The Impact of Prevailing Wage Laws on Military Veterans:

AN ECONOMIC AND LABOR MARKET ANALYSIS

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Report Fact Sheet

This study is a first-of-its-kind statistical exploration of the economic impact of state prevailing wage laws on veterans in the construction industry. The results are based on publicly available information and are reproducible.

Veterans are more likely to work in construction than non-veterans. Currently, veterans are more likely to be employed as blue-collar construction workers than non-veterans: Veterans account for 5.8 percent of the overall workforce nationwide but comprise 6.9 percent of all blue-collar construction workers. In 2014, an estimated 443,938 veterans were employed as blue-collar construction workers.

The United States military promotes skilled trade apprenticeship: From 2014 to 2024, construction is expected to be the second-fastest growing industry in America. The U.S. military has responded to these employment projections through the United States Military Apprenticeship Program (USMAP). USMAP now accounts for 21.4 percent of all registered apprentices in the United States. Active military members are over 3.7 times more likely to be enrolled in a registered apprenticeship program than civilian workers. As the construction industry grows and replaces retiring workers, apprentices from the military will become an increasingly important source of skilled construction labor.

A veteran who returns home to become a blue-collar construction worker or to open a construction business benefits substantially from prevailing wage policies. Prevailing wage laws establish local construction standards and ensure that blue collar construction workers earn livable wages that reflect the markets where they live. By preventing the government from undercutting privately-negotiated local wages, prevailing wage laws create a level playing field for local businesses competing with out-of-area or foreign companies for bids. More than 75 percent of recent, peer-reviewed academic studies have concluded that prevailing wage laws do not increase the total cost of construction. Prevailing wage laws result in higher productivity and taxpayer savings on materials, fuel, and equipment costs.

Prevailing wage improves economic outcomes for veteran workers. Prevailing wage standards make construction employment more attractive for veterans. Strong or average prevailing wage laws at the state level:

- Increase veteran employment in blue-collar construction occupations;
- Increase the annual incomes of veteran blue-collar construction workers by 7.0 to 10.7 percent;
- Increase employer-provided health coverage for veterans in construction by 11.2 to 14.6 percent;
- Reduce veteran poverty by 23.7 to 31.4 percent for those working in construction;
- Support 7,767 veteran-owned construction firms that would go out of business if the laws were repealed.

FIGURE: FORECAST OF THE ECONOMIC IMPACTS OF REPEALING PREVAILING WAGE LAWS ON VETERANS, NATIONAL

Economic Impact on U.S. Veterans	Current Value	Projected Value	Total Change
Employed as Blue-Collar Construction Worker	240,489	175,714	-64,775
Total Wage and Salary Income	\$9.61 billion	\$6.53 billion	-\$3.08 billion
Total without Health Insurance Coverage	82,693	105,559	+23,866
Total Earning Less than the Official Poverty Line	11,903	16,628	+4,725
Veteran-Owned Construction Businesses	165,331	157,564	-7,767

The economic outcomes of veterans would be significantly altered if all states with strong or average prevailing wage legislation weakened or repealed their laws. If state prevailing wage laws were repealed:

- There would be a 65,000-job drop in the number of veterans employed as construction workers nationally;
- The job separations and earnings losses would result in a \$3.1 billion decline in veteran incomes in construction;
- The number of veterans without health insurance would increase by 24,000 uninsured; and
- Approximately 5,000 employed veterans would now earn incomes below the official poverty line.

If Illinois were to repeal its prevailing wage law, as many as 4,300 blue-collar veterans would separate from their jobs in construction occupations. The total income of all veterans employed in construction jobs would decline by \$216 million, approximately 1,700 veterans would lose their employer-provided health plan, and over 300 veteran workers would fall into poverty. The largest impacts would be experienced in Cook County, St. Clair County, and Sangamon County.

Since 2014, at least 11 states altered or have considered changing their prevailing wage laws: California, Illinois, Indiana, Kentucky, Michigan, Missouri, Nevada, New Mexico, New York, West Virginia, and Wisconsin. If all 11 of these states were to weaken of repeal prevailing wage, an estimated 38,700 blue-collar veterans would separate from their construction jobs, over 13,000 veterans would lose their employer-provided health insurance coverage, and nearly 2,600 additional veterans would earn poverty-level wages while working. State efforts to weaken or repeal prevailing wage policies, if successful, would increase poverty for men and women who served the country and upend an opportunity to achieve a middle-class lifestyle for those veterans who are unable to earn a college degree.

There are significant costs to repealing state prevailing wage laws for veterans. Weakening or repealing prevailing wage standards reduces the attractiveness of employment in a construction occupation for veteran workers. By reducing the number of veterans with employer-provided health insurance, worsening veteran poverty, and shrinking the market share of veteran-owned construction companies, repealing state prevailing wage laws increases taxpayer burdens while reducing the incomes of veteran workers who served their country. Introducing or strengthening a prevailing wage law, on the other hand, promotes a middle-class, self-sufficient lifestyle for veterans choosing to work in construction.

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Background

Introduction

Over the past five years, more than 1 million veterans have exited the military and entered the civilian workforce. Ensuring that those who served the country are able to secure stable civilian employment is a priority for the country. Military service enhances discipline, work ethic, teamwork, leadership, professionalism, and adaptive skills that can be applied in civilian careers. Construction, a fast-growing industry where employers report widespread skills shortages, is a vital option for blue-collar veterans who are either unable or uninterested in attending college.

Registered apprenticeships help bridge the gap between military experience and civilian job requirements. The United States Military Apprenticeship Program (USMAP) offers registered apprenticeship programs for active duty service members. Apprenticeships in construction trades are among the most prominent in the USMAP. By promoting skills development while soldiers are still serving, the military helps to improve the job match between employers and veterans in the construction industry.

Across much of the country, prevailing wage laws impact blue-collar veterans who choose a construction occupation. A prevailing wage law establishes local construction standards, ensuring that workers are paid a local market rate that allows them to support families in the communities where they are building projects. A prevailing wage law enables local contractors to compete for projects on a level playing field with firms from other states or other countries. By preventing the government from undercutting privately-negotiated local wages, prevailing wage laws promote high-road economic development for veterans and other workers alike.

Notwithstanding these worthy objectives and an emerging academic consensus that shows prevailing wage laws have no statistically significant impact on project costs while delivering vital benefits across all sectors of the economy, at least 11 states have considered altering or weakening their prevailing wage laws over the past three years.

Despite the fact that construction is a popular sector of employment for veterans when they return home and enter civilian life, no economic research has explicitly investigated the impacts that prevailing wage laws have on the economic and labor market outcomes of veterans. Commissioned by leading veterans advocacy organization VoteVets.org and conducted by researchers at the Illinois Economic Policy Institute (ILEPI), the Project for Middle Class Renewal at the University of Illinois at Urbana-Champaign, and Colorado State University—Pueblo, this report is a statistical exploration of the impact of state prevailing wage laws on America's veterans.

The background section briefly analyzes information on veterans across the country and how construction occupations present employment opportunities for blue-collar veterans. The next section then evaluates the impact of strong or average prevailing wage laws on veterans working in construction. This section first characterizes prevailing wage laws, discusses extant economic research on the costs of repealing prevailing wage laws, and describes the data and methodology used in this report. Subsequently, the impact of prevailing wage standards on both veteran blue-collar construction workers and veteran-owned businesses is assessed in depth. An implications section utilizes findings to forecast national economic impacts on veterans if all states with a strong or average prevailing wage law were to repeal their law. The estimates are also applied to a state-level analysis for Illinois and for 11 states that have either recently changed, or are considering changes to, their prevailing wage laws. The last section concludes the report by recapping key findings.

Information about America's Veterans

Some regions of the country are more represented in the U.S. military than others, according to 2013 Department of Defense data. Florida, Georgia, Maine, Idaho, Arizona, Virginia, North Carolina, South Carolina, and Alabama have the highest enlistment rates among people between the ages of 18 and 24. North Dakota, Utah, Minnesota, New York,

Vermont, Massachusetts, Connecticut, and Rhode Island have the lowest rates of enlisted personnel per 1,000 people ages 18 to 24 (Bender et al., 2014).

Higher rates of enlistment are strongly correlated with larger shares of veterans in civilian employment when individuals are discharged from the military (Figure 1). According to 2014 data from the American Community Survey, veterans comprise 5.8 percent of all workers across America. In general, veterans are a disproportionately larger share of the workforce in Southern states such as South Carolina (8.0 percent), Georgia (7.1 percent), and Alabama (7.5 percent) and a smaller share of total employment Northeastern states like New York (3.2 percent), New Jersey (3.3 percent), and Massachusetts (3.9 percent). The decision by many veterans to locate back in or near their resident state when they return home impacts the broader U.S. labor market.

Figure 1: Share of Veterans Employed in the Workforce, by State and Occupation, 2014

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State	Veteran Share of All Workers	Veteran Share of Construction Workforce	State
Alabama	7.52%	7.94%	Montana
Alaska	11.21%	5.81%	Nebraska
Arizona	6.80%	6.46%	Nevada
Arkansas	6.61%	6.16%	New Hampsh
California	4.06%	4.51%	New Jersey
Colorado	6.98%	6.90%	New Mexico
Connecticut	4.43%	4.81%	New York
Delaware	7.61%	12.20%	North Carolii
D.C.	3.58%	3.13%	North Dakota
Florida	6.50%	6.00%	Ohio
Georgia	7.08%	6.74%	Oklahoma
Hawaii	8.06%	8.13%	Oregon
Idaho	6.12%	6.83%	Pennsylvania
Illinois	4.51%	7.39%	Rhode Island
Indiana	5.78%	8.62%	South Carolin
Iowa	5.46%	8.40%	South Dakota
Kansas	6.09%	7.50%	Tennessee
Kentucky	6.42%	7.68%	Texas
Louisiana	6.05%	7.76%	Utah
Maine	7.65%	16.65%	Vermont
Maryland	6.89%	8.58%	Virginia
Massachusetts	3.94%	7.33%	Washington
Michigan	5.27%	8.43%	West Virginia
Minnesota	4.94%	9.58%	Wisconsin
Mississippi	6.65%	7.50%	Wyoming
Missouri	6.73%	10.48%	United States

State	Veteran Share of All Workers	Veteran Share of Construction Workforce
Montana	7.89%	10.66%
Nebraska	7.29%	7.65%
Nevada	6.84%	5.39%
New Hampshire	6.72%	7.91%
New Jersey	3.25%	5.27%
New Mexico	7.19%	8.02%
New York	3.24%	5.38%
North Carolina	6.87%	5.63%
North Dakota	6.67%	9.52%
Ohio	6.03%	8.49%
Oklahoma	7.54%	8.45%
Oregon	6.06%	6.98%
Pennsylvania	5.57%	8.18%
Rhode Island	5.43%	4.83%
South Carolina	8.03%	8.97%
South Dakota	7.34%	8.87%
Tennessee	6.98%	8.22%
Texas	6.19%	4.46%
Utah	4.57%	5.46%
Vermont	6.73%	14.01%
Virginia	9.57%	11.32%
Washington	7.80%	9.63%
West Virginia	6.62%	7.36%
Wisconsin	5.48%	8.30%
Wyoming	7.38%	8.12%
United States	5.78%	6.86%

Source(s): Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample). For the United States, the difference between the veteran share of the all workers and the veteran share of the construction workforce is statistically significant.

Veterans are more likely to be employed as blue-collar construction workers than non-veterans (Figure 1). In 2014, 5.2 percent of all veterans worked as blue-collar construction workers. Only 4.3 percent of all non-veterans, by contrast, were employed as blue-collar construction workers. As a result, veterans comprise a larger share of the construction workforce. An estimated 443,938 veterans worked as blue-collar construction employees in 2014, an

occupation with total employment equal to 6,478,564 workers. Thus, while veterans accounted for 5.8 percent of the overall workforce nationwide, they comprised 6.9 percent of all blue-collar construction workers. In fact, the veteran share of construction occupations is higher than the veteran share of all workers in 40 of the 50 states plus the District of Columbia. The higher veteran share implies that broad policy changes impacting construction occupations would have disproportionate impacts on military veterans. As will be discussed in the next section, this is particularly true for veteran construction workers in states that have prevailing wage laws.

From 2007 to 2014, nearly 1.2 million veterans of the War in Afghanistan, the War in Iraq, and other post-2001 conflicts left the military and entered civilian life (Figure 2). In 2007, there were 1.8 million veterans of post-2001 conflicts; by 2014, the number of veterans had increased to nearly 3.0 million. Approximately 2.4 million veterans of post-2001 conflicts are under 35 years old. Additionally, as of 2015, the unemployment rate of veterans of post-2001 conflicts was 5.8 percent, statistically greater than the 5.2 percent unemployment rate of the nonveteran civilian population (BLS, 2016).

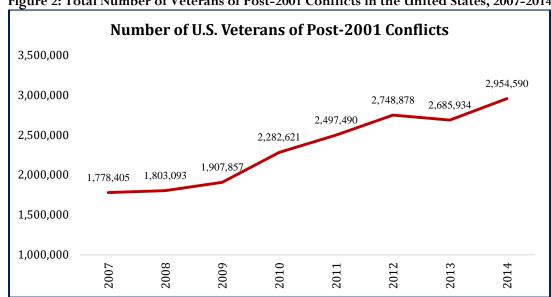


Figure 2: Total Number of Veterans of Post-2001 Conflicts in the United States, 2007-2014

Source(s): Census, 2015 – 2007-2014 American Community Surveys (1-Year Estimate).

Veterans, the Construction Industry, and Apprenticeship Programs

After they separate or discharge from the military, most veterans typically enter the civilian workforce. Despite valuable programs that provide free or low-cost college education to veterans, not all veterans returning home will attend university. The Institute for Veterans and Military Families at Syracuse University finds that construction is the sixth-largest private-sector industry of employment for veterans. At 12.5 percent of veteran employment, manufacturing is the largest private industry to employ those who served in the military (Bradbard, 2016).

Unfortunately, due to globalization and changes in the U.S. labor market, manufacturing is expected to lose 814,100 total jobs over the next decade (BLS, 2015). Thus, blue-collar veterans will increasingly return home to find a manufacturing industry in decline—an industry in which they formerly could have found a good, middle-class job.

For veterans who are unable to earn a college degree, the fastest growing industry of employment will be construction (Figure 3). Construction occupations are already proportionately more likely to employ veterans. From 2014 to 2024, construction is expected to be the second-fastest growing industry in America. Over the next decade, construction is projected to grow by 12.9 percent, adding 790,400 jobs. This growth is second only to the health care and social assistance industry (21.0 percent) but far exceeds projected employment growth in all sectors (6.5 percent). Jobs in

retail trade, another possibility for veterans without a college degree, are only expected to increase by 5.0 percent over the next decade, below the national average.

Steps are already being taken to capitalize on this trend and ensure that blue-collar, post-9/11 military veterans are able to find a career in construction. For example, over 100 construction companies have committed to hiring more than 100,000 veterans by 2019 (Grayson, 2014). The program is part of Joining Forces, an initiative by the Obama Administration to improve private sector employment opportunities for veterans. In committing to hiring more veterans, one executive noted that veterans "often have the traits that are so critical to [the industry's] success: agility, discipline, integrity, and the drive to get the job done right" (Grayson, 2014).

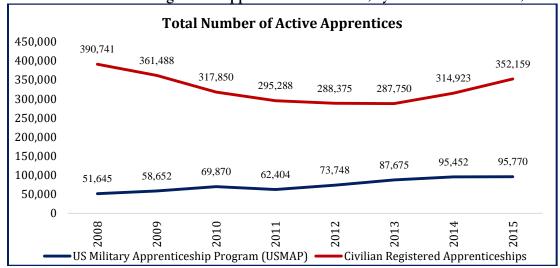
Figure 3: Top 10 Fastest Growing Major Industries in America, by Growth Rate, 2014-2024

Rank	Industry	Growth Rate: 2014-2024	New Jobs: 2014-2024
US	Total	6.50%	9,788,900
1	Health Care and Social Assistance	21.02%	3,627,600
2	Construction	12.88%	790,400
3	Educational Services	9.91%	338,700
4	Professional and Business Services	9.89%	1,889,300
5	Mining	9.50%	80,200
6	Self-employed (Nonagricultural)	6.74%	579,300
7	Leisure and Hospitality	6.40%	941,200
8	Financial Activities	6.36%	507,200
9	Wholesale Trade	5.59%	325,400
10	Retail Trade	4.98%	764,600

Source(s): BLS, 2015 – "Employment Projections – 2014-24."

The U.S. military and active duty soldiers are responding to this trend as well. In the military, soldiers are assigned an occupational specialty and "service members are expected to master the skill requirements and task competencies in each occupational specialty" (Lerman et al., 2015). The military has expanded training in nearly 100 occupations to meet the formal standards of registered apprenticeship through the United States Military Apprenticeship Program (USMAP).

Figure 4: Number of Active Registered Apprentices in America, by Civilian and USMAP, 2008-2015



Source(s): DOLETA, 2015 — "Data and Statistics."

The United States Military Apprenticeship Program has gradually accounted for a larger share of registered apprenticeships in the United States (Figure 4). The U.S. Department of Labor Employment and Training Administration (DOLETA) reports that there were 442,386 active apprentices in registered programs across the country in 2008, of whom 51,645 were enlisted soldiers through USMAP (11.7 percent) and 390,741 were in civilian programs. By 2015, the total number of active apprentices marginally grew to 447,929. The number of active USMAP apprentices, however, significantly increased to 95,770, accounting for 21.4 percent of all apprentices (DOLETA, 2015). According to a study of USMAP, this "growth offset part of the sharp decline in civilian apprentices" (Lerman et al., 2015).

Active military members are disproportionately represented in registered apprenticeship programs. While veterans account for 5.8 percent of the nation's civilian workforce, active military account for 21.4 percent of all apprentices in nationally registered programs. All told, active military members are *at least* 3.7 times more likely to be enrolled in a registered apprenticeship program than civilians—since civilian apprenticeship programs also include veterans, but this breakdown is not reported in the DOLETA data.

Similarly, USMAP's share of apprenticeship completers has increased over time (Figure 5). In 2008, a total of 51,386 workers completed their apprenticeship program. Of these completers, 2,820 advanced through a USMAP trade (5.5 percent). The number of apprenticeship completers expanded slightly to 52,717 individuals by 2015. USMAP completers increased to 11,511 soldiers, accounting for 21.8 percent of all apprentice completers (DOLETA, 2015).

Total Number of Apprenticeship Completers 60,000 53,083 49,993 48,566 47,054 46,294 50,000 44,348 41,206 40,000 34,583 30,000 20,000 11,511 9,834 8,194 6,700 5,185 4,918 10,000 3,439 2,820 0 ഹ US Military Apprenticeship Program (USMAP) Civilian Registered Apprenticeships

Figure 5: Number of Registered Apprenticeship Completers in America, by Civilian and USMAP, 2008-2015

Source(s): DOLETA, 2015 – "Data and Statistics."

Figures 6 through 9 provide work process schedules for four USMAP registered apprentices in the construction tradescarpenters, electricians, operating engineers, and pipefitters (USMAP, 2016). All four registered apprenticeship programs require 8,000 total hours of on-the-job and classroom training. For example, the minimum standards to complete the operating engineer apprenticeship program through USMAP require 4,000 hours of heavy equipment operation, 3,000 hours of construction operations, 500 hours of technical administration, 300 hours of general administration, and 200 hours of safety training. In comparison, the minimum requirements to receive a typical bachelor's degree are 5,760 hours (Manzo, 2014). Enlisted military members who complete registered apprenticeship programs in the trades are therefore receiving high levels of skill that can prepare them for lifelong careers in construction. Prevailing wage laws help veterans capitalize on their apprenticeship training, as the policies improve their earnings and benefits.

Blue-collar service members are enrolling in registered apprenticeship programs through USMAP for at least three reasons. The first is the market's response to the projected growth in construction occupations across America.

Traditional skilled trades such as electricians, carpenters, and operating engineers account for the bulk of registered apprenticeship programs (Reed et al., 2012). It is worth noting that programs are available for other occupations as well, such as nurse assistants, chefs, and computer programmers.

The second reason for completing an apprenticeship program is the personal financial benefit. Participants in a registered apprenticeship program "receive an average of \$123,906 more in compensation than nonparticipants over their careers" including health and other benefits (Reed et al., 2012). By participating in the program, blue-collar service members increase their chances of earning a middle-class lifestyle. Active duty military members can improve their employability and their long-term economic prospects while serving their country, without incurring additional debt.

Figure 6: USMAP Carpenter Requirements

USMAP Work Process Schedule: Carpenter Apprenticeship	
Description	Hours
Foundations, Walls, Floors, & Layout	1,600
Framing, Roofing, Finishing, & Millwork	4,700
Tools and Woodworking Machinery	1,000
Planning and Estimating	200
Safety	500
Total Hours	8,000

Figure 8: USMAP Electrician Requirements

USMAP Work Process Schedule: Electrician Apprenticeship	
Description	Hours
Proper Use of Tools & Equipment	500
Administration & Handling of Material	4,800
Installation of Motors & Controls	1,000
Specialized Applications	700
Maintenance, Repairs, & Installations	1,000
Total Hours	8,000

Figure 7: USMAP Operating Engineer Requirements

USMAP Work Process Schedule: Operating Engineer Apprenticeship		
Description	Hours	
Technical Administration	500	
General Administration	300	
Safety	200	
Heavy Equipment Operation	4,000	
Construction Operations	3,000	
Total Hours 8,000		

Figure 9: USMAP Pipefitter Requirements

USMAP Work Process Schedule: Pipefitter Apprenticeship		
Description	Hours	
Use and Care of Tools and On the Job Safety	600	
Cutting and Joining	3,700	
Installation & Maintenance of Pipe Systems	1,200	
Installation & Maintenance of Equipment	2,000	
Startup Service	500	
Total Hours	8,000	

Source(s): USMAP, 2016 - "All USMAP Trades."

The third reason that soldiers choose to complete an apprenticeship program in a construction trade is the array of similarities between serving in the armed forces and working in a construction occupation. Orion International, an organization that allows companies to attract, hire, and retain military talent, notes that the camaraderie in construction can be similar to that in the military (Jackson, 2014). National Guard reservist Kirk Bradshaw summarized his experience in a civilian joint labor-management training program by noting that the program was similar to being in the military, "especially the structured atmosphere. There's also the support, the brotherhood. ... We were all counting on each other to accomplish a mission" (IBEW, 2009). Finally, both military and civilian construction careers include elements of public service, from defending the country to developing the public infrastructure on which Americans rely.

Prevailing Wage Analysis

What Is a Prevailing Wage Law?

A prevailing wage law specifies wage and benefit standards for construction projects paid for using public funds. The policy requires that workers employed on public construction projects receive compensation that is representative of the hourly earnings normally paid to workers on similar public and private projects in an area. In essence, a prevailing wage acts as a minimum wage for public construction. Contractors can, and often do, pay more than the prevailing wage and benefits package.

The main purpose of a prevailing wage law is to protect local construction standards, local labor market institutions, and the local economy in the competitive public bidding process. Large infusions of government spending into an area, along with a contract award process that favors the lowest bidder, may attract contractors from areas where construction worker wage rates are lower and where the industry underinvests in skills development. Competition between local construction firms and these out-of-area contractors may result in the erosion of local compensation standards and institutions designed to foster skilled workers, and through less local spending, a weaker local economy overall. Public construction puts local workers in the precarious position of having their wages cut in order for contractors to achieve the low bid. Without prevailing wage, this consistent downward pressure results in local markets where construction workers do not earn living wages sufficient to support families in the community where projects are being built—increasing reliance of taxpayer-financed public assistance programs.

Prevailing wage laws create a level playing field for all contractors by ensuring that public works expenditures maintain local standards. Government agencies are not allowed to grant contracts directly to local contractors, due to valid concerns about patronage and corruption. Prevailing wage laws are a solution that promotes transparent bid competition without distorting local wage rates. A prevailing wage law incentivizes contractors to compete efficiently over factors other than labor costs— such as worker productivity, materials costs, technological advances and proficiencies, management practices, and profit margins. Because local standards are protected, public projects become more likely to be completed by contractors and construction workers from the community.

Prevailing wage laws affect all workers the same regardless of race, gender, veteran status, or any other factor. The ascertained rate is the minimum compensation that employers must pay to all workers. However, for blue-collar veterans employed on public construction projects, prevailing wage laws help to promote a middle-class lifestyle and prevent governments from undercutting their wages.

The Costs of Repealing or Weakening Prevailing Wage Laws

An extensive review of the research finds that prevailing wage laws generate considerable benefits to the economy. Recent economic research distinguishes states based on the relative strength, or effectiveness, of the prevailing wage law. The strength of any given state's prevailing wage law is determined by the threshold dollar amount when workers are covered under the policy (if there is a contract threshold), the breadth of projects and specific trades that are covered, the method for setting the prevailing wage rate, and enforcement mechanisms in place to ensure compliance. Distinctions by Thieblot (1995) have since been updated by Duncan and Lantsberg, who conclude that there were 25 states with "strong" or "average" prevailing wage laws and 25 states with either a "weak" prevailing wage policy or no law at all in 2012 (Duncan & Lantsberg, 2015a). Duncan and Lantsberg's breakdown is illustrated in Figure 10.

Weakening prevailing wage laws has been found to have significant negative economic consequences, particularly for local contractors, workers, and taxpayers. Without an effective prevailing wage law, contractors from low-wage, low-skill regions enter the market, win public bids, and take taxpayer dollars back with them to their own states. Data from the 2012 *Economic Census of Construction* reveals that states with weak or no prevailing wage policies experience an influx

of out-of-state contractors performing public construction work. States with weak or no law have 2 percent *less* of the total value of construction work completed by in-state construction firms compared to states with strong or average prevailing wage laws (Duncan & Lantsberg, 2015a). This 2 percent loss of income to out-of-area construction firms can have major impacts on the market. In Illinois, for example, this would equate to over \$1 billion in construction value leaking from the state economy, affecting job creation across all sectors and state tax revenues (Dickson Quesada et al., 2013).

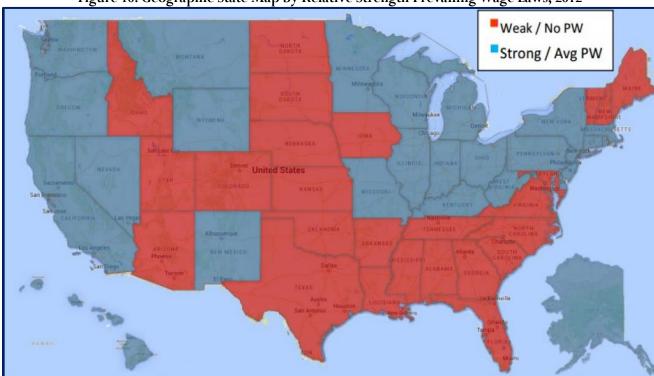


Figure 10: Geographic State Map by Relative Strength Prevailing Wage Laws, 2012

Source(s): Duncan & Lantsberg, 2015.

Weakening prevailing wage has serious impacts on state economies. Recent peer-reviewed analysis finds that weakening prevailing wage in Wisconsin will result in a loss of 2,600 total jobs, \$1.2 billion in economic output, and \$39 million in state and local tax revenues due principally to the flood of out-of-state contractors (Duncan & Lantsberg, 2015a). Similarly, weakening or repealing prevailing wage in Michigan would eliminate 11,000 total jobs, reduce the state's gross domestic product by \$1.7 billion, and lower state and local tax revenues by \$28 million (Duncan et al., 2015). The data show that weakening prevailing wage hurts local contractors and reduces worker wages, particularly for the lowest-paid construction employees. As a result, the most vulnerable workers are pushed into poverty, resulting in increased dependence on government assistance. Economic analysis concludes that, if all 25 states with strong or average prevailing wage legislation decided to weaken their laws, an additional 102,000 blue-collar construction workers would rely on food stamps, 319,000 would lose health insurance coverage, and the corresponding loss of income tax revenue and increased reliance on public assistance would cost U.S. taxpayers at least \$4 billion per year (Manzo et al., 2016).

Efforts to repeal or weaken prevailing wage laws across the country are predicated on the unsubstantiated claim that weakening prevailing wage will cut costs. Opponents of prevailing wage typically cite studies using an outdated and unscientific "wage differential" method (Rosaen, 2013; Kersey, 2007). This approach focuses exclusively on wage differences. The studies fail to account for adjustments in labor productivity, material and fuel costs, contractor profit, and numerous other industry efficiencies that are catalyzed by changes in wages (Philips, 2013).

However, more than 75 percent of peer-reviewed research conducted in the last 15 years has found that weakening or repealing prevailing wage does not reduce overall construction costs (Duncan et al., 2014; Duncan, 2011; Mahalia, 2008). Using state-of-the-art statistical methods, economists and policy researchers have examined the effect of prevailing wage on the cost of building schools, highways, low-income housing, and other structures. An independent report from the Wisconsin Legislative Fiscal Bureau (Horton, 2015) provides the following summary of the research:

"[T]he evidence on prevailing wage effects generally range from relatively small effects to no statistically significant effects. ... These findings echo a 2007 report prepared by the nonpartisan Minnesota Office of the Legislative Auditor which ... concluded that while some studies found a small impact on costs, more comprehensive studies have found that the impact is not statistically significant."

Economists and researchers provide at least three reasons why weakening or repealing prevailing wage does not result in taxpayer savings. First, prevailing wages reflect local labor standards set by competitive practices. State prevailing wage surveys to determine the amount that contractors actually pay workers on public works and similar projects are both effective and reliable (Jordan et al., 2006). A study of contractor bidding behavior in California finds that the presence of prevailing wage regulations does not decrease competition in public bidding, implying that prevailing wage is a true reflection of the local market rate (Kim et al., 2012). Second, labor costs are a low and historically declining percentage of total costs in the construction industry, representing just 23 percent of total construction costs in 2012 (Duncan et al., 2015). Third, when construction wages fall, skilled workers are replaced by untrained workers and material, fuel, rental, and equipment costs rise. Since labor costs represent a small portion of overall costs, drops in worker productivity and minor changes in other costs entirely offset the effect of lower wages (Duncan & Lantsberg, 2015a).

Data Sources and Methodology

This report takes advantage of a policy phenomenon in the American public construction industry. Differences in the strength of state-level prevailing wage laws, as discussed in the previous section, provide a "national laboratory" to conduct research. Some states, such as Illinois, have "strong" prevailing wage laws. Some states, such as Iowa, do not have prevailing wage standards for public works projects at all. Still other states fall somewhere in between the spectrum. These differences allow researchers to draw distinctions and to analyze the economic impacts that those distinctions have on blue-collar veterans working in the construction industry.

This report utilizes data from three sources. First, information on majority veteran-owned businesses was obtained from the 2012 Survey of Business Owners (Census, 2015). The Survey of Business Owners is a comprehensive, stratified sample of businesses and business owners by gender, ethnicity, race, and veteran status that is conducted by the U.S. Census Bureau every five years. The report also uses the 2012 Economic Census of Construction, which is a national survey of construction contractors conducted every five years by the U.S. Census Bureau and the Bureau of Economic Analysis at the U.S. Department of Commerce (Census, 2015).

However, the predominant dataset utilized in this report is the 2014 American Community Survey to analyze impacts on individual veteran workers. The American Community Survey information is an annual poll of approximately 1 percent of the American population by the U.S. Census Bureau. In 2014, the dataset comprised 3,132,610 observations of U.S. residents, including 218,668 responses from military veterans. Analytic weights are provided by the U.S. Census Bureau to match results to the actual American population. The Minnesota Population Center at the University of Minnesota generously makes the data publicly available in easily accessible extractions via the Integrated Public Use Microdata Series (IPUMS-USA) (Ruggles et al., 2015). In this report, a blue-collar construction occupation excludes first-line supervisors and those employed in extraction jobs such as mining and energy production. Typical blue-collar construction occupations include carpenters, electricians, operating engineers, laborers, plumbers, and pipefitters.

Data from the American Community Survey are used in "regression analyses," which separate out the unique impact of strong or average prevailing wage laws from the influence of other factors. The model accounts for construction workers employed directly by the federal government, who earn a Davis-Bacon wage instead of a state-level prevailing wage. The constant term helps to determine percent changes, rather than percentage-point changes, in probabilistic analyses. In a few instances, the report uses a "difference-in-differences" statistical method to understand the effects of a strong or average prevailing wage law. Difference-in-differences are utilized in both the social sciences and the medical field to isolate the impact of a change in one group (the "treatment group") from a similar group (the "control group"). The presence of a strong or average prevailing wage law is the analogous "treatment" in this study.

Prevailing Wage and Veteran Blue-Collar Construction Workers

Veterans are more likely to be employed as blue-collar construction workers in states with a strong or average prevailing wage law, despite fewer veterans residing in those states overall. Figure 11 presents results from a simple "difference-in-differences" analysis using 2014 data. The difference-in-differences approach is used to estimate the impact of strong or average prevailing wage laws after accounting for the fact that veterans disproportionately locate in certain regions of the country.

In the states with a weak or no prevailing wage law, veterans comprised 6.7 percent of the labor force for all occupations other than blue-collar construction workers. Among individuals in the blue-collar construction labor force in these states, 6.8 percent were veterans. Thus, any given blue-collar construction worker was 0.1 percentage point more likely to be a military veteran compared to a worker in all other occupations in the states without effective prevailing wage laws. By contrast, in the states with a strong or average prevailing wage law, veterans comprised just 5.0 percent of the labor force for all non-construction occupations but 6.9 percent of the blue-collar construction labor force. Any given blue-collar construction worker was 1.9 percentage points more likely to be a military veteran in the states with adequate prevailing wage laws. *This difference is statistically significant*.

The difference-in-differences method yields an impact of up to 1.9 percentage points due to strong or average prevailing wage laws statistically increase the veteran share of the blue-collar construction workforce by as much as 1.9 percentage points. Whereas veterans in states without prevailing wage laws tend to seek employment in construction at the same rate as other occupations, strong or average prevailing wage laws encourage more veterans to work in construction. The data indicates that, as career opportunities for veterans, construction occupations may be more attractive in states that have adequate prevailing wage laws.

Figure 11: Difference-in-Differences Estimate of Prevailing Wage Impact on Veteran Employment, 2014

Veteran Share of Workforce by Type of State	Blue-Collar Construction Occupations [A]	All Occupations Other than Blue- Collar Construction [B]	Difference [A - B]
States with a Weak or No PWL	6.77%	6.72%	+0.05%
States with a Strong or Average PWL	6.90%	4.99%	+1.91%
Difference [Weak/No - Strong/Ave]	-0.13%	+1.73%	-1.86%

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample). Simple t-tests reveal that the difference between [A] and [B] is not statistically significant for states with a weak or no prevailing wage law but is statistically significant for states with a strong or average prevailing wage law. To maintain a conservative estimate, however, the former difference is still included in the analysis.

The primary reason that a blue-collar construction occupation may be more attractive in states with a strong or average prevailing wage law is that annual earnings are higher. Intuitively, prevailing wage laws convert what would otherwise tend to be low-wage, low-benefit jobs into more robust middle-class careers. Three statistical approaches are used to estimate the causal effect of strong or average prevailing wage laws on the average annual wage and salary income of blue-collar construction workers, after adjusting for the cost-of-living in each state through "regional price parities"

reported by the Bureau of Economic Analysis at the U.S. Department of Commerce (BEA, 2015). The results are summarized in Figure 12 but reported in full in Appendix Table A.

On average, strong or average prevailing wage laws increase the annual wage and salary income of veteran blue-collar construction workers by between 7.0 percent and 10.7 percent (Figure 12). The first model, which returned the most conservative estimate, is the full workforce model and controls for what similar non-veteran workers earn. The estimated impact of a strong or average prevailing wage law in the full workforce model is a 7.0 percent increase in annual wage and salary income on average. The second analysis, which limits the sample to all military veterans, reports that strong or average prevailing wage laws improve annual earnings by 8.9 percent for military veterans in blue-collar construction occupations. Finally, the third approach investigated only post-2001 veterans of the War in Afghanistan, the Iraq War, and similar conflicts who now have civilian employment. On average, adequate prevailing wage laws boost the annual incomes of recent war veterans in blue-collar construction jobs by 10.7 percent.

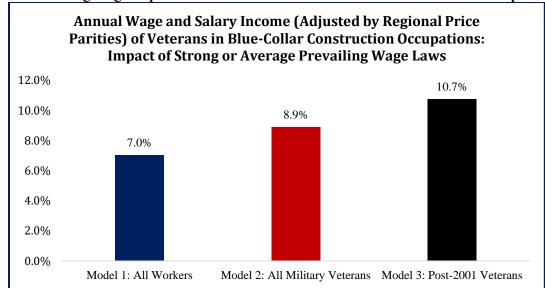


Figure 12: Prevailing Wage Impact on Annual Incomes of Veterans in Construction Occupations, 2014

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample).

Veterans of post-2001 conflicts tend to be younger than their pre-2001 counterparts, and younger workers tend to earn lower incomes. The larger wage and salary hike (10.7 percent) associated with strong or average prevailing wage laws for those who served after 2001 implies that the policy helps younger veterans achieve a middle-class living earlier in their civilian careers. Adequate prevailing wage standards ensure that veterans of recent conflicts abroad do not fall victim to income inequality back home.

Strong or average prevailing wage laws may also make construction an attractive occupation for blue-collar veterans because the laws increase health care coverage. While many people assume that veterans automatically receive benefits from the Veterans Health Administration, fewer than half of the nation's veterans are actually enrolled in the program because it is reserved primarily for certain groups. Veterans with disabilities, former prisoners of war (POWs), Purple Heart and Medal of Honor awardees, and low-income veterans are given priority. As of 2012, more than 1.2 million veterans in America lacked health insurance (Chokshi & Sommers, 2014).

Figure 13 presents the impact of prevailing wage laws on the number of veterans in strong or average law states with employer-provided health insurance coverage, based on 2014 data. After controlling for other observable characteristics, the full model finds that strong or average prevailing wage laws increased the total number of veteran

blue-collar construction workers with employer-provided health insurance by 14.4 percent in those states. In this case, the comparison group is all workers—veteran or not—in other occupations.

Limiting the sample only to veterans produces a similar result, with a positive statistical association of 14.6 percent. In this analysis, veterans in construction are being compared to veterans in all other occupations. The third approach, evaluating veterans of post-2001 conflicts, finds that strong or average prevailing wage laws have improved employerprovided health coverage by 11.2 percent among blue-collar veterans employed in construction occupations. The comparison group in this evaluation is all other post-2001 veterans in non-construction occupations. The effect of prevailing wage laws on the employer-provided health coverage of post-2001 veterans may be smaller because those veterans are younger and more likely to opt out of health coverage.

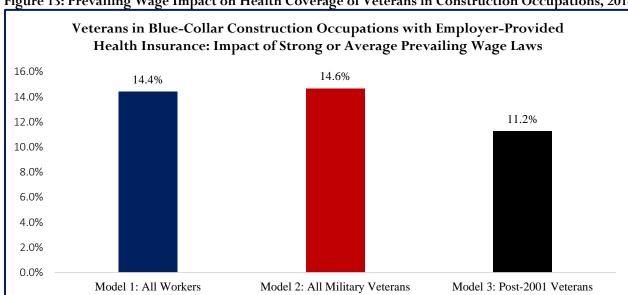


Figure 13: Prevailing Wage Impact on Health Coverage of Veterans in Construction Occupations, 2014

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample).

In states with a strong or average prevailing wage law, the policy is associated with an 11.2 percent to 14.6 percent increase in the number of military veterans with health insurance at work (Figure 13). It is worth noting, however, that the true impact of the Patient Protection and Affordable Care Act is not yet captured in this data. Many aspects of the law were not fully implemented until 2014.

As strong or average prevailing wage laws increase the earnings and health insurance coverage of veterans working in construction trades, they simultaneously reduce veteran poverty (Figure 14). On average, strong or average prevailing wage laws are associated with a 23.7 percent to 31.4 percent reduction in veteran poverty for veterans working in construction in those states. An analysis of the entire U.S. labor market finds that a veteran worker has an 8.3 percent chance of earning an income that is below the official poverty line, independent of his or her occupation, industry, age, race, gender, and other items. In this first model, strong or average prevailing wage laws are found to reduce the likelihood that a veteran will be impoverished by 2.0 percentage points. This reduction translates into a 23.7 percent drop in working poverty overall for veterans who are blue-collar construction workers in states that have adequate prevailing wage laws. Similarly, the veterans-only and post-2001 assessments find that strong or average prevailing

the broader set of institutional arrangements that support working veterans.

¹ A statistical note: This estimate encompasses a dummy variable for strong or average prevailing wage laws that is included for all workers - regardless of whether or not they work in construction. The independent effect of this variable is a positive 4.6 percent increase in health insurance (3.19 percentage points relative to a constant of 68.93 percentage points in Appendix Table B). This result implies that states with strong or average prevailing wage laws have other policies and practices that boost employerprovided health insurance by 4.6 percent regardless of prevailing wage. Nonetheless, those other policies and practices are part of

wage laws decrease veteran blue-collar construction worker poverty by 24.8 percent and 31.4 percent, respectively. Prevailing wage safeguards veterans working in construction from falling below the poverty line when they return home to work in the civilian labor market.

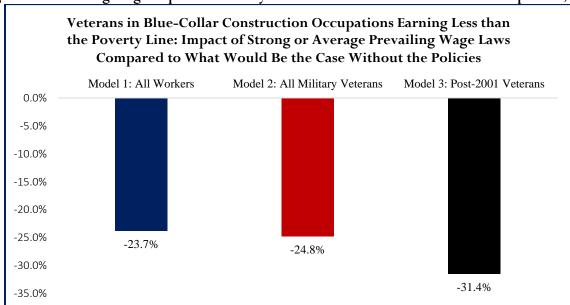


Figure 14: Prevailing Wage Impact on Poverty Status of Veterans in Construction Occupations, 2014

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample).

Prevailing Wage and Veteran-Owned Construction Firms

In the previous section, the data illustrated that veterans are more likely to be employed as blue-collar construction workers in states with a strong or average prevailing wage law, despite fewer veterans residing in those states overall. An evaluation of economic data provides similar results for veteran business owners. Information from the 2012 Survey of Business Owners is incorporated into a difference-in-differences analysis to estimate the impact of strong or average prevailing wage laws, after accounting for the fact that veterans disproportionately locate in certain regions of the country.

In the 25 states with a weak or no prevailing wage law, veterans comprised 9.7 percent of all business owners in industries other than construction. However, 11.9 percent of construction firms are veteran-owned in these states, a 2.2 percentage point difference. By contrast, in the 25 states with a strong or average prevailing wage law, veteran-owned businesses accounted for 8.2 percent of all non-construction firms. In construction, 10.9 percent of contractors were veterans in states with a strong or average prevailing wage law. This means that construction businesses are 2.7 percentage points more likely to be owned by a military veteran compared to all other firms in the states with adequate prevailing wage laws (Figure 15).

Figure 15: Difference-in-Differences Estimate of Prevailing Wage Impact on Veteran Ownership, 2012

Veteran-Owned Share of Businesses by Type of State	Difference
States with a Weak or No PWL	+2.20%
States with a Strong or Average PWL	+2.71%
Difference [Weak/No - Strong/Ave]	-0.51%

Source(s): Authors' analysis of Census, 2015 – 2012 Survey of Business Owners.

The difference-in-differences method yields an impact of up to 0.5 percentage points due to strong or average prevailing wage laws (Figure 15). That is, strong or average prevailing wage laws increase the share of veteran contractors by as much as 0.5 percentage points. This could be because prevailing wage reinforces local construction standards. As previously discussed, states with a weak or no prevailing wage law have 2 percent less of the total value of construction work completed by in-state contractors. Prevailing wage policies thus improve the likelihood that local veteran contractors will win bids on public projects over out-of-area or foreign companies that may employ lower-skilled workers. Veterans may also open contractor businesses in states where the construction industry is more protected and the business environment is more stable. In any case, strong or average prevailing wage laws encourage more veterans to own construction companies.

What would have happened to veteran contractors if the states with adequate prevailing wage laws had decided to weaken or repeal them prior to 2012? While a 0.5 percentage-point difference may seem small, there were 165,331 veteran-owned construction firms in states with a strong or average prevailing wage in 2012. A 0.5 percentage-point decline would translate into approximately 7,767 construction firms. Thus, as many as 7,767 military contractors would have had to close their company doors in 2012 if the states with adequate prevailing wage laws had decided to repeal their laws. By maintaining effective prevailing wage standards, these states protected local veteran contractors.

Implications

Economic Impacts of Repealing State Prevailing Wage Laws on Veterans

The economic outcomes of veterans would be significantly altered if all states with strong or average prevailing wage standards decided to weaken or outright repeal their laws. Strong or average prevailing wage laws improve the attractiveness of a career in a construction trade for veterans because they increase earnings, expand employer-provided health coverage, and reduce the working poverty rate for blue-collar workers without bachelor's degrees. By protecting market share and bolstering local apprenticeship programs to prevent skills shortages, strong or average prevailing wage laws also support local veteran-owned construction companies. If all states with prevailing wage standards suddenly eliminated them, these economic benefits would be jettisoned as well.

Figure 16 aggregates the findings of the previous two sections to forecast this economic impact. If all states with strong or average prevailing wage legislation were to weaken or repeal their laws, the veteran portion of blue-collar construction employment would fall by as much as 1.9 percentage points, from a current share of 6.9 percent. The result would be a considerable, 65,000-job drop nationwide in the number of veterans employed as blue-collar construction workers. This fall in veteran employment would be compounded by a predicted 7.0 percent decline in the average annual wage and salary income of veteran workers. Consequently, the total annual earnings of veterans in construction occupations would decline from \$9.6 billion to just \$6.5 billion. Thus, if all states with strong or average prevailing wage laws were to repeal their policies, veteran incomes would drop by \$3.1 billion in the construction industry. This is the loss of income to veterans from working in construction and it would be partially offset by the displaced workers finding jobs in other industries (Figure 16).

If all states weakened or repealed their prevailing wage laws, the number of veterans without health insurance coverage would increase by about 24,000 uninsured. In addition, approximately 5,000 veterans with jobs would experience income losses significant enough to put them below the official poverty line. This predictive analysis reveals that weakening or repealing prevailing wage standards would increase veteran poverty and force thousands of blue-collar men and women who served their country to rely on government assistance in their civilian life (Figure 16).

Figure 16: Forecast of the Economic Impacts of Repealing Prevailing Wage Laws on Veterans, National

		0 0	
Economic Impact	Current	Projected	Total
on U.S. Veterans	Value	Value	Change
Employed as Blue-Collar Construction Worker	240,489	175,714	-64,775
Total Wage and Salary Income	\$9.61 billion	\$6.53 billion	-\$3.08 billion
Total without Health Insurance Coverage	82,693	105,559	+23,866
Total Earning Less than the Official Poverty Line	11,903	16,628	+4,725
Veteran-Owned Construction Businesses	165,331	157,564	-7,767

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample); Census, 2015 – 2012 Survey of Business Owners.

Applying the data from the previous section, the veteran share of business ownership could fall by approximately 0.5 percentage points for construction companies if state prevailing wage laws were weakened or repealed. This impact translates into a loss of nearly 8,000 veteran-owned contractors across the country (Figure 16).

These economic impacts would have broader effects that are addressed in other economic research (Manzo et al., 2016; Duncan & Lantsberg, 2015a; Kelsay, 2015; Philips, 2014). For veterans specifically, repeal of prevailing wage laws would reduce earnings and shrink consumer demand, resulting in fewer dollars spent in local economies at grocery stores or on health services or on buying a new home. As the productivity of veterans working in construction falls, the number of veterans that rely on government assistance programs increases. The net result is millions of dollars in new taxpayer costs, and— due to lower income tax and sales tax revenues— fewer public dollars to pay for them.

Application to Veterans in Illinois

While the previous sections provide estimates at the national-level, the results can be applied to veterans within states as well (Figure 17). Illinois has a "strong" prevailing wage law with expansive coverage among trades, no contract coverage threshold, and effective enforcement institutions. As a result, veterans comprise approximately 7.4 percent of the blue-collar construction workforce in the state, despite only accounting for 4.5 percent of overall employment in the state (see Figure 11). Once again, veterans are disproportionately employed in construction occupations. In return, construction provides a good middle-class wage to blue-collar veterans in Illinois. The median veteran in a blue-collar construction occupation in Illinois (with non-zero earnings) takes home \$47,500 in annual wages. By contrast, the median veteran with positive earnings in a blue-collar production occupation takes home just \$43,600 in annual wage and salary income.

If Illinois were to weaken or repeal its prevailing wage law, as many as 4,300 veterans employed in construction would become displaced from their jobs. One reason for this drop in veteran employment would be because some their contractors would lose bids on public projects to out-of-state and foreign companies, forcing local contractors out of business. Additionally, some veterans formerly employed in construction occupations would voluntarily choose to leave for another profession because construction wages and benefits would fall. The total wage and salary income of all veterans employed in blue-collar construction jobs would decline by \$216 million in Illinois, approximately 1,700 veterans would lose their employer-provided health insurance plan, and over 300 veteran workers would fall into poverty if the state weakened or repealed prevailing wage (Figure 17).

Figure 17: Forecast of the Economic Impacts of Repealing Prevailing Wage Laws on Veterans, Illinois

Economic Impact	Current	Projected	Total
on Illinois Veterans	Estimate	Estimate	Change
Employed as Blue-Collar Construction Worker	16,949	12,678	-4,271
Total Wage and Salary Income	\$709 million	\$493 million	-\$216 million
Total without Health Insurance Coverage	4,968	6,640	+1,682
Total Earning Less than the Official Poverty Line	653	986	+333

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample).

Some counties would have more affected veterans than others. Figure 18 reports the estimated number of veterans employed in blue-collar construction jobs in 17 large Illinois counties, based upon one-year estimates from the 2013 *American Community Survey*. Cook County, the largest county with over 40 percent of the state's population, comprises over 2,900 veterans working in construction (17 percent of all veterans in construction occupations). In Chicago's "collar counties" of DuPage, Kane, Lake, McHenry, and Will, approximately 3,000 veterans work in construction occupations and benefit from prevailing wage standards. Over 1,000 veterans in both St. Clair County and Sangamon County work in a blue-collar construction occupation as well. The remaining counties presented in Figure 18 all have between 140 and 490 estimated veteran construction workers.

These predictions generally align with a previous forecast on the impact of repealing prevailing wage in Illinois. In *A Weakened State: The Economic and Social Impacts of Repeal of the Prevailing Wage Law in Illinois*, researchers from the University of Illinois, Michigan State University, and the Illinois Economic Policy Institute estimated that a statewide repeal of Illinois' prevailing wage law would shrink Illinois' gross domestic product by \$1.1 billion per year and reduce state and local tax revenues by \$44 million annually. Repeal would also cause a drop in apprenticeship training, resulting in more work-related deaths among construction workers (Dickson Quesada et al., 2013). As this report has shown, veterans are one group that would be disproportionately affected by these changes, accounting for as much as \$216 million of the net loss in economic output.

Figure 18: Estimated Number of Veterans Employed in Construction Occupations, Illinois Counties, 2013

Illinois County	Estimated Veterans Employed in Blue-Collar Construction Occupations
Champaign	390
Cook	2,920
DeKalb	140
DuPage	680
Kane	480
Lake	750
LaSalle	270
Macon	140
Madison	400
McHenry	400
McLean	330
Peoria	490
Rock Island	280
Sangamon	1,070
St. Clair	1,170
Tazewell	310
Will	770
All Other Counties	6,000

Source(s): Ruggles et al., 2014 – 2013 American Community Survey (1 Percent Sample);

<u>Application to States That Have Considered Prevailing Wage Changes Since 2014</u>

Efforts to weaken or eliminate prevailing wage policies through legislative and legal challenges have occurred in at least 11 states since 2014. As a practical matter, these proposals are an attack on the economic status of tens of thousands of veterans who have served their country. Over 131,000 veterans who work in blue-collar construction jobs live in these 11 states, accounting for three out of every ten veterans employed in construction occupations nationwide (29.6 percent).

Many of states have altered or considered changing their prevailing wage laws since 2014:

- 1. In 2014, six **California** cities filed a lawsuit against a statute which only provides state construction funds to cities if they comply with prevailing wage provisions on all public projects (San Diego Superior Court, 2014). The law was upheld, but efforts remain to weaken the state's "strong" prevailing wage law.
- 2. In 2015, **Illinois** Governor Bruce Rauner proposed both a repeal to the state's prevailing wage law and an opt-out provision for local units of government (*Chicago Tonight*, 2015).
- 3. In 2015, **Indiana** completely repealed its state prevailing wage law, called Common Construction Wage (Indiana DOL, 2015).
- 4. In 2015, **Wisconsin** severely weakened its prevailing wage law, mandating that the standards may only apply to state agency and state highway projects starting in 2017 (DWD, 2015).
- 5. In 2015, opponents of the law in **Michigan** campaigned to collect enough citizen signatures to override a veto by Republican Governor Rick Snyder and repeal prevailing wage. After failing, a new petition drive is likely to occur in 2016 (*Crain's Detroit*, 2015).
- 6. In 2015, **Nevada** legislators considered Senate Bill 119, which would have exempted school and university projects from the state's prevailing wage law (*Review Journal*, 2015).
- In 2016, a localized prevailing wage quarrel occurred in New York when Mayor Bill de Blasio of New York
 City aimed to increase affordable housing units by paying rates below the local prevailing wage (Crain's New
 York, 2016).
- 8. In 2016, the **Kentucky** Senate proposed a bill to weaken the state's prevailing wage law by exempting school and university construction from coverage (*Lexington Herald Leader*, 2015).

- 9. In 2016, the **Missouri** House considered a bill that would repeal the state's prevailing wage for public projects (*St. Louis Public Radio*, 2016).
- 10. In 2016, **New Mexico** considered House Bills 110 and 200, which would curtail and eliminate the state's prevailing wage law (Duncan et al., 2016).
- 11. In 2016, **West Virginia** lawmakers overrode a veto by Governor Earl Ray Tomblin and completely repealed the state's prevailing wage law (WSAZ, 2016).

While this section began by estimating impacts if all 25 states with a strong or average prevailing wage law were to repeal their policies, significant changes have only been seriously considered in these 11 states. Full-scale repeal has occurred in both Indiana and West Virginia. In light of these events, Figure 19 forecasts effects on veterans if these 11 states were to weaken their laws. Note that the estimates in Figure 19 *include* the Illinois predictions from Figure 17.

If all 11 states weakened of repealed their prevailing wage standards, an estimated 38,700 blue-collar veterans would separate from their construction jobs through job losses and quits. The results would be over 13,000 veterans losing their employer-provided health insurance coverage and nearly 2,600 additional veterans now earning poverty-level wages while working. These predictions further substantiate previous studies on the impact of repealing prevailing wage in individual states (Manzo et al., 2014; Duncan & Lantsberg, 2015a; Duncan et al., 2015). State efforts to weaken or repeal prevailing wage policies, if successful, would increase poverty for men and women who served the country and upend an opportunity to achieve a middle-class lifestyle for those veterans who are unable to earn a college degree (Figure 19).

Figure 19: Forecast of the Economic Impacts of Repealing Prevailing Wage Laws on Veterans, 11 States

Economic Impact on New York Veterans	Current Value	Projected Value	Total Change
Employed as Blue-Collar Construction Worker	131,292	92,582	-38,710
Total without Health Insurance Coverage	43,708	56,726	+13,028
Total Earning Less than the Official Poverty Line	6,801	9,381	+2,580

Source(s): Authors' analysis of Ruggles et al., 2015 – 2014 American Community Survey (1 Percent Sample).

Conclusions

This study is a statistical exploration of the economic impact of state prevailing wage laws on veterans in the construction industry. From 2007 to 2014, nearly 1.2 million veterans of post-2001 conflicts left the military and entered civilian life. Additionally, hundreds of thousands of today's active duty military members will become jobseekers over the next decade.

Not all veterans returning home will attend college. Currently, veterans disproportionately work in construction occupations. To secure a middle-class lifestyle, blue-collar veterans will increasingly turn to construction, the second-fastest growing industry in America. The U.S. military has responded through the United States Military Apprenticeship Program (USMAP), with apprenticeships in construction that typically require 8,000 total hours of on-the-job and classroom training. USMAP now accounts for 21.4 percent of all registered apprentices in the United States. Active military members are over 3.7 times more likely to be enrolled in a registered apprenticeship program than civilian workers.

Veterans who return home to become blue-collar construction workers benefit substantially from prevailing wage. A prevailing wage law protects local construction standards and ensures that veterans earn living wages that allow them to support families. By creating a level playing field in public construction and preventing the government from undercutting privately-negotiated local wages, prevailing wage laws support local veteran contractors and raise their chances of being awarded a bid over an out-of-area or foreign company. In addition, the preponderance of the evidence finds that prevailing wage laws have no statistical impact on the total cost of construction.

Prevailing wage standards make construction employment more attractive for veterans and improve economic outcomes for veterans. Strong or average prevailing wage laws:

- Increase veteran employment in blue-collar construction occupations by up to 1.9 percentage points;
- Increase the annual incomes of veteran blue-collar construction workers by 7.0 to 10.7 percent;
- Improve employer-provided health coverage for veterans in construction by 11.2 to 14.6 percent;
- Reduce veteran poverty by 23.7 to 31.4 percent for those working in construction;
- Support an estimated 7,767 veteran-owned construction firms.

The economic outcomes of veterans would be significantly altered if all states with strong or average prevailing wage legislation weakened or repealed their laws. If state prevailing wage laws were repealed:

- There would be a 65,000-job drop in the number of veterans employed as construction workers;
- There would be a \$3.1 billion decline in veteran incomes in construction occupations;
- The number of veterans without health insurance would increase by 24,000 uninsured; and
- Approximately 5,000 employed veterans would now earn incomes below the official poverty line.

If Illinois were to repeal its prevailing wage law, as many as 4,300 blue-collar veterans would separate from their jobs in construction. The total wage and salary income of all veterans employed in construction jobs would decline by \$216 million, approximately 1,700 veterans would lose their employer-provided health plan, and over 300 veteran workers would fall into poverty. The largest impacts would be experienced in Cook County, St. Clair County, and Sangamon County, although there are over 140 veterans employed in construction occupations in at least nine other counties.

The consequences would be analogous in the 11 states that have changed, or have considered changing, their prevailing wage laws since 2014. If all 11 states were to weaken or repeal prevailing wage, an estimated 38,700 blue-collar veterans would separate from their construction jobs, over 13,000 veterans would lose their employer-provided health coverage, and nearly 2,600 additional veterans would earn poverty-level wages. State efforts to weaken or repeal prevailing wage policies, if successful, would increase poverty for men and women who served the country and upend an opportunity to achieve a middle-class lifestyle for those veterans who are unable to earn a college degree.

There are opportunities for future research in this area. Recent changes in the prevailing wage laws of Wisconsin, Indiana, and West Virginia will allow researchers to further investigate the impact of weakening prevailing wage on veterans and other groups of workers in construction using retrospective data. The business impact of prevailing wage should also be explored in greater depth. Labor market effects are well understood, but advanced analysis is generally lacking on the causal impact that prevailing wage has on employer profits or on the hiring and separations rates.

The present research, however, finds that there are significant costs to repealing state prevailing wage laws for veterans. Construction will increasingly offer blue-collar veterans the best opportunity to earn a middle-class lifestyle as the manufacturing industry continues to experience long-term decline. Weakening or repealing prevailing wage standards reduces the attractiveness of employment in construction occupations for veteran workers. By decreasing veteran worker incomes, reducing the number of veterans with employer-provided health insurance, worsening veteran poverty, hindering apprenticeship training, and shrinking the market share of veteran-owned construction companies, repealing state prevailing wage laws increases taxpayer costs on the backs of veteran workers who served their country. Strong prevailing wage laws, on the other hand, promote a middle-class economy. Introducing or strengthening a prevailing wage law would disproportionately benefit veterans who are populating the construction trades at higher rates than non-veterans, and who are increasingly utilizing apprenticeship programs to transition into civilian careers in this fast-growing field.

Bibliography

- Bender, Jeremy; Andy Kiersz; and Armin Rosen. (2014). "Some States Have Much Higher Enlistment Rates Than Others." *Business Insider*.
- Bradbard, Deborah; Nicholas Armstrong; and Rosalinda Maury. (2016). Work After Service: Developing Workforce Readiness and Veteran Talent for the Future. Syracuse University, Institute for Veterans and Military Families.
- Bureau of Economic Analysis (BEA). (2015). "Regional Data: Real Personal Income and Regional Price Parities." U.S. Department of Commerce.
- Bureau of Labor Statistics (BLS). (2016). "Employment Situation of Veterans Summary Table A." U.S. Department of Labor.
- Bureau of Labor Statistics (BLS). (2015). "Employment Projections 2014-24." U.S. Department of Labor.
- Census. (2015). "American FactFinder." 2012 Economic Census of Construction and the 2012 Survey of Business Owners. U.S. Census Bureau.
- Chicago Tonight. (2015). "Debating the Prevailing Wage Law." WTTW.
- Choskshi, Dave and Benjamin Sommers. (2014). "Universal Health Coverage for US Veterans: A Goal Within Reach." *The Lancet*, 385(9984): 2320-2321.
- Crain's Detroit. (2015). "Group Trying to Repeal Michigan Prevailing Wage Law Starts New Petition Drive." Crain Communications, Inc.
- Crain's New York. (2016). "Prevailing Wage Would Raise Affordable Housing Costs By 13%, Officials Find." Crain Communications, Inc.
- Department of Labor Employment and Training Administration (DOLETA). (2015). "Data and Statistics." U.S. Department of Labor.
- Department of Workforce Development (DWD). (2015). "The 2015-17 Budget Bill Made Significant Changes to Wisconsin's Prevailing Wage Laws. However, Those Changes Do Not Go Into Effect Until January 1, 2017." State of Wisconsin.
- Dickson Quesada, Alison; Frank Manzo IV; Dale Belman; and Robert Bruno. (2013). A Weakened State: The Economic and Social Impacts of Repeal of the Prevailing Wage Law in Illinois. University of Illinois at Urbana-Champaign; Michigan State University; Illinois Economic Policy Institute.
- Duncan, Kevin. (2011). An Analysis of Davis-Bacon Prevailing Wage Requirements: Evidence from Highway Resurfacing Projects in Colorado. Colorado State University—Pueblo.
- Duncan, Kevin and Alex Lantsberg. (2015). (a). How Weakening Wisconsin's Prevailing Wage Policy Would Affect Public Construction Costs and Economic Activity. Colorado State University—Pueblo; Smart Cities Prevail.
- Duncan, Kevin and Alex Lantsberg. (2015). (b). Building the Golden State: The Economic Impacts of California's Prevailing Wage Policy. Smart Cities Prevail.
- Duncan, Kevin; Alex Lantsberg; and Frank Manzo IV. (2016). "Economic Policy Brief: The Impacts of New Mexico House Bills 110 & 200 (2016)." Colorado State University—Pueblo; Smart Cities Prevail; Illinois Economic Policy Institute.

- Duncan, Kevin; Alex Lantsberg; and Frank Manzo IV. (2015). *The Cost of Repealing Michigan's Prevailing Wage Policy: Impacts on Total Construction Costs and Economic Activity*. Colorado State University— Pueblo; Smart Cities Prevail; Midwest Economic Policy Institute.
- Duncan, Kevin; Peter Philips; and Mark Prus (2014). "Prevailing Wage Regulations and School Construction Costs: Cumulative Evidence from British Columbia." *Industrial Relations*, 53(4): 593-616.
- FPI. (2006). The Economic Development Benefits of Prevailing Wage. Fiscal Policy Institute.
- Grayson, Wayne. (2014). "Construction Companies Join Forces, Commit to Hiring More Than 100,000 Veterans." Equipment World.
- Horton, Ryan. (2015). "Prevailing Wage Laws and 2015 Assembly Bill 32." Wisconsin Legislative Fiscal Bureau. Fiscal Analyst.
- IBEW. (2009). "Veterans Graduate from Rigorous Training Program, Land Jobs." International Brotherhood of Electrical Workers
- Indiana Department of Labor (DOL). (2015). "Repeal: Effective July 1, 2015." State of Indiana.
- Jackson, Tom. (2014). "5 Tips for Hiring Military Veterans at Your Construction Company." Equipment World.
- Jordan, Lisa; Robert Bruno; Phil Schrader; and Tony Sindone. (2006). An Evaluation of Prevailing Wage in Minnesota: Implementation, Comparability and Outcomes. Brevard College; University of Illinois at Urbana-Champaign, University of Minnesota, and Indiana University—South Bend.
- Kelsay, Michael. (2015). The Adverse Economic Impact From Repeal of the Prevailing Wage Law in West Virginia. University of Missouri–Kansas City.
- Kersey, Paul. (2007). The Effects of Michigan's Prevailing Wage Law. Mackinac Center for Public Policy.
- Kim, Jaewhan; Chang Kuo-Liang; and Peter Philips. (2012). "The Effect of Prevailing Wage Regulations on Contractor Bid Participation and Behavior: A Comparison of Palo Alto, California with Four Nearby Prevailing Wage Municipalities," *Industrial Relations*, 51(4): 874-891.
- Lerman, Robert; Devlin Hanson; Myra Tanamor; Lauren Blatt; and Colleen Dobson. (2015). *The United Services Military Apprenticeship Program (USMAP): Implementation Study and Feasibility of an Impact Study*. The Urban Institute.
- Lexington Herald Leader. (2016). "Kentucky Senate Again Seeks to Repeal Prevailing Wage Law for School Construction Projects." Kentucky.com.
- Mahalia, Nooshin. (2008). Prevailing Wages and Government Contracting Costs: A Review of the Research. Economic Policy Institute.
- Manzo IV, Frank (2014). Building a Strong McHenry: How Prevailing Wage Works. Illinois Economic Policy Institute.
- Manzo IV, Frank; Alex Lantsberg; and Kevin Duncan. (2016). *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; Colorado State University—Pueblo.
- Manzo IV, Frank; Robert Bruno; and Scott Littlehale. (2014). Common Sense Construction: The Economic Impacts of Indiana's Common Construction Wage. Midwest Economic Policy Institute; University of Illinois; Smart Cities Prevail.

Philips, Peter. (2013). Mr. Rosaen's Magical Thinking: A Short Evaluation of Alex Rosaen's 2013 Prevailing Wage Methodology. University of Utah.

Philips, Peter. (2014). Kentucky's Prevailing Wage Law: An Economic Impact Analysis University of Utah.

Reed, Debbe; Alberty Yung-Hsu Liu; Rebecca Kleinman; Annalisa Mastri; Davin Reed; Samina Sattar; and Jessica Ziegler. (2012). An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States. Mathematica Policy Research. Submitted to the U.S. Department of Labor Employment and Training Administration.

Rosaen, Alex. (2013). The Impact of Michigan's Prevailing Wage Law on Education Construction Expenditures. Anderson Economic Group.

Ruggles, Steven; Katie Genadek; Ronald Goeken; Josiah Grover; and Matthew Sobek. Integrated Public Use Microdata Series: Version 6.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2015.

San Diego Superior Court. (2014). 37-2014-00003824-CU-WM-CTL City of El Centro vs. David Lanier. Minute Order.

St. Louis Public Radio. (2016). "Bill Would Eliminate Missouri's Prevailing Wage Law." UMSL.

Thieblot, Armond J. (1995). State Prevailing Wage Laws. Prepared for the Associated Builders and Contractors, Inc.

United States Military Apprenticeship Program (USMAP). (2016). "All USMAP Trades." U.S. Navy.

WSAZ. (2016). "UPDATE: Lawmakers Override Tomblin Prevailing Wage Veto." WSAZ News Channel 3.

Appendix

TABLE A: THE IMPACT OF STRONG OR AVERAGE STATE PREVAILING WAGE LAWS ON THE ANNUAL WAGE (ADJUSTED FOR REGIONAL PRICE PARITIES) OF A VETERAN BLUE-COLLAR CONSTRUCTION WORKER

	(1) Full W	orkforce	(2) All Veterans		(3) Post-2001 Veterans	
Ln(Wage)	Coefficient	(St. Err.)	Coefficient	(St. Err.)	Coefficient	(St. Err.)
Strong or Average PWL	-0.00682***	(0.00014)	-0.01191***	(0.00057)	-0.01800***	(0.00103)
Veteran*(Strong or Average PWL)	-0.00363***	(0.00056)				
Construction*(Strong or Average PWL)	0.08071***	(0.00067)	0.10077***	(0.00265)	0.12545***	(0.00493)
Veteran	0.03887***	(0.00044)				
Veteran*Construction	-0.03554***	(0.00134)				
Construction Occupation	-0.00485***	(0.00051)	-0.06344***	(0.00196)	-0.04428***	(0.00356)
Post-2001 Veteran	-0.13760***	(0.00052)	-0.03944***	(0.00088)		
Federal Government	0.23413***	(0.00040)	0.24669***	(0.00087)	0.19637***	(0.01913)
Less than a High School Degree	-0.27518***	(0.00027)	-0.19685***	(0.00202)	-0.23819***	(0.00518)
Some College or Associate's	0.18218***	(0.00017)	0.12009***	(0.00069)	0.07683***	(0.00169)
Bachelor's Degree	0.47408***	(0.00019)	0.38053***	(0.00083)	0.30242***	(0.00182)
Advanced Degree	0.67184***	(0.00023)	0.61066***	(0.00097)	0.65615***	(0.00181)
Lives in a Metro Area	0.11315***	(0.00017)	0.13212***	(0.00066)	0.11704***	(0.00121)
Head of Household	0.15049***	(0.00014)	0.13501***	(0.00059)	0.18582***	(0.00104)
Female	-0.17115***	(0.00014)	-0.15452***	(0.00091)	-0.13877***	(0.00140)
Married	0.17079***	(0.00015)	0.20589***	(0.00061)	0.19481***	(0.00107)
Latino/a	-0.05059***	(0.00029)	-0.05924***	(0.00164)	0.01650***	(0.00243)
White, Non-Latino	0.09562***	(0.00025)	0.09908***	(0.00135)	0.10109***	(0.00205)
African-American, Non-Latino	-0.04351***	(0.00031)	-0.05924***	(0.00152)	-0.01518***	(0.00234)
Usual Weekly Hours Worked	0.03987***	(0.00000)	0.03566***	(0.00002)	0.02848***	(0.00004)
In School	-0.24357***	(0.00024)	-0.15515***	(0.00115)	-0.17259***	(0.00137)
Age	0.07919***	(0.00003)	0.07511***	(0.00014)	0.10707***	(0.00037)
Age^2	-0.00078***	(0.00000)	-0.00074***	(0.00000)	-0.00110***	(0.00000)
Constant	6.5050***	(0.00069)	6.7941***	(0.00409)	5.8720***	(0.02042)
R^2	0.5196		0.3691		0.3994	
Observations ***P 0.01/. **P</0.05/. *P</0.10</td <td>139,981,107</td> <td></td> <td>8,068,043</td> <td></td> <td>2,232,812</td> <td></td>	139,981,107		8,068,043		2,232,812	

^{***}P\(\leq | 0.01 \); **P\(\leq | 0.05 \); *P\(\leq | 0.10 \). Source: American Community Survey (1 Percent Sample). Ruggles et al., 2015.

TABLE B: THE IMPACT OF STRONG OR AVERAGE STATE PREVAILING WAGE LAWS ON THE PROBABILITY THAT A GIVEN VETERAN CONSTRUCTION WORKER HAS EMPLOYER-PROVIDED HEALTH COVERAGE – PROBITS

	(1) Full Wo	rkforce	(2) All Vet	erans	(3) Post-2001	Veterans
Prob(Employer Health Insurance)	AME, DY/DX	(St. Err.)	AME, DY/DX	(St. Err.)	AME, DY/DX	(St. Err.)
Strong or Average PWL	0.03194***	(0.00007)	0.05262***	(0.00031)	0.04285***	(0.00065)
Veteran*(Strong or Average PWL)	0.01305***	(0.00029)				
Construction*(Strong or Average PWL)	0.05424***	(0.00032)	0.04597***	(0.00133)	0.02534***	(0.00299)
Veteran	-0.00211***	(0.00023)				
Veteran*Construction	0.09365***	(0.00065)				
Construction Occupation	-0.11087***	(0.00025)	-0.05152***	(0.00097)	-0.03991***	(0.00213)
Post-2001 Veteran	-0.23653***	(0.00027)	-0.12882***	(0.00047)		
Federal Government	0.28007***	(0.00084)	0.13284***	(0.00351)	0.23399***	(0.01311)
Less than a High School Degree	-0.27171***	(0.00017)	-0.10781***	(0.00108)	-0.06562***	(0.00312)
High School Degree	-0.14467***	(0.00013)	-0.03526***	(0.00052)	-0.04126***	(0.00114)
Some College or Associate's	-0.09627***	(0.00013)	-0.01900***	(0.00052)	-0.01904***	(0.00107)
Bachelor's Degree	-0.02618***	(0.00014)	0.01309***	(0.00057)	0.03623***	(0.00116)
Lives in a Metro Area	0.02618***	(0.00009)	0.02946***	(0.00035)	0.02460***	(0.00076)
Head of Household	-0.00309***	(0.00007)	0.02157***	(0.00032)	0.03195***	(0.00065)
Female	0.00413***	(0.00007)	-0.00672***	(0.00049)	0.00725***	(0.00088)
Married	0.10934***	(0.00008)	0.09717***	(0.00032)	0.02607***	(0.00067)
Latino/a	-0.05566***	(0.00015)	0.00073	(0.00088)	0.00977***	(0.00152)
White, Non-Latino	0.08078***	(0.00013)	0.01863***	(0.00073)	0.02662***	(0.00128)
African-American, Non-Latino	0.01938***	(0.00016)	-0.00804***	(0.00082)	-0.02642***	(0.00146)
Usual Weekly Hours Worked	0.00432***	(0.00000)	0.00385***	(0.00001)	0.00377***	(0.00003)
In School	0.06132***	(0.00013)	-0.03348***	(0.00061)	-0.04547***	(0.00086)
Age	0.01014***	(0.00002)	0.01686***	(0.00007)	0.03113***	(0.00022)
Age^2	-0.00011***	(0.00000)	-0.00020***	(0.00000)	-0.00037***	(0.00000)
Constant	0.68933***	(0.00003)	0.67314***	(0.00015)	0.60608***	(0.00031)
\mathbb{R}^2	0.1463		0.1043		0.0567	
Observations	1,417,043		88,554		19,964	
	(weighted)		(weighted)		(weighted)	

^{***} $P \le |0.01|$; ** $P \le |0.05|$; * $P \le |0.10|$. Source: American Community Survey (1 Percent Sample). Ruggles et al., 2015. NOTE: To convert the values into a percent change, rather than a percentage-point change, the bolded coefficients of interest are summed together and then divided by the respective constant term — which is the probability that any given work has employer-provided health insurance independent of all other factors.

TABLE C: THE IMPACT OF STRONG OR AVERAGE STATE PREVAILING WAGE LAWS ON THE PROBABILITY THAT A GIVEN VETERAN CONSTRUCTION WORKER IS BELOW THE OFFICIAL POVERTY LINE – PROBITS

	(1) Full Wor	rkforce	(2) All Vet	erans	(3) Post-2001	Veterans
Prob(Below Poverty)	AME, DY/DX	(St. Err.)	AME, DY/DX	(St. Err.)	AME, DY/DX	(St. Err.)
Strong or Average PWL	-0.07089***	(0.00004)	-0.00464***	(0.00012)	-0.00473***	(0.00020)
Veteran*(Strong or Average PWL)	0.00274***	(0.00024)				
Construction*(Strong or Average PWL)	-0.01529***	(0.00018)	-0.00337***	(0.00043)	-0.01148***	(0.00113)
Veteran	-0.06522***	(0.00020)				
Veteran*Construction	0.01737***	(0.00045)				
Construction Occupation	0.01907***	(0.00013)	0.00891***	(0.00031)	0.01869***	(0.00078)
Post-2001 Veteran	0.09149***	(0.00018)	-0.00579***	(0.00019)		
Federal Government	-0.03557***	(0.00044)	-0.05488***	(0.00103)	-0.06714***	(0.00359)
Less than a High School Degree	0.11815***	(0.00012)	0.04860***	(0.00041)	0.08056***	(0.00122)
High School Degree	0.08051***	(0.00011)	0.02950***	(0.00028)	0.05067***	(0.00075)
Some College or Associate's	0.06331***	(0.00011)	0.02119***	(0.00028)	0.03636***	(0.00073)
Bachelor's Degree	0.02129***	(0.00011)	0.01128***	(0.00031)	0.02511***	(0.00079)
Lives in a Metro Area	-0.01805***	(0.00005)	-0.00836***	(0.00013)	-0.01727***	(0.00037)
Head of Household	0.03974***	(0.00005)	0.00190***	(0.00012)	0.00515***	(0.00029)
Female	0.00663***	(0.00004)	-0.00021	(0.00017)	0.00361***	(0.00037)
Married	-0.05535***	(0.00009)	-0.02916***	(0.00012)	-0.02368***	(0.00030)
Latino/a	0.00983***	(0.00009)	0.00225***	(0.00031)	0.00151**	(0.00066)
White, Non-Latino	-0.02649***	(0.00008)	-0.00724***	(0.00026)	-0.00720***	(0.00057)
African-American, Non-Latino	0.00844***	(0.00009)	0.00725***	(0.00029)	0.01182***	(0.00064)
Usual Weekly Hours Worked	-0.00339***	(0.00000)	-0.00168***	(0.00000)	-0.00227***	(0.00001)
In School	0.01985***	(0.00007)	0.00397***	(0.00020)	0.00367***	(0.00037)
Age	0.00081***	(0.00001)	-0.00098***	(0.00003)	-0.00464***	(0.00011)
Age^2	-0.00004***	(0.00000)	-0.00000***	(0.00000)	0.00003***	(0.00000)
Constant	0.08282***	(0.00002)	0.03235***	(0.00006)	0.05160***	(0.00014)
\mathbb{R}^2	0.1959		0.1681		0.1456	
Observations	1,417,043		88,554		19,964	
***P < 0.01 **P < 0.05 *P < 0.10 C	(weighted)	., g	(weighted)		(weighted)	T

^{***} $P \le |0.01|$; ** $P \le |0.05|$; * $P \le |0.10|$. Source: American Community Survey (1 Percent Sample). Ruggles et al., 2015. NOTE: To convert the values into a percent change, rather than a percentage-point change, the bolded coefficients of interest are summed together and then divided by the respective constant term — which is the probability that any given worker earns less than the poverty line independent of all other factors.