

# POLICY BRIEF

## The Anticompetitive Effects of Government-Mandated Project Labor Agreements on Construction in Washington State

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Introduction by Erin Shannon, Director, Center for Worker Rights

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### Key Findings

1. This report explores the use of government-mandated Project Labor Agreements (PLAs) on publicly funded infrastructure construction projects in the state of Washington, and examines the effects PLAs had on the number of bidders for, and the final cost of, the projects.
2. The report examines and compares 125 construction projects built since 2003, 62 of which were built with PLAs, and 63 built without a PLA.
3. The findings of the report confirm multiple studies that conclude PLAs artificially restrict competition and increase project costs.
4. The analysis shows a PLA on the infrastructure construction projects built in Washington reduced the number of bidders by 18.26 percent.
5. The analysis shows the reduced competition in the projects completed with a PLA increased the cost of these publicly funded projects by \$589 million to \$879 million.
6. As shown in other states, the exclusionary provisions of PLAs in Washington unfairly discourage competition in the bidding process, and have a significant economic impact resulting in higher costs for taxpayers.
7. Washington state would benefit from a policy that abandons discriminatory PLAs in favor of fair and open access to public construction projects to foster robust competition, reduce costs and increase public value for taxpayers.

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## Introduction by Erin Shannon, Director of WPC's Center for Worker Rights

The use of government-mandated Project Labor Agreements (PLA) on publicly funded construction projects has come under increasing scrutiny as states look for ways to improve efficiencies, maximize value for the public and ensure taxpayer dollars are spent wisely.

The practice of suppressing competition and discriminating against non-union contractors (especially those owned by minorities and women) in the process in order to award labor unions virtually sole access to public works projects, has become a controversial example of the influence special interests wield over policymaking at the expense of taxpayers.

PLAs are a “pre-hire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project.”<sup>1</sup>

PLAs set wage rates, benefits, and working conditions for every worker, union and nonunion, who will be employed on a public works project. The agreements also typically include provisions requiring either all workers on the public project be hired through a union hiring hall, or that workers of any non-union contractors and subcontractors pay union dues and fees, as well as pay into union benefit programs such as pension and medical.

Most of the nonunion workers forced to pay into these union benefit programs (as a condition of employment) will not meet the programs' vesting requirements and will forfeit any claim to those benefits in the future, meaning they will not receive any benefit at all.

Any contractor, or subcontractor, union or nonunion, who bids on a project with a PLA is bound by the terms of the agreement, which unfairly favor union over nonunion bidders. While PLAs do not directly forbid nonunion, merit-based contractors from bidding and working on a public project, they effectively suppress competition because the stringent requirements in PLAs create barriers that are difficult for nonunion contractors to overcome.

This is particularly true for smaller, locally owned contractors and subcontractors, especially those owned by disadvantaged business enterprises, such as women and minorities, which tend to be nonunion. These contractors, and the skilled workers they employ, are shut out of the opportunity to fairly compete for jobs on projects that are funded with taxpayer dollars.

The exclusionary and discriminatory nature of PLAs is why a broad range of trade groups representing small, women and minority owned construction companies have consistently, and vocally, opposed PLAs. These groups include the National Association of Minority Contractors, National Black Chamber of Commerce, Black Contractors Association, National Association of Women in

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1 Presidential Executive Order 13502, “Use of Project Labor Agreements for Federal Construction Projects,” signed by President Obama, February 6, 2009 at [www.govinfo.gov/content/pkg/FR-2009-02-11/pdf/E9-3113.pdf](http://www.govinfo.gov/content/pkg/FR-2009-02-11/pdf/E9-3113.pdf)

Construction, Women Construction Owners and Executives, Latin Builders Association, Asian American Contractors Association, Small Business and Entrepreneurship Council, and others.

These organizations express concern over the artificial restriction on competition that is inherent in union-only PLAs, and the disproportionate impact they have on their members, who are discouraged from competing for, and winning, contracts on public projects in their communities.

This concern over stifling competition and the exclusionary nature of PLAs is why 25 states have prohibited government-mandated PLAs. In these states, government cannot require a contractor to enter into a PLA as a condition for working on a public project. Every public works project is open to all qualified contractors who want to compete fairly for the opportunity to work in their community on taxpayer-funded projects.

Conversely, Washington is one of just nine states (along with California, Connecticut, Hawaii, Illinois, New York, New Jersey, Delaware, Maryland) with an anti-competitive law expressly encouraging government-mandated PLAs. In these states, nonunion contractors and their workers are penalized in an unlevel bidding field that favors union special interests over fair, open, and competitive bidding on public projects.

In addition to concerns over fairness and equity, the limitations on competition in PLAs give rise to the question of the impact on the cost of public projects. One of the defining principles of economics is that reducing competition increases cost.

A number of academic studies show that PLAs increase the cost of construction projects anywhere from 12 percent to 18 percent, on average.<sup>2</sup> The New Jersey Department of Labor and Workforce Development's 2010 *Annual Report to the Governor and Legislature* (examining the impact of PLAs in fiscal year 2008) found school construction projects completed under a PLA were 30.5 percent higher than for all non-PLA projects. The report also found PLA projects for that year had a longer duration than non-PLA projects; the average PLA project took 100 weeks, compared to just 78 weeks for non-PLA projects.<sup>3</sup>

Washington Policy Center asked The Beacon Hill Institute for Public Policy Research to measure the effect of the Washington state directive encouraging the use of PLAs. This report explores the use of PLAs in Washington, and the effects PLAs have on competition in the bidding process, specifically the number of bidders for public construction projects, and the corresponding cost impact.

The findings show public construction projects built under a PLA in Washington have fewer bidders, on average, than projects completed without a

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2 "Research on Government Mandated Project Labor Agreements," Associated Builders and Contractors, accessed on January 9, 2019 at <https://thetruthaboutplas.com/2012/12/28/plastudies/>

3 "Annual Report to the Governor and Legislature: Use of Project Labor Agreements in Public Works Building Projects in Fiscal Year 2008," New Jersey Department of Labor And Workforce Development, October 2010, at [www.nj.gov/labor/forms\\_pdfs/legal/2010/PLAReportOct2010.pdf](http://www.nj.gov/labor/forms_pdfs/legal/2010/PLAReportOct2010.pdf)

PLA. The reduced competition on these PLA jobs resulted in higher bids than if nonunion contractors had participated, translating into higher costs paid by state taxpayers. It also means a large segment of our state's skilled workforce are denied the opportunity to work on these jobs.

As shown in other states, the exclusionary provisions of PLAs in Washington unfairly discourage diversity and competition, and have a significant economic impact resulting in higher costs for taxpayers. In order to deliver the highest quality projects at the best cost, every qualified contractor and subcontractor, and their skilled workers, should have the opportunity to fairly compete for, and to participate in, public construction projects.

Special interest favoritism that rewards union contractors and workers at the expense of nonunion contractors and workers should have no place in state public policy. A better policy for Washington would be one that abandons discriminatory PLAs in favor of fair and open access to public construction projects to foster robust competition, reduce costs and increase public value for taxpayers.

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## Executive Summary

A project labor agreement (PLA) is an agreement between construction unions and contractors employed on a building project under which the firms adhere to specified work rules and hiring procedures. Typically, PLAs require that all workers be hired through union halls, that non-union workers join a union and/or pay dues for the length of the project and that union rules apply to work conditions and dispute resolution. Construction unions actively lobby governments to require PLAs to the end of securing work for their members on projects funded by taxpayers.

A Community Workforce Agreement (CWA), like a PLA, is an agreement between public owners of construction projects and construction unions. The terms of a CWA are virtually identical to those specified by a PLA but with the added purpose of promoting social equity, workforce diversity, and development of local workers for construction careers.<sup>1</sup>

The Beacon Hill Institute has completed an extensive statistical analysis of the effects on school construction bids and on construction costs of PLAs in Ohio, Massachusetts, Connecticut and the state of New York. In the Ohio, Massachusetts and Connecticut studies, our analysis found final construction costs to be significantly higher when a school construction project was executed

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<sup>1</sup> We use PLA to mean both PLAs and CWAs.

under a PLA. In the New York study, we found that final bid costs for construction projects were higher under a PLA.<sup>2</sup>

This report explores the use of PLAs in the state of Washington, and the effects PLAs have on the number of bidders for projects. Non-union contractors contend that their competitive advantages are nullified by a PLA even as they comply with other mandates including prevailing wage laws. The result is that in practice, if not in principle, they are unable to bid competitively on jobs that have a PLA requirement. In turn, the absence of non-union bidders for PLA projects results in fewer bidders for projects, and with fewer bidders, the lowest bids come in higher than if non-union contractors had participated. We gathered data on the number of bidders for construction projects that did and not use a PLA or CWA in Washington.

We find that the presence of a PLA reduces the average number of bidders for public construction projects in Washington by 0.84. Because the average number of bidders on construction projects in our sample is 4.6, PLAs reduce the number of bidders by 18.26 percent ( $0.84/4.6 = 18.26$  percent).

To separate the effects of PLAs on construction costs from other factors affecting construction costs, we use control variables to obtain our results. In this study, we control for the level of activity in the construction industry using the number of employed workers as a proxy for the strength of business activity. We also control for the size of the contract, assuming fewer contractors can provide the scale to complete larger contracts, using the value of the contract award, in 2018 dollars, as a proxy for project size.

We utilize the findings from our previous studies to estimate the potential savings from not using a PLA on a construction project. We estimate that if the \$4.91 billion of construction projects in our sample that were built with a PLA had been built without a PLA, taxpayers would have saved between \$589 million and \$879 million.

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<sup>2</sup> See <http://www.beaconhill.org/PLAStudiesHomePage.htm> for links to our prior work on PLAs. A bid cost is a project's base construction bid that includes site work and, for many projects, both Project Labor Agreements and non-Project Labor Agreements. The figure does not include the demolition costs.

## Introduction

PLAs are a form of a “pre-hire” collective bargaining agreement between contractors and labor unions pertaining to a specific project, contract or work location. They are unique to the construction industry. The terms of a PLA generally recognize the participating unions as the sole bargaining representatives for the workers covered by the agreements, regardless of their current union membership status. They require all workers to be hired by general contractors and subcontractors through the union hall referral system. Non-union workers must join the signatory union of their respective craft and/or pay dues for the length of the project. The workers’ wages, working hours, dispute resolution process and other work rules are also prescribed in the agreement. PLAs supersede all other collective bargaining agreements and prohibit strikes, slowdowns and lockouts for the duration of the project.<sup>3</sup>

PLAs can be mandatory, that is, required by a government entity such as a school board, as a condition of bidding and winning a contract to perform construction services on a project. Alternatively, they can be agreed to voluntarily by contractors participating in an open and competitive bidding process. Mandatory PLAs are anti-competitive insofar as they discourage open shop contractors from bidding on projects to which the PLAs are attached. Voluntary PLAs are less likely to raise costs insofar as winning bidders would not agree to follow union rules and hiring procedures unless it was cost effective to do so and unless it, therefore, made bidders more efficient by allowing them to negotiate the terms and conditions of the PLA directly with unions. For example, the construction of the King County Family and Justice Center contains a voluntary PLA between Balfour Beatty Construction LLC and Seattle/King County Building and Construction Trades Council Northwest Construction Alliance.<sup>4</sup>

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<sup>3</sup>U.S. General Accounting Office, *Project Labor Agreements: The Extent of Their Use and Related Information*, Publication No. GAO/GGD-98-82, (Washington D.C.: 1998), <http://www.gao.gov/achives/1998/gg98082.pdf>.

<sup>4</sup> Teamsters Unions Local 174, Project Labor Agreements, <http://teamsters174.net/wp-content/uploads/2017/04/Children-and-Family-Justice-Center-PLA.pdf>. We do not designate this a PLA.



The Beacon Hill Institute (BHI) found that the presence of PLAs increased construction bid costs over non-PLA school projects in Ohio, Massachusetts, Connecticut, and New York.<sup>5</sup> Of the Four, the studies of Ohio, Massachusetts, and Connecticut showed that PLAs increased final construction costs as well.

Other researchers have found similar results. For example, a study conducted by the New Jersey Department of Labor and Workforce Development found that the “cost per square foot for PLA projects was \$260.00, or 30.5 percent higher than for non-PLA projects, which averaged \$199.19 per square foot” on school construction projects in New Jersey.<sup>6</sup> A study by National University on school construction projects in California found that costs were “13 to 15 percent higher when school districts construct a school under a PLA.”<sup>7</sup>

The current study extends our research of PLAs to public construction projects that took place in Washington State since 2003.

## **Historical Background on PLAs**

PLAs in the United States originated in the public works projects of the Great Depression, which included the Grand Coulee Dam in Washington State in 1938 and the Shasta Dam in California in 1940. Since World War II, PLAs have continued to be used on a limited basis for some large

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<sup>5</sup> Paul Bachman, Darlene C. Chisholm, Jonathan Haughton, and David G. Tuerck, *Project Labor Agreements and the Cost of School Construction in Massachusetts*, The Beacon Hill Institute at Suffolk University, (September 2003). <http://www.beaconhill.org/BHIStudies/PLAPolicyStudy12903.pdf>. See also Paul Bachman, Jonathan Haughton, and David G. Tuerck, *Project Labor Agreements and the Cost of School Construction in Connecticut*, The Beacon Hill Institute at Suffolk University, September 2004. <http://www.beaconhill.org/BHIStudies/PLA2004/PLAinCT23Nov2004.pdf>.

<sup>6</sup> "Annual Report to the Governor and Legislature: Use of Project Labor Agreements in Public Works Building Projects in Fiscal Year 2008", New Jersey Department of Labor and Workforce Development, October 2010, [http://lwd.dol.state.nj.us/labor/forms\\_pdfs/legal/2010/PLAReportOct2010.pdf](http://lwd.dol.state.nj.us/labor/forms_pdfs/legal/2010/PLAReportOct2010.pdf), 3.

<sup>7</sup> Vince Vasquez, Dr. Dale Glaser, and W. Erik Bruvold, "Measuring the Cost of Project Labor Agreements on School Construction in California," National University System Institute for Policy Research, 2010, <http://www.nusinstitute.org/assets/resources/pageResources/Measuring-the-Cost-of-Project-Labor-Agreements-on-School-Construction-in-California.pdf>, 1.

construction projects procured by government entities, from the construction of the Cape Canaveral Space Center in Florida to the Central Artery project (the “Big Dig”) in Boston. PLAs used on prominent private sector projects include the Alaskan Pipeline and Disney World in Florida.

### **The Arguments Against and For PLAs**

Government-mandated PLAs on publicly-financed construction projects are typically issued after lobbying campaigns from labor unions to help them regain lost market share. The logic of mandating PLAs is, however, increasingly dubious given the decline of union membership across the workforce and particularly in the construction sector. Only 13 percent of the U.S. private construction workforce currently belongs to unions.<sup>8</sup>

PLAs typically require that general contractors and subcontractors must hire all construction labor through union halls and union apprenticeship programs, pay union dues, contribute to union-sponsored retirement plans and follow union work rules. PLAs force contractors to hire union workers in place of most of their own workforce. The contractors and any existing employees are required to contribute to union benefit plans even if they cover their own workers under their own policies. The work rules restrict the contractors from using their own, often more flexible, operating rules and multiskilling procedures across multiple trades with their own non-union employees. These restrictive conditions cause costs to rise for a project subject to a government-mandated PLA.

Merit shop (non-union or open shop) contractors contend that their competitive advantages are nullified by a PLA even as they comply with other mandates such as prevailing wage laws. The result is that in practice, if not in principle, they are unable to bid competitively on jobs that have a PLA requirement. In turn, the absence of open shop bidders for PLA projects results in fewer bidders for the project, and with fewer bidders, the lowest bids come in higher than if open shop

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<sup>8</sup> U.S. Bureau of Labor Statistics, “Economic News Release,” January 18, 2019, <https://www.bls.gov/news.release/union2.nr0.htm>.

contractors had participated. Therefore, the project cost will be higher, with fewer bidders attempting to under-bid each other for the contract. Some opponents also argue that requiring a PLA violates state competitive bidding laws that require a free and open bidding process.

Proponents of PLAs counter that PLAs keep projects on time and on budget and that they help to assure the use of qualified, skilled workers on a project. They argue that the agreements provide for work conditions that are harmonious by eliminating inefficiencies in existing union collective bargaining agreements and that they guarantee predictable wage costs for the life of the contract. They contend that the combination of work rules and provisions that prohibit strikes, slowdowns and lockouts keep the project on time while preventing cost overruns due to delays. They argue, furthermore, that the wage stipulations allow firms to estimate more accurately the labor costs for the life of the project and thus keep the project on budget.<sup>9</sup>

Proponents also argue that the work rules, such as overtime and vacation pay under PLAs are often less generous than the collective bargaining agreements for some trades. Thus, if a PLA stipulates that overtime pay begins only after 40 hours per week, and not after eight hours per day, as in some collective bargaining agreements, then the PLA will produce savings on overtime costs.

Advocates insist that the union rules allow for a safer work environment, thereby reducing accidents and thus lowering the number of workers' compensation claims. Besides, they claim workers' union certifications and apprenticeship training programs ensure the quality of the work. These features, they argue, save money in the long run by keeping projects on budget by reducing cost overruns. Also, proponents assert that through union apprenticeship programs, PLAs help to ensure local workers are hired and trained.

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<sup>9</sup> Gerald Mayer, "Project Labor Agreements." Congressional Research Service, R41310, July 1, 2010, <https://www.cga.ct.gov/2011/rpt/2011-R-0360.htm>.

Such claims, against and for PLAs, are merely anecdotal. It is the owner's responsibility, in soliciting bids for a project, to specify the terms of the contract, including completion time and the expected quality of the work to be performed. When the owner is a public entity that is responsible for several or many construction projects over a long-time horizon, that entity should turn to the data to determine whether the practice of mandating a PLA does reduce costs as proponents claim. As in past studies, we use data to determine if the pro-PLA claims are valid.

## **Legal Background**

The controversy over PLAs on public construction projects has become more intense, with a myriad of court challenges from both sides of the argument.

In 1993, the United States Supreme Court's *Boston Harbor* decision raised the stakes over the use of government-mandated PLAs on public projects. In 1988, a federal court ordered the Massachusetts Water Resources Authority to fund the cleanup of Boston Harbor. The Authority's project management firm, IFC Kaiser, negotiated a PLA with the local construction unions for the multibillion-dollar cleanup effort funded by taxpayer dollars. In a move that set a precedent, IFC Kaiser mandated a PLA as part of the project's bid specifications.<sup>10</sup> As a result, a non-union trade group filed a lawsuit contending that the PLA requirement violated the National Labor Relations Act (NLRA). However, the United States Supreme Court held that a state authority, acting as the owner of a construction project and as a market participant purchasing construction services, was legally permitted to enforce a pre-hire collective bargaining agreement negotiated by private parties.<sup>11</sup> Since the *Boston Harbor* decision, most PLA litigation has centered on the competitive bidding requirements of state and local law.

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<sup>10</sup> Herbert R. Northrup and Linda E. Alario, "Government-Mandated Project Labor Agreements in Construction, The Institutional Facts and Issues and Key Litigation: Moving Toward Union Monopoly on Federal and State Financed Projects," *Government Union Review* 19, no. 3, (2000): 60.

<sup>11</sup> *Ibid.*, 60.

*New York State Chapter ABC, Inc. v. New York State Thruway Authority* provided a significant ruling that affected the use of PLAs. The court ruled that PLAs are "neither absolutely prohibited nor absolutely permitted" on public construction projects in New York and that they should be considered on a case-by-case basis. The court ruled that the public owners of construction projects in New York must demonstrate that a PLA upholds the principles of the state's competitive bidding statutes and protects the public's interest by obtaining the lowest price for the highest quality work, and prevents "favoritism, improvidence, fraud and corruption in the awarding of public contracts."<sup>12</sup>

### **PLAs at the Federal Level**

President George H.W. Bush's October 23, 1992, Executive Order 12818, "Open Bidding on Federally Funded Construction Projects," was the first serve in a ping pong match that ensued after the *Boston Harbor* court case. The executive order prohibited federal agencies from requiring PLAs on federal construction projects.<sup>13</sup>

On February 1, 1993, President Clinton issued Executive Order 12836, "Revocation of Certain Executive Orders Concerning Federal Contracting," rescinding President Bush's Executive Order 12818.<sup>14</sup>

After his reelection, President Clinton attempted to implement a pro-PLA executive order that instructed federal agencies to determine if a PLA would "advance the government's procurement interest[s]" on federal construction projects and then to implement them on a project-by-project basis. However, that executive order was never signed.<sup>15</sup> After extensive political pressure from the Republican-controlled U.S. Senate, President Clinton instead issued a June 5, 1997

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<sup>12</sup> *New York State Chapter ABC, Inc. v. New York State Thruway Auth.*, 88 N.Y. 2d 56,643 NYS 2d 480,666 NE 2d 185 (1996).

<sup>13</sup> Northrup, 3.

<sup>14</sup> Exec. Order No. 12836, 3 C.F.R. (1993).

<sup>15</sup> Draft Executive Order on the Use of Project Labor Agreements, April 1997, <http://thetruthaboutplas.com/wp-content/uploads/2009/06/draft-of-pro-pla-clinton-executive-order-never-happened-040197.pdf>.

memorandum that merely encouraged the use of PLAs on contracts over \$5 million for construction projects, including renovation and repair work, for federally owned facilities.<sup>16</sup>

Subsequently, few projects were conducted under government-mandated PLAs because the regulatory process that established the rules in which the federal government could require and use PLAs delayed implementation of the Clinton memo. Also, few federal agencies opted to mandate PLAs on federal construction projects, as documented in a May 5, 1998, U.S. Government Accountability Office (GAO) report: *Project Labor Agreements: The Extent of Their Use and Related Information*. The GAO report found that it is nearly impossible to show any savings or increased quality derived from the use of government-mandated PLAs.<sup>17</sup>

On February 17, 2001, under Executive Order 13202, President George W. Bush canceled the Clinton order by effectively prohibiting government-mandated PLAs on federal and federally assisted construction projects. The executive order declared that neither the federal government nor any agency acting with federal assistance should require or prohibit construction contractors to sign union agreements as a condition of performing work on a government construction project.<sup>18</sup> On April 6, 2001, the Bush Administration amended Executive Order No. 13202 with Executive Order No. 13208, which exempted any project that already had at least one contract awarded with a PLA from Executive Order 13202.<sup>19</sup>

Some of the largest unions in the country, including the AFL-CIO, insisted that the order illegally interfered with their collective bargaining rights under the NLRA. They filed suit in federal court (*Building & Construction Trades v. Allbaugh*), and on November 7, 2001, a United States District Court Judge issued an injunction blocking the President's order. The Justice Department

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<sup>16</sup> Ibid.,3.

<sup>17</sup>U.S. Government Accountability Office, *Project Labor Agreements: The Extent of Their Use and Related Information*, GGD-98-82, (May 29, 1998), <http://www.gao.gov/products/GGD-98-82>.

<sup>18</sup> Worcester Municipal Research Bureau, "Project Labor Agreements on Public Construction Projects: The Case for and Against," Report No. 01-4 (May 21, 2001): 7, <http://www.wrrb.org/reports/public-administration/2001/05/the-use-of-project-labor-agreements-on-public-construction-projects/>.

<sup>19</sup> Exec. Order No. 13208, 3 C.F.R. 187 (2001)

appealed and, the U. S. Court of Appeals for the District of Columbia overturned the lower court decision and ordered the judge to lift the injunction on July 12, 2002. In handing down its decision, the appeals court found that the NLRA did not preempt the executive order as the AFL-CIO argued.<sup>20</sup> The unions disagreed and filed to have the case reviewed by the United States Supreme Court. In April 2003, the Supreme Court declined to review the case, and the President's 2001 executive order remained in place.<sup>21</sup>

On February 6, 2009, shortly after entering office, President Obama issued Executive Order 13502, which changed federal government's policy to one that encouraged executive agencies to consider requiring, on a case-by-case basis, the use of PLAs related to large-scale construction projects (projects where the federal cost exceeded \$25 million).<sup>22</sup> The executive order claimed that, without a PLA, large-scale construction projects are likely to experience (1) labor "disputes," (2) difficulties in predicting labor costs and in avoiding interruptions in labor supply, (3) a lack of coordination on construction projects and (4) uncertainty about the terms and conditions of employment of workers – all of which ostensibly lead to delays and cost overruns.<sup>23</sup> If this were true, then federal construction projects initiated during the George W. Bush Administration's ban on PLAs should have been rife with labor disputes leading to cost overruns and delays.

That was not the case, however. A 2009 study by the Beacon Hill Institute found no evidence of any labor disputes or delays on the \$57 billion of federal construction projects with a price over \$25 million that were performed during George W. Bush's presidency.<sup>24</sup>

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<sup>20</sup> "Bush Administration, Construction Unions in Fight Over Project Labor Agreements," *Bulletin Broadfaxing Network*, December 5, 2002.

<sup>21</sup> Halloran & Sage LLP, "Union Activity Across the Country," *Connecticut Employment Law Letter* 11, M. Lee Smith Publishers & Printers, (April 2003).

<sup>22</sup> U.S. Department of Labor, "Implementation of Project Labor Agreements in Federal Construction Projects: An Evaluation, Interactive Elements Corporation & Hill International," (February 25, 2011) <https://www.dol.gov/asp/evaluation/reports/20110225.pdf>.

<sup>23</sup> David G. Tuerck, Paul Bachman and Sarah Glassman, *Project Labor Agreements: A Costly Solution in Search of a Problem*, The Beacon Hill Institute, (August, 2009), <http://www.beaconhill.org/BHIStudies/PLA2009/PLAFinal090923.pdf>, 4.

<sup>24</sup> *Ibid*, 6.

In 2009, the U.S. Department of Labor selected Manchester, New Hampshire to build a new Jobs Corps Center with a PLA mandate. However, non-union contractors complained that many New Hampshire construction contractors were non-union and that the PLA would favor contractors from out of state. A non-union contractor filed a bid protest with the GAO against the PLA mandate, and in the face of political pressure and an unfavorable ruling against the Labor Department, the PLA was eventually dropped, and the project rebid without a PLA. The second round of bidding produced three times as many bidders and bid prices that were 16 percent lower, ultimately saving taxpayers \$6.2 million and allowing a local company to deliver the award-winning project on-time and on budget.<sup>25</sup>

Similar successful protests against proposed PLA mandates on federal projects resulted in relatively few PLAs being mandated on large-scale federal projects during the Obama administration. Roughly 12 large-scale federal contracts (totaling \$1.256 billion) were subject to PLA mandates or preferences compared to 1,471 contracts (totaling \$82.69 billion) without government-mandated PLAs.

An unknown number of PLA mandates have proliferated on federally assisted projects procured by state and local governments. For example, according to a February 2017 report by the U.S. Department of Transportation's Federal Highway Administration (FHWA), over the last seven years, state and local government authorities mandated PLAs on 382 similar state and local contracts (totaling \$8.7 billion) receiving federal assistance from the FHWA.<sup>26</sup> To date, the Trump administration has not taken any action on PLAs.

State governments also have enacted legislation on the use of PLAs. A total of 25 states have adopted measures restricting the use of government-mandated PLAs on state, state-assisted and

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<sup>25</sup>Ted Siefer, "NH firm wins contract to build \$35M job center in Manchester after years-long fight," *The New Hampshire Union Leader*, (April 21, 2013), <http://www.unionleader.com/apps/pbcs.dll/article?AID=2013130429519&NL=1&template=printart#sthash.Ew01tG4.dpuf>.

<sup>26</sup> U.S. Department of Transportation, Federal Highway Administration, Interim Guidance on the use of Project Labor Agreements, (May 7, 2010), <https://www.fhwa.dot.gov/construction/contracts/100507.cfm>.



local construction projects to some degree. Since 2011, 22 states enacted measures following the Obama administration's pro-PLA policy. Roughly eight states have enacted measures encouraging the use of PLAs on a case-by-case basis.

## **PLAs in Washington State**

The *Boston Harbor* decision opened the door for PLAs on public construction projects throughout the country, including Washington State. As noted above, one of the first and most significant projects built under a PLA was the construction of the original Grand Coulee Dam structure in the 1930s.

Many Washington state public agencies have adopted Community Workforce Agreements (CWAs) that contain the same elements of PLAs. As the CWA for the recently completed 520 Floating Bridge project states, “[the] term Community Workforce Agreement (CWA) reflects the scope of a traditional Project Labor Agreement (PLA) with the added focus of hiring disadvantaged workers.”<sup>27</sup>

Government agencies in western Washington have utilized PLAs and CWAs for several large projects. The Washington State Department of Transportation required a CWA on the Highway 99 Tunnel project under Seattle in addition to the 520 Floating Bridge project. The Central Puget Sound Regional Transit Authority's (Sound Transit's) Sounder Commuter and Link Light Rail Projects, as part of the \$50 billion expansion plan includes a PLA.<sup>28</sup>

The Highway 99 Tunnel project provides a cautionary tale on the benefits that supporters of PLAs claim, specifically the promise that PLAs help builders avoid work stoppages due to strikes and that PLAs keep projects on time. A strike began when the “International Union of Operating Engineers Local 302, which includes crane operators, surveyors, road pavers, mechanics and other

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<sup>27</sup> Pacific Northwest Regional Council of Carpenters, For Members, On the Job, Project Labor Agreements, <https://www.nwcarpenters.org/wp-content/uploads/2018/08/WSDOT-520-Bridge-Replacement-SBT-CWA.pdf>

<sup>28</sup> Sound Transit, About Transit Sound, Project Labor Agreement, (accessed October 2018), <https://www.soundtransit.org/About-Sound-Transit/Doing-business-with-us/Project-Labor-Agreement>.

workers, walked off the job Aug. 21 [2018].”<sup>29</sup> Although the PLA purports to protect the project from strikes, “[s]cheduled work... on 405 and at the southern portal of the new Highway 99 Tunnel in Seattle was also scrapped because of the strike,” according to a story in the *Seattle Times*.<sup>30</sup>

The project has been “plagued by delays and mishaps, including the injury of four workers when an elevator shaft collapsed, and a nearly two-year halt of its huge tunnel boring machine, Bertha.”<sup>31</sup> In 2015, several workers at the worksite claimed that employees bribed supervisors and foreman with bottles of alcohol to get overtime and other perks, also claiming that workers were drunk at the worksite and subject to sexual harassment.<sup>32</sup> The PLA was not effective in inoculating the bore tunnel project from a work stoppage due to the strike or provide for a safe work environment.

The evidence is mixed, however. A 2011 report prepared for Sound Transit found four strikes lasting a total of 74 days during work on their public transportation expansion project. The report found that the project work schedules were unaffected by the strikes due to the PLA.<sup>33</sup>

Both King County and the City of Seattle approved rules promoting the use of PLAs and CWAs. On July 14, 2010, the Metropolitan King County Council Labor Policy Committee adopted King County labor policy LP 2010-031, which directed the county to explore the use of a PLA for county projects when appropriate.<sup>34</sup> The policy establishes four criteria for deciding to use a PLA.

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<sup>29</sup> Mike Rosenberg, Construction Workers Strike Delays Projects across Western Washington, *Seattle Times*, (August 29, 2018) <https://www.thenewstribune.com/news/local/article217535290.html>.

<sup>30</sup> Ibid

<sup>31</sup> Susannah Frame, ‘Booze-for-perks Scheme Alleged at Seattle Tunnel Site,’ King-5-TV, in *USA Today*, (February 26, 2015) <https://www.usatoday.com/story/news/nation-now/2015/02/26/booze-for-perks-seattle-tunnel/24042935/>.

<sup>32</sup> Ibid.

<sup>33</sup> “Sound Transit Project Labor Agreement Study,” Agreement Dynamics, (2011), <https://www.soundtransit.org/sites/default/files/documents/project-labor-agreement-study-201112.pdf>.

<sup>34</sup> Establishing Procedures and Criteria for the Appropriate Use of a Project Labor Agreement (PLA) on Major King County Capital Construction and Alternative Delivery Projects, King County, Policies, Public Rules, and Interlocal Agreements (May 10, 2013) <https://www.kingcounty.gov/about/policies/executive/peraeo/per131aao.aspx>.

The first criterion is "whether the size and complexity of the project and the time needed for completion are significant."<sup>35</sup> The policy further defines "significant" as projects estimated to cost over \$25 million, if the project will take place over a multiyear period when construction labor contracts must be renegotiated, or if the potential for labor disruptions could affect the completion of the project or "ongoing operations."<sup>36</sup>

The second criterion is if "the project is expected to involve a substantial number of trades and crafts." The third criterion is whether "the need and urgency of the project is such that there could be harm to the public if completion of the project is delayed due to labor disruptions." The final criterion is "whether the use of a PLA is otherwise expected to provide cost, efficiency, quality, safety, and/or schedule benefits to the project."<sup>37</sup>

King County has required PLAs or CWAs on dozens projects over the past decade, most involving water treatment or conveyance systems. It required a PLA on the Factoria Recycling and Transfer Station project as well.

In 2015, the City of Seattle established the Priority Hire Program for all city public construction projects valued at \$5 million or more. The program prioritizes the hiring of residents that live in economically distressed areas, particularly in Seattle and King County. The program also sets apprentice utilization requirements and goals for hiring women and "people of color."<sup>38</sup>

The program requires the Director of Finance and Administrative Services "to negotiate and execute a CWA that applies to all Covered Projects other than projects deemed impracticable under Section 20.37.020."<sup>39</sup> The exceptions to Chapter 20.37 include work done on an emergency basis, sole-sourced work, when it violates a grant or agreement with a public agency, projects located in

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<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> Seattle Washington – Municipal Code, Title 20 – Public Works, Chapter 20.37.50 – Community Workforce Agreement, paragraph A,

[https://library.municode.com/wa/seattle/codes/municipal\\_code?nodeId=TIT20PUWOIMPU\\_SUBTITLE\\_I\\_IPUWO\\_CH20.37PRHI\\_20.37.050COWOAG](https://library.municode.com/wa/seattle/codes/municipal_code?nodeId=TIT20PUWOIMPU_SUBTITLE_I_IPUWO_CH20.37PRHI_20.37.050COWOAG).

<sup>39</sup> Ibid.

remote regions and other circumstances.<sup>40</sup> The City has built several public construction projects under the CWA in recent years.

The debate over PLAs has gone under the radar in Washington State. Nevertheless, as the percentage of private construction workers covered by a union contract fell from 33.9 percent in 1983 to 25 percent in 2018, PLAs have become less justifiable.<sup>41</sup>

## **Evidence on PLAs**

The evidence on whether PLAs drive up construction costs has, until recently, been mostly anecdotal. The claims outlined above, fall into two categories: those that depend on the estimates by consultants that were made in the pre-bid stage of a project, with no attempt made to verify their cost-saving claims after the fact; or, two, those for which the cost analysis was restricted to only a few projects, as in the Sound Transit case. No “analysis” of that kind provides any quantitative evidence that PLAs increase or reduce construction costs.

It is statistically possible to test whether PLAs raise construction costs by using the approach taken in our previous studies. However, we were unable to find enough Washington public school construction projects built under a PLA requirement – the method used in our previous studies – to get statistically significant results. Therefore, we had to turn to another method for the purpose of this study.

In this study, we measure the effect of government-mandated PLAs on the level of competition in the bidding process. As discussed above, it is widely believed that PLAs discourage non-union contractors from bidding on public construction projects. We examined data on public

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<sup>40</sup> Seattle Washington – Municipal Code, Title 20 – Public Works, Chapter 20.37.20 – Director Powers, Paragraph B, [https://library.municode.com/wa/seattle/codes/municipal\\_code?nodeId=TIT20PUWOIMPU\\_SUBTITLE\\_I\\_IPUWO\\_CH20.37PRHI\\_20.37.050COWOAG](https://library.municode.com/wa/seattle/codes/municipal_code?nodeId=TIT20PUWOIMPU_SUBTITLE_I_IPUWO_CH20.37PRHI_20.37.050COWOAG).

<sup>41</sup> Barry T. Hirsch and David A. Macpherson, "[Union Membership and Coverage Database from the Current Population Survey: Note](#)," *Industrial and Labor Relations Review*, 56 no. 2 (January 2003):349-54 (updated annually at [unionstats.com](http://unionstats.com)).

construction contracts in western Washington and compared the number of bids received under PLAs to the number without PLAs.

In the next section, we review our variables, data sources, and the methodology. We then report the results of our regression analysis and estimate the effect of PLAs on construction costs in Washington State.

## **Data Sources**

We collected data from government agencies in western Washington that underwent extensive infrastructure construction projects: The City of Seattle, King County, the Washington State Department of Transportation (WS-DOT), Sound Transit and the Port of Seattle. We sought data for construction or infrastructure projects on the number of bids the project received, the contract award date, the contract award amount, the amount of the winning bid, and the engineer's estimate of the contract value.

We were able to collect complete information on contracts from the City of Seattle (47 contracts), King County (60), WS-DOT (12) and Sound Transit (6) for a total of 125 projects. We were able to collect partial data on hundreds of other construction contracts but were unable to confirm one data point, most often the PLA status of the project. We eliminated one non-PLA project as an outlier because it received 19 bids. The data set includes 62 projects built under a PLA and 63 projects not build under a PLA.

Our sample covers the period from 2003 to the present. To compare the number of bidders for PLA with non-PLA projects we used the dollar size of the contract award, the winning bid or the engineer's estimated cost to account for the possibility that projects with a PLA are larger and more expensive than non-PLA projects. It was necessary to correct for the fact that construction costs rose during this period. We used the U.S. Department of Labor's Bureau of Labor Statistics

Producer Price Index industry data for “Total manufacturing industries” to make the needed correction.<sup>42</sup>

## Comparing PLA to Non-PLA Projects

Table 1 compares the characteristics of the construction projects in western Washington with a PLA (“PLA projects”) with those where there was no such agreement (“non-PLA projects”).

**Table 1: Summary Statistics for Construction Projects by PLA Status**

Variable	Number of Bidders	Size of project ('000s 2018 \$ )	Employment in Construction Industry (thousands)
<b>Mean</b>			
PLA	3.56	79,897	178
Non-PLA	4.60	17,185	174
<b>Standard Deviation</b>			
PLA	1.42	188,140	25
Non-PLA	2.50	28,365	27
<b>Minimum</b>			
PLA	1.00	77	136
Non-PLA	1.00	52	136
<b>Maximum</b>			
PLA	7.00	1,088,302	210
Non-PLA	13.00	147,363	210

A notable pattern in the data is that PLA projects, on average, attract 1.04 (4.60 minus 3.56) fewer bidders than non-PLA projects. However, this is not conclusive, because it is possible that PLA projects are systematically different – for instance, PLA projects are costlier projects. Formal regression analysis allows us to determine whether the difference in PLA versus non-PLA projects is robust due to variations in project bids.

The status of the construction market in Washington also influences the number of bids each contract receives. During periods of robust activity in the construction industry, public construction projects are likely to attract fewer bidders as some contractors are likely to be too

<sup>42</sup> Bureau of Labor Statistics, Producer Price Index, PPI industry group data for Total manufacturing industries, Total manufacturing industries, (accessed December 2018), <https://www.bls.gov/ppi/#tables>.

busy to take on new work. Slack construction markets would provide a larger pool of contractors to bid on public contracts and, thus, should increase the number of bids public construction projects receive.

To measure the effect of the status of the construction market in Washington, we include a variable consisting of the number of employed construction workers in Washington in January of each year during the period of the analysis. We match the year each construction contract was awarded with the number of construction employees in Washington that year.

In our regression, the dependent variable is the number of bidders for the construction contract. The most critical independent variable is a dummy variable that is set equal to 1 for PLA projects and to 0 otherwise. The ordinary least squares regression results are presented in Table 2.

**Table 2: Ordinary Least Squares Estimation of the Number of Bidders per Contract**

Variable	Coefficient	Standard error	p-value (one-tailed test)
Constant	8.151	1.276	0.000
PLA	-0.840	0.369	0.013
Employment	-0.202	0.007	0.003
Inflation-Adjusted Contract Value	-1.891	1.401	0.090

Adjusted R<sup>2</sup> is 0.101. The sample size is 125.

Our results show that the PLA projects reduced the number of bidders by 0.84, or almost one bidder on construction contracts. The critical point here is that this amount represents the effect of PLA projects after controlling for other measurable influences on costs; these other influences are essential for explaining why construction costs differ from project to project. The estimates in Table 2 show that it matters whether the project is built under PLA arrangements.

A formal (one-tailed) test of the statistical significance of the PLA coefficient gives a p-value of 0.013, which means that there is less than a 1.5 percent chance that we have accidentally found

that PLA projects receive fewer bids than non-PLA projects. Simply put, there is a 98.7 percent probability that PLA projects attract .84 fewer bidders than non-PLA projects, holding project size and construction market conditions constant.

The equation also shows that periods of higher employment in the construction industry reduce the number of bidders by 0.20. The negative coefficient for the contract amount captures the effect that larger contracts attract 1.9 fewer bidders.

With an adjusted  $R^2 = 0.101$ , the equation “explains” 10.01 percent of the variation in construction bid costs across projects. Clearly, other factors also influence the number of bidders on construction contracts. However, as a practical matter, it is impossible to collect data on every element that increases or decreases cost.

## Robustness

Exploring the robustness of our results is helpful. In other words, is there still a PLA effect if we look to restrict our sample to more substantial projects or projects that meet the CWA threshold of \$5 million for projects in Seattle? The results of this exercise are summarized in Table 3.

**Table 3: Regression Estimates of the “PLA Effect” For Different Sub-Samples**

Sub-sample	PLA effect (bids)	p-value	Sample size (# of PLA projects)	Adjusted R <sup>2</sup>	Mean bids	
					Non-PLA projects	PLA projects
<b>Project bids (baseline)</b>	-0.840	.013	125(62)	.101	4.60	3.56
<b>Value of contract</b>						
\$5 million and up	-1.514	.001	89(42)	.130	5.10	3.36
\$5 to \$100 million	-1.708	.001	77(32)	.152	5.16	3.34
Over \$50 million	-1.303	.065	18(6)	.230	4.50	3.21
Under \$50 million	-0.812	.022	107(48)	.143	4.61	3.67
Weighted (Contract Size)	-1.409	.021	125(62)	.348		
<b>Value of Employment</b>						
150,000 and up	-1.065	.022	94(50)	.024	4.48	3.40
190,000 and under	-1.459	.020	73(49)	.049	5.21	3.51



The first column indicates the sample, or sub-sample, used in estimating the regression equation. We performed this analysis by running separate regressions for the following samples:

1. the “baseline” sample, which consists of all the cases for which information was available on the number of bidders; this was also used to give results weighted by contract amount;
2. different contract award amount parameters; and
3. different construction industry employment parameters.

The “PLA effect” column shows the estimate of the effect of having a PLA on the number of bidders, and the corresponding “p-value” column measures the statistical significance of these coefficients. The PLA effect is statistically significant at the 5 percent level or better, except for contract amounts over \$50 million. However, this sample size is only 18 observations. The size of the PLA effect differs, depending on the sample examined.

Following standard practice, our regressions used ordinary least squares (OLS), which means that each observation (here, a public construction project) carries equal weight in the regression. However, we also estimated our preferred equation using weights, where each project is given a weight that is in proportion to the size of the contract in dollars that it represents. This means that a \$10 million project, for instance, would have twice the weight in the equation as a project of \$5 million. The weighted contract regression shows a PLA effect of -1.409 bids, again statistically significant.

## Conclusion

Based on data on construction bids and related variables for projects in western Washington since 2003, we find the following:

- (i) PLA projects attracted, on average, 0.84 fewer bidders on construction projects relative to non-PLA projects. Because the average number of bidders for non-PLA construction projects is 4.6, PLAs reduced the number of bidders by 18.26 percent.
- (ii) We are more than 98.7 percent confident of this finding, based on the available data.
- (iii) The finding that PLA projects attract fewer bidders is robust, in that:
  - a. The effect persists even when the data are subdivided so that the result is evident separately for mid-size projects, small projects, and large projects; and
  - b. A regression that weighted observations by project size also shows the effect.

In sum, the evidence that PLAs have attracted fewer bidders on public construction projects since 2003 is strong. Altogether, the 62 PLA projects in our sample accounted for \$4.91 billion of contracts awards, based on the projects that we were able to include in our study. Applying a range of the findings from our previous PLA studies, we find that taxpayers would have saved between \$589 million, or 12.12 percent, and \$879 million, or 17.9 percent.<sup>43</sup>

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<sup>43</sup> \$589 million = \$4.91 billion multiplied by 12.1 percent; and \$879 million = \$4.91 billion multiplied by 17.9 percent. The Massachusetts study found PLAs increase construction costs by 12.1 percent; the Ohio study found PLAs increase construction costs by 13.2 percent; and the Connecticut study found PLAs increase construction costs by 17.9 percent.

## Appendix

### Data Gathering Methodology

BHI utilized a multi-step data collection process. In the first step, we searched the internet for instances of PLAs in Washington State to identify the government entities that utilize PLAs. The search result included news stories, union websites, government websites, and other sources. We found that the City of Seattle, King County, the Port of Seattle, Sound Transit, and the Washington State Department of Transportation (WS-DOT) used PLAs.

We contacted each agency to obtain the data points for our analysis. The contracts or procurement departments for King County, Seattle, and WS-DOT had reports or web-tools that contained the contract award, winning bid and engineers' estimate of the contract value. Some of the web tools either included the PLA or language indicating the project required a PLA.

We contacted the agencies to find missing variables, with mixed success. In particular, we were unable to verify the PLA status of past and recent projects. In our discussions with agency representatives, several indicated that the agency did not track the use of PLAs or that PLAs were not widely used. Nevertheless, if we were unable to confirm the PLA status of a project systematically, we excluded the project from our dataset.

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