

BUILDING THE GOLDEN STATE



THE ECONOMIC IMPACTS OF CALIFORNIA'S PREVAILING WAGE POLICY



KEVIN DUNCAN, Ph.D., *Professor of Economics, Colorado State University*

ALEX LANTSBERG, MCP, AICP, *Research Analyst, Smart Cities Prevail*

— March 2015 —

EXECUTIVE SUMMARY

In recent years, prevailing wage policies have been the subject of vigorous debate in city councils, state legislatures, and the Congress. Often missing from the discussion is the broader effect of prevailing wage on the overall economy.

Prevailing wage laws were first established in the 1930s — both federally and in many states — to maintain local labor standards and increase the amount of construction work being done by local businesses and workers. As will later be discussed, some states have strong prevailing wage laws, some have no prevailing wage laws, and still others are somewhere in between.

For the purposes of this study, the question “What would be the economic impact of eliminating prevailing wage in the state of California?” is posed.

Using IMPLAN software — the industry standard — along with data from the Census of Construction and the American Community Survey the economic impacts of prevailing wage policy choices were analyzed, and the outcomes were compelling.

Our research concludes that eliminating prevailing wage would have broad reaching negative impacts across the California economy. These impacts include:

- ▶ **A net loss of more than 17,500 jobs — not just in the construction industry — across large swaths of the economy.**
- ▶ **A \$1.5 billion dollar loss in real income to Californians working in a variety of economic sectors outside of the construction industry. The overall impact to California’s economy would be a \$1.4 billion output reduction.**
- ▶ **Greater inefficiencies in the construction industry with 5% greater materials use and per worker productivity declines of 12%.**
- ▶ **A loss of between \$8 and \$8.9 billion in income and reduced earned benefit contributions for construction industry professionals.**

Because prevailing wage elimination would reduce workers’ wages and overall spending, the effects would ripple across all sectors of the economy. Worse, as past research has shown, it would also increase the reliance of full-time construction professionals on taxpayer funded public assistance programs.

While these negative impacts would be a major change from the status quo, they should also be considered together with prior research that has concluded prevailing wage has a neutral effect on the overall cost of public construction.

Our findings make it clear that if California repealed its strong prevailing wage laws, the consequences would spread outward resulting in negative impacts to nearly every sector of the economy.

INTRODUCTION

Prevailing wage laws (PWL) establish minimum standards for construction funded with public dollars and have been part of the construction landscape at the state and national levels since the 1930s. The impacts of prevailing wage policies on construction costs and quality, labor markets, and productivity have been the subject of extensive economic analysis over the decades. However recent debate about income inequality, infrastructure investment, labor standards, and fiscal policy have brought renewed focus on prevailing wages and has sparked renewed study of prevailing wage impacts.

“ a robust and growing body of evidence shows prevailing wages to be a key labor standard undergirding the middle class ”

While a robust and growing body of evidence shows prevailing wages to be a key labor standard undergirding the middle class, local economic development, and construction industry workforce development at no additional cost to taxpayers, legislation that aims to repeal or weaken prevailing wage standards is perennially introduced in states across the country.

Careful analysis of construction costs reveals that there is no consistent evidence that prevailing wage policies impact overall construction costs.¹ The results indicate that contractors faced with prevailing wage and other requirements deploy a combination of strategies to minimize project costs, which include increasing productivity through heightened managerial and job-site efficiency, the substitution of equipment for labor, and/or the employment of highly skilled and trained workers.²

Our study aims to analyze the statewide economic impacts of prevailing wages by modeling changes in how the construction industry uses materials, services, and labor to produce a finished product. This differs from traditional economic analyses of prevailing wage policy which focus on just one or two measures like construction costs, productivity, and investments in

safety and workforce development, and earned benefits like health care and retirement security, rather than the impacts of the policy on the economy as a whole.

This recognition is key because while the construction process is generally similar across the nation, the construction industries in states with and without prevailing wage laws differ markedly in how they are organized. These structural differences extend beyond the wages earned by construction workers to include materials use rates, management productivity, local subcontracting rates, income distributions for both construction and administrative workers, provision of earned benefits, and other factors. In the interest of providing the most complete information possible, we have included an Appendix at the end of the study which provides the raw data used to achieve these results.

“ there is no consistent evidence that prevailing wage policies impact overall construction costs ”

UNDERSTANDING ECONOMIC IMPACT ANALYSIS

An activity has an economic impact if it draws, or attracts “new dollars” to a region. When these funds are spent within the region, additional economic activity takes place. For example, California’s prevailing wage standard is associated with middle-class incomes for the state’s construction workers. Additional economic activity is induced as construction industry employees spend a portion of their income in their communities.

This process is often referred to as a “ripple effect”, where the initial stimulus to a local economy — the spending by California construction workers — is multiplied as additional local rounds of income, spending, and job creation take place. Because of the ripple effect, the total impact of construction worker spending on the California economy will be larger than the initial spending by these workers. Relatedly, since prevailing wages are also associated with higher shares of construction spending with in-state firms as is shown later, public works expenditures are more

likely to be reinvested into a local workforce. The data also indicates that prevailing wage laws help shift construction business revenues back into the economy instead of being retained. This shift produces a measurable increase in spending in California — resulting in more economic activity and job creation due to the state’s prevailing wage law.

“California’s prevailing wage standard is associated with middle-class incomes for the state’s construction workers.”

THE IMPLAN ECONOMIC IMPACT SOFTWARE

This economic impact study uses the IMPLAN software and data for the state of California to estimate the ripple, or multiplier, effect of the spending associated with the state's prevailing wage standard. Specifically, this software (IMPLAN) is used to estimate the impact on state-level economic activity, employment, and tax revenue. IMPLAN (Impact analysis for PLANning) was originally developed by the U.S. Department of Agriculture to assist the Forest Service with land and resource management planning. The Minnesota IMPLAN Group (MIG) started work on the data-driven model in the mid-1980s at the University of Minnesota. The software was privatized in 1993 and made available for public use. The software contains an input-output model with data available at the zip-code, county, state, and national levels.

Input-output analysis measures the inter-industry relationships within an economy. Specifically, input-output analysis is a means of measuring the market transactions between businesses and between businesses and consumers. This framework allows for the examination of how a change in one sector affects the entire economy. In this way, input-output analysis is able to analyze the economic effects of policy alternatives by measuring the multiplier, or ripple effect, as an initial change in one industry that stimulates further changes in transactions between other businesses and households.

The results reported in this study are based on industry figures from the 2007 Economic Census (the most recent available as of August 2014), income distributions in the 2011 5-year American Community Survey, and 2007-2009 health care industry spending proportions from the National Health Expenditures Survey. IMPLAN deflators are used to adjust for changes in prices over time. The results are reported in 2014 dollars.

“ this software (IMPLAN) is used to estimate the impact on state-level economic activity, employment, and tax revenue ”

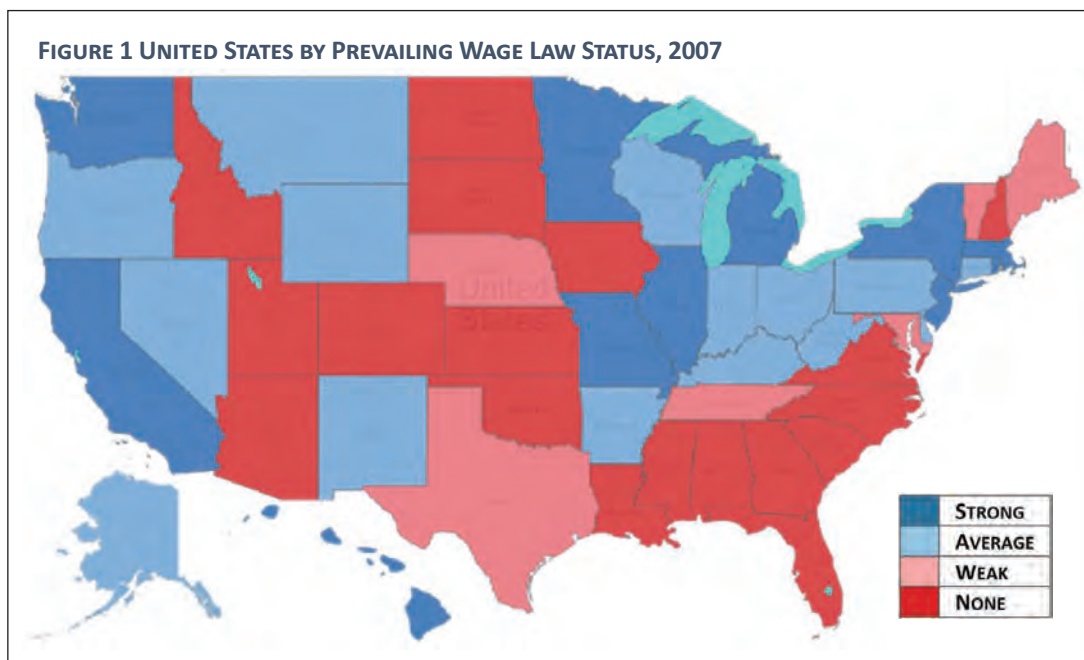
THE DUAL WORLDS OF THE CONSTRUCTION INDUSTRY

The nation's construction industry is incredibly diverse, employing 6 million persons in more than 650,000 establishments, comprising approximately 5% of Gross Domestic Product and 4% of national non-farm employment in 2013.³ However, this national total obscures significant differences in how the industry is organized around the nation.

In this study, we divide the United States into two groups of states: 26 states with average and strong prevailing wages laws and 24 states with weak or no prevailing wage laws.⁴ The prevailing wage states account for 56% of the nation's population, 53% of \$1.33 trillion of construction output and 52% of the industry's total employment, yet 57% of its construction wages paid and 63% of the industry's earned-benefit payments.⁵ Figure 1 below maps the states by their prevailing wage status.

Relying on the Census of Construction, it is possible to break the industry down into its major cost components and examine the differences between the two groups, and how these groups compare to California. We know that states with "strong" and "average" prevailing wage laws, and those with "weak" and non-existent ones differ in ways other than this policy.

“ In the absence of prevailing wage laws, a contractor's search for cheaper labor is more likely to result in the use of more out-of-area subcontractors ”

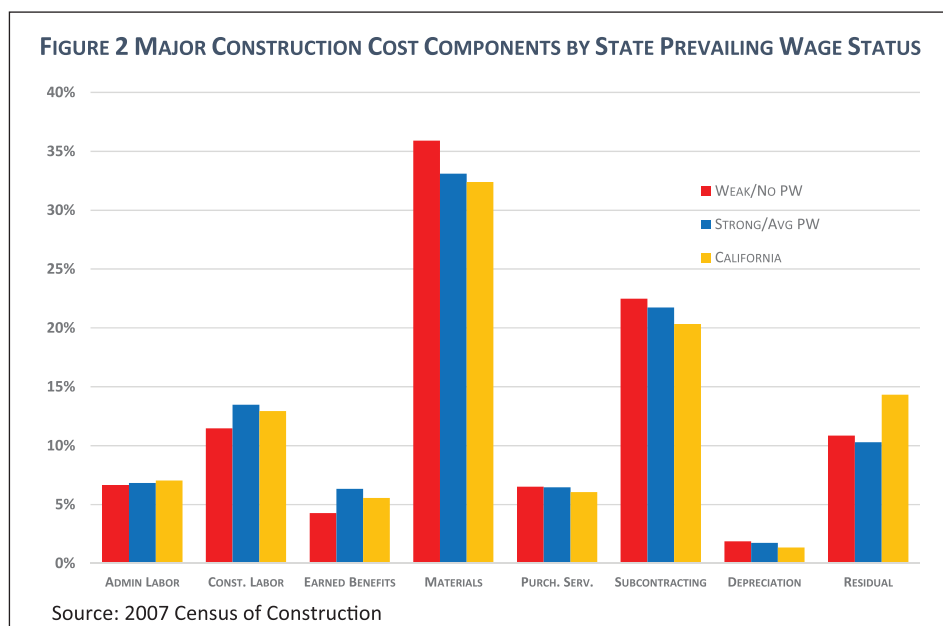


For example, while the construction process is generally similar nationwide, the differences in the methods and techniques between states are consistent with the differences economists expect when wages are higher or lower in an industry (or when PWL apply and when they do not). The payment of prevailing wages is associated both with a higher labor share of construction value and a higher rate of in-state contracting (discussed further below). In the absence of prevailing wage laws, a contractor's search for cheaper labor is more likely to result in the use of more out of area contractors that pay less than local area standards. Similarly, while the payment of middle-class sustaining wages tends to yield more skilled workers and more job site efficiencies, the data suggests that absence of prevailing wage standards has the opposite effect.

Apart from their overall size, clear differences between states with and without PWLs, as well as California's unique position between them, are visible in Figure 2. Consistent with economic research, we see that the cost of construction labor comprises a smaller share of overall construction value in states without PWLs, 11.5% vs. 13.5% and 12.9% in California. This translates into lower earnings for construction workers in non-PWL states. Also consistent with economic research, benefit payments are significantly lower in states without PWLs, 4.3% vs. 6.4%, and 5.6% in California.

“ payment of middle-class sustaining wages tends to yield more skilled workers and more job site efficiencies, the data suggests that absence of prevailing wage standards has the opposite effect ”

These national differences prove to be significant in the context of California's \$214 billion in total construction value, translating into more than \$9 billion of wages and health care and retirement investment for California's construction industry workforce.⁶ As table 2 makes clear, reductions in wages and earned benefit payments to these workers would be offset by dramatic increases in materials use. Similarly, we see that non-PWL states have higher rates of subcontracting and depreciation. The balance of the difference in labor, materials, and services goes to firm owners as pre-tax earnings in non-PWL states at 10.8% compared to 10.3% in PWL states. Construction business profits in California, likely driven by the massive run-up in construction values preceding the recession, was significantly higher than either group at 14.3%.



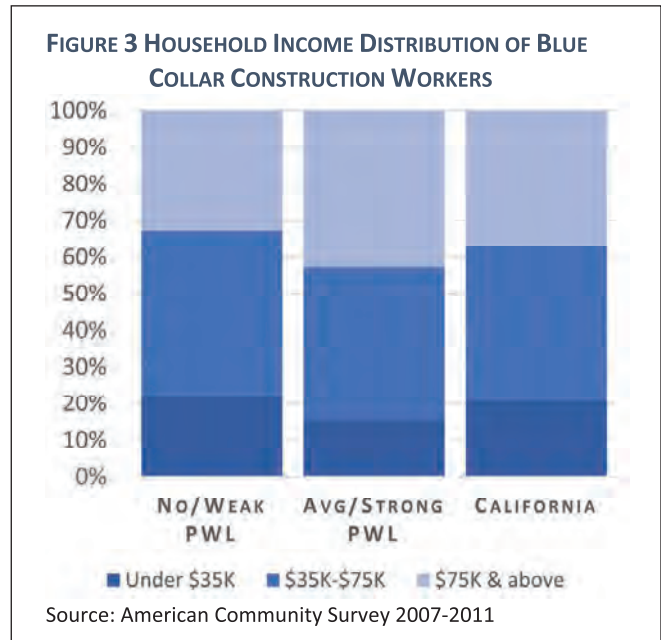
INCOME AND EARNED BENEFITS

Similar to the differences in how the construction industries of PWL and non-PWL states deploy their resources, we also see differences in how wages are distributed among various income groups. While disparities exist for both construction workers and administrative staff, the lower share of construction value earned by construction workers in non-PWL states shows up as lower incomes overall and higher propensity to be in a lower income household.

Relying on the American Community Survey of households and adjusting for state-level price differences via the Bureau of Economic Analysis' Regional Price Parities Index,⁷ we grouped construction and administrative workers based on their total household incomes according to IMPLAN's income groups.⁸ Figure 3 shows the extent to which there are distributional differences between the states for construction worker households.

The differences between the groups were particularly pronounced with construction workers in non-PWL states both earning less themselves as well as having a higher likelihood of living in a lower income household than in a state with PWLs. More than 22% of construction worker households in non-PWL states have price level adjusted incomes of less than \$35,000/year. In PWL states that proportion is less than 16%, or 40% lower. In California, that proportion is a more modest 7% lower with less than 21% of its blue collar construction workers in these lower income households. Conversely, while 43% of construction worker households in PWL states and 37% in California had incomes over \$75,000/year, fewer than 33% of households were in that category in non-PWL states. These distributional differences have economic consequences as these households see reductions in disposable income that plays out as reduced spending across the economy.

Overall, according to the employer-reported Economic Census, construction workers in PWL states on average earned 14% more in wages than their counterparts in non-PWL states after taking into account regional price parities. California's per capita construction worker payroll exceeded that of non-PWL states by a more modest 5%, as shown in Figure 4.⁹

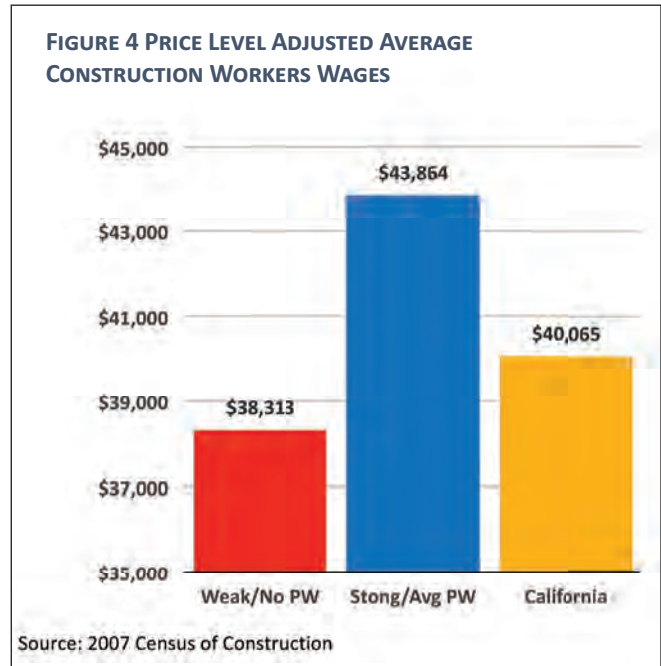


DEBUNKING THE MYTHS — UNDERSTANDING INCOME AND BENEFITS IN CONTEXT

Over the years, opponents of prevailing wage policies have regularly asserted that because PWL workers generally receive higher wages and benefits than their non-PWL counterparts, savings can be found by simply eliminating prevailing wage policies.

This is false. A substantial body of existing research has already shown no material difference in project cost between PWL and non-PWL projects. Research has also highlighted other “hidden” cost factors associated with non-PWL projects. For example, a recent study in California by Working Partnerships found that the average non-PW worker could expect to qualify for up to \$8,032 in taxpayer funded public assistance per year, while PW workers would qualify for no public assistance at all. This staggering disparity is especially notable, because it would reflect a substantial added cost associated with non-PW projects that is never included in overall project cost estimates.¹⁰

There are several other factors — some of which will be discussed in the balance of this paper — that must also be weighed in any evaluation of prevailing wage policies. These include the economic impact of increased local hiring and more spending by PWL workers in their local communities; as well as industry adjustments to prevailing wage that yield increased labor productivity and reduced spending on items like materials, fuel, equipment rental and purchased services.



“ a recent study in California by Working Partnerships found that the average non-PW worker could expect to qualify for up to \$8,032 in taxpayer funded public assistance per year, while PW workers would qualify for no public assistance at all. ”

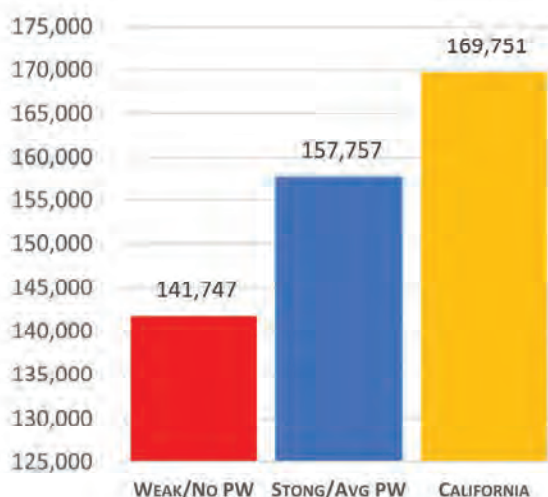
WORKER PRODUCTIVITY

Greater productivity is one of the principal adjustment responses to prevailing wage policies. Cross-state productivity differences show up in measures of average value added per worker, a measure of labor efficiency, and reduced materials use. For example, Figure 2 shows that significantly higher share of construction value is taken by materials, fuels, and rental equipment in non-PWL states compared to both average PWL states as well as California. California's case is particularly noteworthy because of the state's seismic and energy efficiency standards that tend to require more sophisticated building systems and more expensive material inputs. Especially so, considering the strongest regulations are in the state's largest construction markets — Los Angeles and the San Francisco Bay Area.

“ Greater productivity is one of the principal adjustment responses to prevailing wage policies ”

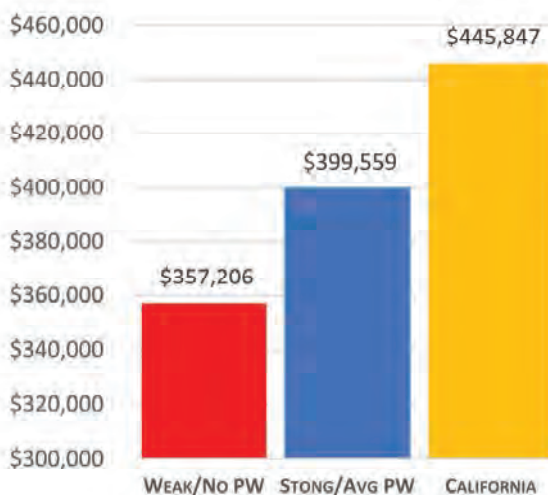
The higher productivity of the prevailing wage workforce — measured through average value added per worker — is demonstrated in figures 5 and 6. Figure 5 shows that the average California construction worker contributes 20% more value than peers in non-PWL states, and avg. PWL construction workers contribute 11% more value than peers in Non-PWL states. One of the principal arguments in support of prevailing wage laws is that by anchoring construction wages to a common standard, construction firms do not just need better trained construction workers, but also more effective project management. Here again we see a stark difference between the groups, with California and PWL states showing administrative productivity levels of 25% and 12% higher than the average non-PWL state.

FIGURE 5 VALUE ADDED PER CONSTRUCTION WORKER



Source: 2007 Census of Construction

FIGURE 6 VALUE ADDED PER ADMINISTRATIVE WORKER



Source: 2007 Census of Construction

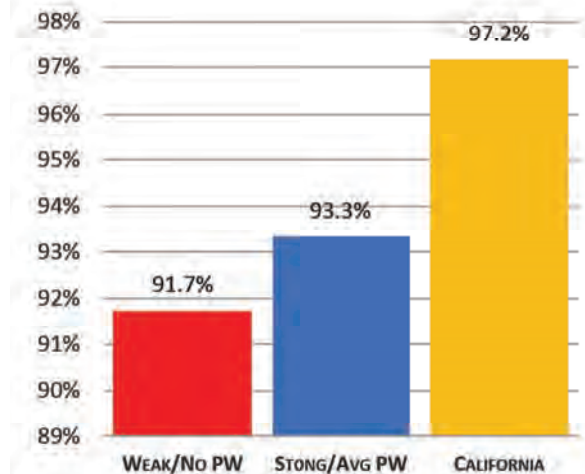
LOCAL CONTRACTING

Advocates have likened prevailing wage regulations to California’s Local Hiring ordinance. That description is apt both for California and other PWL states. According to the Economic Census, California enjoys a significantly higher rate of in-state contracting than its nearby non-PWL counterparts, as does the average state with a PWL as shown in Figure 7. Although it is tempting to ascribe California’s high local contracting rate¹¹ to the distance of its major coastal construction markets from neighboring states, a comparison of other Western states shows a similar divergence (95.2% vs. 92.1%) in local contracting rates between PWL and non-PWL states.

Although the state data examined in this study does not allow for a regional analysis, the same dynamic is likely to hold at smaller geographic levels. This is particularly true in California where expensive coastal markets with higher wages and low-unemployment about large regions driven by low construction spending, lower wages, and high unemployment. In such an environment, the absence of locally benchmarked labor standards or administrative impediments (i.e. licensing as with out-of state contractors) would orient the “lowest bidder” process towards out-of-area contractors. The resulting process would undercut area wages and drive down standards while local tax dollars are “offshored” and sent to the contractors’ home regions.

One case study of two similar library projects in Santa Clara County, CA that began about the same

FIGURE 7 PORTION OF SUBCONTRACTED WORK PERFORMED BY IN-STATE CONTRACTOR



Source: 2007 Census of Construction

time in 2011 — one built with prevailing wage, and one without neatly illustrates this point. A comparison of initial hiring on these two projects revealed that the prevailing wage project had a 71% regional contracting share while the non-prevailing wage project came in under 12%.¹² It is also notable to point out that the prevailing wage project was completed on time and on budget while its counterpart remained incomplete and delayed for more than two years, before it was finally completed after running significantly over contracted cost and a change in contractors.

“Advocates have likened prevailing wage regulations to California’s Local Hiring ordinance”

TOTAL SPENDING SHIFT SCENARIOS

As we have shown, the construction industries of PWL and non-PWL states behave differently in a variety of ways. In this section we calculate the economic ripple effects of transforming California’s construction industry to resemble a non-PWL state.¹³

To ensure a reliable range of how construction spending would change with weaker PWL laws, we used two methods of calculating the expenditure shifts, and each yielded similar results.

The first method takes California’s 2007 \$171B net construction expenditures (total construction values, less subcontracted work), and shows how spending in major categories would change if these expenditures shifted from that of an average PWL state to that of an average non-PWL state.

Mathematically, this scenario is expressed as:
 $CAf(AvgPW) - CAf(AvgNoPW)$

In the second scenario, we take the same \$171B net construction expenditures and subtract from it a proportionally scaled distribution (rather than average in Scenario 1) of an average PWL state to an average non-PWL state.

Mathematically, the second scenario is expressed as:
 $CAf(CA) - CAf(AvgNoPW/AvgPW)$

Figure 8 presents the results of each of these scenarios side by side, showing similar and notable results.

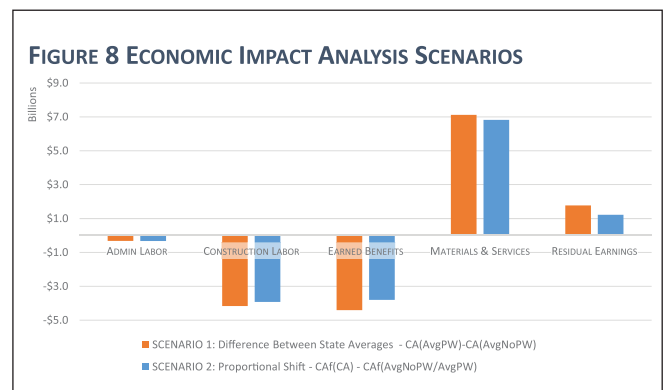
The findings of this analysis are significant. They show a substantial shift from wage and benefit expenditures toward increased materials expenditures and residual earnings, and this shift has broad based negative economic impacts.

“PWL states stimulate local economies by returning more of their public works construction investment to their communities than their non-PWL counterparts.”

The most compelling findings regarding this shift are:

- ▶ Between \$8B and \$8.9B in lost income and benefits to California construction professionals
- ▶ Between \$8B and \$8.9B in increased expenditures on materials, fuels, equipment rentals and residual earnings.

In simple terms, PWL states stimulate local economies by returning more of their public works construction investment to their communities than their non-PWL counterparts.



MODELING RESULTS

In order to gain a more complete understanding of how the elimination of prevailing wage would influence California's economy, it is necessary to understand current policy impacts across the economic spectrum.

Overall, prevailing wage policies result in a net gain of 17,500 jobs to California's economy, \$1.5 billion in labor income, and a more productive construction industry that minimizes its reliance on taxpayers to make up the shortfall in workers' earnings through public assistance programs. Overall, economic output increases \$1.4 billion.

The broadly defined Business and Personal Services sector shows a gain of \$2.6 billion labor income, \$5.9 billion in output, and nearly 39,000 jobs. Public service workers realize \$303 million in labor income and more than 2,900 jobs and \$380 million in output. Because construction is reflective of broader economic activity, that sector creates more than 3,900 jobs, nearly \$275 million in labor income and more than \$530 million of output.

Despite the cost neutrality of the internal shifts among the major expenditure groups envisioned in our analysis, clear differences can be seen once these shifts are modeled in IMPLAN (summary IMPLAN results available in the Appendix). Prevailing wage workers are more efficient, resulting in less job-site waste and directly leading to less spending on materials. Consequently, increased efficiency reduces demand for the sectors most associated with these expenditures as it also reduces the environmental impacts of producing and transporting those materials.

In practice this means the 45,500 jobs gained with prevailing wage policies in place are offset by 3,100 fewer jobs in the Agriculture, Mining, and Tech/Info sectors and approximately 24,900 fewer jobs in the Manufacturing and Trade sectors.

In the end, it is clear that significant and broad reaching negative effects would impact California's economy if existing prevailing wage laws were eliminated.

“ Overall, prevailing wage policies result in a net gain of 17,500 jobs to California's economy ”

CONCLUSION

The elimination of prevailing wage in California would have broad reaching economic impacts, including the loss of thousands of jobs, billions in lost income and economic activity, a less productive construction industry workforce, a less efficient construction industry overall, and far more full time workers at risk of living in poverty.

For decades, a body of research has accumulated detailing the effects of prevailing wage on economies, governments, construction standards, and workers. Past studies have shown that prevailing wage has similar costs, creates a safer work environment, supports job ladders for workforce development, and ensures less dependence on public assistance.

Our findings in this study add a new dimension to the existing body of research, demonstrating prevailing wage's real and substantial benefits to California in terms of employment levels and incomes.

Our research also shows that California's prevailing wage policy provides extensive benefits to the state's construction workforce and the construction industry as a whole. In addition to boosting construction industry productivity, prevailing wage policies increase rates of local subcontracting, and improve efficiency to both construction project management and materials and fuels usage.

In addition to the \$8-\$8.9 billion in additional wages and benefits afforded to the construction industry's blue and white collar workers, the ripple effects from these prevailing wage policies help add more than 17,500 jobs and \$1.4 billion of output to California's economy. As a point of comparison, California has

added an average of 26,000 jobs per month since coming out of the deep recession of 2008. These additional jobs pump more than \$1.5 billion in additional labor income into the overall California economy, concentrating the benefits in Personal services like health care and retail, construction, and public services.

Finally, because the benefits of prevailing wage come at neutral costs to California taxpayers as they would with no prevailing wage laws, it is clear that prevailing wage policies pairing strong labor standards with a competitive public contracting process provide taxpayers with a far better return on investment for publicly funded construction projects than the weaker (non-PWL) labor standard alternative.

END NOTES

- 1 A recent study of WV school construction revealed that costs in WV, a prevailing wage state, were substantially lower than school construction costs in surrounding states that do not pay prevailing wage. The study is available at <http://www.smartcitiesprevail.org/wp-content/uploads/2015/02/ExecSummaryWVKelsayStudy.pdf>
- 2 For a review of the several generations of academic studies of prevailing wage cost implications, see Kevin C. Duncan (2011), “An Analysis of Davis-Bacon Prevailing Wage Requirements: Evidence from Highway Resurfacing Projects in Colorado,” available for download via the website of the Colorado state legislature: <http://www.smartcitiesprevail.org/wp-content/uploads/2015/01/HseLocal0125AttachB.pdf>
- 3 FRED, Federal Reserve Economic Data, from the Federal Reserve Bank of St. Louis. The construction industry has weathered significant challenges since its 2006 peak, losing approximately almost 4 out of every 10 of its workers and two-thirds of the inflation adjusted value of construction put in place at the recession’s bottom in 2010. Since then the industry has recovered only 17% of the real loss in construction value and only 14% of the jobs lost between 2007 and 2010.
- 4 State-level prevailing wage laws were coded using an approach developed by Armand J. Thieblot in *Prevailing Wage Legislation: The Davis-Bacon Act, State “Little Davis-Bacon” Acts, The Walsh-Healey Act, and The Service Contract Act* (Philadelphia: The Wharton School, University of Pennsylvania, 1986). Thieblot evaluated the strength of prevailing wage laws across several dimensions including the dollar limit at which they apply, the projects they cover, and the determination method. The authors updated Thieblot’s classifications reflective of subsequent policy changes and our own judgment. For the purposes of this analysis, we refer to states with weak laws as non-PWL states. A summary of recent state-level prevailing wage characteristics is available at www.cga.ct.gov/2010/rpt/2010-R-0526.htm.
- 5 2007 Census of Construction.
- 6 We use net construction value for the purposes of our analysis, subtracting subcontracting costs because the expenses incurred by those subs are already reflected in the production function categories.
- 7 We relied on the 2008 Regional Price Parities Index, the first year available for the series.
- 8 IMPLAN reports household incomes in nine intervals. These are <\$10k, \$10k-15k, \$15k-25k, \$25k-35k, \$35k-50k, \$50k-75k, \$75k-100k, and >\$150k. We collapse these groups in the charts for clarity. Complete distributions are available in the Appendix.
- 9 A discussion of California’s divergence from other avg./strong-PWL states is beyond the scope of this brief. Future research will investigate demographic factors and variation in the relative weights across states of the various sub-sectors of the construction industry.
- 10 Working Partnerships USA, “Economic, Fiscal and Social Impacts of Prevailing Wage in San Jose, CA”, Economic Policy Brief, April 25, 2011: http://wpusa.org/5-13-11%20prevailing_wage_brief.pdf
- 11 Defined here as the percentage of construction value performed by contractors domiciled in the state.
- 12 Working Partnerships USA, “Economic, Fiscal and Social Impacts of Prevailing Wage in San Jose, CA”, Economic Policy Brief, April 25, 2011: http://wpusa.org/5-13-11%20prevailing_wage_brief.pdf
- 13 Detailed tables showing the sectoral shifts for both scenarios are available on the Smart Cities Prevail website at: <http://www.smartcitiesprevail.org/wp-content/uploads/2015/01/Detailed-Spending-Shift-Scenarios.pdf>

APPENDIX

	Net Value Of Construction	Admin Labor	Const. Labor	Earned Benefits	Materials	Purchased Services	Depreciation	Residual	Residual %	Subcontracting
Weak/No PW	\$ 604,521,655	\$ 51,683,372	\$ 89,452,945	\$ 33,364,758	\$ 279,977,385	\$ 50,839,847	\$ 14,545,317	\$ 84,658,031	14%	\$ 175,278,159
Strong/Avg PW	\$ 722,613,353	\$ 63,129,402	\$ 124,517,822	\$ 58,509,257	\$ 305,660,968	\$ 59,712,559	\$ 16,016,346	\$ 95,066,999	13%	\$ 200,719,012
California	\$ 171,035,867	\$ 15,122,744	\$ 27,788,717	\$ 11,937,708	\$ 69,528,873	\$ 13,005,196	\$ 2,884,281	\$ 30,768,348	18%	\$ 43,663,343
Weak/No PW		8.5%	14.8%	5.5%	46.3%	8.4%	2.4%			28.99%
Strong/Avg PW		8.7%	17.2%	8.1%	42.3%	8.3%	2.2%			27.78%
California		8.8%	16.2%	7.0%	40.7%	7.6%	1.7%			25.53%
WHAT IF CA AVG NON PWL										
	171,035,867	\$ 14,622,653	\$ 25,308,708	\$ 9,439,811	\$ 79,213,332	\$ 14,383,996	\$ 4,115,272	\$ 23,952,094		\$ 49,591,031
WHAT IF CA'S f(p) scaled to Avg PW ratio										
	171,035,867	\$ 14,942,143	\$ 29,472,212	\$ 13,848,598	\$ 72,347,111	\$ 14,133,408	\$ 3,790,920	\$ 22,501,475		\$ 47,508,325
WHAT IF CA'S f(p) adjusted by 0/1 shift										
	171,035,867	\$ 14,799,392	\$ 23,863,039	\$ 8,137,265	\$ 76,127,625	\$ 13,235,781	\$ 3,131,060	\$ 31,741,705		\$ 45,577,489
BENEFITS ALLOCATION										
AvgPW-AvgNoPW income shift										
Description	TOTAL	HEALTH CARE	H.C. ADMIN	PENSION	PENSION ADMIN					
		65%		35%						
ADMIN/BENEFIT SPLIT		85%		15%		98%		2%		
TOTAL BENEFITS	\$ 3,880,280,406	\$ 2,143,854,924	\$ 378,327,340	\$ 1,330,936,179	\$ 27,161,963					
356: Brokers	\$ 27,161,963				\$ 27,161,963					
357: Insurance Carriers	\$ 378,327,340	\$ -	\$ 378,327,340							
394: Offices of physicians, dentists, and other health practitioners	\$ 1,060,111,881	\$ 1,060,111,881								
395: Home health care services	\$ 105,791,684	\$ 105,791,684								
396: Medical and diagnostic labs and outpatient and other ambulatory care services	\$ 95,192,528	\$ 95,192,528								
397: Private hospitals	\$ 882,758,831	\$ 882,758,831								
Capital	\$ 1,330,936,179			\$ 1,330,936,179						
	\$ 3,880,280,406	\$ 2,143,854,924	\$ 378,327,340	\$ 1,330,936,179	\$ 27,161,963					
CA-NoPWL/AvgPWL shift										
Description	TOTAL	HEALTH CARE	H.C. ADMIN	PENSION	PENSION ADMIN					
		65%		35%						
ADMIN/BENEFIT SPLIT		85%		15%		98%		2%		
TOTAL BENEFITS	\$ 3,299,519,234	\$ 1,822,984,377	\$ 321,703,125	\$ 1,131,735,097	\$ 23,096,635					
356: Brokers	\$ 23,096,635				\$ 23,096,635					
357: Insurance Carriers	\$ 321,703,125	\$ -	\$ 321,703,125							
394: Offices of physicians, dentists, and other health practitioners	\$ 901,445,044	\$ 901,445,044								
395: Home health care services	\$ 89,957,854	\$ 89,957,854								
396: Medical and diagnostic labs and outpatient and other ambulatory care services	\$ 80,945,072	\$ 80,945,072								
397: Private hospitals	\$ 750,636,407	\$ 750,636,407								
Capital	\$ 1,131,735,097			\$ 1,131,735,097						
	\$ 3,299,519,234	\$ 1,822,984,377	\$ 321,703,125	\$ 1,131,735,097	\$ 23,096,635					
ACS Income Distributions										
	NAICS 23 Blue Collar Construction Workers			NAICS 23 White Collar Workers						
	No/Weak PWL	Avg/Strong PWL	California	No/Weak PWL	Avg/Strong PWL	California				
<10K	0.7%	0.5%	0.7%	0%	0%	0%				
10K-15K	1.9%	1.2%	1.9%	0%	1%	1%				
15K-25K	8.0%	5.3%	7.5%	2%	2%	2%				
25K-35K	11.6%	8.4%	10.6%	5%	4%	4%				
35K-50K	18.8%	15.3%	16.8%	10%	9%	10%				
50K-75K	26.2%	26.4%	25.6%	20%	20%	19%				
75K-100K	16.3%	19.4%	16.8%	20%	20%	19%				
100K-150K	12.2%	17.1%	14.5%	25%	26%	25%				
>150K	4.3%	6.3%	5.6%	17%	19%	21%				

IMPLAN Results

SCENARIO 1: Difference Between State Averages

Summary Impacts

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	7,844.3	(\$135,589,999)	\$923,948,214	\$1,850,599,581
Indirect Effect	3,868.6	\$295,523,662	\$479,041,689	\$1,342,617,236
Induced Effect	-30,394.4	(\$1,819,964,226)	(\$3,036,149,103)	(\$4,855,202,295)
Total Effect	-18,681.5	(\$1,660,030,564)	(\$1,633,159,199)	(\$1,661,985,478)

Detailed Employment Impacts, Aggregated by Industry Sector

Sector	Description	Direct	Indirect	Induced	Total
0	Total	7,844.3	3,868.6	-30,394.4	-18,681.5
1	Agriculture	675.1	797.7	-179.8	1,293.0
2	Mining	671.4	410.5	-45.6	1,036.4
3	Construction	-3,531.4	352.7	-992.6	-4,171.2
4	Manufacturing	11,096.6	1,031.6	-900.0	11,228.2
5	TIPU	93.2	1,569.6	-820.4	842.4
6	Trade	20,611.3	367.9	-6,680.5	14,298.7
7	Service	-21,771.6	-727.6	-17,837.0	-40,336.2
8	Government	-0.2	66.1	-2,938.7	-2,872.8

SCENARIO 2: Proportional Shift

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	10,413.0	\$104,926,631	\$1,165,593,217	\$2,236,602,400
Indirect Effect	4,828.0	\$352,894,825	\$574,935,887	\$1,479,579,086
Induced Effect	-31,587.2	(\$1,886,480,244)	(\$3,147,153,555)	(\$5,034,082,171)
Total Effect	-16,346.3	(\$1,428,658,788)	(\$1,406,624,452)	(\$1,317,900,685)

Detailed Employment Impacts, Aggregated by Industry Sector

Sector	Description	Direct	Indirect	Induced	Total
0	Total	10,413.0	4,828.0	-31,587.2	-16,346.3
1	Agriculture	647.8	769.3	-186.7	1,230.3
2	Mining	650.1	396.6	-46.4	1,000.3
3	Construction	-2,996.4	354.0	-992.9	-3,635.3
4	Manufacturing	10,683.8	1,062.7	-924.7	10,821.9
5	TIPU	95.5	1,548.8	-851.3	793.0
6	Trade	19,844.0	421.6	-6,878.0	13,387.6
7	Service	-18,511.7	196.2	-18,671.0	-36,986.5
8	Government	-0.2	78.7	-3,036.1	-2,957.6