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UCLA LABOR CENTER

### **ABC-Funded Report on Project Labor Agreements and School Construction**

The UCLA Labor Center – California Construction Academy (CCA) has reviewed the study “Measuring the Cost of Project Labor Agreements on School Construction in California,” written by Vince Vasquez, Dr. Dale Glaser, and W. Erik Bruvold and funded by the Associated Builders and Contractors (ABC). The CCA finds that the study’s methodologies are flawed and that the study’s data relating presence of a project labor agreements (PLAs) to increased school construction costs are inconclusive. In addition focusing solely on up-front costs neglects the relatively high return on investments created by PLAs in quality construction, on time delivery safety, building maintenance, and local and national economic impacts. Aside from the misleading results, the premise of this study is troubling. In tough economic times, rather than focus on creating more stable middle class jobs, the authors choose to use misleading conclusions to discourage one of the few existing tools that successfully creates high quality jobs.

### **Why Care About Project Labor Agreements (PLAs)?**

Though the American economy overall is slowly starting to recover, job growth is not keeping pace. The jobs that are coming back tend to be temporary, with lower wages. Due to increasing cost of gas and inflation, the cost of living is rising, but meanwhile wages are decreasing. Over the past two years, the wages of 80 percent of the US workforce (private sector workers who are not in management positions) have decreased from \$8.93 an hour to \$8.76.<sup>1</sup> The shrinking middle class has strong impacts on the greater economy. Construction careers remain one of the few critical pathways available to strengthen and broaden the shrinking middle class. Project Labor Agreements (PLAs) are one of the few existing tools that successfully create strong middle class jobs in the construction industry.

Project Labor Agreement (PLAs) are contracts that are negotiated and signed between the Building and Construction Trades unions and project owners before the start of a project. They act much like “worksite constitutions.” Each PLA can vary depending on the negotiated terms but typically they establish worksite conditions, management rights, dispute processes, hiring processes, local hire goals, and prevent lock-outs and strikes. PLAs help make work on complex

projects move more smoothly by creating work rules and expectations before a project begins. By deploying highly trained workers to the site, they ensure high quality, on-time projects that stand the test of time, therefore reducing maintenance and repair costs over the life of the project. Well-trained workers on complex construction projects also mean increased safety for workers and reduced risk to the project owner for worker's compensation. PLAs also help to prevent work stoppages through strikes and lockouts, therefore reducing construction risks high costs, and delays. All contractors and sub-contractors must sign onto a PLA, including both union and non-union contractors.

By agreeing on negotiated conditions for work prior to the beginning of a project, PLAs create clear expectations for all parties involved. PLAs also create coordinated work processes for various general contractors and sub-contractors who must work together to tackle complex commercial, residential, institutional, industrial and infrastructure projects

PLAs require that employees receive fair wages and benefits, creating high quality jobs. These agreements also often include requirements for hiring an agreed percentage of local workers from zip codes surrounding the project (known as "local hire"). Local hire creates additional opportunities for local workers to access these long-term workforce training and career opportunities. With middle-class wages and benefits, these workers from the local community can support their families and purchase goods and services from local businesses, invest in home ownership, and contribute more money to the local tax base. Thus, PLAs ensure that construction dollars have a larger impact beyond just the construction project, creating high quality jobs that positively impact the broader economy.

At the beginning of the study under review, researchers mention arguments in favor of PLA but do not take any steps to address any of these arguments in the rest of the report (Pages 2-3). "Supporters of PLAs argue that they keep costs down and ensure timely construction (and create ancillary benefits beyond the construction of the project). By agreeing to predetermined wages and benefits by mandating the use of union hiring halls, proponents argue that labor markets are more effective and the supply is more certain. Proponents also argue that worker grievances and alleged contract violations can be resolved quickly and more efficiently under PLAs. As noted, strikes and lockouts are explicitly prohibited. Proponents also claim that PLA requirements involving apprenticeship programs and improved workplace safety lower workers' compensation claims. In total, proponents argue that these provisions create stability and predictability that reduce delays, cost overruns, and change orders, thus increasing the likelihood that projects will be completed on-schedule and on-budget" (Page 2).

The arguments above all still hold true and the report findings did not contradict them. Additionally the researchers also do not mention that because projects are built to high standards and quality under PLAs, this significantly reduces the maintenance and repairs costs

for the project over time. For project owners, it makes sense to invest in quality work up-front in order to reduce operations costs over time.

Perhaps most importantly, the study does not analyze the indirect and direct impacts of high quality construction jobs, with health, retirement and other benefits. Every dollar spent on PLAs has a positive multiplier effect on workers, their families, local businesses and tax revenues.

### **Flawed Methodology and Buried Findings**

The authors of the ABC-funded study conducted an “apples-to-apples” comparison of 65 schools built under PLAs and 65 comparable schools not built under PLAs, and found that the presence of PLAs was not statistically significant, meaning that they could not prove PLAs caused the differences in costs between these projects. However, instead of revealing these findings in the “Results” section of the report, the authors misleadingly place the findings toward the end of the report, in the “Additional Research Questions” section. “...We were able to identify a region of common support, matching 65 PLA projects with 65 non- PLA projects that, but for the absence of a PLA, are similar with respect to other project characteristics, such as the use of demolition and total square footage... In our second phase, we analyzed the matched set of 130 projects (incorporating a propensity weight covariate) using the ordinary least squares method. **We found that PLAs were not statistically significant. Similar results were found when the propensity score was omitted from the model**” (Additional Research Questions, p 15).

The study also misleads readers by claiming in the main “Results” section that the presence of PLAs cause school construction costs to increase by 13%-15% (Page 10). However, there are significant flaws within this methodology, one of which being sample bias. When the authors remove Los Angeles Unified School District (LAUSD) schools from their data set, the study’s R-squared correlation (relationship between PLAs and school costs) drops from 0.2861 to 0.096. A R-squared of 0.096 is considered to be a poor model fit in statistical terms, meaning that the researchers cannot conclude that PLAs is a factor that significantly increases school construction costs. The same authors of the study admit the poor model fit. “...The correlation of PLA and the price per square foot is only 0.163 and **overall model fit is not impressive** (r-squared = 0.096).” Once again, the authors chose to place these findings, which counter their desired argument, in the “Additional Research Questions” section rather than the main “Results” section (Pages 11-15).

Numerous other reasons can explain why school construction in LAUSD is more costly than in other districts. The bulk of the school districts in the study’s sample are in the Central Valley and Southern California. Los Angeles, where LAUSD projects are based, has the most expensive

construction market in these regions. Land costs in Los Angeles are higher than its smaller city counterparts. Prevailing wages are also higher in Los Angeles due to higher costs of living, and the types of buildings included in the LAUSD sample were multi-floor structures that required more expensive materials such as steel and concrete. Additionally, LAUSD projects may exceed minimum building code standards, perhaps for increased energy savings. The study's sample of projects includes just a few examples from the San Francisco Bay Area, which would be more likely to have comparable construction costs to Los Angeles. The LAUSD projects are therefore an outlier within the study and the researchers cannot conclude that PLAs are responsible for higher construction costs.

Even the USC researchers who reviewed the study in Appendix A confirm that the researchers were not able to separate whether it was the presence of PLAs or LAUSD that explained the difference in construction costs. They say that the researchers were “**unable to disentangle the two factors**” (Appendix A, p18).

The study's methodology neglects some important factors that can significantly impact the study's results. There is potential for “selection bias” since only approximately 50% of the schools targeted for the study responded to the study survey. Thus, it is possible that school districts with higher costs that were not built under PLAs simply decided to not respond to the survey, skewing the data set. The study also only includes 65 schools built under PLAs compared to 486 schools not built under PLAs. This sample size, especially in light of the 50% response rate, creates a scenario where the researchers are comparing “apples to oranges to watermelons.” Even when the authors attempt to control for the differences in local markets complexity of project, size of project, etc, they conceal their actual calculations for these explanatory variables and they change the variables without explanation throughout the study. As a result, the author's 13% to 15% cost differences are not convincing. As previously stated the study's findings in the “Additional Research Questions” contradict its own main “Results” section by stating that when the authors compared the 65 schools built under PLAs to 65 comparable schools not built under PLAs, the presence of “**PLAs were not statistically significant**” (Page 15)

Though the study's methodology is deeply flawed and its results remain inconclusive, it is still important to evaluate our priorities when investing public school construction dollars. Project Labor Agreements are a key tool to making sure these dollars go farther. Especially in this current economic downturn, public investments in projects such as school construction need to account for more than just the up-front costs of investments, but also focus on the return and value generated for each dollar spent. PLAs create high quality projects that stand the test of time while also generating high quality jobs that have a positive ripple effect throughout the rest of the economy.

Although our analysis focuses on the public sector school construction PLA study, it should also be noted that PLAs are regularly used in private sector development where the incentive is profit driven and practitioners do not commit to tools that waste resources. Successful private sector examples of PLA use exist in California and throughout the US.