

Project Labor Agreements

Last Updated: June 2023

SUMMARY

- The three most recent and advanced studies in academic journals concluded that PLAs did not have a statistically significant effect on construction costs.
- PLAs did not have a statistically significant effect on the number of bidders on a project in the only peer-reviewed study that has looked at the issue to date.
- Peer-reviewed research on PLAs is limited to only a few studies on school and college construction projects. Additional research is sorely needed to confirm these outcomes and expand knowledge about PLAs.

BACKGROUND

Project labor agreements (PLAs) are pre-hire labor contracts between a construction owner or general contractor and labor organizations that establish the terms and conditions of employment on a specific construction project. A source of controversy when used on public-sector projects, proponents contend that PLAs ensure access to skilled labor—via union referral systems—and promote timely completion of projects. Opponents argue that PLAs reduce bid competition and increase construction costs.

RESEARCH OVERVIEW

There have been four quantitative studies published in peer-reviewed journals that examined the cost effects of PLAs. All four papers assessed their effects on K-12 and college construction projects. The three most recent and empirically advanced studies concluded that PLAs do not have a statistically significant impact on school construction costs, contradicting the findings of an older and less sophisticated paper.

Most recently, Philips and Waitzman (2021) analyzed 263 construction projects commissioned by community colleges in California between 2007 and 2016. They found that PLAs did not have a statistically significant

effect on the number of bidders or on construction costs.

Belman et al. (2010) represents a critical study informing research on PLAs. In a study of 70 K-12 school construction projects in Massachusetts built between 1996 and 2002, the authors also concluded that PLAs did not have a statistically significant cost impact. The study also revealed that while overly simplistic statistical models suggested significant cost effects, those disappeared after differences in the complexity and location of schools were adequately accounted for in the model. This conclusion was similarly echoed in Philips and Waitzman (2021) and Waddoups and May (2014).

This is an important finding in evaluating research in this area. PLAs are more typically used in urban areas and on larger and more complex projects, all characteristics of higher-cost projects. Studies that do not sufficiently account for size, complexity and location will conflate the cost impact of these issues with the cost associated with PLAs. This is the critique offered by Belman et al. (2010) towards Bachman and Haughton (2007), whose simplistic statistical model suggested a positive cost effect of PLAs.

A caution that peer-reviewed research on PLAs is quite limited. While consensus may be emerging regarding their lack of cost impact on educational buildings, there exists just one study on the effect of PLAs on bid competition. The research is silent on other key arguments surrounding PLAs—such as quality and timely completion—and there is no research on the effect of PLAs outside of schools and colleges.

ADDITIONAL READING

ICERES Research Review:
Ormiston and Duncan (2023) - [LINK](#)

Individual Peer-Reviewed Studies:
Philips and Waitzman (2021) - [LINK](#)
Waddoups and May (2014) - [LINK](#)
Belman et al. (2010) - [LINK](#)
Bachman and Haughton (2007) - [LINK](#)

What is ICERES?

The Institute for Construction Employment Research is a non-profit organization whose mission is to facilitate high-quality, non-partisan research on labor and employment issues affecting construction owners, employers and workers. Founded in 2013, ICERES represents an independent network of academic researchers and other scholars in the United States and Canada interested in pursuing and developing academic-quality research on construction-related employment issues. For more information, visit:

[icer.es.org](https://www.icer.es.org)

The Value of Peer-Reviewed Research

The peer-review process subjects a research study to scrutiny from other qualified subject experts to ensure the paper meets the highest scientific quality standards. These papers are typically authored by college faculty and Ph.D. students, with subject experts evaluating the appropriateness of their methodology and conclusions. While imperfect, the peer-review process is considered to be a vitally important safeguard that confirms a research study to be sufficiently trustworthy to inform scientific and policy debates.

What is Statistical Significance?

A “statistically significant” difference is one in which an estimated effect is sufficiently large enough for a researcher to conclude with a high degree of confidence that the outcome is not the result of random chance.