green Jobs-Green New York Act

In October 2009, The Working Families Party and a broad coalition of green, labor, business and community organizations won enactment of the Green Jobs-Green New York Act. This Act creates a revolving capital fund to leverage private investment that will cover the upfront costs of carrying out energy efficiency retrofits. The program intends to reach approximately one million homes and businesses over the next five years, with costs repaid through the resulting energy savings.

HIGH ROAD ELEMENTS: ENACTING HIGH ROAD JOB STANDARDS AND EQUITABLE ACCESS FOR WORKERS AND CONTRACTORS

The Green Jobs-Green New York Act includes several equitable, high road elements:

- Explicit goals to “support sustainable community development” and “create green job opportunities, including opportunities for new entrants into the state’s workforce, the long-term unemployed and displaced workers;

- Mandates and funding for workforce training, including occupational training, work readiness and apprenticeship training for unemployed workers; certification, skills upgrade training for incumbent workers; and a range of work supports;

- Links between training and job placement on work funded by this program, with a preference given to training and placement of women, minorities, low-income individuals and populations with barriers to employment;

- Responsible contractor standards;

- Criteria for awarding funding to applicants that include significant participation by minority and women owned business enterprises and/or to applications that serve economically distressed communities;

- An Advisory Council that includes community groups, consumer advocates, community-based workforce development groups, unions and contractors.

79 Landmark Green Jobs Bill is Win-Win-Win (Green Jobs New York; October 13, 2009)
Massachusetts Green Justice Community Mobilization Initiative (CMI) Pilot Model

The Green Justice Coalition (GJC), a statewide group of community and environmental organizations and labor unions, was convened by Community Labor United and the Massachusetts Apollo Alliance. GJC and several utility companies have come together to pilot a new approach to achieving broad-based participation in neighborhood-scale energy efficiency retrofits, a ‘Community Mobilization Initiative’ (CMI) model that implements a large-scale bundled neighborhood approach to energy efficiency retrofitting. GJC expects to carry out CMI pilots in four to five low-income urban communities this year.

HIGH ROAD ELEMENTS:

- Community-based organizations are hired to lead canvassing efforts to sign up dozens of neighbors for home retrofits. “Bundling” all of these individual homes into one contract then makes it possible for high road contractors to provide quality services, steady employment for local workers and use economies of scale to reduce materials cost enabling them to pay living wages and benefits to their workers.

- The pilot programs create pathways out of poverty by hiring residents from the communities where the work is being done. Pilots in immigrant communities will create access to energy efficiency jobs for workers with minimal English skills, working with a bilingual team leader.

- The pilots provide high road jobs with family-supporting wage and benefit packages, as well as thorough training and safety mechanisms. Energy efficiency workers on these pilots will have an average compensation package with $18/hour in wages and $4 or more in other benefits, including health insurance. Unions are providing training and representing the workforce in most pilots.

- In the absence of other financing mechanisms, the Green Justice Coalition is working with state and municipal agencies to secure “up-front” financing so low-to-moderate income residents can afford “deep” retrofits and funding for “pre-weatherization” work, removing lead or asbestos and other repairs that must be completed before weatherization can start.