



Washington Nationals' Ballpark: Cost and Timeliness Implications of Using a Project Labor Agreement

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EXECUTIVE SUMMARY

At the end of the 1971 season, the Washington Senators franchise moved south and became the Texas Rangers. Since the move, Washington, D.C. (the District) has been without a major league baseball franchise. Offering to build the team a new stadium, the city was able to court successfully the financially struggling Montreal Expos. The team was renamed the Washington Nationals and began the 2005 season playing home games at Robert F. Kennedy Memorial Stadium, its temporary home until a new stadium is built.

In 2004, public officials estimated that the project would cost \$161 million for land acquisition and environmental cleanup and another \$244 million for the actual construction of the ballpark.¹ Those estimates have been revised. The most current estimate is 78.5% above the original, with \$300 million in land acquisition and \$320 million in construction costs (\$388 million with soft costs such as insurance included).² The District of Columbia Sports and Entertainment Commission (DCSEC), the agency charged with managing the District's sporting venues, retained Hill International to evaluate the inclusion of a Project Labor Agreement (PLA) in the bidding process.

A PLA is an agreement negotiated between construction clients (often states and municipalities) and the local Building and Construction Trades Councils (labor unions), establishing a set of rules to be followed by all firms bidding on the construction project. Typically these agreements include a "no strike" clause and dispute resolution procedures, standardized shift and compensation details, and a requirement that all workers be hired through union halls and become union members for the duration of the project. PLAs are controversial. Proponents contend that PLAs provide cost savings through the streamlining of work rules and by assuring timely completion of projects that can avoid work stoppages. In contrast, opponents claim that these agreements impose additional costs on a project by restricting competition in the bidding process.

Noting that it would be in the DC Sports and Entertainment Commission's best interest, Hill International recommended a PLA. Time considerations were a key factor in the Hill International decision, since the Commission insists the project be completed by opening day in 2008. Hill International also concluded that a PLA would help guarantee a supply of labor, provide a cost savings from the harmonization of labor contracts, and ensure that the project be completed without cost overruns and construction defects.

For the most part, the Hill International analysis did not cite data sources to support its conclusions. The Beacon Hill Institute at Suffolk University (BHI) conducted an independent review of the data that underpinned the conclusions of the Hill International report.

After a thorough examination, BHI finds the following regarding the labor and construction markets in Washington, D.C.:

1. The labor and construction markets, while currently tight, have peaked and as a result will be able to supply ample resources during the construction phase of the ballpark project.
2. Membership in the local trade unions comprises less than 25% of the local labor construction labor force, and a PLA would hinder the participation of local workers on the project.
3. Although over 80% of the local union contracts are due to expire during the construction of ballpark, there is no history of labor unrest on public construction projects in the Washington, D.C. area, and this is unlikely to change in the future. Therefore, a PLA is not necessary to assure labor peace during the ballpark project.

In addition, previous empirical studies of PLA projects by BHI in three states have shown that, contrary to supporters' claim about cost savings, a PLA increases not only the bids but also the final costs of a project. Given these studies, BHI estimates that the inclusion of a PLA on the D.C. ballpark project can increase construction costs from \$34 to \$49 million.

A PLA in no way guarantees the timeliness, quality or hiring goals of a project. The experience of the new Washington, D.C. Convention Center, a recent public construction project designated with a PLA, shows mixed results at best in attaining these goals. The final project costs were 63% more than the initial estimate. Moreover, it was completed in 4.5 years instead of the initial schedule of 2 years. Results were also mixed when it came to meeting the goals of local and minority business participation. Although the project achieved the goals for the hiring minority workers and local apprentices, the thresholds for the participation of local labor and firms were not reached. Furthermore, a survey of other large projects finds examples of projects built under a PLA that were not completed on time and on budget.

Upon this review, BHI finds that the D.C. Sports and Entertainment Commission would benefit from lower costs, without sacrificing quality or timeliness, by not using a PLA and introducing more competition into the process.

INTRODUCTION

The District of Columbia has been without major league baseball since the Washington Senators left for Texas in 1971. The franchise not only left but also changed its name; becoming the Texas Rangers. Longing for the return of major league baseball, D.C. civic and government leaders successfully courted the financially troubled Montreal Expos. In 2005, the former Canadian franchise, known as the Washington Nationals played its first game in its temporary home, the Robert F. Kennedy Memorial Stadium. The team expects to move to a new facility in two years. The D.C. Sports & Entertainment Commission, a quasi-independent agency of the District of Columbia government, is responsible for the construction of a new stadium and contracting associated with the project. Upon completion, the Commission will assume ownership of the new stadium and lease the facility to the baseball club.

D.C. Sports and Entertainment Commission retained Hill International Inc., a construction and consulting firm, to conduct an analysis of the local labor and construction markets and to study the viability of a PLA on the construction of the new Washington National's ballpark.³ The report written by Hill International evaluated the status of the labor, and construction markets in the D.C. area, and the contracts of the local trade unions. Hill International recommended a PLA for the ballpark construction project based on the following considerations surrounding the planning and construction of the project.

1. Limited time window. The project schedule is tight (25 months) with a high penalty for delays. A PLA will avoid delays due to strikes or work stoppages.
2. The dominance of union labor. The D.C. labor market is highly unionized with all union collective bargaining agreements expiring during the term of the project.
3. Concerns about labor shortages. The level of construction activity in the D.C. area is expected to be brisk leading to shortages of skilled labor.
4. Expected cost savings. The PLA will provide direct labor cost savings through standardization of labor practices.

For the most part, the Hill International analysis did not cite data sources to support its conclusions. In response, several local open-shop contractors and groups have questioned the validity of the Hill International analysis and conclusions.

To provide a better picture of the labor market and data about industry conditions, BHI conducted an independent review of the project and the request for a PLA.

THE BALLPARK

The new Washington Nationals ballpark project is to be completed in 25 months, prior to opening day of the 2008 Major League Baseball season. The site of the new ballpark is in southeast Washington, D.C., along the Anacostia River, which is an underdeveloped area of the District recently targeted for “renewal” under the Anacostia Waterfront Initiative (AWI). The architecture of the modern 41,000-seat ballpark calls for the innovative use of glass, architectural concrete, and steel that can capture the commanding views of the Capitol and the Washington Monument. Architectural details, such as a glass sunscreen that will be illuminated at night, will make the park a striking part of the District’s skyline. When the project broke ground on May 4, 2006, many of the details, from parking facilities to fabrics, were not yet finalized.

On December 29, 2004, Mayor Anthony Williams signed into law, Bill 15-1028: The Ballpark Omnibus Financing and Revenue Act of 2004. The law, in addition to other provisions, authorized the District to issue up to \$534.8 million in revenue bonds for the purpose of directly paying or financing the development of a new ballpark, renovations to Robert F. Kennedy Stadium for interim use by the Washington Nationals, and future renovations, maintenance, and upgrades of the ballpark.⁴

The law finances the new ballpark through a series of additional and increased taxes and fees. It establishes a 4.25% additional sales tax on gross receipts from the sale of baseball tickets and merchandise. Also, the District dedicates 1/11th of the 11% of the gross receipts tax paid by utility providers to the District, as well as an additional charge for electricity. Finally, the District collects a ballpark fee from businesses, ranging from \$5,500 for the smaller businesses to \$16,500 for the largest businesses; those with gross receipts less than \$5 million are exempt. Proceeds from these taxes and fees are deposited in the Ballpark Revenue Fund to pay debt service on the bonds.

The Act requires the mayor to take measures assuring that at least 50% of the contract work for the ballpark be awarded to Local, Small and Disadvantaged Business Enterprises (LSDBEs) and those contracts comply with apprenticeship requirements, where 50% of all apprenticeship hours performed are performed by District residents.

The original budget called for \$244 million to build the ballpark and \$161.4 million for land acquisition and environmental cleanup. The bill has increased to \$320 million in construction costs (\$388 million including “soft costs” such as insurance) and \$300 million in land acquisition, 78.5% over original estimates.

HISTORICAL BACKGROUND ON PROJECT LABOR AGREEMENTS

PLAs are a type of a “pre-hire” collective bargaining agreement between unions and project owners or managers, unique to the construction industry. They are negotiated for a specific project, contract or work location. Generally, participating unions are recognized as the sole bargaining representatives for all workers on the project, regardless of their current union membership status. PLAs generally require all workers to be hired through the union hall referral system. Non-union workers must join the signatory union of their respective craft and pay dues for the length of the project. 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.⁵

During the Great Depression, PLAs were used on publicly funded projects including the Grand Coulee Dam in Washington State and the Shasta Dam in California in 1938 and 1940, respectively. Since World War II, they have been used on large-scale construction projects including the Cape Canaveral Space Center in Florida and the current Central Artery program (the “Big Dig”) in Boston. The private sector has likewise utilized PLAs for certain projects, including the Alaskan Pipeline and Disney World in Florida. In the District of Columbia, a PLA was used on the construction of the new convention center.

Increasingly, PLA considerations are a contentious precursor to large-scale construction projects engendering lawsuits, executive orders and fierce debate. Union leaders and project managers claim that they ensure predictable costs and timetables. The project manager’s task is to coordinate all of the many facets of a complex project, can be made simpler when all of the participating firms agree to the same set of rules. Therefore, some project managers support the use of PLAs. Open-shop contractors contend that by forcing them to conform to inflexible union rules, the agreements undermine their competitive advantage. Moreover, PLAs discourage open-shop contractors from bidding on projects, since their employees will have to pay union dues and pension contributions, resulting in less competition and higher final costs.

Contention over PLAs in the Northeast rose to a crescendo in 1993 with the United States Supreme Court’s *Boston Harbor* decision. In 1988, a federal court directed the Massachusetts Water Resources Authority to clean up the pollution in Boston Harbor. The Authority’s project management firm, IFC Kaiser, negotiated a PLA with the local construction unions for the project. The precedent-setting aspect

of this PLA was that its use was mandated in the project's bid specifications.⁶ An open-shop trade group filed a lawsuit contending that requiring the PLA as a part of the bid specification violated the National Labor Relations Act. However, the United States Supreme Court held that a state authority, acting as the owner of a construction project, was legally permitted to enforce a pre-hire collective bargaining agreement negotiated by private parties.⁷ Since the *Boston Harbor* decision, most litigation regarding PLAs has been based on the competitive bidding requirements of state and local law, while the controversy over the use of PLAs on public construction projects continues.

The executive branch of the federal government has been involved in the PLA debate for over a decade. The administration of George H. W. Bush issued an Executive Order in 1992 forbidding the use of PLAs on federally funded projects.⁸ The Clinton Administration rescinded that order in February 1993 and attempted to go further in 1997, when it planned to issue an executive order requiring all federal agencies to use PLAs on their construction projects. However, after extensive lobbying, President Clinton instead issued a memorandum *encouraging* the use of PLAs on contracts over \$5 million for construction projects, including renovation and repair work, for federally owned facilities.⁹ President George W. Bush canceled the Clinton order on February 17, 2001 by issuing an Executive Order prohibiting PLAs on federally funded and assisted construction projects.¹⁰

Some of largest unions in the country, including the AFL-CIO, insisted that the order illegally interfered with their collective bargaining rights under National Labor Relations Act. 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. Upon appeal by the United States Justice Department, the United States 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. The appeals court contended that the National Labor Relations Act did not preempt the executive order.¹¹ The unions disagreed and filed to have the case reviewed by the United States Supreme Court. In April 2003, the court declined to review the case and the executive order remains in place today.¹²

CONSTRUCTION MARKET

Like many regions across the country, the Washington, D.C. area has benefited from the recent construction boom that many economists believe is fuelled by low interest rates. According to the latest data available, from 1999 to 2004 the value of construction activity in Washington, D.C. rose from \$570 million in 1999 to \$1,054 million in 2004, a staggering 85% increase.¹³ This computes to an average

annual growth rate of nearly 17% for the period. This data supports the Hill International claim that construction activity will be brisk during the period of the ballpark construction.

However, the building boom in Washington, D.C. is slowing. The growth rate of construction activity, in dollar terms, has moderated in the last few years: increasing by only 6.8% from 2002 to 2003, and by a paltry 1.1% from 2003 to 2004. This slowdown in activity coincides with the beginning of the campaign by the Federal Reserve to raise interest rates, which increases borrowing costs for new construction projects, especially residential building, and can be expected to slow further as rates have continued to rise. As a result, the D.C. housing market is poised for a slow-down.

Evidence that the housing market in Washington, D.C. is cooling is already appearing in recent statistics. According to the most recent Census Bureau data, new home sales in the northeastern United States for the month of June dropped by one-third, from 83,000 in 2005 to 55,000 in 2006.¹⁴ The slowing housing market in Washington, D.C. has helped to swell the inventories of unsold homes in the area by 188% over the past year.¹⁵ A slower housing market is beginning to hit residential construction in the area as permits for new construction have decreased by 11%.¹⁶

Commercial construction in Washington, D.C. area also appears poised for a slowdown, as higher interest rates boost financing costs in the commercial building sector as well. Dr. Stephen Fuller, director of the Center for Regional Analysis at George Mason University in Fairfax, VA, predicts that commercial construction in the region will peak in 2006.¹⁷

Construction activity in the surrounding states of Maryland, Virginia and West Virginia shows double-digit growth from 2003 to 2004, the most recent data available from the U.S Bureau of Economic Analysis.¹⁸ This data provides information on the construction activity in the Washington, D.C. metropolitan area, but it also includes activity in areas that are geographically outside the area. Nevertheless, the data points to strong growth in construction activity in the greater region surrounding Washington, D.C.

The Hill International report cites large-scale projects, such as the Woodrow Wilson Bridge and the National Harbor Gaylord Convention Center projects, as examples of large projects that will be drawing on the same construction resources simultaneously. While these projects will compete for the same resources, it must be noted that these projects are ongoing and should not be expected to create large additional demands for construction resources.

Construction activity in Washington, D.C. and the greater region has experienced impressive gains over the most recent five years, according to the latest data available. Hill International's projection that activity will continue to be strong over the next couple of years is consistent with this data. However, a closer look at the local data, especially in the residential building market, coupled with additional analysis of the commercial market, points to a slowdown that is already underway. According to BHI, the Washington, D.C. construction market will loosen up over the next few years, mitigating any worry of a capacity constraint in the construction industry during the building of the new Washington, D.C. Ballpark.

LABOR MARKET

As with the Washington, D.C. construction market, the most recent data for the labor market indicate that available labor during the period for the ballpark construction should be tight. The Bureau of Labor Statistics reports that the unemployment rate for the Washington, D.C. Metropolitan Statistical Area (MSA) was 3.3% in June of 2006. This is substantially lower than the national average of 5.1% and demonstrates that the overall labor market is tight. Moreover, seasonally adjusted job growth, measured by total non-farm payrolls, has increased by 229,000 or 10.4% since June 2001, translating into an annual growth rate of almost 2.1% through June of 2006.¹⁹ This compares favorably to a growth rate of just 2.4%, or an annual rate of only 0.2%, for the United States over the same period. Overall, the labor market in Washington, D.C. displays the characteristics of a healthy one, with a combination of very low unemployment and solid employment growth.

The labor market in the city of Washington, D.C. appears less robust as that for the entire metropolitan area. The seasonally adjusted unemployment rate for Washington, D.C. stood at 5.4 % in June of 2006, which is substantially higher than that of the metropolitan area, and slightly higher than the national average. The city created 37,200 new jobs between June 2001 and June 2006, a total increase of 5.7% and an annual growth rate of 1.2%. Again, these figures compare favorably with the national figures but are half as strong as those for the entire area.

The labor market in the Washington, D.C. metropolitan area demonstrates a healthy combination of very low unemployment and strong job growth, measured by recent non-farm payrolls. The city of Washington, D.C. has a labor market with a higher unemployment rate and slower job growth than the statistical area as a whole, which indicates more capacity for further job growth and a lower unemployment rate. While the overall health of the overall labor market provides a good indicator for the

availability of labor for the ballpark construction, we need to focus more specifically on the construction industry.

According to the Bureau of Labor Statistics (BLS), in June 2006 there were 150,600 construction workers, representing 6.0% of the workforce, in the Washington, D.C. MSA (including Washington, D.C., Baltimore and portions of Maryland, Virginia and West Virginia). The national figure is 5.3%.²⁰ This is up from 127,200 in June 2001, an increase of 18.3% over the period and an annual growth rate of 3.7%.²¹ This is substantially higher than the average for the overall labor market and suggests fast growth in employment over the period. The city of Washington, D.C. displays much slower job growth in the construction industry adding 1,000 jobs or 8.3% over the same period and an annual rate of 1.7%.²² Similar to the Washington, D.C. MSA, the District's labor market in the construction industry has demonstrated strong growth over the past five years.

However, job growth in the construction industry displays a pattern of recent slowing that mirrors the activity in the industry itself. In the Washington, D.C. MSA, construction jobs grew by 5.7% from June 2003 to 2004 and 6.5% between June of 2004 and 2005, but growth slowed to 2.6% from June 2005 to 2006. The figures for the city of Washington, D.C. display more volatility: growing by 4.1% between June of 2002 and 2003, contracting by 4.7% between June of 2003 and 2004, growing by 6.6% from June 2004 and 2005 and finally remaining flat between 2005 and 2006. The city of Washington, D.C MSA is creating construction jobs at a slower pace in the whole metropolitan area as industry activity weakens.

As the local housing market cools, job growth in the construction industry should continue to slow and may even shed jobs if the downturn becomes more severe. Since the Washington, D.C. workforce has a proportionally higher composition of construction workers than the nation as a whole, a slowdown will produce a larger effect in this market. Any displaced workers in residential construction with skills transferable to heavy and civil engineering construction (e.g. laborers, painters and electricians) would provide additional supply to the commercial market with additional available labor as residential construction slows.

According to an estimate by the National Association of Home Builders, building 100 single-family homes generates about 350 jobs for a year, 280 of which are local.²³ Using building permits as a proxy for the future construction of new single-family home construction and applying the above ratio to the decline in permits for the Washington, D.C. MSA, we conservatively estimate a decline of more than 1,000 construction jobs.²⁴

Given the current and projected conditions of the labor and construction markets in the region, it is unlikely that the absence of a PLA would result in labor shortages on the project. On the contrary, by discouraging non-union shops, the PLA itself could potentially cause labor supply issues. Furthermore, Hill International states that the union “halls will be able to draw the necessary manpower from union locals elsewhere,” which is inconsistent with the PLA goal of preserving local employment for the project. Hill International is saying, in effect, that union labor is preferred to non-union, whether it is provided locally or from outside the area.

LABOR COMPOSITION AND RELATIONS

Hill International argues for the inclusion of a PLA on the D.C. ballpark project to mitigate the possibility of strikes, work stoppages or slowdowns, given the short (25-months) project schedule. Hill International bases this recommendation on two underlying assumptions. Hill claims that the local construction labor force is evenly divided between union and non-union contractors and that the ratio increases to 75% for major construction projects (over \$10 million). Second, all the union contracts expire during the ballpark construction schedule and should renegotiation of these agreements break down, it could cause a delay that would be very costly. These assumptions need further examination.

The composition of the labor force appears to be well short of the 50% asserted in the Hill International report. BHI conducted an informal telephone survey of the local construction trade unions listed in the Hill International report, inquiring as to the size of their membership. Using the results of the survey and information on the number and type of construction workers in the metropolitan area from BLS, we estimate union members represent 21.5% of construction workers. We find that electrical workers and ironworkers have relatively high rates of unionization, 46.5% and 46.1%, respectively. However, open-shop contractors still appear to employ the majority workers in these trades.

Dr. Barry T. Hirsch of Trinity University in San Antonio Texas uses data from the Census Bureau to estimate the unionization of workers, including construction workers, across the United States. He calculates that union workers in the Washington, D.C. MSA constitute 9.6% of all construction workers, and within the city of Washington, D.C. proper, union workers comprise 24.9% of all construction workers.²⁵ The estimates by BHI and Dr. Hirsch are far below those cited in the Hill International report.

The Hill International report asserts “all of the collective bargaining agreements of union locals that will be involved in the construction will expire during the Project (ballpark) construction period.” Ignoring, the fact that Hill International appears to be awarding contracts prior to the bidding process, a look at the information provided in Appendix A of the report shows that of the 16 local labor unions listed, 13 agreements expire during the project’s timeframe. Contrary to the Hill International analysis, the terms of the Boilermakers, Cement Masons and Operating Engineers union agreements expire after the project’s scheduled completion. Nevertheless, this figure still represents 81% of the 16 collective bargaining agreements included in the Hill International report – a high number that could raise initial concern. However, one also should examine the history of labor relations in the area in order to make a full assessment of the impact of these contract expirations.

In 2001, the State of Maryland requested approval from the Federal Highway Administration (FHA) to require a PLA on the construction project to replace the Woodrow Wilson Bridge, a project that included federal funding. The state’s principle argument for requiring a PLA was “to address and prevent labor unrest.”²⁶ However, in rejecting the request, the FHA noted that Maryland was unable to cite a single instance of labor unrest on its projects in the last 20 years. The last instance took place during the Fort McHenry Tunnel project that took place 20 years ago. Ironically, the Fort McHenry Tunnel project was built with a PLA and provides an example of a PLA that did not provide the labor harmony that Hill International and other proponents seek. Moreover, the FHA states that, “Maryland candidly admits that it has no evidence of labor unrest in the Washington area.”²⁷ Additional research conducted by BHI was unable to uncover any significant labor disputes on public construction projects in the Washington, D.C. area.

Hill International bases their recommendation to use a PLA on the ballpark construction project on their characterization of the local construction labor market as largely unionized and stretched to capacity. However, their estimate of the unionization of construction workers is grossly overstated at 50%, and the cooling markets for residential and commercial real estate are creating extra capacity. Furthermore, there is no recent history of labor disputes on large public construction projects in the Washington, D.C. area, and no evidence indicating that this is likely to change for the duration of the ballpark project. Any disruptions due to labor disputes would involve only union workers, a relatively small fraction of the workforce. For these reasons, we find no evidence to merit the use of a PLA on the ballpark project.

THE WASHINGTON, D.C. CONVENTION CENTER

In addition to the ballpark project, the new Washington, D.C. Convention Center provides another recent example of a PLA being used on large-scale project. Like on the ballpark, the decision to include a PLA in the construction of the \$850 million Convention Center was based on expected cost and time savings and the ability to guarantee jobs and training for local workers and businesses. A brief review of the project's ability to meet these objectives follows.

Previously, Washington, D.C.'s small 381,000 square foot, convention center had the ability to provide for only 54% of the market.²⁸ City planners considered this lack of capacity a substantial hindrance to the District's ability to prosper and grow, and decided that a new convention center be erected in two phases, totaling 808,000 square feet of exhibit space. With the ability to capture at least 93% of the market, the new convention center would generate substantial increases in revenue from dedicated taxes on local hotels and restaurants.⁸ To oversee operations at the old convention center and the construction of the new one, the Washington Convention Center Authority (WCCA) was created under the Washington Convention Center Authority Act of 1994.²⁹

In a 1993 feasibility study, conducted by Deloitte and Touché, the cost of the project was estimated at \$521 million.³⁰ A decade later, the final cost of the project was \$850 million, 63% over the estimate.³¹ The project included a Guaranteed Maximum Price (GMP) that capped the fiscal responsibility of the WCCA. Costs exceeding the GMP, which is subject to revisions in the terms of the contract, would be the responsibility of the project managers, Clark and Smoot. The GMP, \$500.6 million in 1998, increased in each subsequent year to reach \$655.7 million in 2003, a 31% increase.³²

The project broke ground on October 2, 1998 (excavation began in March the following year) and it opened March 31, 2003. In the original estimates, construction was to commence in October 1995 and finish two years later in October 1997. Excluding the initial lag of three years before actual work began; the twenty-four month schedule was extended 125% to fifty-four months. Clearly, the inclusion of the PLA failed to help meet the goals of keeping the project on time or on budget.

PLA proponents also laud the ability of such projects to meet specific hiring goals. In this area, the D.C. Convention Center PLA achieved mixed results, hitting some goals and missing others. One such goal was to contract at least 35% of the project work to local, small and disadvantaged business enterprises (LSDBE).³³ In spite of this, Clark and Smoot's Summary Employment Report as of March, 2003, lists

124 companies, of which, only sixteen (12.9%) are also listed in the Washington, D.C. local, small and disadvantaged business enterprise (LSDBE) database. In order to be considered a LSDBE certified business, one must have an office in the greater DC area (MD and VA) and apply for one or more of the five statuses: local, small, disadvantaged, resident-owned, or longtime resident.

Two other missed goals were the use of local labor and female labor. The requirement for local labor stated in the employment report was 51%.³⁴ Of the 4,447 new hires for the DC Convention Center Project, 1,038 (23%) were DC residents.³⁵ Similarly, the female labor employed on the project (3%) failed to meet the goal of 6.9%.

The project did meet the goals for hiring of minority workers and apprentices. Minority workers performed 2,928,617 out of 5,162,561 total field hours on the project, or 57%, exceeding the 42% requirement. Additionally, the Step-Up program, established by the WCCA and Clark/Smoot, provided on-site apprenticeship training to 126 DC residents.³⁶ There were 276 residents of Washington, D.C. hired as apprentices by Clark/Smoot out of a total 517 (53%), exceeding the target of 51%.³⁷

The record of hiring goals for the project was disappointing, particularly with respect to the local workforce requirement. At best, it is misleading to say that a PLA will guarantee work for local labor and will draw from the union halls to get labor externally. When the contractors representing 75-90% of the local labor are discouraged from bidding on a large-scale project like the convention center, the expectation is that labor will have to be imported to compensate. For this reason, we believe that instead of improving the ability to meet hiring goals, the PLA undermines them.

On the D.C. Convention Center, the PLA was unable to ensure that the project was completed on time or within its budget. It also failed to meet the hiring goals of the project. We have no reason to believe that the PLA on the new ballpark will prove any more successful.

IMPACT ON COSTS

A principal argument for implementing a PLA on large-scale construction projects is that harmonization of union work rules will reduce labor costs. The analysis conducted by Hill International for the Washington, D.C. Sports and Entertainment Commission states an anticipated savings of between 6-13%. However the Hill International report acknowledges that such savings could not be quantified. In addition, PLA advocates contend that their use make costs “predictable”. Projects often run over budget for many reasons, including changes in the scope or detail of a project, spikes in materials costs, and

environmental contamination. Overruns occur on private and public projects, those with PLAs and those without.

Although it would be inaccurate to assign all culpability for overruns to PLAs, the inclusion of one certainly provides no safeguard against them. Some egregious examples of cost overruns on PLA projects include Boston's Central Artery Project ("The Big Dig"), which was \$12 billion (460%) over budget³⁸ and Safeco Field in Seattle, which was \$100 million (24%) over budget³⁹. On the other hand, the Federal Highway Administration declined requests from the Maryland Department of Transportation to use a PLA on the Woodrow Wilson Bridge (outlined in the Labor Relations section above) construction, citing lack of any concrete evidence that it would save money.⁴⁰ The \$2.4 billion project is currently on time and under budget.

PLA opponents conclude that a PLA discourages open-shop contractors from bidding on projects, and thus reducing competition in the bidding process. Conventional microeconomic theory establishes an inverse relationship between prices and the level of competition, and thus a reduction in the number of bidders would generally result in higher bids. Evidence that a PLA reduces the number of bidders can be found in a 1997 survey conducted in Washington State by the University of Washington. The survey found that 86% of open-shop contractors would opt not to bid on projects that included a PLA.⁴¹ Clearly, if 86% of contractors that represent up to 80% of the labor force abstain from bidding on PLA projects, the number of bidders would be reduced substantially.

The very standardization of work rules and hiring practices that Hill International claims would save labor costs is one reason cited by open-shop contractors decline to bid on PLA projects. The codification of union work rules that are costly and inflexible restrict the contractors from using their own more flexible operating rules and procedures. The strict categorization of the different trades can cause delays as skilled workers are prevented from completing simple unskilled tasks that might be outside the scope of their trade, but are necessary for them to continue working. Instead, they must wait for another worker from that specific trade category to perform the task before they can resume production. Harmonizing labor practices to union standards will likely lead to an increase in labor costs, not a savings.

A 1995 study of the Roswell Park Cancer Institute provides additional evidence to support the theory that reduced competition results in higher bids, which reveals that the bid packages that come in under budget had 45% more participation than those that did not.⁴² In addition, some of the project's construction

packages were bid under a PLA requirement and others were not. The study found that the packages bid under the PLA were over budget by 10% and those bid without the PLA were under budget by 13%.⁴³

In a 2001 study evaluating the effects of a Project Labor Agreements in Erie County, Ernst & Young concluded, “PLAs have the practical effect, if not the stated purpose, of eliminating competition”.⁴⁴ The specific scope of the study was to determine if PLAs reduce competition and if so, did the reduced competition result in higher costs. They concluded that fewer qualified contractors bid on projects with PLAs and that “a paucity of bidders drives prices higher.”⁴⁵

The studies above provide evidence that PLAs restrict competition in the bidding process and actually raise construction costs. The next section provides further statistical evidence.

EMPIRICAL ANALYSIS

Many state and municipalities have been in the process of upgrading and replacing obsolete schools. The availability of data for a substantial population lent this sector of the industry to a study of the effects that PLAs have on construction costs. BHI has conducted three separate studies, one each for public school construction projects in Massachusetts, Connecticut and New York. Each of the studies found a significant increase in construction costs when a PLA was present. Project bids were 14% to 20% higher when a PLA was included and final costs were 12% to 18% higher.

Using these results as a range, BHI estimates that the city of Washington, D.C. could have realized significant savings to the \$320 million construction budget had a PLA not been used on the project.

- The cost of construction bids would have been lower by \$39 to \$47 million.
- The final construction costs would be lower by \$34 to \$49 million.

Together BHI research and the other studies of the issue provide compelling evidence that a PLA does not afford the DCSEC the assurances of time and cost savings that its advocates promise.

QUALITY & SAFETY

Union representatives claim to produce a higher quality product, due to their training and apprenticeship programs, than their non-union counterparts. To our knowledge, no empirical study has been conducted to support or refute this claim. A sufficient amount of anecdotal evidence of deficient quality is available

to prove that a PLA does not safeguard a project from defects. We are unable to quantify the level of quality in union or open-shop construction.

A 1990 Occupational Safety and Health Administration (OSHA) study of 3,496 construction fatalities found, “The distribution of fatalities among union and nonunion worksites is similar to the composition of the construction workforce in terms of numbers of union and nonunion workers.”⁴⁶ Close scrutiny of the figures in the study show that union work sites are slightly more dangerous than non-union sites.

CONCLUSION

The timely completion of the new ballpark is a financial imperative for the city and the owners. Therefore, it is understandable that decision makers would want to take precautions to avoid construction delays where possible. This is arguably the most compelling reason to utilize a PLA since it will eliminate labor actions that could interfere with the construction timetable. The no-strike provision, while reassuring, is not a guarantee that workers will not strike. In San Francisco, construction workers staged a strike during construction of the city’s airport despite the application of a PLA. Additionally, there exists no evidence that labor unrest would develop in the absence of a PLA and its consideration should be given little weight. Claims that “harmonization” of work rules lead to predictable and/or accelerated completion time of a project are unsubstantiated speculation with an extensively documented history of failure.

We find claims of cost savings from the use of PLAs to be erroneous and misleading. Using a PLA reduces competition and, keeping with standard economic theory, drives up bids and final construction costs. Extrapolating from our prior work, we estimate construction costs to be inflated \$34 to \$49 million due to the inclusion of a PLA. Assuming that there will not be any change orders or further cost over runs between now and its completion, the project will be 79% over original estimates.

In our judgment, the D.C. Sports and Entertainment Commission made a costly error in deciding to implement a PLA for construction of the new ballpark. Delays, cost over-runs and missed hiring targets as shown by the District’s experience with the D.C. Convention Center, demonstrate that a PLA does not always promise to deliver on its prime objectives.

ENDNOTES

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calculate 17,550 jobs lost (6,268 homes x 2.8 jobs per home) and the BLS estimates of 5.96% we calculate 1,046 of them to be construction jobs (17,550 * 0.0596).

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