

Illinois' Prevailing Wage Law and the Cost of Education Construction

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in partnership with:

Illinois Association of School Boards
Illinois Black Chamber of Commerce
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I. Executive Summary

In the State of Illinois, all construction projects for state and local governments, including school districts, counties, and public authorities, are subject to prevailing wage laws. Under those laws, contractors must provide a set wage and provide a set rate for benefits, as determined by the Illinois Department of Labor. These rates vary depending on location, trade, and occupation. Contractors placing bids on public construction projects can compete on several dimensions, but not on the wage that they pay workers.

Illinois is not alone. The federal government, 32 states, and the District of Columbia all have prevailing wage laws for at least a portion of projects funded by public dollars. Illinois' prevailing wage law went into effect in 1941, around the time when many other states adopted their prevailing wage laws. In Illinois, the prevailing wage is set by county, with the Illinois Department of Labor determining the wage and benefits rate based on a review of contracts and bargaining agreements that cover construction work in that county.

PURPOSE OF REPORT

The Illinois chapter of Associated Builders and Contractors, Inc., commissioned Anderson Economic Group to estimate the portion of construction expenditures by school districts and higher education institutions in Illinois that are attributable to the state's prevailing wage law. In this report, we estimate the increase in annual costs due to this law, based on an estimate of the average annual increase in costs on construction projects performed in the years 2002 to 2011.

OVERVIEW OF APPROACH

Prevailing wage laws apply to many types of construction, including public buildings, roads, and schools. In this report, we focus on the construction expenditures of K-12 schools, community colleges, and public higher education institutions.

We rely on data from the U.S. Census Bureau for government expenditures on the construction of public education facilities in Illinois. We used the most recent ten years of data available (2002 through 2011) to estimate a typical annual expenditure amount for education construction in Illinois. We also use data on local construction wages from the Bureau of Labor Statistics, prevailing wages by county from the Illinois Department of Labor, and information from interviews with local contractors and state agencies.

We also surveyed the existing literature on prevailing wage laws to understand the evidence on prevailing wages, construction labor costs, and overall construction costs. Using this data and research, we then estimated the cost savings state and local governments would have realized had the construction contracts carried out in the years considered not been subject to the prevailing wage law.

Limitations

We model construction costs subject to prevailing wage rates and assume that those costs are passed on to the clients, in this case state and local governments in Illinois. In our analysis, we assume that there will not be a substantial change in raw material costs in the absence of a prevailing wage. Also, we do not attempt to project the behavioral responses of the client, such as choosing to build more, larger, or higher-quality buildings when faced with lower overall costs. We only consider the estimated cost savings that would be realized on projects that actually occurred.

OVERVIEW OF FINDINGS

1. We estimate that each year \$2.9 billion in education construction expenditures are subject to Illinois' prevailing wage law.

On average state and local governments in Illinois spend \$2.9 billion on the construction and repair of public K-12 schools, community colleges, and public higher education institutions each year. From 2002 through 2011 this amounted to over \$29 billion in expenditures (after adjusting for inflation). Approximately \$23 billion of these expenditures were spent by Illinois school districts on construction at K-12 schools. The remaining \$6 billion were spent by public universities and community colleges.

*2. In the absence of the state's prevailing wage law, we estimate that Illinois could have saved \$158 million on average **each** of the past ten years.*

We estimate that of the \$158 million in annual savings, \$124 million would have been realized by K-12 schools, and \$34 million by community colleges and public universities. From 2002 to 2011, state and local governments could have saved an estimated \$1.6 billion. See Table 1 below.

TABLE 1. Estimate of the Savings on School Construction in the Absence of Illinois' Prevailing Wage Law (in 2013 dollars)

	Average Annual Savings	Total Savings (2002-2011)
K-12 School Expenditures	\$ 124 million	\$ 1.2 billion
Higher Education Expenditures	<u>\$ 34 million</u>	<u>\$ 0.3 billion</u>
Estimate of Total Expenditures	\$ 158 million	\$ 1.6 billion

Sources: AEG Estimates

Analysis: Anderson Economic Group, LLC

Note: Numbers may not sum to total due to rounding.

**ABOUT ANDERSON
ECONOMIC GROUP**

Anderson Economic Group is a research and consulting firm specializing in economics, finance, business valuation, and industry analysis. Clients include industry associations, private companies, governments, universities, and others. The firm was founded in 1996, and has offices in East Lansing, Michigan, and Chicago, Illinois. See “Appendix B: About AEG” on page B-1.

II. Prevailing Wage Laws in Illinois and Elsewhere

The prevailing wage law is a labor law at the federal and state level that requires a given level of wages and benefits for workers on publicly-funded construction projects. Common projects where these laws apply include the construction of schools, public roads, and government buildings. In Illinois, the prevailing wage law applies to all publicly funded projects involving public works.

In this section, we provide a brief discussion of the history behind both the national prevailing wage law and the statute enacted in Illinois.

PREVAILING WAGE LAW IN THE U.S.

Enacted in 1931, the federal prevailing wage statute, 40 U.S. Code §276, is better known as the Davis-Bacon Act. The Davis-Bacon and Related Acts (DBRA) apply to contractors and subcontractors working under federally funded or assisted contracts in excess of \$2,000 for the “construction, alteration, or repair (including painting and decorating) of public buildings or public works.”¹ The law requires that workers be paid no less than the prevailing wage rates and fringe benefits that correspond to the relevant class of laborers and mechanics employed on similar projects in the area.

The federal government defines the prevailing wage rate as the average wage paid to similarly employed workers in the same occupation in the area of intended employment. These rates are determined by the Department of Labor and Industries for each trade and occupation employed for each county in order to reflect local wage conditions.²

Prior to enactment of the federal prevailing wage, several states chose to enact their own prevailing wage laws. Kansas was the first to establish minimum labor standards for public works construction in 1891, followed by seven other states over the next thirty years: New York (1894), Oklahoma (1909), Idaho (1911), Arizona (1912), New Jersey (1913), Massachusetts (1914), and Nebraska (1923). Between the start of the Great Depression and U.S. entry into World War II, twenty additional states passed their own prevailing wage laws.

Today, 32 states and the District of Columbia enforce prevailing wage laws. Nine states have never had their own prevailing wage laws: Georgia, Iowa, Mississippi, North Carolina, North Dakota, South Carolina, South Dakota, Ver-

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1. U.S. Department of Labor, accessible at <http://www.dol.gov/whd/govcontracts/dbra.htm>.
 2. Rates vary and there are exceptions. For example, apprentices may be employed at less than predetermined rates, but only if they are in a state apprenticeship agency recognized by the Department of Labor or a program registered with the Department. For rates and further discussion see the Prevailing Wage Resource Book, U.S. Department of Labor, accessible at <http://www.dol.gov/whd/recovery/pwrb/toc.htm>.

mont, and Virginia. Another nine states have chosen to repeal their prevailing wage laws since enacting them: Florida, Alabama, Utah, Arizona, Colorado, Idaho, New Hampshire, Kansas, and Louisiana. In Oklahoma, the prevailing wage law was found to violate the state's constitution, and while it has not been repealed or amended, it is not enforced.³

ILLINOIS' PREVAILING WAGE LAW

The Illinois Prevailing Wage Act, Public Act 86-1324, went into effect in 1941. The Act is enforced and administered by the Illinois Department of Labor's Conciliation and Mediation Division. All fixed works constructed by a public body or paid in whole or in part with public funds are subject to the Illinois Prevailing Wage Act. This includes all construction projects financed in whole or in part with bonds, grants, loans, or other funds provided by the State of Illinois or another public entity. The Act applies to modifications to landscape and real estate.

Under the Illinois Prevailing Wage Act, a contractor or subcontractor for a public works project is required to submit monthly certified payroll records to the public body in charge of the project, documenting personal information, hours worked, and wages paid for each worker. The contractor or subcontractor is required to maintain these records for a period of no less than three years from the date of the last payment on a public works project.

If a contractor fails to comply with keeping and maintaining this information, he or she is subject to a Notice of Violation. Failure to submit a certified payroll on a monthly basis can also result in a Notice of Violation. A contractor or subcontractor who receives two Notices of Violation within a period of five years can be banned from receiving contracts for public works projects.

If the Department of Labor determines that a contractor has violated the Act, the contractor will be held liable for the difference between what was actually paid to the workers on the public works project and the prevailing rate. Additionally, the contractor will be required to pay the Department of Labor a penalty equal to 20% of the contractor's underpayment. We were unable to ascertain the frequency of violations and penalties.

The prevailing rate varies by county and is dependent on the type of work being performed. In our interpretation of the Act, each public body has the ability to research and set the prevailing wage rate for various types of work. Similarly, the Department of Labor is required to research and determine the prevailing wage rates for each county in Illinois. If a public body does not determine its

3. In 1995, Oklahoma's prevailing wage law was found to violate its constitution on the grounds that "it impermissibly delegated authority to federal officials." See *Oklahoma City v. State ex rel. Department of Labor*, 918 P.2d 26.

own prevailing wage rate, the rate established by the Department of Labor for the county in which the public body is located will be used.

After conducting interviews and meetings with employees at the Department of Labor and several contractors, we found no instance of a public body setting its own prevailing wage independently of the Department of Labor. In practice, local governments use the rates set by the Department of Labor for the county in which they are located. In addition, there is no set statutory procedure for estimating the prevailing wage rate. The law simply states that the Department of Labor shall “conduct an investigation to ascertain the prevailing rate of wages.” Those affected by the rates are allowed to object.⁴ Our research suggests that the Department of Labor collects local bargaining agreements and sets the prevailing wage rate based on the wages in those agreements.

4. Illinois Compiled Statutes, 820 ILCS 130/9.

III. The Economics of Prevailing Wage Laws

Prevailing wage laws have been a subject of debate for some time at the state and federal level. Opponents question whether the purported benefits of these laws exist or are worth the greater cost, while supporters often argue there is no additional cost. Rigorous economic studies have attempted to quantify the impacts of these laws, with limited success. In this section, we broadly describe the arguments for and against prevailing wage laws. Also, we identify several economic studies that contribute to our understanding of the impact of prevailing wage laws on labor and construction costs.

ARGUMENTS ABOUT PREVAILING WAGE LAWS

Prevailing wage laws are highly complex, differ by state, and continue to be the subject of heated policy debate across the country. Below we briefly summarize the most widely-cited arguments for and against prevailing wage laws. We do not assess the theoretical or empirical merits of each argument. The many items discussed below illustrate that there are many factors to consider in assessing the merits of prevailing wage laws. In this report, we address one: their impact on the cost of construction.

Rationale for Prevailing Wage Regulations

When prevailing wage laws were enacted at the federal level during the Great Depression, they were consistent with President Hoover's theory that high wages caused prosperity. This is still the primary motivation of some proponents of prevailing wage, who maintain that well-paying jobs in the public sector can create and support a middle class, as higher incomes provide disposable income and the opportunity to purchase a home. Higher wages can also mean additional tax revenue from purchased goods and property. In addition, higher wages in the public sector place pressure on the private sector to increase compensation, especially when the public sector makes up a large share of an industry, as in construction.

Proponents also argue that, without a prevailing wage, contractors will have no choice but to use substitute laborers that are unskilled or low-skilled to remain competitive. Keeping those unskilled or low-skilled workers out of the construction site arguably can result in a more experienced and productive workforce that result in higher quality craftsmanship and fewer workplace injuries. If the craftsmanship is higher quality and fewer workers are injured, in the long run there could be savings even with expensive labor due to the lower cost of maintenance and upkeep. Since the process of ensuring high quality can be expensive, time-consuming, or poorly enforced, higher wages provide an indirect way to improve work quality.

Another rationale for a prevailing wage is to keep construction local. By ensuring that construction workers are paid at least the wages and benefits that "pre-

vail” in that community, contractors are deterred from bringing in cheaper labor from outside the community in order to underbid their competition. At the time that the Davis-Bacon Act was enacted, the concern was not the effect of government construction on the overall labor market, but rather the effect that competition from outside firms might have on workers native to the region of a government-funded project. Prior to Davis-Bacon, it was not uncommon to bring workers from another region to a higher cost locality because they were willing to take lower wages that corresponded to their cost of living at home.

It is also argued that the higher wages under prevailing wage statutes can help retain a state’s skilled workforce and attract new entrants into the construction trades. These rates can allow contractors and unions to invest in continuing to train their workers, conduct apprenticeship programs, and build training facilities. Also, they require that a certain amount be paid for pension and health benefits, which are available only sporadically for nonunion construction workers.

Opposition to Prevailing Wage Regulations

Opponents of the prevailing wage argue that prevailing wage laws suppress competition and make it more expensive to hire workers, which can reduce employment and increase costs. Essentially, contractors can only compete on nonpayroll expenses when they bid for public projects. Putting in place a minimum amount that someone must be paid discourages employers from hiring additional employees because the cost to do so is greater.

There are opportunity costs for a contractor to put together a bid and determine what rates apply to which workers for the work needed in each bid. This can be especially time consuming and costly for nonunion contractors who tend to be less familiar with the finely detailed classifications of prevailing wage rates, and smaller companies that rely less on specialization.

The requirement to categorize all tasks for a given profession in order to comply with the prevailing wage can also reduce a contractor’s flexibility. To avoid extensive record keeping, workers may be relegated to one category of tasks, rather than being used as they are needed. Workers are assigned certain legally-defined titles and constrained to a given set of tasks, resulting in less efficient projects.

It is argued by proponents of prevailing wage that higher wages result in workers with better skills that can produce higher quality products. Opponents point out that all projects, regardless of whether prevailing wage rules are in force, are subject to the same construction codes that set standards for quality and safety of buildings. Furthermore, customers have the ability to evaluate the quality of construction projects, both at the contracting stage where materials and methods may be specified, and after completion when many aspects of quality are apparent.

Some proponents argue that the prevailing wage can keep local workers on projects, rather than allowing them to be undercut by cheaper labor from outside a given location. However, insofar as state prevailing wage laws effect low-cost communities, the effect may be the opposite. Local laborers in low-cost locales lose their competitive edge because they cannot offer their services for less and therefore could be less likely to find employment on local construction projects due to the prevailing wage law.

Additionally, as with most regulations, there is an administrative burden. Determining prevailing wage rates and properly implementing them are a tough administrative burden at both the state and national level. In several states, the quality of submitted data that determines the prevailing wage has led to allegations of fraud.⁵ On a federal level, the Labor Department's method for determining "prevailing" rates has been widely criticized for giving far too little weight to lower, nonunion rates that many construction workers in the area receive.⁶ Several empirical studies found errors in how prevailing wage rates were implemented, including examples of states assigning wage rates that were both higher and lower than the true prevailing wage.

In particular, the way that the State of Illinois determines prevailing wage rates does not ensure a competitive wage. The prevailing wage rate is based in large part on the wages and benefits in collective bargaining agreements, which are determined by negotiations between contractors and unions. The prevailing wage is essentially a union wage, regardless of the prevalence of unions in the local market.

EMPIRICAL RESEARCH ON THE EFFECTS OF PREVAILING WAGE

There has been extensive research on the effects of prevailing wage. Below we provide a brief summary of several well-known studies that focus on how prevailing wage laws impact costs. This literature review provides some background but is by no means exhaustive. We draw on the conclusions and findings from some of these studies in our own model, which estimates the additional construction costs associated with Illinois' prevailing wage.⁷

5. In the 1990s, the Oklahoma Commissioner of Labor had uncovered widespread fraud in the submission of data on which prevailing wage determinations were made. See Cook, S. (2005) "Freedom in the Workplace: The Untold Story of Merit Shop Contracting's Crusade against Compulsory Trade Unionism." Washington: Regnery.

6. Wage survey method in use "employs unrepresentative survey and measurement methods that produce wages estimates that are biased upward." See Glassman, S.; Head, M.; Tuerck, D.; and Bachman, P. (2008) "The Federal Davis-Bacon Act: The Prevailing Mismeasure of Wages." Beacon Hill Institute at Suffolk University. Available at www.beaconhill.org/BHIStudies/PrevWage08/DavisBaconPrevWage080207Final.pdf.

7. Not all of these studies specifically focused on education construction costs, and several examine the effects at a federal level or in other states. We discuss how we used these studies to inform our assumptions in "Appendix A. Data Sources and Methodology" on page A-1.

It is difficult to observe the impact of the prevailing wage even in retrospect for several reasons. Firstly, it requires comparing the costs of construction across states or over time, making it difficult to separate a wage differential driven by local construction market conditions from one driven by the prevailing wage. Secondly, there is little data available that sums up the total costs for construction across a range of different projects. For example, some studies are constrained to the bid price alone, or to statewide average compensation levels, costs, or spending within an industry.

Researchers have taken several approaches to study the impact of prevailing wages on costs. One such approach, called cross-sectional analysis, compares contracts that are subject to the prevailing wage and those that are not, but always during the same time period. Typically these studies compare the costs of government contracts in states with prevailing wage regulations with contracts from places without prevailing wage laws. Another approach, called time series analysis, compares the costs in contracts during time periods with a prevailing wage requirement with contract costs in time periods without one within the same state or set of states who have changed their laws over time. We provide a few examples of each approach.

Cross Sectional Analysis

The first econometric cross-sectional study of prevailing wage laws and government construction costs collected construction data in 1977 and 1978 through in-person interviews with contractors of 215 new non-residential buildings in rural areas throughout the U.S.⁸ Nearly half of these projects (113) were subject to the Davis-Bacon Act, with the remaining projects being private. The study concluded that the public projects, which were all subject to prevailing wage rates, were 26.1 percent more expensive than private construction. The authors acknowledged this to be high considering labor costs make up roughly a third of total construction costs. One criticism of this study is that a significant share of this disparity may be from the higher cost of public construction, as compared to private construction, due to a range of causes.

Another study considered the cost of construction projects for public and private schools across all states during the years 1991 to 1999. This study included both types of schools in order to account for the possibility that public schools are more expensive to build than private schools even in the absence of a prevailing wage law.⁹ The researchers found a slightly higher bid price among states with strong prevailing wage regulations, but this result was not statistically significant. Due to their sample size, the researchers were not able to control for the

8. See Martha Fraundorf, John Farrell, and Robert Mason, "The Effect of Davis-Bacon Act on Construction in Rural Areas," *Review of Economics and Statistics*, Vol. 142, No. 6, Feb. 1984.

9. Azari-Rad, Hamid, Peter Philips, and Mark Prus, "State Prevailing Wage Laws and School Construction Costs," *Industrial Relations*, Vol. 42, No. 3, pp. 445-457.

state in which the project occurred, only for whether there was a prevailing wage in that state. Therefore, this study is unable to account for the possibility that local construction markets may alter the apparent impact of the prevailing wage.

A study of California's construction of low-income residential projects concluded that the state's prevailing wage rates raised public costs between 9 percent and 37 percent.¹⁰ The researchers were able to compare construction costs between public projects that were subject to prevailing wage regulation and public projects that were not, as some public projects were exempted.

Time Series Analysis

A study of Michigan, Kentucky, and Ohio in the mid 1990s concluded that when prevailing wage laws were in effect, suspended or repealed, there was no statistically significant difference in the cost between schools built under prevailing wage regulations and those that were not.¹¹ The study examined the time during which Michigan's prevailing wage law was judicially suspended, Kentucky adopted prevailing wages for school construction, and Ohio exempted school construction from its prevailing wage statute. No statistically significant difference was found, but the variance in construction costs across the sample was very high—approximately a third of the average costs for a project. The impact of prevailing wages would need to be much higher than that suggested by other studies for this method and this sample to yield a statistically significant result.

In 2002, five years after repealing the prevailing wage for school construction, the Ohio State Legislature ordered the Ohio Legislative Service Committee (LSC) to study the impact of the repeal.¹² The study concluded that by allowing competitive bidding, taxpayers saved 10.7 percent on construction. The LSC found no meaningful impact on either the quality of construction or on wages received by workers. Due to the methodology of the study, a survey of the state's school district administrators, the LSC concluded that they could not attribute any of the changes definitively to the change in prevailing wage law.

10. The researchers used two different models, which account for the wide variance. One model found an increase in contract costs of 9 to 11 percent, and the other, which used voter and union data, estimated construction costs increase by 19 to 37 percent. See Dunn, Sarah, John Quigley, and Larry Rosenthal. 2005. "The Effects of Prevailing Wage Requirements on the Cost of Low-Income Housing." *Industrial & Labor Relations Review*. Vol. 59, No. 1, pp. 141-57.

11. Philips, Peter, "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," Economics Department, University of Utah, 2001.

12. See Ohio Legislative Service Committee Senate Bill 102 Report: 22–25.

Another study considered the impact of prevailing wage laws on wages, pension benefits, and health benefits, respectively, across all states over the period from 1982 to 1992.¹³ This approach is particularly compelling because the difference in compensation for construction workers is often driven by the need to maintain a certain level of funding in union pension plans. These pension payments impact the local prevailing wage required by the State of Illinois.

This study compared construction worker compensation using a method that controlled for state-level construction markets and accounted for the fact that several states had repealed their prevailing wage partway through the time period of study. It concluded that the prevailing wage raised base wages and benefits by 11% and 61%, respectively, primarily due to an increase in the cost of pension payments.

Conclusion

There are many studies on this subject, providing mixed results. Some studies show that there is no statistically significant effect of prevailing wage on construction costs, while others show an impact of 25% or more, but almost all studies that found an effect found that prevailing wages increase construction costs.

In almost all studies, including those that show no statistically significant effect, there is either a lack of control for state-level variation in construction markets or the sample size is so small that variation in costs outweighs the scale of the impact that we might expect. This latter shortcoming implies that, even in studies with a sound methodology, the level of “noise” (variation in costs) is too high to discern a “signal” (statistically significant cost difference due to prevailing wage laws).

One study that we rely on, in particular, shows how prevailing wage laws have a profound impact on overall compensation, particularly through the provision of benefits. The results of this study corroborate our understanding of how prevailing wages increase the cost of compensation from publicly available data and through discussions with contractors about their business. We rely on the results of this study and other data to estimate the change in construction costs for Illinois schools due to the prevailing wage law. Our estimates ultimately fall in a range that is corroborated by the research we have reviewed here.

13. Peterson, Jeffrey S., “Health Care and Pension Benefits for Construction Workers: The Role of Prevailing Wage Laws,” *Industrial Relations*, Vol. 39, No. 2 (April 2000).

IV. Estimated Impact of Prevailing Wage on Education Construction

Prevailing wage laws apply to many types of construction, including public buildings, roads, and schools. In this report, we focus on the capital expenditures of public education institutions in Illinois. In this section, we discuss education construction expenditures in the state over the past ten years (2002 through 2011). We conclude by providing an estimate for additional annual spending due to Illinois' prevailing wage law.

TOTAL EDUCATION CONSTRUCTION IN ILLINOIS

The expenditures made by local and state governments for public education construction in Illinois from 2002 to 2011 totaled \$23.8 billion.¹⁴ In terms of 2013 dollars, this is nearly \$29 billion.¹⁵ Annual construction expenditures fluctuate greatly. This can be a result of the overall economy, bad weather, changes in funding (such as the federal stimulus), and several other factors.

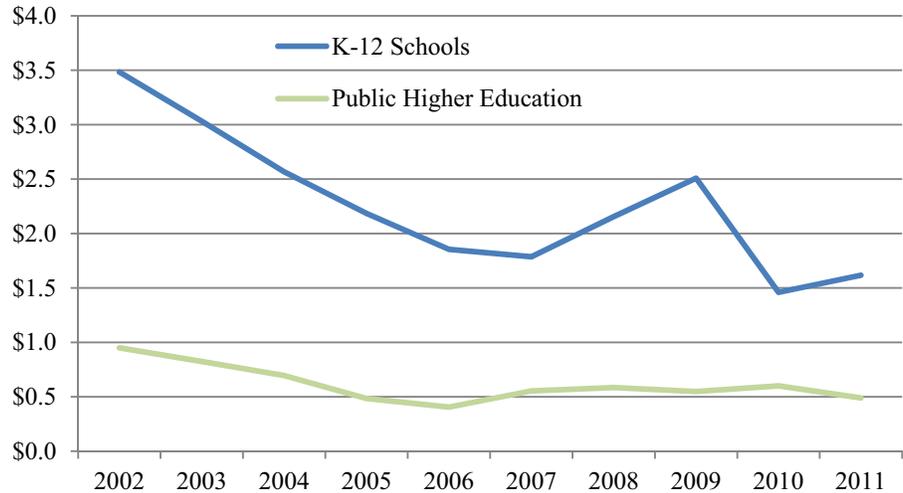
By using a ten-year average of spending that is adjusted for inflation, rather than a single year, we were able to take into account changes in the business cycle and large fluctuations in demand. We consider, then, \$2.9 billion to be a “typical” year of expenditures by Illinois governments on education construction projects.

There are two components of education construction expenditures: K-12 public schools and higher education institutions, which include community colleges and public universities. K-12 construction expenditures over this ten-year period were \$2.3 billion, or nearly 80 percent of total spending on education construction projects. See Figure 1 on page 14 for a summary of spending for each component over the ten years from 2002 to 2011.

14. Due to issues with data submission and quality, the Census Bureau does not make 2003 state finance data available to the public. AEG estimated the 2003 expenditures by taking the average expenditures made in 2002 and 2004. See “Appendix A. Data Sources and Methodology” on page A-1 for additional discussion.

15. The price index we use to adjust for inflation is the Bureau of Economic Analysis price index for gross domestic product that corresponds to state and local governments.

FIGURE 1. Annual Expenditures on Public Education Construction in Illinois (billions of 2013 dollars), 2002-2011



Source: U.S. Census Bureau Survey of State and Local Government Finances; Bureau of Economic Analysis GDP Price Index for State and Local Governments

Analysis: Anderson Economic Group, LLC

Note: Data is not available for the year 2003. The value shown here is the average of 2002 and 2004 values.

IMPACT OF THE PREVAILING WAGE

As discussed above, Illinois has spent \$29 billion on education construction expenditures over the past decade, after adjusting for inflation. We estimate that less than a third of total construction expenses, or about \$770 million annually, are due to the cost of labor. See “Estimating Labor Costs as a Share of Total Construction Costs” on page A-2 for more details on this estimate.

Based on research that estimates the impact of the prevailing wage on compensation, we estimate that the prevailing wage increases benefit payments by employers by approximately 60% and base wages by approximately 10%, on average.¹⁶ We applied these projected impacts to the prevailing wage for all counties and then weighted the impact by population within each county. The weighted reduction in compensation due to eliminating the prevailing wage, according to our estimates, is 20%.

As shown in Table 2 on page 15, when we apply this estimate to our estimate for compensation, we find that \$158 million in annual education construction costs are induced by Illinois’ prevailing wage law each year. The estimated additional costs comprise 5.5% of the annual expenditures made by state and local governments on education construction projects. Applying this estimate to total expen-

16. See “Compensation Under Prevailing Wage Laws” on page A-2.

ditures from 2002 to 2011, Illinois taxpayers could have saved an estimated \$1.6 billion in total over that time period (in 2013 dollars).

TABLE 2. Estimating the Additional Annual Construction Costs due to Illinois' Prevailing Wage Rates

Estimated Expenditures	
Estimate of Public Education Construction Expenditures in Illinois ^a	\$ 2.9 billion
Proportion of Total Expenditures Due to Labor Costs ^b	<u>26.8%</u>
Estimate of Expenditures for Payroll Expenses	\$ 773 million
Estimated Average Reduction in Wages and Benefits without Prevailing Wage ^c	<u>20.4%</u>
Estimate of Additional Cost Due to Illinois' Prevailing Wage	\$ 158 million

Sources: AEG Estimates

Analysis: Anderson Economic Group, LLC

- a. Estimated by taking the annual average from 2002 to 2011, adjusted for inflation.
- b. See “Estimating Labor Costs as a Share of Total Construction Costs” on page A-2.
- c. See “Compensation Under Prevailing Wage Laws” on page A-2.

Note that this is an aggregate impact. Individual counties or localities would see different changes in cost without prevailing wage laws. This estimate includes a change in cost due to a mixture of union and nonunion contractors. Though union contractors may lose some of their advantage without prevailing wage laws, there are many places where union contractors would continue to gain work. Based on estimates from RSMMeans on the difference in wages between union and nonunion contractors, our estimated change in cost implies that just under half of new contracts would go to nonunion contractors in the absence of prevailing wage laws.¹⁷

For further discussion of our methodology and assumptions see “Appendix A. Data Sources and Methodology” on page A-1.

17. This estimate is uncertain given the dynamic nature of the construction marketplace. There is evidence that in the absence of prevailing wage laws, union and nonunion bids remain very close, suggesting that both types of contractors find a way to remain competitive, either through converging compensation costs or other means.

Atalah, Alan, “Comparison of Union and Non-Union Bids on Ohio School Facilities Commission Construction Projects,” *International Journal of Economics and Management Engineering*, March 2013, Vol. 3, Iss. 1, pp. 29-35.

Appendix A. Data Sources and Methodology

TOTAL CONSTRUCTION EXPENDITURES

The primary data source for our analysis was the U.S. Census Bureau's Annual Survey of State and Local Government Finances. The data we used from this survey included:

- Elementary & Secondary Education Construction expenditures, and
- Higher Education Auxiliary Enterprises Construction expenditures and Other Higher Education Construction expenditures, which include spending by community colleges and public universities.

We combined expenditures by state and local governments. Construction expenditures can fluctuate a great deal. In order to get a sense for what state and local governments spend on education construction, we use a ten-year average. The most recent data available from this survey of government finances is from 2011. The Census Bureau did not have 2003 data available by state. AEG called the Census Bureau and they stated that, due to issues with data submission and quality, the Census Bureau does not make 2003 state data available to the public. We estimated the 2003 expenditures by taking the average of expenditures made in 2002 and 2004. We then adjusted for inflation and put all expenditures in 2013 dollars.

The price index we used to adjust for inflation was the state and local government component of the gross domestic product price index, provided by the Bureau of Economic Analysis. This index provides a good estimate for how costs have changed over time for government purchases, rather than for the average consumer.

CONSTRUCTION COST MODEL

A number of factors can impact the cost of a construction project including the building age, type, function, amenities, materials, and size. In the estimate presented here, we assume that the projects executed and the cost of non-labor components of construction would be unchanged without prevailing wage laws. We do not attempt to project the behavioral responses of the consumer, such as choosing to build larger or higher-quality buildings when faced with lower overall costs.

There is a great deal of research on the effects of prevailing wage on construction costs. Our scope of analysis is limited to estimating how much local and state governments spend on education construction due to Illinois' prevailing wage law. To inform our model, we draw on the conclusions and findings from this research. We build our own set of assumptions keeping in mind these studies are not necessarily specific to Illinois or to education construction costs, in particular.

We began with the inflation-adjusted expenditures on education construction in Illinois. We then consider how much of this spending is due to labor costs. We estimated 26.8% of construction costs come from labor compensation, and that the cost of compensation would be 20.4% lower, on average, without the prevailing wage restriction. We discuss the analysis behind these estimates in “Estimating Labor Costs as a Share of Total Construction Costs” and “Compensation Under Prevailing Wage Laws” below.

The above numbers imply that public education construction costs in Illinois would be 5.5% lower without the prevailing wage law.

Estimating Labor Costs as a Share of Total Construction Costs

The Economic Census, performed by the Census Bureau every five years, provides extensive data on the construction industry by state. Results for the year 2012 are not yet available. However, results from 2002 and 2007 provide total payroll for construction worker wages, fringe benefits for all workers in the construction industry, and the net value of construction work for all projects in Illinois. The net value of construction work is the total cost of construction minus the amount paid out by construction companies for subcontractors (this eliminates double-counting when aggregating statistics across the state).

For each survey, we estimate the fringe benefits for construction workers by assuming that they are the same as the average fringe benefits for all workers, as a share of payroll. We then divide the total wages for construction workers and estimated fringe benefits by the total net value of construction. This amount, in each survey, is the cost of labor as a share of total cost of construction. In 2002, this share was 30.6%. In 2007, it was 24.5%.

Recall that we used construction expenditures for the year 2002 to 2011 in our analysis. In the year 2002, we applied the share from the 2002 Economic Census and in the year 2007, we applied the share from the 2007 Economic Census. For the years in between, we assumed that the share changed along a linear trajectory. For all years following the year 2007, we assumed that the 2007 Economic Census share of 24.5% for labor costs continued to apply.

Using this method, in aggregate, the labor cost share across all ten years was 26.8%.

Compensation Under Prevailing Wage Laws

AEG found several studies that estimated how much higher prevailing wage rates are than average industry wages. Many of these studies compared state or federal prevailing wage rates with the Bureau of Labor and Statistics’ data on wages. While this analysis is descriptive, it assumes that the wage would simply be the industry average in the absence of the prevailing wage. This is not necessarily the case.

We ended up relying on one study, in particular, because it used a sound methodology and allowed us to apply impacts to prevailing wage rates in the State of Illinois, specifically. In a study on the impact of prevailing wage laws on wages, health care, and pension benefits, respectively, it was found that prevailing wage laws increased wages by 11% and total benefits by 61%.¹⁸

We compared these findings to published prevailing wage rates by county, and discussed them with contractors to ensure that they corroborated real-world experience in Illinois. Most contractors confirmed that, by far, the greatest impact of the laws was on their required benefit payments.

Note that this is an average impact. It is likely that the impact for an individual contractor could be considerably larger or smaller. If, for example, a contractor who works on a public project would be working with union labor even without the prevailing wage law, this impact would be minimal since the bargained wages and benefits for the union are likely similar to the prevailing wage rate. On the other hand, contractors who do not use union labor that bid for a public works project may not provide pension benefits at all in the absence of the prevailing wage law. The research we reviewed suggests that, on average, pension costs will be cut in half.

We applied these impacts to wages and benefits (health care and pension benefits) required by prevailing wage laws for each individual county to estimate a hypothetical compensation rate in that county if there were not prevailing wage laws. We then estimated the percentage difference between this hypothetical compensation level and the compensation level under prevailing wage laws. Finally, we estimated an aggregate change in compensation statewide, by taking the average difference in compensation across all counties, weighted by the county's population in 2010.

18. Peterson, Jeffrey S., "Health Care and Pension Benefits for Construction Workers: The Role of Prevailing Wage Laws," *Industrial Relations*, Vol. 39, No. 2 (April 2000).

Appendix B: About AEG

Anderson Economic Group, LLC was founded in 1996 and today has offices in East Lansing, Michigan and Chicago, Illinois. AEG is a research and consulting firm that specializes in economics, public policy, financial valuation, and market research. AEG's past clients include:

- *Governments* such as the states of Michigan, North Carolina, and Wisconsin; the cities of Detroit, Cincinnati, Norfolk, and Fort Wayne; counties such as Oakland County, Michigan, and Collier County, Florida; and authorities such as the Detroit-Wayne County Port Authority.
- *Corporations* such as GM, Ford, Delphi, Honda, Taubman Centers, The Detroit Lions, PG&E Generating; SBC, Gambrinus, Labatt USA, and InBev USA; Spartan Stores, Nestle, automobile dealers and dealership groups representing Toyota, Honda, Chrysler, Mercedes-Benz, and other brands.
- *Nonprofit organizations* such as Michigan State University, Wayne State University, University of Michigan, Van Andel Institute, the Michigan Manufacturers Association, United Ways of Michigan, Service Employees International Union, Automation Alley, the Michigan Chamber of Commerce, and Detroit Renaissance.

Please visit www.AndersonEconomicGroup.com for more information.

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Mr. Horwitz is a Consultant at Anderson Economic Group, working in the Public Policy and Economic Analysis practice area. Mr. Horwitz' work includes research and analyses for a range of AEG clients representing both the public and private sectors.

Mr. Horwitz's recent work includes an analysis on the proposed reforms to Chicago municipal pensions, an assessment of the effects of personal property tax reform in Michigan, an assessment of the effects of proposed reforms to state pension and retiree health care systems, analyses of the fiscal condition and tax policies of Michigan's state and local governments, and a review of tax incentive programs administered by the Commonwealth of Kentucky.

Prior to joining AEG, Mr. Horwitz was the Coordinator of Distribution for the Community Center of St. Bernard near New Orleans, where he oversaw the distribution of donated food, clothes, and household supplies to low-income residents of St. Bernard Parish and New Orleans' Lower Ninth Ward.

Mr. Horwitz holds a Master of Public Policy from the Harris School of Public Policy at the University of Chicago and a Bachelor of Arts in Physics and Philosophy from Swarthmore College.

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David Westlake is an Analyst with Anderson Economic Group, working in the Public Policy and Economic Analysis practice area. His background is in energy and utility policy, as well as economic analysis. His work at AEG includes research and data analysis, as well as assisting on economic impact valuation projects.

Prior to joining Anderson Economic Group, Mr. Westlake worked as an Intern at the American Council on Renewable Energy in Washington, DC and at the US Embassy in Singapore. During graduate school he worked as a Research Assistant at Michigan State University's Institute of Public Utilities. His work included research and market analysis on developments and trends in the energy, water and communications industries.

Mr. Westlake holds B.A.s in both International Relations and Economics from Michigan State University and returned to MSU to earn his Master's of Public Policy.