

Prepared for:

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1. Executive Summary

This report has been prepared for the U.S. Department of Veterans Affairs (VA), Office of Construction and Facilities Management, to provide the VA with an opinion on the potential cost, schedule and other impacts associated with the potential use of Project Labor Agreements (PLAs) in Pittsburgh, Pennsylvania. Per the scope of work, the focus of this report is:

"to investigate the potential premiums associated with entering into PLAs as compared to the existing prevailing wages in support of on-going construction projects in Pittsburg, PA."

This report applies to Pittsburgh, Pennsylvania only and reference should be made to the base report (refer Project Labor Agreements – Impact Study; June 02, 2009; Rider Levett Bucknall). Detailed background information regarding the argued pros and cons of PLAs is discussed in this base report. To ensure a concise report, the background information has not been duplicated in this Pittsburgh update.

This Pittsburgh report is the first update to a report dated September 10, 2010. The methodology in compiling the report was to review available literature and interview key industry representatives including contractors and trades unions to gain an understanding of specific local issues given their experience and knowledge of PLAs.

The subject of PLAs has created much debate in the U.S. and written reports often vary widely in their conclusions – some affirming that PLAs are a useful management tool for achieving cost savings, on-time, on-budget completion and quality construction, while others argue that PLAs cause up to 30% increases in construction costs, decreased bid competition and utilize less skilled labor.

Pennsylvania interviewees cite PLAs can be suited for large industrial and energy facilities with considerable duration and shift work. The VA projects proposed in Pittsburgh do not appear to represent a great deal of complexity, or extended duration, so many union and non-union general contractors and sub-contractors will be interested and capable of performing the work.

Pennsylvania has very divided, partisan opinions regarding PLAs. There has been a lot of press coverage of PLAs in Pennsylvania and opposition has been high, with some sentiment that a VA mandated PLA will gain considerable vocal opposition and possible legal action.

At this point in time, we hold our opinion of the September 2010 issue of this report. We believe that project costs are likely to increase if a PLA is mandated for a VA project in Pittsburgh. Our opinion is a potential cost risk premium of 3% to 5%.

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2. Introduction

Purpose

This report has been prepared for the U.S. Department of Veterans Affairs (VA), Office of Construction and Facilities Management. Its purpose is to provide the VA with an updated opinion on the potential cost, schedule and other impacts associated with the use of Project Labor Agreements (PLAs) on a VA project at the present time in Pittsburgh, Pennsylvania.

3. Methodology

In addition to a desktop study, the following organizations were interviewed / contacted in compiling this update for Pittsburgh:

- Pittsburgh Plumbers Union Local 27
- Pittsburgh Building & Construction Trades Council (BACTC)
- Pennsylvania Building & Construction Trades Council (BACTC)
- General Contractors Association of Pennsylvania (GCAP)
- General Building Contractors Association (GBCA)-Philadelphia Five County Area
- Master Builders Association of Western Pennsylvania (MBA)
- Association of Building Contractors Inc., (ABC) Keystone Chapter and Western Pennsylvania Chapters
- Pennsylvania Association of Business and Industry
- The Pennsylvania Department of Labor

To understand the groups above - BACTC are union representatives; the MBA and GBCA are AGC affiliates and have a union only membership. MBA and GBCA fall under the parent organization GCAP. ABC is entirely non-union.

4. Background

On February 6, 2009 President Obama issued Executive Order 13502, entitled "Use of Project Labor Agreements for federal Construction Projects" to encourage agencies to use Project Labor Agreements (PLAs) in certain federal construction projects with a total cost to the government of \$25 million or more. The Executive Order only encourages the use of PLAs in such large scale projects, it does not mandate them:

"Executive agencies may, on a project-by-project basis, require the use of a project labor agreement by a contractor where use of such an agreement will ... advance the federal Government's interest in achieving economy and efficiency in federal procurement."

A subsequent FAR which came into effect on May 13th 2010 also "encourages agencies to consider the use" of PLAs on projects on a case by case basis either at the solicitation, preaward or award stage.

Project Labor Agreements (PLAs) are collective bargaining agreements prevalent in the construction industry. They establish the terms and conditions of employment for a specific project through an arrangement between owners / contractors and organized labor groups.

PLAs outline terms and conditions of employment for all contractors and subcontractors working on a project, whether they are normally union or non-union contractors.

PLAs typically contain three key provisions:

- 1) A no-strike provision that prohibits work stoppages and allows work to continue on the project during any strike over local contract negotiations;
- 2) Specific wage, benefits and working condition requirements for all workers on the project, as outlined by the local unions and / or prevailing wage requirements; and
- 3) Defined procedures for dispute resolution.

PLAs generally stipulate that all workers are hired through union halls, all employees pay union dues and adhere to union work rules. Contractors must similarly pay into union benefit and pension programs for their workers, which if they are non-union, their employees will not benefit from unless they join the respective union.

The scope of PLAs varies widely. While many are simply no-strike agreements or wage rate structures, others contain requirements for local hiring, scheduling, work rules, employment of minorities, or the general staffing of projects. Recently PLAs have come under varied titles, including Project Stabilization Agreements, Community Partnership Agreements and Labor Stabilization Agreements, however a consistent theme is to direct labor to projects via unions and union hiring halls.

Recently, PLA proponents have touted local labor force benefits as the primary advantage of a PLA. Under this 'community partnership' the argument is that by directing all labor via local labor halls, that all of this labor is therefore local.

Pittsburgh VA Project Information

The proposed VA Pittsburgh Consolidation of Campuses project has an estimated project cost of \$295.6 mil and will take place at both the University Drive (218,000 sf and 1,500 car parking garage) and HJ Heinz campuses (265,000 sf). During the project, the current Highland Drive division is planned for closure/divestiture.¹

A recent sources sought notice² cites a \$20 mil to \$50 mil project value for a 99,671 gsf research office building addition.

Local interviews cite these as sought after "nice" projects in terms of size, but note they are not unduly large or onerous in the region which has had considerable recent growth in healthcare.

¹ VA FY2011 Construction and 5 year Cap Plan

² FedBizOpps www.fbo.gov Number VA10110RI0102

5. Local Labor Market Characteristics

Pittsburgh, Pennsylvania, is the second-largest city in the state (to Philadelphia) and is the county seat of Allegheny County. Its population was 334,563 at the 2000 census; and by 2009, the population was estimated to have fallen to 311,647. The population of the seven-county Pittsburgh metropolitan area was 2,354,957 in 2009.

Downtown Pittsburgh retains substantial economic influence, ranking at 25th in the nation for jobs within the urban core (and is 6th in job density).³ While historically known for its steel industry, the current economy is largely based on healthcare, education, technology, robotics, and financial services.

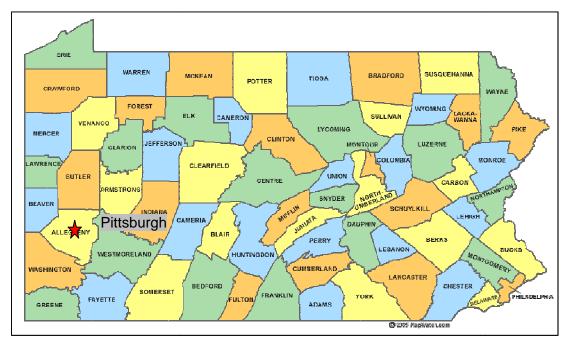


Figure 1 - Pennsylvania, Allegheny County & Pittsburgh Map

Pennsylvania has not passed 'right-to-work' legislation. Therefore it is still legal in Pennsylvania for union membership to be a condition of employment.

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³ www.wikipedia.org

2011 data for Pennsylvania shows that union representation steadily declined from 2000 to 2006, and the <u>percentage</u> of coverage has increased since then. ⁴ Referencing Figure 4, it can be seen that this general percentage increase is primarily due to the overall reduction in construction employment, which is dominated by generally non-union construction job losses in the less unionized residential housing sector.

In 2010, the state had a 27.8% unionism rate, just over double the US average of 13.5%.

Interviewees cite this unionism as more concentrated in the east of the state, particularly Philadelphia in the southeast and the counties adjacent to New York State and New Jersey.

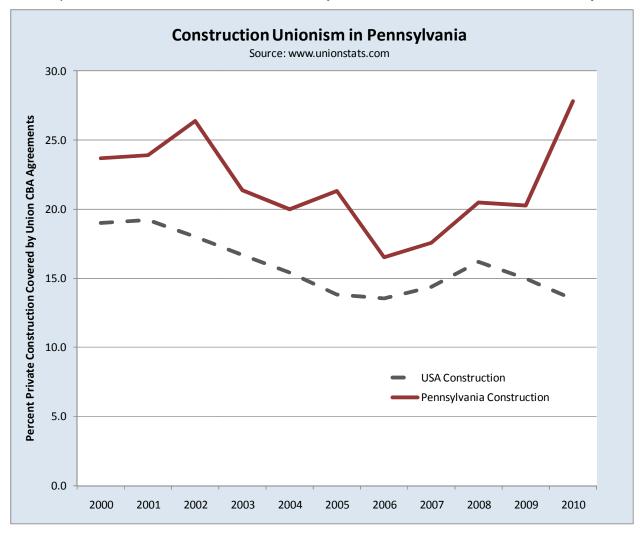


Figure 2 - Construction Unionism in Pennsylvania

Pittsburgh, while noted as a 'union town' by interviewees is cited as a 'much less militant' than the strong union town Philadelphia in the south east of Pennsylvania.

A number of unions in Pittsburgh are significant - Bricklayers Local 9 (2,947 members), Electricians Local 5 (3,067 members), Operating Engineers Local 66 (5,200 members), Ironworkers Local 3 (2,268 members).⁵ The mechanical trades – boilermakers and pipefitters

⁴ www.unionstats.com extracted May 2011

⁵ www.unionfacts.com and interview with Plumbers Local 27

have slightly lower coverage, with around 1,500 members, and plumbers 1,000 members (600 working members).

Figure 3 reflects the latest data to May 2011 with Pennsylvania seasonally adjusted unemployment at 7.8 % and Pittsburgh non-seasonally adjusted at 7.4%. Both areas have shown unemployment improvement since the previous issue of this report in September 2010.

Overall, the city of Pittsburgh and the state of Pennsylvania have continued the trend of lower unemployment rates compared to the US average.

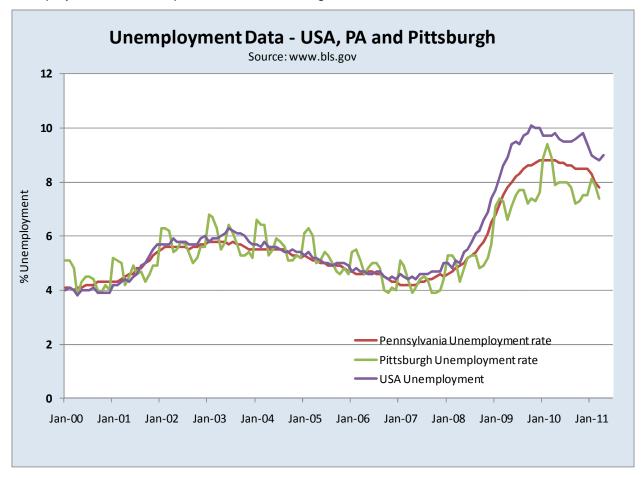


Figure 3 - USA and Pennsylvania Unemployment Rates

USA construction unemployment peaked at 27.1% in February 2010 and has declined to 17.8%, due to a seasonal affect as summer approaches and slow upturn in construction volumes.

Plumbers Local 27 cites that they have only 30 of their 600 active members on the bench, a rate of 5%, which they agree is much less than state and national averages. Another estimate is that 2008 to 2009 and 2009 to 2010 both saw drops of around 15% year on year, for an overall drop in construction volume of 25% to 30%.

Pittsburgh BLS (Bureau of Labor and Statistics) data has only been produced since 2005 (and is not seasonally adjusted, hence the erratic annual cycle). Analyzing data for Pittsburgh construction *employment* (refer Figure 4); the current level of construction employment is estimated to be at around 96% of the 2000 levels, with an index peak of 133% in August 2008. Current employment levels are 28% less than this peak.⁶.

The monthly percentage change in Pennsylvania has trended positive in the 12 monthly moving average since mid 2010, and is now trending above 0%. A slight drop recently can likely be attributed to the winter slowdown in construction, but the current trend indicates employment numbers are now on the increase in Pennsylvania.

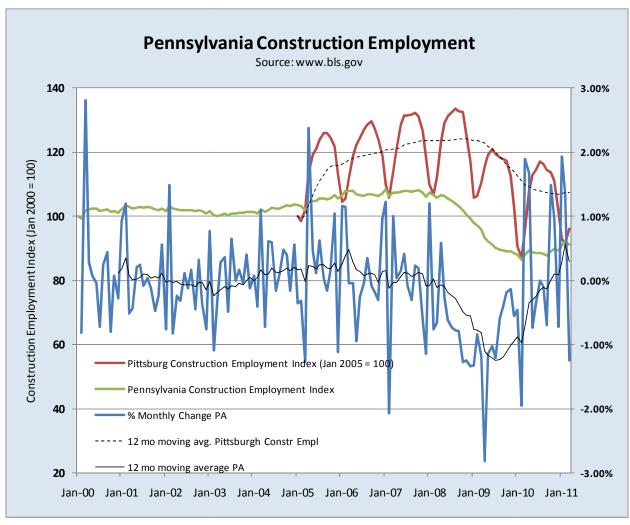


Figure 4 – Pennsylvania Construction Employment Trends

⁶ Source: www.bls.gov

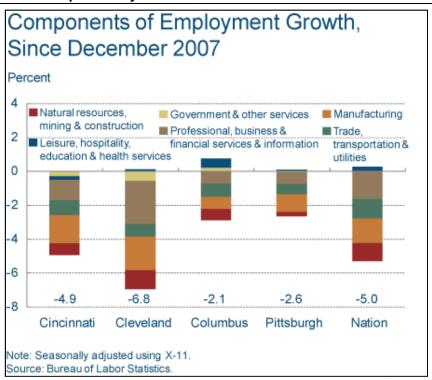


Figure 5 - Pittsburgh Economic Growth Source: http://www.clevelandfed.org/research/trends/2009/1009/01regact.cfm

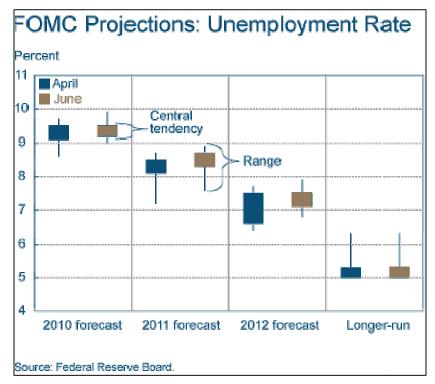


Figure 6 – Federal Open Markets Committee (FOMC)-Projected Unemployment Source: http://www.clevelandfed.org/Research/Trends/2010/0810/01monpol.cfm

The Cleveland Federal Reserve reports that Pittsburgh has fared better than other regional centers in adjacent Ohio. Figure 5 was produced in September 2009 and shows Pittsburgh construction with less construction job losses than the other centers.

Figure 6 produced by the Fed's Federal Open Markets Committee show that unemployment projections for 2010 and 2011 have increased from their April 2010 to June 2010 estimates. This is indicative of a slower/flatter recovery than previously predicted and confirms that labor supply should be plentiful in the 2-3 year window.

Pennsylvania Projects

Pennsylvania State construction contracts are required to have four prime contracts (general construction, mechanical, plumbing and electrical) to comply with a 1913 law known as the Separations Act. Some see this law as archaic, and the General Contractors Association of Pennsylvania (GCAP, an advocacy group solely for union contractors) noted that the Separations Act may be responsible for many schedule delays and claims. In 2008, Act 41, allowed the new prison projects to be built under a design-build method, where the successful design-build contractor then must bid at least these four separate contracts to still comply with the Separations Act.

Pennsylvania building permit data has trended similar to most other US regions, seeing a significant drop from the peak in 2004/2005 and a slight uptick in 2010, possibly buoyed by the First Time Homebuyers Federal Tax Credit. 2011 year to date is showing slow recovery, but given the data to data is only from winter, the next few months may reflect a different story as summer construction picks up.

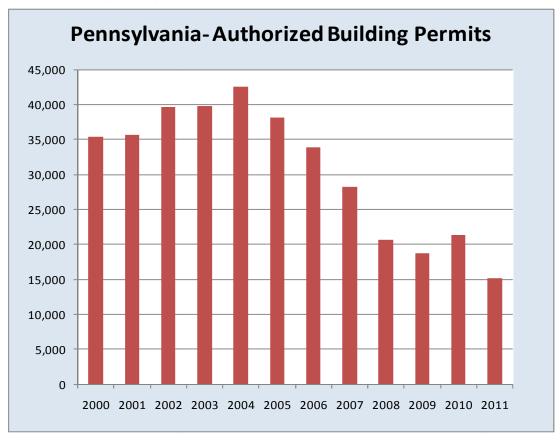


Figure 7 – Pennsylvania Authorized Building Permits. Source www.census.gov (**Note** 2011 is extrapolated from March year to date)

Pennsylvania PLAs

Recent Pennsylvania project labor agreements identified during this study are:

- Onondaga Lake Improvement Project. In a Republican Policy Committee Hearing⁷ the Pennsylvania Building and Construction Trades council noted this project as a PLA success, with 62 contracts; 58/59 local contracts; \$144 mil to 11 union contracts and \$80 mil to 12 non-union contracts for this 15 year, \$500mil project. (Appendix 5 details some opposition to this PLA).
- Pirates Stadium, Pittsburgh
- Steelers Stadium, Pittsburgh
- Penguins Ice Hockey Arena (Consol Energy Arena, \$321 mil, opening August 18, 2010)
- Scranton School District projects
- Scranton Parking Garage
- Scranton University around \$20-30mil of projects
- Mohegan Sun Casino
- University of Pittsburgh Medical Center (UPMC) projects including \$270 mil, 300,000 sf new construction in Munroville, PA. 2009 thru 2012
- University of Pittsburgh (U.Pitt) Biomedical Center \$331,000 sf, \$205.5 mil
- August Wilson Cultural Center (Pittsburg)
- RPS Headquarters Building
- Robinson Township Shopping Center
- Pittsburgh Federal Courthouse 268,000 sf, \$123 mil
- Shaler High School
- Pottstown, Schuylkill Intermodal Bus Terminal, around \$18.1mil near Harrisburgh was sighted as being under a PLA. Although a New York contractor won the job. Debates as to the extent of local labor on the project continue⁸.
- Three Mile Island, Nuclear Power Plant, near Harrisburgh, North East Pennsylvania is under a 'General Presidents Maintenance Agreement', which is cited by the sheet metal workers union as allowing 15-20% savings in labor costs. This is similar to a PLA, with a 100% union labor clause in the contract. 10

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⁷ http://media2.pahousegop.com/PreviewMedia.aspx?FileID=9308

http://republicanherald.com/news/ Article dated April 18, 2010

http://www.smwia.org/MembersSection/Agreements/GPsProjectMaintenanceAgreement.aspx

http://www.bctd.org/Field-Services/General-President-s-Maintenance-Agreement.aspx

Pennsylvania PLA Case Law

As a federal agency, the VA is not bound by Pennsylvania state case law, but a pivotal case relating to PLA's in Pennsylvania is the decision made in the case *A Pickett Construction Inc v. Luzerne County Construction Center Authority* (138 A.2d 20 PA, Cmwlth.1999):

For a large civic/convention center in the more unionized Luzerne County, north east Pennsylvania, a PLA study was undertaken by Hill International who found a PLA was justified for the following reasons. 1/ to avoid costly delays from labor disruption in a heavily unionized community; 2/ for overall labor harmony; 3/ a tight, inflexible construction deadline that if not met, would lead to the loss of an anchor tenant and state funding; 4/ cost savings and management flexibility; and 5/ the assurance of a large pool of skilled and experienced labor.¹¹

In this *Pickett* ruling, the judge ruled that the PLA requirement was permissible and consistent with state competitive bidding laws and subsequent rulings have generally utilized this *Pickett* ruling as the benchmark. A PLA was disallowed in *Jeffrey S. Will v City of Erie* in 2005, given the project in question did not meet these 5 criteria while two other rulings in 2001¹² and 2008¹³ upheld the use of PLAs given the view that these 5 points applied.

The General Contractors Association of Pennsylvania (GCAP), has four districts, with *all of its members union contractors and specialty subcontractors*. Two of the districts are AGC affiliated (Philadelphia General Building Contractors Association, and Pittsburgh Master Builders Association). Even with its all union membership, GCAP does not support mandated PLAs on projects for the following reasons:

- a. PLAs prohibit competition
- b. Contractors and councils may have no involvement in PLA compilation and they wish to be "at the table"
- c. PLAs may create wider regional issues i.e. if a PLA has a no strike clause, and union negotiations reach an impasse, this can create major regional issues where some projects may be striking, while others are not. The non striking, PLA projects may become targeted
- d. General Contractors lose control i.e. if a union subcontractor is non-performing under a PLA, the ability to fire this subcontractor and replace them with different *labor* is limited. There may be the ability to change the subcontractor, but under a PLA, a new subcontractor will likely have mostly the same union labor, which was potentially a main factor of the initial underperformance.

Similar to item c. above, Appendix 2 cites a recent example on a Chicago PLA project, where although a project had a no strike clause, the fact that off-site production facilities were on strike caused material supply issues and delays for a PLA project.

¹¹ Labor Feasibility Study for SCI Benner TWP for Pennsylvania Department of General Services, Kevin A Moore Esq (undated ~mid 2009)

¹² North Central Mechanical v. DGS, Cmwth Ct of PA, June 21, 2001

¹³ Sossong v. Shaler Area School District, 945 A.2d 788 (PA.Cmwlth 2008)

Pennsylvania Department of General Services (DGS) Prison Expansion Program

Due to current prison overcrowding in Pennsylvania, an expansion program is underway with three large proposed projects:

- Graterford Prison, Skippack Township, Montgomery County, \$400 mil, 4,100 beds (bids close August 3, 2010)
- Rockview Prison, Benner Township, Center County, \$200 mil, 2,000 beds (awarded)
- Forest, Jenks Township, Forest County, \$11 mil expansion, 96 cells (awarded)

The PLA history with these projects is checkered. On the Rockview prison two studies concerning PLAs were carried out. The first by Kevin A. Moore concluded that "there appears to be sufficient skilled labor among both union and non-union contractors" and "A PLA is not necessary for the project". While a subsequent study by the Keystone Research Group observed "a PLA could help ensure the project is completed in a timely and cost effective manner" but conversely added "a PLA may not be necessary to access skilled labor if the current downturn deepens and persists". Rockview was rebid due to bid protests and the fact the initial bids received were possibly around \$50mil greater than the budget. The rebid did not require a PLA, but if a bidder included a PLA, this received 10 points in the bid scoring. Hensel Phelps, a non-union contractor was awarded this contract, and are utilizing union subcontractors for at least the mechanical, plumbing and electrical trades (W.G. Tomko and Lighthouse electric are identified in their MEP subcontract tab).

The Forest project was also awarded without the optional PLA and Appendix 6 shows the language the PA DGS included in their bid document which includes many PLA language similarities, without the requirement for all labor to be via union halls. The selected general contractor, Walsh Construction, chose to abide by Option B and not be signatory to a PLA.

On the largest of these projects, the \$400mil, 4,100 bed Graterford prison, it was revealed that a PLA was agreed to without a formal study, and over a year before bids closed. A subsequent appeal by ABC member contractors in *Hawbaker et al vs the Pennsylvania Department of General Services* was ruled upon in a Dec 01, 2009 opinion from Judge Dan Pellegrini¹⁶. Here, the ruling was that a PLA was justified for this large, complex project, where timely completion is critical, also consistent with the earlier *Pickett* ruling. One main component of this ruling was that given the overcrowding of prisons was deemed critical, the construction schedule for Graterford was also deemed critical and "inflexible".

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¹⁴ Labor Feasibility Study for SCI Benner TWP for Pennsylvania Department of General Services, Kevin A Moore Esq (undated ~mid 2009)

Assessment of the potential need for a project labor agreement covering the SCI Benner Township prison in Center County, PA; Herzenberg and Price, Keystone Research Center, June 2009.
 Commonwealth Court of PA, Hawbaker et al vs Department of General Services, No.405MD, Dec 01, 2009

Feedback from Local Research

A summary of key comments related to the local Pittsburgh construction market are:

- "With Davis-Bacon prevailing wages a PLA allows fair bidding,...reduces cheating...and...there is no cost difference". (union representative)
- Most CBAs already contain a no strike clause.
- Electrical and plumbing unions have a lower market share at around 40% and are seeing many jobs (such as the school district projects) go to non union subcontractors. Mechanical work has a higher union market share at around 50-60%.
- No large local general contractors capable of carrying out a VA project of this nature operate as a union only shop.
- Large hospital projects (such as Penn State University Milton S Hershey Medical Center, Children's Hospital Applied Research, Lancaster General Hospital Additions) have been successfully completed as merit shop projects with no PLAs
- The recently bid prison projects in the region attracted considerable objection to the PLA requirement. (Greaterford and Rockview)
- The original Forest County prison project [which included a PLA] was more than \$10mil over budget (on \$94 million) and two years behind schedule.
- Mandated PLAs remove the contractor, a key party to the success of the project from the table and are harmful to contractors. PLAs mandate jurisdiction which is not acceptable to the general contractor.
- "PLAs take labor relations back thirty years".
- Productivity will be less if competition is removed from the wings and the GC has no fall-back if there are performance problems.
- "There is a lot of opposition to PLAs in the state".
- Mixed jobs are normal. In Pittsburgh we are fortunate to have good unions to work with.
- Quality differences are less of an issue. Apprentice training is better from the unions, with better training facilities.
- "There will be no cost savings with a PLA".

Pennsylvania Contractors

Mid Atlantic Construction data for 2009 cites Clark, Whiting Turner and Gilbane as the major regional healthcare General Contractors.

-	TOP HEALTHCARE AND HOSPITALS CONTRACTORS									
Rank	Firm	\$ Mil.								
1	Clark Group	526.81								
2	The Whiting-Turner Contracting Company	434.56								
3	Gilbane Building Company	365.78								
4	Structure Tone Inc.	229.1								
5	Turner Construction Company	190.89								
6	Bovis Lend Lease	137.92								
7	Skanska USA Inc.	118.35								
8	Balfour Beatty US	118.19								
9	P. Agnes	100								
10	M. A. Mortenson Company	71.85								

Mid Atlantic Top Healthcare Contractors Source: Mid-Atlantic Construction

6. Davis-Bacon Prevailing Wage Rates and Current Union Rates

The VA Pittsburgh project will be within the prevailing wage zone for Allegheny County, Pennsylvania.

Trade	Approx Members	Union	Union Rate	Davis-Bacon Prevailing Wage Rate ¹⁷
Carpenters	954	Local 142	tbc	28.39 + 11.85 = 40.24
Electricians	3067	Local 5	tbc	35.26 + 19.36 = 54.62
Laborers	2011	Local 373	20.92+9.72 = 30.64	20.52 + 9.16 = 29.68
Plumbers	1000	Local 27	34.75 +19.12= 52.67	34.75 + 17.57 = 52.32
Steamfitters	1447	Local 449	34.93 + 17.64= 52.57	34.93 + 17.64 = 52.57
Ironworkers	2268	Local 3	tbc	30.03 + 22.55 = 52.58
Operating Engineers	5200 ¹⁸	Local 66	30.72+16.53 = 47.25	30.22 + 15.22 = 45.44

The above table shows union membership, and union pay scales as compared with Davis-Bacon pay scales for key trades. Most rates show general parity, with the exception of the operating engineers, where the union rate is \$1.81 (3.8%).

¹⁸ Source enr.com 3/18/2009

¹⁷ Refer Government Purchasing Office - www.gpo.gov/davisbacon/ PA20100001 4/15/2011 revision

7. Project Labor Agreements FAR 22.503 Policy

FAR 22.503 (April 13, 2010) states that an agency may require a PLA, if a PLA will:

- Advance the Federal Government's interest in achieving economy and efficiency in Federal procurement,
- producing labor-management stability,
- and ensuring compliance with laws and regulations governing safety and health,
- equal employment opportunity,
- labor and employment standards, and other matters; and
- be consistent with law.¹⁹

In addition, FAR 22.503 (c) adds - Agencies may also consider the following factors in deciding whether the use of a project labor agreement is appropriate for the construction project:

- (1) The project will require multiple construction contractors and/ or subcontractors employing workers in multiple crafts or trades.
- (2) There is a shortage of skilled labor in the region in which the construction project will be sited.
- (3) Completion of the project will require an extended period of time.
- (4) Project labor agreements have been used on comparable projects undertaken by Federal, State, municipal, or private entities in the geographic area of the project.
- (5) A project labor agreement will promote the agency's long term program interests, such as facilitating the training of a skilled workforce to meet the agency's future construction needs.
- (6) Any other factors that the agency decides are appropriate.

The VA Pittsburgh Consolidation of Campuses project is essentially two projects (at HJ Heinz and University Drive) each at around \$100 mil construction cost. We are not privy to any schedule, or phasing considerations and while these projects are significant, at around 250,000sf each, they are not mega-projects and would be similar in scale to other large hospital facilities recently constructed across the state of Pennsylvania (without a PLA). Examples of this are:

- Penn State University projects Hershey Cancer Institute (178,000sf, \$140mil), new Children's Hospital (252,000 sf); Millennium Science Project (276,000 sf); Moore Building (58,000 sf) and Lewis Katz Building (113,000sf, \$60 mil)²⁰
- Lancaster General Hospital added wings 54,000 sf, \$13mil
- Reading two large hospital projects and co-generation plant
- Hanover PA large new hospital

In his 2009 study, Kevin Moore cited Penn State University as the region's largest construction services user. All of their projects to date have not been under a PLA.²¹

¹⁹ FAR 22.503 b 1 and 2. Bullets added to itemize specific requirements.

²⁰ Penn State – Office of Physical Plant (OPP) and www.pennstatehershey.org

8. Effect on Construction Costs Derived from Local Research

Project Level Analysis

This method of analysis estimates the potential project level cost risks and impacts of a PLA as compared to a non-PLA project. Key issues such as Strikes, Labor Supply, Intertrade Jurisdictions. Wage Rate Stability. Labor Cost and the PLA Related Bid Effect are evaluated for their potential cost impact, and their probability of occurring. This establishes a 'cost risk' value where a low cost risk is likely to be preferred to a higher cost risk.

8.1 Strikes

For a \$40mil project and an estimated construction duration of 15 to 24 months, the strife matrix on the following page scores 20 out of the maximum 30, i.e. 67%. Central Pittsburgh is a large urban area with a strong union presence.

In Construction and Utilities, since 1984 there have been 80 reported strikes in Pennsylvania, with an average duration of 11.5 days. Since 2000, 24 reported strikes have occurred in Pennsylvania construction, with an average duration of 8.2 days. 4 of these 24 were reported in Pittsburgh. The most significant in this period was 29,412 workers days during the IBEW-459 action against Penelec First Energy in May-July 2009. (Refer to Appendix 4).

In the current challenged economy, the number of strikes has reduced significantly, with the most recent Bureau of Labor and Statistics data in Feb 2010 stating that major strikes of 1000 workers or more is at the lowest level since 1947.²²

Interviewees noted jurisdictional disputes (without strikes) between laborers and carpenters for ancillary items, such as stadium seat transporting, plumbing jurisdictional debates with the laborers union and curtain wall metal frames (glaziers and sheetmetal workers).

Most CBAs in Pittsburgh have a no strike clause, therefore if union labor is selected, the unions contractually cannot strike if there is a dispute. The main argued benefit of reduced strike is therefore a moot point, and as noted in Appendix 2 a PLA does not guarantee a project will be unaffected by a strike if there are supply chain issues. It must be noted that all labor strikes originate from unions.

From the Appendix 4 data, a base strike in the analysis in Section 8.7 is 8 days with a 1% to 3% probability of strike occurring. The recovery cost includes overtime and extra equipment required to bring a project back on schedule.

²¹ Labor Feasibility Study for SCI Benner TWP for Pennsylvania Department of General Services, Kevin A Moore Esq (undated ~mid 2009)

22 http://www.bls.gov/news.release/wkstp.nr0.htm

PITTSBURGH Labor Strife Matrix

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	Issue	Low = 1	Medium = 2	High = 3	Score
Project location/city 1 population	Isolated project locations generally dictate that workers are relocated for a particular project. Historically, labor strife has been lower in these less location with limited options for local workforce. Some out of town populated areas. Sub-contractors/workers required.	Isolated location with limited options for alternative work.	Medium sized city with adequate local workforce. Some out of town sub-contractors/workers required.	Large city with a strong construction workforce	m
2 Project safety	Safe projects have been shown to have lower worker disruption. A clear safety management plan which worker induction and training, good lay down areas is followed through. Focus on safety.		Adequate safety plan and follow up. Minor safety issues.	Management team with poorsafety record. Higher risk for project safety issues.	
3 Project organization	Reports have shown that poor organization (also well organized, efficient Top linked to safety) can increase absenteeism, increase experienced/capable contractor. Top turnover and affect schedule. This can lead to management team following best disruptive/strife action in response.		Acceptable organization but not best practice.	Poorly organized project site. Limited Acceptable organization but not best laydown and poor access. Poor worker practice.	τ
	Large projects are more likely to warrant more attention from unions and more worker organization can lead to action. Smaller projects statistically are				
4 Project size	less likely to nave active strong advocates promoting labor strife.	Small project <\$50 mil	Medium project \$50-\$150mil	Large project >\$150 mil	Н
5 Project schedule	Compressed schedules can create overtime requirements, night/weekend work, safety issues, limited laydown/access and possibly increased worker density. Tight schedules may be more prone to worker strife.		Reasonable schedule - medium difficulty project	Compressed/crash schedule - difficult project	2
6 Project duration	Long duration projects are potentially subject to union renegotiations. The longer the project, the more renegotiations which represent a greater risk.	Up to 15 months	15 months - 24 months	Over 24 months construction	2
	In buoyant times, worker strife is more likely, as workers may be able to move to other projects and owners are more able to meet higher pay demands. In tougher times, there may be no alternative job and pay increases are less able to be met, so strike				
/ Economic conditions	action is less likely.	Poor/ 10W economic umes Low = 1	Stable economic times Medium = 5	Buoyant economic times High = 9	7
8 Union strength	Higher unionized locations are more likely to have higher worker strife.		Medium unionism 10-20%	High unionism >20%	6
		Lowest possible score = 8		Maximum = 30	20
					0/ /0

8.2 Qualified/Skilled Labor

Pennsylvania electrical, operators, bricklayers and steel unions are seen as most capable to compete and carry out work on a large hospital project. They would likely be heavily involved in the project with a PLA or not, so a PLA should not be necessary to improve union coverage. Interviewees noted many school project subcontracts have been awarded to non-union plumbing and electrical firms. Department of Labor data cites around 80% of Pennsylvania as non-union and with the massive drop in commercial and housing construction worker availability is high.

For the supply of labor, the Pittsburgh projects are smaller, with the Pittsburgh VA consolidation project planned to be carried out over two sites (at around \$100mil value each). This size is well within the capacity of many sub-contractors.

General contractors are almost all non-union, and will hire subcontractors on their merit. i.e. a pre-qualified, best value bid basis regardless of whether they are union or non-union.

Local Labor

As noted above, local labor supply is plentiful and current construction volumes are low. It is likely subcontractors and workers from all across Pennsylvania, as well as the Ohio cities of Cleveland and Columbus will be interested in the Pittsburgh VA project.

Productivity

Productivity is a variable that is almost impossible to accurately measure between projects and workers. As below in section 8.5 on Labor Cost, the driver of cost increases under a PLA is the management of labor, jurisdictions to perform tasks and the rules that may apply to team composition and work rules. To carry out a productivity study - or prove union labor vs non-union labor productivity; or PLA labor vs non-PLA labor productivity is higher or lower - would be impossible.

8.3 Intertrade Jurisdictions

Most interviewees noted jurisdictional conflicts are very rare on 'normal' Pittsburgh projects and they have good working relationships with the unions.

Interviewees noted jurisdictional disputes (without strikes) such as stadium seat transporting (laborers and carpenters), plumbing jurisdictional debates with the laborers union and curtain wall metal frames (glaziers and sheetmetal workers).

If jurisdictional dispute issues occur, we estimate a 1% to 2% cost risk (for slow downs, rescheduling as issues are resolved), at 10% probability for non-PLA projects and 10% to 20% for a PLA project. In the current slower market we see intertrade disputes becoming more commonplace as unions fight for a greater share for their members.

8.4 Wage Rate Stability

From PLAs we have studied it appears that wage rates are not actually defined within a PLA, but merely refer to union scales or Davis-Bacon scales – which in Pittsburgh are very closely aligned. Union scales are around 1.2% per hour (\$0.50/hr) higher for dues which are not recoverable under Davis-Bacon.

Non-union subcontractors have the ability to accurately assess their wage costs over a project duration and make allowances for their workers. Union shops on the other hand need to make

some judgment for annual wage increments which are often not set for the second and third years out. The trades council confirmed that is was unlikely to actually have established wage increments set within a PLA but historical union wage increases were used to predict the future increases.

Union contracts are expiring at various dates with Carpenters in May 2014, Laborers in May 2015, Operating Engineers in May 2012 and Masons in May 2011. These are negotiated by the Master Builders Association, who target longer duration 3-5 year contracts. Electrical expires in June 2012 and Plumbers in June 2011, so if construction were to start in mid to late 2011, and complete in late 2012, a number of contracts would require renegotiation.

In an area with a higher union presence, as would occur in Pittsburgh, for a non-PLA project we have assigned a 1% to 2% premium with 20% to 30% likelihood. A PLA project is assigned a 2% premium, with a 20% to 30% likelihood, given higher allowances may be required by subcontractors at bidding time.

8.5 Labor Costs

Given that the minimum labor rate is defined by Davis-Bacon prevailing wages, consistent with many studies (including the NECA supported report entitled Comparison of Operational Costs of Union vs Non-Union Electrical Contractors²³) we see that the <u>management of labor</u>, not the unit cost of the labor itself, is one of the drivers for increased cost under a PLA:

We found that management of labor, which leads to reduction of non-value added work, is the main cost driver for union contractors. It is commonly perceived that the most uncertain part of any job is the labor. Instead, we found that it is not the labor that is uncertain, but it is the management of the labor. Labor is the final indicator of all the processes and procedures used by the management.

Figuratively, labor can be thought of as fuel in a vehicles tank, and labor usage is the fuel level indicator. Therefore, management is the driver that should maintain efficient operations of the vehicle. Erratic movement of the fuel gauge is not the reason for bad gas mileage. On the other hand, owing to the lack of appropriate management of the labor, union leaders have had to pursue more controlling agreements that have a negative impact on contractors profitability.²⁴ [emphasis added]

We see that labor rules will affect the project real labor costs (i.e. each crane requires an "oiler" to be present under the standard Operating Engineers CBA). If a PLA is mandated this also limits the GCs ability to package the work to the most suitable subcontractor.

Misclassification and 'cheating' was raised as a major concern from unions and we concur that these practices should be closely monitored by the VA and/or general contractor, so that all workers are paid the correct prevailing wage for their area of work.

Interviewees generally agreed that a PLA will not reduce labor costs, particularly given Davis-Bacon prevailing wages dictate standardized *hourly rates*.

²³ Electi International, Electrical Contracting Foundation, Dr Parviz Daneshgari, www.electri21.org, 2004
²⁴ Ibid. Page 33.

Apprentice Ratios

Team make-up also contributes to the overall labor cost of a PLA project. Union work rules for team structure, which by proxy are required to be followed under a PLA, dictate the minimum number of journeypersons per apprentice. 1:3 appears to be the most common ratio in Pennsylvania (although the ABC cites a current issue that unions can change their ratios on a case by case basis, whereas open shop contractors must formally apply to the Pennsylvania Department of Labor and Industry for an amendment).

Many union shops operate at a 1:1 or 1:2 ratio. To evaluate the cost impact of this versus a team at 1:3 (i.e. 1 apprentice to 3 journey men), if a sub-contractor required 20 workers to perform their scope, the team make-up would be:

Non-union (1:1) = 10 apprentices, 10 journeymen

Non-union (1:2) = 6 apprentices, 14 journeymen (Note: 7:13 is just under 1:2)

Union (1:3) = 5 apprentices, 15 journeymen

Apprentice pay rates vary from around 50% in the first year to 85%-90% in the final year. Assuming a 70% pay average for an apprentice, the number of equivalent 100% journeymen wages would be

Non-union $(1:1) = 10 \times 70\% + 10 = 17$

Non-union $(1:2) = 6 \times 70\% + 14 = 18.2$

Union $(1:3) = 5 \times 0.7 + 15 = 18.5$

Therefore a non-union 1:2 ratio could offer savings in labor cost of 0.3/18.2 = 1.65%, while the non-union 1:1 ratio is 1.5/18.5 =8.11%. If a mix of 1:1 and 1:2 ratios was needed on a project depending on the stage (i.e. at rough-in it is possible to have more apprentices to achieve the work quality, while final completion might require a higher journeyman ratio) the average labor cost saving could be 4.9% versus the union average.

Double Payment of Benefits

One of the reasons non-union contractors elect not to bid under a PLA is that most PLAs require contributions from all employees into union pension and health & welfare schemes, even if a contractor has their own program. Non-union employees who work on a project under a PLA generally do not meet vesting requirements, so these contributions can be ultimately "lost" from them and their employers. Allegheny County union health and welfare schemes average 14% to 21% of the total pay package, and pension 10% to 16.9% of the total pay package. The average total of these contributions is 31% of total wage package.

The VA has small and disadvantaged business targets for its projects and with Davis-Bacon wage rules, these businesses must pay employees health and pension during a project – even if they do not have a scheme in place prior to the project (or after the project). It is these non-union, small businesses that are most disadvantaged by this double payment if they have prior health and welfare and pension schemes in place. Larger non-union firms generally have their own programs in place.

So, for a \$40mil project with 35% labor cost, total labor = \$14,000,000

If 25% of the sub-contractors are non-union and must 'double pay' this total non-union labor value is $= $14,000,000 \times 25\% = $3,500,000 \text{ mil.}$

And, with this double payment at 31% of total labor costs, this could be = $$3,500,000 \times 31\% = $1,085,000$.

A potential increase of \$1.085 mil represents 2.7% of the total project costs, 7.75% of the total labor costs. This significant cost cannot be recouped unless the sub-contractor can manage its labor differently - which is generally prohibited under a PLA, given core employee limitations and apprentice ratio rules, so the non-union subs will generally elect to not bid.

With double payment at a potential 7.75% of labor cost and higher apprentice ratios (i.e. fewer apprentices under a PLA) contributing a potential 4.9% we have assigned a low range cost risk of 5% and high range of 10% for labor cost increases under a PLA. This high range of 10% is lower than the 12.65%, as both would have to occur simultaneously and to the levels assumed above to be realized. This 5% to 10% range is at an 80% probability for a PLA project.

8.6 PLA Related Bidding Effect

A major factor and one difficult to quantify is the fact that many large local Pittsburgh subcontractors may not bid on a PLA mandated project. The effect of this would be three fold:

- 1. Out-of-state union contractors would bid for the job, requiring accommodation and per diems for their staff;
- 2. The total number of bidders will be reduced, potentially decreasing competition and increasing cost (at a potential penalty estimated by Carr at 3.2% for each withdrawal of bidder)²⁵; and
- 3. If ALL sub-contract bidders are union, there is the potential for bids to be less competitive overall.

A \$40mil project is well within the range of many union and non-union subcontractors in the area. A PLA will be a deterrent for many moderately sized non-union subcontractors. We have assigned a 5% to 8% premium related to the PLA bidding effect, with an 80% probability.

8.7 Lafayette Building Renovation, Washington D.C.

An interesting development in December 2010, was on the General Services Administration (GSA) managed \$52.3 mil construction project to renovate the Lafayette building in Washington D.C. After the initial contract award, where a PLA bid was optional, the winning bid which did not originally include a PLA was issued a change order for \$3.327 mil to incorporate the requirements of a PLA. This added 6.4% to the project cost. Refer Appendix 6.7.

²⁵ Analysis of Impacts on Jefferson County Courthouse Complex through PLAs. Paul Carr. Sept 2000.

8.8 PLA Cost Impact Analysis

Table 6 below represents a low range scenario for a Pittsburgh project, and suggests that **a PLA project would present more risk of increased cost** at 3.1%, compared to a NON-PLA project, in which the same factors may increase costs by 0.2%. Given the nature of this analysis we suggest an error range for this figure of +/- 0.5%. The potential premium for a PLA is therefore estimated at 3.0% (+/- 0.5%)²⁶ cost risk.

PITTSBURGH, PA	PROJECT COST		\$	40,000,000					
LOW RANGE/OPTIMISTIC EFFECTS	LABOR CO	ST (35%)	\$	14,000,000				
		Estimated			500	Project Duration/	;		
				\$	80.000	Project Cost/Cal.	dav		
WITHOUT A PLA				Ψ.	20,000	ojest sost, sam	,		
WIIIIOOTAFLA	Days/%		Cost	Cos	t if occur	Probability	Cost		%
1. Strikes (72.5% recovery cost for duration)	Bays/ 76	Ś	58,000	Ś	464,000	1%	\$	4,640	/0
•	%	Ş	1%		•	_, _		•	
2. Labor Issues (supply)	, -			\$	140,000	10%	\$	14,000	
3. Intertrade jurisdictions	%		1%	\$	140,000	10%	\$	14,000	
4. Wage Rate Stability	%		1%	\$	140,000	20%	\$	28,000	
5. Labor Cost	%		0%	\$	-	0%	\$	-	
5. PLA related bidding effect	%		0%	\$	-	0%	\$	-	
							\$	60,640	0.2%
WITH A PLA	Days/%		Cost	Cos	t if occur	Probability	Cost		%
1. Strikes (72.5% recovery cost for duration)	8	\$	58,000	\$	464,000	2%	\$	9,280	
2. Labor Issues (supply)	%		1%	\$	140,000	10%	\$	14,000	
3. Intertrade jurisdictions	%		2%	\$	280,000	15%	\$	42,000	
4. Wage Rate Stability	%		2%	\$	280,000	20%	\$	56,000	
5. Labor Cost	%		5%	\$	700,000	80%	\$	560,000	
6. PLA related bidding effect	%		5%	\$	700,000	80%	\$	560,000	
							Ś	1,241,280	3.1%

Table 6 - Pittsburgh - Low Range Project Cost Risks

It is important to note that some of these are not true dollar costs, but potential cost impacts which may be reduced under a carefully crafted PLA contract, and also reduced under a well managed 'normal' non-PLA contract.

²⁶ Rounding to one significant figure.

Table 7 below represents a high range scenario, and suggests that **a PLA project would present more risk of increased cost** at 5.5%, compared to a NON-PLA project, in which the same factors may increase costs by 0.4%. The potential high range premium of having a PLA is 5.0% (+/- 0.5%) cost risk.

PITTSBURGH, PA	PROJECT COST			\$	40,000,000				
				r i					
HIGH RANGE/CONSERVATIVE EFFECT	S LABOR COST (3	35%)		\$	14,000,000		_		
					500	Project Duration/Cal.	Days	5	
				\$	80,000	Project Cost/Cal. day			
WITHOUT A PLA									
	Days/%		Cost	C	Cost if occur	Probability		Cost	%
1. Strikes (72.5% recovery cost for duration)	12	\$	58,000	\$	696,000	2%	\$	13,920	
2. Labor Issues (supply)	%		2%	\$	280,000	10%	\$	28,000	
3. Intertrade jurisdictions	%		2%	\$	280,000	10%	\$	28,000	
4. Wage Rate Stability	%		2%	\$	280,000	30%	\$	84,000	
5. Labor Cost	%		0%	\$	-	0%	\$	-	
6. PLA related bidding effect	%		0%	\$	-	0%	\$	-	
<u> </u>							\$	153,920	0.4%
WITH A PLA									
	Days/%		Cost	C	Cost if occur	Probability		Cost	%
1. Strikes (72.5% recovery cost for duration)	12	\$	58,000	\$	696,000	3%	\$	20,880	
2. Labor Issues (supply)	%		2%	\$	280,000	10%	\$	28,000	
3. Intertrade jurisdictions	%		2%	\$	280,000	20%	\$	56,000	
4. Wage Rate Stability	%		2%	\$	280,000	30%	\$	84,000	
5. Labor Cost	%		10.00%	\$	1,400,000	80%	\$	1,120,000	
6. PLA related bidding effect	%		8%	\$	1,120,000	80%	\$	896,000	
							\$	2,204,880	5.5%

Table 7 - Pittsburgh - High Range Project Cost Risks

Therefore we see the cost risk premium by mandating a PLA ranges from 3.0% to 5.0% (+/-0.5%)

9. Conclusion

With clear specifications for this project, and an adequate review and approval process, constructed quality will be reflective of the final approved design. **Quality** differences with or without a PLA are likely to be negligible.

On-Time Completion will be dictated by suitable use of liquidated damages, minimal change orders and clear contract management. We do not anticipate a PLA will influence timely completion in Pittsburgh.

Strikes have occurred infrequently in, and many large projects have been completed with mixed union and non-union labor.

80% of Pennsylvania construction labor is non-union, so qualified labor will be more available in a normal, merit based approach. Reaching **SBA**, **Veteran**, **Women and Minority Workers** will be similar, in that many of these small businesses are non-unionized and the labor pool will be larger without a PLA. While unions will be interested in increasing their rolls by having these workers join their unions, this should be at the *choice* of the worker, or business, not through the *requirement* to join a union under a mandated PLA.

The nebulous nature of PLAs and varied terms contained within any final negotiated PLA make a specific percentage cost impact difficult to evaluate and confirm. If the real impacts of a PLA were wished to be evaluated with real subcontract bids, this could be achieved by 'encouraging contractors to <u>consider</u> a PLA' but not have this as a specific factor of bid review. Therefore the market will demonstrate if a PLA adds any benefits to a project in terms of quality, local labor, cost, schedule, training, small, women and veteran owned businesses etc. Contractors could be empowered to evaluate preliminary PLA clauses and receive bids according to these terms.

The wider social impact such as "do PLAs actively promote and improve apprentice numbers to develop a greater number of local journeymen?" is not within the scope of this study. Similarly, the variance in quality of training schemes between union and non-union workers is very partisan and also not investigated in depth as part of the scope of this report.

Davis-Bacon pay scales, which federal VA projects must comply, are established to create worker equality and fair wages for a fair days work. With the VA selecting a competent/qualified general contractor, the risk of pay cheating should be minimized with thorough wage reviews.

A number of Pennsylvania projects have utilized PLAs and the results of these appear to be mixed. A considerable amount of construction has also occurred without PLAs – particularly at Penn State University.

The VA projects proposed for Pittsburgh are not 'mega projects' and appear to be well within reach of many local firms – both union and non-union.

With clear specifications for quality, and appropriate liquidated damages assigned to prevent untimely completion, the VA project risks will be protected contractually. Historically, VA project contracts have included small business, disabled veteran, women and minority business targets, as well as local labor criteria. These can be included in the contract general conditions and need not be repeated in a PLA.

For a Pittsburgh, Pennsylvania project at the present time, we see a potential **cost risk premium** of 3% to 5% if a PLA is mandated. For a \$40mil project, this could equate to \$1.2 to \$2.0mil.

We see that a mandated PLA will reduce sub-contractors and lower the labor pool to the detriment of the project, and potentially add cost; therefore we believe that a PLA would likely not "advance the federal Government's interest in achieving economy and efficiency in federal procurement."

Appendix 1 - References

- www.unionstats.com
- Laborers International Union of North America LIUNA http://www.liunabuildsamerica.org/files/NationalConstructionAgreement.pdf
- Project Labor Agreement PLA Study for Clark County School District [Las Vegas, NV]; Resolution Management; June 2000
- Project Labor Agreements The extent of their use and related information, GAO; May 1998
- Absenteeism and Turnover, The Business Roundtable, June 1982
- Federal Mediation and Conciliatory Service (FMCS) FOIA Work Stoppage Data 1984-2009. http://www.fmcs.gov/internet/downloadsList.asp?categoryID=276
- City and County of Honolulu Rapid Transit Stabilization Agreement (RTSA) November 19, 2009
 Source www.thetruthaboutplas.com
- Project Labor Agreement Capital Improvement and Restructuring Program (2004 2009)
 between New York City Schools Construction Authority and the Building and Construction Trades Council of Greater New York
- Project Labor Agreements and Public Construction Cost in New York State. By Paul Bachman, MSIE and David G. Tuerck, PhD. Beacon Hill Institute at Suffolk University. April, 2006
- Project Labor Agreements in New York State: In the Public Interest. By Fred B. Kotler, J.D., Associate Director of the Construction Industry Program, School of Industrial and Labor Relations, Cornell University. March, 2009
- Project Labor Agreement on Public Construction Projects: The Case For and Against.
 Worchester Municipal Research Bureau, Worchester, Mass. May, 2001
- Labor Deals with Uncertainties by Bruce Buckley Engineering News Record May 18, 2009
- Tight Labor Markets Push Wages Up Engineering News Record October 6, 2009
- Website www.nrtw.org National Right to Work Legal Defense Foundation
- Website http://opencontracting.com/studies/
- Website –www.abc.org
- Testimony of Tom Rolleri Granite Construction on behalf of the AGC to the Senate Committee on Labor and Human Resources on Project Labor Agreements April 30, 1997
- Davis-Bacon Data by State Website http://www.gpo.gov/davisbacon/allstates.html
- The Effect of State Prevailing Wage Laws on Total Construction Costs Mark Prus, Dept of Economics, SUNY, Cortland. Jan 1996
- Davis-Bacon Works Center for American Progress Action Fund www.americanprogressaction.org
- Union-only Project Labor Agreements: The Public Record of Poor Performance. Maurice Baskin Esg. 2005 Edition
- Project Labor Agreements. Electri International. Dale Belman, Matthew Bodah, Peter Philips. January 2007
- Alaskan Project Labor Agreement for Consolidated Public Works Facility, Phase II. 2009
- Craft Worker Compensation Report Jan 2008, by FMI for AGC.

- Project Labor Agreements Research Study Focus on Southern Nevada Water Authority. Opfer, Son and Gambatese. Nov 2000.
- Government Mandated Project Labor Agreements in Construction. The Wharton School. U.Pen. Herbert Northrup. Jan 2000
- Why Project Labor Agreements & Apprenticeship Requirements are Bad Policy ABC of Western Washington.
- Collective Bargaining FAQs Center for Labor Education & Research, University of Hawaii West Oahu.
- Q & A's about Project Labor Agreements ABC Wisconsin Chapter
- Put Freedom to Work Opencontracting.com
- The Glens Falls/Indek Decision John W. Prager
- Project Labor Agreements State Building and Construction Trades Council of California
- Project Labor Agreements for Public Agencies Neil D Opfer, Dr. Jaeho Son and Dr. John Gambatese. 2001
- Xcel Energy Comanche 3 press release
- Project Labor Agreements in Iowa Ralph Scharnau and Michael F. Sheehan Oct 2004
- Cockshaw's Construction Labor News and Opinion. Volume 31, No. 11November 2001 DoT City and County of Honolulu – Rapid Transit Stabilization Agreement (RTSA)
- Denver Business Journal
- CURT Construction Labor: Managing the Construction Workforce, March 2005
- Draft CBA between Plumbers and Gasfitters Union No 3 and Pipefitters Local Union No 208 and Mechanical Contractors Association of Northeastern Colorado
- Contractor, Labor Leaders Negotiate Historic PLA, Saving 43 New York Projects. Engineering News Record. Jan 18, 2010. Page 26.
- Why Project Labor Agreements Are Not In the Public Interest. Cato Journal Vol 30, No 1 (Winter 2010) David G Tuerck
- The Business Roundtable (now the Construction Users Roundtable, CURT), Exclusive Jurisdiction in Construction, Cost Effectiveness Project Report. 1990.
- Review of RLB Report PLA Update, for A Neal Hall, Colorado Building and Construction Trades Council, by Kevin Duncan, Ph.D (undated) May 2010
- A Comparison of Operational Costs of Union vs Non-Union Electrical Contractors, Electi International, Electrical Contracting Foundation (NECA supported), Dr Parviz Daneshgari, www.electri21.org, 2004
- The Federal Davis Bacon Act: The Prevailing Mismeasure of Wages; Glassman, Head, Tuerck and Bachman, Beacon Hill Institute Feb 2008
- Commonwealth Court of Pennsylvania. Members of Associated Builders and Contractors (ABC) vs Department of General Services. Ruling by Judge Pellegrini (Dec 01, 2009)
- New Jersey Department of Labor and Workforce Development PLA Act (PL 2002, Chapter 44)
 Annual Report to the Governor and Legislature (June 2009)
- www.plaswork.org
- Construction Procurement Policies That Address health Insurance: A Cost Analysis. David C May; C Jeffrey Waddoups April 2010

- Economic Consequences of Building the Black Hills Energy Power Plant in Pueble County with a Project Labor Agreement (June 10, 2010). Healy Center for Business and Economic Research. Kevin Duncan (Ph.D.)
- Prevailing wage legislation and public school construction efficiency: a stochastic frontier approach. Kevin Duncan, Peter Philips and Mark Prus. Construction Management and Economics (June 2006).
- Reed Construction Data, Chief Economist Commentary Project Labor Agreements will raise federal construction costs - http://www.reedconstructiondata.com/jim-haughey/post/project-labor-agreements-will-raise-federal-construction-costs/ Jim Haughey, April 13, 2010
- Pennsylvania Employment "Fast Facts' http://www.paworkstats.state.pa.us/
- Pennsylvania Department of General Services (DGS) Construction and Public Works, Prison Expansion Projects

Appendix 2

Construction strike now affects tollway work

July 16, 2010 - Jon Hilkevitch - www.chicagobreakingnews.com²⁷

A two-week-old construction workers strike that halted many Chicago-area roadway projects is now forcing the Illinois Tollway to set deadlines for the total suspension of three major projects, despite a written agreement prohibiting work stoppages, officials said Friday.

Construction crews on the tollway system are showing up for work. The problem is that the construction companies they work for cannot obtain the materials and equipment they need because union drivers are honoring the picket lines of striking laborers outside asphalt plants, concrete-mix facilities and quarries, officials said.

As a result, officials at the Illinois State Toll Highway Authority have stopped the removal of concrete on pavement-patching jobs on several interstates because of difficulty receiving materials to complete the work. In some cases, other work is continuing, but at a slow pace, officials said.

The toll authority also set deadlines Friday to fully suspend all work on the Edens Spur, the Veterans Memorial Tollway and the Tri-State Tollway/Reagan Memorial Tollway interchange--likely until next construction season.

If no breakthrough is reached to end the strike soon, anticipated suspension dates are July 22 on the Edens Spur and on the Veterans Memorial (Interstate Highway 355) between Finley Road and Army Trail Road; July 28 on the Tri-State (Interstate Highway 294)/Reagan Memorial (Interstate Highway 88) interchange bridges; and Aug. 6 on I-355 work between I-88 and Finley Road, officials said.

"Our costs and our customers are being impacted. We don't think it's a responsible thing to tear up any more roads when we don't know when they are going to be replaced," said Kristi Lafleur, executive director of the tollway.

She said that once closed lanes are reopened after the deadlines pass, the projects will likely be delayed until next year.

The toll authority has a multi-project labor agreement that prohibits strikes, work slowdowns or stoppages and lockouts by employers. Tollway projects were not supposed to be affected by the current strike because the labor pact guarantees no disruptions in return for prevailing wages and no non-union workers on tollway jobs.

"We have been able to keep work going for as long as we have due to the labor agreement," Lafleur said. "It has allowed more time for labor and management to get on the same page. But it's not going to be able to prevent impacts on our construction indefinitely."

Jennifer Krug, vice president of K-5 Construction Corp. based in Lemont, said, "On our job on I-355 we are ready to do the concrete patches, but we can't get any material out there."

Thousands of laborers and heavy equipment operators went on strike July 1 after negotiations broke down over a new three-year contract with construction firms represented by the Mid-America Regional Bargaining Association.

Talks are set to resume Monday between the association and Local 150 of the International Union of Operating Engineers and the Laborers' District Council of Chicago. The unions are seeking a wage increase to offset increases in their contributions to health care coverage.

Major projects on hold include the resurfacing of the Eisenhower Expressway, the rehab of the Congress Parkway bridge over the Chicago River, the Wacker Drive reconstruction and dozens of buildings across the area.

In the City of Chicago, most street, sidewalk and bridge construction projects have been shut down because hot-mix asphalt and other materials are unavailable from suppliers due to the strike, said Brian Steele, spokesman for the Chicago Department of Transportation. Dozens of projects are affected by the cutoff of materials, which renders almost meaningless a no-strike clause in the contract governing the department's in-house construction work force.

²⁷ http://www.chicagobreakingnews.com/2010/07/construction-strike-now-affects-tollway-work.html

Appendix 3 - Pennsylvania Apprenticeship

	Number of Apprentices (June 2010) Percentage				
	Total	Female	Minority	Female %	Minority %
Electricians	2429	52	238	2.1%	9.8%
Carpenters	2020	48	223	2.4%	11.0%
Plumbers	950	6	78	0.6%	8.2%
Line Erector	654	4	44	0.6%	6.7%
Sheetmetal	584	9	60	1.5%	10.3%
Pipefitter	517	5	51	1.0%	9.9%
Ironworker	434	3	52	0.7%	12.0%
Elevator Constructor	407	7	21	1.7%	5.2%
Roofer	357	2	29	0.6%	8.1%
Operating Engineer	291	20	36	6.9%	12.4%
Insutaltion, Frost and					
Heat Workers	243	4	11	1.6%	4.5%
Glaziers	231	3	39	1.3%	16.9%
Bricklayers	200	2	14	1.0%	7.0%
Laborers	173	21	52	12.1%	30.1%
Heating & Aircon	115	0	9	0.0%	7.8%
	9605	186	957	1.9%	10.0%

Pennsylvania Apprentices as at June 2020. Source: Department of Labor, Tom Bydlon, ph 717-221-3496

DoL did not supply formal data for the union, non-union split between the above apprentices, but estimated the split as 70% union, 30% non-union for the number of apprentices.

There are 871 active apprentice programs in PA, and the DoL representative estimated the split in programs was the inverse of apprentice numbers. i.e 70% program numbers are non-union and 30% union. This is due to the fact union apprentices are under joint/or multi –employer programs which are often larger and supply many companies, whereas many non-union schemes are operated by single companies.

In 2002, Keystone Research Group used data supplied by Mr Bydlon to study PA apprenticeship²⁸. Their findings showed 21% of apprentice schemes were union (compared to the current 30%) with 82% of apprentices as union (compared to the current estimate at 70%). While the current estimate by the DoL is not hard data, this implies union apprentice percentage is dropping, and there is possibly some consolidation of the non-union programs.

²⁸ Construction Apprenticeship and Training in Pennsylvania, Bradley and Herzenberg, Keystone Research Center. 2002

Appendix 4 - Pennsylvania – Strike Data

Source - Federal Mediation and Conciliation Service, www.fmcs.gov/internet/downloadsList.asp?categoryID=276

FMCS Case Number	Employer Name	▼ Union Name ▼	Affected City	Affected State ✓	Industry	√ # Idle ▼	WS Begin Date	WS End Date	Ending Fiscal Year ▼ dı	ura tic 💌	Worker Days	Worker Hrs
1984AA00O537	Northern Contracting Co Inc	ILA 1698	Philadelphia	PA	Construction	70	4/1/1984	4/11/1984	1984	10	700	5,600
1984BA00X708	Mid-valley Roofing Co Inc	RWAW 64	Moosic	PA	Construction	95	7/12/1984	7/15/1984	1984	3	285	2,280
	Ne Penna Gen Contractors Assoc N E Penna Gen Contractors Assoc	BAC 18 OPCM 150	Scranton Scranton	PA PA	Construction Construction	200 55	5/2/1984 5/3/1984	5/16/1984 5/14/1984	1984 1984	14 11	2,800 605	22,400 4,840
1985CA00S573	Neca Philadelphia Div - Penn-del-jersey	IBEW 98	Philadelphia	PA	Construction	450	5/13/1985	5/23/1985	1985	10	4,500	36,000
1985CA00U380	Contractors Association Of York Inc	LIUNA 1167	York	PA	Construction	380	5/1/1985	5/2/1985	1985	1	380	3,040
1985DA00Y193	Floor Coverers & Decorators 39/western P	CJA 1759	Pittsburgh	PA	Construction	150	6/3/1985	6/27/1985	1985	24	3,600	28,800
1985DA00Y216	Marble & Terrazzo Companies	TMTF 20	Pittsburgh	PA	Construction	100	6/3/1985	6/10/1985	1985	7	700	5,600
1985DB00A498	Master Interior Contractors Association	TMTF 2006	Pittsburgh	PA	Construction	150	6/21/1985	7/19/1985	1985	28	4,200	33,600
1985EB00B409	Mason Contractors Association Of Alleghe	BAC 33	Oakmont	PA PA	Construction	30 24	6/3/1985	7/2/1985	1985	29 31	870 744	6,960
1985KA00G478 1986GZ002111	Warren Electric Cooperative Inc Southwest Central Rea Inc	IBEW 1124 IBEW 459	Youngsville Indiana	PA	Utilities Utilities	29	12/13/1984 6/9/1986	1/13/1985 6/30/1986	1985 1986	21	609	5,952 4,872
1986GZ002230	N E Penn Gen Contractors Assoc	BAC 18	Scranton	PA	Construction	200	5/1/1986	5/10/1986	1986	9	1,800	14,400
1986HZ002363	Masonry Contractors Of Northeastern Pa	BAC 30	Luzerne	PA	Construction	112	5/1/1986	6/3/1986	1986	33	3,696	29,568
1986HZ002437	Smacna Of W Pa & Ind Contractors	SMW 12	Pittsburgh	PA	Construction	400	7/1/1986	7/8/1986	1986	7	2,800	22,400
1986HZ002718	Boilermaker Employers Of The Western Pen	BBF 154	Pittsburgh	PA	Construction	700	6/2/1986	6/5/1986	1986	3	2,100	16,800
1986IZ002759	Employing Bricklayers Assoc Of Delaware	BAC 1	Phildelphia	PA	Construction	600	5/1/1986	6/4/1986	1986	34	20,400	163,200
1986FZ001758	Rochez Brothers, Inc Specialty Steel Div	BSOIW 527	Braddock	PA	Construction	59	6/13/1986	2/12/1987	1987	244	14,396	115,168
1987BZ000625	Hoys Construction Co Inc	IBT 491	Waynesburg	PA	Construction	15	7/17/1987	9/19/1987	1987	64	960	7,680
1987GZ002850	Smacna Of W Pa & Independent Contractors	SMW 12	Pittsburgh	PA	Construction	500	7/1/1987	7/8/1987	1987	7	3,500	28,000
1987HZ003350 1988GZ002572	Philadelphia Boilermakers Empls Negotiating C Boilermaker Empls Of The Western Pennsylvan		Philadelphia Pittsburgh	PA PA	Construction Construction	340 250	8/4/1987 6/1/1988	8/16/1987 6/7/1988	1987 1988	12 6	4,080 1,500	32,640 12,000
1988HZ002785	Eastern Exterior Wall Systems	LIUNA 1174	Lehigh Valley	PA	Construction	50	5/17/1988	5/28/1988	1988	11	550	4,400
1988FZ002207	Conveyor Service Corp/nat'l Coal Mine Construct		Blairsville	PA	Construction	11	2/21/1989	6/1/1989	1989	100	1,100	8,800
1988KZ004013	Glass & Glazing Contrs Pittsburgh (inside) Pat 75		Pittsburgh	PA	Construction	12	1/31/1989	3/1/1989	1989	29	348	2,784
1989FZ002478	Northeast Pennsylvania Contractors Assn	BAC 18	West Pittston	PA	Construction	150	5/1/1989	6/5/1989	1989	35	5,250	42,000
1989GZ002867	Floor Covering Companies Pittsburgh & Vic Cja	17 CJA 1759	Pittsburgh	PA	Construction	150	6/2/1989	6/30/1989	1989	28	4,200	33,600
1989HZ002932	Warner & Warner Inc	CJA WESTERN PA D		PA	Construction	15	6/19/1989	6/28/1989	1989	9	135	1,080
1990DZ001140	Ugi Corporation	IBEW	Bethlehem	PA	Utilities	300	4/11/1990	5/4/1990	1990	23	6,900	55,200
1990DZ001351	Erie Construction Council Inc	OPCM 526	Erie	PA	Construction	32	5/8/1990	6/8/1990	1990	31	992	7,936
1990EZ001465	Erie Construction Council Inc	RWAW 210	Erie	PA	Construction	110	5/8/1990	5/14/1990	1990	6	660	5,280
1990FZ001906	Master Builders Association Of Western Pennsy		Pittsburgh	PA	Construction	250	6/4/1990	6/13/1990	1990	9	2,250	18,000
1990FZ002245 1991EZ001532	Builders Assn/eastern Oh & Western Pa(&oths) Gen Bldg Contrs Assoc (&ots Philadelphia Pa C		Pittsburgh Philadelphia	PA PA	Construction Construction	150 380	6/1/1990 5/1/1991	6/19/1990 5/4/1991	1990 1991	18	2,700 1,140	21,600 9,120
1991EZ001756	General Building Contractors Assoc Inc	CJA	Philadelphia	PA	Construction	4000	5/1/1991	5/4/1991	1991	3	12,000	96,000
1991EZ001757	Interior Finish Contractors Assoc	CJA	Bala-cynwyd	PA	Construction	2000	5/1/1991	5/4/1991	1991	3	6,000	48,000
1991EZ001758	Contractors Assoc Of Eastern Of Pennsylvania	CJA	Philadelphia	PA	Construction	300	5/1/1991	5/4/1991	1991	3	900	7,200
1991EZ001759	Furniture Handlers Assoc	CJA	Bala-cynwyd	PA	Construction	400	5/1/1991	5/4/1991	1991	3	1,200	9,600
1991FZ001909	Employing Bricklayers Association	BAC 1	Plymouth Meeting	PA	Construction	450	5/1/1991	5/3/1991	1991	2	900	7,200
1991FZ002259	Boilermaker Employers Of The Western Pa Area		Pittsburgh	PA	Construction	900	6/10/1991	7/3/1991	1991	23	20,700	165,600
1991GZ002307	E R Stuebner Inc (er)	LIUNA 471	Reading	PA	Construction	15	5/28/1991	6/20/1991	1991	23	345	2,760
1991KZ003895	Pennsylvania American Water Co	UWU 537	Pittsburgh	PA	Utilities	250	11/20/1991	1/15/1992	1992	56	14,000	112,000
1992EZ001595	Roofing & Sheet Metal Contrs Assn Philadelphia		Philadelphia	PA PA	Construction	15 1950	5/8/1992 5/20/1992	6/8/1992 6/8/1992	1992 1992	31 19	465 37,050	3,720 296,400
1992FZ001885 1992FZ001991	Neca Penn Del Jersey Chapter (penn-del-jerse) Pdca	PAT 411	Philadelphia Harrisburg	PA	Construction Construction	100	5/1/1992	5/8/1992	1992	7	700	5,600
1992JZ003218	Us Roofing Corporation (u S)	SMW 19	Philadelphia	PA	Construction	20	5/11/1992	7/1/1992	1992	51	1,020	8,160
1993HZ002880	Keystone Building Contractors Association	OPCM 31	Harrisburg	PA	Construction	20	6/7/1993	6/22/1993	1993	15	300	2,400
1994IZ003086	Independent Roofing Contractors Of West Pa Ry		Pittsburgh	PA	Construction	187	7/25/1994	8/1/1994	1994	7	1,309	10,472
1994LZ004237	Hri (h R I)	IBT 110	State College	PA	Construction	70	12/12/1994	4/3/1995	1995	112	7,840	62,720
1996GZ001690	Lehigh Valley Contractors Association	BAC 5	Allentown	PA	Construction	300	5/1/1996	5/6/1996	1996	5	1,500	12,000
1997GM001908	Independent Roofing Contractors Of Western Pa		Pittsburgh	PA	Construction	203	6/24/1997	7/11/1997	1997	17	3,451	27,608
1997HZ002029	General Building Contractors Association Inc	CJA METRO PHILAD		PA	Construction	3500	5/1/1997	5/19/1997	1997	18	63,000	504,000
199809470012	Conti Enterprises	USA	Lehighton	PA PA	Construction	80	1/20/1998	4/12/1998	1998	82	6,560	52,480
1998EM000782 1998EM000937	Master Interior Contractors Association Master Interior Contractors Assoc (mica)(m I C A)	PAT 2006 OPCM 31	Pittsburgh Pittsburgh	PA	Construction Construction	189 250	6/5/1998 6/1/1998	6/9/1998 6/5/1998	1998 1998	4	756 1,000	6,048 8,000
1999FM000936	Peoples Natural Gas Co	SEIU 69	Pittsburgh	PA	Utilities	527	5/19/1999	5/26/1999	1999	7	3,689	29,512
2000FZ000930	Bricklaying Contrs Philadelphia Pa & Vic Bac 1	BAC 1	Philadelphia	PA	Construction	100	5/1/2000	5/3/2000	2000	2	200	1,600
2000FZ000931	Employing Bricklaying Association	BAC 1	Philadelphia	PA	Construction	800	5/1/2000	5/3/2000	2000	2	1,600	12,800
2000FZ000932	Delaware Valley Masonry Contrs Plymouth Mtg		Plymouth Meeting	PA	Construction	200	5/1/2000	5/3/2000	2000	2	400	3,200
2000FZ000956	Construction Assocs & Oths Phil Pa & Vic Opcm		Philadelphia	PA	Construction	400	5/1/2000	5/3/2000	2000	2	800	6,400
2000HZ001540	R E Jones Inc (re)	PAT 411 DC 21	Harrisburg	PA	Construction	30	6/2/2000	6/8/2000	2000	6	180	1,440
2003HM001570	I A Construction Corporation	IUOE 66	Volant	PA	Construction	10	8/11/2003	9/28/2003	2003	48	480	3,840
2003FM001020	Dominion Peoples Natural Gas Company	UWU 69	Pittsburgh	PA	Utilities	600	1/19/2004	1/31/2004	2004	12	7,200	57,600
2004DZ000506	American Asphalt (chase Plant)	USA 15253	Shavertown	PA	Construction	30	3/16/2004	3/26/2004 5/25/2004	2004	10	300	2,400
2004EM000754 2004EZ000644	Erie Construction Council Inc Plastering Contractors Philadelphia Pa & Vic Op	PAT DC 57	Erie Philadelphia	PA PA	Construction Construction	80 420	5/5/2004 4/30/2004	5/25/2004	2004 2004	20 7	1,600 2,940	12,800 23,520
	Ductmate Industries Inc	SMW 12	Pittsburgh	PA	Construction	120	7/1/2004	7/16/2004	2004	15	1,800	14,400
2004IZ001683	BOSIO METAL SPECIALTIES	SMW-194		PA	Construction	13	10/1/2004		2005	7	91	728
200500330006	BOB SHOWERS WINDOWS & SUNROOMS IN			PA	Construction	50	3/7/2005		2005	171	8,550	68,400
2005007N01JT	MECHANICAL CONTRS ASSOC EASTERN PA	IN PPF-420	PHILADELPHIA	PA	Construction	2300	5/1/2005	5/4/2005	2005	3	6,900	55,200
	MECHANICAL CONTRS ASSOC EASTERN PA		READING	PA	Construction	400	5/1/2005	5/4/2005	2005	3	1,200	9,600
	MECHANICAL CONTRACTORS ASSOC OF NV		ERIE	PA	Construction	75	5/2/2005		2005	9	675	5,400
	MECHANICAL CONTRACTORS ASSOC OF W		PITTSBURGH	PA	Construction	600	6/1/2005	6/7/2005	2005	6	3,600	28,800
	MECHANICAL CONTRACTORS ASSOCIATION		PITTSBURGH	PA DA	Construction	1000	6/1/2005	6/9/2005	2005	8	8,000	64,000
	Northwestern Rural Electric Cooperative Associa- INTERIOR FINISH CONTRACTORS ASSOCIATION		Cambridge Springs		Utilities	3000	8/29/2005	9/6/2005	2005 2006	8	224 6,000	1,792
	Building Industry Association	CJA-METRO RC	WAYNE Philadelphia	PA PA	Construction Construction	3000 500	5/1/2006 5/15/2009	5/3/2006 5/26/2009	2006	11	5,500	48,000 44,000
	National Fire Sprinkler Association	PPF-692	Philadelphia	PA	Construction	500	5/15/2009	5/26/2009	2009	18	9,000	72,000
	Penelec First Energy	IBEW-459 Dist 3	Erie	PA	Utilities	516	5/21/2009		2009	57	29,412	235,296
	Alan McIlvain Co.	LIUNA-57		PA	Construction	37	5/1/2009	5/7/2009	2009	6	222	1,776
COUNT	80					34054				23	383009	
•									Av	verage	11.25	
						1100=			-1 2000	40.105	0007	
						11809			since 2000	18.125	96874	
						1 1			count=24 Av	vg Dur	8.20	

In Construction and Utilities, since 1984 there have been 80 reported strikes in Pennsylvania, with an average duration of 11.5 days.

Since 2000, 24 reported strikes have occurred in Pennsylvania construction, with an average duration of 8.2 days. The most significant in this period was 29,412 workers days during the IBEW-459 action against Penelec First Energy in May-July 2009.

No single union appears to have had any more prevalence to strike that others.

Appendix 5 - Onondaga Lake PLA

How Broken Promises on the Onondaga Lake Cleanup Project PLA Can Serve as a Wake-Up Call for Syracuse School Construction Project ²⁹

On September 19, 1997, Onondaga County signed an Amended Consent Judgment (ACJ) for the Onondaga Lake Improvement Project. The project calls for significant capital improvements to be made to the Metropolitan Wastewater Treatment Plan (METRO) and to the wastewater collection system for the purpose of abatement of combined sewer overflows and improving water quality in Onondaga Lake.

The improvements were budgeted in the neighborhood of \$385 million (in 1998 dollars) with an additional \$63 million (in 1998 dollars) in the year 2010 if certain future compliance determinations require additional facilities. The ACJ is designed to improve the water quality of Onondaga Lake and achieve full compliance with state and federal water quality regulations by December 1, 2012. The ACJ specifically includes a listing of more than 30 projects to be undertaken over 15 years.

The project is being built under the terms of a union-only PLA. That union-only provision was implemented to provide economic savings in the amount of \$11 million, according to an analysis of the merits of using a union-only PLA for the project that was conducted by the firm of Camp, Dresser & McKee. These projected savings are what the County relied upon to meet the requirement that the utilization of the union-only PLA allow for obtaining the best work possible at the *lowest* possible price.

However, here's where these projected savings stand today:

Workers Comp Alternative Dispute Resolution (ADR) - was projected to save more than \$1.7 million over the life of the project, according to a study done by CDM to detail costs savings to justify a union-only PLA on the Onondaga Lake Cleanup. According to contractors performing work on the project, the ADR program has never been implemented. A similar CDM study projects a savings of nearly \$7.7 million over the life of the Syracuse city school rehab project if a similar ADR provision is implemented. History is destined to repeat itself – these savings will never be realized.

Management Rights – the ability of individual contractors to control the level of staffing/scheduling on the Onondaga Lake Cleanup Project was to save more than \$2.1 million over the life of the project. According to contractors who have performed work on the project, this concept is a "smokescreen," because if the staffing issue is not specifically addressed in the PLA, the contractor is obligated to staff the job according to union collective bargaining agreement rules. For example, according to the Operating Engineers CBA, for every crane on the job, there must be an "oiler" on site. So even though a contractor with two cranes at work on site wants to have just one "oiler" for efficiency/productivity/cost reasons, he is required to have two, and the Management Rights concept embodied in the PLA does not allow him to do otherwise. The

²⁹ Direct Excerpt, Source http://www.opencontracting.com/syracuse/info/index.htm.

- nearly \$1.5 million in savings that CDM says it will realize over the life of the school renovation project is yet another smokescreen.
- 3:1 Apprentice ratio across all trades in direct violation of New York State Labor Law, as the NYSDOL mandates ratios by trade, and those ratios must be followed regardless of a PLA. So the savings of \$1,205,000 that this provision of the PLA was to save has never been realized.
- Productivity the ability for workers to work four 10-hour days at a regular rate was to save four hours per worker per month in "productivity," a total savings of more than \$2.5 million. However, a review of certified payrolls on several of the Onondaga Lake Cleanup projects shows virtually no utilization of this concept, so these savings are not being realized.
- Less restrictive off-site fabrication rules were to realize savings over the life of the Onondaga Lake Cleanup Project of \$1.7 million. There is no evidence in a review of payroll records that this provision is being implemented.
- Elimination of guaranteed pay The proposed savings of nearly \$1.7 million is bogus because if non-union contractors are employed on the project, they do not have a guaranteed pay provision that they must abide by. Of the \$11.9 million in labor costs savings that the CDM study indicated would be realized as justification to implement a PLA, \$11,001,000 are NOT being realized.

Direct Excerpt, Source http://www.opencontracting.com/syracuse/info/index.htm.

Appendix 6 - Forest Prison Project - Labor Certification.

Here, the selected contractor, Walsh Construction elected Option B, to certify that aspects often included in a PLA would be adhered to by their company, while undertaking this specialized prison expansion Design-Build Project.

SCI Forest, DGS Project 377-2 Project Labor Certification

Option A

I, the undersigned CEO or President of the Proposer, hereby agree that:

- 1. I have personally read the applicable paragraphs in the SCI Forest RFP regarding project labor; and
- My firm agrees to become a signatory to the Project Labor Agreement ("the PLA", a copy of which
 was issued in a bulletin to the original RFP) and require subcontractors of every tier to execute a
 Letter of Assent agreeing to the terms of the PLA.

Signaturo	Print Name Here	
Title	Date -	

Option B

I, the undersigned CEO or President of the Proposer, hereby agree that:

- 1. I have personally read the applicable paragraphs in the SCI Forest RFP regarding project labor; and
- The Project will be carried out in an orderly and timely manner with no delays due to strikes, lockouts or slowdowns; and
- The Project will have a reliable supply of skilled, trained workers to meet the manpower and equipment demands of the schedule for this Project; and
- 4. All workers on the Project shall be classified in accordance with work performed and paid the prevailing wage and benefit rates for those classifications as determined by the Commonwealth of Pennsylvania's Department of Labor & Industry in its Prevailing Wage Determination, attached as part of the specifications for the Project, and any subsequent modifications thereto; and
- One of the many significant benefits that can be provided by the Project is an increase in job training and employment opportunities for individuals within the community. My firm (if awarded the design/build contract for the project) will work to improve employment opportunities for local residents, minorities, women and the economically disadvantaged in the construction industry. My firm (if awarded the design/build contract for the project) agrees to work in close cooperation with

Request for Proposal Department of General Services DGS Proj. 377-2 Rebid SCI Forest

- our Non-Discrimination Coordinator and the Pennsylvania Department of Labor & Industry ("L&I") to ensure that minorities, women and unemployed local residents are afforded equal opportunity to participate in apprenticeship programs which result in the placement of apprentices on this Project; and
- 6. My firm may utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs, counseling and mentoring, support network, and employment opportunities; and
- My firm will provide safe working conditions for its employees and comply with any safety rules
 established by the our own policies and/or the contract documents for the Project; and
- 8. The Project encompasses the design and construction of a prison facility, which requires specific security and safety rules as set forth in detail in the contract documents. My firm agrees that employees shall at all times while in the employ of the DBC or any subcontractor be bound by the safety, security and visitor rules as established by the contract documents and/or my firm in accordance with applicable State and Federal safety and health statutes and regulations. These rules will be published and posted in conspicuous places through the Project.

Signature

President

Title

Daniel J. Walsh

Print Name Here

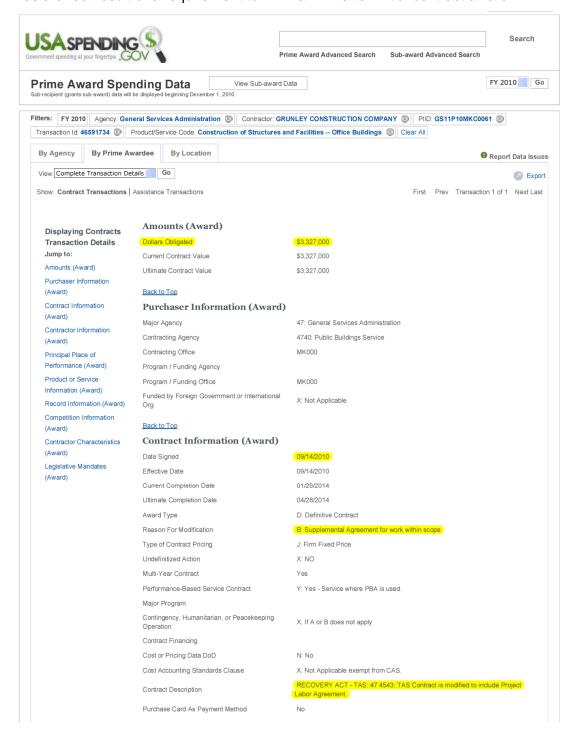
March 26, 2010

Date

Source: www.revenue.state.pa.us/portal/server.pt/community/construction_and_public_works/1235/prison_expansion_projects/526276

Appendix 7 - Lafayette Building - Washington D.C.

The document below shows the \$3.327mil change order issued on the GSA procured Lafayette Building which was initially contracted to Grunley Construction for \$52.3mil. This 6.36% change was a direct result of a requirement to ADD a PLA after initial contract award.³⁰



³⁰ www.thetruthaboutplas.com Article posted December 06, 2010.