

**UNION-ONLY PROJECT LABOR AGREEMENTS:
THE PUBLIC RECORD OF POOR PERFORMANCE
(2005 Edition)**

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I. Introduction

Union-only project labor agreements (PLAs) are agreements by which construction owners/developers require successful bidders to sign collective bargaining agreements with labor unions as a condition of being allowed to perform work on a project. Such PLAs are “union-only” in the sense that, regardless of whether their employees have previously performed work on a unionized basis, contractors cannot perform work on the project without first signing a union agreement covering that project.¹

The legality of union-only project labor agreements (PLAs) has been the subject of much debate and litigation, particularly with regard to the proper role of government in relation to such agreements. In 1993, the U.S. Supreme Court held that government-mandated PLAs were not automatically preempted by the National Labor Relations Act, but the Court did not address the legality of PLAs under state or federal competitive bidding laws.² Since then, a number of state courts have reviewed challenges to union-only PLAs on government projects, with mixed results.³

¹ For a further discussion of the definition and historical development of union-only PLAs, *see Symposium, Government-Mandated Project Labor Agreements*, 19 Jnl. Of Labor Res. 1 (1998).

² *Building and Construction Trades Council of the Metropolitan District v. Associated Builders and Contractors of Massachusetts/Rhode Island, Inc.* (“Boston Harbor”), 507 U.S. 218 (1993).

³ Compare *Tormee Const., Inc. v. Mercer County*, 669 A. 2d 1369 (NJ 1995) (government-mandated union-only PLAs generally not permitted under state competitive bidding law); with *New York State Chapter, Inc., Associated General Contractors of America v. New York Thruway Authority*, 88 N.Y. 2d 56 (1996) (PLAs permitted only upon proof of cost savings and demonstrable need to meet unusual construction circumstances); and with *Associated Builders and Contractors, Inc., Golden Gate Chapter v. San Francisco Airports Commission*, 87 Cal. Rptr. 2d 654 (1999) (upholding PLA absent proof of injury to competition in order to “prevent costly delays”); *See also ABC of Rhode Island, Inc. v. City of Providence*, 108 F. Supp. 2d 73 (D. R.I. 2002) (government's conditioning of tax incentives on developer's acceptance of PLA held preempted by NLRA); *Callahan & Sons v. City of Malden, Mass.*, 713 N.E. 2d 955 (1999) (PLAs neither “absolutely prohibited nor absolutely permitted.”).

In 2001, President Bush issued an Executive Order prohibiting federal agencies and recipients of federal funds from imposing union-only requirements on federally funded construction projects.⁴ Two states, Montana and Utah, have laws currently in effect that prohibit government agencies from imposing union-only PLAs.⁵

Until recently, much of the discussion of PLAs, both in the courts and among political decision makers, took place in an evidentiary vacuum. There was little hard proof as to the actual impact of union-only PLAs on construction costs, schedules, safety, minorities, labor supply, or quality of work. Supporters and detractors put forward theories as to the *likely* impact of union-only construction, without being able to show clear examples supporting their claims.

The purpose of the present report is to help fill the apparent gap in public knowledge about the true impact of union-only PLAs. In order to achieve this goal, the Report undertakes the only known examination of the actual results of union-only construction, to see whether PLAs have achieved the goals claimed by their supporters, or whether union-only PLAs have instead been the subject of increased costs, injured competition, delayed construction timetables, unsafe work practices, problems for minorities, or other construction defects, as claimed by their detractors. To the maximum extent possible, the Report relies on published sources, particularly news media accounts and academic studies that have examined the *actual progress of identified projects built under union-only requirements*.

As is shown below, the public record of union-only construction reflects a persistent pattern of cost overruns, adverse impacts on competition, delays in construction, construction

⁴ Executive Order 13202 (Feb. 17, 2001), as amended, Executive Order 13208 (April 6, 2001). President Bush's Executive Order was upheld against claims of labor law preemption in *Building & Const. Trades Dept., AFL-CIO v. Allbaugh*, 295 F. 3d 28 (D.C. Cir. 2002).

⁵ Utah Code Ann. § 34-30-14(2) (1995); Mont. Code Anno., § 18-2-425 (1999).

defects, safety problems and diversity issues on union-only construction projects. Each of these problems has been confirmed by numerous published reports on union-only projects undertaken during the past decade.

This Report does not attempt to determine whether and to what extent any particular union-only PLA “caused” the problems that have occurred on the cited projects. The Report simply identifies union-only projects about which information is publicly available and describes the results that were achieved under such union-only requirements. Readers are left to make their own judgments. It should be noted, however, that PLA proponents' claims of cost savings, avoidance of delays and/or improved performance under proposed PLAs have been repeatedly contradicted by the actual project performance under such union-only requirements. The following summary of published reports strongly supports the assertion that union-only PLAs, aside from their questionable legality, are a bad bargain for taxpayers.

This Report is organized by PLA performance issue, in the following order:

Cost Overruns;

Adverse Impacts on Competition;

Delays in Construction;

Safety Problems; and

Problems with Minorities and Women.

Published reports on the union-only projects within each category are then organized under each issue associated with them, more or less geographically from East to West across the United States. **For ease of reference, all of the projects discussed in the Report are listed together, with the published sources referencing each project, in an Appendix to this Report.**

II. Cost Overruns On Union-Only Construction Projects

Proponents of union-only PLAs have frequently claimed that such agreements will achieve cost savings for the projects involved. To the contrary, the public track record of a significant number of union-only PLAs to date has reflected significant cost *overruns*. The following union-only projects have been the subject of published reports of cost overruns:

The Boston Central Artery Project (the "Big Dig") was built under a union-only PLA, notwithstanding a court challenge, in the 1990s. Originally projected to cost \$2.2 billion dollars, the Big Dig wound up costing more than \$14 billion dollars, among the biggest cost overruns in the history of American construction projects.⁶ The scope of the overruns was reported on television's "Sixty Minutes" and in numerous newspaper reports, and allegations of fraud and waste on the Big Dig resulted in a Congressional investigation and years of litigation.⁷ As discussed in later sections of this Report, the excessive cost of the Big Dig did not result in higher quality or safety of construction, as there were a number of fatalities among the union workers, and published reports have described massive leakage throughout the tunnel.⁸

Another Boston project built under a union-only PLA, the Convention Center, likewise suffered from cost overruns. Construction managers were "stunned" at the size of the cost overrun, which was deemed "likely to soar nearly \$100 million over the allotted \$750 million for the project."⁹

A 2003 study published by the Beacon Hill Institute examined 126 school construction projects undertaken with and without union-only project labor agreements in the Boston area from 1995 to 2003. The study found that union-only PLAs added \$37.88 per square foot to the

⁶ <http://www.issuesource.org>.

⁷ *Boston's 'Big Dig' Buried in Cost Overruns*, Washington Post, April 12, 2000; *Low Bid, \$22 Million Over Estimate, Is Approved*, ENR, Jan. 13, 1997 at 5; *Boston Projects Tracking Higher*, ENR, Jan. 20, 1997, at 27.

⁸ See pages 17-20 below for further reports on safety and quality issues on the Big Dig.

cost of building schools.¹⁰ One of the study's authors observed: "It is puzzling to us why any local official would enter into a PLA in the light of local budget realities, as well as our findings."¹¹

Beacon Hill conducted a second study, this time of Connecticut school construction, in 2004. The study again found that union-only PLAs increased the cost of school construction in Connecticut, based upon an analysis of dozens of actual projects built on both a union-only and open competition basis since 1996. According to its Connecticut report, Beacon Hill found that PLAs increase actual project costs by 17.9% and that bid costs are raised by 16.6%.¹² "Taken together, PLA projects accounted for 1.32 million square feet of construction with a combined actual cost of \$224.8 million (in 2002 prices), based on the projects that we were able to include in our study. Our estimates show that this cost was \$39.5 million higher than it would have been if PLAs had not been used."¹³

One particular Connecticut high school, Hartford Public High, encountered significant cost overruns after the government imposed a union-only PLA in 2004. As reported in the Hartford Courant, "Some components of the job received few or no bids. The bids that did arrive were several million dollars more than the \$82 million that voters approved seven years ago."¹⁴

In New York, the Roswell Park Cancer Institute was partially constructed under a union-only PLA. Comparisons of bid packages released under the PLA and bid packages undertaken without any union-only requirement revealed that costs of construction under the union-only

⁹ *Huge Overrun Looms at Convention Center*, Boston Globe, Jan. 9, 2001.

¹⁰ Beacon Hill Institute, *Project Labor Agreements and the Cost of School Construction in Massachusetts* (Sept. 2003) (www.beaconhill.org).

¹¹ Boston Business Journal (April 11, 2003).

¹² Beacon Hill Institute, *Project Labor Agreements and The Cost of School Construction in Connecticut* (Oct. 2004).

¹³ *Id.*

¹⁴ *School Project Back in Limbo*, Hartford Courant, April 7, 2004.

PLA were 48% higher than without the PLA.¹⁵ Projects not subject to the union-only PLA were 13% under budget. Projects bid with a union-only PLA were 10% over budget.¹⁶

Similarly, in Buffalo, New York, a PLA was imposed on the Northwest Academy school project. Bids received were more than 20% over budget, and the price tag soared from an estimated cost of \$26 million to \$32.4 million. The School Board was forced to cut \$4 million from projects at other schools to make up the deficit.¹⁷ Also in Buffalo, a Democratic legislator proposed naming the new Erie County Courthouse the “Flimflam-50 Percent Courthouse.” Referring to the latest product of union-only construction, the legislator stated: “We’ve been flimflammed and now we’re 50 percent over budget.”¹⁸

In Washington, D.C. a new convention center was projected to cost \$685 million in 1998.¹⁹ After a union-only PLA was signed, however, costs ballooned to more than \$840 million by the time the project was completed.²⁰

Also in the Washington area, the \$2.4 billion project to replace the Wilson Bridge between suburban Maryland and Virginia was temporarily subjected to a union-only PLA requirement by former Maryland Governor Glendening. After the PLA was imposed, only one bidder responded to the RFP for Phase 1 of the project, at a bid price more than \$370 million above the State's engineering estimates, a 78% cost overrun.²¹ After the President issued his Executive Order prohibiting union-only PLAs on federally assisted projects like this one,

¹⁵ Baskin, *The Case Against Union-Only Project Labor Agreements*, 19 *Construction Lawyer* (ABA) 14, 15 (1999).

¹⁶ *Id.*

¹⁷ *Board to Absorb Extra Costs as Price of New School Soars to \$32.4 Million*, Buffalo Evening News, Oct. 29, 1998.

¹⁸ *Calling Courthouse a Spade*, Buffalo News, Jan. 23, 2000.

¹⁹ *Convention Center Costs Increase By \$15 million*, Washington Construction News, March 2001.

²⁰ Washington Business Journal (March 2003).

²¹ *Lone Wilson Bridge Bid Comes in 70% Above Estimate*, Engineering News Record, Dec. 24, 2001; *see also* Baltimore Sun, March 2, 2002.

however,²² Phase 1 of the Wilson Bridge project was rebid without the PLA. This time multiple bids were received, and the winning bids came in significantly *below* the engineering estimates.²³ Three years after elimination of the union-only PLA requirement, the Wilson Bridge project is well underway and is 30% under budget.²⁴

In Cleveland, Ohio three union-only construction projects built during the 1997-1999 period all suffered from significant cost overruns.²⁵ These inflated costs to taxpayers contributed to the Ohio legislature's decision eventually to prohibit state-sponsored union-only requirements entirely.²⁶

Thus, the cost of Cleveland's Gund Arena was originally estimated at \$118 million. The governing agency then entered into a union-only PLA. The final cost of Gund Arena was \$148 million, \$30 million or 25% more than estimated.²⁷

The cost of the Cleveland Browns' new stadium, also constructed pursuant to a union-only PLA, was \$21 million over the estimate in 1998. The union-only bids for the stadium totaled millions higher than the estimates. The final cost of the stadium was reported to be at least \$61 million more than the original estimate, an increase of 25%.²⁸

²² See discussion above at page 2.

²³ *Unexpectedly Low Bid Keeps Wilson Bridge Under Budget*, Washington Post, March 2, 2002.

²⁴ *New Bridge on the Rise*, Washington Post, October 13, 2004.

²⁵ *\$12 Million to pay for Arena Overruns*, Cleveland Plain Dealer, Dec. 14, 1996, at 16-A; See also, *Westbrook says stadium overruns at \$21 million*, Cleveland Plain Dealer, Jan. 21, 1998; See also, *Parma Justice Center building behind schedule, over budget*, Cleveland Plain Dealer, Mar. 2, 1999.

²⁶ Ohio R.C. 4116 (1999), subsequently struck down by the Ohio Supreme Court in *Ohio State Building & Construction Trades Council v. Cuyahoga County Board of Commissioners*, 2002 Oh. 7213, 781 N.E. 2d 951 (Ohio 2002)..

²⁷ *\$12 Million to pay for Arena Overruns*, Cleveland Plain Dealer, Dec. 14, 1996, at 16-A.

²⁸ *Mayor's Final Cost at Stadium 25% Over*, Cleveland Plain Dealer, June 24, 2000; *Westbrook says stadium overruns at \$21 million*, Cleveland Plain Dealer, Jan. 21, 1998.

In March 1999, the Parma Justice Center, another product of union-only construction, was declared to be \$2 million over budget. The City of Cleveland announced in 1999 that it would have to borrow \$1.5 million to pay for the cost overruns.²⁹

Faring even worse was the new federal courthouse in St. Louis, also constructed on a union-only basis. There, the U.S. General Services Administration was forced to terminate the union contractor for default, due to projections of increased costs and delays.³⁰

Comerica Park, the Detroit Tigers' new union-only baseball stadium, was expected to cost \$260 million, prior to imposition of a union-only PLA. A PLA was signed, however, and upon completion of construction, costs were reported to be in excess of \$320 million.³¹

In Rochester, Minnesota, bids were opened under a union-only PLA for expansion of the Mayo Civic Center on September 21, 1999. The lowest bid was \$14.9 million dollars, 36% higher than the City's budget. On October 5, 1999, the City Board voted to reject all bids, redesign the project, and rebid it.³² The City Parks Superintendent said: "We don't really know what to do. We were very disappointed with the bids." Significantly, previous work on the Center had been performed without any union-only requirements and had been completed within the City's budget.

The Iowa Events Center was constructed under a union-only PLA in 2003-2004. Though estimated to cost \$217 million prior to the PLA being imposed, the Center was several million

²⁹ *Parma Justice Center building behind schedule, over budget*, Cleveland Plain Dealer, Mar. 2, 1999.

³⁰ *GSA Terminates Morse Diesel*, ENR June 28, 1999 at 15.

³¹ *Stadium On Time, But Costs More*, Detroit News, Oct. 31, 1999, B3; *see also Field of Woes*, Crain's Detroit Business Magazine, June 18, 2001.

³² *Civic Center Bids Exceed the Budget*, Post-Bulletin, Sept. 28, 1999.

dollars over budget by mid-2003.³³ In addition to increased costs, the project suffered from safety and quality defects.³⁴

Increased wage costs were identified on the union-only Department of Energy project at the Idaho Nuclear Engineering Laboratory, according to a GAO Report in 1991. In particular, the GAO found that wages on the project were 20 percent higher than the prevailing wage for the area, an amount which GAO attributed to increased travel costs under the PLA.³⁵

The San Francisco Airport, whose PLA was upheld by the California Supreme Court in part on the ground of cost savings, has since gone “hundreds of millions over budget.” Soon after the court decision in favor of the PLA, published estimates indicated that the Airport would exceed its \$2.4 billion budget by more than \$400 million.³⁶

The Eastside Reservoir project, east of Los Angeles, another union-only project, was the nation’s largest earth moving project in the late 1990’s. In October 1998 the project reported a \$220 million cost overrun, an 11% cost increase.³⁷ The cost overruns were attributed to payment of overtime wages under circumstances mandated by the PLA.³⁸

A union-only PLA was imposed on the Pasadena, California Power Plant after bids had already been received without any such requirement. As a result of imposition of the PLA, the winning bidder announced that its bid would have to be increased by \$2.3 million, roughly a 10% cost increase.³⁹

On September 3, 1999, then-Secretary of Energy Bill Richardson announced that he was “unhappy” with cost overruns of as much as \$300 million at the Energy Department’s \$1.1

³³ *Troubled Center Moves Ahead*, Des Moines Register, July 12, 2003; *Say No to Project Labor Agreement*, Des Moines Register, July 23, 2003.

³⁴ See discussion below at pages 18-20.

³⁵ *Construction Agreement at DOE’s Idaho Laboratory Needs Reassessing*, GAO, May 23, 1991.

³⁶ *SFO Expansion Project Hundreds of Millions Over Budget*, San Francisco Chronicle, Dec. 22, 1999.

³⁷ *Overruns Hit Eastside Project*, ENR, Oct. 19, 1998, at 1, 13.

³⁸ *Id.*

billion National Ignition Facility in Livermore, California. The project was constructed pursuant to a union-only PLA.⁴⁰

Finally, in Seattle, the union-only construction of Safeco Field, the new Seattle Mariners stadium, experienced very high cost overruns.⁴¹ The original estimate for the new stadium was \$320 million. The stadium's final price tag was in excess of \$517 million, a 60% increase. The cost overruns made the new union-only stadium the most expensive stadium ever built in the United States. By contrast, Baltimore's Camden Yards, among many other stadiums around the country, was built without any union-only requirements, with no cost overruns.

³⁹ *Power Plant Costs to Soar*, Pasadena Star-News, March 21, 2003.

⁴⁰ *Cost Overruns Dog DOE Facility*, ENR, Sept. 13, 1999.

⁴¹ *New Seattle Stadium Battles Massive Cost Overruns*, ENR, July 27/Aug. 3, 1998, at 1, 9.

III. Adverse Impacts on Competition

A potentially significant contributor to the increased costs of union-only projects is the reluctance of many non-union contractors to submit bids for work under such conditions. A review of published reports about union-only projects reveals a substantial number of projects in which the competition among bidders has been less than expected, to the detriment of taxpayers.

In 1996, the Boston officials administrating the union-only Central Artery/Tunnel (CA/T) project predicted intense competition for the award of work on the project.⁴² The project director, Peter M. Zuk, CA/T said in 1995, “previous history indicates intense competition for the jobs, with all bids generally coming in below engineers’ estimates.”⁴³ Only one year later, after implementation of the union-only requirement, the bid for half of the project was awarded to a union contractor for a price \$22 million over the engineer’s estimate.⁴⁴ The second lowest bid was \$41 million over the engineer’s estimate.⁴⁵ In February 1996, Zuk said that, “given the size of the project we are surprised at the relatively small number of bidders to date.”⁴⁶ He also said that, “the bid packages are big enough that they should be attractive . . .” The project director was eventually forced to pursue bidders for the remaining \$2 billion in construction work that had not been awarded. The bids for the remaining projects continued to be submitted at amounts higher than the engineer’s estimates. This forced the project director to recruit contractors to bolster competition; they also decreased the size of several of the bid packages.⁴⁷

⁴² *Big Boston bids in 1996*, ENR Nov. 20, 1995 at 26.

⁴³ *Id.*

⁴⁴ *Low Bid, \$22 Million Over Estimate, Is Approved*, ENR, Jan. 13, 1997, at 1, 5.

⁴⁵ *Id.*

⁴⁶ *More Bidders Wanted For Central Artery Project Work*, ENR, Feb 3, 1997, at 1, 18.

⁴⁷ *Id.*

All of the bids awarded on the Central Artery project were awarded at costs higher than the engineers' estimates.⁴⁸

In March 1995, a study analyzed the effects of project labor agreements on bids for construction work on the Roswell Park Cancer Institute. The study concluded that, "union-only project labor agreements increase costs ... and reduce the number of companies bidding on the projects."⁴⁹ The study found a correlation between the number of bidders on a project and whether or not the project came in under budget. Projects that were not performed union-only had 21 percent more bidders and were over 10 percent under budget. The projects performed union-only had fewer bidders and were 10 percent over budget. "Those packages that were bid under budget had 45 percent more bidders than those that were bid over budget, . . ." The study concluded that union-only projects attract fewer bidders, causing a decrease in competition for the construction work and an increase in costs.⁵⁰

A follow-up study conducted on behalf of the Jefferson County Board of Legislators by engineering consultant Paul G. Carr found that there was a statistically significant relationship between the number of bidders and the cost of projects, concluding that the relationship between these two factors does not occur by chance. Professor Carr further concluded that a PLA requirement would adversely impact the number of bidders and would thereby increase project costs.⁵¹ Elsewhere in New York, the Oswego Sewer project attracted *no* bids after a union-only requirement was imposed by the City.⁵²

⁴⁸ *Boston Project Tracking Higher*, ENR, Jan. 20, 1997, at 27.

⁴⁹ Analysis of Bids and costs to Taxpayers in Roswell Park, New York (ABC 1995).

⁵⁰ *Id.*

⁵¹ Carr, *PLA Analysis for the Jefferson County Courthouse Complex* (Submitted to Jefferson County Board of Legislators, Sept. 14, 2000). See also Thieblot, *Review of the Guidance for a Union-Only Project Labor Agreement for Construction of the Wilson Bridge* (Md. Foundation for Research and Economic Education Nov. 2000).

⁵² *Sewer Project Phase Attracts No Bids*, Syracuse Post-Standard, Aug. 20, 1997, E-1.

In Middletown, Connecticut, the town distributed 72 sets of bid specifications containing a union-only PLA for a local school. Only four responses were received, and the lowest bid submitted by a union contractor for the union-only school renovation was \$9.1 million, \$600,000 over the project's \$8.5 million budget. When the PLA was removed and the project re-bid, ten responses were received, including a \$7.8 million bid from a non-union contractor, which saved local taxpayers over \$1.5 million dollars.⁵³

In Hartford, Connecticut, bid results under the union-only PLA for the renovation of Hartford Public High School were characterized as "pitiful" in April 2004. Some components of the job received few or no bids. The bids that did arrive were several million dollars more than the \$82 million that voters had approved.⁵⁴

As noted above, the \$2.4 billion project to replace the Wilson Bridge between suburban Maryland and Virginia was temporarily subjected to a union-only PLA requirement in 2001. After the PLA was imposed, only one bidder responded to the RFP for Phase 1 of the project, at a bid price more than \$370 million above the State's \$470 million engineering estimate, a 78% cost overrun.⁵⁵ After the President issued his Executive Order prohibiting union-only PLAs on federally assisted projects like this one, however,⁵⁶ Phase 1 of the Wilson Bridge project was rebid without the PLA. This time multiple bids were received, and the winning bids came in significantly *below* the engineering estimates.⁵⁷

The Wyoming County, West Virginia, Board of Education experienced similar reductions in bidders and increased costs from its attempt to impose a union-only PLA in December 2000.

⁵³ *State's Dubious Labor Policy*, Hartford Courant, Aug. 20, 1998, 3.

⁵⁴ *School Project Back in Limbo*, Hartford Courant, April 7, 2004.

⁵⁵ *Lone Wilson Bridge Bid Comes in 70% Above Estimate*, Engineering News Record, Dec. 24, 2001; *see also* Baltimore Sun, March 2, 2002.

⁵⁶ *See* discussion above at page 2.

⁵⁷ *Unexpectedly Low Bid Keeps Wilson Bridge Under Budget*, Washington Post, March 2, 2002.

The County Board voted 4-1 to rebid all PLA contracts, without the union-only requirement, after initial bids came in more than \$1.5 million over estimates and with fewer than half the expected number of bidders. The construction manager stated: “I believe that the labor agreement had a negative impact on the number of bids as well as the dollar amount of each bid.”⁵⁸ Without the PLA, the number of bidders increased by 67% and the overall costs of the project decreased by 11%.

The San Francisco International Airport experienced a similar adverse impact on competition when the Airport Authority implemented a union-only project labor agreement. Only four bids were submitted and all of them were higher than the undisclosed estimates.⁵⁹ Due to the high bids, the project designers were forced to “backtrack to cut costs.”⁶⁰

Proponents of union-only construction, in responding to claims of adverse impacts on competition, have cited in their favor a letter published by the manager of the union-only Boston Harbor project. This letter asserted that 16 open shop general contractors and 102 open shop subcontractors performed work under the union-only requirement. The letter was submitted to Congress and was cited by PLA proponents as demonstrating that union-only PLAs do not adversely affect competition on public works.

However, a study of the facts underlying the Boston Harbor construction manager’s letter was conducted in 1999 by Professor James Andrews of Fitchburg State University.⁶¹ The Fitchburg State researchers obtained a list of the so-called open shop contractors reported in the letter. They then contacted many of the contractors identified by the project manager as being

⁵⁸ *New Wyoming County School to be Rebid*, Associated Press, Dec. 20, 2000.

⁵⁹ *Labor Protests Fly, Bids Are High*, ENR, July 22, 1996, at 16.

⁶⁰ *Id.*

⁶¹ *New Study of Boston Harbor Project Shows How PLA Hurt Competition*, ABC Today, June 4, 1999.

“open shop bidders” and asked them to confirm whether they were open shop or union contractors and whether they bid on or performed construction contracts covered by the PLA.

The results of this research showed that over 66% of the prime contractors surveyed by Fitchburg State, who had been identified as open shop contractors by the project manager, stated that they were in fact *union* contractors. In addition, over 54% of the subcontractors surveyed by Fitchburg, who the manager had claimed to be open shop subcontractors performing work on the project, were either union contractors or did not perform on the project at all!

Of those open shop subcontractors who did perform work on Boston Harbor, more than 64% were mere suppliers or professionals, who were not covered by the union-only requirement of the PLA. The Fitchburg State study confirmed that the union-only requirement discouraged non-union contractors from bidding on or performing work on the Boston Harbor construction project, to the detriment of taxpayers.

A similar study has undermined a widely disseminated report that a PLA on the Southern Nevada Water District project suffered no adverse impact on competition by non-union contractors.⁶² Professors at the Construction Management Program of the University of Nevada Las Vegas found that the earlier report included as non-union bidders numerous firms that were actually unionized prior to bidding on the PLA. The authors also contacted those non-union firms who did bid on the project, and thereby discovered that the contractors suffered negative experiences on the project due to the inefficiencies encountered with the union-only PLA.⁶³

⁶² The original claim by project managers was included in evidence submitted to and relied on by the Supreme Court of Nevada in upholding the PLA. See *Associated Builders and Contractors v. Southern Nevada Water Authority*, 979 P. 2d 224 (Nev. 1999).

⁶³ Neil Opfer, Jaeho Son, and John Gambatese, “*Project Labor Agreements Research Study: Focus On Southern Nevada Water Authority*” (UNLV 2000).

Similar conclusions were reached by the Clark County, Nevada School District, which recommended against adoption of any union-only requirements on Clark County schools.⁶⁴

Finally, two separate studies of non-union contractors have concluded that overwhelming majorities of such potential bidders are discouraged from bidding on projects which are subject to union-only PLA requirements. In a study of infrastructure contractors in the Washington, D.C. area conducted by the Weber-Merritt Research Firm, more than 70% of the surveyed contractors stated that they would be “less likely” to bid on a public construction project containing a union-only PLA.⁶⁵ Across the country in Washington State, another survey of contractors revealed that 86% of open shop contractors would decline to bid on a project under a union-only PLA.⁶⁶

⁶⁴ *School District Should Heed Conclusions of Report*, Las Vegas Journal, Sept. 11, 2000.

⁶⁵ *The Impact of Union-Only Project Labor Agreements On Bidding By Public Works Contractors in the Washington, D.C. Area* (Weber-Merritt 2000).

⁶⁶ Lange, *Perceptions and Influence of Project Labor Agreements on Merit Shop Contractors*, *Independent Research Report* (Winter 1997).

IV. Delays in Construction

Another argument often made in support of union-only PLAs is that they will insure timely completion of construction projects by, inter alia, guaranteeing labor peace. Once again, however, the proponents' claims are belied by the published reports of the completion dates of union-only projects and their significant labor disruptions.

Thus, in addition to sustaining huge cost overruns under its union-only PLA, the Big Dig in Boston was more than two years delayed in its completion. The project was supposed to be finished in 2002 but as of the end of 2004 was still ongoing.⁶⁷

In Cleveland, the union-only Parma Justice Center was completed behind schedule. The Parma Justice Center was scheduled to open in the spring of 1999, but project completion was pushed back to autumn.⁶⁸

A union-only baseball stadium, Miller Park in Milwaukee, missed its scheduled opening season entirely due to construction delays. Due to a fatal accident involving union workers (discussed below), the stadium could not be opened at all as expected during the 2000 season and instead did not open until the year 2001.

As noted above, the GSA was forced to terminate for default the unionized builder of the St. Louis federal courthouse. A principal cause of the termination, according to published reports, were the severe delays in construction. Thus, the government claimed damages of nearly \$5,000 a day because construction fell behind schedule by 361 days.⁶⁹

Thus, in 1999, union carpenters on the union-only San Francisco Airport expansion project struck over wages even though their union had signed a project labor agreement. The

⁶⁷ <http://www.issuesource.org>.

⁶⁸ *Parma Justice Center building behind schedule, over budget*, Cleveland Plain Dealer, Mar. 2, 1999.

⁶⁹ *GSA Terminates Morse Diesel*, ENR, June 28, 1999 at 15.

union electricians, plumbers, and painters also went on strike in support of the union carpenters.⁷⁰ The cost of the strike was \$1 million dollars. The project, which was already a month behind schedule, lost even more time.⁷¹

Published reports also laid part of the blame for the California energy crisis on the inordinate delays in construction of needed power plants resulting from union demands for PLAs. According to the Wall Street Journal: “For years, unions have intimidated and badgered power plant builders to employ only the 25% of California’s construction workers who hold union cards. These demands by construction unions for bans on nonunion labor have both delayed and driven up the cost of, you guessed it, power plants in the state.”⁷²

The union-only Safeco field in Seattle, noted above as the most expensive baseball stadium ever built, was also completed months later than scheduled. The stadium could not be opened in time for the beginning of the 1999 season, as had been promised, and the Seattle Mariners could not begin play at their new home until July 1999.

⁷⁰ *Carpenters at Airport Protest Against Union Leadership*, San Francisco Chronicle, May 21, 1999; see also *Arbitrator Orders California Carpenters To End Wildcat Strike, Return to Work*, Daily Labor Report, June 23, 1999.

⁷¹ *Carpenters at Airport Protest Against Union Leadership*, San Francisco Chronicle, May 21, 1999.

⁷² *Power Grab*, Wall Street Jnl., Feb. 15, 2001.

V. Construction Defects.

Many union-only projects have suffered from serious construction defects, notwithstanding claims of PLA supporters that union-only PLAs will improve the quality of construction.

The union-only Boston Central Artery / Tunnel project has encountered all manner of defects in construction that have both delayed and increased the overall cost of the project.⁷³ An Auditor stated that faulty design work cost the project an additional \$1 million.⁷⁴ The auditor reported that “inadequate controls resulted in a serious leak in the sunken tube tunnel, . . . and that inadequate welding and inaccurate measurements generated unnecessary costs.”⁷⁵ When the tunnel opened the toll takers were forced to wear respirators because of headaches, nausea, sore throats, and itchy eyes. The cause of the fumes is unknown. The same Auditor had previously found \$170 million in waste and other questionable costs. Finally, in 2004, after the project was substantially completed, the Boston Globe reported that the tunnel had developed more than 400 leaks, as well as “thousands of ceiling fissures, water damaged supports and fireproofing systems, and overloaded drainage equipment.” Fixing the leaks could take up to ten years, according to the engineering firm hired to investigate the cause.⁷⁶

In January 1999, a problem with roofing panels occurred at Montreal’s Olympic Stadium, again constructed on a union-only basis. While workers were setting up for a car show, a “180-ft cascade of snow and water poured through a tear in one of the 63 new fabric panels, causing

⁷³ *Project under renewed fire*, ENR, Sept. 25, 1995, at 1, 28, see also, *Smell seeps into toll booths*, Feb. 5, 1996, at 1, 22.

⁷⁴ *Project under renewed fire*, ENR, Sept. 25, 1995, at 1, 28.

⁷⁵ *Id.*

⁷⁶ Boston Globe, Nov. 11, 2004.

workers to run for cover.”⁷⁷ The roof was replaced in June of 1998 because of previous tears, at a cost of \$25 million. The union contractors have still not released a report detailing the reasons for the defect.

In New York City in 1998, A U.S. Department of Commerce Consultant claimed counterfeit fasteners were used in the Times Square hoist scaffold failure, an all-union project, resulting in killing an elderly woman and injuring 12 others.⁷⁸ There was “very clear evidence” that mismarked counterfeit fasteners were used in this scaffold and hoist and initial findings include evidence of use of inferior steel.

Less than six years after it opened, the union-only football stadium at Rutgers University has required repairs totaling more than \$3 million due to “dangerously unstable guardrails and other structural problems.”⁷⁹ Meanwhile, even before the opening of the new Convention Center in Washington, D.C., a large section of the roof collapsed during construction of the union-only project. Construction workers and building managers said that “fasteners that held the large steel pieces of the roof together were improperly fastened [by union workers].”⁸⁰

Iowa's union-only Events Center was discovered to have hairline cracks in throughout the arena's main concourse floor in 2003. An estimated 30 to 40 cracks were found throughout the slab after the concrete was poured by an out-of state contractor. Local concrete contractors had refused to bid on the work due to the presence of the union-only PLA, according to the county's construction manager.⁸¹

⁷⁷ *Stadium Fabric Roof Tears Again*, ENR, Feb. 8, 1999, at 1, 19.

⁷⁸ *Bogus Bolts Eyed on Failed Hoist*, ENR, Apr. 5, 1999, at 14.

⁷⁹ *Cost Rises as Rutgers Stadium Crumbles*, Newark Star-Ledger (April 9, 2000).

⁸⁰ *Roof Section Collapses at D.C. Convention Center Site*, Washington Construction News (May 2001).

⁸¹ Des Moines Register, Oct. 3, 2003.

VI. Safety Problems

The public record does not support claims of increased safety on construction sites as a result of union-only agreements. To the contrary, over the last several years union-only construction projects have been cited numerous times for serious safety violations. Many of these safety violations caused fatalities and serious injuries to workers and bystanders. In the following section, we will discuss the significant number of union-only construction projects that have experienced publicly reported serious safety violations.

On the union-only Boston Harbor clean-up project, OSHA proposed fines totaling \$410,900 against four contractors in connection with the fatalities of two workers overcome by insufficient oxygen.⁸² OSHA had already proposed penalties against subcontractors on the project in amounts exceeding \$100,000 for violations of “safety standards relative to tunneling, cranes, suspended work platforms, electrical grounding and guarding of an open shaft pit.”⁸³ Harbor tunnel work ceased because of an electrical fire; workers were evacuated because of fumes; and an engineer was crushed to death in an accident. There have been 2 other fatalities.

In July 1995, 200 Boston Harbor tunnel workers were sickened from a stench in the wastewater tunnel to Deer Island; and other incidents have indicated a lack of sufficiently diligent management safety practices.⁸⁴ In September of 1998, the Occupational and Safety and Health Administration fined a unionized contractor \$158,500 for safety violations on Boston’s

⁸² *OSHA Cites Boston Harbor Contractors*, 13 Daily Labor Report (BNA) A-2 (Jan. 20, 2000).

⁸³ *“Boston Harbor”-Type Project Labor Agreements in Construction: Nature, Rationales, and Legal Challenges*, 19 J. Lab. Res., Winter 1998, at 1, 14.

⁸⁴ *Id.*

Deer Island Wastewater Treatment Plant.⁸⁵ The violations were for exposing employees to various hazards. The fine also includes \$12,500 for this being a second violation.⁸⁶

Safety problems involving the Central Artery Project have been ongoing. The State Auditor has charged 'that faulty design work on the cross-harbor portion...jeopardizes workers and increased costs by more than \$1 million...Inadequate controls resulted in a serious leak in the sunken tube tunnel, threatening worker safety.'⁸⁷ In April, 2001, OSHA proposed \$69,000 in fines against a Big Dig contractor for alleged serious health and safety violations.⁸⁸

On New York State's union-only Tappan Zee Bridge project in 1998, there were 32 safety violations.⁸⁹ Citations were issued for such violations as failing to comply with fall protection standards, safety training programs and exposure to lead. These safety violations led up to \$22,530 in penalties.

The cable repair of the Ben Franklin Bridge that connects Philadelphia and Camden, New Jersey was investigated after a fire broke out burning a wooden scaffold and tarps. The fire occurred in September of 1998, when union workers were carelessly smoking.⁹⁰

In August 1999, the union-only construction of the new Miller Park baseball stadium for the Milwaukee Brewers came to a halt when a crane collapsed onto the stadium killing three workers and injuring three others.⁹¹ The crane was being used to install a retractable roof. The wind was gusting at 26 mph when the collapse happened. Earlier, on March 5, the original date

⁸⁵ *Modern Hit With Heavy Fine*, ENR, Sept. 21, 1998, at 9.

⁸⁶ *Id.*

⁸⁷ "Boston Harbor"-Type Project Labor Agreements in Construction: Nature, Rationales, and Legal Challenges, 19 J. Lab. Res., Winter 1998, at 1, 14.

⁸⁸ *OSHA Proposed \$69,000 in Fines Against Big Dig Contractor*, OSHA Regional News Release (April 2, 2001).

⁸⁹ Cover Story: *Safety*, ENR, June 21, 1999, at 30-31.

⁹⁰ *SMOKIN' Fire-Scarred Philadelphia Bridge Is Further Inspected*, ENR, Oct. 12, 1998, at 16.

⁹¹ *Crane Accident Kills Three at Unfinished Miller Park*, Washington Times, July 15, 1999.

contractors had set for installing the second part of the roof; the lift was cancelled because the wind was gusting at 10 mph.⁹²

The union-only Iowa Events Center suffered nearly 50 construction accidents in its first six months of construction, including four linked directly to substance abuse by unionized construction workers. One construction worker was killed when he was struck by a steel beam. Ironworkers had been working late shifts to catch up due to previous delays on the project.⁹³ In another incident, a large crane nearly fell several stories after being compromised by a heavy load. The crane operator was fired for refusing to take a drug test.⁹⁴

The union-only Hanford nuclear site in Washington State was fined a record \$330,000 by DOE for nuclear safety violations under the Price-Anderson Act.⁹⁵ This is the largest penalty issued in the history of the Price-anderson Enforcement Program. The construction managers failed to see to it that contractors building the site followed their own safety procedures. They allegedly failed to meet quality assurance requirements in areas such as work process controls, subcontractor qualifications, subcontractor oversight and project design.⁹⁶

In Las Vegas, the Aladdin Hotel and Casino construction led to the death of a union ironworker. The worker was crushed by a 25-ton load of concrete slabs which fell seven floors when a crane dropped the concrete.⁹⁷

⁹² *Id.*

⁹³ Des Moines Register, Sept. 21, 2004.

⁹⁴ *County Grapples With Substance Abuse On Self-Insured Construction Project*, Workplace Substance Abuse Advisor, Nov. 26, 2003.

⁹⁵ *Fluor Unit Gets Record Fine Over Nuclear Waste Safety*, ENR, June 7, 1999, at 9.

⁹⁶ *DOE Fines Hanford Contractor \$330,000; Secretary Issues First Compliance Order*, CLR Vol. 45, No. 2231, June 2, 1999, at 370.

VII. Problems Involving Minorities and Women

Some recent union-only agreements have included provisions purporting to increase training and business opportunities for minorities and women. In part, these clauses have been designed to deflect criticism of unionized construction emanating from minority and women's groups. Several union-only projects, however, have suffered from problems relating to the employment of minorities and women, discussed below.

In Buffalo, New York, the mayor announced that construction trade unions were failing to meet diversity goals established in the PLA covering \$1 billion in school renovation work... The PLA called for at least 35 percent minority and 10 percent women participants.⁹⁸

In Detroit, four black female carpenters sued the Stadium Authority for discrimination and failure to provide promised job opportunities to minorities and women on the union-only Tiger Stadium project.⁹⁹

In Chicago, 100 African American and female union construction workers were awarded \$1.33 million under a consent decree arising out of the Robins Incinerator project. The government was forced to sue both the contractor and the Pipe Fitters Union because of a "gross degree of harassment," including offensive graffiti on portable toilets featuring racial epithets and sexual images.¹⁰⁰

In Los Angeles, the biggest contractor on the union-only San Francisco International Airport project was sued by a Los Angeles transit agency alleging that it used bogus minority

⁹⁷ *One Worker Killed as Crane drops 25-Ton Load*, ENR, Apr. 19, 1999, at 9.

⁹⁸ *Buffalo Mayor Says Trades Not Attaining Diversity Goals as Specified in School PLA*, Construction Labor Report (BNA) Sept. 22, 2004.

⁹⁹ *Four Black Female Carpenters Sue*, Detroit News, Oct. 29, 1999, C-1.

¹⁰⁰ *Construction Firm to Pay \$1.33 Million to Settle Racial, Sexual Harassment Case*, 45 Construction Labor Report (BNA) 1266 (Jan. 12, 2000).

subcontractors to get millions in unionized subway work.¹⁰¹ Similar allegations were investigated by the FBI in connection with the San Francisco Airport project. The Los Angeles lawsuit and San Francisco investigation both allege that white-owned unionized firms set up companies that "either were not qualified or in whom the union companies owned an undisclosed interest." The lawsuit also alleged that the union joint venture joined with its sham minority subcontractors to present false claims on subway work to obtain millions of dollars in additional payments.¹⁰²

On January 10, 2000, an Alameda County jury awarded a black construction worker \$490,000 for racial harassment on the union-only San Francisco Airport job site. The case centered on a noose left hanging for two months at the site. For part of the time, the noose contained the effigy of a black man with the worker's name pinned to it. At trial, the harassment was attributed to someone dispatched from the union hall.¹⁰³

¹⁰¹ *LA Transit Agency Says Sham Minority Firms Were Used to Win Bids*, SF Chronicle, A-9 (Dec. 7, 1999).

¹⁰² *Id.*

¹⁰³ *Jury Awards Construction Worker \$490,000*, 45 Construction Labor Report (BNA) 1290 (Jan. 19, 2000).

VIII. Conclusion

There are many fine contractors in the construction industry, both union and non-union, who have worked together to build many public projects safely, on time and under budget. Each of the “problem” projects described above, however, was performed on a discriminatory union-*only* basis, instead of awarding the work on the basis of merit after full and open competition, regardless of labor affiliation.

As has been shown, such union-only construction projects have been plagued by cost overruns, adverse impacts on competition, delays in construction, construction defects, safety problems, and problems related to minorities and women. Meanwhile, the purported benefits of union-only PLAs have not been demonstrated by actual practice. The published track record of union-only construction indicates that union-only PLAs are a bad bargain for taxpayers.

APPENDIX

Problems with Union-Only Construction Projects

Cost Overruns

Project Name	Source	Date
1 Boston Central Artery Project	Boston's Big Dig Buried in Cost Overruns, Washington Post, April 12, 2000;	4/12/2000
2 Boston Convention Center	Huge Overrun Looms at Convention Center, Boston Globe, Jan. 9, 2001	1/9/2001
3 Boston Schools	Boston Bus. Jnl., April 11, 2003	4/11/2003
4 Buffalo's Northwest Academy	Board to Absorb Extra Costs as Price of New School Soars to \$32.4 Million, Buffalo Evening News, Oct. 29, 1998.	10/29/1998
5 California's Livermore Lab	Cost Overruns Dog DOE Facility, ENR, Sept. 13, 1999.	9/13/1999
6 Cleveland Browns Stadium	Mayor's Final Cost at Stadium 25% Over, Plain Dealer June 24, 2000	6/24/2000
7 Cleveland Gund Arena	\$12 Million to pay for Arena Overruns, Cleveland Plain Dealer, Dec. 14, 1996, at 16-A.	12/14/1996
8 Des Moines Iowa Events Center	Troubled Center Moves Ahead, Des Moines Register, July 12, 2003	7/12/2003
9 Detroit Baseball Stadium	Stadium On Time, But Costs More, Detroit News, Oct. 31, 1999, B3.	10/31/1999
10 DOE's Idaho Nat'l Eng. Lab.	Construction Agreement at DOE's Idaho Laboratory Needs Reassessing, GAO, May 1991	5/23/1991
11 Hartford Public High School	School Project Back in Limbo, Hartford Courant, Apr. 7, 2004	4/7/2004
12 Los Angeles Eastside Reservoir	Overruns Hit Eastside Project, ENR, Oct. 19, 1998, at 1, 13.	10/19/1998
13 Parma, Ohio Justice Center	Parma Justice Center building behind schedule, over budget, Cleveland Plain Dealer, Mar. 2, 1999.	3/2/1999
14 Pasadena Power Plant	Power Plant Costs to Soar, Pasadena Star-News, March 21, 2003	3/21/2003
15 Rochester's Mayo Civic Center	Civic Center Bids Exceed the Budget, Post-Bulletin, Sept. 28, 1999.	9/28/1999
16 Roswell Park, NY Cancer Institute	Baskin, The Case Against Union-Only Project Labor Agreements, 19 Construction Lawyer (ABA) 14, 15 (1999).	1/99
17 San Francisco Airport	SFO Expansion Project Hundreds of Millions Over Budget, Chronicle, Dec. 1999	12/22/1999
18 Seattle Mariners Safeco Stadium	New Seattle Stadium Battles Massive Cost Overruns, ENR, July 27/Aug. 3, 1998, at 1, 9.	7/27/1998
19 St. Louis Federal Courthouse	GSA Terminates Morse Diesel, ENR June 28, 1999 at 15.	6/28/1999
20 Washington, D.C. Convention Ctr.	Convention Center Costs Increase by \$15 Million, Washington Construction News Washington Bus. Journal (March 2003)	3/2001 3/2003
21 Wilson Bridge, MD-VA	Lone Wilson Bridge Bid Comes in 70% Above Estimate, ENR, Dec. 24, 2001 Baltimore Sun, March, 2, 2002 Unexpectedly Low Bid Keeps Wilson Bridge Under Budget, Washington Post New Bridge on the Rise, Washington Post, Oct. 13, 2004	12/24/2001 3/2/2002 3/2/2002 10/13/2004

Defects in Construction

Project Name	Source	Date
1 Boston Central Artery Project	Boston Globe, Nov. 11, 2004	11/11/2004
2 Montreal's Olympic Stadium	Project under renewed fire, ENR, Sept. 25, 1995, at 1, 28.	9/25/1995
3 New York's Times Square Hoist Scaffold Failure	Stadium Fabric Roof Tears Again, ENR, Feb. 8, 1999, at 1, 19. Bogus Bolts Eyed on Failed Hoist, ENR, Apr. 5, 1999, at 14.	2/8/1999 4/5/1999
4 Rutgers Stadium	Cost Rises as Stadium Crumbles, Newark Star-Ledger, Apr. 2000	4/9/2000
5 Seattle Kingdome	Kingdome's Costly Roof Dispute Finally Settled, ENR, Nov. 18, 1996, at	11/18/1996
6 Washington, D.C. Convention Ctr.	Roof Section Collapses at Center Site, Washington Construction News, May 01	5/01

Delays

Project Name	Source	Date
1 Boston's Big Dig	http://www.issuesource.org .	11/2004
2 Milwaukee's Miller Park	Crane Accident Kills Three at Unfinished Miller Park, Washington Times, July 15, 1999.	7/15/1999
3 Parma, Ohio Justice Center	Parma Justice Center building behind schedule, over budget, Cleveland Plain Dealer, Mar. 2, 1999.	3/2/1999
4 San Francisco International Airport	Carpenters at Airport Protest Against Union Leadership, San Francisco Chronicle, May 21, 1999.	5/21/1999
5 Seattle Mariners Safeco Stadium	New Seattle Stadium Battles Massive Cost Overruns, ENR, July 27/Aug. 3, 1998, at 1, 9.	7/27-8/3/98
6 St. Louis Federal Courthouse	GSA Terminates Morse Diesel, ENR, June 28, 1999 at 15.	6/28/1999

Race Discrimination

Project Name	Source	Date
1 Buffalo Schools	Buffalo Mayor Says Trades Not Attaining Diversity, Const. Labor Report	9/22/2004
2 Chicago Robbins Incinerator	Construction Firm to Pay \$1.33 Million to Settle Racial, Sexual Case	1/12/2000
3 Detroit Baseball Stadium	Four Black Female Carpenters Sue, Detroit News, Oct. 29, 1999	10/29/1999
4 San Francisco International Airport	Jury Awards Construction Worker \$490,000 After Company Failed to Prevent Harassment, BNA CLR, Jan. 19, 2000, Vol. 45, 1290.	1/19/2000
5 San Francisco International Airport	LA Transit Agency Says Sham Minority Firms Were Used to Win Bids, San Francisco Chronicle, Dec. 7, 1999	12/7/1999
6 Washington, D.C. Convention Center	D.C. Convention Center Contractor Frustrated, Construction Labor Report, Nov. 10, 1999	11/10/1999

Reduced Competition

Project Name	Source	Date
1 Boston Central Artery Project	Big Boston bids in 1996, ENR Nov. 20, 1995 at 26.	11/20/1995
2 Boston Harbor Clean Up	New Study of Boston Harbor Project Shows How PLA Hurt Competition, ABC Today, 6/4/99.	6/4/1999
3 Harford Public High	School Project Back in Limbo, Harford Courant, April 7, 2004	4/7/2004
4 Middletown, CT School Renovation	State's Dubious Labor Policy, Hartford Courant, Aug. 20, 1998, 3.	8/20/1998
5 Rochester's Mayo Civic Center	Civic Center Bids Exceed the Budget, Post-Bulletin, Sept. 28, 1999	9/29/1999
6 Roswell Park, NY Cancer Institute	Analysis of Bids and costs to Taxpayers in Roswell Park, New York (ABC)	1995
7 New York's Oswego Sewer	Sewer Project Phase Attracts No Bids, Syracuse Post-Standard	8/20/1997
8 San Francisco International Airport	Labor Protests Fly, Bids Are High, ENR, July 22, 1996, at 16.	7/22/1996
9 Southern Nevada Water District	Opfer, et al, PLA Research Study: Focus on SNWA, (UNLV 2000)	2000
10 Washington, D.C.	Impact of Union-Only PLAs, Weber-Merritt, 2000	2000
11 Western Washington	Perceptions and Influence of PLAs, Lange, Independent Research	1997
12 Wilson Bridge, MD-VA	Lone bid Comes in 70% Above Estimate, ENR, Dec. 24, 2001	12/24/2001
	Unexpectedly Low Bid Keeps Wilson Bridge Under Budget, Washington Post	3/2/2002
13 Wyoming County, WVA	New Wyoming School to be Rebid, AP, Dec. 20, 2000	12/20/2000

Safety Problems

Project Name	Source	Date
1 Boston Central Artery Project	"Boston Harbor"-Type Project Labor Agreements in Construction: Nature, Rationales, and Legal Challenges, 19 J. Lab. Res., Winter 1998, at 1, 14.	Winter 1998
2 Boston Harbor Clean Up	OSHA Cites Boston Harbor Contractors Following Investigation Into Tunnel Fatalities, BNA DLR, Jan. 20, 2000, Vol. 13, A-2.	1/20/2000
3 Boston Harbor Clean Up	"Boston Harbor"-Type Project Labor Agreements in Construction: Nature, Rationales, and Legal Challenges, 19 J. Lab. Res., Winter 1998, at 1, 14.	Winter 1998
4 Des Moines Iowa Events Center	Des Moines Register, Sept. 21, 2004 County Grapples With Substance Abuse, Workplace Substance Abuse Advisor	9/21/2004 11/26/2003
5 Hanford Nuclear Site	Fluor Unit Gets Record Fine Over Nuclear Waste Safety, ENR, June 7, 1999, at 9.	6/7/1999
6 Las Vegas' Alladin Hotel and Casino	One Worker Killed as Crane drops 25-Ton Load, ENR, Apr. 19, 1999, at 9.	4/19/1999
7 Milwaukee's Miller Park	Crane Accident Kills Three at Unfinished Miller Park, Washington Times, July 15, 1999.	7/15/1999
8 New York's Tappan Zee Bridge	Cover Story: Safety, ENR, June 21, 1999, at 30-31.	6/21/1999
9 Philadelphia's Ben Franklin Bridge	SMOKIN' Fire-Scarred Philadelphia Bridge Is Further Inspected, ENR, Oct. 12, 1998, at 16.	10/12/1998