Towards the High Road in the New Hampshire Construction Industry:

The Impact of a State Prevailing Wage Law

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The Keystone Research Center

The Keystone Research Center (KRC) (www.keystoneresearch.org) was founded in 1996 to broaden public discussion on strategies to achieve a more prosperous and equitable economy.

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Executive Summary

Prevailing wage policies specify wage and benefit standards for construction projects paid for with public funds. In recent years, these policies have been the subject of vigorous debate in city councils, state legislatures, and the United States Congress. Often missing from the discussion is the broader effect of prevailing wage on the overall economy.

Prevailing wage laws were first established in the 1930s — both federally and in many states — to create a level playing field for all contractors and to protect against public construction projects driving down local wages and benefits in the construction industry. Some states have strong prevailing wage laws, some have no prevailing wage laws, and still others are somewhere in between.

This study poses the following question: "What would be the economic impact of establishing a prevailing wage in the state of New Hampshire?" By protecting local wage rates from market distortions associated with public construction procurement, prevailing wages expand work for local contractors and construction workers. Thus, New Hampshire could expect an increase in the amount of construction work that is completed by in-state contractors with a prevailing wage policy.

Using IMPLAN software — the industry standard in economic impact analysis — along with data from official government data bases (the Census of Construction, Current Population Survey and American Community Survey), the effects of prevailing wage laws were analyzed, and the outcomes were compelling.

Our research concludes that establishing a prevailing wage would have broad positive impacts across the New Hampshire economy. These impacts include:

- A net gain of 1,710 to nearly 4,000 jobs – not just in the construction but across all industries. These jobs would be created on a permanent basis after a phase-in period of a few years. The size of the job gain within the range above depends on the magnitude of the recapture of state construction business by in-state contractors with a prevailing wage law. Evidence from New Hampshire and from New England states with effective prevailing wage laws points to a potential for recapture that would create almost 4,000 jobs economy-wide. National comparison of states with and without effective prevailing wage laws suggests a more modest amount of recapture that would support about half as many jobs.
- An increase in economic activity across all industries of $298 million to $681 million.
- Greater efficiencies in the construction industry with 7% less materials use.
- An increase in state and local tax revenues in the range of $7.3 million to $17 million.

An effective prevailing wage law would also substantially improve outcomes for workers.

- Construction occupation wage and salary income would increase by an estimated 19%, with larger increases for lower-wage construction workers. Effective prevailing wage laws counter the depressing effect of state low-bid contracting laws on construction industry wages.
- An estimated 2,515 more New Hampshire construction workers would receive health benefits through their job and an estimated 1,422 more would receive pension benefits.
- Roughly 600 fewer construction workers would receive food assistance (through Supplemental Assistance for Needy Families or SNAP) and another 600 would no longer receive the Earned Income Tax Credit (EITC).

Similar to the benefits of the recapture of construction business by local contractors, the positive effects of boosting workers' wages and disposable incomes would ripple across all sectors of the economy. In addition, by increasing incomes and benefits, and reducing the reliance of households that include construction workers on public assistance, a prevailing wage law would generate savings for federal and state taxpayers.

These positive economic impacts should be considered together with prior research – reviewed in the second half of this report, much of it published in peer-refereed academic journals – showing that prevailing wage does not impact the cost of public construction. Prevailing wage, the research indicates, does positively impact wages, benefits, productivity levels, investment in apprenticeship training, safety levels, and worker experience.

Taken as a whole, the findings in this report indicate that prevailing wage laws shift the way the construction industry uses materials, services, and labor to produce a finished product. These laws increase reliance on the skills and experience of career construction professionals who use materials efficiently, and reduce reliance on low-wage inexperienced workers, sometimes recruited from out of state. Consistent with the idea that "you get what you pay for," the gain in skills, experience, and materials cost savings with prevailing wage laws offsets the higher per hour wage and benefit costs. Prevailing wage generates benefits for the economy as a whole because wages and benefits would increase and more contractors and employees on state-funded projects would live in New Hampshire.

Interviews with New Hampshire contractors and other construction industry participants also indicate that a prevailing wage law is particularly needed today. After a decade of depressed demand, many workers have left the industry, the workforce has aged and there has been little recent investment in apprenticeship training. As the industry recovers and needs new workers, will it invest adequately in training and pay enough to retain workers as they gain experience and become more productive? Or will it seek low-wage unskilled labor, with negative consequences for construction productivity and job quality, expanding market share for out-of-state firms that specialize in tapping vulnerable workers? A prevailing wage law in New Hampshire can help create a context in which contractors are able to offer good jobs and invest in their workers, with benefits for contractors, workers, and construction customers – and, as we have seen, for the New Hampshire economy as a whole. A prevailing wage law can help the New Hampshire construction industry take the high road.

Introduction

Prevailing wage laws (PWL) establish minimum wage and benefit standards by occupation (i.e., "craft" or "trade") for construction funded at least in part by public dollars. These laws have been part of the construction landscape at the state and national levels since the 1930s. The impacts of prevailing wage policies on construction costs and quality, labor markets, and productivity have been the subject of extensive economic analysis over the decades. Recent debate about income inequality and the need to create more middle-class jobs, skill shortages, the importance of infrastructure investment, and state budgets and revenue shortfalls have brought a renewed focus on construction industry prevailing wage laws and their impacts.

Roughly half of states have strong or average prevailing wage laws, while the other half have no law or a weak one. New Hampshire is the only state in New England and the Northeast United States without a prevailing wage law at all, although the laws in Maine and Vermont are "weak." Virginia is the closest state to New Hampshire that does not have a prevailing wage law.

The fact that half of the states have effective prevailing wage laws and another half do not provides economists with a national laboratory to evaluate the impacts of these policies based on real-world experience. We don't have to conjecture what might happen, we can use real-world experience to see what *does* happen. Research is further aided by the fact that policies within the past couple of decades have changed within some individual states, providing "natural experiments" that make it easier to separate the impact of enacting or repealing prevailing wage laws from other differences among states.

Our analysis of the economic impact of prevailing wage laws is divided into three main sections. The economic impact analysis begins with an overview of the differences between the construction industry in the half of states with average or strong prevailing wage laws and the other half of states. There are critical structural differences between states with strong prevailing wage laws and those without that extend beyond the wages earned by construction workers. These include materials usage rates, productivity, local subcontracting rates, the income distributions for both construction and administrative workers, the provision of earned benefits, and other factors. These differences allow us to project the economic impact of establishing a prevailing wage law in New Hampshire, first on the New Hampshire economy as a whole and then on workers' wages and incomes, health and pension benefits, and reliance on public safety net programs.

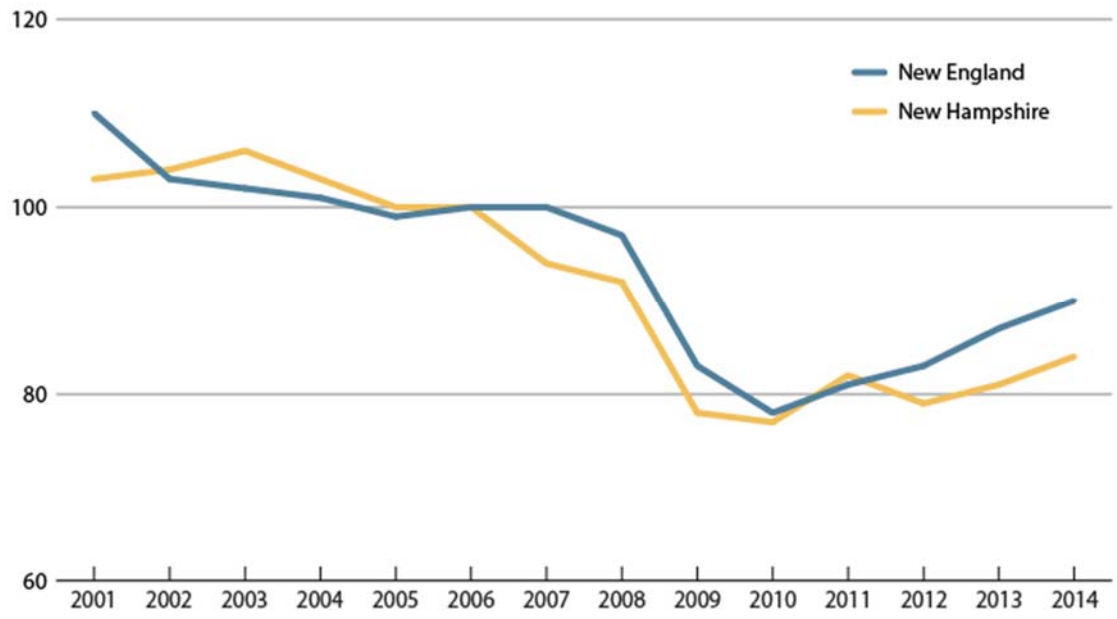
In projecting how the impacts of prevailing wage would ripple through the economy as a whole, we used a standard economic model (called "IMPLAN"). The impact is due to both the alteration of the cost components and the reduction in the leakage of construction spending out of the New Hampshire economy. An additional positive economic impact (not incorporated into our model) is the taxpayer savings resulting from reduced use of public services by construction workers.

After projecting the economic impact of a New Hampshire prevailing wage law, we review the high-quality research literature on the impact of prevailing wage laws. This section focuses first on the critical issue of construction costs and then on other factors such as training, safety and productivity.

The penultimate section of the report, "The Voice of Construction Industry Leaders," presents qualitative findings from interviews with construction industry stakeholders in New Hampshire. These insights help us interpret the earlier economic impact analysis and review of the research literature.

The broader context for this report is a construction industry – in both New Hampshire and across the country – that has just experienced one of the most difficult decades in its history, and a construction industry workforce that earns little more than it did a quarter century ago (Figure 1). Throughout the nation, the construction industry was the epicenter of the Great Recession, which started in the residential housing market but then spread to non-residential construction, as cash-strapped corporations, states, localities, and non-profit institutions (e.g., higher education) cut back their construction spending. Employment in the residential construction industry in New Hampshire fell by nearly a third (32%) from 2006 to 2010, and employment in the non-residential sector fell by nearly a quarter (23%).[1] While construction employment has recovered somewhat, employment in the New England construction industry (residential plus non-residential) remains 10% below the pre-recession 2006 level (and nearly 20% below the 2000 level) and employment in the New Hampshire industry remains 15% below the 2006 level (Figure 1). Construction industry data also show that the number of construction businesses fell during and after the Great Recession. To ensure the strong building industry needed to provide the infrastructure for a competitive economy, New Hampshire needs to rebuild its stable of experienced contractors and its skilled construction industry workforce.

Figure 1.
Employment in the New Hampshire and New England Construction Industries, 2000-2014
Indexed to 2006=100

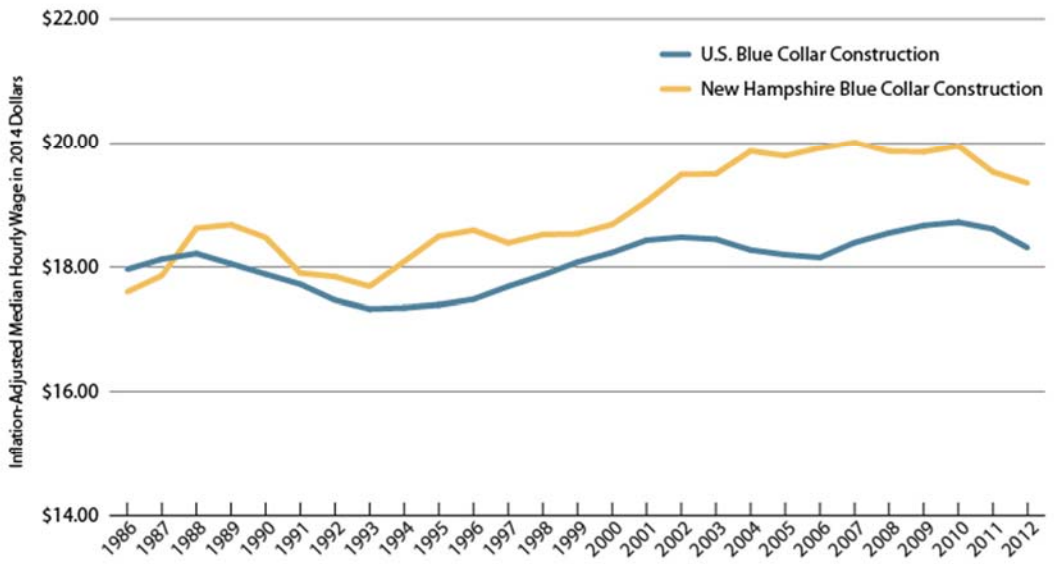


Source. Keystone Research Center (KRC) based on Quarterly Census of Employment and Wage (QCEW) data.

[1] Source: Quarterly Census of Employment and Wages (QCEW).

For construction industry professionals, challenging economic times began long before the Great Recession. As Figure 2 shows, hourly wages (adjusted for inflation) have increased little since 1985. In New Hampshire, after a small increase in the second half of the 1980s, hourly blue-collar construction trades' wages rose only 67 cents per hour from 1989 to 2012 – about 3 cents per hour per year. Over the full period shown in Figure 2, New Hampshire economy-wide productivity has grown 78% but construction workers – similar to many other groups of workers – have barely shared at all in the benefits of an expanding economic pie, with construction wages rising only by one sixth as much as the state's (13%) overall productivity growth.[2]

Figure 2.
Wages Among Blue-Collar Construction Trades Have Grown Little in the Past Quarter Century



Note. This graph shows a five-year average of hourly wages adjusted for inflation using the CPI-U-RS (Consumer Price Index - All Urban Consumers - Research Series. Since it is a five-year average, 1986 means 1984-1988 and so on.
Source. Keystone Research Center (KRC) based on the Current Population Survey (CPS).

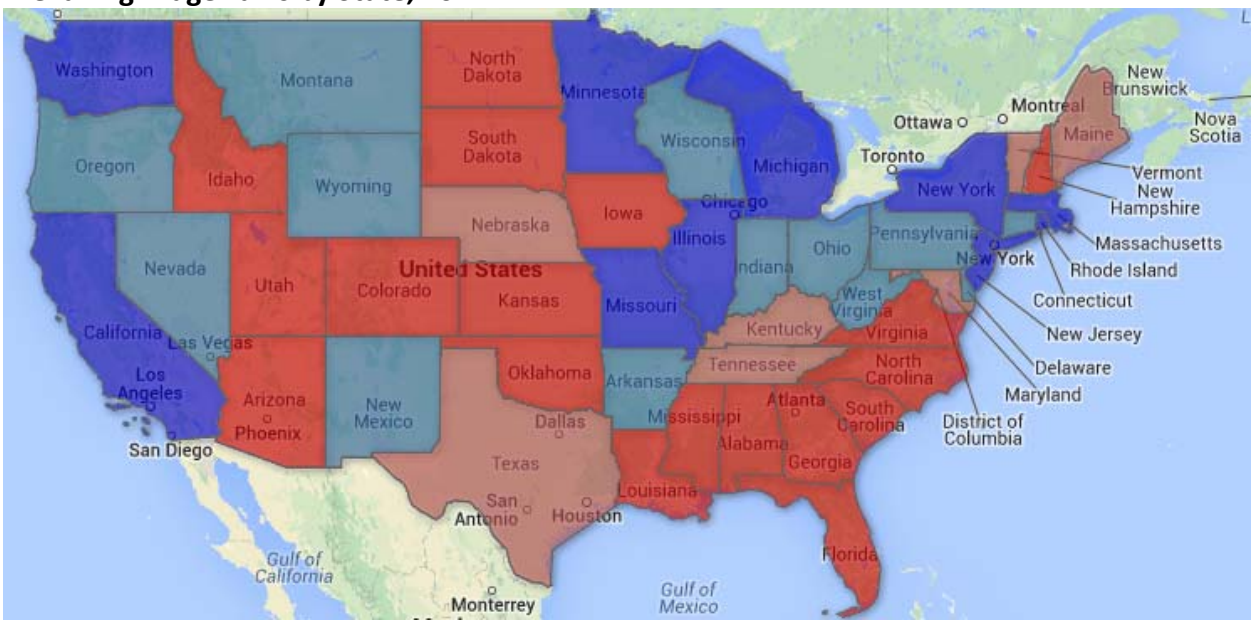
The challenges of the past decade in the New Hampshire construction industry make it imperative that New Hampshire today adopt public policies that boost local contractors and help ensure middle-class wages. The good news is that a state prevailing wage law could be the foundation for a strong construction industry that benefits contractors, career construction professional, and taxpayers in the state.

[2] Source for productivity estimate: Economic Policy Institute (EPI) analysis of unpublished total economy data from the Bureau of Labor Statistics, Labor Productivity and costs program; employment data from the Bureau of Labor Statistics, Local Area Unemployment Statistics; wage data from the Current Population Survey and compensation data from the Bureau of Economic Analysis, State/National Income and Product Accounts public data series.

The Dual Worlds of the Construction Industry

The nation's construction industry is incredibly diverse, employing six million people in more than 650,000 establishments, comprising approximately 5% of Gross Domestic Product and 4% of national non-farm employment in 2013. These national totals, however, obscure significant differences in how the industry is organized around the nation. To explore these differences, we divide the United States into two groups of states: 25 states with average or strong prevailing wages laws and 25 states with weak or no prevailing wage laws.[3] The prevailing wage states account for 56% of the nation's population, 53% of $1.33 trillion of construction output and 52% of the industry's total employment, yet 57% of its construction wages paid and 63% of the industry's earned-benefit payments.[4] Figure 3 below maps the states by their prevailing wage status in 2012. (We show 2012 because that was the year in which the data used in our economic impact analysis was gathered.)

Figure 3.
Prevailing Wage Laws by State, 2012



Key: Dark Blue = Strong Prevailing Wage Law; Light Blue = Average Prevailing Wage Law; Light Red = Weak Prevailing Wage Law; Dark Red = No Prevailing Wage Law

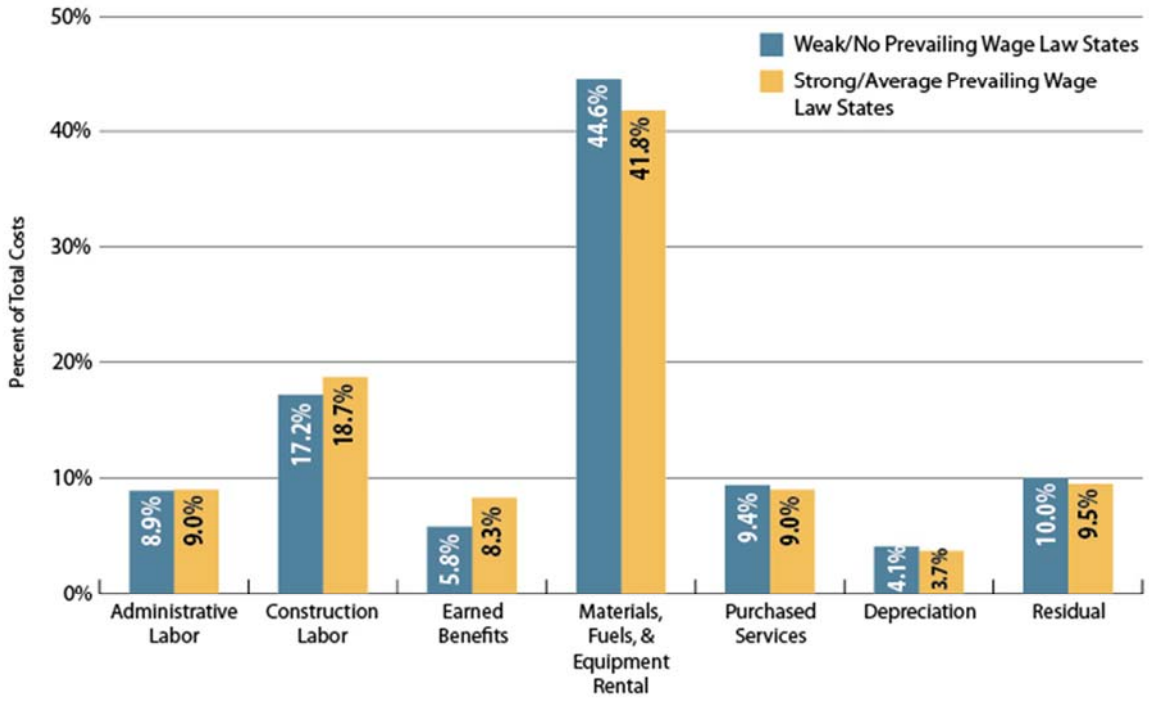
[3] State-level prevailing wage laws were coded "strong," "average," and "weak" using an approach developed by Armand J. Thieblot in *Prevailing Wage Legislation: The Davis-Bacon Act, State "Little Davis-Bacon" Acts, The Walsh-Healey Act, and The Service Contract Act* (Philadelphia: The Wharton School, University of Pennsylvania, 1986). Thieblot evaluated the strength of prevailing wage laws across several dimensions including the dollar limit at which they apply, the projects they cover, and the method used to determine the wage and benefit standards that prevail. The authors updated Thieblot's classifications to reflect subsequent policy changes and our own judgment. A summary of recent state-level prevailing wage characteristics is available at www.cga.ct.gov/2010/rpt/2010-R-0526.htm.

[4] Source: 2007 Census of Construction

Relying on data from the 2012 *Economic Census of Construction* (the most recent year for which data are available), it is possible to break down industry costs into major components and examine differences in how the industry operates in the two groups of states. Cost component differences between states with different prevailing wage laws are shown in Figure 4. The existence of a meaningful prevailing wage law is associated with:

- lower materials and fuels costs – materials, fuels, and equipment rental costs are 44.6% of total costs in states with weak or no wage policy and are 41.8% in states with strong and average laws.
- higher benefit costs (8.3% of total costs in strong/average law states vs. 5.8% in weak/no law states and 7.5% in New Hampshire); and
- higher labor costs (18.7% vs. 17.2% for blue-collar labor costs in strong/average vs. weak/no prevailing wage law states).

Figure 4.
Construction Costs Break Down Differently Based on Whether or Not States Have Effective Prevailing Wage Laws



Source. 2012 U.S. Census of Construction.

Data from the *Economic Census of Construction* also indicate that value added per worker is 11% higher in states with strong or average prevailing wage laws. In the absence of prevailing wage laws, a contractor's search for cheaper labor is more likely to result in the use of more out-of-area contractors that pay less than local area standards.

States with strong or average prevailing wage laws have more construction work completed by in-state domiciled contractors. Across the country as a whole, data from the 2007 *Economic Census of Construction* show an approximately two percentage-point difference in the share of the total value of in-state construction performed by in-state contractors between states with and without effective prevailing wage laws. A two percentage point jump in the share of New Hampshire construction performed by in-state contractors amounts to a recapture of $101.5 million dollars of construction demand. The potential for recapture could be greater in New Hampshire because New Hampshire's starting point for the share of construction performed by in-state contractors is low (81.6%). By contrast, the three New England states with strong or average prevailing wage laws have a roughly 90% in-state contractor share of in-state construction value, 8.3 percentage points higher than New Hampshire.[5] As well as loss of market share to low-wage out-of-state contractors, a gap this large likely reflects loss of demand by in-state New Hampshire contractors on large and complex projects to big regional firms (e.g. from Boston or southern New York state).

Research on prevailing wage laws finds that states with "strong" and "average" prevailing wage laws differ in fundamental ways from those with "weak" or nonexistent laws. Prevailing wage laws are part of a set of interrelated institutional arrangements, including a stronger emphasis on apprenticeship training, greater work-place safety, higher rates of health insurance and retirement benefits, and relatively higher wages, all of which contribute to the "high road" in the construction industry.[6] On this path, the construction industry provides the skills needed to build the structures and infrastructures for a growing, technologically sophisticated, and competitive state economy. Prevailing wage laws establish a legal foundation that supports this type of construction industry and economic benefits.

In contrast, the construction "low road" does not have the same institutional support. In states with weak or no prevailing wage laws there are lower levels of training and productivity and higher rates of job-related injury. Wages and benefits are lower, with greater reliance on public safety net programs, including "uncompensated health care" provided to construction workers without health insurance.[7] Without prevailing wages, worker benefits are lower and contractor profits are higher. Thus, without adequate prevailing wages and benefits, taxpayers are at risk of subsidizing the profits of contractors. Also under these conditions, the construction industry does not have the skills to contribute to a broadly competitive state economy. State and local governments are the single, largest purchasers of construction services in New Hampshire, accounting for one out of six dollars of construction output,

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[5] The 90% weighted average in-state contractor share in the three New England states with effective prevailing wage laws is influenced most by Massachusetts at 92.1%.

[6] For more discussion of the influence of prevailing wage laws and construction industry characteristics see Peter Philips, "Kentucky's Prevailing Wage Law," January 2014; Hamid Azari-Rad, Peter Philips, Mark Prus (eds), *The Economics of Prevailing Wage Laws* (Ashgate Publishing Limited, Aldershot, England, 2005); Frank Manzo and Robert Bruno, *Which Labor Market Institutions Reduce Income Inequality? Labor Unions, Prevailing Wage Laws, and Right-to-Work Laws in the Construction Industry*, January 29, 2014' online at http://docplayer.net/106037-Which-labor-market-institutions-reduce-income-inequality.html

[7] Academic research documents the connection between the lack of employment-based health insurance among construction works and higher uncompensated care costs that accrue to public hospitals and, by extension, other health-care payers, including taxpayers and businesses that do provide health care. See Jeff Waddoups "Health Care Subsidies in Construction: Does the Public Sector Subsidize Low Wage Contractors?" in Azari-Rad, Hamid, Peter Phillips, and Mark Prus, eds. *The Economics of Prevailing Wage Laws*, pp. 205-224. Accessed at: http://www.researchgate.net/publication/237102337_Health_Care_Subsidies_in_Construction_Does_the_Public_Sector_Subsidize_Low_Wage_Contractors.

and about one out of every four dollars of non-residential construction output.[8] By virtue of this position, public expenditures set the tone for the state's construction industry. It is up to the New Hampshire legislature to tip the balance of the state's construction industry towards the high road.

Economic Impacts

Recognizing the systemic differences in how the construction industry operates between states with and without prevailing wage laws, this section seeks to estimate the impact of those differences on the New Hampshire economy. To generate these estimates we rely on a standard modeling technique used by economists called "input-output analysis" and a widely used input-output software package, "IMPLAN." Input-output analysis breaks down the total economic impact of any economic shift into a "direct" effect (e.g., the increase in construction spending by in-state contractors whose market share grows with a prevailing wage law), an "indirect effect" (because contractors increase purchases from their supply chain) and an "induced" or "consumption" effect (e.g., as spending by workers and owners in construction contractors and their suppliers increases demand in through consumer industries).

In the case at hand, then, the most important factor that drives our economic impact estimates is the recapture of demand by in-state contractors. With a prevailing wage law, fewer New Hampshire construction dollars will leak out of the state's economy and more in-state contractors and construction workers will be employed. The recapture of demand by local contractors will also ripple through the supply chain and then the economy as those contractors, their suppliers, and their employees spend additional profits and wages, primarily in New Hampshire.

A second factor that contributes to the economic impact of a prevailing wage law is how such a law changes the allocation of spending in the construction industry. As described previously, states with strong or average prevailing wage laws have relatively higher labor and benefits costs and lower material costs. These shifts in industry spending patterns create jobs in New Hampshire if labor income is more likely be spent in New Hampshire than contractor spending on materials companies, many of which are out of state.

A third factor that contributes to the economic impact of a prevailing wage law is its tendency to increase wages of blue-collar construction industry professionals, especially the lowest-paid individuals. When income is shifted downward, economic activity, employment, and tax revenue all increase because middle- and lower-wage employees spend higher proportions of their earnings, and also tend to spend locally. By offsetting the low wages that otherwise result from low-bidding procedures in public procurement, prevailing wage laws alter the distribution of income in a way that increases economic activity.

As noted, the biggest driver of our estimated economic impacts of an effective prevailing wage law is the size of the shift to in-state contracting. We estimate this shift using two different methods. The most conservative method (shown in Table 1) assumes that the shift would be two percentage points, the national estimate of the impact of prevailing wage laws on in-state contracting in 2007. The second

[8] Purchases of state and local governments represent 17% of the total value of construction in New Hampshire in 2012. The total is 20% if federal purchases are included. Source: 2012 Economic Census of Construction, Table 23A1. Accessed at: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_23A1&prodType=table

method (shown in Table 2) uses regional data which shows that there is an 8.3 percentage point gap between the level of in-state contracting in New Hampshire compared to Connecticut, Massachusetts, and Rhode Island combined. Since this likely represents loss of contractor market share to both sophisticated and low-wage out-of-state competitors, assuming a jump of the full 8.3 percentage points with the introduction of an effective prevailing wage law in New Hampshire may not be realistic. Therefore, the top end of our range of potential economic impacts does not assume that a prevailing wage law will lead in-state contractors to recapture the full 8.3 percentage point gap with CT-MA-RI. Instead, the top end of our range averages the economic impact of a full 8.3 percentage point recapture and the much smaller two percentage point recapture.

Table 1. Economic Impact of an Effective New Hampshire Prevailing Wage Law: Low Recapture of Market Share from Out-of-State Contractors

Impact Category	***Direct Effect***	***Multiplier***	***Total Economic Impact***
Construction Industry Spending Change	$124 million	2.40	$298 million
Employment (number of jobs)	413 jobs	4.14	1,710 jobs
Total State and local tax revenues Revenue Change			$7.3 million

Note. These estimates assume that a New Hampshire prevailing wage law would increase the market share of in-state New Hampshire contractors by two percentage points, which is the national average gap between the in-state contractor shares in states with strong/average prevailing wage laws versus states with no/weak prevailing wage laws.

Source. The authors based on official government data and IMPLAN modelling.

Table 2. Economic Impact of an Effective New Hampshire Prevailing Wage Law: High Recapture of Market Share from Out-of-State Contractors

Impact Category	***Direct Effect***	***Multiplier***	***Total Economic Impact***
Construction Industry Spending Change	$302 million	2.25	$681 million
Employment (number of jobs)	$1,187 jobs	3.36	3,992 jobs
Total State and local tax revenues Revenue Change			$17 million

Note. These estimates assume that a New Hampshire prevailing wage law would have an economic impact equal to the average of the impact shown in Table 1 (using a low recapture assumption) and the impact with the recapture of the full 8.3 percentage point gap between New Hampshire in-state contractor share and the (weighed average) of the Connecticut, Massachusetts and Rhode Island contractor market share.

Source. The authors based on official government data and IMPLAN modelling.

Table 1 shows that the economic impact of a New Hampshire prevailing wage law will be meaningful even using our more conservative assumption. Tables 1 and 2 together show that such a law is projected to:

- Increase economic activity by at least $298 million and as much as $681 million.
- Lead to a net gain of at least 1,710 jobs and nearly 4,000 jobs across all industries.
- Increase state and local tax revenues by somewhere in the range of $7.3 million to $17 million.

Implementing an effective prevailing wage law in New Hampshire would be a pro-business policy change. After the last decade, construction contractors and other firms in New Hampshire require new strategies to boost economic activity and grow their businesses, including policies that increase a portion of the state's construction expenditures for in-state contractors. A prevailing wage law is one such strategy to support small businesses in New Hampshire.

Income and Benefits Earned

Similar to the differences in how the construction industry operates in states with and without robust prevailing wage laws, we also observe differences in these two groups of states in wages, benefit coverage, poverty levels, and reliance on public assistance. This section compares these outcomes for construction workers residing in New England states with strong/average prevailing wages against those in states with weak/no wage policies. Data from the March (Annual Social and Economic, or ASEC) Supplement of the Current Population Survey (CPS) of the U.S. Census Bureau contain economic and demographic information on a large number of construction workers.[9] The *Current Population Survey* is a random poll of households, jointly sponsored by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics.

The March CPS Supplement also provides data on income and noncash benefits, including food stamps and public and private health insurance plans. In total, a dataset pooling 10 years of March CPS data from the beginning of 2004 through the end of 2013 comprises 7,745 observations for the construction industry across New England, including 3,775 employed blue-collar construction workers. This group allows us to estimate the characteristics of 262,707 construction workers annually in these six states.[10]

New Hampshire and Other New England Blue Collar Construction Workers Compared, 2004-13. Table 3 profiles the demographics and labor-market outcomes of our sample in New Hampshire, in the three states with weak or no prevailing wage law as a group (Maine, New Hampshire and Vermont) and in the three states with strong/average prevailing wage laws (Connecticut, Massachusetts and Rhode Island). Blue-collar construction workers are defined as all workers employed in "construction occupations," such as construction laborers, operating engineers, electricians, carpenters, plumbers, pipefitters, and painters – what are sometimes referred to as "crafts," "trades," "skilled trades" or, elsewhere in this report, as constructional professionals. First-line supervisors are excluded.

The demographics of the blue-collar construction workforce are similar throughout New England independent of the existence of a strong/average prevailing wage law (Table 3). For blue-collar construction workers, the average age is just over 40, white non-Latino workers account for at least 80% of the workforce (although the workforce in the more populous strong/average prevailing wage laws is more diverse), and only 2% to 3% of the workforce is female. In addition, only about one-in-five construction professionals has a college degree and nearly two thirds of the workforce have a high-school degree or less, although New Hampshire has a more educated workforce than the other groups shown.

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[9] See "Poverty," *Current Population Survey* Annual Social and Economic Supplement, U.S. Census Bureau. Accessed at: http://www.census.gov/hhes/www/poverty/publications/pubs-cps.html.

[10] The information was extracted from the Integrated Public Use Microdata Series (IPUMS-CPS) project by the Minnesota Population Center at the University of Minnesota. See Sarah Flood, Miriam King, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, *Current Population Survey*: Version 4.0. [Machine-readable database]. Minneapolis: University of Minnesota, 2015.

Economic outcomes for workers in New Hampshire and the other states without robust prevailing wage laws differ more substantially from those in the three states with such laws. After adjusting for inflation, the average wage and salary income for blue-collar construction workers was $44,151 in New England states with a strong or average prevailing wage law, or $5,001 greater than their counterparts in states with a weak or no law ($39,150). In New Hampshire alone, blue-collar construction professionals fared better ($41,736) than in the other regional peer states with a weak/no law; but New Hampshire construction workers still earned less than their counterparts in states with a strong/average prevailing wage law. In New England states with an effective prevailing wage law, 76.4% of blue-collar construction workers had health insurance and 28.5% had a pension plan at work. Conversely, in New England states without an adequate prevailing wage law, only 70.3% of blue-collar construction professionals had health insurance and only 25.5% had a pension plan at work. The respective figures for New Hampshire were 67.1% covered by health insurance and 26.3% covered by a pension.

Table 3. A Profile of Blue-Collar Construction Workers in New England, 2004-2013

Summary Statistics	***New Hampshire***	***Weak/No PWL (incl. NH)***	***Strong/Average PWL***
Demographics			
Age	39.6	40.8	40.7
White, non-Latino	94.1%	95.7%	83.5%
Female	2.3%	2.8%	2.4%
High school degree or less	62.2%	65.1%	66.6%
Some college, no degree	16.8%	14.9%	14.2%
College degree	21.0%	20.0%	19.2%
Poverty, Government Assistance, and Taxes			
Real wage and salary income*	$41,736	$39,150	$44,151
Has health insurance	67.1%	70.3%	76.4%
Has a pension plan at work	26.3%	25.5%	28.5%
Lives below official poverty line	6.8%	6.3%	6.1%
Receives SNAP assistance	2.8%	5.9%	3.2%
Receives Earned Income Tax Credits (EITC)	8.5%	10.0%	9.6%

*Adjusted for inflation (Consumer Price Index) to 2013 dollars; reported only for workers with positive earnings.

Source. Current Population Survey, March (Annual Social and Economic (ASEC)) Supplement, 2004-2013. N= 3,775.

Table 3 also shows that approximately 6% of construction workers earned an income that placed them below the official poverty line, regardless of the type of New England state in which they reside. However, fewer blue-collar construction professionals received SNAP assistance (3.2%) and Earned Income Tax Credits (9.6%) in those New England states with strong/average prevailing wage laws than in those without (5.9% and 10.0%, respectively). New Hampshire alone fared better on these metrics, with 2.8% of the blue-collar construction workforce receiving food stamps and 8.5% receiving Earned Income Tax Credits.

How Much Would an Effective Prevailing Wage Law Improve Economic Outcomes for New Hampshire's Construction Professionals?

We now want to move beyond describing "what is" – the characteristics of New Hampshire construction professionals compared to those of professionals in New England peer group states – to understand the impact of strong/average prevailing wage laws on worker incomes and public sector budgets. To do this we use statistical methods (called "regression analysis") that separate out the impact of prevailing wage

policies on construction workers' economic outcomes from the impact on these outcomes of other factors (e.g., individual workers; education, marital status, gender, race, etc.). Our analysis answer the question "if the same worker moved from a state without strong/average prevailing wage legislation to a state with a strong/average prevailing wage law, how much would his or her income increase or decrease?" The analysis also estimates how much workers' outcomes would change in New Hampshire with an effective prevailing wage law and whether these changes are large enough that they could not reasonably be a result of random chance (in the language of statisticians and economists, are the impacts of an effective prevailing wage law "statistically significant?"). It is worth noting that our data source may underestimate dependence on government transfers by as much as 40% (partly because respondents to the household survey from which CPS data come are not always comfortable acknowledging that they receive public assistance). Our estimates of reliance on government assistance are therefore *conservative*.[11]

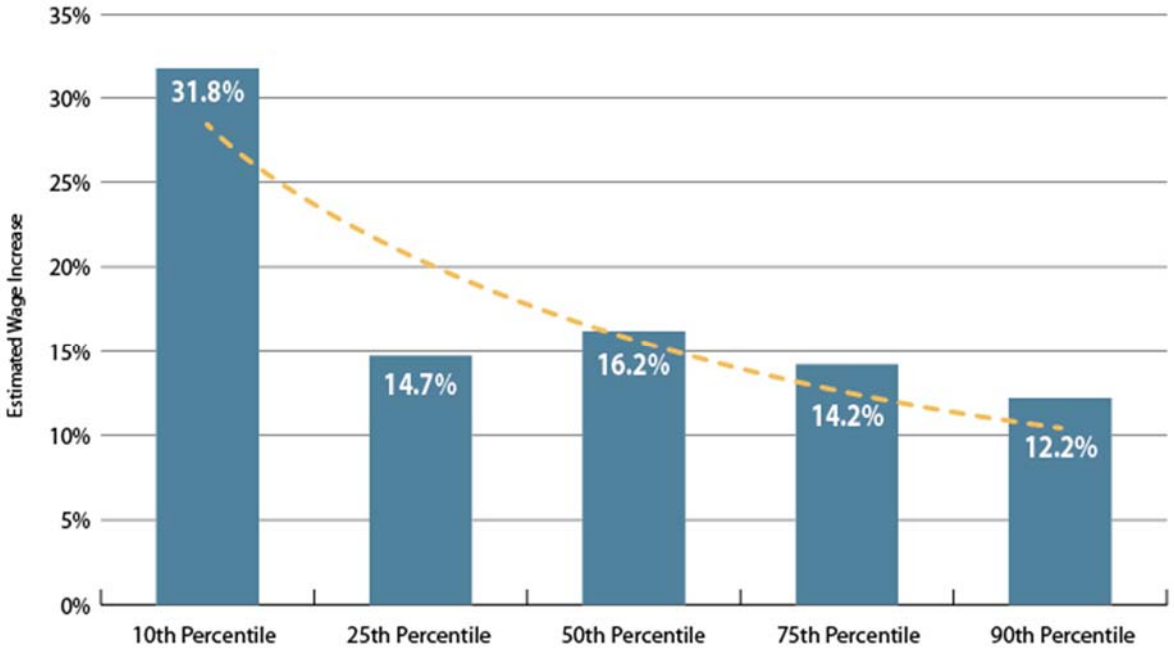
Impacts on Construction Workers' Wage and Salary Income and Benefit Coverage.

Figure 5 shows that strong/average prevailing wage laws increase construction workers' wage income by a statistically significant amount. The effects are largest for lower-income construction workers. For example, strong or average prevailing wage laws increase earnings by 31.8% for the lowest earners shown (at the 10th percentile), versus 16.2% for the median worker (at the 50th percentile). The increase for the top 10% of blue-collar construction workers (the 90th percentile) was 12.2%. The results illustrate how effective prevailing wage policies improve personal incomes for *all* blue-collar construction workers but benefit low- and middle-income workers most. In the absence of an effective prevailing wage law, state low-bid contracting creates downward pressure on workers' wages. By contrast, strong or average prevailing wage laws reduce wage inequality, fostering middle-class incomes for construction workers and their families. The significant impact on the lowest-paid construction professionals makes them less likely to rely on government assistance.

It is worth noting that average and strong prevailing wage laws are part of a broader set of "high road" institutional arrangements that may also be responsible for increasing worker earnings. Figure 5 only controls for demographics (such as age, race, gender, and immigration status), educational attainment, urban status, hours worked, and annual trends. Other characteristics of a "high road" construction industry such as greater worker productivity, enhanced safety procedures, and higher unionization may also be important. Thus, the effect in Figure 5 is the *maximum* impact of prevailing wage on distributional income.

[11] Other limitations of our methods include those associated with many statistical models, such as missing or unobservable variables. For more details on the statistical methods, see Frank Manzo IV, Alex Lantsberg, and Kevin Duncan, *The Economic, Fiscal, and Social Impacts of State Prevailing Wage Laws: Choosing Between the High Road and the Low Road in the Construction Industry*. Illinois Economic Policy Institute, Smart Cities Prevail, and Colorado State University–Pueblo. Accessed at: www.illinoisepi.org.

Figure 5.
Maximum Impact of an Effective New Hampshire Prevailing Wage Law on Wages for Lower-, Median, and Higher-Wage Blue Collar Construction Trades

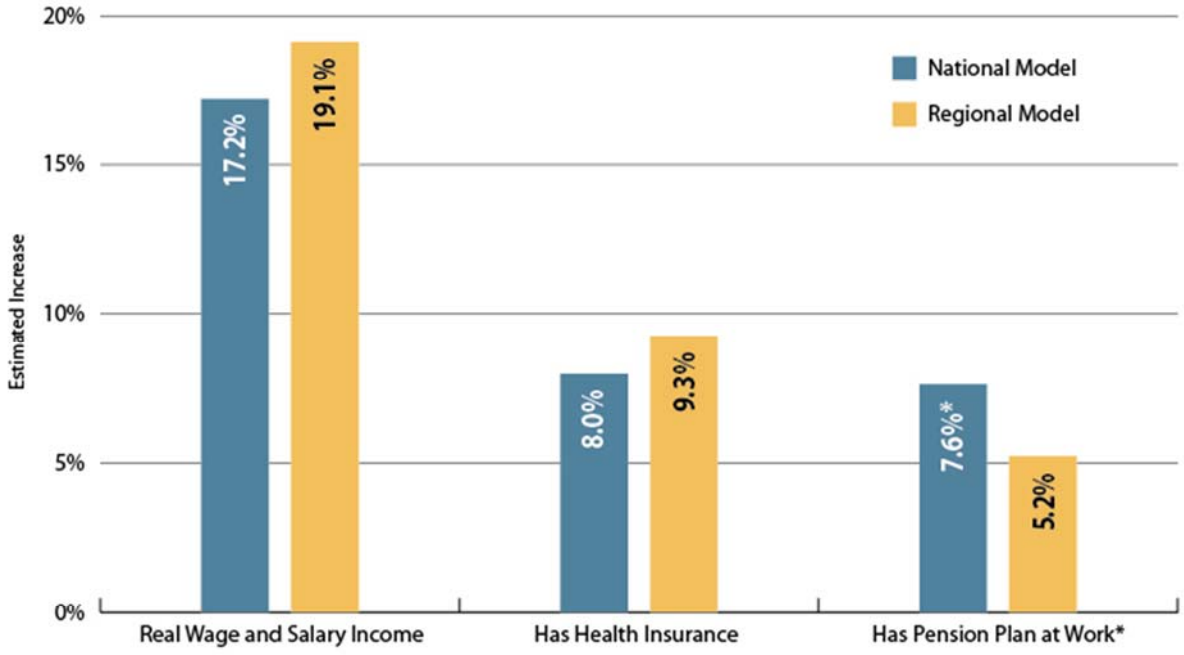


Note. Estimated percent wage increases resulting from an effective prevailing wage law based on regression analysis of wages in blue-collar construction trades in six New England states, three with strong/average prevailing wage laws (Connecticut, Massachusetts and Rhode Island) and three with no/weak laws (Maine, New Hampshire and Vermont). Regression results available upon request.

Source. Authors' regression estimates using data from the March (Annual Social and Economic (ASEC)) Supplement to the CPS.

The estimated effect of strong/average prevailing wage laws on incomes, health insurance coverage and pension in coverage in New England is similar to the estimated effect nationally when the half of states with effective prevailing wage laws are compared to the half without (Figure 6). Prevailing wage laws increase construction worker incomes and help to significantly increase private health and retirement coverage, ensuring that construction workers are self-sufficient and not reliant on public insurance programs.

Figure 6.
Estimated Impact of an Effective New Hampshire Prevailing Wage Law on Wages/Salaries and Health and Pension Benefits



Note. Estimated percent increases in wage/salary income and health and pension benefit coverage resulting from an effective prevailing wage law based on regression analyses of six New England states and of all 50 states. Regression results available upon request.

Source. Authors' regression estimates using data from the March ASEC Supplement to the CPS.

Impact on Construction Workers Reliance on Social Safety Net Programs.
Since prevailing wage laws raise workers' earnings, fostering self-sufficient construction workers, they would be expected to reduce reliance on government programs, reducing taxpayer costs. This is indeed the case within our six-state New England region and also nationally.[12] In both New England and nationally, controlling for other variables, strong or average prevailing wage laws reduce the probability that a blue-collar construction worker receives Supplemental Nutrition Assistance Program (SNAP) benefits by just over three percentage points. In New England, prevailing wage laws also reduce reliance on the federal Earned Income Tax Credit (EITC) program by an estimated 2.3 percentage points (although the level of EITC usage in New England is much lower than in the nation as a whole).

Table 4 translates our findings into an estimate of the reduction in the number of workers in New Hampshire that would rely on public programs if the state adopted an effective prevailing wage law.

[12] See Frank Manzo IV, Alex Lantsberg, and Kevin Duncan, "The Economic, Fiscal, and Social Impacts of State Prevailing Wage Laws: Choosing Between the High Road and the Low Road in the Construction Industry." Illinois Economic Policy Institute, Smart Cities Prevail, and Colorado State University–Pueblo. Accessed at: www.illinoisepi.org.

Keep in mind that these estimates are conservative because reliance on public assistance is underreported and also because the figures do not include extraction occupations, some of which fall in the construction industry, or first-line supervisors or managers. Approximately 600 fewer New Hampshire workers would rely on both SNAP assistance and EITC benefits. About 2,500 more blue-collar construction workers would had health insurance coverage and over 1,400 blue-collar construction workers would have gained an employer-provided pension plan across New Hampshire if the state already had an effective prevailing wage law. By reducing reliance on government assistance, on public health insurance, and on public retirement, adopting a strong or average prevailing wage law would reduce costs to taxpayers.

Table 4. Estimated Impact of an Effective Prevailing Wage Law on Blue-Collar Construction Workers' Reliance on Government Assistance in New Hampshire

Public Benefit Program	***Number of New Hampshire Blue-Collar Construction Trades Reliant on the Program***		***Estimated Change***
	Actual (2004-2013)	***With Strong or Average PWL***	
Supplemental Nutrition Assistance Program (SNAP)	2.8%	<1.0%	-3.1%
	756	*<270*	*-600*
Earned Income Tax Credit (EITC)	8.5%	6.2%	-2.3%
	2,300	*1,688*	*-612*
Has Health Insurance	67.1%	76.3%	+9.3%
	18,232	*20,747*	*+2,515*
Has a pension plan available at work	26.3%	31.6%	+5.2%
	7,161	*8,583*	*+1,422*

Source. Authors' analysis of the Current Population Survey, Annual Social and Economic Supplement (2004-2013). Note that the estimated change in SNAP assistance from the regional model is -3.1%, but only 2.8% of blue-collar construction workers in New Hampshire received food stamps during the period of analysis. The analysis thus assumes the effect would be to lower the actual amount below 1% of the blue-collar construction worker labor force.

The Impact of Prevailing Wage Laws: A Review of the Literature

The two previous sections projected the expected impact of an effective New Hampshire prevailing wage law on the economy based on data from strong/average prevailing wage law states and weak/no prevailing wage law states within New England and in the nation as a whole. This section reviews the findings from high-quality research on what *has happened* in the past in states with and without prevailing wage laws. This high-quality research, much of it published in peer-refereed academic journals, uses complex statistical methods (such as the "regression" approach described earlier) to separate the impact of prevailing wage laws from the impact of other differences (across states and construction projects) on construction industry costs and other outcomes. This high-quality research generally capitalizes on one or both of two realities. The first is the variation across states in prevailing wage policies which we have highlighted throughout this report. The second is the fact that the prevailing wage policy has changed at some point in the two decades in some individual states. A change in state policy creates a kind of natural experiment, allowing a before-after look at construction industry outcomes, ideally controlled for by examining neighboring states in which policy did not change.[13]

The high-quality research on the impact of prevailing wage laws differs from low-quality research most often cited by opponents of prevailing wage laws. Again and again, opponents of prevailing wage laws disseminate "reports" and estimates that fail to examine real-world experience but instead use hypothetical – or "what-if" – calculations. They ask what would happen to total costs if wages and benefits go up *and nothing else on a project changes* (such as productivity, use of materials, etc.). In essence, these studies simply assume the policy conclusion that their sponsors support – that prevailing wage laws increase costs. Fortunately, policymakers do not need to rely on this unsubstantiated assumption that defies both logic and the overwhelming body of evidence. Policymakers can rely instead on the high-quality research.

The Impact of Prevailing Wage Laws on Construction Costs

Labor costs are a small share of construction costs.

To understand the impact (or lack of impact) of prevailing wage laws on construction costs, it is helpful to understand the relationships between wages, costs, and labor productivity in the construction industry. While labor costs are a relatively high percent of total production costs for the overall economy, these costs are a low percent of total costs in the construction industry. The most reliable data on construction labor costs comes from the U.S. Census Bureau's *Economic Census of Construction*, used earlier in our analysis of the economic impact of prevailing wage.[14] Census of Construction data are derived from a survey of construction contractors in every state, every five years. Data from the most recent *Economic Census of Construction* indicate that construction worker labor costs (wages plus benefits) are 18.6% of the net value of commercial and institutional building construction in New

[13] While New Hampshire itself had a change in prevailing wage policy in the mid-1980s, this change took place before the emergence in the early 2000s of high-quality research on prevailing wage laws.

[14] See the 2012 U.S. Census Bureau, *Economic Census of Construction*, Construction: Geographic Area Series: Detailed Statistics for Establishments, accessed at: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_23A1&prodType=table

Hampshire.[15] This category includes many of the structures (institutional buildings) that would be covered by New Hampshire's proposed prevailing wage law. Construction worker labor costs are 24.4% of total costs highway, street, and bridge construction in New Hampshire. Again, this category includes one type of project covered by the state's proposed prevailing wage law. These data are consistent with U.S. Census Bureau information from other states. For example, Peter Philips reports that labor costs range between 17% and 20% for selected building types in Kentucky.[16] Elsewhere, Kevin Duncan has reported that labor costs are approximately 22% of the net value of construction for highway, street, and bridge construction in Colorado.[17] Since labor costs are a relatively small share of construction costs, when wages change in the construction industry, only a small portion of overall costs is affected.

***You get what you pay for – labor costs impact labor quality*.**

It is also important to keep in mind that higher labor costs are linked to construction efficiency and productivity. For example, professors Blankenau and Cassou find that the use of skilled and unskilled construction labor is sensitive to wage rates.[18] When construction wage rates increase, more skilled and productive construction workers are used instead of less-skilled workers. Professors Balistreri, McDaniel, and Wong also find that when wages increase and more skilled construction workers are employed, more capital equipment and machinery is used in construction.[19] In addition, since labor costs are a low share of total construction costs, relatively small increases in labor productivity are needed to cancel out the impact of higher prevailing wage rates.

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[15] The *Economic Census of Construction* for 2012 does not report labor costs as a percent of total costs. This ratio must be calculated based on other data. Here, labor cost as a percent of total construction cost is derived by dividing total construction worker payroll, plus proportionally allocated total fringe benefits, by the net value of construction work. The net value of construction is based on the value of work completed by a contractor, less the value of work subcontracted to other contractors. The *Economic Census of Construction* defines construction worker payroll as the gross earnings paid in the reporting year to all construction workers on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to deductions such as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The *Economic Census of Construction* defines the net value of construction as the receipts, billings, or sales for construction work done by contractors, less the value of construction work subcontracted to others. The net value of construction does not include contractor business receipts from retail and wholesale trade, rental of equipment without operator, manufacturing, transportation, legal services, insurance, finance, rental of property and other real estate operations, and other non-construction activities. Receipts for separately definable architectural and engineering work for others are also excluded. Non-operating income such as interest, dividends, the sale of fixed assets, and receipts from other business operations in foreign countries are also excluded. See Construction: Geographic Area Series: Detailed Statistics for Establishments: 2012. Accessed at: See Construction: Geographic Area Series: Detailed Statistics for Establishments: 2012. Accessed at: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_23A1&prodType=table.

[16] See Peter Philips, "Kentucky's Prevailing Wage Law: An Economic Impact Analysis," January 2014.

[17] See Kevin Duncan, "The Effect of Federal Davis-Bacon and Disadvantaged Business Enterprise Regulations on Highway Maintenance Costs," *Industrial and Labor Relations Review*, January, 2015, Vol. 68, No. 1, pp. 212-237. Accessed at: http://ilr.sagepub.com/content/68/1.toc.

[18] See William Blankenau and Steven Cassou, "Industry Differences in the Elasticity of Substitution and Rate of Biased Technological Change Between Skilled and Unskilled Labor." *Applied Economics*, 2011, Vol. 43, pp. 3129-3142.

[19] See Edward Balistreri, Christine McDaniel and Eina Vivian Wong, "An Estimation of U.S. Industry-Level Capital-Labor Substitution Elasticities: Support for Cobb-Douglas." *The North American Journal of Economics and Finance*, 2003, Vol. 14, No. 3, 343-356.

The findings of Balistreri and co-authors are consistent with the data presented in our earlier comparison of the construction industry in states with and without strong/average prevailing wage laws: i.e., the fact that value-added per construction worker is lower in states with weak or no prevailing wages and that the combined costs of materials, fuels, and equipment rentals are higher in states without meaningful prevailing wage standards. Better paid and more skilled workers translate into savings because they contribute to more efficient use of material and fuel as well as higher productivity.

Prevailing wage laws do not significantly impact construction cost.

The high-quality, peer-reviewed research on prevailing wage laws indicates that prevailing wage laws do not impact construction costs in a statistically significant way.[20] For example, an article in the *Journal of Education Finance* in spring 2002 explored the dependence of school construction costs across the United States from mid-1991 to mid-1999 on factors such as the state of the economy (measured by the level of unemployment), the size of the school, the season, and the existence of a responsible wage ordinance.[21] The analysis found that public school construction costs:

- rose 22% when the unemployment rate declined by half;
- fell 2.5% for bids accepted in the spring compared to bids accepted in the fall;
- fell by 4.7% with a doubling of the school size, indicative of modest "economies of scale"; and
- did not go up or down a statistically significant amount based on the presence of a prevailing wage law.

This research thus suggests that if a state wants to reduce the costs of public construction, the most powerful approach would be to create a "Rainy Day Construction Fund" that provides resources for more public construction to take place when the overall market is depressed. This would have the additional benefits of stabilizing construction industry employment and contractor income, reducing reliance on public assistance programs, and facilitating the retention of experienced workers and good contractors by the industry.

In another study, Professors Cihan Bilginsoy and Peter Philips examined the outcomes in British Columbia when this province introduced a prevailing wage standard similar to strong state-level prevailing wage laws in the United States.[22] The authors found that this change had no statistically significant impact on school construction costs.[23]

In the 1990s, prevailing wage policies for school projects changed in Kentucky, Ohio and Michigan.[24] Specifically Kentucky adopted an ordinance for school construction after not having one, Ohio chose to make school construction exempt from prevailing wage law after it previously was not exempt, and

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[20] A comprehensive review of the literature can be found in Kevin Duncan, "An illustration of the Impact on the Santa Clara County Economy of Repealing the Prevailing Wage Policy of the City of San Jose." Submitted to Working Partnerships USA, February 11, 2011.

[21] Hamid Azari-Rad, Peter Philips, and Mark Prus, "Making Hay When It Rains: The Effect Prevailing Wage Regulations, Scale Economies, Seasonal, Cyclical and Local Business Patterns Have on School Construction Costs," *Journal of Education Finance 27* (Spring 2002): 997-1012.

[22] For a complete description of the BC policy, see Kevin Duncan, Peter Philips, and Mark Prus, "Prevailing Wage Regulations and School Construction Costs: Cumulative Evidence from British Columbia" *Industrial Relations*, 2014, Vol. 53, No. 4, pp.593-616.

[23] Cihan Bilginsoy and Peter Philips, "Prevailing Wage Regulations and School Construction Costs: Evidence from British Columbia," *Journal of Education Finance* 25(3) (Winter 2000): 415-31.

[24] Peter Philips, A *Comparison of Public School Construction Costs In Three Midwestern States that Have Changed Their Prevailing Wage Laws in the 1990s: Kentucky, Ohio and Michigan* (Utah: University of Utah, 2001).

Michigan had an ordinance, suspended it, and then reinstated it. Researchers found that costs did not differ significantly during periods when such ordinances were, and were not, in effect.

In Colorado and Pennsylvania, researchers have compared construction costs in periods in which prevailing wages and benefits were measured in two different ways, one of which led to substantially lower wage and benefit standards. In Colorado until April of 2002, prevailing wage and benefit rates for the detailed job classifications involved in highway resurfacing projects in Colorado were based on union rates.[25] From April 2002 until the next prevailing wage survey in the fall of 2011, average wage and benefit rates prevailed. This change applied to 11 of the 13 detailed job classifications involved in highway resurfacing and represented an average 18% decrease in total hourly compensation for these jobs. Despite this substantial decrease, in the overwhelming majority of the wages paid for highway resurfacing, there was no corresponding decrease in the cost of federally funded resurfacing work relative to comparable state-funded projects. Professor Kevin Duncan's further analysis of highway resurfacing projects in Colorado indicates that when contractors switch from federal-funded projects to state-funded construction, there is no statistically significant difference in bid prices.[26]

In Pennsylvania, Dr. Howard Wial of the Keystone Research Center (KRC) examined changes in public school construction bids during a mid-to-late 1990s period in which Pennsylvania's prevailing wage and benefit standards were lowered substantially, especially in rural areas.[27] KRC found no association between the number of occupations in which the prevailing wage level was lowered and the price per square foot of school of construction bids. If anything, construction bids appeared to go up *more* in areas where prevailing wages were lowered more.

Taken together, the studies examining the effects of decreases in, or the elimination of, prevailing wage laws reveal that these changes are not associated with reduced construction costs. These studies corroborate evidence from other sources that the increase in construction professionals' skills and productivity, and more efficient use of materials, offset higher labor costs.

The Impact of Prevailing Wage Laws on Training, Safety, and Benefits

While prevailing wage laws do not impact costs, they do impact other variables in ways that support "higher road" – high-skill, high-productivity, efficient – construction industry competition.

***Training*.**

Construction workers have portable skills and often move from employer to employer as they finish up one project and begin work on another. Worker mobility and skill portability pose a dilemma for construction employers: while they need skilled workers, it is difficult to justify training someone who may walk out the door to work for the competition. If many employers are reluctant to invest in training

[25] See Kevin Duncan, "Do Construction Costs Decrease When Davis-Bacon Prevailing Wages Change from Union to Average Rates?" Working Paper, Colorado State University-Pueblo.

[26] See Kevin Duncan, "Do Federal Davis-Bacon and Disadvantaged Business Enterprise Regulations Affect Aggressive Bidding? Evidence from Highway Procurement Auctions." Scheduled to appear in Issue 3 of the *Journal of Public Procurement*, 2015.

[27] Howard Wial, *Do Lower Prevailing Wages Reduce Public Construction Costs?* (Harrisburg: Keystone Research Center, 1999); online at http://keystoneresearch.org/publications/research/do-lower-prevailing-wages-reduce-public-construction-costs.

because workers might leave, the end result may be a low overall investment in training. Economists call this outcome a "market failure."

Prevailing wage laws can help reduce the tendency to underinvest in training through several mechanisms. Most important, these laws reduce the potential for small, low-wage firms that invest little in training to outbid more responsible firms that invest large amounts in apprenticeship training. Second, since starting apprentices typically earn only 50% to 60% of the responsible wage level for experienced workers, firms have an incentive to include some apprentices in crews on public jobs, as long as it lowers productivity less than it lowers compensation. Thus prevailing wage laws tend to lead to significant use of apprentices, and significant investment in apprenticeship, on state construction jobs.

Consistent with the importance of these mechanisms, Cihan Bilginsoy found more investment in apprenticeship in states with prevailing wage laws when he analyzed data from the U.S. Bureau of Apprenticeship and Training.[28] In New Hampshire, a 2012 study found that there were 690 apprentices enrolled in joint labor-management apprenticeship programs at that time. No records were available on apprenticeship training by non-union firms.[29]

Worker Safety.

While construction workers represent just over one in 20 of all workers, they account for about one in five workplace fatalities and one in 10 workplace injuries.[30] In analysis of the U.S. Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses, Hamid Azari-Rad found that the existence of prevailing wage laws was associated with fewer injuries and reduced worker compensation costs.[31] Azari-Rad concludes that construction is safer in state with prevailing wage laws because these laws encourage training, promote the retention of experienced workers and create an environment of increased compliance with workplace safety and workers' compensation rules and regulations. Absent these laws, a corrosive competitive environment can develop where contractors seek a competitive advantage by using young, inexperienced and sometimes desperate workers – a deadly mix in a dangerous industry.

Health and Pension Benefits.

Prevailing wage laws also encourage the provision of health and pension benefits by establishing, a minimum contribution towards fringe benefits. By setting a minimum contribution, these provisions prevent bidders from gaining a cost advantage by not providing benefits. Given this, it is not surprising that the high-quality economic research corroborates our earlier finding that states with effective

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[28] Cihan Bilginsoy, "Wage Regulation and Training: The Impact of State Prevailing Wage Laws on Apprenticeship," in Azari-Rad et al., *The Economics of Prevailing Wage Laws*.

[29] Thomas J. Kriger, *Analysis of Associated Builders and Contractors*, National Labor College Working Paper, May 31, 2012, pp. 74-75, online at http://www.knowyourabc.com/ULWSiteResources/abc/Resources/file/TJK_Reports/ABCResearchReport-FINAL5-31-12.pdf

[30] In recent years, the construction industry's share of fatalities and of employment share have fallen somewhat. In 2009, there were 816 fatalities in construction out of 4340 in all industries; see http://www.bls.gov/news.release/cfoi.t02.htm.

[31] Hamid Azari-Rad, "Prevailing Wage Laws and Injury Rates in Construction," in Azari-Rad et al., *The Economics of Prevailing Wage Laws*.

prevailing wage laws are more likely to have both a pension plan and health insurance than workers in states without such laws.[32]

As noted earlier, research documents that when construction workers do not have health benefit coverage through their job, this can end up increasing the costs of publicly subsidized health care including "uncompensated care" provided by emergency rooms.[33]

[32] Jeffrey S. Peterson, "Health Care and Pension Benefits for Construction Workers: The Role of Prevailing Wage Laws," *Industrial Relations* 39(2): 246-264, April 2000.; Mark A. Price, "Pension and Health Insurance Coverage in Construction Labor Markets," Azari-Rad et al., *The Economics of Prevailing Wage Laws*.; Mark A. Price "State Prevailing Wage Laws and Construction Labor Markets", Dissertation: University of Utah, December 2005.
[33] See Waddoups, "Health Care Subsidies in Construction: Does the Public Sector Subsidize Low Wage Contractors?" in Azari-Rad et al., *The Economics of Prevailing Wage Laws*.

The Voice of Construction Industry Leaders in New Hampshire

We now turn to findings from open-ended, semi-structured interviews with 14 New Hampshire participants in the construction industry: contractors, state officials knowledgeable about contracting, and labor union representatives. Open ended interviews are a standard social science methodology for gaining qualitative understanding of an issue, and a powerful complement to quantitative and statistical analysis. Given our small, non-representative sample, these interviews are not the same as a statistically valid representative survey. Their purpose is not to provide estimates of the share of contractors and other stakeholders with particular views. Their purpose in this report is to generate hypotheses and insights that can be used to make sense of findings from our economic impact analysis and review of the literature.

Based on their experience with state low-bidding procedures in the absence of a prevailing wage law, these stakeholders believe that a prevailing wage law would benefit the state and the industry by discouraging low-road competition. The observations of these industry leaders are consistent with the findings from quantitative and statistical analysis of states with and without prevailing wage laws.

Prevailing Wage Laws Counteract State Low-Bid Contracting Requirements

The dominant view of those interviewed is that, in the absence of any constraint on low-wage competition, state low-bidding laws are counterproductive. In the words of one contractor, "low bidder is not low responsible bidder." While there is a requirement that contractors be "qualified," industry participants say these requirements are not stringent enough to prevent "low-ball" bids. According to a contractor: "You can get folks bidding that have more nerve than brains."

State procurement officials as well as contractors maintain that some low-ball contractors specialize in pursuing "change orders" – identifying places where the original project bid specifications were not sufficiently detailed and then negotiating additional reimbursement to cover the cost of work beyond the original specifications. According to one electrical contractor, "some electrical contractors bid low then chase extras, so at the end of the day the total cost is where we were. After a ton of paperwork and a six or seven month court procedure, the cost is the same as the realistic, responsible bids." State officials say they hold their breath when they open bid prices because they want to avoid certain contractors that are, on paper, qualified.

The emphasis on up-front bid price alone, industry stakeholders say, means that some good contractors won't bid on state jobs. "The number one impact for the state of having to take the lowest bid is that it reduces the number of talented contractors bidding state projects. A low bid policy means that what you get is the bottom feeders bidding against each other for these projects – and a lower quality project."

The reluctance of quality contractors to bid state jobs is exacerbated by the fact that, after an award, the winning general contractor sometimes drops a subcontractor (e.g., electrical, mechanical or plumbing) included in a bid, finding a new subcontractor by "shopping" the original subcontractor bid and using that that as the high bar so that the general contractor can obtain higher profits. "You may be low on bid day but not necessarily get the job. Because of the way our procurement laws are, it is a nasty business and the state of New Hampshire suffers for it." According to a second contractor: "A lot of the best contractors in New England won't bid state jobs because of the job shopping; they would

rather do private downtown jobs in Boston." According to a third contractor: "Currently it's the 'Wild West,' because contractors keep shopping the job…"

At different points in time, contractors and building trades union officials say different contractors may emerge that frequently bid lower than other contractors but then rely heavily on "independent contractors," unskilled temporary agency workers, "apprentices" (although not always supported by quality training and mentoring), or other unskilled, vulnerable workers – as well as change orders – to achieve profits for the contractor. Compared to the 1980s and earlier, there are now a large of number of temp agencies in the state of New Hampshire (one source estimated 30-40) that hire construction workers, which increases the availability of low-wage, low-skilled labor.

According to one contractor, "No one knows the quality of worker they are getting from the temp agency. If they were any good, they'd be working full-time at a contractor. Some contractors take advantage of their people. They overload the apprentice ratio. They pay their top guys decent money but then hire out of Labor Ready guys who don't know anything. Lead guys have to crack the whip and make sure everything is done properly."

Low-bid requirements and low-ball contractors may lead to other cutting corners that increases costs for the state long term. One contractor gave an example of a job for the National Guard on which the contractor used a lower-quality concrete mix with twice as much fly ash as in the original specifications. While this saved the contractor money it also made the concrete weaker so that it failed strength tests. "While the lay person can't see the difference of relying on lower-quality contractors, if you talk to different owners [construction customers], they've seen nightmare after nightmare." Heavy reliance on contractors, according to industry participants, "…can lead to cheating of workers and also on workers' compensation."

Some industry participants believe that the Great Recession and subsequent slow economic recovery exacerbated the negative consequences of the state's low-bid contractor procedures. "The downturn increased the bottom feeding a lot," said one electrical contractor.

A state prevailing wage law, according to New Hampshire industry participants, can help counter the tendency of state low-bid contracting to result in counter-productive price competition. Such a law creates a "level playing field" and places a reasonable floor on wages and benefits on the project. According to one contractor, "Contractors prefer to bid prevailing wage public jobs because the fly-by-night contractors won't be in the mix…"

Another interviewee said: "With prevailing wage, there is an enforced disbarment process of contractors that violate the law. As a result, you end up with more participation from a better class of contractor. Prevailing wage cuts out real low-ball contractors – two guys in a pickup truck – that you might not want participating on a state contract."

Added another industry participant: "What we find with prevailing wage projects is that the law guarantees that the worker has recourse if he's cheated."

Prevailing Wage Laws and the Quality of the Construction Workforce

New Hampshire industry stakeholders interviewed believe that a prevailing wage law is particularly needed as the industry recovers from its deep, long downturn and faces a growing skill shortage. During the extended downturn that began in 2007, apprenticeship programs let in substantially fewer people each year and a lot of good, young people left the industry, creating what one official called "a perfect storm" with regard to skill shortages now that the industry is recovering.

There is a general consensus in the industry today that it is difficult to recruit good workers. According to one contractor: "Everybody complains that we can't get good people…The industry is going to crash and burn if we don't pay to attract better people."

The same contractor added: "There are a lot of good people in the construction, but the perception at a young age is not positive. We too often get the leftovers. That's not a good position for an industry to be in." Another contractor said: "Why come out of high-school and work in the mud for $10 per hour – or less? Young workers don't want to get their hands dirty." A prevailing wage law would substantially reduce the number of jobs on state projects paying close to $10 per hour and exert upward pressure on wage and benefit standards throughout non-residential construction.

Concern about the quality of new recruits is heightened by the awareness that, whatever the perceptions, most construction work requires significant skills. As one industry official said, "You don't want someone working on a boiler who doesn't know what they are doing; or building the backbone of your building; or working on a life-saving sprinkler system."

By relieving short-term downward pressure on wages and benefits, a prevailing wage law can make it easier to attract more qualified recruits. According to one contractor: "The industry hasn't been paying a fair wage. That's a huge problem. The industry needs to pay a fair wage to attract the right people. That's why I believe in prevailing wage."

Prevailing Wage Laws and Construction Costs

In the view of New Hampshire industry participants, the impact of prevailing wage laws on the quality of construction contractors and the quality of construction workers mean that it will not increase costs.

According to one contractor: "Will a prevailing wage increase the cost of public construction? No. If you attract better people, it will ultimately bring down the costs. If we continue to get lower-skilled workers, the cost is going to go up because it's taking longer to get the work done – you operate less efficiently." The same contractor added that higher wage and benefit standards will force contractors to reorganize their jobs to keep costs down, "so cost will level off because people will become more efficient." Customers, he added, should get a higher quality product in the end.

Added another interviewee: "Higher wage people – there's a value in that. Somewhere along the road we made cost the most important thing in the world. It's value, no different than buying a car." He added: "The guy who does things with less qualified people and cheaper materials may be cheaper. But low bid is not low *qualified* bid. There's got to be a happy medium."

Prevailing Wage Laws and Use of Local Contractors and Workers

Contractors interviewed also suggested that prevailing wage laws impact both where New Hampshire workers come from and whether the most skilled construction professionals choose to work in New Hampshire. While most workers employed by New Hampshire contractors come from New Hampshire, you get a few from Vermont and Maine because wages tend to be slightly higher in New Hampshire. By contrast, contractors in recent years have lost some of their best workers who can earn more to the south. “We have lost a lot of our core people over the past two-and-a-half years once the economy and workload in Massachusetts picked up. Some people who were with us for 12-15 years just left.”

Conclusion

New Hampshire's construction industry is now at a fork in the road. State policymakers have the ability to decisively influence whether the state goes down the low road or the high road.

To this juncture, the negative impacts of New Hampshire's lack of a prevailing wage law may have been mitigated by its proximity to a relatively "high road" Massachusetts construction industry, its being surrounded by other states that at least have weak prevailing wage laws, and limited pools of low-wage vulnerable labor.

The Great Recession and the long, slow recovery – which even today leave New Hampshire construction employment 20% below its peak – have reinforced cut-throat competition for business. They have also contributed to skill shortages, with little investment in apprenticeship for much of a decade, and a significant aging of the construction industry workforce that will increase rates of retirement. The residential housing boom right before the Great Recession led to the first significant signs of low-wage immigrant penetration of the state's construction industry.

If the current recovery maintains its momentum, construction companies will have more demand and more need for labor in the next few years. The question is how they will expand their capacity and their workforce. Will they invest broadly in new, young construction professionals, leading to high-wage, high-skill, and high-productivity competition? This could incubate a new generation of entrepreneurs, ready in a few years to move out of the trades to start their own New Hampshire businesses. It could also incubate future supervisors, superintendents, and middle managers – the talent need to position more New Hampshire firms to grow at the high end of the market where quality and sophistication trump low costs and low wages? Or will New Hampshire businesses choose the low-road?

Today, in the absence of a prevailing wage law, New Hampshire's state low-bid procurement procedures push towards the low road. This report documents that a state prevailing wage law would push towards the high road, with more business for New Hampshire contractors that meet local wage and benefit standards and use local workers. Prevailing wage boosts economic activity, supports jobs and higher incomes across New Hampshire, increases state and local tax revenues revenue. A prevailing wage law would improve economic efficiency. And, critically, prevailing wage does not make state construction more expensive.

In a new economy in which lawmakers struggle to find ways to grow the middle class, a prevailing wage law is a "proven policy." It is time for lawmakers to choose the high road and to enact an effective prevailing wage law.