

Investment in Union Labor Pays Off for US Capital Projects

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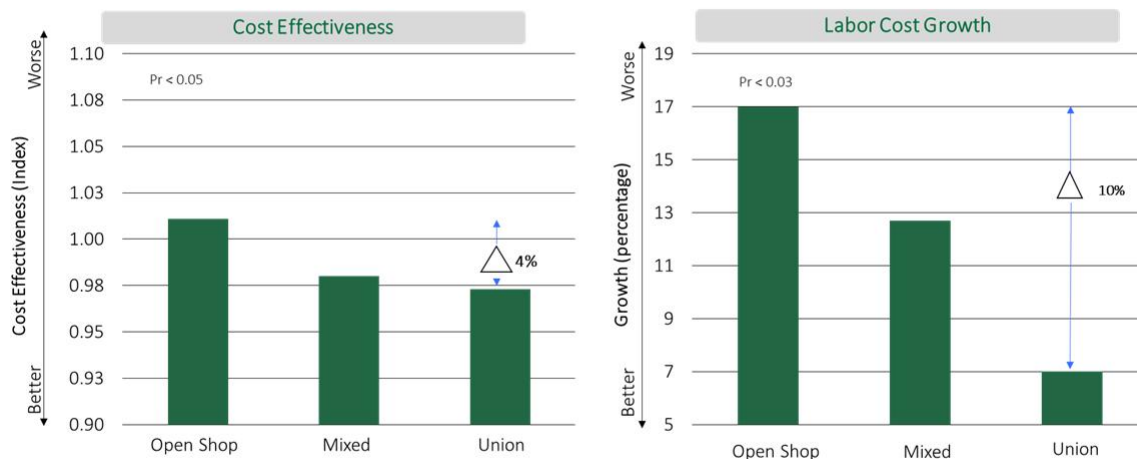
Author [Michael McFadden](#) February 1, 2023

Conventional wisdom is that unions benefit workers but are expensive to companies. However, [recent Independent Project Analysis, Inc. \(IPA\) research](#) has found the opposite: projects that use union labor have better outcomes than those that use non-union or open shop labor, despite union projects having higher hourly labor rates. Projects that used union labor had lower costs overall as well as better cost and schedule predictability. Although many factors go into project success, the difference between union and open shop labor comes down to better productivity for union labor.

Union Labor Projects Have Lower and More Predictable Costs

The recent IPA study confirmed earlier work^[1] that found that union labor delivers lower and more predictable project costs. As shown in Figure 1, projects that use union labor have 4 percent lower costs than those that use open shop labor and are 10 percent more predictable. Those that use a mix end up somewhere in the middle—better than all open shop, but not as good as all union labor.

Union Labor vs. Mixed and Open Shop Project Cost Performance



*Statistical significance shown is open shop vs. union

Figure 1

Labor Productivity

Figure 2 shows the wide range of labor productivity on process projects in the United States: the middle 50 percent range productivity indices range from 0.5 to 1.5—that is, half the average to one and a half times the average. Multiple factors drive this range, including the quality of planning, quality of project management, and workforce skill.

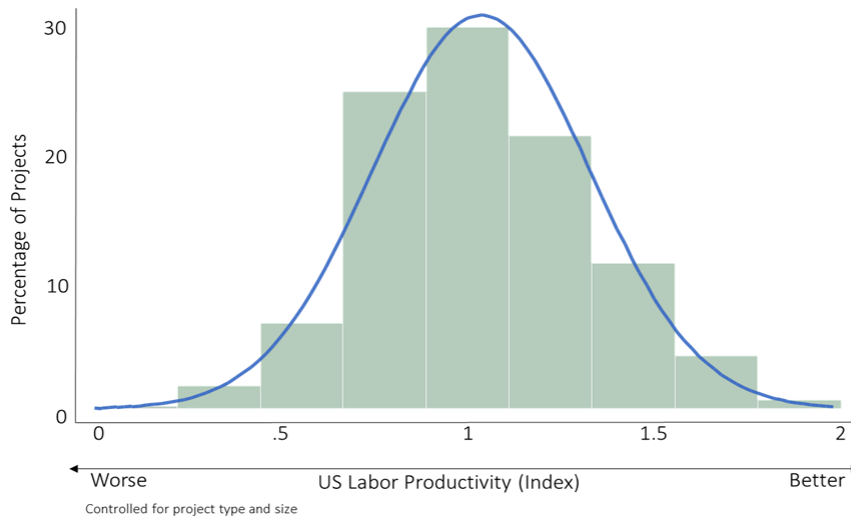
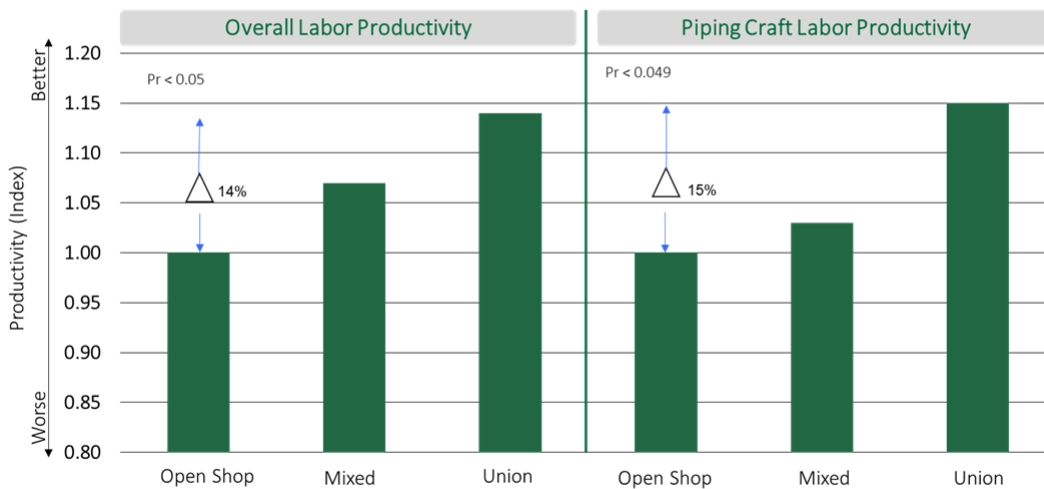


Figure 2

What Drives Good Union Labor Outcomes?

The difference between union and non-union labor comes down to better productivity for union labor. As shown in Figure 3, union labor projects have 14 percent better productivity than open shop projects overall and 15 percent better productivity for piping craft labor.



*Statistical significance shown is open shop versus Union

Figure 3

Labor productivity, in turn, is driven by three main factors:

- Skill level of the labor and supervision
- Deployment of skilled labor
- Stability of the labor

Union Workers Are More Skilled

Union workers have a higher level of skill than non-union workers. How do we know? When we asked owners to rate the skill of their project labor, we found that union workers were much more likely to be rated as above average or highly skilled than open shop or mixed labor. For example, 75 percent of project owners rated the craft of installing piping as above average or highly skilled for union workers compared to only 63 percent for open shop workers.

Projects With Union Labor Can Reliably Source Labor When Needed

The second difference between union versus open shop and mixed labor is the ability to reliably source labor when needed. Projects that sourced labor from union halls are 40 percent less likely to be short on skilled labor than projects that sourced labor from open shop sources or mixed labor. Skilled labor shortages create significant challenges for projects. Labor shortages are linked to worse cost and schedule performance, including increased risk of major cost growth and schedule slip.

Team Stability Is Another Key Factor in Project Success

Finally, we looked at the turnover of labor as another potential explanation for the higher productivity of union versus open shop labor. Projects that employ union labor report significantly lower monthly turnover rates for their workers than projects employing open shop labor. Projects employing mixed labor appear to benefit from the presence of union labor with lower turnover than projects employing open shop labor. Again, labor turnover is linked to cost and schedule performance: higher turnover leads to worse performance.

Union Labor Leads to Better Outcomes Overall

The combination of higher skills gained through more consistent training and better deployment of labor from union halls along with lower turnover of craft once they are on the job helps to explain the significantly higher productivity of union labor, which, in turn, drives lower and more predictable project costs and better cost and schedule predictability. The presence of union labor in projects employing mixed labor is evident in nearly all of the key success measures; projects with mixed labor do not perform quite as well as those that use all union labor, but they do outperform open shop labor. Overall, employing union labor creates significant value for owners through lower costs and more predictable schedules and reduces the risk of major cost and schedule deviations.

Download the Full Report

This study was conducted for the Mechanical Industry Advancement Fund (MIAF), a national joint labor management cooperative committee established and operated by trustees appointed by the [United Association of Plumbers and Pipefitters](#) (UA) and [Mechanical Contractors Association of America](#) (MCAA).

[Click here](#) to download the full report prepared by IPA.

[1] Edward W. Merrow, *The Looming Labor Shortage*, presented at the UA/MCAA Labor Relations Conference, October 30, 2008.