Santa Clara Valley Water District
Capital Improvement Program Committee Meeting

District Headquarters Boardroom
5700 Almaden Expressway, San Jose, CA 95118

*AMENDED/APPENDED
RESCHEDULED REGULAR MEETING
AGENDA

Monday, October 21, 2019
10:00 AM

***ITEMS AMENDED AND/OR APPENDED SINCE THE ORIGINAL PUBLICATION OF THIS AGENDA ARE IDENTIFIED BY AN ASTERISK (*) HEREIN**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, enviornment and economy.

Nai Hsueh, Chair, District 5
Linda J. LeZotte, Vice Chair, District 4

Tony Estremera, District 6

All public records relating to an item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA 95118, at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

BETH REDMOND
Committee Liaison

NATALIE F. DOMINGUEZ, CMC
Assistant Deputy Clerk II
Office/Clerk of the Board
(408) 265-2659
ndominguez@valleywater.org

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

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Santa Clara Valley Water District
Capital Improvement Program Committee

*AMENDED/APPENDED AGENDA

***ITEMS AMENDED AND/OR APPENDED SINCE THE ORIGINAL PUBLICATION OF THIS AGENDA ARE IDENTIFIED BY AN ASTERISK (*) HEREIN**

Monday, October 21, 2019 **10:00 AM** **District Headquarters Boardroom**
5700 Almaden Expressway, San Jose, CA 95118

1. CALL TO ORDER:

1.1. Roll Call.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the public: This item is reserved for persons desiring to address the Committee on any matter not on this agenda. Members of the public who wish to address the Committee on any item not listed on the agenda should complete a Speaker Form and present it to the Committee Clerk. The Committee Chair will call individuals in turn. Speakers comments should be limited to three minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.

3. ACTION ITEMS:

3.1. Information on Project Labor Agreements (PLAs). (Continued from July 29, 2019) 19-0847

Recommendation:
A. Receive information from staff regarding how Project Labor Agreements may impact Valley Water's capital projects; and
B. Provide input to staff and discuss recommending to the Board whether Valley Water should pilot a Project Labor Agreement on a capital project.

Manager: Michael Baratz, 408-630-2361

Attachments: *Attachment 1: Staff Memo
*Handout 3.1-A Building Opportunity
*Handout 3.1-B Peter Philips PLA Testimony
*Handout 3.1-C NECA PLA Report 2007

Est. Staff Time: 30 Minutes

4. INFORMATION ITEMS:

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

6. ADJOURN:

6.1. Adjourn to rescheduled Regular Meeting at 10:00 a.m., on October 24, 2019, in the Santa Clara Valley Water District, Board Conference Room A-124, 5700 Almaden Expressway, San Jose, California.

Santa Clara Valley Water District

File No.: 19-0847

Agenda Date: 10/21/2019
Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Information on Project Labor Agreements (PLAs). (Continued from July 29, 2019)

RECOMMENDATION:

A. Receive information from staff regarding how Project Labor Agreements may impact Valley Water's capital projects; and
B. Provide input to staff and discuss recommending to the Board whether Valley Water should pilot a Project Labor Agreement on a capital project.

SUMMARY:
Following the presentation on PLAs at the July 29, 2019 Capital Improvement Program (CIP) Committee meeting, the Committee asked staff to provide further input for a discussion on the implications of using Project Labor Agreements (PLAs) on Valley Water capital projects.

Staff have invited the following speakers to the October 21, 2019 CIP meeting in order to provide a summary of their PLA experience:

1.) Mr. Joe Flatley, previously Milpitas Unified School District
Mr. Flatley will discuss his experience leading Negotiated Project Stabilization Agreement (PSA) (aka PLA). Specifically, a $95M modernization project, the estimated 3-month time period for negotiating which included core worker provision. Mr. Flatley will also discuss his good relationship with Santa Clara & San Benito Counties Building & Construction Trades Council. And, aspects of the PLA process which included: Pre-Project Meetings; Scope of work review and the signed agreement of duties by trade.

2.) Mr. Kenneth Wong, County of Alameda and former experience with the County of Santa Clara
Mr. Wong will discuss Factors Affecting PLA Efficacy. Economy and market conditions (American Recovery and Reinvestment Act (ARRA); General contractors' relationships with subcontractor; Size and sophistication of general contractors (administration); Labor disputes and general availability of crafts in the area (location); Size and duration of project (long-term employment stability); Craft(s) collective bargaining contract expiration during PLA project; Effect on government delays in contract award and performance; Project delivery methods (Design-Bid-Build; Design-Build); Political Climate and PLA signatories.

3.) Mr. Thomas Esch, Valley Water, Purchasing & Consultant Contracts Unit Manager and former Valley Transportation Authority (VTA) experience

Mr. Esch will discuss his managerial experience during his tenure with VTA as Construction Contracts Administrative Manager with oversight over PLAs for VTA.

The Staff Memo (Attachment 1) provides more detailed information about the history of activities and the research conducted by staff around PLAs and includes a recap of the meetings, discussions and comments from external stakeholders regarding PLAs as well as a section on frequently asked questions about PLAs.

FINANCIAL:
There is no financial impact associated with this item.

ATTACHMENTS:
Attachment 1: Staff Memo

UNCLASSIFIED MANAGER:
Michael Baratz, 408-630-2361

Valley Water

MEMORANDUM

FC 14 (08-21-19)

TO:	Capital Improvement Program Committee	**FROM**:	Michael Baratz Labor Relations Officer
SUBJECT:	Project Labor Agreement Item No.: 19-0847	**DATE**:	October 21, 2019

On September 25, 2018, the Board was informed of a request from the Santa Clara & San Benito Counties Building and Construction Trades Council to consider using a Project Labor Agreement (PLA) and Community Workforce Agreement (CWA) on all public works contracts awarded by Valley Water. The Board referred this request to the Capital Improvement Program (CIP) Committee to evaluate the request and make a recommendation to the full Board of Directors.

The CIP Committee had several meetings, starting on February 11, 2019, with research presentations from Valley Water staff and presentations and/or comments from representatives from the building trades, business association, small business owners, union affiliated spokesperson, industry experts and members of the public. A recap of the meetings scheduled by Valley Water and comments received by external stakeholders on the topic of PLA follows:

On February 11, 2019, a PLA overview was presented to the CIP Committee by Valley Water Staff.
[Attachment 1: PowerPoint – Project Labor Agreement dated February 11, 2019]

On March 11, 2019, one representative expressed opposition to the PLA: Ms. Susan Siegert, ABC NorCal. On March 19, 2019, and March 26, 2019, Ms. Siegert provided information to Valley Water, via e-mail, regarding PLAs and core worker requirements.
[Attachment 2: (1) E-mail dated March 19, 2019 sent by Susan Siegert to Leslie Orta; (2) E-mail dated March 26, 2019 sent by Susan Siegert to Leslie Orta]

On April 17, 2019, representatives from organizations representing proponents and critics of the PLA made statements to the CIP Committee. Two representatives expressed opposition to the PLA: Mr. Eric Christen, Coalition for Fair Employment in Construction, and Ms. Nicole Goehring, Associated Builders and Contractors. Six representatives expressed support to the PLA: Mr. David Bini, Ms. Cherie Cabral, Mr. Frank Biehl, Santa Clara & San Benito Counties Building & Construction Trades Council, Mr. Samuel Munoz, Ms. Laurie Drocic, Carpenter's Local Union 405, and Mr. Javier Casillas, International Brotherhood of Electrical Workers Local Union 332.
[Attachment 3: SPEAKER NOTES dated April 17, 2019]

The CIP Committee was provided examples of PLA policies enacted by public agencies in the Bay Area, as well as a synopsis of Valley Water's construction activities. This synopsis included information about the number of awarded contractors and subcontractors, Small Business Enterprise (SBE) participation, and the contractor labor force.
[Attachment 4: Synopsis of Valley Water Construction]

Valley Water Director Barbara Keegan's memo regarding PLAs, dated April 10, 2019, was entered into the record. The memo was provided to the CIP Committee and made available to the public.
[Attachment 5: Memo dated April 10, 2019 from Director Keegan to the CIP Committee]

On June 10, 2019, Mr. Jonathan V. Holtzman, Partner, Renne Public Law Group, provided insight to the CIP Committee regarding the costs and benefits of PLAs. Mr. Holtzman provided a handout summarizing observations of PLA cost control and issues based upon his experience negotiating PLAs.
[Attachment 6: Observations About PLAs, Cost Control and Hiring Goals dated June 9, 2019]

One comment expressing support for PLAs was received from Mr. Bini, and one comment expressing opposition to PLAs was received from Ms. Goehring.

On July 29, 2019, Valley Water staff presented information to the CIP Committee regarding how PLAs may impact capital projects.
[Attachment 7: PowerPoint – Project Labor Agreement dated July 29, 2019]

One comment expressing support for PLAs was received from Mr. Bini, and one comment expressing opposition to PLAs was received from Ms. Susan Andrews (undisclosed residency).

At the July 29, 2019 CIP Committee meeting, Valley Water staff was asked to connect with local public agencies and the Santa Clara & San Benito Counties Building & Construction Trades Council to obtain factual PLA experience information, regarding negotiating agreements, implementation, and selection of contractors and workforce.

On August 9, 2019, Mr. Bini provided Valley Water staff material regarding frequently asked questions surrounding PLAs and CWAs.
[Attachment 8: Project Labor Agreement/Community Workforce Agreement Frequently Asked Questions dated August 8, 2019]

Per the CIP Committee's request on July 29, 2019 the following speakers will provide a summary of their PLA experience at the October 21, 2019 CIP Committee meeting:

a. **Mr. Joe Flatley, formerly Director of Facilities Modernization at Milpitas Unified School District**
   Mr. Flatley will discuss his experience leading a Negotiated Project Stabilization Agreement (PSA) (aka PLA). Specifically, a $95M modernization project, the estimated 3-month time period for negotiating, and inclusion of a core worker provision. Mr. Flatley will also discuss his good relationship with the Santa Clara & San Benito Counties Building & Construction Trades Council. And, aspects of the PLA process, which included: pre-project meetings, scope of work review and the signed agreement of duties by trade.

b. **Mr. Kenneth Wong, currently County of Alameda and formerly Chief of Construction Services at the County of Santa Clara**
   Mr. Wong will discuss factors affecting PLA efficacy, including economy and market conditions (American Recovery and Reinvestment Act (ARRA); general contractors' relationships with subcontractor; size and sophistication of general contractors (administration); labor disputes and general availability of crafts in the area (location); size and duration of project (long-term employment stability); craft(s) collective bargaining contract expiration during PLA project; effect on government delays in contract award and performance; project delivery methods (Design-Bid-Build; Design-Build); political climate and PLA signatories.

c. **Mr. Thomas Esch, Valley Water, Purchasing & Consultant Contracts Unit Manager, and former experience with Santa Clara Valley Transportation Authority (VTA)**
   Mr. Esch will discuss his managerial experience during his tenure with VTA as the Construction Contracts Administrative Manager with oversight over PLAs for VTA.

The following provides a summary of the frequently asked questions from the CIP Committee.

Q1: What is a PLA?

A1: A PLA is a pre-hire collective bargaining agreement which establishes the terms and conditions of employment for a specific construction project or projects. The agreement must include provisions on prohibition of discrimination, permittance for all qualified contractors and subcontractors to bid for and be awarded work without regard to whether they are parties to

collective bargaining agreements, drug testing protocol, guarantee against lockouts, work stoppages, and strikes, and dispute resolution by a neutral arbitrator.
[Attachment 1: PowerPoint – Project Labor Agreement dated February 11, 2019]

Q2: Who are some of Valley Water's impacted internal stakeholders?

A2: A few of the impacted internal stakeholders managing projects, or upcoming similar project types, which may be considered for PLA consideration include: Mr. Christopher Hakes, Deputy Operating Officer, Dam Safety & Capital Delivery Division. Mr. Hakes oversees the Anderson Dam and Pacheco projects. Mr. Timothy Bramer, Acting Deputy Operating Officer, Water Utility Capital Division. Mr. Bramer oversees public works facilities projects, such as the Rinconada project. Mr. Ngoc Nguyen, Deputy Operating Officer, Watersheds Design and Construction Division. Mr. Nguyen oversees complex Watersheds projects for Valley Water, such as the Shoreline Protection project.

Q3: Are there Industry Expert Opinions on PLA?

A3: Mr. Holtzman provided his industry expert opinion at the June 10, 2019 CIP Committee meeting.
[Attachment 6: Observations About PLAs, Cost Control and Hiring Goals]

Q4: Is the usage of PLAs limited to the public sector?

A4: No, approximately 93% of PLAs are reportedly in the private sector. Companies include: Apple, Disney World, Samsung, Trans-Alaska Pipeline, Tesla, Toyota and Walmart.

Q5: What are examples of public sector public works PLA Projects?

A5: Examples of regional Bay Area PLA projects are as follows:

a. The Contra Costa County Water District used PLAs for projects such as the Los Vaqueros Dam, a $450M project in 1995 through 1997. And, the Bollman Water Treatment, a $35M project in 1995 through 1999.
b. The San Mateo Community College had projects from 2003 through 2007 totaling $90M.
c. The Eastside Unified School District used a PLA in 2002 for projects totaling $298M.
d. The County of Santa Clara PLA projects included (*Countywide PLA):
    i. Animal Shelter* (2018): $34M
    ii. Department of Revenue and Taxation* (2018): $12M
    iii. Santa Clara Jail Security* (2017): $10M
    iv. James Ranch Expansion and Renovation (2015): $48M
    v. VMC Ancillary Building (2015): $20M
    vi. County IT/ROV/DOR Berger Drive Building (2015): $12.7M
    vii. Valley Medical Center (VMC) Bed Building #1 (2009 Extension): $350M
    viii. VMC Service Building Replacement (2011): $55M

Q6: Are all PLA thresholds the same?

A6: Project thresholds vary in private and public sector. In the public sector, examples within Santa Clara County include: The City of San Jose established a project value threshold of $3M or greater for new or major replacement projects. The City of San Jose's PLA policy did not apply to rehabilitated facility projects or maintenance projects. The Valley Transportation Authority established a threshold of $2M or greater. The County of Santa Clara also established a PLA threshold of $2M or greater.

Q7: What are the PROS to implementing a PLA? Is there a Valley Water Board Policy that is applicable? And, who are the beneficiaries?

A7: Please refer to the summary below.

PROS	BOARD POLICY VALUE?	WHO BENEFITS?
✓ May guard against the possibility of work stoppages or labor actions	X	Valley Water
✓ May aid in on-time delivery of key Valley Water projects through unions' use of subcontractors	✓ (Governance Policy E-1.5)	Valley Water + subcontractors
✓ May include local and/or targeted hiring involvement through incorporation of a Community Workforce Agreement	X	Valley Water + e.g. minorities, women, veterans, etc.
✓ Provides uniform wages, benefits, overtime pay, working conditions, and work rules for different crafts	X	Valley Water + contractors

Q8: What are the CONS to implementing a PLA? Who is impacted? Is there a mechanism to reduce the impact?

A8: Please refer to the summary below.

CONS	WHO IS IMPACTED?	POTENTIAL MECHANISM TO REDUCE IMPACT
× May delay key Valley Water projects due to individual project negotiation	Valley Water	♀ Limit negotiation proposals that are inconsistent with the Building & Construction Trades Council's established agreements
× May conflict with projects utilizing external funding and may impact Valley Water's ability to obtain funding on projects with PLAs (e.g. state, federal grant or U.S. Army Corps of Engineers funded projects)	Valley Water	♀ Select project(s) that does not include external funding source(s) restricting the use of PLAs (e.g. state, federal grant or U.S. Army Corps of Engineers funded projects)
× May cause loss of staffing control for contractors of projects (e.g. core worker limitations, 1:1 hiring, use of unknown employees)	Valley Water + contractors	♀ Negotiate terms to include use of more core workers by non-union contractors
× May reduce the number of contractors who submit bids for projects	Valley Water + contractors	× No control over submission of bids
× Union dues requirements cause reduction in paycheck for non-union workers	non-union construction trade workers	♀ Negotiate terms
× Requires non-union contractors to pay health and retirement benefits twice (union + company plan) *receipt of benefits from contributions paid to union only if worker joins union and remains member until vested	non-union construction trade workers	♀ Negotiate terms
× May increase administrative costs (e.g. monitoring and compliance)	Valley Water + rate payer(s), small and/or non-union contractors	♀ Select larger, more substantial project(s) so costs are proportional to the value of the project
× May increase project costs (e.g. monitoring and compliance)	Valley Water + rate payer(s), small and/or non-union contractors	♀ Select larger, more substantial project(s) so costs are proportional to the value of the project

Q9: What is the budgetary cost impact of a PLA?

A9: Examples of projects that resulted in both savings and budgetary excess are listed below:

a. San Francisco 50 United Nations Plaza (2011): $128M. The PLA bid price was 2% less than the non-PLA bid price. The project was completed on schedule and within budget.

b. City of Berkeley (CWA): The engineers' estimates ranged from $578K to $2.7M. The bid prices ranged from -13% to +31%. Project examples include:

1. Street Rehabilitation Project: $1.6M(estimated). The low bid was $1.4M.
2. Sanitary Sewer Rehab Project 10: $1.3M (estimated). The low bid was $1.057M.
3. Sanitary Sewer Rehabilitation Project 11: $1.3M (estimated). The low bid was $1.28M.
4. Claremont Branch: $2.9M (estimated). The low bid was $2.97M.
5. North Branch: $3.8M (estimated). The low bid was $4.25M.
6. South Branch: $4.3M (estimated). The low bid was $4.6M.

c. City of Fremont (CWA). The bid prices were 32% below similar projects in Contra Costa County.

d. County of Alameda (CWA) with a 40% local hiring requirement. Project examples included:

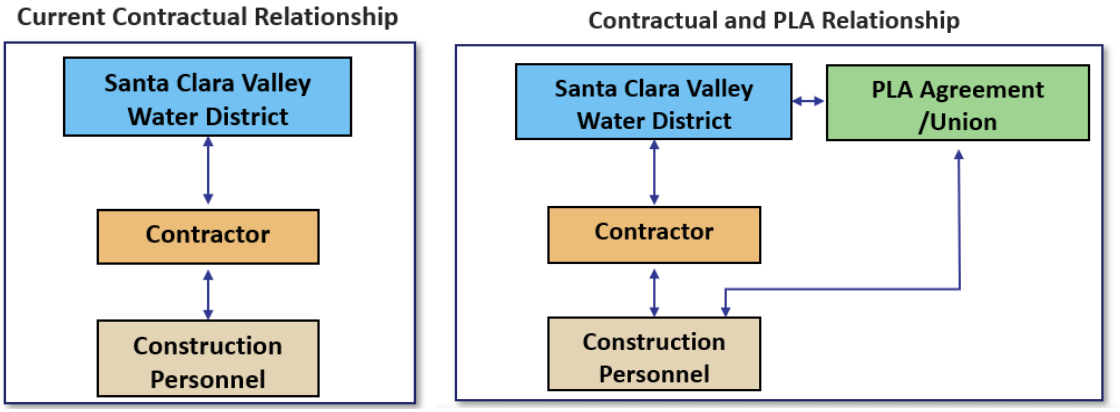
1. Peralta Oaks Seismic Upgrade (Design-Bid-Build). The $20M awarded bid was 10% over estimate.
2. East County Hall of Justice (Design-Build). The $90M awarded bid was 15% over the estimated bid.

e. Federally funded projects

1. The New York Thruway Authority
   a. Tappan Zee Bridge (1996) had a $130M project budget. The PLA resulted in a 4.6% ($5.98M) savings.
   b. Lawrence Livermore Laboratory (1997) had a $1.2B project budget. The PLA resulted in 0.2% ($24M) savings.

Q10: What are the Contractual Relationship differences with a PLA?

A10: Please refer to the illustration of differences below.



CONCLUSIONS:

In geographical locations where union presence is strong and in difficult economic times where construction activity is low, a PLA may offer concessions to normal union work rates and rules. In the Bay Area, PLA is relatively cost neutral ranging from -1.5% to +1.5% during a poor economy. In a stable economy, construction cost increase ranges from 0% to 3%. In areas where union presence is low, the construction cost increase in both poor and stable economies ranges from 5% to 10%. The efficacy of PLAs is affected by many factors: state of economy, project size, scope of the project, duration of project, local labor market, contractor and subcontractors' relationships, PLA signatories, contract types and delivery methods (subcontractors' buy-in). The AFL-CIO: Building and Construction Trades Department directs its local affiliates to adopt a more comprehensive PLA to cover multiple projects and encourage local hiring practice.

NEXT STEPS:

Subject to the CIP Committee's discussion and possible referral to the full Board of Directors, possible considerations include:

a. Should a wrap-around PLA be used versus a project-specific PLA?
b. Initially, should one specific pilot project be selected to test the use of a PLA?
c. What size and type of project may be appropriate for a PLA?
    i. What type(s) of project(s) should be included/excluded?
    ii. What will the monetary threshold be for the project(s)?
d. What additional resource(s) will Valley Water need to implement a PLA?
e. Will implementation of a PLA create the need for an organizational restructure?

[END OF PAGE]

Project Labor Agreement

Capital Improvement Program Committee Meeting
February 11, 2019

Santa Clara Valley Water District

Project Labor Agreement - Overview

What is a Project Labor Agreement (PLA)?

- A pre-hire labor agreement with the local labor trades council, which establishes the terms and conditions of employment for a construction project.
- Permitted for use in the construction industry by the National Labor Relations Act (NLRA).
- Parties typically include local building trades councils and local building trades unions.

Santa Clara Valley Water District

PLA – Overview (continued)

- **Typically negotiated between the project owner and the local labor trades council, prior to awarding a construction contract.**

- **May cover a single project, or a set of similar projects.**

- **Designed to:**
  - Eliminate potential project delays resulting from labor conflict;
  - Ensure steady supply of skilled labor on projects;
  - Provide contractually binding means of resolving worker grievances.

Santa Clara Valley Water District

PLA - Key Provisions

- **Nearly all PLA agreements contain:**
  - **Union Agreement -**
    - Not to strike, or take other collective action against the projects or contractors working on the projects.
  - **Contractor Agreement -**
    - To abide by the terms of the trade's collective bargaining agreement in performance of all project work.
  - **Dispute Resolution Process -**
    - To resolve jurisdictional disputes between unions;
    - To resolve disputes between contractors and workers.

PLA - Key Provisions (continued)

- **Many PLA agreements also contain:**
  - **Provisions for facilitating participation by non-union contractors** (e.g. core workers; carve-outs).
  - **Provisions streamlining practices across different construction trades to improve project efficiency** (e.g. unified holiday schedule).
  - **Provisions for facilitating contractor compliance with targeted hiring goals imposed by the public entity** (e.g. Community Workforce Agreement).

Community Workforce Agreement (CWA) – Overview

- **Sometimes incorporated into a PLA to identify provisions involving local hiring and/or targeted hiring.**
  - Also referred to as a Targeted Hiring Agreement or Policy;
  - Generally only covers construction work;
  - Two Types: Single-Project CWA and Multiple-Project CWA.

- **Imposed by many public entities on public construction projects, to:**
  - Advance policy goals;
  - Comply with federal funding requirements, if applicable.

Santa Clara Valley Water District

CWA – Key Provisions

- **A CWA may include:**
  - **Hiring policies adopted by local agencies or jurisdictions** (e.g. policies adopted by ordinance or resolution in Oakland, Los Angeles, and San Francisco; prohibited on projects funded by US-DOT)**.**
  - **Disadvantaged-hiring policies adopted by local agencies or jurisdictions** (i.e. targeting employment of low-income individuals, veterans, residents of low-income neighborhoods, etc.)**.**
    - If required, a Disparate Impact Study must be conducted.

CWA – Key Provisions (continued)

- **Federally-mandated requirements:**
  - To hire a specific percentage of minorities/veterans/women.
- **Such policies generally require:**
  - Construction contractors attempt to employ specified percentages of the targeted worker categories, or show effort was made to do so and targeted worker categories were unavailable.

CWA – Potential Difficulties

- **Conflict between terms of targeted hiring policies and requirements of applicable collective bargaining agreements:**
  - Targeted hiring policies require contractors to make an effort to employ specified percentages of targeted worker categories, but collective bargaining agreements typically require utilization of current workers, or workers referred from a union in a specified order.

- **Compliance:**
  - Contractors may have difficulty complying with a targeted hiring policy and applicable collective bargaining agreement due to limited control over hired individuals.

Santa Clara Valley Water District

PLA – Conflict Resolution

- **PLAs typically include an alternate dispute resolution process** (e.g. arbitration)**, which:**
  - Overrides bargaining agreement terms.

PLA – Potential Benefits

- **Parties establish agreed upon single hiring procedure in advance.**

- **Benefits to the public agency may include:**
  - Delivery of high-quality employment and training opportunities for local workers;
  - Avoidance of project delays due to labor strife;
  - Use of established training and labor quality standards.

PLA – Opposition

- **Non-union construction trade organizations cite the following concerns:**
  - Dues requirements cause reduction in paychecks;
  - Forced to lay off productive, non-union workers;
  - Requires open shop contractors to pay benefits twice (union + company plan):
    - Payment of health and retirement benefits to union and pension funds;
    - Non-union workers only receive benefits from contributions sent to union if workers join union, and remain members until vested.

Santa Clara Valley Water District

PLA – Opposition (continued)

- Increased Costs:
  - Limits number of general contractors and subcontractors interested in a project, and therefore reduces competition.

- Barriers:
  - Creates barriers for local, minority/veteran/women-owned construction employers due to provisions disallowing use of own workforce.

Santa Clara Valley Water District

- **No history of:**
  - District utilizing PLAs;
  - Labor disputes on District projects.

- **District pays prevailing wages:**
  - State law requires public agencies pay prevailing wages at the rates established by the California Department of Industrial Relations or per the federal Davis-Bacon Act, if applicable.

Emily Meeks (1)

From: Leslie Orta
Sent: Wednesday, October 16, 2019 9:50 AM
To: Emily Meeks
Subject: FW: Educational Information about Project Labor Agreements
Attachments: Salinas Chamber offers historical numbers to oppose PLA for new high school.pdf; SDUSD Local Hiring Goals Falling Further Out of Reach.pdf; PLA-Study-Summaries-Updated-Jan-2014.doc; SCCCD PLA Survey Results.pdf; EBMUD 2015 PLA Contractor Survey.pdf; SRJC survey results - June 13th, 2017.ppt; Pasadena Power Plant Bids without and with PLA.pdf; DIR_slides_showing_decreased_number_of_bidders_increases_price[1].pdf; PLA Talking Points - Bullets.docx; Sac Biz Journal Another Voice - Sacramento City Council should reject Project Labor Agreement.pdf; Patterson - PLA Letter to WH_ Requested by ABC.pdf; PLA Talking Points - San Joaquin County.docx; PLA Debacle - City of Selma Police Station.pdf; San Joaquin County PLA Term Sheet.docx; Recent City PLA Failures - Stockton.docx; Hanford Sentinel - Letter to the Editor - PLA.pdf; Standard PLA Provisions.docx; Op-Ed Fresno Yosemite project needs local workforce for expansion project.pdf; PLA - Selma.pdf; Pennsylvania Court Strikes Down PLA Mandate.docx
Importance: High

From: Susan Siegert <Susan@abcnorcal.org>
Sent: Tuesday, March 19, 2019 3:20 PM
To: Leslie Orta <lorta@valleywater.org>
Subject: Educational Information about Project Labor Agreements
Importance: High

Hi Leslie, here is some of the information that I told you I would send to you after the last Santa Clara Valley Water District Committee Meeting. There is more information that I am still looking for and will send to you. There were two women on the Board that you told me might meet with me. One was Nai Hsueh and I can't remember the other. Are you able to give me her name. Thanks, susan

In order to make the most educated decision possible on the expenditure of taxpayer funds on one of the most controversial topics in the construction industry, below and attached is a variety of information and recent articles about Project Labor Agreements. Please let me know if you have any questions.

Project Labor Agreements (PLAs) create barriers for local, minority and women-owned construction employers and their employees from participating in building their community because they contain provisions that do not allow for the full utilization of their own workforces.

Furthermore, studies show these types of agreements increase project costs – anywhere from 10-30% above prevailing wage because they restrict competition. Open competition is healthy and increases quality. It levels the playing field and local money is invested into the community.

And finally, project labor agreements exclude the men, women, and veterans who have chosen to enter into state approved, unilateral apprenticeship training programs in pursuit of a construction career from the opportunity to work and gain the invaluable on-the-job training experience that provides stability for them, their family and their community.

For these reasons, we strongly and respectfully oppose Project Labor Agreements.

What is a Project Labor Agreement (PLA)?

- An exclusionary labor agreement that discourages the vast majority of local contractors and small business owners from competing on and winning construction projects
- Introduced as a tool to local school, city, county, state and federal officials by State and Local Building and Construction Trades Council Representatives

What the State Building and Construction Trades Council says about PLAs

- The vast majority of workers are dispatched from union hiring halls to both union-signatory contractors and non-union contractors who choose to work under a PLA.

Almost Every Construction Trade Organization opposes PLAs

Opposed:	In Favor:
Air Conditioning and Trades Association	Building Trades
American Subcontractors Association	
California Subcontractors Association	
American Road Builders and Transportation Association	
Asian American Contractors Association	
Associated Builders and Contractors	
Associated General Contractors	
Black Contractors Association	
Bay Area Black Contractors Association	
Californians for the Advancement of Apprenticeship & Training	
Golden State Builder's Exchanges	
Independent Roofing Contractors of California	
Independent Electrical Contractors Association	
Kern Minority Contractors Association	
National Association of Minority Contractors	
National Association of Women in Construction	
Painting Decorating Contractors Association	
Plumbing and Heating Contractors of California	
Western Electrical Contractors Association	
Independent Electrical Contractors Association	

Concerns for non-union workers

- Union dues requirement for non-union workers on or after 8th day (less money on pay-check)
- Companies are forced to lay off productive non-union workers
- Requires payment into union pension programs in which workers may never vest
- Requires payment into union health & welfare program in addition to the mandated Affordable Care Act.
- Non-union apprentices cannot learn their trade and work on these jobs in their own communities

Concerns for the local govt.

- PLAs are routinely used in bankrupt cities like Vallejo and Stockton and fiscally mismanaged school districts like the West Contra Costa Unified School District and the Los Angeles Unified School District

- Federal regulations prohibit the "local hire" requirements contained in PLAs. Section 200.319 "Competition" of the Electronic Code of Federal Regulations states "The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference."

- Negotiations can take up to two years adding delays and legal fee expenses up to $200,000.

- It costs money to administer a PLA. The related professional services add to the expense.
  - Riverside CCD $1,800,000
  - San Diego USD $1,000,000

- PLAs are exempt from DIR enforcement of prevailing wage requirements
  As a result of SB 854, as of July 1, 2014, the DIR launched a new Public Works Contractor Registration Program. Contractors wishing to bid on public works will need to register online and submit a non-refundable $300 annual fee. The public works contractor registration fee pays for all DIR administration and enforcement of prevailing wage requirements.

  - **Exemptions:** As of April 1, 2015, and even after January, 1, 2016, the following projects are exempt from the requirement to have contractors and subcontractors furnish certified payroll records (CPRs) to the Labor Commissioner:
    Projects covered by qualifying project labor agreements

- **Local Hiring Goals Are Falling Further Out of Reach under PLA policies.**
  - San Diego Unified's Local Hiring Goals Are Falling Further Out of Reach - Voice of San Diego
  - http://www.voiceofsandiego.org/topics/education/san-diego-unifieds-local-hiring-goals-falling-reach/

Concerns for the taxpayers

- Reduction of bidders and increased costs

- $39M Pinole-Hercules Wastewater Treatment Plant Expansion
  - 10 bidders pre-qualified for the Project
  - 8 bidders present for mandatory job walk
  - 2 bids received and opened on 12/10/15
  - Bids came in at 8% and 22% above engineer's estimate of $39M
  - Increased Costs

- $68M SMUD Corporate Headquarters Remodel bid with a PLA was rejected because it came in nearly $30M over the budget with just two bidders.

- Alameda County Hall of Justice project delayed and over budget
  - Local business participation under PLA. 60% goal, 2.58% achievement
  - $111,966,000 contract is now $147,512,205
  - Change in substantial completion date from 2/15/17 – spring of 2017.

- Cost of Golden 1 Center jumps by millions | The Sacramento Bee

What do studies say?

- EBMUD conducted PLA survey of its union and non-union contractors – Also see attached FSUSD, SJUSD, SCCCD and SRJC Contractor Surveys
  - 100% said PLAs increase costs

- 64% said PLAs were a disincentive to bid

- Increased costs of 13-15% on California School Construction (July 2011 study released by the National University System Institute for Policy Research)

- No studies exist that show PLAs save money

- Have you surveyed your contractor list to determine their position on PLAs and if they will decrease competition and increase costs?

11 entities in California have banned the use of PLAs including the cities of Fresno, San Diego, Chula Vista, Oceanside and El Cajon

City of Berkeley PLA One-Year Status Report

- 316 total workers employed on CWA-eligible projects
- 4 Berkeley residents
- 96 East Bay Green Corridor residents
- 35 Alameda County residents
- Reports of concerns about a "displaced core workforce" from small contractors at pre-bid meetings to comply with local hire requirements
- Increased engineer's estimates in order to allow for the higher bid prices

Solutions

- Continue bidding without PLA and keep **FAIR** and **OPEN** competition
- **ALL** sides should be represented in any negotiations
- Allow for **ALL** state approved apprentices to work on the project
- Allow contractors to hire their entire **CORE** workforce
- Allow contractors to pay health and pension benefits into their employees' **OWN** plans to care for them and their families
- Use an alternate bid approach
- Rebid the project **WITHOUT** a PLA if there are three bidders or less on project
- Set a **HIGH** Local Hire goal that benefits the workers in the community
- Establish metrics for **PROPER** PLA compliance, accountability, and transparency

Americans overwhelmingly reject PLAs

- In September 2009, nationally known pollster Frank Luntz surveyed Americans about taxpayer funded bidding procedures. 88.5% said they preferred a "fair, open, and competitive bidding process." 12% felt that unions should have the exclusive right to the work.

- California taxpayers want their projects built by the best contractors at the best price and want their elected officials to choose the construction firm that offers the best value. The record clearly shows PLAs harm all of these goals.

Additional PLA Educational Material for your review

In California, only 18.4% of the private construction workforce belongs to a union. State Building and Construction Trades Council representatives, AFL-CIO affiliates, introduce Project Labor Agreements as a tool to local school, city, county, state and federal officials to exclude non-union workers.

More information about PLAs can be found at www.thetruthaboutplas.com.

Link to recently produced video about Project Labor Agreements; Not What We Need, Not What We Deserve

Below are studies that show cost increases for public works projects on which contractors are required to sign Project Labor Agreements:

1. Here is the study released in mid-July 2011 from National University's Institute for Policy Research (based in San Diego), with significant review from other economists: http://www.thecostofplas.com. This study concludes that costs are 13 to 15 percent higher when California school districts build a school under a Project Labor Agreement. In inflation-adjusted dollars, a Project Labor Agreement is associated with costs that are $28.90 to $32.49 per square foot higher. (In my opinion, this is the most comprehensive study ever conducted on the costs of Project Labor Agreements.) The study is also attached.

2. Two examples of projects in California bid without a Project Labor Agreement and then with a Project Labor Agreement. The Burckhalter Elementary School in Oakland Unified School District went from eight bidders to three bidders and the low bid increased 24 percent; the City of Pasadena's Glendale Power Plant had a net loss of one bidder and the low bid increased more than 15 percent. The winning contractor declared that the higher bid was "100 percent due to the PLA." See attached.

3. The Beacon Hill Institute at Suffolk University in Massachusetts has published studies comparing school construction costs in the Boston area, in Connecticut, and in New York State with and without PLAs. The studies conclude that Project Labor Agreements increased bid costs by 14 percent in the Boston area, by almost 18 percent in Connecticut, and by 20 percent in New York State.

   Here is a link to the Boston study : www.beaconhill.org/BHIStudies/PLApolicystudy12903.pdf

   Here is a link to the Connecticut study: http://www.beaconhill.org/BHIStudies/PLA2004/PLAinCT23Nov2004.pdf

   Here is a link to the New York study: http://www.beaconhill.org/BHIStudies/PLA2006/NYPLAReport0605.pdf

4. A December 11, 2007 presentation by the California Department of Industrial Relations to the Director's Advisory Committee on Public Works included results from a study by Leland Saylor Associates (a California construction cost analysis and management firm) indicating that 8+ bidders reduces cost 10-20%, 6-7 bidders reduces cost 0-10%, 4-5 bidders increases cost 0-10%, 2-3 bidders increases costs 10-25%, and one bidder increases costs 25-100%. This would seem to conform with classical economic theory (and common sense) that more competition results in lower costs. See attached DIR slides.

5. **Government-Mandated Project Labor Agreements: The Public Record of Poor Performance (2014 Edition)**

   Summary of PLA Research (2014 Edition) The Impact of Government-Mandated Project Labor Agreements (PLAs): A Review of Key Reports and Studies (2014 Edition) (pdf) highlights excerpts from studies pertaining to common points of contention during PLA debates. A record of PLA construction projects experiencing an unfortunate pattern of cost overruns, reduced competition, delays in construction, construction defects, safety problems and diversity issues. It is a key resource to find failed government-mandated PLA projects in your community, illustrating why anti-competitive and costly government-mandated PLAs are nothing more than a bad solution in search of a problem.

6. **Government Funded Study Finds PLAs Increase Costs and Offer Limited Value (June 2009)**

   A June 2009 study conducted by property and construction consulting firm Rider Levett Bucknall prepared for

the U.S. Department of Veterans Affairs (VA) Office of Construction and Facilities Management found that PLAs would likely increase construction costs by as much as 9 percent on three of the five construction markets (Denver, New Orleans and Orlando) in which the VA is planning to build hospitals.

Project Labor Agreements – Impact Study for the Department of Veterans Affairs

7. **Santa Cruz Metro Transit District Metrobase Project:** 6 of 8 unresponsive bidders. Project bid September 12, 2012. Project not awarded until December 2012.

1) Life of Project (LOP) budget increased from $27,350,425 to $29,428,765.
2) Completion date was two years past contracted completion date (original was Dec, 2014, move in date was end of 2017).

8. **Salinas Chamber case study at Hartnell College** in the Monterey County market demonstrated that a PLA will result in fewer local jobs not more. Without Project Labor Agreements, 56% of the money spent stays in the local economy. With PLAs, only 10% does. See attachment.

9. **Disastrous bid results under the Contra Costa Community College District PLA.**

A. Contra Costa College New College Center
   a. Bid results 10.2% over low engineer's estimate of $45M
   b. General Contractor from out of county
   c. Only 2 subcontractors from Contra Costa County
   d. 1 out of state contractor

B. Los Medanos College Student Services Remodel
   a. Bid results 9.8% over high engineer's estimate of $15M
   b. General Contractor from out of county
   c. Only 2 subcontractors from Contra Costa County

C. Physical Education and Student Union Complex
   a. Bid range - $35M - $50M (District has now had to resort to a bid range vs. an engineer's estimate.
   b. 2 bidders
   c. Only 5 subs out of 24 from Contra Costa County and one from Quebec

10. $26M is the cost of PLAs at West Contra Costa USD to fund three updated construction bids for projects at Kennedy High, El Cerrito High and Coronado Elementary. This **37% increase** over the $44.8 Million allocated by Measures J, D & E is the cost of government-mandated Project Labor Agreements (PLAs). WCCCUSD has had a PLA in place since 2000. Learn more. CC Times Article: Pricey school construction spending at WCCUSD.

11. Oxnard Union High School District new Rancho Campana High School bid coming in 20% over estimates. The cost of the project had been estimated to be $49 million while the price tag now stands at $58 million. GC blames PLA. Final project cost $71.2M.

12. South San Francisco school starts amid construction project

School started Wednesday for children in the South San Francisco Unified School District. The fifth grade classrooms had not been completed due to construction delays. The district says part of the construction delays at Buri Buri Elementary School was due to roofing materials that didn't arrive on time. In fact, this is not the only school in the district that's behind in construction.

The district has used up all the funds from the $162 million bond for school improvements and ran out. It moved $10 million from its general fund to complete projects because of increased costs.

South SFO has been using Project Labor Agreements since 2011.

13. EBMUD conducted a survey of its union and non-union contractors who bid district projects about Project Labor Agreements.

a. 100% said PLAs increase costs
b. 64% said PLAs were a disincentive to bid

14. Southwestern Community College National City Higher Education Center project failed to garner the required 3 bidders for the following trades and is now rebidding them PLA free:

- BP 01 – Surveying (Prof licensed surveyor)
- BP 02 – Final Clean (B or D-63)
- BP 03 – Earthwork & Site Demo (A or C12 & C21)
- BP 04 – TI Demo (C-21)
- BP 06 – Masonry (C-29)
- BP 10 – Misc Metals & Stairs (C-51)
- BP 11 – Non-Lab Casework (C-6)
- BP 14 – Sheet Metal (C-43)
- BP 18 – Flooring (C-15)
- BP 24 – Elevator (B or C-11)
- BP 25 – Fire Protection (C-16)

http://www.southwesterncollegeproprplanroom.com/details.php?jo 2010R-2

San Mateo CCD PLA Example

6/28/17 Agenda Item 17-6-7CA pages 131-132 https://smccd-public.sharepoint.com/BoardofTrusteesPackets/2017-06-28%20Packet.pdf

"APPROVAL TO REJECT ALL BIDS AND REBID COLLEGE OF SAN MATEO BUILDING 17 LEARNING COMMUNITIES MODERNIZATION PROJECT.

On June 14, 2017, the District received two bids for this project as follows: Contractor Total Bid D.L. Falk Construction $4,649,700 Build Group $6,233,510

The lowest bid received exceeds the project budget target for construction costs by 66%. Therefore, facilities is seeking approval to reject all bids and re-bid the project.

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Emily Meeks

(2)

From: Leslie Orta
Sent: Wednesday, October 16, 2019 9:51 AM
To: Emily Meeks
Subject: FW: Research re: Core Worker Definition limited to non-signatory contractors

From: Susan Siegert <Susan@abcnorcal.org>
Sent: Tuesday, March 26, 2019 2:28 PM
To: Leslie Orta <lorta@valleywater.org>
Subject: Research re: Core Worker Definition limited to non-signatory contractors

Hi Leslie, below is more research on core worker requirements that I spoke to you about. It is one of the main reasons merit shop contractors will not bid the work if they read & understand the PLA. I believe it could potentially make the PLA legally discriminatory. Thanks, susan

https://www.independent.com/2019/03/20/unions-win-big-in-city-construction-showdown/
Under PLAs, nonunion contractors are allowed to bring only a limited number of "core" workers on PLA jobs;

http://www.seattle.gov/contracting/docs/labor/TargetedHire.pdf
Though PLAs often require the exclusive use of hiring halls, there are some limited exemptions for open-shop contractors to use their workforce, referred to as "core" workers

https://www.lawa.org/-/media/lawa-web/employment/files/lawa-pla-flyer.ashx?la=en&hash=97AB7B8CC9E4DDEE0188D7CA46DD8E6BA2818E4F
CAN PRIME CONTRACTORS & SUBCONTRACTORS USE THEIR OWN WORKFORCE? In accordance with PLA, Article 3, Section 10, to ensure that contractors will have an opportunity to employ their experienced "core employees" on this Project, the parties agree that in those situations where a Contractor not a party to the current collective bargaining agreement with the signatory union having jurisdiction over the affected work is a successful bidder, that the Contractor may request by name, and the local will honor, referral of persons who have applied to the local union for Project work and who meet the following qualifications:

4. As needed, non-signatory contractors shall work with applicable union(s) to sign up and dispatch qualified core employees prior to start of work.
https://www.portofoakland.com/files/PDF/MAPLA_Agreement_2016.pdf Section 7.6 Port of Oakland

Union halls prioritize targeted workers when dispatching so non-signatory contractors will inevitably be dispatched those workers.
It appears that some PLA's require union contractors to submit a core-workforce list, but I don't believe they ever are dispatched (from local hire programs) off the hiring bench unless they need additional workers and cannot get apprentices from somewhere else.

I believe this has been added to the PLA to sell it as a workforce development tool and harm open shops at the same time, also, it should make the PLA legally discriminatory and show favoritism. Union shops would never comply with this and it will break the PLA if they were forced to comply.
Just my feedback as a contractor.

Susan Andrews
Community Relations
Associated Builders and Contractors of Northern California
4577 Las Positas Road, Unit C, Livermore, CA 94551
susan@abcnorcal.org | (p) 925.960.8518 | (f) 925.474.1310
abcnorcal.org

Santa Clara Valley Water District
Capital Improvement Program Committee Meeting
Information on Project Labor Agreements

April 17, 2019

SPEAKER NOTES

Eric Christen, Coalition for Fair Employment in Construction
(Track 23, 03:58 – Track 27, 05:00)

- The Bureau of Labor Statistics reports Unions represent less than 15% of the California construction workforce
- Local hire goals in PLA's are aspirational, but do not mandate local hiring
- Non-Union Contractor employees hired to a PLA job are required to pay Union health, welfare, and pension fees for benefits they will never vest in or receive.
- PLAs require non-union employers, with workforces up to 2,500, to hire only 3-6 of their own employees, and staff the rest of the project with union labor.
- 2018 Statistics show that over 86% of skilled trade employees choose to work in non-union environments in the state of California
- The National Black Chamber of Commerce calls PLAs an act of segregation, non-competitive, and discriminatory
- The Asian American Contractors Association stated that the SFO PLA dropped minority participation dropped 91.9% and called PLAs a disaster for minority owned businesses
- Newspaper editorials unanimously express opposition to PLAs
- In every case, the Coalition for Fair Employment in Construction won ballet measures banning PLA's locally with over 60% of the vote, excluding San Diego which was won at 58% vote
- Labor strikes and their impact to project budgets and schedules are a negative impact to PLAs
- After enacting a policy that allowed open bidding for non-union contractors if three qualified bids are not received on a PLA, the Chula Vista Elementary School District realized $468,920, or 13% savings, on three bid packages, referenced as Bid Packages 3, 5, and 8
- Studies find that PLA's increase project costs 13-15%
- The City of Selma, California reported bids for its police station project being driven up to 33% over estimated cost as a direct result of a non-competitive PLA process
- EBMUD and SJUSD chose not to use PLAs after surveying their contractors and receiving results that 50% of contractors that had previously worked on their projects would not bid on a PLA.
- The San Diego Unified School District spends over $1 million a year to oversee their PLA agreements
- Only 360 PLAs have been implemented in over 20 years in California

Nicole Goehring, Associated Builders and Contractors, N. CA Chapter
(Track 28, 00:50 – 29, 03:27)

- PLAs will not be able to be applied to certain projects as a result of federal regulations stating that projects funded by federal dollars and/or grants must be conducted in a manner providing for fair and open competition
- The Pinole/Hercules Wastewater Treatment Plant Project, a PLA project, resulted in only 2 bids received with bids coming in at 8% and 22% over the engineers estimate of $39 million
- EBMUD's contractor survey resulted in 100% of contractors responding that PLAs increased costs, and 68% stating that they were a detourent to bid
- Analysis shows that a plumber who works on a PLA job will lose an additional $24,000 a year in pay
- Sacramento Municipal Utility District's $68 million headquarters project received a bid that was $30 over estimate and as a result had to reduce the scope of the project
- Until 2009 there were bans on PLAs

David Bini, SC/SB Counties Building and Construction Trades Council
(Track 29, 03:50 – Track 30, 04:05)

- Every district within Santa Clara County that has entered into a PLA agreement has been satisfied with the results, and has extended or renewed PLAs for subsequent terms
- The Building and Trades Council represents up to 75% of each of the individual construction industry crafts, locally
- Contractors with work forces up to 2,500 are not impacted by PLA's as alleged by Mr. Christen, as even on the largest jobs, rarely are more than 100 workers assigned, and at that it is only for a temporary portion of peak construction
- The SC/SB Counties Building and Construction Trades Council, and the Associated Builders and Contractors Northern California Chapter train 30,000 and 500 respectively
- Minorities are more highly represented in union construction trades
- PLA's deliver labor harmony

Cherie Cabral, SC/SB Counties Building and Construction Trades Council
(Track 30, 04:15 – Track 33, 00:27)

- Use of PLA's across the state has increased by 500% since 2008, have been in use since the 1930's, and were used for Hoover and Coulee Dams
- PLA's ensure tax payer dollars are spent locally
- The City of Selma Police Station Project came in over budget because the original engineers estimate did not include critical components such as security cameras and a fenced area for patrol car parking and officer access to the facility
- Patterns of bids being over engineer estimates are resulting from estimates being established 5-6 years before projects bid, and the state of the economy at that time
- As of 2019, reports show that there are 850,000 construction workers, and 82,000 apprentices, in the State of California. The Building and Trades Council represents an excess 400,000 construction workers, and 80,000 apprentices.
- Non Union apprentices represent 1% of the apprentices total apprentices in California, and have a 0-30% annual graduation rate.
- Public agencies within the State of California have no way to stipulate their PLAs as union only agreements. This violates Public Contract Section 2500.

Frank Biehl, SC/SB Counties Building and Construction Trades Council
(Track 33, 00:50 – Track 34: 00:30)

- Information on results from a study of 88 California Community Colleges, and the opinion of College of Marin regarding their 3 PLA vs. 4 non-PLA experiences, as sited in Attachment 9, shows that using PLAs resulted in more bidders per project, than non-PLA projects, and resulted in more frequent receipt of bids below engineer's estimate
- In 2010 the Building and Trades Council spent $230 million to produce 15,200 apprenticeships, while non-union agencies spent $28 million to produce 420 apprenticeships. A total of 72,400 union, and 2,050 non-union apprenticeships were produced between 2010 and 2015.
- Most PLA's are private agreements between Building and Trade agencies and contractors, and not public agreements

Samuel Munoz and Laurie Drocic, Carpenter's Local Union 405
(Track 34, 00:35 – 04:20)

- Expressed support for PLA's, without providing conflicting information on statistic and data already presented.

Javier Casillas, International Brotherhood of Electrical Workers Local Union 332
(Track 34, 04:20 – Track 35, 00:00 – 00:58)

- Expressed support for PLA's, without providing conflicting information on statistic and data already presented.

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SYNOPSIS OF VALLEY WATER CONSTRUCTION

CAPITAL CONSTRUCTION PROJECTS LABORER ANALYSIS CONDUCTED JANUARY 2016

3 Capital Projects Analyzed: C0556 Upper Guad Reach 6, C0591 RWTP Residuals Mgmt, C0596 IRP2 WTP Ops Bid Retrofit	Santa Clara County	Other Bay Area County (Sonoma, Napa, Marin, Solano, Contra Costa, San Francisco, Alameda, San Mateo)	Other California County (Santa Cruz, San Benito, San Joaquin, Monterey, Stanislaus, Sacramento, Merced, Lake, Calaveras, El Dorado, Tuolumne, San Luis Obispo, Santa Barbara, Fresno, Butte, Sutter, Yolo, Los Angeles, Kern, Colusa, Placer)	Within California	Outside California	Total # of Laborers	Total # of Contractors
# of Laborers	171	410	237	818	5	823	34
	21%	50%	29%	99.39%	0.61%		

CAPITAL CONSTRUCTION PROJECTS AWARDED JANUARY 2011 - JULY 2018

BID AMOUNT	# OF CONTRACTS	SBE PARTICIPATION	AVERAGE % SUB CONTRACTED	AVERAGE # OF SUB CONTRACTORS
Less than $5M	27	77%	18%	3
$5M-$10M	8	21%	34%	7
$10M-$20M	4	41%	34%	6
$20M+	5	17%	23%	9
# of Contracts:	**44**			
# of Contracts w/SBE Prime:	**13**			

CAPITAL CONSTRUCTION PROJECTS AWARDED AUGUST 2013 THROUGH JULY 2018

	# of Contractors	Union		Non Union	
PRIME:	42	27	64%	14	33%
SUB:	198	124	63%	68	34%
Totals:	**240**	**151**	**63%**	**82**	**34%**

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Valley Water

MEMORANDUM
FC 14 (02-08-19)

TO: Capital Improvement Program Committee

FROM: Director Barbara Keegan

SUBJECT: Project Labor Agreements (PLA)

DATE: April 10, 2019

Project labor agreements (PLA) can be useful in large construction projects with a number of different trades involved. Having a PLA in projects of this type can provide benefits to the project owner. These benefits include a commitment to labor peace thus minimizing expensive construction delays.

There is also a benefit in having more local workers hired. These workers provide a direct and positive impact on the local economy.

In my opinion, the benefits are not as clear cut on projects such as our watershed jobs where there is a much smaller number of different trades involved.

If the District chooses to try out PLA's, I would recommend that we implement a pilot project with a focus on building projects (as opposed to creek or environmental projects) that utilize a number of different trades. We can then evaluate the use of PLA's to see whether there are measurable benefits to District project delivery.

Barbara Keegan
Director District 2

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RPLG Renne Public Law Group®
350 Sansome Street | Suite 300
San Francisco, CA 94104

Memorandum

Date: June 9, 2019

To: Santa Clara Valley Water District
Capital Improvement Program Committee

From: Jonathan V. Holtzman, Partner

Re: Observations About PLAs, Cost Control and Hiring Goals

The following is a brief summary of our observations regarding cost control and other PLA issues based upon a review of materials submitted to the Committee and our own experience with negotiating numerous project labor agreements.

1. Evidence about whether PLAs add to the cost of construction *projects* is contradictory and anecdotal. We are aware of no rigorous study that finds PLAs add to the total cost of a project, although there is anecdotal evidence. Many industry experts suggest that PLAs generally add at least 5% to overall cost, partly because much of the work would be performed union in any event. How much a PLA costs depends on a number of other factors including (1) the familiarity of bidders in working with PLAs; (2) the percentage of sub-contractors who are signatory to master labor agreements; (3) the competitive environment (i.e. demand for contractors' services and labor supply); (4) degree of specialization of the work; and (5) the overall size of the project(s).

2. There are a number of demonstrable ways in which they may add to construction costs:

    a. It is beyond dispute that some contractors and sub-contractors will not bid on a PLA project. Thus, PLAs likely reduce competition, and for that reason alone, probably add to cost.
    b. Many contractors and subcontractors state that they bid higher on PLA projects, presumably because of administrative costs and risks that work could be "upskilled."

c. PLAs generally require off-site fabrication by sheet metal, plumbing (and sometimes electrical) trades to be covered; this work need not be done at prevailing wage rates otherwise. There is also a greater risk of disputes over pre-assembled supplies.
d. PLAs limit (and sometimes prohibit) non-union contractors from using their "core" workers. This can result in additional cost or reduced competition for highly specialized contractors with standing crews. Even the best core worker provisions require "1 for 1" from the hiring hall.
e. PLAs require that a significant portion of compensation be spent on benefit trust funds managed by unions; this results in a lower wage for non-union employees than would otherwise be paid directly to those employees on a prevailing wage job. It is unclear, however, whether this fact alone discourages non-union contractors from bidding on PLA-covered prevailing wage jobs.
f. To the extent that contractors have standing workforces and provide health insurance or 401k matches, payment into union trust funds while maintaining may increase costs.
g. PLAs increase transparency in work assignments by requiring pre-job conferences. While this reduces the potential for disputes regarding payment of the appropriate prevailing wage, it may result in some "upskilling" of work claimed by specialized trades that might otherwise be performed by less expensive trades. This has been a particular problem on pipe-related work.
h. Administration costs, particularly on smaller PLAs

3. There may well be offsetting savings from PLAs as well.

a. PLAs guarantee that disputes over work assignment, terms and conditions of employment, successor master agreements, and other disputes do not result in project delays. In our experience, these mechanisms are highly effective.
b. PLAs do not guarantee a supply of labor when the construction industry is busy, but certainly can help. Implicitly, PLAs encourage unions to find available sub-contractors.
c. On larger jobs where union and non-union crews are working side-by-side, PLAs assure labor harmony and avoid the necessity of reserve gates.
d. On larger projects and in urban areas, most general contractors are signatory to labor agreements anyway, and are familiar with union work rules.

4. Not All PLAs are created equal economically; there are a number of critical provisions that are helpful in controlling cost in a PLA, including:

a. For agency-wide PLAs, higher thresholds for coverage are better.

b. Clear definition of what constitutes a project and/or contract that meets the dollar threshold for coverage purposes
c. Core workers
d. Clear exclusions for work by agency employees, warranty work, technical work, art work, utility work, federal issues, jointly funded or performed work, maintenance work, repair
e. Depending on circumstances, consider limiting coverage to funding – e.g. CIP
f. Clear language regarding when PLA coverage begins and ceases
g. Clear language regarding agreement to install materials/items selected by contractor
h. Clear delineation of any coverage for work performed off-site along with side letters for addressing disputes where off-site work is covered
i. Exclusion off-haul trucking if performed by owner-operators
j. Exclusion of other sole proprietors
k. Exclusions for construction performed by tenants including tenant build-out
l. Coverage based on engineer estimate, not contract amount
m. Clear language excluding pre-contract preparatory work
n. Freeze on prevailing wage after bid, during project?
o. Exclusions for small contracts/SBE/DBE
p. For agency-wide PLAs, limited duration combined with assessment conveyed to governing body
q. For agency-wide PLAs, provision that allows individual projects to be excluded where PLA coverage not in the public interest
r. Clarity, clarity, clarity – ambiguity causes contractors to bid high

5. If Local/Targeted Hiring is a key goal, make sure it's real

a. Monitoring and public/governing body reporting
b. Preference for disadvantaged/local workers at hiring halls and in selection of apprentices from pre-apprenticeship programs
c. Aggressive goals based on workforce availability study, applicable to both union and contractors
d. Link with existing pre-apprenticeship programs and funding
e. Enforcement provisions that permit alternative sources of recruiting labor when goals not met
f. Exclusions for SBEs/DBEs
g. Partner with community workforce development agencies for oversight
h. Include goals in bid specs; PLA simply facilitates contractor achievement of goals
i. Ensure that PLA does not negatively affect participation by minority/disadvantaged contractors
j. Special grievance procedure for public agency to enforce goals where necessary

k. Limit fees for non-union disadvantaged workers to monthly dues (not initiation fees)

Valley Water

Clean Water • Healthy Environment • Flood Protection

Capital Improvement Program Committee Meeting
July 29, 2019

Project Labor Agreement (PLA)

Presented by: **Emily Meeks, Labor Relations Unit**

REQUEST FOR STAFF PERSPECTIVE

- At the June 10, 2019 CIP Committee meeting, Valley Water staff was asked to provide further input on the use of PLAs for public works construction projects for our agency

ANTICIPATED BENEFITS FOR USE OF PLAs

4

- Valley Water may receive a number of benefits in consideration for the additional costs
- The use of PLAs may guard against the possibility of work stoppages or labor actions

ANTICIPATED BENEFITS FOR USE OF PLAs (continued)

- Protection of Small and Local Businesses
  - Use of a PLA may encourage and promote Valley Water's interest in the use of small and local businesses in the contracting and procurement of goods and services (Ordinance No. 04-01)
    - A PLA requirement that non-union contractors derive a portion of their project workforce from a union hiring hall may have a greater impact on smaller contractors
      - So that these smaller contractors are not dissuaded from participating, craft and consider PLA terms which will be inclusive in encouraging small contractor participation

ANTICIPATED BENEFITS FOR USE OF PLAs (continued)

- PLAs encourage unions to find available subcontractors, which may help key Valley Water projects get delivered on time
  - This is consistent with Governance Policy EL-1.5 (recognize that Valley Water services are critical to the economic vitality of Silicon Valley)
- A Community Workforce Agreement may be incorporated into a PLA to identify provisions involving local hiring and/or targeted hiring

CONCERNS OVER USE OF PLAs

- Potential Project Delays
  - Input from various jurisdictions indicate it may take six to twelve months to negotiate a PLA for an individual project
  - Valley Water staff will need to factor in additional time in the project timeline to negotiate and secure a PLA
- Possible Conflict with Projects Utilizing External Funding
  - Specific external funding sources may prohibit use of PLAs such as requirements in state, federal grants or U.S. Army Corps of Engineers funded projects which may negatively impact Valley Water's ability to obtain funding on projects with PLAs

CONCERNS OVER USE OF PLAs (continued)

- Contractors May Lose Staffing Control of Projects
  - Many PLAs and hiring agreements limit and sometimes prohibit non-union contractors from using their core workers
  - Other PLAs require non-union contractors to require 1:1 hiring from the union hiring hall (bringing one union hiring-hall worker on board for every non-union contractor employee used)
  - Non-union contractors would have to use (either in full or in part) union hiring hall employees that may be unfamiliar to them, but who have completed a skilled apprenticeship program

CONCERNS OVER USE OF PLAs (continued)

- May Reduce the Number of Contractors who Submit Bids for a Project
- May Increase Administrative Costs
  - The use of PLAs in Valley Water projects may add to Valley Water's administrative costs given the related monitoring and compliance functions to be performed
    - So that the size of the administrative costs remains proportional to the value of the project, it is recommended that PLAs are used for larger, more substantial Valley Water projects

RECOMMENDATION TO CIP COMMITTEE

- Recommend to full Board of Directors:
  - Select a pilot project that does not include any external funding sources that restrict the use of PLAs
  - Inclusion of a Community Workforce Agreement as part of the PLA
    - Preference for disadvantaged or local workers at hiring halls
    - Selection of apprentices from pre-apprenticeship programs

QUESTIONS

Project Labor Agreement/Community Workforce Agreement
Frequently Asked Questions

What is a Project Labor Agreement?
A Project Labor Agreement (PLA) is a comprehensive pre-hire collective bargaining agreement that sets the basic terms and conditions of employment for an entire construction project.

What is the difference between a PLA and a usual Collective Bargaining Agreement?
In the construction industry, collective bargaining agreements are commonly negotiated between a single union that represents the members of a particular trade and a contractor or association of contractors that employ the members of that trade. As a result, on any construction site, there may be employees working under any number of collective bargaining agreements, or no agreement at all.

A PLA establishes the basic terms and conditions of employment for *all* of the employees who will be engaged on the project.

Are there certain common features in PLAs?
A PLA will commonly have the following features:

- Uniform work hours and holiday schedules
- Prohibitions against strikes and lockouts
- Procedures for quickly resolving disputes that arise on the project
- Pre-job conferences to assign and coordinate work
- Joint safety and health committees
- Provisions for using apprentices on the project, to ensure local community job training opportunities
- A commitment to utilize the services of the Center for Military Recruitment, Assessment and Veteran's Employment and its "Helmets to Hardhats Program," to recruit veterans to work on the covered project

Why would an owner or construction manager be interested in using a PLA?
PLAs provide owners and managers with a tool for creating a stable, uniform labor management foundation for methodically planning and scheduling a project. The agreements reduce the uncertainties inherent in large-scale construction projects by establishing all terms and expectations up front and creating a framework for cooperation among all groups working on the project. By adopting a labor-management model that fosters jobsite efficiencies and ensures an uninterrupted supply of qualified workers, PLAs keep a project on schedule, avoiding costly delays. They also allow parties to more accurately predict labor costs and production timetables, which means more accurate bidding and lower overall costs. PLAs also offer direct cost savings through streamlined safety procedures, avoiding the need to renegotiate agreements during the course of the project, setting work schedules to keep costs low, and using expedited dispute resolution procedures.

Finally, public entities are increasingly using PLAs to benefit the community in which the project is being constructed, by guaranteeing training and work opportunities to the local workforce.

Do PLA's discriminate against non-union contractors?
No. Any contractor that is willing to abide by the terms of the agreement is free to bid for work under a PLA. On public projects, contractors only have to agree to abide by the PLA and the underlying local agreements while working on that particular project.

How long does it take to negotiate a Project Labor Agreement?
Basically after an agency Board has directed staff to negotiate in good faith, agreements are typically ready for formal approval in 1-4 months. The length of time is primarily driven by the priority given to the process by the respective Board and the agency's staff as well as the scheduling availability of the participants.
The Building Trades Council provides a boiler plate agreement to facilitate negotiations. Agreements with other agencies throughout the Valley typically start with this document, adding modifications to meet individual agency needs.

Is PLA training available?
The Building and Construction Trades Council will develop and conduct a customized training for an agency's staff involved in project management. We have successfully conducted trainings for a variety of departments in the County of Santa Clara and the City of San Jose. Trainings typically take about an hour. All materials are provided. With mutual agreement, trainings have been held at agency sites and the Building and Construction Trades offices. When requested, individual meetings with Project managers have been arranged.

The training follows this basic outline:

1. Purpose and benefits of a PLA
2. PLA Pre-Construction Conference
3. Program Manager's Responsibilities
4. Documents
    a. Addendum A (Agreement to be bound by PLA)
    b. Targeted Hiring Form
5. Pre-construction Conference Agenda
6. Work Assignments and Jurisdictional Disputes
7. Targeted Hiring

Do PLA's require a lot of additional agency staff time to administer?
Once integrated into an agency's bidding procedures PLA require little time to administer. The key to successful PLA administration is to include the PLA in the bid packet with the requirement that a bid submittal by a General Contractor (GM) or Construction Manager (CM) at risk include a signed Addendum A (Agreement to be bound by the PLA).

A GM or CM at risk should then follow the same procedure with subcontractor bidding. This way everyone understands the rules upfront and the burden to gather the signed Addendum A's and Targeted Hiring Forms rest with the GM or CM at risk rather than agency staff.

What happens at a mandatory PLA Pre-Job meeting?

- Each subcontractor will announce their scope and work assignments. Work assignments will be accepted by respective unions.
- Unions with overlapping work claims will step outside, exchange business cards and attempt to resolve any jurisdictional disputes. The assignment of covered work will be solely the responsibility of the Employer preforming the work involved; and such work assignments will be in accordance with the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (referred to as the "Plan")
- The Community Workforce Coordinator will explain Targeted Hiring procedures.
- Assignment acceptance and any overlapping claims will be recorded.

How have PLAs been used to achieve benefits for the community or what is a Community Workforce Agreement?

Public entities are using PLAs to provide opportunities for historically disadvantaged workers and businesses. Working together, agencies, unions, contractors and community groups have created innovative pre-apprenticeship programs to help community members develop the skills they need to enter apprenticeship programs.

Critics say PLAs increase the cost of construction. Is this true?

No. Opponents of Community Workforce Agreements have argued that PLAs increase project costs, but studies by leading academics have concluded that there is simply no evidence to back up this conclusion, and that the studies on which the critics rely routinely fail to take into account other factors that influence a project's costs. In fact, most PLA users speak to the economic benefits that come from having access to an uninterrupted supply of qualified workers, being able accurately to predict labor costs, utilizing expeditious mechanisms for resolving disputes, and creating labor-management cooperation committees to promote safe work practices on the job.

Do PLAs disadvantage small businesses?

Although opponents of PLAs claim small businesses suffer, PLAs actually provide a financial advantage to small non-union businesses. Because a PLA sets the basic terms and conditions for all contractors, these non-union contractors get unprecedented access to multiemployer benefit plans. In real terms the PLA allows the contractor to reduce their payroll taxes by 20 to 35 percent. Normally these contractors would be responsible for the entire Prevailing Wage paid in wages. Under a PLA, small non-union contractors benefit from a significant savings on total labor cost due to the lesser payroll tax burden.

08/08/19

Building Opportunity

Investing in local and disadvantaged residents with Community Workforce Agreements

WORKING PARTNERSHIPS USA

JULY 2017

CONTENTS

Executive Summary

The City of San Jose is projected to invest $1.42 billion over the next five years in public construction projects to meet neighborhood infrastructure needs: community centers, fire stations, roads, trails, parks, water treatment, and more.

Yet the City currently has no provisions in place to help direct that considerable taxpayer investment towards tackling one of the biggest challenges facing our communities: access to good, middle-wage jobs and career pathways.

This report examines how public dollars currently being spent on construction projects are, or are not, benefitting the local workforce, and explores the use of Community Workforce Agreements as a tool to better focus public investments on creating training and career opportunities for all of our diverse San Jose communities.

Section 1 of this paper reports the initial findings of an analysis of the workforce employed on City of San Jose public construction projects between 2008 and 2016. Drawing from a sample of projects including certified payroll records for 1,638 individual workers, this analysis finds that both local residents and historically under-represented groups have to a large extent been left out of these projects and the career opportunities they represent.

Historically, African-Americans, Asian Pacific Americans, and women have all been severely under-represented in construction employment. Despite progress in the industry overall, these long-standing disparities are still present in recent San Jose public works projects. Out of a total of 795 workers on recently completed projects, only 15 workers were Asian or Pacific Islander (1.9%); only 5 were Black or African-American (0.63%); and only 6 were women (0.75%).

Latino workers faced a different challenge. Latinos were well represented on the public construction projects, making up the majority of employees. However, Latinos earned considerably less than white workers on the same projects. For 2014-2016, the average total project earnings for a Latino worker was $2,690 — just over half the $5,217 average for a white worker.

Local residents were a small minority of the workforce on the City projects. Only one-quarter (26%) of workers on the projects studied lived in San Jose. Another 9% lived elsewhere in Santa Clara County, leaving nearly two-thirds (65%) of the workforce originating from outside Santa Clara County. The average worker lived 57 miles away from their worksite.

This dependence on a largely non-local workforce has implications for equity and opportunity for local residents as well as for traffic and environmental impacts. Even assuming the more distant workers stayed in town (perhaps in motels, RVs, or sleeping in cars) rather than commute 6 or more hours daily, the remaining construction workforce on the six projects studied is estimated to have driven a total of 1.66 million vehicle miles.

These vehicle miles travelled directly contribute to both climate change and local health impacts. In addition to contributing to local smog and pollution, tailpipe emissions from vehicles are the single largest source of greenhouse gas emissions in California. The longer than average commutes on these

projects – two-thirds of all workers lived more than 30 minutes from their project site, compared to an average 1-way commute for all San Jose workers of 26 minutes – results in increased tailpipe emissions.

Section 2 of this paper analyzes a tool that is often used by local governments to address workforce issues and increase career opportunities on public works projects: a Community Workforce Agreement.

A Community Workforce Agreement is an innovative type of Project Labor Agreement (PLA) which, in addition to standard PLA requirements, incorporates provisions to encourage community hiring, apprenticeship training, and career paths.

Many of the nation's largest cities already have CWA policies in place: Chicago, New York, Philadelphia, Milwaukee, Seattle, Los Angeles, and a number of others. In California, more than 30 local jurisdictions have established CWA policies (see Appendix B for a chart of CWA policies by jurisdiction). Locally, the Santa Clara Valley Transportation Authority (VTA) and the County of Santa Clara both adopted CWA policies last year.

Section 2 surveys available impact data for local jurisdiction CWAs. All of the impact datasets reviewed show that the CWA has had a substantial impact on hiring and work hours for local and disadvantaged residents. However, the levels of targeted or local hiring achieved vary widely depending on the local market and project types. Many jurisdictions report that partnerships with community based organizations and industry-recognized pre-apprenticeship programs are critical in reaching the goals, especially for entry-level disadvantaged workers.

CWAs, then, are a policy tool designed by and for local governments to ensure that taxpayer-funded construction projects are creating good quality jobs that are accessible to local residents, historically under-represented groups, and targeted populations such as at-risk youth, low-income households, and others who face barriers to a career pathway. Impact data from existing CWAs show that they are effective in moving the needle on these goals.

However, the City of San Jose, unlike other large Silicon Valley jurisdictions, has not yet adopted a CWA or similar workforce policy on its public works. The objections raised to a San Jose CWA have generally fallen into one of two categories: fear that a CWA on public projects will increase project costs, or fear that it will reduce competitive bidding or make it harder for small and minority-owned businesses to compete. However, the evidence shows that Community Workforce Agreements or Project Labor Agreements on public works projects in California do not significantly impact either project costs or competiveness of bidding.

In California, public works projects on which a CWA/PLA might be applied typically are already subject to the state prevailing wage. On prevailing wage projects, a PLA therefore has no impact on wage rates.

Rather, it provides for enhanced enforcement of the existing wage rates through strict project-level oversight, making it more difficult for unscrupulous contractors to employ such illegal practices as misclassifying employees, bypassing safety regulations, or requiring employees to work off the books. By creating a more level playing field, the PLA structure helps support responsible contractors, since they are less likely to be bidding against a competitor who is willing to violate the law in order to underbid a project.

Multiple academic studies evaluating PLAs in the context of all construction cost factors have found small to no effect on costs. The most comprehensive recent analysis of the effect of public sector PLAs on bidding is a study published by UC Berkeley in January 2017. The researchers undertook statistical analysis of 263 community college projects, 88 performed with a PLA and 175 without a PLA. Controlling for project size, location and timing, they found that the presence or absence of a PLA had no effect on total project cost. (In fact, the analysis showed that the low bids were slightly lower on projects with a PLA, but the difference was not statistically significant.)[1]

In looking at the total number of bidders, the analysis found that projects with PLAs had slightly more bidders than projects without PLAs.[2] Jurisdictions with PLA/CWAs often have bid preferences or small business assistance programs to help enable small, local minority- and women-owned businesses to bid and compete on PLA projects. In addition, a PLA allows both union and non-union contractors to bid, and gives small non-union contractors access to a larger pool of skilled workers by allowing them to request workers from the local union hiring halls for the duration of the project.

A Community Workforce policy for major public construction projects could enable San Jose to build a real regional pipeline to open up high-quality construction careers to low-income residents, youth, veterans, immigrant and communities of color, all while building the skilled local workforce that is needed in order to be able to supply the City's long-term construction demand.

1 Waitzman, Emma and Peter Philips. (January 2017). *Project Labor Agreements and Bidding Outcomes: The Case of Community College Construction in California.* University of California, Berkeley. http://laborcenter.berkeley.edu/project-labor-agreements-and-bidding-outcomes/

2 Waitzman, Emma and Peter Philips. (January 2017). *Project Labor Agreements and Bidding Outcomes: The Case of Community College Construction in California.* University of California, Berkeley. http://laborcenter.berkeley.edu/project-labor-agreements-and-bidding-outcomes/

SECTION 1:

Analysis of Construction Payrolls for San Jose Public Works Projects

Project Overview

Using Certified Payroll data provided by the City of San Jose Office of Equality Assurance, we have undertaken to enter anonymized data from paper payrolls into digital format, followed by reviewing, cleaning, and analyzing the data. This project has thus far involved roughly 200 hours of data entry and 100 hours of data cleaning and analysis.

The following analysis draws from a sample of six City of San Jose public works projects completed between 2008 and 2016. It encompasses large and small public works projects including a library, fire stations, and large airport projects. The projects reviewed include payroll records for 1,638 individual workers who worked a total of 122,031 hours and earned $5,251,756 in wages.

The goal of this analysis is to better understand the demographics, income, and geographic spread of workers employed on publicly funded City of San Jose construction projects. We looked at regional and demographic variations in pay, hours, and overall employment. The size and the timespan of our sample give insight into the composition of the workforce on public works projects in the past ten years.

Key findings from our initial analysis of these data are presented below.

Employment Data by Race/Ethnicity and Gender[3]

Under-Represented Populations

Historically, African-Americans, Asian Pacific Americans, and women have all been severely under-represented in construction employment. Despite progress in the industry overall, we found these long-standing disparities still present in recent San Jose public works projects. Out of a total of 795 workers on projects completed between 2015 and 2016, only 15 workers were Asian or Pacific Islander (1.9%); only 5 were Black or African-American (0.63%); and only 6 were women (0.75%).

These numbers contrast sharply with the overall Santa Clara County workforce, of whom 34% are Asian or Pacific Islander, 2.3% are Black or African-American, and 43% are female.[4]

Race/Ethnicity	# of Workers	% of Workers
Hispanic/Latino	473	59.50%
Undetermined/Unreported	186	23.40%
White	115	14.47%
AAPI	15	1.89%
Black/African-American	5	0.63%
American Indian/Alaska Native	1	0.13%
Grand Total	**795**	**100.00%**

3 Demographic details for workers were available only for the more recent projects; for projects completed between 2014 and 2016, records were reviewed for 795 workers who worked a total of 54,207 hours and earned $2,440,565 in wages.

4 Source: 2011-15 American Community Survey 5-Year Estimates, U.S. Census Bureau. Accessed via DataFERRETT.

Gender	# of Workers	% of Workers
Female	6	0.75%
Male	789	99.25%
Grand Total	**795**	**100.00%**

Notably, the construction apprentice pipeline in Santa Clara County has a higher proportion of these under-represented groups than was found on the City of San Jose projects, although disparities still remain.

Asian Americans are 3 times as prevalent among Santa Clara County-resident apprentices than on the public works projects studied. African Americans are 6 times as prevalent among local apprentices than on the public works projects. And women are 4 times as prevalent.

While the representation of Asian-Americans and women in local apprenticeships is still well below the overall workforce, these data indicate that the pipeline in Santa Clara County is becoming more diverse. The challenge now is to create more opportunities for that local diverse workforce to work on local public works projects.

Recent efforts to further diversify the pipeline indicate promising results. The Santa Clara County Trades Orientation Program, the work2future-affiliated "feeder" program that recruits disadvantaged community members and prepares them for apprenticeship, since 2015 has graduated 153 students of whom 22% are API, 20% are African-American, and 30% are women.

Wage Disparities

Latino workers made up the majority of employees on the public works projects studied; an estimated 60% of workers were of Hispanic heritage.

However, Latinos earned considerably less than white workers on the same projects. For 2014-2016, the average total project earnings for a Latino worker was $2,690, just over half the $5,217 average for a white worker.

This disparity is likely not due to a direct pay differential. On public construction projects, all workers in the same job classification must be paid at least the prevailing wage. Rather, the difference is a combination of two factors: first, Latino workers were concentrated in lower-wage job classifications, while white workers were concentrated in the classifications that pay the most (see table below); and second, the average white worker received more work-hours on the projects than the average Latino worker.

For African-Americans, Asians, and Native Americans, the number of workers was not large enough to draw any conclusions regarding average wages.

Race/Ethnicity	Mean Wages Per Hour	Average Total Project Earnings
Hispanic/Latino	$41.20	$2,690
White	$57.56	$5,217
Others	$43.81	$2,765
Overall Average	**$44.96**	**$3,075**

Worker Tenure

Notably, the average individual employee worked only 74 hours on a given project. This reflects the nature of major construction projects in which each skilled trade is brought onto the site to perform their specialized work, be it laying tile, installing fire suppression systems, or the many other sequenced steps needed to complete a building.

This short duration of employment on each individual project highlights the importance of setting workforce standards that will be broadly applicable across all major public works projects, so that local workers can easily move from job to job.

Furthermore, in most State-registered apprenticeships, wages and benefits are standardized so that an apprentice receives the same pay and benefits whether they are working on a public or a private project. Expanding the use of apprentices thus can also be a tool to help increase earnings stability for new construction workers as they move from project to project.

Employment Data by Geography

Commute Times and Distances

Based on workers' ZIP code of residence, two-thirds of the workers on the public works projects studied traveled longer than the average Bay Area one-way commute of 30 minutes. 66% of workers lived more than a 30-minute drive from the projects, with 17% living more than 90 minutes away.[5]

To put those travel times in perspective, the average commute in San Jose is 27 minutes.[6]

Estimated commute times for workers on the projects studied

Commute Time	30 minutes or less	30 to 60 minutes	60 to 90 minutes	90 to 120 minutes	120 to 180 minutes	More than 3-hour drive*
% of workers	34%	32%	17%	8.8%	5.8%	2.6%

**These workers presumably made temporary lodging or sleeping arrangements during the work-week.*

The average distance from workers' home ZIP codes to the project site was 56.8 miles. The workers for whom payroll data was collected worked a cumulative total of roughly 20,520 days. If they all drove solo to and from work each day, they would have travelled a total of 2,730,755 vehicle miles to complete the six projects studied.

If we instead assume that those who lived more than 3 hours from the project site did not drive at all, then the workforce on the six projects would have travelled a total of 1,663,432 vehicle miles.

Excessive commute distances generate traffic congestion, impact neighborhood livabilty and pollute the air. Total traffic congestion in the Bay Area, as measure by vehicle hours of delay, has increased by 84% in the last ten years (2005 to 2015).[7] Nationally, the Bay Area ranks as the 2nd most congested commute shed; only Los Angeles has more congested freeways.[8]

Commute times and traffic congestion have significant impacts on livability and community cohesion. Long commutes limit the amount of time workers have available to spend at home and in their communities, reducing civic participation and straining families. Local residents are affected indirectly as increased highway congestion generated by commuters forces locals to spend more time in traffic.

Finally, miles travelled by passenger vehicles are a major driver of climate change; in fact, they are the single largest CO2 emitter in California. In addition to accounting for 27% of the state's greenhouse gas

5 One-way commute time was estimated from home ZIP code to project location using Google Maps. Commute time estimates assume that workers returned home each day; if workers instead made temporary sleeping arrangements in San Jose, these data would not reflect that arrangement. Totals may not add to 100 due to rounding.

6 "2014 Commute Time for Cities and Neighborhoods", *Vital Signs,* Bay Area Metropolitan Transportation Commission (MTC). Accessed July 13, 2017. http://www.vitalsigns.mtc.ca.gov/commute-time

7 "Bay Area traffic congestion shot up 84 percent in the last decade, with no improvements." Silicon Valley Business Journal. Dec. 29, 2016. http://www.bizjournals.com/sanjose/news/2016/12/29/bay-area-traffic-congestion-shot-up-46-percent-in.html

8 "Time Spent in Congestion", *Vital Signs,* Bay Area Metropolitan Transportation Commission (MTC). Accessed July 20, 2017. http://www.vitalsigns.mtc.ca.gov/time-spent-congestion

emissions, vehicle emissions produce smog and other pollutants that affect residents' health.[9] California's historic Global Warming Solutions Act of 2006 (AB32) committed the state to reduce its total greenhouse gas emissions to 1990 levels by 2020 and to 80% below 1990 levels by 2050 – a goal that can only be reached if vehicle-produced emissions are greatly reduced.

The imperative to reduce Vehicle Miles of Travel is further emphasized by SB 375, passed in 2008, which requires regions throughout the state to take greenhouse gas emissions into account in their land use planning.

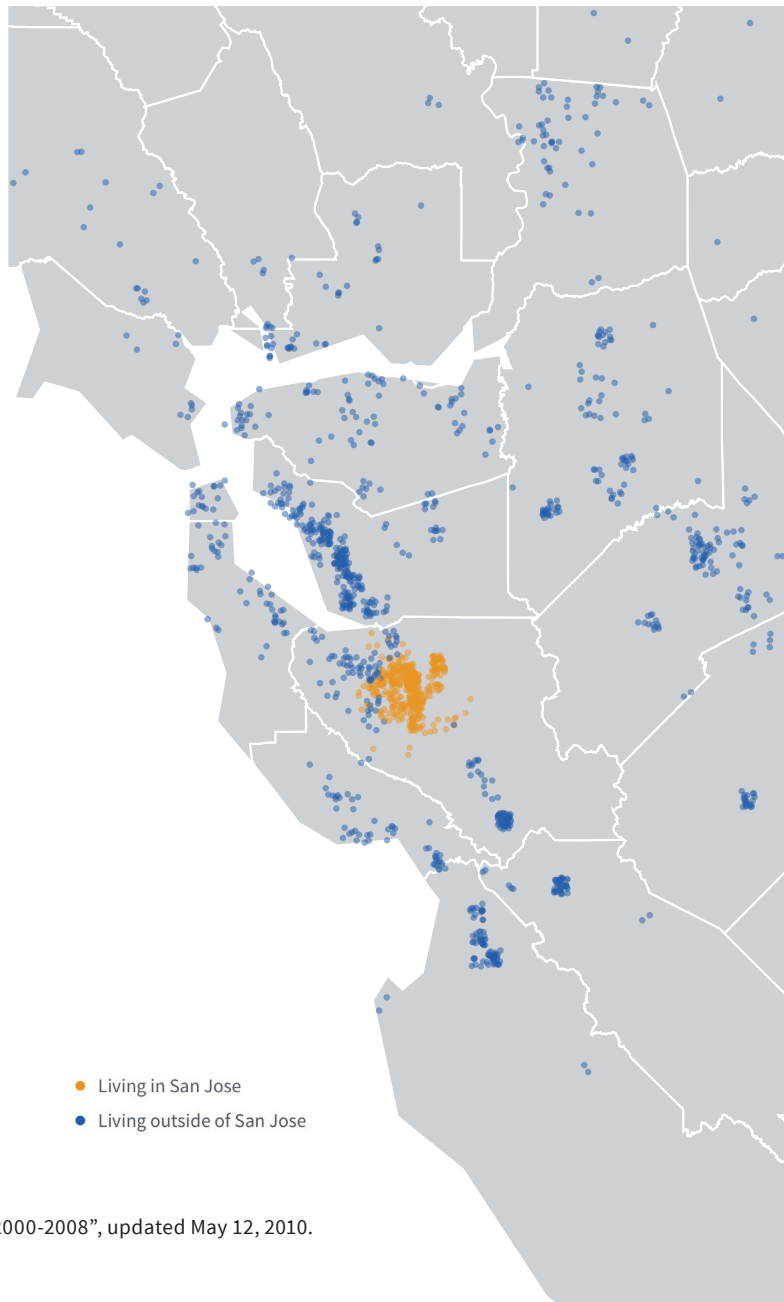
In July 2017, the State of California reaffirmed its focus on reducing greenhouse gas emissions by passing Senate Bill 1, which extends the emissions cap program from 2020 until 2030. A bipartisan super-majority of legislators in both the California Assembly and California Senate approved the bill, which includes strong measures to reduce tailpipe emissions.

Home Residence of Workers

Only one-quarter (26%) of workers on the projects studied lived in San Jose. Another 9% lived elsewhere in Santa Clara County, leaving nearly two-thirds (65%) of the workforce originating from outside Santa Clara County.

The non-San Jose portion of the workforce was widely dispersed, hailing from 48 different counties and 200 cities. While some lived in neighboring communities, many came from a considerable distance away, as evidenced by the commute estimates. The tables on the following page show the top 20 cities and counties of residence for workers on the projects studied.

In addition to the traffic, environmental, health and social effects of lengthening commutes, a preponderantly non-local workforce also reduces local tax revenues generated by public investment. Workers who do not reside in San Jose are not contributing to the property tax base that supports local schools, hospitals, public safety, and other critical public services. They are also likely to be contributing considerably less to local sales tax revenue, since many of their purchases will be made in their home county.



9 California Air Resources Board, "California Greenhouse Gas Inventory for 2000-2008", updated May 12, 2010.

Top 20 Counties Workers Live In			
#	County	# of Workers	% of Workers
1	Santa Clara	557	35.16%
2	Alameda	257	16.22%
3	Stanislaus	94	5.93%
4	San Joaquin	90	5.68%
5	Monterey	84	5.30%
6	Contra Costa	80	5.05%
7	Santa Cruz	54	3.41%
8	Sacramento	49	3.09%
9	San Mateo	45	2.84%
10	Solano	42	2.65%
11	San Benito	42	2.65%
12	Merced	37	2.34%
13	Fresno	25	1.58%
14	San Francisco	19	1.20%
15	Sonoma	17	1.07%
16	Marin	9	0.57%
17	Butte	8	0.51%
18	Madera	8	0.51%
19	Los Angeles	6	0.38%
20	Napa	6	0.38%
	All others	*55*	*3.47%*
Grand Total		**1584**	**100%**

Top 20 Cities Workers Live In			
#	City	# of Workers	% of Workers
1	San Jose	419	26.45%
2	Hayward	76	4.80%
3	Salinas	72	4.55%
4	Modesto	51	3.22%
5	Gilroy	48	3.03%
6	Fremont	43	2.71%
7	Hollister	38	2.40%
8	Oakland	31	1.96%
9	Newark	29	1.83%
10	Union City	25	1.58%
11	Sacramento	25	1.58%
12	Tracy	24	1.52%
13	Santa Clara	23	1.45%
14	Fresno	21	1.33%
15	Los Banos	21	1.33%
16	Manteca	21	1.33%
17	Vallejo	21	1.33%
18	San Francisco	18	1.14%
19	Stockton	18	1.14%
20	San Leandro	18	1.14%
	All others	*542*	*34.22%*
Grand Total		**1584**	**100%**

Worker Hours and Wages by County				
County	**Total Hours**	**% of Hours**	**Total Wages**	**% of Wages**
Santa Clara	46876.26	38.41%	1961445	37.35%
Alameda	14848.53	12.17%	588080.4	11.20%
San Benito	9426.25	7.72%	393540.1	7.49%
Monterey	8046	6.59%	314604.7	5.99%
San Joaquin	6271.92	5.14%	271559.6	5.17%
Contra Costa	5815	4.77%	266056.3	5.07%
Santa Cruz	4990.36	4.09%	242927.2	4.63%
Stanislaus	3977.75	3.26%	227376.4	4.33%
San Mateo	3845	3.15%	192822.5	3.67%
Napa	1995.5	1.64%	120537.3	2.30%
Merced	2680.96	2.20%	109616.5	2.09%
San Francisco	1447	1.19%	88301.19	1.68%
Solano	1577.1	1.29%	70022.37	1.33%
Sacramento	1874.01	1.54%	69738.17	1.33%
Fresno	948.75	0.78%	32327.18	0.62%
Unknown	1506.28	1.23%	55055.06	1.05%
Sarasota	672	0.55%	29405.04	0.56%
San Luis Obispo	624	0.51%	29336.73	0.56%
El Dorado	812.75	0.67%	27979.47	0.53%
Los Angeles	698	0.57%	29058.57	0.55%
All others	*3097.73*	*2.54%*	*131966.85*	*2.51%*
Grand Total	**122,031**	**100%**	**5,251,756**	**100%**

Contractor Locations

The employers on the projects studied (contractors and subcontractors) were largely based outside of Santa Clara County. Out of 165 contractors hired on the six City of San Jose public works projects, 36% had business addresses in Santa Clara County. Another 25% came from neighboring Alameda County, 3% from San Mateo, 3% from Santa Cruz, and less than 1% from San Benito. The remaining 33% of contractors were based in non-contiguous counties.

A contractor's location does not necessarily determine whether they will use a local or non-local workforce. However, in the absence of any public policy to encourage use of apprentices and local hiring halls, non-local contractors are generally more likely to hire non-local workers. In the next phase of this project we will attempt to perform a statistical analysis on contractor locations and worker ZIP codes to examine how strongly they are correlated.

Contractors by County of Origin

County	Number of Contractors	Percent of Contractors
Santa Clara	59	36%
Alameda	41	25%
Stanislaus	8	5%
San Joaquin	6	4%
Santa Cruz	5	3%
San Mateo	5	3%
Placer	4	2%
Contra Costa	4	2%
Los Angeles	3	2%
Sacramento	3	2%
All others	*27*	*16%*
Total	**165**	**100%**

Local Economic Impacts

Wages paid to local residents benefit not only the workers themselves and their families, but also the broader community. As local workers earn money, they spend it on food, clothing, childcare, housing, entertainment, personal care, and other goods and services, increasing the circulation of money throughout the local economy. However, if most of those wages are taken out of the region, then the local economy sees little benefit.

The payroll data collected show that out of $5,251,756 paid in wages to blue-collar construction workers on the City projects reviewed, $3,290,311 (62.65%) went to workers who lived outside of Santa Clara County.

To extrapolate this to the overall economic impacts of public sector construction, we can look at the City of San Jose's adopted budget, which includes a 5-year Capital Improvement Program (CIP).

The 2016-2020 CIP budget includes a total of $1,420,943,707 to be spend on construction projects over the next five years (non-construction expenses are excluded).[10] In the California construction sector, approximately 28% of the net value of construction work goes to labor costs.[11]

Applying this ratio to the San Jose CIP, roughly $398 million over five years can be expected to go towards wages, benefits, and other payroll costs.

If the pattern observed in the sample of projects continues to hold in the future — meaning that 62.65% of wages on City projects are paid to out-of-town workers — that represents a total over five years of $249 million in public construction dollars being paid to out-of-town workers, or just under $50 million per year. This likely means that much of that $50 million annually would leave the area rather than circulating in the local economy. For comparison, the 2016 Super Bowl 50 event brought an estimated $29 million in economic benefit to San Jose.[12]

10 http://www.sanjoseca.gov/DocumentCenter/View/46155

11 Calculated from the 2012 Economic Census of the United States, U.S. Census Bureau, Table EC1223A1: Construction: Geographic Area Series: Detailed Statistics for the State. Accessed via American FactFinder, July 18, 2017.

12 Artz, Matthew, "Super Bowl: Of $240 million boost, San Jose got 12 percent." *Daily Democrat News*, Aug. 15, 2016.

Methodology

The primary data source for this analysis is the hardcopy certified payrolls collected and verified by the City of San Jose Office of Equality Assurance. Weekly payroll data for a sample of six projects completed over the past decade were compiled, tabulated, and analyzed.

We began by entering the raw data from weekly certified payrolls submitted to the City into a spreadsheet format. To preserve privacy, each individual worker was assigned a unique identifying number. We entered data for a total of 1638 individual workers.

After cleaning and standardizing the data, we began tabulating this information for the report, with a special focus on where workers lived and their demographic background. A total of 11 workers were excluded for incomplete individual worker data.

Although the certified payrolls include a field for Equal Employment Opportunity (EEO) data on race/ethnicity, a large portion of payrolls did not include this data. To determine race and ethnicity for workers for whom it was not reported, prior to anonymization we performed an analysis on surnames, coding those with high likelihoods of a specific race/ethnic origin. Race/ethnicity could not be identified for approximately 23 percent of workers. Because white surnames are more difficult to identify than Hispanic/Latino or Asian surnames, it is likely that the large majority of those unidentified are white, but this could not be confirmed.

Commute time and distance was estimated from the worker's home ZIP code to the project address, using Google Maps data. While less precise than commute data based on a worker's exact street address, this gives a reasonably accurate estimate. Some workers may not have commuted daily from their home address, but instead stayed nearby during the workweek. Because American Community Survey data showed no workers with a commute of more than 3 hours into Santa Clara County, we assumed that any individual living more than 3 hours from the worksite did not commute daily. To the extent that other workers (less than 3 hours away) used a temporary residence or sleeping place rather than commuting, the shown data may overestimate the average commute. Conversely, to the extent that workers 3 or more hours away did commute daily, the data shown may underestimate the average commute.

To facilitate public access to data and monitoring of indicators, we suggest that the city consider standardizing and digitizing construction payroll information, and making appropriately anonymized version of that information available to the public via the City's Open Data Portal. In addition, the city could encourage contractors to collect demographic data more consistently and accurately.

SECTION 2:

Impact Analysis of Community Workforce Policies for Public Works

Overview of Community Workforce Agreements

A Community Workforce Agreement (CWA) is a form of Project Labor Agreement (PLA), which is a construction industry collective bargaining agreement applied to a particular public works project or set of projects. A CWA consists of a signed Project Labor Agreement (PLA) which, in addition to all standard PLA provisions,[13] incorporates provisions for targeted hiring of disadvantaged or under-represented local residents, often as entry-level apprentices.[14]

Over the past two decades, an increasing number of public entities have adopted CWAs as one of the most effective tools to both create local career-pathway job opportunities on public works projects, and to increase access to construction apprenticeships for under-represented groups. As of 2010, at least 103 agreements with CWA provisions had been adopted across the country;[15] today, although an exact count has not been made, the number is considerably higher.

The particulars of each agreement are typically tailored to the needs of the public entity, the community, and the type of work it covers. PLAs with "community workforce" provisions may go by a number of different names, or the agreement may simply be called a "PLA" and include additional language requiring targeted hiring, local hiring, or other provisions designed to open career pathways into the construction trades.

The disadvantaged workers supported by community workforce provisions vary based on local needs, but commonly include categories such as at-risk youth (age 18+), emancipated foster youth, unemployed or under-employed adults, veterans, under-represented minority or immigrant community members, CalWORKs and GA recipients, the formerly incarcerated, and those who are homeless or precariously housed.

Two key provisions for effective CWAs in a high-cost region like Silicon Valley are:

1. **It should establish and enforce strong job standards.** These include monitoring and enforcement mechanisms to ensure fair pay, health and safety, which are typically included in a standard PLA. They may also include provisions to prevent wage theft and misclassification of employees as independent contractors.

2. **It should create a pathway to apprenticeship for local communities** by requiring **targeted hiring** of disadvantaged or under-represented community members as entry-level apprentices, in coordination with one or more industry-recognized pre-apprenticeship programs with track records of successful

13 A brief description of PLAs: "Project labor agreements (PLAs) (sometimes called project stabilization agreements, or PSAs)… have historically functioned to establish the parameters of working conditions and labor relations between the general contractor, the developer and building trades unions on major construction projects. These agreements set out the terms under which building trades unions agree not to go on strike or picket the job. Typically public entities have seen project labor agreements as a value-added for projects where the public investment must be safeguarded. Project labor agreements help prevent delays, maintain workplace safety, and ensure high-quality construction products, all of which help protect taxpayers' investments when public money funds some or all of the project." (Partnership for Working Families, 2012)

14 Being hired as an entry-level apprentice provides a new employee with not just a temporary job, but enrollment in a State-registered apprenticeship program providing on-the-job and classroom training as part of a career pathway. No prior training or experience is required in order to become an apprentice. See box on p. 22 for a description of the California apprenticeship system.

15 Figueroa, Maria, Jeff Grabelsky, and Ryan Lamare, "Community Workforce Provisions in Project Labor Agreements" (October 2011). Cornell University, ILR School.

placement into apprenticeship jobs.[16]

Most CWAs are developed in partnership with grassroots organizations who provide community education, outreach, and support to disadvantaged community members, as well as with certificated pre-apprenticeships.

Model language for Community Workforce provisions, adapted from provisions adopted by the County of Santa Clara and other Bay Area jurisdictions, is included as Appendix A.

What's Included in a Community Workforce Agreement?

The following general description is excerpted from *The Roadmap to Emerald Cities*, 2010:

Like traditional PLAs, Community Workforce Agreements cover terms and conditions of employment, including collectively bargained wage rates, benefit fund payments, hours, etc. They also encourage job stability and prevent costly delays by:

- Guaranteeing no-strikes and no-lockouts;
- Providing alternative dispute resolution procedures;
- Establishing the journey level to apprentice ratios on the covered project(s);
- Determining uniform hours, conditions, schedules, and work rules for the covered projects within a common contract time frame;
- Assuring contractor access to a well-trained and highly-skilled workforce through union referral procedures.

Community Workforce Agreements also build well-defined career opportunities for under-represented communities by establishing apprenticeship utilization requirements and targeted hiring practices.

A CWA's hiring targets are not merely aspirational career goals. Rather, good CWAs set clear and concrete hiring goals that are strategically important and politically feasible. An effective CWA provides for real accountability and applies metrics to measure, monitor, evaluate and enforce agreed-upon employment goals for target categories of workers.

CWAs typically establish a framework that helps guide all project stakeholders through the process by which low-income and local residents will get access to construction careers, but also help encourage flexibility given the challenges involved in pursuing these goals. Establishing project-wide goals, for example, can enable the overall project to meet the targeted hiring goals even if some trades have difficulty recruiting and some contractors have difficulty employing targeted workers. In some cases, goals may be achieved by contractors engaged on a covered project employing workers from targeted categories on other projects outside the scope of the CWA.

16 A number of industry-recognized pre-apprenticeship programs utilize the nationally certified Multi–Craft Core Curriculum (MC3), which was developed to align with construction apprenticeship requirements and construction industry workforce needs and is currently being used by the California Workforce Development Board (CWBD) as the required curriculum for its Prop. 39 pre-apprenticeship grantees.

Many other jurisdictions in the Bay Area, California and elsewhere in the United States have also established Community Workforce Agreements, each including standard PLA provisions plus workforce hiring provisions tailored to local communities' needs and the nature of the local labor market. It is important to note that different jurisdictions may use different terminology for a PLA with Community Workforce provisions; for example, it may be called a Construction Careers Agreement, have a locally-specific name such as MAPLA or WSIPLA, or simply be known as a "PLA with targeted hiring provisions."

The Next Step: Community Workforce Policies

To streamline and bring certainty to the process, rather that negotiating an individual PLA/CWA for every project, local governments are increasingly enacting a Community Workforce policy to apply Community Workforce Agreements to all publicly funded construction projects that meet specified criteria. These criteria often include a minimum dollar value (e.g., projects of $1 million or more) and reference to the funding sources for covered projects.

At least 30 local governments in California have adopted CWA policies covering multiple projects. In the San Jose metro region, CWA policies have recently been adopted by the County of Santa Clara and the Santa Clara Valley Transportation Authority (VTA).

A chart of CWA policies by jurisdiction, summarizing scope and provisions contained in each, is included as Appendix B.

Impacts of Community Workforce Provisions on Employment Goals

Community Workforce provisions are sections that are added on to a Project Labor Agreement (PLA), either in the body of the PLA or as appendices, in order to achieve specified goals above and beyond the baseline provisions of the PLA. A PLA which includes Community Workforce Provisions is often referred to as a *Community Workforce Agreement (CWA).*

Community Workforce provisions are typically designed to pursue one or more of the following objectives:

1. Increase hiring of **targeted workers** from specific disadvantaged populations as entry-level apprentices;
2. Increase the total on-the-job training hours worked by **apprentices**; and/or
3. Increase hiring and work hours for **local area residents.** (Note: Local area resident requirements can be challenging in the construction sector due to the nature of the industry, in which both businesses and workers move from job to job rather than remaining in one location. Any such requirement should be carefully considered in light of the construction labor market and existing construction workforce in the region, to avoid unintended consequences.)

A key question in evaluating Community Workforce provisions is how effectively these provisions achieve the stated goals. Following is an overview of those CWAs in California which have tracked and released data regarding progress towards these goals.

All of the CWAs reviewed have shown substantial progress, though notably, the levels of targeted and/or local hiring achieved vary widely depending on the local market and project types. Many jurisdictions report that partnerships with community based organizations and/or industry-recognized pre-apprenticeship programs are critical in reaching the goals, especially for entry-level targeted / disadvantaged workers.

The SFPUC's Water System Improvement Project Labor Agreement (WSIPLA) and the Port of Oakland's Modernization and Aviation Project Labor Agreement (MAPLA) are the largest & among the longest-standing PLA/CWAs in the Bay Area, and have the most robust impact data.

Under the WSIPLA, as of Dec. 2016:

- 5,582 **local area residents** have been hired, working 3,169,726 hours (41% of all hours) & earning wages of $120,415,620.
- 13.4% of hours have been worked by **apprentices**.
- The SFPUC works closely with several community based training and referral programs to identify and prepare disadvantaged workers for career opportunities beginning with a job on a WSIPLA project. Among those who have been hired are 976 **targeted workers** referred from community-based partners in Job Training Programs. These targeted workers have worked a total of 905,710 hours and earned $26,807,108 in wages.
- All data above is sourced from the most recent "Project Labor Agreement Quarterly Report" (2016-17, 2nd Quarter). Detailed quarterly reports are available at http://sfwater.org/index.aspx?page=559.

The Port of Oakland MAPLA was adopted by the Board of Port Commissioners in 2000. A new MAPLA went into effect on February 1, 2016, with key changes including additional coverage and local hire requirements.

Under the MAPLA, as of June 2016:

- 2,800,106 hours have been worked by **local area residents** (59.17% of all hours).
- 13.07% of hours have been worked by **apprentices**.[17]
- During the most recent reporting period (July 2015 to June 2016), local residents working under MAPLA earned estimated wages of $6,695,884.
- The most recent progress report is available at http://www.portofoakland.com/files/PDF/responsibility/MAPLA%20Report_Jul15June16.pdf.

More recently adopted CWAs show similar findings.

The Oakland Airport Connector project was performed under a Project Stabilization Agreement (another name for a PLA) which included Community Workforce provisions. The final outcomes report, issued Jan. 31, 2015, showed that the policy overall was successful, exceeding most of the goals set. It fell short on one goal: for apprentice utilization, the goal was that 20% of project hours would be worked by local apprentices, but the final local apprentice participation achieved was 17.08%.

Detailed outcomes for the Oakland Airport Connector included:

- 514,509 hours, representing 70.33% of all hours, were worked by **Local Area Residents** (includes residents of Alameda County, San Francisco, Contra Costa County and San Mateo County.)
- 140,776 hours, representing 19.24% of all hours, were worked by **apprentices**.
- 17.08% of all hours were worked by Local Area Resident apprentices.[18]

What is Apprenticeship?

Apprenticeship is both a full-time job and an intensive educational program. California registered apprenticeship programs are a form of post-secondary education that combines classroom and hands-on training with paid on-the-job training.

Apprenticeship programs require an intensive long-term commitment from the student; the training period is three to five years and typically requires successful completion of a curriculum of 400 to 800 classroom hours (free of charge) combined with 3,000 to 8,000 hours of paid on-the-job training, where apprentices work side by side with experienced workers to learn all the skills required for a trade.

The State of California Department of Apprenticeship Standards has oversight authority over all registered apprenticeship programs in the state, including the standards and processes by which they admit new apprentices.

17 Note that some of the covered work on the MAPLA, including the work of Teamsters, Laborers working in Asbestos Abatement, and some dredging and barge work, is not eligible to hire apprentices.

18 Flatiron/Parsons JV, "BART Oakland Airport Connector Project: Local Hire Results through January 31, 2015." Presented to the BART OAC Joint Administrative Committee.

The County of Alameda adopted a countywide PLA with community benefits provisions (known as the Project Stabilization and Community Benefits Agreement, or PSCBA) in 2013, with implementation beginning the following year. In June 2016, the County renewed the initial 3-year agreement for an additional term. For the new term, the County is proposing to coordinate with community-based organizations to increase the number of Disadvantaged Resident Workers hired on the proejcts.

As of June 2016, 7 projects had been awarded under the Alameda County PSCBA. Outcomes include:

- Approximately 79,500 hours, representing 47% of all hours, were worked by **local residents**.
- Approximately 32,800 hours, representing 19.4% of all hours, were worked by **apprentices**.
- 17 **disadvantaged resident workers** have been hired on as new apprentices.[19]

Outside of the Bay Area, agreements incorporating Community Workforce provisions are common in a number of regions, including Southern California.

As of 2011, the City of Los Angeles had already awarded over $1 billion in construction contracts with targeted hiring requirements. Apprentices performed 26.15% of work hours on those projects, including 594 disadvantaged residents hired as new first-period apprentices. To achieve these goals, the City partnered with Work Source Centers and community based organizations.[20]

San Diego Unified School District (SDUSD) contracted with Rea & Parker Research to perform a third-party evaluation of the impacts of the SDUSD policy (called the Project Stabilization Agreement, or PSA). Key findings included: "Workers from targeted zip codes (economically disadvantaged portions of the District) have increased during the past six months and are presently close to achieving the very ambitious target of 35 percent that was set in the PSA."

Los Angeles Unified School District (LAUSD) also includes third-party compliance monitoring of its policy. From 2003 to 2011, just over 96,000 workers were hired on construction contracts covered by the LAUSD PSA, working approximately 45.16 million hours, with an average hourly wage of $32.29. Of those, 30,557 workers, or 31.8%, were apprentices. First-year apprentices, totaling 12,678 people, made up 41.5% of all apprentices on the project.[21]

Instrumental to LAUSD's success is the "We-Build" workforce development program, described in the evaluation report as follows:

"The LAUSD 'We-Build' program is a pre-apprenticeship program that outreaches to and trains local workers, and then funnels these workers into joint labor-management apprenticeship programs where apprentices receive training while they work on LAUSD projects. Not only does "We-Build" conduct the pre-apprentice job training components, but it also works closely with contractors and union hiring halls to help these groups meet the 50% local hire goal, the 30% apprenticeship goal, and the 40% first-year apprentice goal."[22]

19 "Project Stabilization /Community Benefits Agreement (PSCBA) Status Report to Board of Supervisors." (June 6, 2016). Presented to the Alameda County Procurement and Contracting Policy Committee. http://www.acgov.org/board/com_calendar/documents/Procure_Contract_minutes_6_6_2016I.pdf

20 Rossitter, Hugo S. and John L. Reamer. (2011). Using Project Labor Agreements (PLAs): The City of Los Angeles Perspective. 2011. City of Los Angeles.

21 Le, Uyen. (November 2011). *Project labor agreements: Pathways to business ownership and workforce development in Los Angeles*. Los Angeles: UCLA Labor Center, California Construction Academy.

22 Le, Uyen. (November 2011). *Project labor agreements: Pathways to business ownership and workforce development in Los Angeles*. Los Angeles:

Impact on Bidding and Small Business Participation

The most comprehensive recent analysis of the effect of public sector PLAs on bidding is a study published by UC Berkeley in January 2017. The researchers examined the effects of PLAs in the construction of community college projects in California. Statistical analysis of 263 community college projects (88 performed with a PLA and 175 without a PLA), controlling for project size, location and timing, found that projects with PLAs had slightly more bidders than projects without PLAs.[23]

To understand in more depth how and why PLAs affect bidding, especially with regard to small, minority-or woman-owned, or disadvantaged businesses, we can examine the functioning of individual PLAs.

The SFPUC's Water System Improvement Project Labor Agreement (WSIPLA) and the Port of Oakland's Modernization and Aviation Project Labor Agreement (MAPLA) are the largest and among the longest-standing PLA/CWAs in the Bay Area, and have the most robust impact data. Both these agreements also have systems in place to encourage use of local small/DBE contractors.

The SFPUC has a Local Business Enterprise program to encourage use of small local contractors on construction projects, including those covered by the WSIPLA. This program provides both a 10% bid discount for prime contracts who are local small businesses, and specific goals for subcontracting to local small businesses. Details of the SFPUC's Local Business Enterprise program are available at http://www.sfwater.org/index.aspx?page=112.

The MAPLA includes both a bid preference for small local businesses (up to 10 points), and a special set-aside pool of contracts for very small businesses which "was established to help small local construction firms, many of which are non-union contractors, by providing opportunities to increase their capacity to perform public work through graduated involvement in the Port's construction projects." A guide for small businesses on contracting with the Port is available at http://www.portofoakland.com/pdf/opportunities/Contract_101-Handout.pdf.

Outside of the Bay Area, **San Diego Unified School District (SDUSD)** contracted with Rea & Parker Research to perform a third-party evaluation of the impacts of the SDUSD policy on bidding. Key findings included: "The number of general contractor bidders and participating subcontractors per project has declined for PSA projects; however, this decline is not reflected in any increase in cost to SDUSD. . . .[and] does not translate into higher construction bids. . . . According to the survey, small subcontractors need help in obtaining bonding and meeting their insurance requirements much more than they feel they need technical or administrative aid."[24]

Finally, the Los Angeles Unified School District (LAUSD) has adopted a Project Stabilization Agreement with community workforce provisions that includes a Small Business Participation Goal of 25%, and requires third-party monitoring of compliance with the PSA. From 2003 to 2011, the district awarded

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UCLA Labor Center, California Construction Academy.

23 Waitzman, Emma and Peter Philips. (January 2017). *Project Labor Agreements and Bidding Outcomes: The Case of Community College Construction in California.* University of California, Berkeley. http://laborcenter.berkeley.edu/project-labor-agreements-and-bidding-outcomes/

24 Parker, Richard A. and Louis M. Rea. *San Diego Unified School District Project Stabilization Agreement: A Review of Construction Contractor and Labor Considerations.* Rea & Parker Research: Nov. 2011.

$8.7 billion in construction contracts, of which $4.1 billion went to small businesses. The LAUSD policy thus achieved a small business participation rate of 47.8%, meeting and exceeding the District's initial goal.[25]

Impact on Construction Costs

The Project Labor Agreement framework is designed to reduce total project costs by:

- Improving productivity,
- Ensuring practicability of labor costs and availability,
- Reducing project delays by banning strikes or lockouts and harmonizing contract expiration dates,
- Streamlining work rules and work schedules to improve cross-craft coordination and meet specific project timetables, and
- Through the use of local hiring halls, promoting hiring and retention of local workers who have greater investment in the project's successful completion.

It has been argued that a PLA could increase costs by raising the wage rates paid to the workforce. However, in California, public works projects on which a PLA might be applied typically are already subject to the state prevailing wage. On prevailing wage projects, a PLA therefore has no impact on wage rates. Rather, a PLA provides for enhanced enforcement of the existing wage rates through strict project-level oversight, making it more difficult for contractors or subcontractors to employ such illegal but widespread practices as misclassifying employees as independent contractors, bypassing safety regulations, or requiring employees to work off the books.

PLA-induced cost savings effects can occur in three ways: one, greater productivity results in fewer work hours needed, especially fewer unplanned overtime hours; second, improved adherence to planned timetables avoids additional expenses or loss of utility due to delays; and third, more efficient use of materials and equipment can produce cost savings.

The first and second effects listed above primarily impact labor costs, while the third effect primarily impacts non-labor costs.

The existence of cost effects on both labor and non-labor costs is important to note, because labor costs are often a fairly small proportion of the total project cost. For example, cost data for a series of library renovation projects in San Francisco showed that costs for worker wages and benefits made up approximately 33% of total project costs.[26] For new construction, the cost of land and materials is typically higher than for renovations, so the proportion of total cost attributable to labor is likely to be even lower. Any meaningful examination of the effects of PLA on construction costs must therefore consider the total cost of the project.

A seminal study investigated the effect of PLAs on the cost of new school construction in Massachusetts

25 Le, Uyen. (2011, November). *Project labor agreements: Pathways to business ownership and workforce development in Los Angeles.* Los Angeles: UCLA Labor Center, California Construction Academy.

26 Duncan, Kevin, Senior Economist, Colorado State University – Pueblo. "An Illustration of the Impact on the Santa Clara County Economy of Repealing the Prevailing Wage Policy of the City of San Jose." Project submitted to Working Partnerships USA, February 11, 2011.

between 1996 and 2002. Controlling for construction characteristics including location and type of structures being built, they found no discernable difference in construction costs between projects with and without PLAs.[27]

More recent case studies have indicated that PLAs appear to produce overall cost savings. In 2009, the City of New York put into effect four Project Labor Agreements covering $5.3 billion of new construction and renovation work. Due diligence studies performed by four independent construction management firms found that the agreements would save New York City approximately $300 million.[28]

Several California jurisdictions that enacted PLAs with Community Workforce provisions have undertaken evaluations of the impact on construction costs:

The **City of Los Angeles** tracked winning bids relative to the Engineer's Estimate before and after a PLA policy with Community Workforce provisions was implemented for its ATSAC System. The analysis showed that "after the PLA was implemented, the bids for the most part started to trend closer or lower than the engineer's estimate," implying that the PLA policy reduced construction costs. However, in the judgement of City personnel, the PLA policy had no discernable effect on costs; they concluded that "the bid amounts appear to be more of a function of the state of the economy of the construction industry."[29]

The City of Los Angeles Community Redevelopment Agency (CRA/LA) in 2008 enacted a Construction Careers and Project Stabilization Policy that applied CWAs to **affordable housing developments** built using CRA/LA subsidies. This provided an opportunity to directly compare construction costs of affordable housing projects built under the CWA to other affordable housing projects built in L.A. during the same time period without a PLA or CWA. Statistical analysis of 130 affordable housing projects built in L.A. from 2008 to 2012 showed no significant different in construction costs between the PLA projects and the non-PLA projects.[30]

San Diego Unified School District contracted with Rea & Parker Research to perform a third-party evaluation of the impacts of the SDUSD policy (called the Project Stabilization Agreement, or PSA). Key findings included:

- "There has been no increase in the cost of the winning bids for school construction projects under the San Diego Unified School District (SDUSD) Project Stabilization Agreement (PSA) than [compared with] the winning bids for non-PSA projects under Proposition S that was approved in November, 2008."
- "Project completion time is faster under the PSA than for Proposition S projects that predated the PSA. Faster completion allows for the District to experience less overhead per project and for the more efficient replacement school improvements to be in operation more quickly."[31]

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27 Belman, Dale, Russell Ormiston, Richard Kelso, William Schriver, And Kenneth A. Frank, "Project Labor Agreements' Effect on School Construction Costs in Massachusetts." Industrial Relations, Vol. 49, No. 1 (January 2010).

28 Kotler, Fred B. J.D., "Project Labor Agreements in New York State II: In the Public Interest and of Proven Value" (2011). Research Studies and Reports. Paper 36. http://digitalcommons.ilr.cornell.edu/reports/36

29 Rossitter, Hugo S. and John L. Reamer. (2011). "Using Project Labor Agreements (PLAs): The City of Los Angeles Perspective." City of Los Angeles.

30 Philips, Peter and Scott Littlehale. (Sept. 2015). "Did PLAs on LA Affordable Housing Projects Raise Construction Costs?" Working Paper No: 2015-03, University of Utah, Department of Economics.

31 Parker, Richard A. and Louis M. Rea. (November 2011). *San Diego Unified School District Project Stabilization Agreement: A Review of Construction Contractor and Labor Considerations.* Rea & Parker Research.

Finally, a recent study published by UC Berkeley examined the effects of PLAs in the construction of community college projects in California. The researchers undertook statistical analysis of 263 community college projects, 88 performed with a PLA and 175 without a PLA. Controlling for project size, location and timing, they found that the presence or absence of a PLA had no effect on total project cost. (In fact, the analysis showed that the low bids were slightly lower on projects with a PLA, but the difference was not statistically significant.)[32]

32 Waitzman, Emma and Peter Philips. (January 2017). *Project Labor Agreements and Bidding Outcomes: The Case of Community College Construction in California.* University of California, Berkeley. http://laborcenter.berkeley.edu/project-labor-agreements-and-bidding-outcomes/

APPENDICES

Appendix A: Model Community Workforce Language

Community Workforce language (sometimes also called "Targeted Hiring" or "Construction Careers" language) is typically incorporated into a Project Labor Agreement or equivalent, either as an addendum or in the body of the agreement.

Following is sample Community Workforce language for the South Bay subregion, structured as an addendum to a Project Labor Agreement between a government entity (identified as CITY/COUNTY/AGENCY) as the project owner, and the local Building Trades Council.

Addendum X to Project Labor Agreement

Community Workforce Pipeline

Purpose. The Parties to the Project Labor Agreement ("the Agreement") recognize the mutual needs and public interest in: (1) increasing training and career opportunities for underrepresented and targeted individuals in the construction trades through apprenticeship and pre-apprenticeship programs and (2) developing a pipeline to ensure the continued availability of a skilled, qualified and readily available construction workforce for this and future construction Projects. Furthermore, the Santa Clara & San Benito Counties Building Trades Council ("Council") with other parties, is signatory to the Santa Clara County Construction Careers Collaborative MOU, which is working to establish a coordinated Santa Clara County pre-apprenticeship program to serve as a pipeline for youth and jobseekers into apprenticeship. In furtherance of these goals, the Parties agree to enter into this Community Workforce Agreement for Targeted Hire ("THA") and to participate in the Santa Clara County Community Workforce Pipeline ("the Pipeline").

I. ***Definitions.***

All capitalized terms not defined below are as defined in the Agreement.

Approved Pre-Apprenticeship Program. An Approved Pre-Apprenticeship Program means the Santa Clara County Trades Orientation Program or an equivalent structured, MC-3 certified pre-apprenticeship program that: (1) serves Underrepresented Workers, and (2) is sponsored by Council-approved community-based organizations ("CBOs"), Council affiliates, or by Local, State, Regional or National Building Trades Councils.

At-Risk Youth. An At-Risk Youth means a person 18-24 years old who is one of the following: 1) disconnected from school and/or work; 2) currently or formerly justice engaged; 3) in the foster care system; 4) pregnant/parenting; or 5) homeless.

Community Workforce Coordinator. The Community Workforce Coordinator means the work2future Workforce Investment Board, or another entity as determined by mutual written agreement of the Council and [CITY/COUNTY/AGENCY]. The Community Workforce Coordinator is responsible for maintaining an up-to-date list of Targeted Workers who are available for work with their current contact information, and will provide this list to any of the Parties upon request.

Covered Contractor. A Covered Contractor means a contractor of whatever tier that performs $250,000 or more of Covered Work (as that term is defined in Section 2.3 of the Agreement) on a Project. A Covered Contractor is subject to the Workforce Goal. If a contractor performs less than $250,000 of Covered Work on a Project, that contractor is not subject to the Workforce Goal, but may nonetheless participate voluntarily in the Workforce Goal.

Underrepresented Worker. An Underrepresented Worker is an individual who, prior to commencing work on a Project has at least one of the following barriers to employment: (1) is currently homeless; (2) is currently receiving public assistance; (3) is currently participating in a reentry program or was formerly incarcerated; (4) has been continuously unemployed for the previous one year; (5) has a family or household income that falls below the Self-Sufficiency Standard for Santa Clara County ; (6) has been emancipated from the foster care system; (7) is a veteran of the U.S. military; or (8) is an At-Risk Youth.

Targeted Worker. A Targeted Worker is an individual who has completed an Approved Pre-Apprenticeship Program.

II. ***Workforce Goal.*** Consistent with any Master Labor Agreements, hiring hall procedures, and JATC standards as approved by the Division of Apprenticeship Standards, Department of Industrial Relations, State of California; and with the requirements of California Labor Code §§ 1776, 1777.5 and 1777.6, each Covered Contractor shall employ 1 or more Targeted Worker(s) as First Year Apprentice(s) for at least 25% of the Covered Contractor's apprentice hours on the Project, unless the Contractor demonstrates to the Community Workforce Coordinator that the Targeted Worker(s) worked the maximum available first year apprentice hours.

a) Nothing herein requires a Covered Contractor either to hire a particular individual or to retain a particular individual in employment.

b) A Covered Contractor may receive credit toward the Workforce Goal for hours performed by a Targeted Worker assigned to work on the Project or on another jobsite at the employer's discretion, provided that the worker is assigned to the same job classification that would apply to a Targeted Worker on the Project.

c) Each Covered Contractor shall employ the maximum number of apprentices allowed by law.

d) All apprentices shall be properly supervised and paid in accordance with provisions contained within the Master Labor Agreements.

e) The Covered Contractor agrees to maintain electronic records documenting employment of and hours worked by Targeted Worker(s), and to provide such records to the General Contractor, [CITY/COUNTY/AGENCY], or the Community Workforce Coordinator upon request.

f) Prior to commencing work on a Project, each Covered Contractor shall obtain approval by [CITY/COUNTY/AGENCY] of a Targeted Apprentice Hiring Plan, which, in a form determined by [CITY/COUNTY/AGENCY] details how the Covered Contractor will meet its obligations hereunder to employ Targeted Workers as First Year Apprentices.

g) In the event that the Community Workforce Coordinator is unable to refer sufficient qualified, available, and willing Targeted Workers, this subsection shall not apply until such time as qualified and willing Targeted Workers are available for hire.

h) [CITY/COUNTY/AGENCY] **Obligations**. The Community Workforce Coordinator, upon request, will refer names of qualified, available, and willing Targeted Workers to the Union and Covered Contractors.

i) Union Obligations. The Unions agree to cooperate with Covered Contractor(s) in providing apprentices as requested. The Unions also agree to cooperate with [CITY/COUNTY/AGENCY] and community-based organizations designated by mutual agreement of [CITY/COUNTY/AGENCY] and the Council in conducting outreach activities to recruit and refer Underrepresented Worker applicants to Approved Pre-Apprenticeship Programs for which they are qualified or qualifiable.

III. ***Alternate Method to Satisfy Workforce Goal ("Best Faith Effort").***

a) A Covered Contractor who fails to meet its employment obligations under Section II above may also satisfy its obligations under this Addendum thorough a "best faith effort" by demonstrating that it has accomplished all of the following:.

1. Employ at least one (1) entry-level apprentice on the Project (or for equivalent work on another jobsite, provided that the apprentice is assigned to the same job classification the apprentice would have performed on the Project).

2. Through written requests made using a Craft Request Form, offer the Community Workforce Coordinator the first opportunity to provide Targeted Workers for employment consideration on entry-level apprentice positions.

3. Using a Craft Request Form, request construction trades Unions to dispatch qualified, willing, and available Targeted Workers in an amount sufficient to meet the hiring obligations under Section II.

4. Contact and provide the following information to the Community Workforce Coordinator for all entry-level apprentice job openings on the project in a timely manner when requested:

   a) description of the job, including the trade and any job requirements for applicants, such as specific qualifications or skills;

   b) person's name and telephone number at the Covered Contractor's business who will be responsible for answering questions regarding the job opening; and

   c) description of how applicants should apply for the job.

IV. ***Consequences of Non-Compliance:*** The Joint Administrative Committee (JAC) established by the Project Labor Agreement shall consider allegations of non-compliance by a Covered Contractor with the THA. If there is a determination by the JAC that a Covered Contractor has: (1) failed to meet the Workforce Pipeline Goal set forth in Section II of the THA, and (2) failed

to demonstrate that they have made a Best Faith Effort as set forth in Section III of the THA, the issue will be referred to the grievance procedure as provided in Article XX of the Agreement. At any time during the process of compliance review, the JAC shall have the authority to reach a resolution with the Covered Contractor.

V. ***Implementation.*** The JAC shall help monitor and implement the THA.

Appendix B: Community Workforce Agreements in California Cities and Other Selected Jurisdictions

The following chart summarizes the projects covered and key Community Workforce provisions of PLA policies adopted by local government entities. While this is not a comprehensive list, we have attempted to identify all known CWA-type policies enacted by local government entities in California. Selected policies developed by large cities outside of California are also included.

PLA policies that lack explicit Community Workforce provisions are not included; nor are CWAs which cover only a single project.

This chart is current as of March 2016. The CWA policies adopted in 2016 by the County of Santa Clara and the Santa Clara Valley Transportation Authority are therefore not included.

Jurisdiction	Type of entity	Agreement coverage	When enacted	Community Workforce provisions
Berkeley	City	City-wide public works $500,000+	Original 1/18/11; renewed 6/23/15	Current: 20% local hire; targeted hire of 1 new disadv. apprentice per $500K; referral thru MC3 pre-apprenticeship programs
Carson (CA)	City	City-wide general construction public works contracts $125,000+; specialty construction public works $25,000+	2005	30% local hire; 5% targeted hire of disadv. workers; referral through local WIB & CBOs. (Original PLA had no tracking or enforcement provisions for these goals.)
Chicago	City	City-wide public works $25,000+	2011 (most recent renewal)	25% of apprentices hired to be graduates of Chicago Public Schools; building trades unions agree to specific outreach steps to CPS students and teachers
El Monte	City	City-wide construction work	2013	30% local hire
Long Beach	City	City-wide public works $500K+	April 2015	40% local hire; 10% targeted hire; referral through pre-apprenticeship programs.

Jurisdiction	Type of entity	Agreement coverage	When enacted	Community Workforce provisions
Los Angeles	City	City-wide infrastructure projects undertaken by the Dept. of Public Works.	2010 (for blanket PLA; a number of project-based PLAs were signed prior to this date)	30% local hire; 10% targeted hire. Referral through Jobs Coordinator, WorkSource Center, CBOs & pre-apprenticeship programs.
Martinez	City	City-wide public works $250,000+	11/19/14	25% local hire (not clear how it is implemented)
New York City	City	$6 billion in City public works	2009	45% of new apprentice slots be filled by disadv. residents. Referral through pre-apprenticeship.
Philadelphia	City	City public works $5 million+	2011 (exec order)	Minimum 50% local hire, 32% minorities, 7% women.
Richmond (CA)	City	Policy supporting PLAs on City projects (individual PLAs are project-based). Local employment ordinance on public works $100,000+.	2001 (policy). 2010 (local hire ordinance).	Local employment ordinance: 25% local hire; 25% of new hires must be Richmond residents; referral through pre-apprenticeship programs.
San Fernando	City	City-wide general construction public works contracts $125,000+; specialty construction public works $25,000+	2005 (extended 2010)	30% local hire; commitment to develop pre-apprenticeship programs & pipelines with local schools.
San Leandro	City	City-wide public works $1 million+	June 2015	30% local hire; targeted hire of 1 new local apprentice per first $1M and 1 for each subsequent $5M
Seattle	City	All public works projects w/ budget + contingency of $5 million or more	April 2015	Local hire; targeted hire of disadv. workers (percentage targets established on project-by-project basis). 1 of every 5 apprentices to be referred from a recognized pre-apprenticeship program.

Jurisdiction	Type of entity	Agreement coverage	When enacted	Community Workforce provisions
Watsonville	City	City-wide public works $600,000+	2013	Contractors shall comply with City Code 7-15.03, Local Hiring Requirement.
Community Redevelopment Agency of Los Angeles (CRA/LA)	City redevelopment agency	All development subsidized at $500,000 or more or occurring on land owned by the CRA	2008 (ended when Governor dissolved all redevelopment agencies)	30% local hire; 10% targeted hire of disadv. workers; 50% of apprentice hours to be done by local residents. Referral through pre-apprenticeships/CBOs.
Alameda	County	County-wide public works $1 million+	June 2013	40% local hire; targeted hire of 1 new disadv. apprentice per first $1M and 1 for each subsequent $5M; referral thru pre-apprenticeship programs
Contra Costa	County	County-wide public works $1 million+	Jan. 2002	n/a
Solano	County	County-wide public works $10 million+	2004	Commitment to encourage local hiring & apprentice utilization.
Sonoma	County	County-wide public works $10 million+	Jan. 2014	70% local hire (local = resident of Sonoma, Marin, Lake, Mendocino or Napa County); agreement to support development of pre-apprenticeship program
Foothill De Anza Community College District	CCD	All Measure C funded projects (no minimum)	2008	Construction Careers Program (contractors to provide paid internships for FHDA students)
Los Angeles Community College District	CCD		2001	30% local hire; 20% of local hires must be disadv. workers. Referral through pre-apprenticeship program (PV Jobs).
Peralta Community College District	CCD		2009 (Amendment 1: Jan. 2015)	50% local hire; 20% local apprentice hire. Amendment 1 added: targeted hire of 1 new local apprentice per first $1M and 1 for each subsequent $5M; referral thru MC3 pre-apprenticeship programs.
San Mateo Community College District	CCD	All major capital improvement projects	2003 (renewed in 2007, 2009 & 2012)	Amended PLA currently being developed that would include targeted hiring of new apprentices from TIP MC3 pre-apprenticeship.

Jurisdiction	Type of entity	Agreement coverage	When enacted	Community Workforce provisions
Alum Rock Union Elementary School District	School district	All Measure G & Measure J funded projects (no minimum)	2009 (renewed in 2013)	Construction Careers Program (contractors to provide paid summer internships for ARUESD teachers)
East Side Union High School District	School district	All bond funded projects (no minimum)	2003 (extended in 2009)	Construction Careers Program (contractors to provide paid internships for ESUHSD students)
Hayward Unified School District	School district		2009	40% local hire
Los Angeles Unified School District	School district	All general (prime) multi-trade contracts that exceed $175,000; all general (prime) specialty contracts that exceed $20,000; and job order contracts.	2003	50% local hire; 40% of apprentices must be first-year Referral through pre-apprenticeship program (We Build).
San Diego Unified School District	School district	All Measure S bond projects over $1 million	2009	100% local hire (County residents); 35% targeted hire (residents of designated ZIP codes). Commitment to develop a pre-apprenticeship program.
AC Transit	Transp. agency	BRT	Oct. 2013	See agreement – targeted hire w / federal provisions
Los Angeles Metro	Transp. agency	Capital projects $2,500,000+	2012	40% local hire; 10% targeted hire of disadv. workers; 20 % of work hours to be performed by apprentices; 50% of apprentice hours to be done by local residents. Referral through Jobs Coordinator.
California High Speed Rail	Transp. agency	All construction contracts (no minimum)	2012	At least 30% of work hours to residents of targeted areas / 10% of work hours to disadvantaged workers

Jurisdiction	Type of entity	Agreement coverage	When enacted	Community Workforce provisions
Port of Oakland (MAPLA)	Port Commission	All projects $150,000+	2000 (original); most recent renewal 2/1/16.	50% local hire (includes residents of neighboring cities) **and** 20% of hours to be worked by local apprentices. Targeted hiring goal of one new hire local resident for the first $1 million dollars of construction bid value and for each additional $5 million, one additional new hire.
San Francisco Public Utilities Commission (WSIPLA)	Municipal utility	All water projects over $5 million (covers approx. $4.3 billion CIP)	2007	50% local hire (residents of SF or the greater SFPUC service area); 20% apprentice hire. Referral through pre-apprenticeship program (CityBuild).

WORKING PARTNERSHIPS USA

Working Partnerships USA is a community organization that drives the movement for a just economy by bringing together public policy innovation and the power of grassroots organizing. We build the capacity of workers, low-income neighborhoods and communities of color to lead and govern. Based in Silicon Valley, we tackle the root causes of inequality and poverty by leading collaborative campaigns for good jobs, healthy communities, equitable and sustainable growth and a democracy that works for all.

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Testimony of Peter Philips, Ph.D., Professor of Economics, University of Utah

PLAs Are Common in California

Project labor agreements (PLAs) are a common contractual agreement found both in the public and private sectors of U.S. construction. In California, the California Research Bureau of the California State Library found that 72 percent of the sample of PLAs they studied were private sector project labor agreements.[1] Because they are public documents, public sector PLAs are more easily tracked.

Kevin Dayton, a critic of public sector PLAs, has compiled a list of 213 public sector PLAs signed since 1993 of which 74 were with California public school districts or community colleges. Between 2013 and early 2015, 37 public sector PLAs were signed, with just over half (19) being school district or community college PLAs.[2] In the Bay Area, Dayton found 27 public school and community college project labor agreements. These are listed in the footnote below.[3]

New Partners: New Opportunities

To understand why project labor agreements are popular both in the public and private sectors of construction, one needs to understand what a PLA is.

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[1] Kimberly Johnston-Dodds, "Constructing California: A Review of Project Labor Agreements," California Research Bureau, California State Library, CRB 01-010, 2001, https://www.library.ca.gov/crb/01/10/01-010.pdf

[2]Kevin Dayton, President and CEO, Labor Issues Solutions, LLC , "Copies of All Project Labor Agreements on California Government Projects, 1993-Present," Chart compiled as of April 6, 2015. http://laborissuessolutions.com/list-of-all-project-labor-agreements-imposed-on-government-projects-california-1993-2012/

[3] They included: Albany Unified School District, Alum Rock Union Elementary School District, Antioch Unified School District, Berkeley Unified School District, City College of San Francisco, College of Marin (Marin Community College District), Contra Costa Community College District, East Side Union High School District, Foothill-DeAnza Community College District, Fremont Union High School District, Hayward Unified School District, Milpitas Unified School District, Mt. Diablo Unified School District, Oakland Unified School District, Oakley Union Elementary School District, Peralta Community College District, Pittsburg Unified School District, San Francisco Unified School District, San Jose-Evergreen Community College District, San Leandro Unified School District, San Mateo Community College District, San Mateo Union High School District, San Ramon Valley Unified School District, Solano Community College District, Vallejo City Unified School District, South San Francisco Unified School District, West Valley-Mission Community College District; Kevin Dayton (see citation above).

A project labor agreement is a pre-hire contract between an owner with work to be done and a group of construction craft unions hoping to get some of that work. In traditional collective bargaining, in construction, specific craft unions bargain with their related specialty or general contractors over future prospective work in general. With project labor agreements, all construction craft unions in an area, as a group, bargain with an owner over a known amount of specific work.

The owner has a bargaining advantage with PLAs that contractors engaged in traditional bargaining do not have. Owners have a bird in the hand--known work, while contractors are bargaining over birds in the bush--possible, prospective work. Unions are attracted to known, upcoming work as opposed to prospective work that may or may not emerge.

Thus, the owner can ask for something (or many things) of unions in exchange for actual, in-the-works, employment opportunities. What the owner asks for is up to the owner. It could be a no-strike pledge. It could be concessions on work schedules, holidays, overtime or work rules. The owner could ask for wage concessions or expedited worker compensation procedures.

In addition to possible concessions, the owner could also ask for sweeteners--local hire provisions, local access to apprenticeship training, help with project permits or project bonding. Whatever the combination of concessions or sweeteners that the owner asks for, the owner is offering to trade real work for these modifications from or additions to the local collectively bargained contracts.

As with all bargaining, the union and the owner may not reach "yes" in negotiating over a project labor agreement. Each party is free to walk away if the inducement is not worth the cost.

All that a PLA does is bring new parties together to explore new possibilities of win-win. If they are found, then a PLA is signed. If they are not found, the PLA goes unsigned. The provisions of a PLA vary widely based on the needs of the owners and unions that get together to explore mutual benefits. The key point is that PLAs provide a tool for owners and unions to explore potential mutual benefits that are not available to either party through traditional collective bargaining. When more lines of negotiation exist, when more negotiation partners are joined, new and potentially creative win-wins are opened for exploration.

Critics Argue that School PLAs Increase Costs by Reducing the Number of Bidders

Despite the popularity of PLAs, they remain controversial in the public sector. Critics argue that PLAs come with a cost: they raise public construction costs. The route to raising costs on prevailing wage projects is through reducing the number of bidders on PLA public projects compared to non-PLA public projects. Also, critics argue that union work rules hobble productivity and increase costs. Furthermore, critics state that PLAs discriminate against nonunion contractors and workers.

Setting aside the issue of the number of bidders for the moment, because PLA provisions are flexible, owners concerned with nonunion access to PLA projects or work rules can negotiate into their PLA provisions allowing nonunion contractors to bid on their PLA project, and/or allowing nonunion

contractors to bring onto the project core nonunion workers. The owner can negotiate work rules and jurisdictions between crafts. The owner can negotiate accelerated dispute resolution procedures.

PLAs are contracts and as such the contract can be tailored to the needs and concerns of the owner.

Nonetheless, the Associated Builders and Contractors (ABC) argues that PLAs are poor public policy because "PLAs increase the costs to taxpayers, reduce the number of potential bidders, and do nothing to improve the quality, safety, timeliness or overall efficiency of government construction projects."[4]

In support of the argument that PLAs raise government construction costs, the ABC underwrote a study of public school construction costs in California.[5] This study noted that

> Opponents argue that PLAs increase costs. They claim that the requirements imposed by PLAs discourage nonunion contractors from bidding on projects and subcontractors from participating. This reduced competition, it is claimed, results in overall higher bids. Opponents also claim that the work condition rules required in PLAs increase labor costs and that these are passed onto the project's developer.[6]

To test this proposition, the authors selected data from 551 public schools with 88% built without PLAs and 12% with PLA contracts. Using standard statistical techniques, the authors concluded that school construction "costs are 13 to 15 percent higher when school districts construct a school under a PLA."[7]

If correct, these are dramatic conclusions because labor costs as a percent of total costs in California construction averages around 25%.[8] Wage rates and benefits on public school construction do not vary significantly between PLA and non-PLA projects because both require the payment of prevailing wages. Thus, without changing wage rates or benefits at all, the authors conclude that with the elimination of PLA agreements, wage costs would fall by 60 percent due to the elimination of union work rules and or the increase in the number of bidders.[9]

The source of this conclusion may, however, be the result of a statistical confusion. The higher cost of school PLAs in the authors study is primarily driven by higher costs of building schools in Los Angeles. So

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[4] Maurice Baskin, Esq, Associated Builders and Contractors (ABC), "Statement for the Record for Associated Builders and Contractors," Before the House Oversight and Government Reform Committee Technology, Information Policy, Intergovernmental Relations and Procurement Reform Subcommittee, June 3, 2011, p. 2, http://edworkforce.house.gov/uploadedfiles/baskin_-_testimony.pdf

[5] Vince Vasquez, Dr. Dale Glaser, and W. Erik Bruvold, "Measuring the Cost of Project Labor Agreements on School Construction in California," 2010, http://www.nusinstitute.org/assets/resources/pageResources/Measuring-the-Cost-of-Project-Labor-Agreements-on-School-Construction-in-California.pdf

[6] Vasquez, et al. p. 1.

[7] Vasquez et al. p. 1.

[8] US Bureau of the Census, EC1223A1, Construction: Geographic Area Series: Detailed Statistics for the State: 2012, California, 2012 Economic Census http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

[9] If labor costs are 25% of total costs, and total costs fall by 15% due to a change in labor costs, then labor costs must fall from 25% to 10%. This is a 60% decline in the cost of labor.

the question becomes--is the 15% higher cost they find due to PLAs or due to the costs of construction in Los Angeles?

The authors submitted their statistical analysis for review to the University of Southern California, Keston Institute for Public Finance and Infrastructure Policy. The Keston Institute pointed out that:

> The LAUSD projects [in the Vasquez study] represent an unavoidable dilemma of covariance which hindered the ability of the research team to delineate to what extent it was the presence of PLAs or the LAUSD that explain the variability in cost. Despite laudable efforts by the research team to address this issue, they were not able to disentangle the two factors.[10]

The statistical term "covariance" in this case simply means one cannot know from the Vasquez study whether the more expensive schools in Los Angeles are due to the PLAs on LAUSD schools or other factors such as the cost of construction in LA or the characteristics unique to LAUSD schools. Unlike some of the literature that the authors criticize, a search of Google Scholar does not show that the Vasques paper has ever passed peer review and been published in an academic journal. The likely reason for this is the "covariance" hole in the Vasquez research found by the Keston Institute.[11]

Vasquez et al. also failed to show that PLA projects actually discouraged contractors from bidding on PLA projects in sufficient numbers so as to increase construction costs. Given that the hypothesized cause of higher PLA costs is fewer PLA bidders, this is an important missing piece of the puzzle. We now turn to that piece.

The General Relationship between Bidders and Costs in Construction

Increasing the number of bidders on a construction project can increase competition and decrease costs but there are diminishing returns to increasing the number of bidders. The second bidder on a project has the biggest effect on competition because that bidder breaks the monopoly held by the first bidder. The third bidder also increases competition but less so than the second. The fourth bidder will increase competition but with less of an impact compared to the third. And so on. In general, the effect of a

[10] Letter from Richard G. Little, AICP, Director, The Keston Institute for Public Finance and Infrastructure Policy to Mr. Kevin D. Korenthal, Executive Director, Associated Builders and Contractors of California Cooperation Committee, July 13, 2011 found in Vasquez, et al. p. 18.

[11] For instance, Vasquez et al. criticize Belma et al. who do not find a cost increase associated with school PLAs. But while the Belman piece passed peer review and was published in the University of California journal Industrial Relations, the Vasquez paper has not been accepted in a peer-reviewed academic journal. See: DALE BELMAN, RUSSELL ORMISTON, RICHARD KELSO, WILLIAM SCHRIVER and KENNETH A. FRANK, "Project Labor Agreements' Effect on School Construction Costs in Massachusetts, ***Industrial Relations***, Volume 49, Issue 1, pages 44–60, January 2010.

seventh or eighth bidder on the lowest bid price will be minimal. In a sprint does the fastest runner run that much faster when there are seven runners instead of six?[12]

Various factors will determine how many bidders there are on a project and how much influence the next bidder will have on the lowest bid. All other things being equal, larger projects will have fewer bidders because fewer contractors will have the resources and qualifications to build larger projects. In the downturn, there will be more bidders for each of the fewer available projects as contractors scramble for work. In the upturn, each project will attract fewer bidders as contractors are busy.

The size of a project will affect the importance of each additional bidder on the competition for a project. In general, the larger the project, the fewer bidders are needed to make a project competitive. This is because the value of large projects to contractors induces them to carefully prepare their bids fearful of losing a big project. Typically where 4 or 5 bidders are needed to make a smaller project competitive, 3 or even 2 will do on a larger project.[13]

Prequalification will affect the number of contractors actually bidding on a project by eliminating less qualified contractors. This is not necessarily a bad thing in the construction industry because reducing the number of bidders may be justified by the elimination of a potential winner who might not actually be able to build the project.

In the analysis of the San Jose Unified School District compared to East Side Union High School District below, the slight difference in the average number of bidders between the two districts can be accounted for by the fact that during the period of analysis, San Jose Unified used multiple prime contracts while East Side used general contractors. The smaller values on the multiple prime contracts helps explain the slight increase in the average number of bidders (4.5 vs. 4.0). In the analysis of the College of Marin projects below, the PLA projects were larger also helping to explain the somewhat larger number of bidders on the smaller non-PLA projects (8.5 vs. 7.3). Having one additional contractor bidding on a project that already has 4 to 7 bidders is unlikely to cut labor costs by 60%.

San Jose Unified School District vs. East Side Union High School District

The East Side Union High School District and the San Jose Unified School District are similar adjacent public school districts in San Jose, California.[14] In March 2002, voters in both districts approved bond issues for school construction, repair and renovation. The East Side vote allowed the district to borrow up to $300 million. In San Jose, the vote capped borrowing at $429 million. In 2004, the East Side district

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[12] Sheng Li, Joshua R Foulger and Peter W Philips, "Analysis of the Impacts of the Number of Bidders Upon Bid Values," ***Public Works Management Policy***, January 2008 vol. 12 no. 3 503-514

[13] Sheng Li and Peter Philips, "Construction Procurement Auctions: Do Entrant Bidders Employ More Aggressive Strategies than Incumbent Bidders?," ***Review of Industrial Organization***, May 2012, Volume 40, Issue 3, pp 191-205.

[14] https://en.wikipedia.org/wiki/East_Side_Union_High_School_District
https://en.wikipedia.org/wiki/San_Jose_Unified_School_District

entered into a PLA with the Santa Clara and San Benito Building and Construction Trades Council. The San Jose district chose to build without a PLA.

The different decisions of the districts with regard to a PLA leave us with the perfect ingredients for a naturally occurring experiment. We can compare bidding behavior with the East Side district before and after the implementation of the PLA, and we can compare across districts.

Belman, Bodah and Philips identified 21 projects in the East Side district bid under the PLA and 35 projects bid during the same period without a PLA in the San Jose district. They also identified twelve projects bid prior to the PLA agreement in the East Side district and 96 projects in the San Jose district during the same period. Thus, they compared 164 projects, 21 of which were built under a PLA.

There were two potentially important differences between the two districts with respect to project bidding. First, the East Side projects were, in dollar value, approximately two to three times larger than the San Jose projects both before and after the use of PLAs. Also, the two districts employed different bidding procedures. The East Side district favored hiring a single prime contractor, who then sought its own subcontractors, while the San Jose district treated specialty contractors as individual prime contractors.

Data on these projects showed that the East Side district received, on average, fewer bidders per bid opening compared to San Jose Unified (approximately 4.5 versus approximately 4.0). This result would be consistent with the assertion that PLAs reduce the number of bids on a project, except that the result holds for both before and after the implementation of the PLA. In fact, the difference in the number of bidders between the two districts decreased after the acceptance of the PLA.

Further, the number of bidders dropped across both districts over the time period. This decrease was probably due to an increase in construction activity in the area at the time. In general, during busy periods fewer contractors bid on any given project compared to slack times when idle contractors crown onto the bid lists of available projects.

The small difference in the number of bidders both before and after the PLA across both districts is probably due to the differing methods of construction management. By using separate prime contracts on specialty work San Jose Unified would attract slightly more contractors simply because there are more specialty than general contractors in most construction markets. Also by chopping projects up into smaller multiple prime contracts, the smaller dollar size of contracts helps qualify more contractors to bid.

The key point is that the ratio of bidders on the East Side and San Jose Unified projects remained unchanged before and after East Side Unified High School District took on a PLA.[15]

[15] Dale Belman, Matthew M Bodah and Peter Philips, "Project Labor Agreements," Electri International, The Foundation for Electrical Construction, 2007, pp. 53-59.

College of Marin PLA vs. Non-PLA Projects

Vasquez was criticized the Keston Institute for being unable to disentangle the effects of PLAs from the effects of building schools in the Los Angeles Unified School District (LAUSD). Keston stated:

> Perhaps the only way to do so is empirically, with LAUSD undertaking a group of projects which do not utilize PLAs to serve as a control group.[16]

While the LAUSD has not performed such an experiment, the College of Marin recently has. " The College of Marin is a community college in Marin County, California, U.S., with two campuses, one in Kentfield, and the second in Novato. It is the only institution operated by the Marin Community College District."[17] In June 2007, the Marin Community College District Board approved negotiations for a PLA (called a project stabilization agreement--PSA) with the Marin County Building Trades to build three projects-- the Science/Math/Central Plant project at the Kentfield Campus, and the Main Building project at the Indian Valley Campus. After a year of negotiations, the PLA was approved. Contemporaneously, the Board had authorized the construction of four projects-- the Performing Arts Center, the Diamond PE Complex, the Transportation Technology Center, and the Fine Arts Center at Kentfield without PLAs.[18] Pleased with the performance of the first two PLAs, the Board adopted an additional PLA for the New Academic Center (NAC) project in 2013.

> The NAC, as planned, is a 44,257 square foot, three level facility located along College Avenue at the District's Kentfield campus. The NAC will house classrooms, a large 120-seat capacity lecture room, computer labs, ESL facilities, and faculty offices, including the Dean's office. The NAC will replace five existing older buildings on the site: Harlan Center, Business Management Center, Olney Hall, the Administrative Center, and the Taqueria restaurant building.[19]

So here we have the "a group of projects which do not utilize PLAs to serve as a control group."[20] Table 1 shows the average start and completion dates for the three PLA and four non-PLA College of Marin projects. The New Academic Center will be completed in 2015 but is still wrapping up construction. The non-PLAs, on average, began at the bottom of the Great Recession while the PLA projects began, on average in 2011. Both projects, on average, are completed in two years. While all of the PLA projects required that contractors be prequalified, half of the non-PLA projects did not require contractor prequalification. The PLA projects were larger--with an average engineer's estimate of $29.3 million compared to $12.5 million for the non-PLA projects.

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[16] Letter from Richard G. Little, AICP, Director, The Keston Institute for Public Finance and Infrastructure Policy to Mr. Kevin D. Korenthal, Executive Director, Associated Builders and Contractors of California Cooperation Committee, July 13, 2011 found in Vasquez, et al. p. 18.

[17] https://en.wikipedia.org/wiki/College_of_Marin

[18] http://www.marin.edu/WORD-PPT/BoardPacket4_16_2013.pdf
http://www.marin.edu/WORD-PPT/PSAMCCDNAClusionBOT20130618.pdf

[19] http://www.marin.edu/WORD-PPT/BoardPacket4_16_2013.pdf

[20] Letter from Richard G. Little, AICP, Director, The Keston Institute for Public Finance and Infrastructure Policy to Mr. Kevin D. Korenthal, Executive Director, Associated Builders and Contractors of California Cooperation Committee, July 13, 2011 found in Vasquez, et al. p. 18.

On the PLA projects, on average, 7.3 contractors bid while on the non-PLA projects, on average, 8.5 contractors bid. The one fewer bidders on the PLA projects may be explained by 1) the larger size restricting the pool of qualified contractors, 2) prequalification restricting the pool of qualified contractors, 3) the upswing in the construction business cycle limiting the availability of qualified contractors, or 4) the PLA discouraging nonunion contractors (50% of the non-PLA general contractors were nonunion compared to 33% of the PLA general contractors).

Regardless of the reason for one fewer bidders on the PLA contracts, the number bidding were sufficient to generate a competitive low bid. In the case of the PLA projects, the low bidder was, on average, 25% below the engineer's estimate compared to a similar average low bid coming in 22% below the engineer's estimate on the non-PLA projects.

However, in the case of final costs, the gap between the engineer's original estimate and final costs almost converge in the case of the non-PLA projects while in the case of the PLA projects, the final cost still came in 14% below the engineer's estimate.

One can argue whether the change orders that lead to higher final costs compared to accepted bid price are the fault of the owner or the contractor. Regardless, in this controlled experiment, the PLA projects were certainly no more expensive than the non-PLA projects and a case can be made that they were, on average, cheaper. Certainly the decision of the Board of Trustees to adopt an additional PLA after experience with both PLA and non-PLA approaches suggests that this group of decision makers were pleased with this contractual tool.

Table 1: A comparison of bids and final costs for 3 PLA and 4 Non-PLA projects built for the College of Marin

	PLA	Non-PLA
Number of Projects	3	4
Average Start Date	2011	2009
Average Completion Date	2013	2011
P% Projects Requiring Pre-qualified Bidders	100%	50%
Number of Bidders	7.3	8.5
Percent Nonunion Winning Bid	33%	50%
Average Engineer's Estimat	$29,347,000	$12,471,250
Average Lowest Bid	$22,107,667	$9,721,303
Average Percent Lowest Bid below Estimate	-25%	-22%
Average Final or Current Contract	$25,318,296	$12,194,125
Average Percent Final Contract Below Estimate	-14%	-2%

Conclusion

Project labor agreements from the perspective of the owner is a management tool used to exploit their advantage of controlling specific work. They can use this advantage to negotiate either or both concessions or sweeteners relative to the local collectively bargained contracts in construction. The owner can address concerns regarding nonunion access to PLA work through provisions in the PLA contract permitting nonunion bidding and core nonunion worker arrangements. Critics caution that

PLAs will increase public school construction costs by around 15% based on the proposition that PLAs will discourage the number of bidders on public school projects. However, in both the case of comparing San Jose Unified School District compared to East Side Union High School District before the Great Recession and PLA compared to non-PLA projects for the College of Marin after the Great Recession, the difference in bidders was from one-half to one more bidder on the non-PLA projects. In both cases, the increased number of bidders on the non-PLA projects may have been due to the smaller size of these projects rather than the PLA provisions themselves. And furthermore, the proof is in the pudding. There is no evidence that the Marin PLA projects were more expensive relative to the engineer's estimate, and some evidence to suggest that these PLAs projects were less expensive relative to the engineer's estimate. The College of Marin Board members seemed satisfied with using the PLA tool by the fact that after using PLAs twice, they chose to use it again with their last project.

About the Author

Peter Philips, Professor of Economics, received his B.A. from Pomona College and his M.A. and Ph.D. from Stanford University and since 1978 has been on the faculty of the Economics Department at the University of Utah. For the last 25 years, Philips' research has focused on the construction industry including bidding in construction, construction safety, and construction labor market regulations. Philips was the only economist on the National Academies review panel of the National Institutes of Health construction safety research program. Philips has served as a construction expert for the U.S. Labor Department and U.S. Justice Department. Philips has served as a forensic expert on construction issues for major utilities and nonunion contractors. Philips has testified in the Federal Court of Claims on construction labor shortages as well as before many state legislatures and Congress on construction issues.

Philips' peer-reviewed academic journal publications for the last 3 years are:

- Kevin Duncan, Peter Philips and Mark Prus,"Prevailing Wage Regulations and School Construction Costs: Cumulative Evidence from British Columbia," ***Industrial Relations,*** Vol. 53, No. 4 (October 2014).
- JaeWhan Kim and Peter Philips, "Remuneration and absenteeism on a large construction site," ***Construction Management and Economics*****,** October, 2014 Vol. 32, No. 10, 983–999.
- Ziad Hamideh, David Blatter, Peter Philips, Guowang Rao, Josh Simnitt and Tao Yu, "The Impact of IIPP Policies on Statewide Injury Rates in U.S. Construction," ***The Center for Construction Research and Training, CPWR Small Study Final Report***, May 2014
- JaeWhan Kim, Kuo-Liang Chang and Peter Philips, "The Effect of Prevailing Wage Regulations on Contractor Bid Participation and Behavior: A Comparison of Palo Alto, California with Four Nearby Prevailing Wage Municipalities" ***Industrial Relations***, Vol. 51, Issue 4, pp. 874-891, October, 2012.
- Kevin Duncan, Peter Philips and Mark Prus, "Using Stochastic Frontier Regression to Estimate the Construction Cost Inefficiency of Prevailing Wage Laws," ***Engineering, Construction and Architectural Management,*** Vol. 19 Iss: 3, pp.320 - 334.

- Sheng Li and Peter Philips, "Construction Procurement Auctions: Do Entrant Bidders Employ More Aggressive Strategies than Incumbent Bidders?," ***Review of Industrial Organization*** Volume 40, Number 3, 191-205.

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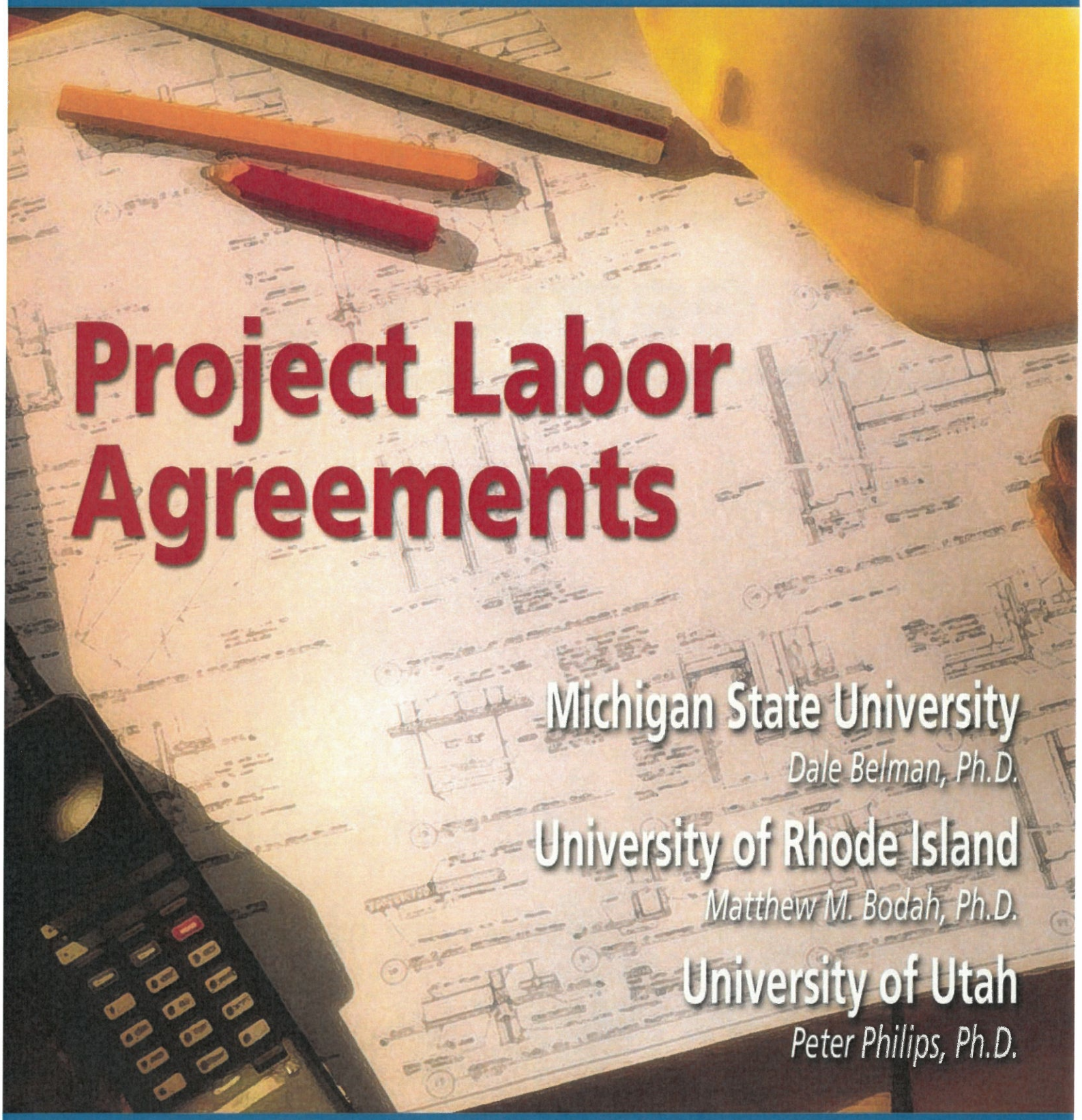

Project Labor Agreements

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ELECTRI International
The Foundation for Electrical Construction, Inc.

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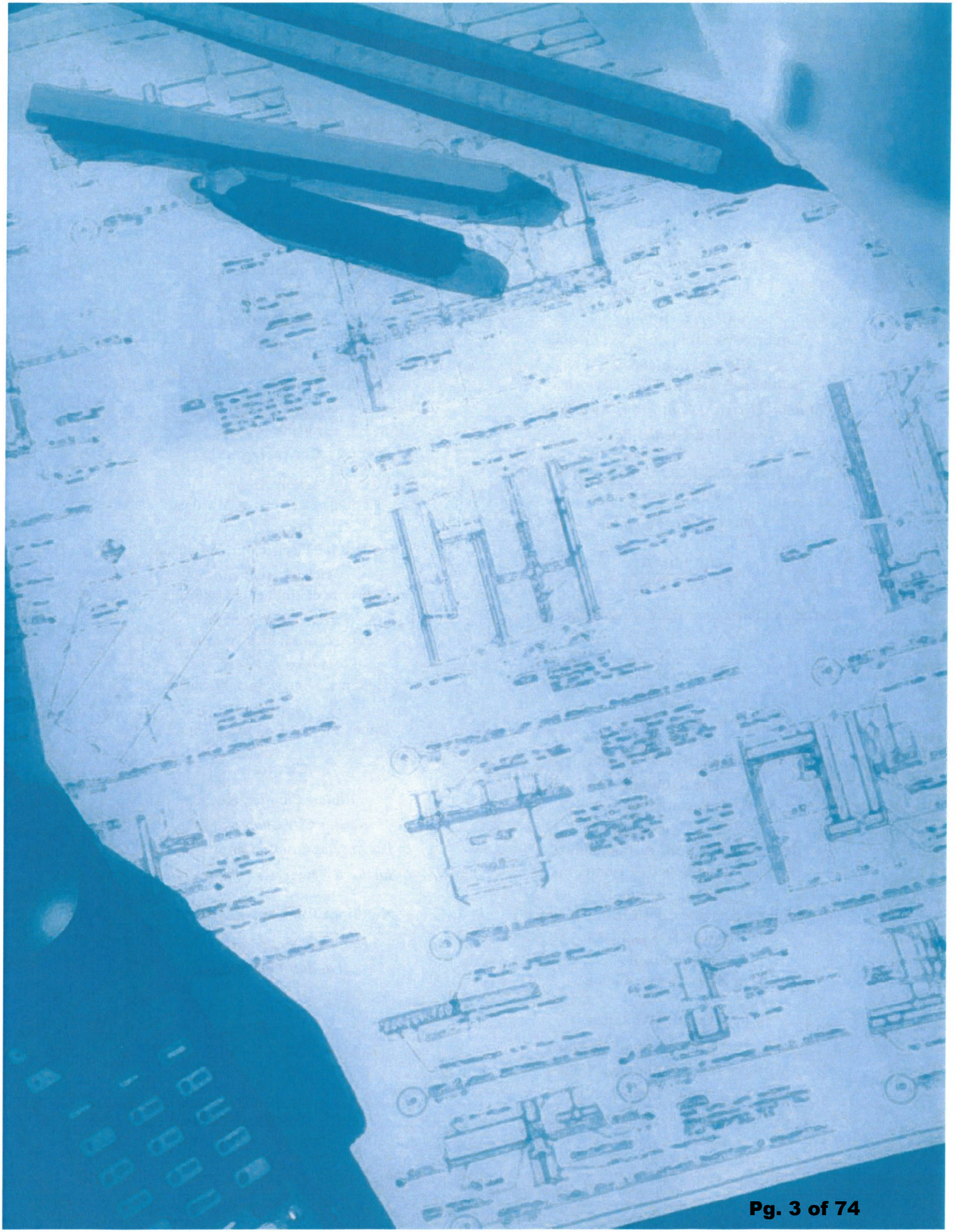

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Table of Contents

Executive Summary

Project labor agreements (PLAs) are prehire collective bargaining agreements that establish the terms and conditions of employment on one or more construction projects. PLAs are typically the product of negotiations between a group of unions, usually represented by a building, construction trades' council and the representative of a construction user, most often a construction management firm. Unlike local construction collective bargaining, contractors and contractor associations have little or no role in such negotiations. PLAs require all contractors working on a project to adhere to collectively bargained terms and conditions of employment, whether they are normally union or nonunion contractors. PLAs have undergone considerable evolution over the years. Once used almost exclusively on very large projects that were either extremely isolated or that overwhelmed the capacity of the local construction labor market, PLAs are now used on a variety of private and public projects.

The use of PLAs in the public sector has raised questions about possible conflicts with state or local bidding regulations. As a result, all branches and levels of government have become involved in the controversy, which, in turn, has drawn both media attention and spurred a fair amount of research. However, as our review shows, most of the research is of low quality and little use in determining whether PLAs actually affect bidding behavior, wages, construction costs, etc.

The current report is possibly the broadest ranging and most detailed study of PLAs conducted to date. While prior studies have focused on a particular PLA project and addressed one or two narrowly defined issues, in this study we examine a large number of projects using a variety of techniques, including archival research, interviews, case studies and the statistical analysis of original data.

We ask a number of questions, including the following: What is a PLA? How do PLAs differ? What does prior research tell us about the effects of PLAs on construction projects? How do individuals with experience with PLAs view these agreements? How do PLAs affect the outcomes of construction projects? In what ways can PLAs be used to address the strategic needs of a project?

There are several central findings of this study. Perhaps most important, we find that there is no substantial evidence that PLAs decrease the number of bidders or change the costs of construction projects. Although our findings run contrary to prior research, we believe that most previous studies failed to account for important influences on construction costs. Therefore, effects were falsely attributed to PLAs that actually belonged to unobserved variables.

We arrived at our conclusions on bidding behavior by studying two adjacent school districts in San Jose, California. Both began extensive school construction in 2002. In 2004, one school district

signed a PLA, while the other did not. While the number of bids per bid opening decreased after the PLA in the former district, they also decreased in the district that did not sign a PLA. The decrease in bids was better predicted by an increasingly busy construction market than the existence of the PLA.

To examine cost effects, we studied 108 school projects in New England. We found that such variables as the building's size, the need for a new boiler, the construction of an auditorium, the construction of library and where the school was located had positive effects on construction costs. There is no evidence that a PLA either raised or lowered the costs of the projects studied.

We argue that if PLAs are cost neutral, then other reasons for using or not using PLAs must be examined. Through interviews and case studies, we found that users favored PLAs to reduce some of the uncertainty inherent in large scale construction projects. Obviously, no one can control the weather, and material shortages are always a concern. But construction users felt a PLA would ensured a steady flow of highly qualified labor. The flow of labor was guaranteed by the nationwide referral systems maintained by unions; the steadiness of the flow was buttressed by no-strike agreements, which are a nearly universal item in PLAs. Construction users told us that PLAs were particularly attractive on large projects that needed to be completed on a tight schedule. PLAs can be used to harmonize hours and holidays across the trades and to modify shifts and work schedules to meet the needs of construction users.

Although we lack good data on safety outcomes, interview evidence suggests that safety inputs are greater on PLA projects. Often PLAs include language establishing labor/management committees that deal specifically with safety and health issues.

PLAs may also be crafted to achieve wider social ends, such as increasing minority employment and participation on projects by minority business enterprises. As in a case study of the East Side Union High School district in San Jose, PLAs may also be used to create highly developed structures for training and recruiting young workers into the building trades, a critical need in light of the reported looming skills shortage in the industry.

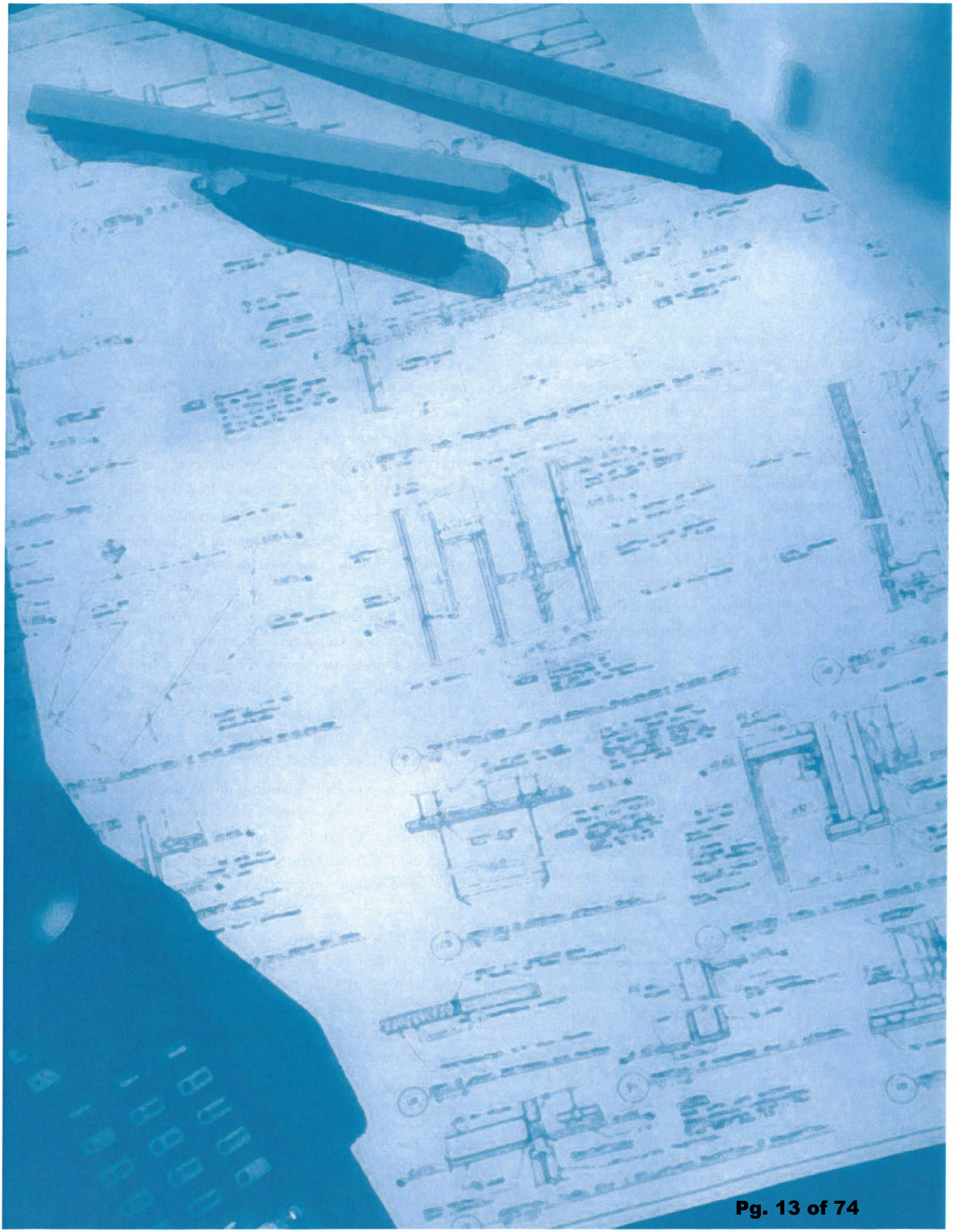
A possible downside of PLAs is their effect on local labor relations. Some interviewees told us that power relations at the bargaining table may be skewed when too much work is covered by PLAs and their accompanying no-strike/no-lockout clauses. With workers protected from job actions, compromises in local bargaining may be harder to affect, leading to unusual settlements and protracted negotiations.

Another problem with PLAs is the general lack of contractor participation in bargaining. This sometimes leads to the needs of an industry not being addressed in an agreement. One complaint of local electrical industry representatives is that most PLAs do not allow them to use their longstanding, bipartite system of dispute resolution.

A possible solution to the problem, and one that is used in many areas, is to develop model PLA language through standing labor/management committees, which can be established as Taft-Hartley trusts and supported through per capita assessments on work. Typically, contractor organizations have high levels of participation on such committees.

Most interviewees agreed that PLAs are not suited to every project in every location. In considering whether to use a PLA, owners usually consider the importance of scheduling, the size of the project, the need for skilled labor, whether there are a sufficient number of union contractors in the major trades needed for the project to support competitive bidding and whether the work is likely to be done by union contractors with or without the PLA. In general, larger and more complex projects, for which scheduling is important, are good candidates for the use of a PLA.

PLAs are valuable tools for the construction industry because they can be used to create the conditions needed for a superior construction project. More than one hundred PLAs were reviewed for this study. The provisions of those agreements varied widely. The most sophisticated agreements had been crafted to address project specific issues such as local hiring, scheduling, work rules, employment of minorities, or the staffing of projects. We also found many bare bones PLAs that were little more than no strike/no lockout agreements. Based on our review of these agreements, and the findings of this research, we believe that there is great potential, much of it unrealized, for using PLAs to improve construction projects and promote union construction. Realizing this potential will require the education of contractors, construction users, and union officials on how PLAs can be crafted to promote the interests of all parties and provide better construction outcomes.



Introduction

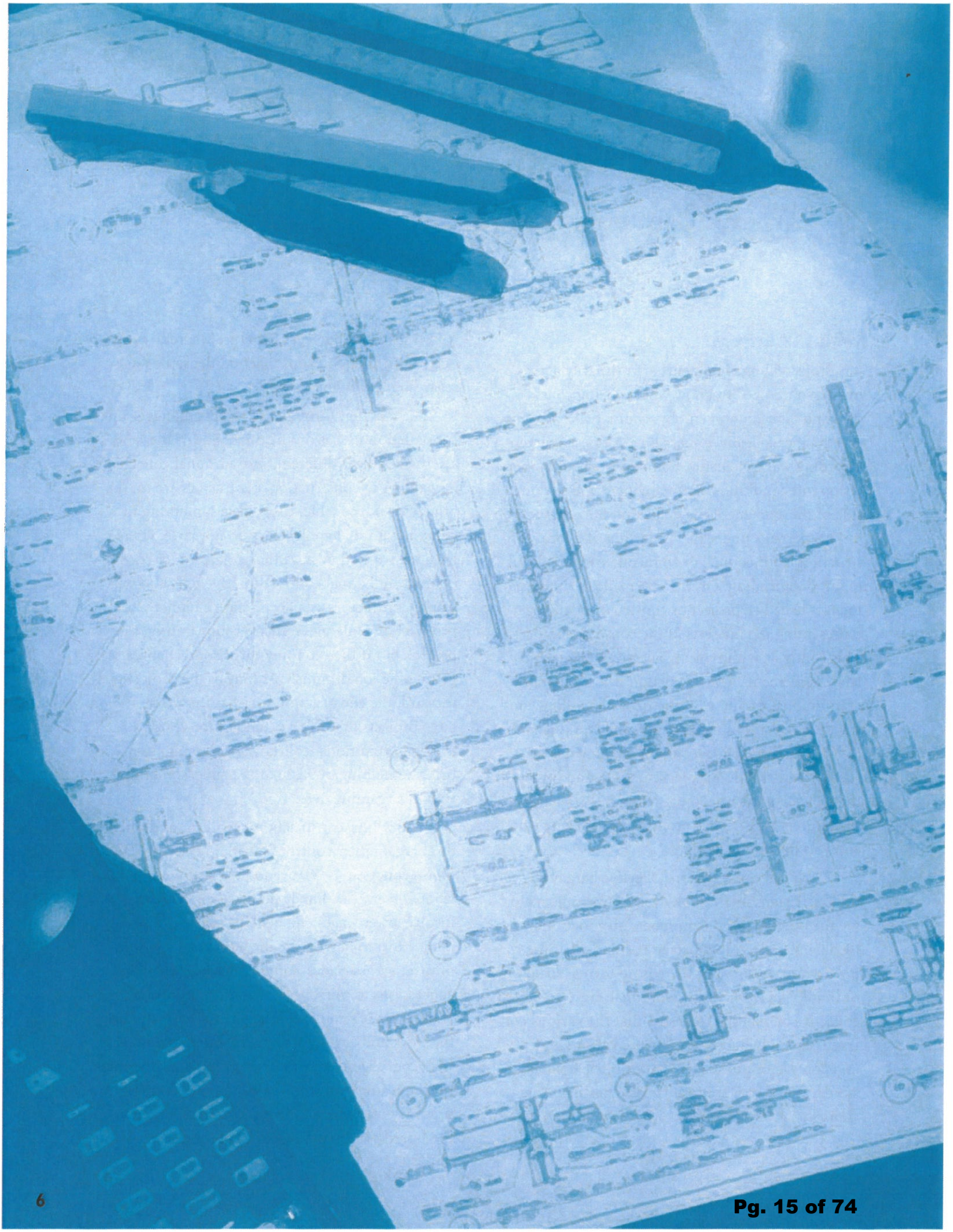
PLAs are nothing new. McCartin[1] noted that something like a modern PLA was used during WWI when the War Department worked out a compromise between the American Federation of Labor (AFL) and defense contractors who were building cantonments. All workers would be paid union scale in exchange for dropping a demand for a closed shop.

The use of PLAs increased during WWII. Dunlop[2] writes of the stabilization agreement between the Office of Production Management and the Building and Construction Trades Department (BCTD) of the AFL. The agreement provided for uniform overtime rates of time-and-one-half, standard shifts at regular rates and declared that there shall be "no stoppage of work on account of jurisdictional disputes or for any other cause."

Until the 1980s, PLAs were used in both the private and public sectors with little notice. So why have PLAs become so controversial? Why have virtually all branches and levels of government been dragged into the fight over PLAs? We explore these questions in this study. Moreover, we examine the contents of PLAs, present comments from interviews with stakeholders concerning PLAs, assess the economics of PLAs and provide details of the strategic use of PLAs from several case studies of actual projects.

Using archival sources, interviews and both qualitative and quantitative methods, we try to determine how Project Labor Agreements affect construction costs, scheduling, safety, training and minority employment.

- **Chapter One** of this report defines PLAs, discusses the reasons for the controversy over PLAs and gives an overview of previous PLA research.
- **Chapter Two** presents and analyzes the contents of PLAs. The results are based on a review of nearly one hundred agreements from all parts of the country.
- **Chapter Three** discusses the comments of several dozen stakeholders concerning PLAs. Interviews were conducted with, among others, construction users (both public and private), contractors, construction managers and union officials. Interviews were held in southern New England, the sorthern Midwest and the West.
- **Chapter Four** examines the economics of PLAs through original research. It presents findings of bidding behavior based on evidence from two adjacent California school districts and research on PLAs and school construction costs in New England.
- **Chapter Five** presents several case studies of PLAs, including a highway project in Utah, an automobile plant in Texas, an airport terminal in Rhode Island and a set of school projects in California. Chapter five tells how PLAs can be used to address specific needs on a project.
- The end of this report contains a list of principal findings.



I. Background

What is a PLA?

Project labor agreements are primarily agreements, so we need to know what is being considered and agreed upon and by whom. PLAs are project-specific, collectively-bargained labor agreements regarding wages, benefits, hours of work and other terms and conditions of employment. On the one side of the agreement is a collection of construction unions perhaps under the leadership of a local construction labor council or some other form of multicraft organization. On the other side of the agreement is usually a project or construction manager representing the interests of the construction user. This contrasts with typical collectively bargained labor agreements in construction where separate craft unions bargain with their corresponding contractor associations about wages and working conditions. Traditional collective bargaining has no specific construction project in mind, and no one at the table controls upcoming work. In PLA bargaining, unions bargain as a group with someone who controls upcoming work.

In typical construction collective bargaining, the electricians might look over their shoulders to see the outcome of the plumbers' negotiations, and the laborers are going to keep in mind what the carpenters are getting. But there is no formal structure or binding agreement in traditional, craft-separated collective bargaining to ensure that the various contracts signed in a local area by the various crafts and contractor groups will have similar holidays, similar hours of work, similar drug testing provisions, etc. or even similar contract expiration dates. A PLA provides the legal structure whereby everyone can (if they so choose) get on the same page regarding all of the issues.

The fact that through the project manager the construction user is on the other side of the table also makes PLAs different. In traditional collective bargaining in construction, contractors are on the other side of the table. Users have something to bargain with that contractors do not have. Users have the work: they have the project under consideration. Individual contractors have to bid to win work. Contractors as a group have a higher prospect of someone in their group winning the project, but if the economy turns sour, chances of getting the job diminish. As long as the project goes forward, the construction user has the work, and on large projects that work could last for years. Through traditional collective bargaining, users bring something of value to the table, something worth bargaining over.

With PLAs, construction users can (and often do) bargain their control of work in exchange for union concessions relative to the existing set of local labor agreements. Rarely do these concessions involve lower wages and benefits. More commonly, in an effort to harmonize the terms and conditions of work across trades, some trades have to make concessions to mirror terms and conditions in another trade's contract. The fact that the user has the work and is willing to provide it in exchange for such concessions may motivate a trade's willingness to compromise on working conditions. Sometimes a user may convince all the trades to make an across-the-board concession in exchange for the job. In one

case, a bridge contractor signed a PLA with the various relevant trades for long term work on a major bridge reconstruction project in exchange for altering all the unions' overtime provisions, so the project could proceed without overtime pay in off hours to avoid backing up traffic. Under traditional collective bargaining with no specific consideration to a specific project, such a concession would not make much sense to any union and to obtain this concession across all unions would be impossible. A PLA made it happen.

In one sense, all PLAs are across-the-board concessionary contracts because, universally, all PLAs have no-strike clauses in effect through the entire duration of the project. For long-lasting projects, these no-strike clauses are meaningful because inevitably in a two or three year period, one or more traditional union contracts will expire, leading to the possibility of a negotiation stalemate and a strike. PLAs take the user's work off the traditional collective bargaining table and insulate it from strikes. This can be very important to the user who has a vital completion date. So the construction user comes to the PLA bargaining table ready to exchange work for harmonized working conditions, occasional project-tailored terms and conditions, and a guaranteed uninterrupted labor supply through the duration of the project. Only PLAs can get all of this done with multiple craft unions, multiple contractor associations and differing contract expiration dates. In short, PLAs bring new players to the table and thus create the possibility of bargaining to new win-win solutions.

What is in a PLA for unions besides various possible concessions? In a word: work. PLA projects tend to be large and long-lasting. In private sector PLAs, the work is what the unions bargain for, and that is what they get because private sector PLAs typically restrict bidding to union contractors. On public sector work, restricting bidders to union contractors usually violates public procurement rules. Nonunion contractors are allowed to bid on public PLA jobs. Nonetheless, when working on a covered project, all contractors (including nonunion contractors) agree to abide by the terms of the PLA as well as any provisions of local agreements that are specifically referred to in the PLA or not limited by the PLA. The means of assuring this compliance by all contractors is a letter of assent the PLA requires.

The following letter of assent comes from a Missouri PLA and is typical:

Pursuant to Article II, Section 1, Paragraph 3, of the above-referenced Agreement, the undersigned contractor hereby agrees that it will be bound by and comply with all terms and conditions of said Project Labor Agreement, and any amendment thereto for this Project only.

This Letter of Assent will remain in effect for the duration of the Agreement, and any extensions, after which this understanding will automatically terminate, except as provided in Article II, Section 6 [concerning repairs and rework] of the Agreement.

As a practical matter this means that all contractors usually agree to use union referral mechanisms (e.g. hiring halls), pay union scale, contribute to jointly administered (i.e. union sector) benefit programs and, in general, operate as union contractors while on a project—whether or not they are usually union contractors. Sometimes PLAs have key worker provisions that allow nonunion contractors to use a limited number of key nonunion workers. Occasionally, nonunion

workers are permitted to apply to the project manager for work rather than go through the union hall. But the basic point is this: through PLAs, unions exchange concessions for work. If the PLA cannot deliver at least most of the work, the construction user has nothing to bargain with.

There are two players not at the PLA bargaining table—the union contractor and the nonunion contractor, both of whom might end up working on a public PLA project. From the perspective of traditional collective bargaining, PLAs are a topsy-turvy world. Usually the union agrees with the contractor, and then the contractor goes out and finds the work. Under a PLA, the unions, as a group, go out and find the work. Wages and benefits are set. Then, on private jobs, union contractors bid for the project and, on public jobs, all contractors willing to abide by the terms of the PLA bid on the project. Union contractors get a level playing field, but that is all.

The other absent player is the nonunion contractor willing to pay the PLA wage rates and abide by the terms and conditions of the PLA. These participating nonunion contractors stand on the sidelines along with the union contractors until the project is let out for bid. Technically, PLAs are prehire agreements because the terms and conditions of work are agreed upon prior to the hiring of workers. But, effectively, PLAs are usually also prebid agreements because the terms and conditions are set prior to any bidding on the project.

And, of course, there is one absent non-player—contractors unwilling to bid on the project because of the terms and conditions of the PLA. These, typically nonunion contractors, may not be able to compete with the higher labor productivity called forth by the PLA wages. They may not wish to expose their key workers to union workers. They may not wish to have their non-key workers go through the hiring hall to get work. They may philosophically object to PLAs. They may have other reasons for not participating. In any case, nonunion contractors' nonparticipation may lower the number of contractors who bid on a PLA project. Alternatively, the presence of a PLA may attract contractors who otherwise might not bid on the project. The effect of PLAs on the number of bidders is an open empirical question that chapter four addresses.

Because PLAs set wages and benefits close to or at the local union rates, PLAs probably encourage contractors to shift towards capital intensive and high skill construction strategies. PLAs may also alter the composition of contractors shifting towards more heavily capitalized firms. Some public entities, restricted in their ability to pre-qualify contractors by public procurement regulations, may be attracted to PLAs, in part, due to the way PLAs probably sort through potential bidders shifting the mix towards more established, capital intensive and skill oriented contractors.

Thus, PLAs are first of all agreements where unions, as a group, bargain for work from construction users in exchange for concessions on strikes and working conditions. Until the PLA is signed, contractors sit on the sideline. Once signed, union contractors know that even their nonunion competitors will have to pay the same wages and benefits. Nonunion contractors may be excluded entirely from private projects but on public works they are still players. Some, however, will withdraw not wanting to agree to the terms of the PLA. Both union and nonunion high-wage/high-skill contractors are likely to be attracted. Whether ultimately PLAs discourage more bidders than they attract is an empirical issue, but some public construction users may be partially attracted to PLAs based on what type of contractor is attracted and what type of contractor is repelled by PLAs.

How are today's PLAs different?

Old-School PLAs

From the first major use of PLAs to around 1980, PLAs were generally restricted to a particular

and relatively unusual type of construction project—the large, long-lasting, typically complex and often rural construction project. Construction users bringing these projects to market faced three problems. First, if the project was rural (such as a hydroelectric dam located where the water was or a coal-fired power plant located where the coal was), the size of the project was likely to overwhelm the capacity of the local construction industry and labor market. By having a PLA, the construction user could create regular and known wages and working conditions needed to attract workers from far away.

Second, if the project was specialized and complex (such as a nuclear facility), the skill requirements of the job might overwhelm the local labor market even in a non-isolated area. A PLA would provide ready access to distant union workers again by establishing appropriate wages and conditions and by invoking the union system of using skilled traveling workers.

Third, if the project was long-lasting (say three or more years), and schedule and completion were important to the user, a no-strike provision in a PLA would insulate the project from labor/management conflict during the bargaining between local craft unions and their corresponding contractor organizations. Whatever work stoppage or lockout might occur through the normal operations of collective bargaining would not affect a PLA project. In short, bargaining impasse would not interrupt the PLA project.

So PLAs for many years were a specialized and relatively rare construction contract designed to obtain a ready and qualified supply of labor to large, complex and long-lasting projects.

Stop-Loss PLAs

In the 1980s, PLAs took on a new role. The downturn in construction in the 1980s was very sharp. Price competition (as opposed to quality or scheduling competition) is most intense when an economy slows and customers are more price-conscious and less concerned about timeliness or even quality. This environment favored nonunion contractors. But in order to keep some of the union sector's biggest and best industrial customers and stop the loss of jobs, PLAs were written that contained wage and benefit concessions. American manufacturers facing severe overseas competition on both price and quality terms needed quality infrastructure built at the lowest price possible. PLAs became a way of delivering quality work at low prices to demanding customers. These PLA-based wage cuts were partially offset by the promise of steady work for an extended period of time during a period when construction work was anything but steady. The PLAs in the 1980s traded lower wages for longer work. Thus, it was possible, in part, because the agreement was with a user who had work to exchange for concessions in wages and conditions.

Market-Share PLAs

In the 1990s, however, the construction economy improved, leading to a decade long boom that has recently slowed but not collapsed. Union workers were working; local union unemployment rates were low, and the attractiveness of trading hourly wages for more assured work faded. But PLAs did not fade. In fact, they proliferated primarily in areas where construction unions were relatively strong but even in areas where union coverage was low. And the new PLAs were often used on more modest projects, such as schools and court houses, and cover renovations as well as new construction.

Two economic conditions (other reasons will be discussed below) converged to lead to the proliferation of PLAs. First, construction labor markets were becoming increasingly tight. Not only was unemployment down, but also apprenticeship training was down. As the nonunion sector proliferated in the 1980s, union apprenticeship programs reduced their enrollments or even in a few

instances shut down. The nonunion sector did not fill the gap, in part, because they were happily harvesting union-trained workers in need of jobs, and because the nonunion sector had not been able to find a viable alternative to collective bargaining to finance apprenticeship training. So construction users were hungry for available and qualified craft construction workers. The Business Roundtable, a group of large construction users, stated in an analysis of skill shortages in construction, "The union sector has always excelled in craft training through the joint labor/management apprenticeship programs…the open shop, as a whole, has not supported formal craft training to the extent necessary." [3]

Second, while the construction economy had recovered and construction union membership was growing, the union share of the construction labor market was either still declining or merely stabilizing, depending on the area. PLAs emerged as a new key instrument for both providing users with an uninterrupted supply of qualified workers and in helping unions to stabilize or expand their share of the construction market.

But why the controversy?

Old-school PLAs were used with little controversy in both the private and public sectors throughout the postwar period—a period during which much of the construction sector was highly unionized. With strong unions, there was a great desire on the part of construction users and contractors to avoid labor disputes and to gain the best economic deal possible relative to local agreements. The climate changed, however, when union market share dropped and construction users and the nonunion sector became better organized.[4] In the new environment, with large nonunion contractors able to compete for all types of work in virtually every state and with the growing strength of a nonunion contractors' association, Associated Builders and Contractors (ABC), challenges to

Two state court cases

To give two examples of state court decisions, in the consolidated case of New York State Chapter, Associate General Contractors v. New York State Thruway Authority (666 NE 2d 185, 151 LRRM 2891, N.Y. Court of Appeals, March 28,1996) the New York Court of Appeals upheld the use of a PLA on the renovation of the Tappan Zee Bridge, but overturned the one attached to the construction of dormitories at the Roswell Park Cancer Institute. In Associated Builders and Contractors of Rhode Island v. Department of Administration (787 A2d 1179, 170 LRRM 2054, R.I. Supreme Court, January 4, 2002) the Rhode Island State Supreme Court overturned a PLA for a new sports facility at the University of Rhode Island.

In the former case, the court held that New York law does not prohibit nor absolutely permit PLAs but does require that there be an adequate reason to apply a PLA to a project and further requires that sufficient analysis be done to determine whether a PLA advances the purposes of the state's competitive bidding statute. For the Tappan Zee Bridge, the Thruway Authority had determined that the need for quick completion and labor peace supported the use of a PLA. The authority also found that it would save over $6 million by using a project agreement (as opposed to operating under local contracts). However, in the dormitory case, the state agency had already begun the project without a PLA. Later, it attached one to the project without doing any serious analysis of

the benefits. The court voided that PLA stating that the agency had failed to "consider the goals of the competitive bidding statute."

The facts of the Rhode Island case are somewhat similar to those of the New York dormitory case. The University of Rhode Island had already begun construction of a $73 million basketball and ice hockey facility. Work on the project involved 34 separate bid packages. Six bids had been awarded with no mention of a PLA. But in the fall of 2000, more than one year into the project, a PLA was signed. Immediately thereafter, fourteen additional packages went out to bid requiring adherence to the new agreement. The Rhode Island Supreme Court found that the PLA violated state law. The court wrote (170 LRRM at 2060):

[We] are of the opinion that an awarding authority may include a PLA as a bid specification in a public contract, but the awarding authority may do so only after it has established that (1) the size and complexity of the project are such that a PLA supports the goals and objectives of the state purchases act, and (2) the record demonstrates that the awarding authority has conducted an objective, reasoned study using reviewable criteria in determining that the adoption of a PLA helps achieve the goals of the state purchases act.

Since the sports facilities were nearly complete, the court let the project go forward and did not award any damages to the plaintiffs.

PLAs became more common. In the past decade, all branches and levels of government have been dragged into the PLA debate.[5] It is probably not an exaggeration to say that ABC has challenged nearly every large public sector PLA that has been proposed during the past ten or twelve years.

However, not all challenges have resulted in the outcome sought by PLA opponents. A watershed event was the 1993 United States Supreme Court decision in the so-called Boston Harbor case.[6] Although the case dealt with the narrow question of whether local public sector PLAs should be preempted by the National Labor Relations Act, the unanimous court decision allowing a Massachusetts water resources board to go ahead with its PLA bolstered the efforts of proponents to seek agreements on a wide range of public projects.

Viewing market-share PLAs as a threat to their members' market position, the ABC and its state affiliates have mounted intensive national and local campaigns to oppose the use of PLAs. This effort has included numerous court cases, media campaigns and lobbying efforts.[7] Most of the legal action since Boston Harbor has concerned bidding statutes and ordinances and if PLAs, since they place conditions on successful bidders and arguably limit the number of bidders, violate either the letter or the spirit of such laws. Court decisions have been mixed.[8] In a number of cases, state courts have refused to overturn PLAs, while in other cases they have found that a particular PLA did violate a bidding statute.

The situation at the federal level, however, is different. One of President George W. Bush's first actions in office was to reverse altogether a Clinton administration's policy encouraging PLAs. On February 21, 2001, the President issued Executive Order 13208 prohibiting the federal government or a construction manager acting on its behalf from placing in its bid specifications any language that denotes the following:

(a) Require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organiza-

tions on the same or related projects

(b) Otherwise discriminate against bidders, offerors, contractors or subcontractors for becoming or refusing to become or remain signatories or otherwise to adhere to agreements with one or more labor organizations, on the same or related construction projects

The President amended the order on April 6, 2001 to exempt agreements that had already been entered into. And Executive Order 13208 allows successful bidders to enter into PLAs voluntarily, but it prohibits the mandatory acceptance of a PLA as a condition of bidding. The result is that PLAs are not currently being applied to most federally funded projects. This has not, however, slowed their use in the private sector nor on public projects that use only state or local funds. It is not possible to determine precisely how many PLAs are in effect at any time, nor how many are public sector and how many are private sector. However, based on findings in previous research, it is likely that at least three-quarters of PLAs are private sector.[9] Therefore, Executive Order 13208 may have only a small effect on the overall use of such agreements. Nevertheless, market-share PLAs are controversial because they involve a struggle between union contractors, high-wage nonunion contractors and low-wage nonunion contractors over market share in the public sector.

What do we know about the effects of PLAs?

The controversy over PLAs has spurred research on the effects of PLAs on a variety of issues, including the number of bidders on a project, labor costs and final bid price. Unfortunately, much of the research is of low quality and has originated from organizations or individuals with a clear prior position. This research typically relies on anecdotes and spurious comparisons. For example, ABC's Union Only Project Agreements: The Public Record of Poor Performance discusses eighteen projects on which there were cost overruns. Of these, six are described as union only projects but are not PLAs. No attempt is made to compare a sample of PLA and non-PLA projects.[10]

Some of the research, however, is a bit more sophisticated. Two important topics that have been examined by researchers are the effects of PLAs on the number of bidders on a project and the ultimate effect of a PLA on project cost.

PLAs and bidding

The research on bidding can be divided into three categories: studies that compare the number of bidders on PLA and non-PLA projects, those that look at the union/nonunion mix of contractors on PLA projects and those, based on survey research, that gauge the likelihood of nonunion contractors bidding on PLA projects.

The Empire State Chapter of ABC, in studying construction at the Roswell Park Cancer Institute in New York concluded that packages put out to bid without a PLA stipulation received 21% more bids than projects with a PLA attached.[11] Andrews, the General Accounting Office (GAO); and Opfer, Son and Gambatese all examined participation by nonunion contractors on PLAs.[12] Andrews studied the Boston Harbor project and found that nonunion participation was lower than reported by the construction manager. He also found that less than half of the nonunion contractors were supplying construction services, with the remainder involved in material supply or professional services. A study of a project run by the South Nevada Water Authority, Opfer, Son and Gambetese concluded that between 16% and 33% of contractors were nonunion and one percent to 27% of the volume work was done by nonunion contractors. The authors interviewed representatives of two nonunion firms that had worked on the SNWA project but indicated that they would not work on

PLA projects again. Among the problems cited by the firms were jurisdictional disputes among unions, poor performance by union workers and obligations to support union sector benefits funds. The GAO's study found that 86 of 286 contracts on the Idaho National Engineering Laboratory were awarded to nonunion contractors, despite eight of eleven nonunion contractors telling the GAO that they would not bid on the project because of the PLA provisions.

All of the studies cited above have problems. For example, the ABC study failed to account for differences in the types work covered and not covered by PLAs at the Roswell facility, and Andrews's sample is much too small to produce valid, statistically significant results. However, a more important question is the relationship between the number of bidders and project cost. In two studies in New York State, Carr found that project costs fall between 3.2% and 3.8% for each additional bidder.[13] However, Carr's statistics show that his model accounts for only 11% of the variance in project costs, suggesting that a number of possibly critical variables are not included in his analysis. If important variables are excluded, effects may incorrectly be attributed to the number of bidders that when, in fact, other causes are at play.

PLAs affect on bid price

One stream of research simply looks at the direct effects of PLAs on bid price regardless of the number of bidders. Research conducted by the Beacon Hill Institute (BHI) at Suffolk University in Boston has been widely reported. In 2003, BHI conducted two studies of school construction projects in the Boston area. In 2004, it replicated its research in Connecticut. In all of the studies, BHI reported substantial cost premiums associated with PLAs. In the original Boston study, the researchers found that PLAs increased school construction costs by 17.3% or about $31.74 per square foot. A follow-up study on a larger sample pegged the estimate at 14% or $18.83 per square foot. The Connecticut study estimated that PLAs added about thirty dollars per square foot to costs.[14]

More detail resides in later sections; however, in brief, the BHI team did an insufficient job at controlling for variables that affect construction costs. Hence, much of what was attributed of the presence of a PLA is actually explained by other variables, such as project location (e.g. the inner city) and building amenities (heating systems, swimming pools, etc.).

PLAs and human resource outcomes: compensation, strikes, safety and minority employment

Two studies examine the impact of PLAs on wages. In the GAO paper on the INEL project, researchers found that wages on the project were 17% to 21% higher than the Davis-Bacon prevailing wage rates for the area. In a 1997 article, Lyons argued that the executive memorandum issued by President Clinton to encourage the use of PLAs on federal construction projects would raise federal construction costs between 2.3% and 7.2%.[15] In the GAO piece, however, most of the difference was accounted for by the travel allowances included in the agreement, and the critical problem with Lyons's calculation is that he used the national average construction wage as a proxy for the Davis-Bacon rate.

Several studies have addressed the complaint by nonunion contractors that PLAs force them to pay into the union sector benefits funds while maintaining their own pension and health care plans.[16] Lund and Oswald point out, however, that this argument may be more theoretical than actual, since many nonunion workers lack any benefit coverage.[17] Either their employers do not offer coverage, or the short tenure of nonunion workers precludes their participation in benefits' programs. It is also the case that participation would be gov-

erned by the PLA and could vary from agreement to agreement (see, for example, the Toyota agreement discussed in Chapter Five).

A central feature of PLAs is the inclusion of a no-strike/no-lockout clause. In research done by Johnston-Dodds in California, 26 of 59 reviewed PLAs contained blanket no-strike provisions, while the remaining 33 allowed strikes only in the event of contractor delinquency in payments to joint funds.[18] PLA proponents champion such provisions as an important element in raising certainty on construction projects.

Opponents discount such provisions on several grounds. First, they note that no-strike provisions have been violated (though proponents counter that dispute settlement procedures have been highly effective in quickly resolving problems). Second, PLA opponents point to the generally low strike rates in construction today. And, finally, they note that such disruptions are rare on nonunion worksites.

Available research on safety is, for most part, restricted to two case studies: work done by Dunlop on the Boston Harbor project and Opfer, Son and Gambatese's work on the SNWA project.[19] Dunlop found that lost time incident rate on the Boston Harbor Project was 4.1 while the national average for heavy construction was 6.2. Further, the lost workday incident rate was 134.7 for Boston Harbor versus a national heavy construction rate of 150.4. Opfer, Son and Gambatese, however, found contrary evidence when examining the SNWA project.

Finally, the research on minority (including female) employment is also sketchy and primarily anecdotal. PLAs have been opposed by a number of minority contractor associations. However, membership in such associations is likely dominated by nonunion firms. In additiong, ABC argues that the emphasis placed on minority employment by PLA proponents is designed to "deflect criticism of unionized construction emanating from minority and women's groups."[20] Johnston-Dodds provides perhaps the most interesting description of a minority employment program in her description of the Port of Oakland, California PLA.[21] The agreement included a small/local business utilization program and a local hiring program, which provided for set-asides and targets for minority contractor and worker participation. The PLA also called for a social justice committee to oversee implementation of the minority hiring provisions. The social justice components of the PLA were supported by a contribution of up to $1.15 per hour for all work done under the PLA. Although some difficulties were mentioned in meeting some of the PLA's goals, the report does not contain an analysis of the overall effectiveness of the program.

Conclusions

A PLA is an agreement between a multicraft set of labor unions and a construction user represented by the project manager or some other agent qualified to sign a labor agreement. Bringing new parties to the table—a user who controls work and a combination of unions who can collectively harmonize their local labor agreements—creates new bargaining possibilities, and new win-win solutions become possible. PLAs fall into three historical categories.

Old School PLAs were dominant from WWII to around 1980. They were large, long-lasting, often technical or rural projects that needed to draw workers from long distances and proceed uninterrupted by strikes in an environment with widespread unionization. PLAs set the wages, conditions, traveling arrangements and no-strike clauses that made these goals possible.

Stop-Loss PLAs emerged in the 1980s in response to stagnation in the construction labor market and loss of work to the nonunion sector. These concessionary PLAs granted primarily to large industrial owners discounted local union wages and benefits to preserve work. Neither PLA was particularly controversial for its time except for

those union members who objected to the concessions embedded in Stop-Loss PLAs.

Modern Market-Share PLAs are applied to a wide range of private and public projects attracting owners based on new win-win possibilities associated with a new bargaining table. Market-Share PLAs are controversial because these contracts serve as weapons in the struggle between union and some nonunion contractors (those who cannot or will not compete for PLA work) over market share.

While most PLAs are on private work, the controversy over PLAs is focused on public work: if a private owner wishes to sign a PLA, there is no public policy that would stop the owner doing so. Consequently, the debate is over whether PLAs are good for the public sector. Thus far, most of the debate has been on whether PLAs raise public construction costs. Analytically, this is a delicate argument to make because most Market-Share PLAs exist where unions are strong and public works require prevailing wages and those wages (and benefits) tend to correspond to the wages and benefits required by PLAs. So the argument must be that PLAs restrict bidders, thus reducing competition and raising prices. The problem with this argument is one need only about half a dozen bidders to get the full effect of bidding competition on prices. Furthermore, research to date only looks at whether nonunion contractors are discouraged and not whether union or high wage nonunion contractors are attracted by PLAs. In short, we do not know whether or to what extent PLAs discourage bidding. Nonetheless, some research has argued that PLAs raise total costs on prevailing wage jobs by around 15%. This is not only a surprising result because it cannot be derived from increased wages, but also because labor costs as a percent of total costs typically is around 30% in construction.

Readers should not be dismayed at the preliminary, incomplete, and often inadequate results of research on PLAs. This field of research is young, and from the heat of current controversy there may yet emerge information. Some of the problems with prior work simply reflect the inherent difficulties with this type or research (e.g. getting adequate data, comparing very different projects). In other cases, results are compromised by low quality research, including poor statistical modeling. Perhaps the most disheartening weakness is that some studies simply attempt to support a previously held position, with findings merely leading to a foregone conclusion. Nonetheless, this research literature will mature, become more sophisticated and solve some of its methodological problems, and thoughtful conclusions will drive out preconceived notions. This study is an attempt to contribute to that maturation process.

2. The Content of PLAs

Before analyzing the effects of PLAs, the contents require explanation. There are two model agreements adopted by the AFL-CIO's Building and Construction Trades epartment and approximately one hundred actual PLAs covering projects in 17 states.

Two categories of PLA provisions are clearly designed to promote cost savings on projects. The first category primarily includes compensation concessions on wages, benefits, premium pay and pay for time not worked (e.g. breaks). The second type of provision seeks to contain cost by enhancing productivity by relaxing work rules, minimizing crew sizes and restricting the introduction of new technology, among other things.

Cost containment provisions

Wages

Direct wage concessions in PLAs are rare. Most PLAs simply incorporate the wage schedules from local collective bargaining agreements. These are usually called Schedule A agreements, with Schedule A being the first contract appendix. However, a PLA occasionally will call for a trades' more favorable wage schedule to be used (e.g. residential rates on a commercial project). Less common is a separate wage schedule with different pay rates and different timings for pay increases.

Though rare, across-the-board wage concessions are possible and were more common during the recession of the early 1990s. A PLA for a building project at a private college in Rhode Island, for example, stated that "All employees covered by this agreement shall be classified in accordance with work performed and paid at the rate of eighty percent (80%) of the base hourly wage rates for those classifications…"

A more common concession is a wage freeze for the life of a project. A Connecticut PLA read, "The wage rates will be frozen as of September 1, 1998 for the remainder of the project. Fringe benefits shall not be frozen during this period."

Premium pay

PLAs often limit the types of premium pay available on a project. A New Jersey PLA allowed for reporting and call back pay but otherwise held "there shall be no premiums, bonuses, hazardous duty, high time or other special payments of any kind." Similarly, overtime may be limited. A Connecticut PLA called for time-and-one-half to be paid after "ten hours worked in a day or forty hours worked in a week." Area agreements required premium pay after eight hours of work.

Benefits

We discovered two approaches in PLAs to limiting benefits' costs. Most common, PLAs restrict the payments required of contractors to those funds that directly benefit employees. An Oregon agreement stated that "The employer shall pay only fringe benefit funds for employees (such as pension, health and welfare, vacation, apprenticeship and the like) that have been legally negotiated and established by the applicable collective bargaining agreement…This expressly excludes any and all Industry Promotion Funds, Contract Administration Funds, Contractor-Union Management Funds, Craft of

Industry Alliance of Associations."

A clause in a New England PLA limited premium contributions (for most trades) to the straight time rate, regardless of whether work was being performed at straight time or premium rates.

Pay for time not worked

A clause from a New York PLA stating, "There will be no rest periods, organized coffee breaks or other non-working time established during working hours" is typical. Some PLAs specifically allow workers to bring beverage containers to their workplace for brief individual pauses. Except for lunch breaks, pay for time not worked is often limited by PLAs.

Work rules

PLAs generally include broad proscriptions on practices that would, in any way limit productivity. Consider the following two sections from an Indiana PLA:

Section 1: There shall be no limit on production by workers nor restrictions on the full use of tools and equipment. There shall be no restriction, other than may be required by safety regulations, on the number of employees assigned to any crew or to any service. ...

Section 7: The Union will not impose conditions which limit or restrict production or limit or restrict the joint or individual working efforts of employees. The Construction Contractor may utilize any method or technique of construction, and there shall be no limitation or restriction regardless of source or location of machinery, precast tools, or other labor-saving devices, nor shall there be any limitation upon choice of materials and design.

Provisions effecting scheduling

As the interview portion of this research reveals, one of the primary reasons that construction users agree to PLAs is their effect on scheduling. It is particularly significant when a project has a tight deadline, such as completion before the start of a school year or sports' season. Nearly all PLAs include in the preamble some mention of the need for timely completion. This mention may be general or very specific.

As well, PLAs usually reconcile the often disparate work schedules of the trades. PLAs specify standard start, quit and break times, and most PLAs note a uniform set of holidays. The following language is from a Minnesota PLA and addresses a number of scheduling issues.

Article VIII
Hours of Work, Overtime, Shifts and Holidays

8.1 The regular forty (40) hour work week will start on Monday and conclude on Friday. Eight (8) consecutive hours, exclusive of a one-half (1/2) hour lunch period, between 7:00 a.m. and 5:00 p.m. shall normally constitute a work day. The starting time of the Work may be changed within these hours by the Employer upon notification to the Union to take advantage of daylight hours, weather conditions, shift, or traffic conditions. It is understood that all work performed in excess of eight (8) hours per day shall be considered overtime. Starting time may be adjusted up to one (1) hour prior to 7:00 a.m. with mutual consent of the Union and Employer.

8.2 At the scheduled starting time, all employees will be at the place where they pick up

their tools or receive instructions from their foreman. They shall remain at their place of work under the supervision of the Employer until the scheduled quitting time. There shall be no practices that result in starting work late in the morning or after lunch or in stopping work early at lunch time or prior to the scheduled quitting time. Coffee breaks will be limited to ten (10) minutes and shall be taken in close proximity to the Employee's Work Station. The parties are in accord that the intent of the Agreement is a "fair day's work for a fair day's pay" and Work should be managed in such a manner to enable the Employer to maintain and increase efficiency consistent with fair labor standards.

8.3 When employees leave the Work on their own accord at other than normal quitting time, it is their responsibility to notify the Employer. Employees will be paid only for actual hours worked.

8.4 The Employer shall determine the recording devices, checking systems, brassing or other methods of keeping time records on the Work.

8.5 An effort will be made to keep overtime work to a minimum but when such is judged necessary it will be worked at the direction and discretion of the Employer.

8.6 All overtime to be paid at time and one-half except on Sunday and Holidays which will be paid as specified in Local Union Bargaining Agreements

8.7 All employees shall be paid for actual time worked. The Employer shall have sole responsibility to determine availability of work due to weather conditions.

8.8 Shift work may be performed at the option of the Employer. In the event the second or third shift of any regular work day shall extend into a holiday, employees shall be paid at regular shift rates. Shift work shall be paid as specified in local collective bargaining agreements. When so elected by the Employer, multiple shifts of a temporary basis, shall be worked the number of consecutive days required by the Local Union Bargaining Agreement.

8.9 Uniform holidays for the Agreement are as follows: New Year's Day, Good Friday, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, the Friday after Thanksgiving, Christmas Eve Day and Christmas Day. If any of these holidays fall on a Saturday or Sunday, the preceding day, Friday, or the following day, Monday, shall be considered to be a legal holiday. A holiday shall be a 24-hour period commencing with the established starting time of the day shift on the date of the holiday.

8.10 When work is to be performed in controlled areas, the Employer may elect to have the employees take two (2) one-half hour breaks instead of two (2) ten minute coffee breaks and a one-half hour lunch period.

No-strike/no-lockout and dispute settlement provisions

Perhaps most importantly, PLAs insulate work on a project from disruptions that might occur because of labor relations issues or grievances.

Some no-strike/no-lockout provisions are very broad and preclude all types of actions. Others provide a narrow exception that allows striking if a contractor is delinquent in its payments to benefits' funds. The BCTD model PLA allows for disciplinary action—including ineligibility for rehire for ninety days—for any individual who violates the no-strike provision.

To ensure that disruptions do not occur or are dealt with swiftly, PLAs often contain several types of dispute settlement mechanisms. First, many PLAs, following the BCTD model, have a three step grievance procedure ending in binding, neutral third-party arbitration. This procedure handles typical complaints of contract violations. Second, PLAs often have some method of resolving jurisdictional disputes. Most PLAs simply refer matters to the BCTD's plan for the settlement of jurisdictional disputes in the construction industry. Some, however, contain their own procedures for resolving such disputes, particularly for cases where a non-BCTD union or employer who does not agree to use the plan is involved. Clear language in the scope of work provision and requirements for pre-bid or pre-job conferences are also ways of avoiding jurisdictional problems.

Many PLAs also have expedited procedures to handle job actions if they do occur. Typically, an arbitration hearing is held quickly with an immediate finding as to whether a job action has taken place. If one has, injunctions are authorized and penalties may be handed out to the offending individuals, unions or employers.

Safety, training and minority employment

All of the PLAs reviewed for this research mention the need to adhere to safe work practices. In some cases, these are fairly brief statements calling for adherence to contractor's safety rules and OSHA or state safety regulations. Drug testing policies are also a nearly universal item.

It is not uncommon, however, for safety clauses to be much more highly-developed and include, among other things, labor/management committees and mandatory testing on safety protocols. Rather than being included in the PLA itself, a project safety plan is often a separate document altogether.

Since PLAs typically cover large projects that last for several years, they provide excellent opportunities for training initiatives. Changes in the journeyman/apprentice ratio, the inclusion of pre-apprenticeship programs and even programs to set aside a portion of worksite for training are possibilities. An Indiana PLA, for example, stated that apprentices and non-journeymen may be "up to forty percent (40%) of a craft's workforce…unless the local collective bargaining agreement establishes a higher percentage."

A New York PLA provides a good example of a pre-apprenticeship program. In this case, pre-apprentice opportunities were provided to "students of the City of Buffalo's Vocational High Schools." The PLA stated that students "shall perform 'hands-on' work in the following trades: carpentry/drywall, taping, interior finishes/painting, electrical, plumbing, communication and low voltage cabling, masonry, HVAC, finish carpentry work and fire protection.

An extraordinary training program was part of the PLA for British Columbia's Island Highway. The centerpiece of the effort was the Hindoo Creek project, a section of highway built by trainees. As reported by Cohen and Braid, "Time spent on the job was strictly on actual production. 'I wasn't just pushing barrels around from one side of a training yard to another,' one trainee explained, 'I was doing real work.'" [22]

The Hindoo Creek project was part of an effort to recruit women and minorities into construction.

Targets and local hiring initiatives are also means of increasing minority participation under PLAs. A Connecticut PLA, for example, required that local residents be given first hiring preference, followed by those in neighboring communities. A New Jersey PLA stated that "up to 50% of the apprentices placed on this project shall be first year, minority, women or economically disadvantaged apprentices as shall be 60% of the of the apprentice equivalents…"

Critical miscellaneous provisions

Several other distinctive aspects of PLAs deserve mention. The Scope of Agreement provisions are highly detailed in PLAs. In order to avoid conflicts over what work the PLA covers and does not cover, the PLA project must be well defined. The following is an example from the Boston Harbor project.

The Management Rights clause in nearly all PLAs includes the rights to "hire, promote, transfer, layoff or discharge for just cause." The latter part of the provision bears special notice, since many local agreements in the construction industry do not include a just cause provision. However, these are typical in PLAs and balance with the dispute settlement procedures as a means of resolving just cause issues.

PLAs generally require all contractors on a project to use the referral system that is specified in the PLA or those included in local agreements. Some PLA referral mechanisms allow nonunion contractors to bring some of their own workers onto a project. These are called core personnel, key man or drag along provisions. For example, a western New York State PLA provides an illustration. It read, "In addition, the Contractor may hire, per craft, five (5) journeypersons referred by the affected trade or craft and may the hire one (1) core employee as a journeyperson who has been regularly employed by that Contractor for a reasonable time."

Such Project is generally described as the construction of the following:

1) Primary, secondary and residual wastewater treatment facilities on Deer Island
2) Head works on Nut Island
3) A tunnel under Boston Harbor from Nut Island to Deer Island
4) An outflow tunnel eastward in the Atlantic Ocean from Deer Island, including the installation of diffusers
5) Related facilities, which include, as necessary the following:
a. Site preparation, demolition and/or rehabilitation of facilities now located on the site
b. Designated materials and personnel loading and unloading and staging sites dedicated to the Project
c. Transportation systems in and around the Harbor for personnel and materials
d. Installation of materials necessary for the Authority's Deer Island facilities, not otherwise undertaken by public or private utility organizations, in the town of Winthrop
6) The interim and permanent sludge treatment plants at FSRA
7) New construction/rehabilitation work for the Authority's current operating facilities on Deer Island and Nut Island awarded after the effective date of this agreement

Finally, the term of agreement or duration clause is critical. Such clauses are much more complex in PLAs than in local agreements. Rather than the typical three or four year termination dates, PLAs must have detailed language concerning a project's completion. Without such language, disputes may arise as whether subsequent work is covered by the PLA. The following illustration comes from a Nevada PLA and shows the detail of such clauses:

ARTICLE XVIII
DURATION OF AGREEMENT

The Project Labor Agreement shall be effective on the date approved by the [owner], the Union and the General Contractor and shall continue until final acceptance, as defined in Section 1(b) of this Article, of the Project construction work described in Article II hereof.

Section 1:

(a) Turnover. Construction of any phase, portion, section or segment of the Project shall be deemed complete when such phase, portion, section or segment has been turned over to the Owner by the Contractor and the Owner has accepted such phase, portion, section or segment. As areas and systems of the Project are inspected and construction tested and/or approved by the Construction Manager and accepted by the Owner or third parties with approval of the Owner, the Agreement shall have no further force or effect on such items or areas, except when the Contractor is directed by the Construction Manager or Owner to engage in repairs or modifications required by its contract(s) with the Owner or Construction Manager.

(b) Notice. Notice of each final acceptance received by the General Contractor and/or Contractor will be provided to the Union with a description of what portion, segment, etc. has been accepted. Final acceptance may be subject to a 'punch list', and in such case, the Agreement will continue to apply to each such item on the list until it is completed to the satisfaction of the Owner and Notice of Acceptance is given by the Owner to the General Contractor and/or Contractor.

(c) Termination. Final Termination of all obligations, rights and liabilities and disagreements shall occur upon receipt by the Union of a notice from the General Contractor or the Owner saying that no work remains within the scope of the Agreement for the General Contractor or its successor.

(d) Releases/Waivers. Any and all releases and/or waivers shall be provided to the Owner.

A PLA checklist

The following table provides a comprehensive checklist of items for negotiators of PLAs. However, the list should not be a substitute for the important needs on a specific project. As chapter five states, the strength of PLAs is the ability to address these needs. The initial questions negotiators should ask are: What are the important issues on this project (e.g. cost, scheduling, safety, etc.)? How can the PLA be structured to handle these issues?

Table 1: A PLA Item Checklist

1. Purpose

- If there is a specific date by which the project must be completed, is it included?
- Is the need for harmonization of hours and the stabilization of wages mentioned?
- Is the need for the maintenance of labor peace mentioned along with a dedication to the mutual resolution of disputes?
- Does the clause contain a no-strike/no-lockout statement?

2. Scope of agreement

- Is it clear that the PLA is intended only to cover construction work?
- Is work that is not included clearly stated?
- Are the various projects and geographic parameters of the site well-defined?
- Does language address site preparation and/or dedicated off-site work?
- Does the clause clearly state that all contractors, of whatever tier, must accept and be bound by the agreement through a letter of assent?
- Does the agreement clearly state that the property owner's employees are not covered and the PLA does not create joint-employer status?
- Is there a supremacy clause stating that the PLA supersedes all other agreements?

3. Union recognition

- Are the signatory unions recognized as the sole and exclusive representatives of all craft employees?

4. Management's rights

- Is management specifically given the right to hire, promote, transfer, lay off or discharge employees, subject only to the provisions of the Agreement?
- Is just cause protection granted?
- Are restrictions of output, crew size or the introduction of technology prohibited?

5. Referral of employees

- Do signatories agree to use the referral procedures maintained by the unions?
- Is there a provision for unions that do not have an established referral system?
- Is there a non-discrimination clause in the agreement?
- Is there a period (e.g. 48 hours) after which contractors may seek labor from other sources if the

union is unable to fulfill a request?

- Is there language relating to the appointment of foremen?
- Does the agreement allow for testing or evaluation for those who require special skills?
- Is there a "key man" or core personnel provision?
- Is there a clause that prohibits the union from reassigning project employees to another site?
- Is there a provision for the reemployment of individuals who quit or are terminated for cause (e.g. ineligibility to return to the site for 90 days)?

6. Apprentices and trainees

- Is there language about the employment of apprentices?
- Does the PLA allow for a uniform journeyman/apprentice ratio?
- Are helpers, trainees, or other subjourneymen allowed on the project?
- Is the ratio of these other trainees defined?
- Are apprentice or trainee wages defined in the PLA?
- Does the PLA establish any special program for the recruitment or training of apprentices or other trainees (such as minority or female targeting, a school-to-work program, etc.)?

7. Wages and benefits

- Does the PLA contain any direct concessions on wages?
- Does the PLA contain any direct concession on overtime pay?
- Does the PLA limit forms premium pay, such as travel time, high time, etc?
- Does the agreement limit the joint funds to which contractors must contribute?
- Does the agreement limit amounts to be contributed to straight time wages?

8. Work rules

- These are unique to each project, but may include such matters as rules on the use of equipment, smoking, absenteeism, etc. Often this section is used as a residual category for items that do not fit easily into other sections.

9. Work stoppages and lockouts

- Is there strong language prohibiting strikes and lockouts, as well as other types of job actions (e.g. slowdowns)?
- Is striking allowed over certain matters, such as delinquency in payments to joint funds?
- If striking is allowed, is it limited in any way (e.g. must not be accompanied by picketing, handbilling, etc.)?
- Is notice required for striking?
- Is there a procedure for determining if a proscribed job action has occurred and for enforcing the no-strike/no-lockout clause?

10. Grievances and arbitration

- Does the agreement contain a grievance and arbitration procedure?
- Are arbitrators named in the PLA?

- If not, is the source of arbitrators (e.g. AAA, FMCS) defined?
- Does the agreement define the types of disputes or grievance that are subject to the procedure?
- Are exceptions made to the grievance/arbitration procedure for industries that have their own settlement procedures?
- Is the procedure, including the number of steps and individuals involved, clearly defined?
- Is the employer allowed access to the grievance procedure?
- Are limits to the arbitrator's authority defined?

11. Jurisdictional disputes

- Does the PLA reference the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry?
- Is a provision made for parties that are not stipulated to the Plan?
- Are pre-job conferences required to work out jurisdictional issues?

12. Union security

- Is there a requirement to join the appropriate union within the statutorily defined period of time?
- Is there a maintenance of membership provision?
- Is an exception made if the project is in a "right-to-work" state?

13. Union representation

- Is provision made for access to the project by union officials?
- Are the rules for union access defined?
- Are rules governing stewards defined?

14. Hours of work

- Is the workday defined?
- Are hours of work standardized across crafts?
- Are break times defined?
- Are any statements about overtime or overtime distribution included?
- Are there provisions for shift work and/or flex time?
- Are uniform holidays specified?
- Are rules concerning the celebration of holidays that fall on weekend defined?
- Is there a provision for make-up time?

15. Subcontracting

- Is subcontracting restricted to those willing to sign a letter of assent?

16. Safety and health

- Are any special safety programs or safety committees specified in the agreement?
- Are employees required to receive special safety training or be certified in particular safety procedures?
- Is a drug and alcohol abuse monitoring or prevention program specified?
- Is immediate dismissal allowed for safety violations?

17. Saving clause

- Does the clause preserve the contract if any particular provision is voided by a court of law?
- Does the clause require the parties to negotiate a substitute agreement for any provision voided under law?

18. Term of agreement

- Are the start and end dates of the project clearly defined?
- Is there a provision for rework or a contractor's subsequent involvement with the project?

3. Interviews

It was essential to hear from individuals with experience with PLAs. The research team interviewed approximately forty people who shared a variety of thoughts. It spoke with both public and private construction users, contractors, contractor association representatives, labor union officials and two labor/management committee executive directors. Interviews were conducted in southern New England, the northern Midwest, and the West (mainly California). To comply with rules for research including human subjects, the names of the interviewees are not revealed. Below we discuss positive and negative comments about PLAs, suggestions for when a PLA should or should not be used and ideas for improving PLAs.

Positive comments

Favorable comments about PLAs came mainly through questions about how PLAs affect costs, scheduling, safety, training and minority employment.

Scheduling

Interviewees seemed most convinced that the greatest benefit of a PLA was in assuring timely completion of a project. Foremost, PLAs nearly guarantee a steady flow of qualified labor. A New England contractors' association representative (who was generally ambivalent about PLAs) said, *"If a nonunion contractor needs labor, he will have to put an ad in the paper and hope he gets people to apply. But the unions have a national network of referral and hiring halls, and a contractor can nearly always get qualified labor."*

> *"Anything above five to eight million dollars we will go to a project labor agreement because we find it a more effective management tool...Basically it's the labor pool, the supply of labor, the quality of the workmanship. In my experience we have had some jobs that had both union and nonunion contractors on them and from the point of view of the lump sum delivery of the job it was tough to manage. So from an owner's perspective it's a more effective management tool."*
>
> *The construction manager of an Ivy League university*

Similarly, the construction manager for an Ivy League university stated:

Anything above five to eight million dollars we will go to a project labor agreement because we find it a more effective management tool...Basically it's the labor pool, the supply of labor, the quality of the workmanship. In my experience we have had some jobs that had both union and nonunion contractors on them and from the point of view of the lump sum delivery of the job it was tough to manage. So from an owner's perspective it's a more effective management tool.

In my experience, on our union (i.e. PLA) jobs we have never missed an opening date, and it is all driven by the academic schedule...We need to deliver this building by May 2006, and I get a better level of assurance building with a PLA.

The manager also noted that scheduling depended not only on getting qualified workers, but on keeping them working. Hence, the dispute settlement provisions of PLAs are also important. He added, *"The only [job] action we had*

where we had a problem was on an open shop job. Generally PLAs will protect us from that type of action."

The director of a hospital in the Midwest also noted the advantages of getting a quality workforce and being free from work disruptions:

> *Having an IMPACT agreement [i.e. a PLA] gave us peace-of-mind throughout all phases of the project. A new facility was a dream of our volunteers, board members and staff for many years. The planning phase was lengthy and thorough. Once we entered the construction phase, time was a crucial issue. The IMPACT agreement assured us of the full cooperation of the building trades. There were no work stoppages, and job harmony made for a project completed in a timely manner.*

In the West, a public sector owner also commented on the scheduling advantages of a PLA, while noting the cost advantages of assuring quality:

> *With the PLA, we finish on time, no interruptions or delays associated with disputes. It isn't just the dollar figure. When I put up a building, I stand back and take pride in it. When I see lousy work, I get angry. It isn't a question of it costing us five dollars an hour more. My community wants their school buildings put up properly, and they want them to last and not to have to come back and fix things because somebody was not properly trained. The PLA saves us money on the final cost, which matters more than the bid price.*

"The PLA saves us money on the final cost, which matters more than the bid price."

A Western public sector construction user

Adding some detail to concerns about scheduling, a public sector construction user in New England talked about assuring a proper flow of work on a project:

> *Delays in the project are what cause some of the most significant issues because it put trades out of schedule. They may have to go to another job. Then when you throw them off, you throw off the others...So in order to have the right order and to have people in the different trades, when they look across, say 'we know they do good work. If somebody is falling a little bit behind, let's work with them. Let's figure out a way we can move on, and let's resolve any issues.' That aspect of PLAs was very appealing to the building committee.*

"The biggest advantage is knowing that once a job starts it's going to stay working. It's not going to be affected by these external things that, for example, could affect you in local negotiations."

"You can't have delays [on school projects], and one of the things that PLAs give you is the ability to get the workforce."

The thoughts of two New England union officials

Training and minority employment

Several interviewees remarked that PLAs enhanced training and fostered minority participation in the trades. A Boston area union official told us:

> *We have made provisions for intake of certain people from communities into our programs to give them a direct access. It could be a project where the school committee says, 'any chance our young people might have a shot of getting into the training programs?' and we will write something in...One thing we talk about in the PLA is getting the kids and actually putting them in our training program, so in three or four or five years they're actually a journeyperson, as opposed to just throwing them on the job site for a few months, and then they're gone, and*

they don't learn anything...We give them more of a committed career path as opposed to just giving them a part-time job for the summer.

[On one project] there was an agreement in order to take in minority, women, disadvantaged kids into the industry, the building trades set up a pre-apprentice program...They put 200 or 300 kids through the program every year. It's a six month program, so they do two a year. Those kids are then moved into the apprentice program if they want...The six month program is really to give them a sense of what construction is as a career. But those that want to pursue it, they go into the apprentice programs, and they're off and running from there.

A New Haven area union official added:

[The city] had done a lot of projects without PLAs, but the PLA projects invariably came in on time and on budget and, two, they demonstrated, as contrasted with the non-PLA jobs, a clear superiority in numbers in terms of [city] residents and minorities...and they still came in few cents per square foot cheaper than the other jobs.

For the larger cities, it's important to them that they get local residents and minorities and women, and we demonstrate to them the successful programs that we've implemented within PLAs in other areas. The state projects, and even a lot of the local projects, it's important for them to understand that the PLA is the only way you can really guarantee a local workforce. In the public sector any person can bid, and the successful bidder can bring his workforce from wherever he so chooses, and we've seen people coming in from Arkansas, Texas and Maine. The PLA doesn't prevent anyone from bidding the project. All it says is that the successful low bidder is going to employ local building trades people. And we've done things in those agreements to give local residents a first off the bench hiring preference. We guaranteed one community ten apprentices into the trades during the building project.

Safety

Even some of the skeptics we interviewed said that PLA covered jobs were marked by a heavy emphasis on safety. Some, like the following interviewee, linked safety performance to the labor/management committees found in many PLAs:

Under the PLAs, more so than absent a PLA, there is usually more emphasis on safety and more so, there is more emphasis on joint participation around safety. On almost all the agreements, we insist there be a joint safety committee formed for this project so that on a regular basis, once a month, the agents get together with the stewards and contractor and talk about safety related issues. Now, on the private side, something like this is very demanded, and it is starting to come more and more from the owners, even if we had [started] it initially. On the public side it's asked for less often by the construction manager, but we think it is an advantage.

A contractor's representative stated: *"A contractor can't say 'I can't afford to buy a harness' or lanyard or whatever on a PLA project. The costs are built into the bid process, since they are required on the PLA."*

"Under the PLAs, more so than absent a PLA, there is usually more emphasis on safety, and more so, there is more emphasis on joint participation around safety."

A Boston area labor official

Costs

Since concessions on compensation are rare in today's PLAs, few interviewees made mention of direct cost savings. Rather, savings were implied through better scheduling, higher quality, etc. One interviewee, a union official, commented:

You know time is money, too. I think the PLA jobs—at least the one hundred percent union jobs—are better scheduled and usually come out ahead of schedule, and I think because of that there is a lot of value added.

An interviewee in the West offered an interesting take on PLAs and costs:

When the union brought the PLA to me, I didn't like it. I don't like anybody dictating what the terms of my project should be. But after I stepped back and talked with other people and after re-reading the PLA, I saw the pony in the coral. Low ball bids are not necessarily a great deal. A way-low bid probably means somebody missed something. With the PLA we now have in place, we have a more experienced group of bidders providing a much closer range of bids compared to the mom and pop organizations that were bidding on our projects previously. By law, we have to accept the lowest responsive and responsible bid. [The] mom and pop organizations come in thinking they can take on a major project, and they lose their shirts. Contractors have left. Contractors have been fired. Contractors have gone broke on our projects. Those are things we don't want to get into.

The traditional low-bid approach to awarding public school jobs rewards stupidity. Let's say a project entails three parts—A, B and C. Everybody bids on A, B and C except Stupid. Stupid is stupid, so he doesn't see the third part. So Stupid bids only thinking about A and B. Guess who's the lowest bidder? Stupid! Now Stupid starts the work. The summer goes along. School's coming and the project has got to be completed. Now Stupid sees the third part of the project, but Stupid doesn't have the money to get it done. So Stupid comes to me and asks for change orders. Now he has no business asking for change orders. We could fire him; we could sue him; we could go after his bond. But like I said, school's coming. The kids have to have somewhere to go. So we bite the bullet and pay Stupid his change order. We reward Stupid for being stupid. It's stupid! PLAs cut through this crap by either chasing Stupid out of the game or getting him to pay attention.

"The traditional low-bid approach to awarding public school jobs rewards stupidity...PLAs cut through this crap by either chasing Stupid out of the game or getting him to pay attention."

A Western public sector construction user.

General comments

Construction users in a Midwest city offer a couple of comments that do not easily fit in a category are offered by construction users in a Midwestern city. In the area, a labor/management committee developed a model PLA known as an IMPACT agreement. A hospital and museum official offered us the following comments on the advantages of using the agreement:

Having an IMPACT agreement facilitated a positive partnership between [the medical center] and the subcontractors who worked on our 7th Street campus project. It gave us the assurance of quality workmanship with stringent safety and production standards. We had confidence in a stable, reliable workforce that completed the project on schedule. We were very pleased with the teamwork on our campus and with the benefits gained from our IMPACT agreement.

At [this organization], we know that success is found in uniting the talents of many and building strong relationships. Our IMPACT agreement has been a critical relationship in our effort to build the institute and advance the cardiovascular health of our community. We take pride in being the Quad City's very own health system. Relying on the talents of local people who share a stake in the Quad Cities

only makes sense and has always brought us tremendous results.

The $14 million construction of the museum's IMAX Theater created numerous challenges as we nestled a 38,000 square foot addition between two existing facilities, while continuing to invite the public to participate in a full range of educational programs and exhibitions on Museum Hill. There is no question in my mind that the IMPACT agreement enabled us to achieve our construction time line.

The successful presentation of IMAX films requires a high degree of precision and attention to detail in the construction process. The complex includes a 270 seat auditorium with its centerpiece of a five story-high, seven story-wide flat screen. The talents and dedication of the highly competent workers employed through the IMPACT agreement enabled us to prepare the building to accept the highly technical IMAX equipment. We are assured that the Quad Cities will have one of the finest large format theaters in the nation.

The men and women who worked on this project took pride in their work and shared the excitement of bringing this spectacular new attraction to the region. We look forward to seeing them come back to enjoy the product they created for all of us to enjoy for many years to come. The IMAX Experience will be another point of pride for everyone in the Quad Cities.

Negative comments

Not all comments about PLAs were positive. And, in fact, nearly all interviewees had some criticisms of their use or overuse.

The effect of PLAs on local labor relations

The strongest negative comments about PLAs were not about their impact on construction outcomes, but rather on how PLAs affect local labor relations. Three respondents from a large Midwestern city told a similar of how PLAs had emboldened building trades unions to seek larger than normal bargaining settlements. Since a majority of workers in the area were covered by the no-strike/no-lockout provisions of various PLAs, they did not fear the consequences of a job action and were not, therefore, as willing to compromise their bargaining position. The result was, in the opinions of our interviewees, an overgenerous settlement with electricians that then spread to other trades.

Subsequent negotiations with the plumbers and pipefitters resulted in strike, under local agreements, of seven weeks. Although work continued on PLA projects, it slowed as traveling workers—at the first hint of labor troubles—left the area, making it difficult for the union to staff PLA jobs. Although the owner and employers were able to find sufficient labor, in part by shifting labor from less urgent work, the situation was viewed as burdensome and not in keeping with the commitments made by labor in the PLA.

The interviewees believed PLAs covered too much work in one area. This, in turn, led to greater worker militancy arising from a lowering of the consequences of such militancy. More expensive and more difficult local area settlements resulted.

It should be noted that interviewees mentioned a considerable evolution in labor relations in the area since that problem. The plumbers and pipefitters and Mechanical Contractors Association agreed to use a dispute resolution procedure in place of a strike in future negotiations, and there has been a general mending of relations.

A New England contractors' association representative also noted problems in local labor relations caused by PLAs. His particular complaint was with unions using the grievance/arbitration mechanisms in the PLAs to make gains that might not have been possible at the bargaining table.

An example he gave was of shacks provided to

workers on worksites. A practice had developed in the area of contractors providing such shacks in which workers would take breaks, change clothes, etc. However, the shacks were not guaranteed by the local collective bargaining agreements. When contractors balked at providing a shack on a particular PLA project, a grievance was filed and, an arbitrator determined that the contractors must provide a shack in accordance with established past practice. Our interviewee was convinced that this decision would be used as precedent on future projects.

Since his industry relies on a bipartite employer/union panel, not neutral, third-party arbitration, he feared the imposition of an outside voice on industry practices. The problem would be most pronounced when a majority of work in an area was covered by PLAs.

We've got a lot of nonunion shops that do really good work. I wouldn't be doing the community a service if I excluded the nonunion contractors. Sixty percent of our contractors tend to be union contractors. We don't have any problem with unions; we're happier with their work but not with the price. We have to get through our scope of work with very limited funds."

A Western construction user

The effect of PLAs on bidding and costs

A few respondents indicated that they did believe that PLAs raised the costs of projects, particularly by limiting the number of bidders.

A public sector construction user in Connecticut, though generally happy with his PLA-covered project, noted that only one bid had been received on drywall contract and that the job had to be put out to bid a second time.

Two Western respondents seemed most concerned about the effects of PLAs on bid activity and costs. A public sector user stated:

We've got a lot of nonunion shops that do really good work. I wouldn't be doing the community a service if I excluded the nonunion contractors. Sixty percent of our contractors tend to be union contractors. We don't have any problem with unions; we're happier with their work but not with the price. We have to get through our scope of work with very limited funds.

A traditionally nonunion general contractor in a western state, who had just become a signatory contractor, agreed that PLAs reduce or at least change the number of bidders on a project; although, he was more optimistic about their ultimate effects:

Any conditions or restrictions you place on a

Table 2: Positive and Negative Aspects of PLAs

Positives	Negatives
Ensure a steady flow of highly qualified labor	May interfere with local labor relations
Promote on-time completion	May interfere with established methods of dispute resolution
Enhance safety	May result in fewer bidders under certain circumstances
Aid targeted hiring	
Promote training	
Address a range of project needs	

bid will decrease the number of bidders. If you prequalify your contractors, that will reduce the number of bidders. If you go design-build, that will reduce the number of bidders. If you require a certain [workers compensation] experience modification rate to influence safety on the job, that will reduce the number of bidders on your job. And a PLA will reduce the number of bidders on your job. Anytime you reduce the number of bidders on your job, you will increase the [accepted] bid price. But in the absence of a PLA, prequalification, etc. you increase the possibility that you'll get an irresponsible contractor. That means excessive change orders, litigation as the architect and the contractor fight, scheduling problems, inferior work, and increased construction management costs. PLAs are like insurance. An increased bid price is buying insurance against downstream costs.

When is a PLA appropriate?

Most interviewees agreed that PLAs are not appropriate for all types of work. The regional vice president for construction operations for a large, northeast-based, construction management firm, who often counsels clients in PLA use, said that size and scheduling were the two main factors he urged clients to consider when contemplating a PLA. Moreover, he implied that considering the nature of the work was important. In parts of the Northeast, for example, it is difficult to find nonunion contractors capable of doing certain types of work (e.g. site excavation and iron work). When, on a large project, it is inevitable that much of the basic work would go union, this construction manager advises clients that a PLA makes sense.

Although a PLA would require all contractors to operate in accordance with collective agreements, problems that might arise by having both union and nonunion contractors on a site will be forestalled, and the construction user might, along the way, gain some important concessions. A contractor's association representative also offered that there is "too much conflict on hybrid jobs" to make them worthwhile on large projects where most of the work will go union anyway.

A midwestern respondent offered that PLAs are not a good idea when there are not a sufficient number of union contractors capable of performing the required work in an area. The danger of receiving too few bids under such circumstances is too great.

Although different interviewees suggested different parameters, generally PLAs start to make sense when projects are at least in the five to ten million dollar range. Further factors include the complexity of the work, how tight a schedule the construction user is on and how high the likelihood of essential work going union anyway. According to our interviewees, when such conditions exist, PLAs make sense. Otherwise, the recommend open bidding and construction under area agreements.

Improving PLAs

Now that PLAs have reached a level of maturity and, to an extent, standardization, interviewees did not offer many comments on how PLAs could be improved. But not surprisingly, contractors and contractors' association representatives saw the most room for improvement. The improvements they sought were principally in the ways most PLAs are negotiated. Currently, contractors usually have no formal role in negotiations, which are conducted between the building trades unions and a representative of the construction user, generally a construction manager. As mentioned, the construction manager must be a construction employer under the definitions of the National Labor Relations Act, but most prime and subcontractors, as well as their associations, have no role at the table.

Occasionally, it is clear that the contractors have had input into the process. A Michigan PLA, for example, excluded grievances arising in the electrical and sheet metal industries from the PLA's grievance/arbitration machinery in deference to the bipartite arbitration panels in those industries.

The improvements interviewees sought were principally in the ways most PLAs are negotiated. Currently, contractors usually have no formal role in negotiations, which are conducted between the building trades unions and a representative of the construction user, generally a construction manager.

Where such exclusions do not exist, however, contractors and particularly association representatives are put in a bind. First, their members are clearly bound by the provisions of PLAs. However, since the contractors' associations are not signatory to the PLA, they do not have standing in the grievance/arbitration process and cannot offer full representation to member contractors as a party to the agreement. A further problem is that some PLAs exclude per capita payment to the types of administrative funds that support the involvement of associations in the process.

One possible solution is the development of PLAs through multicraft, multiemployer labor/management associations similar to the National Maintenance Agreements and the IMPACT agreement mentioned above. In fact, in a number of areas, labor/management committees are the main vehicle for developing and promoting PLAs. In such cases, the contractors have a forum to make sure that their concerns are brought into any PLA negotiations.

4. Bidding and Costs

The bidding research compares projects in the East Side Union High School district of San Jose, California with the San Jose Unified School district. The former used a PLA on a series of school construction projects while the latter did not. The research on costs examines 108 school construction projects in New England.

We find that the use of a PLA neither lowers the number of bidders nor increases costs when other important variables are taken into account.

The results show the use of a PLA neither lowers the number of bidders nor increases costs when other important variables are taken into account.

Bidding behavior

The East Side Union High School district in San Jose is responsible for the education of 24,000 high school students. A neighboring district, the San Jose Unified School district, enrolls 32,000 students ranging from kindergarten through high school. In March 2002, voters in both districts approved bond issues for school construction, repair and renovation. The East Side vote allowed the district to borrow up to $300 million. In San Jose, the vote capped borrowing at $429 million. In 2004, the East Side district entered into a PLA with the Santa Clara and San Benito Building and Construction Trades Council. The San Jose district chose to build without a PLA.

The different decisions of the districts with regard to a PLA provided the perfect ingredients for a naturally occurring experiment. We can compare bidding behavior with the East Side district before and after the implementation of the PLA, and we can compare across districts.

There were 21 projects in the East Side district bid under the PLA and 35 projects bid during the same period without a PLA in the San Jose district. Also, there were 12 projects bid prior to the PLA agreement in the East Side district and 96 projects in the San Jose district during the same period. In sum, there were 164 projects, 21 of which were built under a PLA.

The East Side and San Jose districts are adjacent and, therefore, within the same construction market. The time is also the same. However, there are two potentially important differences. The East Side projects were, in dollar value, approximately two to three times larger than the San Jose projects both before and after the use of PLAs. Also, the two districts employ different bidding procedures. The East Side district favors hiring a single prime contractor, who then seeks its own subcontractors, while the San Jose district treats specialty contractors as individual prime contractors.

Statistics indicate that the East Side district received, on average, fewer bidders per bid opening than the San Jose district (approximately 4.5 versus approximately 4.0). This result would be consistent with the findings of those who argue that PLAs reduce the number of bids on a project, except that the result holds for both before and after the implementation of the PLA. In fact, the difference between the two districts decreases after the acceptance of the PLA. Further, there was a drop in the number of bidders across both districts over the

time period. This decrease may be associated with an increase in construction activity in the area at the time. Bureau of the Labor Statistics data for the San Jose-Sunnyvale-Santa Clare area show more employment in construction during 2004 than in 2003. Assuming that this statistic reflects more construction activity, fewer contractors would be willing to bid the projects than if they were experiencing a slack period.

The small difference in the number of bidders both before and after the PLA across districts is likely tied to the differing methods of construction management. The San Jose district favors separate prime contracts on specialty work. Since there are more specialty than general contractors in most construction markets, that fact alone may account for more bidding activity.

One way to find out what the effects of all these possibilities are is to place a number of variables in a multiple regression model.[23] In doing so, the only statistically significant variable that predicts bidding behavior is business cycle. In the period that construction activity increased, the number of bidders per bid opening decreased. Most notably, the results of the study indicate that the presence of a PLA has no statistically significant effect on the number of bidders per bid opening.

Costs

Whether PLAs increase or decrease the number of bidders is probably of little interest to those who ultimately pay for construction projects. What is of keen interest is whether PLAs increase, reduce or have no effect on project costs. In examining 108 school projects in New England, ten of which were built with PLAs, the presence of a PLA does not have a statistically significant effect on the final cost of a project. The research on costs is modeled closely after several studies done by the Beacon Hill Institute (BHI) at Suffolk University in Boston. In 2003 and 2004, BHI produced reports on the effects of PLAs on school construction costs in the Greater Boston area and in Connecticut. Their original study found that PLAs increased construction costs by 17.3% (or $31.74 per square foot) in the Boston area. A subsequent study, which corrected several problems in the first, lowered the estimate to about 12% (or $16.51). In extending the research to Connecticut, the researchers found a PLA premium of $30.00 per square foot.[24]

Similarly, the research includes a model, predicting costs on 108 school projects in New England. Studying schools has several advantages. First, there are more schools than, say, power plant projects in an area, which allows us to have enough observations within a relatively homogenous construction market. Further, while by no means identical, schools are enough alike to provide a basis for meaningful comparison. Finally, there are both public and private schools, which allows us to examine both private and public construction.

Returning to the BHI studies, there were a number of problems with the research. But the main complaint is with the presumption stated in the following paragraph:

> Clearly, other factors also influence the cost of construction—the exact nature of the site, the materials used for flooring and roofing, the outside finish, and the like. As a practical matter, collecting viable information at this level of detail for all 126 projects, would be impossible. Thus, our equation necessarily excludes these unobservable variables. However, this does not undermine our finding of a substantial PLA effect. For the PLA effect shown here to be overstated, it would have to be the case that PLA projects systematically use more expensive materials or add more enhancements and "bells and whistles" than non-PLA projects. Our conversations with builders, town officials and architects suggest that PLA projects are not systematically more upscale.[25]

The BHI researchers dismiss the possibility that PLA projects have more amenities or are more complex than non-PLA projects. Such factors, however, determine why projects are built with PLAs in the first place. To hold otherwise is to ignore prevailing public policy. In many states—particularly in New England—court decisions require public owners to establish the need for a PLA before using one. The size of a project, its complexity and the need for timely completion are all variables that must be considered.

Since the BHI researchers do not believe that PLA projects are "systematically more upscale" they included very few variables in their models that could affect construction costs. Other than whether a PLA had been used, they controlled for little more than the size of the project in square feet, whether a project was new construction or a renovation and, in the Connecticut study, the number of stories and if the project involved an elementary or high school. The methodological problem with such a lean specification is that effects are attributed to the presence of a PLA when they actually result from some unobserved variable or variables.

Finding detailed information for a large number of construction projects is very difficult work. However, we were able to find information—through speaking with architects, construction managers, school department officials, etc.—on thirty variables across the 108 projects in New England.

The descriptive statistics alone tell us that PLA-covered projects are inherently different than non-PLA projects. For example, the average square footage for a PLA school is approximately 157,000 while a non-PLA school is close to 118,000. PLA schools average more than three stories while non-PLA schools average fewer than three. All the PLA projects required prior demolition work, while less than half of the non-PLA schools required such work.

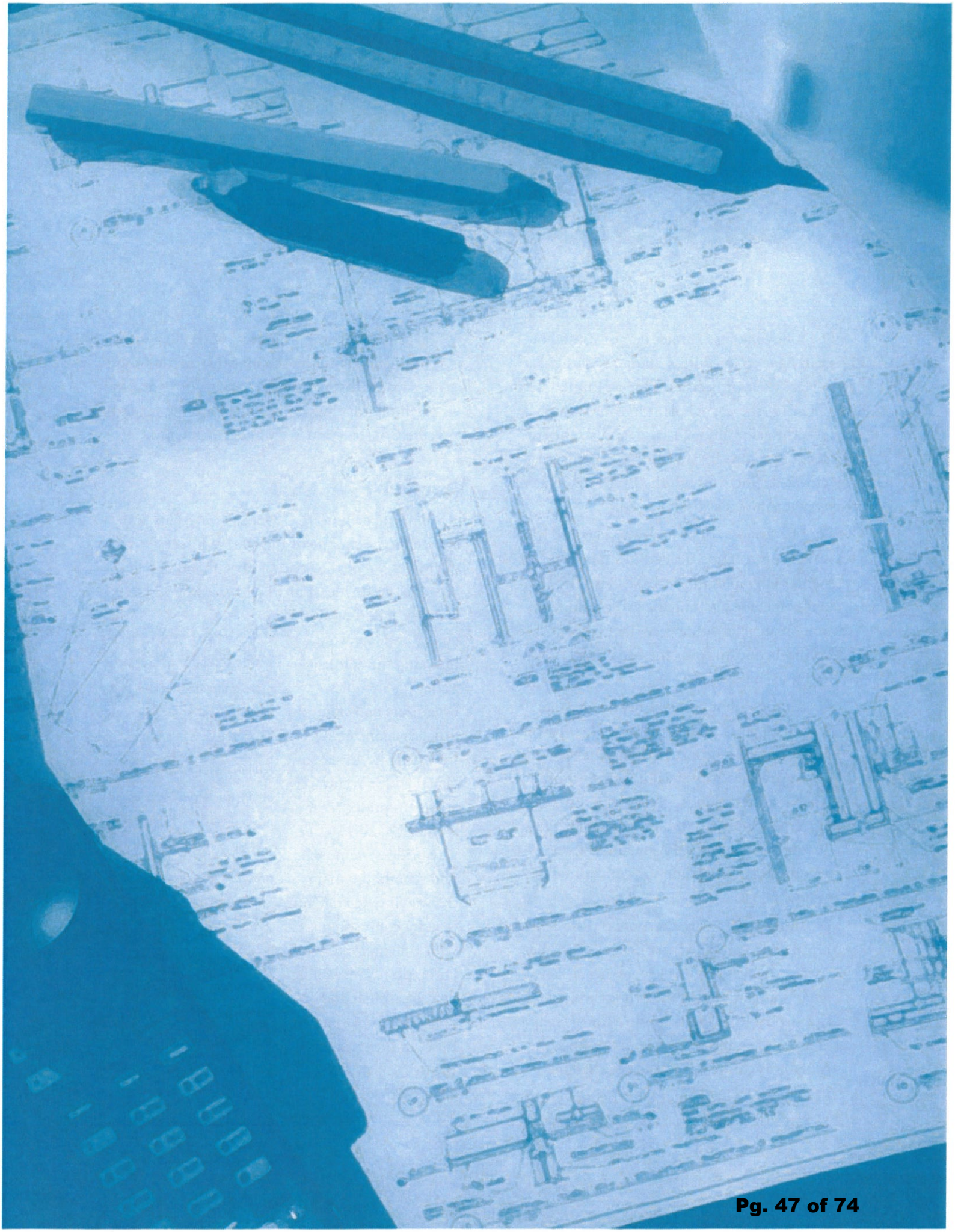
Using the data we assembled, we created a multiple regression model.[26] The dependent variable is the logarithm of the final cost of a project. Using the logarithm of final cost rather than final cost itself allows us to interpret the effects of the independent variables in percentage terms.

When we enter all the variables in a regression equation, we find that significant positive effects are associated with the size of a project (i.e. square footage), whether the building is an elementary school, the construction of an auditorium, cafeteria or kitchen, whether the roof includes both low and steep pitches, and whether the project was located in an urban area. While our model suggests that a PLA adds 7.8% to project costs, the result is not statistically significant. In fact, the PLA variable is so weakly predictive, that the actual effect could range anywhere from -14.4% to 29.9%.

The inherent difficulties in this type of research—identifying the labor relations practices on projects, gathering information on building amenities, materials and aspects of design, etc.—make it unlikely that large samples can ever be used. But small samples, such as the ones by BHI and this one, have a number of problems. Perhaps the main problem is that they can be very sensitive to outlying values. One or two projects that are very different from the majority can skew results. Therefore, results need to be interpreted with caution.

Nonetheless, our conclusion is that the additional costs observed on PLA projects by previous researchers likely have little to do with the PLA itself, but result from the additional amenities or requirements that are inherent in large, complex jobs, which are more likely to be covered by PLAs. We find no strong evidence that PLAs affect final costs either positively or negatively.

To conclude, if PLAs are, in fact, cost neutral, then more attention must be paid for other outcomes that can be achieved with PLAs, such as timely completion, better safety outcomes, training opportunities and industry recruitment. The next chapter investigates some of these issues through case studies of four projects, each of which had distinctive requirements.



5. Case Studies

The following case studies demonstrate how PLAs can be used to address different essential needs. Here, four projects take focus: Route I-15 in Salt Lake City, the Toyota plant in San Antonio, an airport terminal in Rhode Island, and a series of high school projects in San Jose. As we will see, each project was distinctive, with the PLA used in a creative way to address a specific need.

- The Route I-15 project was a critical highway reconstruction needed to support the 2002 Winter Olympics in Salt Lake City. The challenges included getting the project done on time in an area with a very tight labor market. Political concerns over the use of a PLA also had to be addressed.
- Although nonunion at nearly all of its American parts' and assembly plants, Toyota uses PLAs for its construction. This fact, however, proved controversial in San Antonio, where construction is so lightly unionized. Extremely unusual for a private sector PLA, the Toyota San Antonio PLA includes strong accommodations for nonunion contractors and workers.
- In the mid-1990s, the State of Rhode Island replaced the outdated terminal at T.F. Green Airport, which services Providence. A key challenge was completing the project while keeping the airport in full operation. With the help of creative scheduling options in the PLA, the terminal was completed ahead of schedule.
- The East Side Union High School District in San Jose features many specialized vocational academies and programs. With the approval of the $300 million school construction bond issue, the district saw an opportunity for experiential learning and, through a PLA, created the Construction Technology Academy.

Route I-15 in Utah

On Friday, June 16, 1995, Salt Lake City was selected to be the site of the 2002 Winter Olympics.[27] For the games to begin, much had to be done, not the least of which was the complete reconstruction of a seventeen mile freeway bisecting the Salt Lake Valley.[28] Olympic organizers and state officials agonized over the traffic tie-ups associated with a reconstruction project that would rebuild 130 freeway bridges, demolish and rebuild the main freeway interchange in the city connecting I-15 with I-80 and "chop up and replace every cubic inch of asphalt and concrete" for seventeen miles in the heart of the urban Salt Lake area.[29] Worse than a traffic nightmare, many feared not being done in time. The Utah Department of Transportation (UDOT) estimated that the reconstruction of I-15 could not be completed until after the Olympics in 2002 and probably would not be done until 2004. Then-Governor Mike Leavitt later recalled: "I told [Tom Warne, Executive Director of UDOT], 'Tom, we've got to find a way to do this faster. We cannot have this community torn up for nine years.'"

feared not being done in time. The Utah Department of Transportation (UDOT) estimated that the reconstruction of I-15 could not be completed until after the Olympics in 2002 and probably would not be done until 2004.[30] Then Utah Governor Mike Leavitt later said, "I told [Tom Warne, Executive Director of UDOT], 'Tom, we've got to find a way to do this faster. We cannot have this community torn up for nine years.'"[31]

UDOT's solution to this dilemma was to invoke an innovative form of construction—design build—which would hopefully allow the reconstruction project to be completed prior to the 2002 Olympics without completely shutting the I-15 corridor for years. Using design-build meant that construction could begin prior to a complete and detailed design and specification of the overall project. UDOT engineers would provide general guidance, but competing contractors would be free to develop their bids using innovative materials and procedures aimed at speeding construction and reducing costs.[32] At the time, estimates of the cost of the I-15 reconstruction project were at one billion dollars indicating that UDOT thought the design-build approach would save about ten percent on total costs along with cutting construction time by about two years.[33]

Under design-build, construction could be scheduled to begin in early 1997. Contractors would be expected to work around the clock, six or seven days per week. There would be limits on how many lanes could be closed at any given time as well as how many interchanges could be closed.[34] Design-build was particularly cost-effective on large projects but some felt that inevitably out-of-state contractors would be awarded the project. Local contractors were not equipped to handle the scope of work proposed, particularly the engineering required of contractors on a design-build project. However, Warne said that contract language for the I-15 project would stipulate that Utah construction companies would be named as subcontractors.[35]

In September 1996, UDOT prequalified three contractors from a field of ninety that responded to the announcements in March. By September, the project had expanded to include an additional interchange at the north end of the reconstruction project and the relocation of some railroad tracks near the project. The official cost estimate had risen to $1.36 billion due to these additions and other considerations. On March 26, 1997 UDOT announced that Wasatch Constructors (a consortium led by Kiewit Constructors of Omaha and which included several Utah companies) had won the bid.

With design-build, the lowest bidder does not always win the project. UDOT was using a "best-value" approach that combined cost considerations with technical and quality considerations to receive the best bang for the Utah taxpayer's buck.[36] Warne later said that the "I-15 design-build contract was given to the best overall proposal, not the lowest bid."[37] However, Wasatch Constructors had coincidentally come in with the lowest bid.

Wasatch officials indicated they planned to begin immediately. "You have to remember this job isn't even designed yet," said Conway Narby, principal on site for the winning consortium.[38]

With groundbreaking coming within a month of the bid opening and a project-completion deadline of August 2001, this 17 mile reconstruction was a fast-track project. If Wasatch could complete its work on-time and complete it to UDOT's satisfaction, Wasatch stood to win up to $50 million in bonuses. If Wasatch exceeded UDOT's deadline of November 2001, just before the 2002 Winter Olympics, the company risked paying UDOT up to $100 million in fines. Also, Wasatch had to guarantee its work. According to the contract, UDOT could take a default one-year warranty on the project or force Wasatch to cover all road maintenance for ten years for a fee of $27 million. UDOT reasoned that this potential warranty at UDOT's option would focus Wasatch Constructors on qual-

ity as well as speed. In short, Wasatch had won because it had the experience to do what it said it would do including designing on the fly while building on time and within budget.

Ed Mayne, president of the Utah AFL-CIO, was very pleased that Wasatch had won the bid. He felt that Wasatch was the most union-friendly of the three pre-qualified bidders. Indeed, prior to bidding the project, Wasatch had secretly signed a PLA with six local unions agreeing to a uniform set of wages, benefits and work rules that largely corresponded to local union collective bargaining agreements. This agreement was not made public prior to the bid opening because the PLA was part of Wasatch's bidding strategy. Building a fast-track project under design-build, in a tight labor market, with substantial performance awards and penalties in play, involved considerable risks for Wasatch. The PLA was one means of controlling some of those risks—the ones associated with the supply and quality of labor.

Mayne felt the PLA provided another advantage. Just as it was politically wise to require outside general contractors to partner with local subcontractors, it was also politically sensible to encourage local employment on the biggest public project ever financed by Utah tax dollars. Mayne anticipated that the consortium would hire seventy to eighty percent of its workforce locally despite Utah's 3.1% state unemployment rate at the time of the bid award. Narby, the person who signed the PLA for Wasatch, agreed that eighty percent local hire was possible particularly if participating nonunion contractors hired locally.[39] The PLA did not prohibit nonunion contractors, and ten percent of the value of the work was exempt from the provisions of the PLA. But if nonunion contractors from out of state brought in their traveling labor force, the amount of local hiring would go down. Union contractors both in-state and out-of-state were required by the local collective bargaining agreement to give preference to local workers over travelers. However, local labor shortages loomed as a problem for all contractors.

By early 1997 when the project was to begin, the Utah construction industry had been booming for seven years (since 1990). While construction accounted for just under four percent of total Utah state employment in 1990, by 1996 construction accounted for 6.5% of all state civilian, nonagricultural employment. Furthermore, construction employment had been growing in absolute terms at over ten percent per year for each year from 1990 to 1996. While Utah's construction's growth rates peaked in 1994, its share of total state employment would not peak until 1999. I-15 was going to be rebuilt during a period of labor shortages and Wasatch Constructors saw that coming.

The *Salt Lake Tribune* reported at the beginning of the I-15 project that:

> *[Wasatch Constructors] has to find some 1,000 to 1,500 skilled highway construction workers in a state where the unemployment rate is so low that even unskilled jobs in hamburger joints go begging to be filled. "It is hard to say where they are going to find the workers," says Ken Jensen, chief economist for Utah Job Service. "I am not aware of any bunch of workers out there standing in line waiting to climb up on earth movers."*[40]

Estimates of the needed workforce varied. The *Deseret Morning News* estimated 600-1,000 hourly craft workers and 100-150 salaried employees. The *Salt Lake Tribune* estimated 1,000 to 1,500 workers.[41] Several other road construction projects were underway at the time or scheduled to begin, including a light rail project running along the same corridor as I-15. Local highway contractor Richard Clyde, whose firm W.W. Clyde was part of the losing consortium, Salt Lake Constructors, noted that heavy construction workers were already in high demand and stated, "I still do not see where [Wasatch] are going to get all the workers they need without bringing in a lot from out of state."[42]

Having won the contract, Wasatch Constructors announced its PLA with the six key trade unions that were going to complete the project. These unions were the operating engineers (heavy equipment operators), laborers, plasterers-cement finishers, carpenters, iron workers and teamsters (truck drivers). The contract these unions signed with Wasatch was a variant of the heavy-highway construction project agreement used around the country by various highway contractors in conjunction with (typically) these unions—namely the unions that do most of the heavy and highway work. The contract stated in part:

> It is the intent of the parties to set out uniformly standard working conditions for the efficient prosecution of the new construction herein; to establish and maintain harmonious relations between all parties to the Agreement; to secure optimum productivity, and to eliminate strikes, lockouts or delays in the prosecution of the work undertaken by the employer...
>
> The greatest advantage in working with the Unions is the ability of the Employer to acquire an immediate and continuous source of skilled applicants. Within the Unions there exists the capability to activate a recruiting network throughout the United States to ensure a steady flow of skilled applicants to meet project schedules.
>
> The Employer may name hire any individual who has previously worked for the Employer (or any of the individual joint venturers thereof)...[as long as] those hired from "other lists" shall not exceed forty percent of each craft's work force.

This last provision meant that contractors (union or nonunion) could bring onto the project up to forty percent of their own workers (either union or nonunion). In practice, the percentage would likely be smaller because this forty percent limit was applied craft by craft and contractor by contractor. Thus, while one out-of-state nonunion contractor might bring in forty percent outside workers for each craft, an in-state union contractor might name hire few, if any, workers simply taking workers in order from the union hiring hall. Another out-of-state union or nonunion contractor might bring in his skilled crew but take lesser skilled workers from the hall. So the forty percent rule gave contractors flexibility to respond to particular cases but also made it likely that, on average, less than twenty percent of the workers would come from out of state. The unions, in turn, agreed not to discriminate against nonunion workers seeking to be sent out from the hiring hall in this right-to-work state.

> The Unions represent that their local unions administer and control their referrals in a nondiscriminatory manner and in full compliance with Federal, state and local laws and regulations which require equal employment opportunities and non-discrimination.
>
> The Unions agree to engage in active recruitment of minority and female applicants...

The unions also agreed to cooperate jointly with management in enhancing productivity on the job and to forswear any work stoppage:

> The Employer and the Unions recognize the need to continually explore ways and means to increase productivity to enhance the competitive position of the signatory contractors and thereby increase job opportunities for members of the Unions. To this end, signatory contractors and local unions are encouraged to establish Project Productivity Committees to deal with problems affecting job schedules, construction technology, recruitment and similar matters...There shall be a labor-management committee whose purposes are to foster labor-relations communications and to explore ways and means to improve safety, quality and productivity at the jobsite.

> The Parties agree that there is an absolute prohibition against any and all strikes, work stoppages, slowdowns, picketing, sympathy strikes, handbilling or any other forms or types of interference of any kind...There shall be no lockout by the contractor.

An expedited grievance procedure was established for any violation of the no-strike, no-lockout clause. The contract also established uniform work rules, hours, shifts, overtime pay and holidays, including time off for July 24th, a local Utah holiday. Pay scales, including wages and benefits, were set for all craft classifications and these were to be reviewed yearly in July. A section on apprentices stated:

> Recognizing the need to maintain continuing support of programs designed to develop adequate numbers of competent workers in the construction industry, the Employer will employ registered apprentices in the respective Unions. The combined employment of apprentices shall not exceed thirty-three and one-third percent of the individual Union work force...

This meant that the local tax dollars financing the I-15 rebuild would also finance a rebuilding of the skills of the local construction labor force. Finally, subcontractors also were to be covered by this agreement except "the Employer may subcontract up to but not exceeding ten percent cumulative of the final Prime Contract amount to subcontractors...[not] signatory to this agreement or local labor agreements..." Also women and minority subcontractors need not be signatory to the agreement. Thus, the PLA was designed to provide contractors with flexibility permitting contractors to bring in up to forty percent of their own worker while at the same time creating a structure that would likely generate around eighty percent local hiring. The contract required most subcontractors to adhere to its provisions but allowed ten percent of the work to go on outside the requirements of the PLA.

Wastach's Greg Brooks explained part of the rationale for Wasatch signing this agreement: "What we are basically doing is taking Mayne at his word [that he can provide the qualified local labor]. Mayne said, "There is no doubt that we are going to be scrambling, but the seventy to eighty percent [local hire] figure is certainly doable. Each of the major craft unions in the state probably have 100 to 200 apprentices in training as we speak. [Out-of-state skilled workers] are part of the equation. But we are committed that most of these Utah jobs will go to Utah workers."[43] Brooks indicated that Wasatch's policy was: "We'll hire locally and buy our supplies locally. Any time we can't, we'll bring whatever we need in from other sources in the region. If that's not enough, we'll go further out."[44]

Ground broke on the I-15 project on April 15, 1997, but the political ground began to break out from under the PLA almost immediately thereafter. On May 2, under the headline "Does the I-15 Union Deal Violate Utah Law?" the *Deseret Morning News* reported that Republican Governor Mike Leavitt was asking his Democratic Attorney General Jan Graham for a legal opinion on whether the PLA violated Utah's right-to-work law.[45] The *Deseret Morning News* reported:

> Nonunion workers can apply and get Wasatch jobs, and they can do so without dealing with any union. But the reality is most applicants will go through union hall doors to get those jobs, and they will certainly be solicited to join the union in the process. And that is what worries some conservative lawmakers who don't want any Utahns pressured to join a union in order to get an I-15 job.[46]

In actuality, there were several avenues besides union hiring halls for obtaining work on I-15. Anyone who had worked for any contractor working on the project could work for that contractor again by applying to that contractor directly, assuming the forty percent threshold of workers

not coming from hiring halls had not been breached. Nonunion contractors were exempt from the provisions of the contract for ten percent of the work while additional nonunion workers could come with their nonunion contractor under the provisions of the PLA. However, Utah legislators were deeply concerned.

State Transportation Commission chairman, Glen Brown, brother of Utah House speaker, Mel Brown, stated, "We're hearing people saying 'We can't live with [the hiring aspects of the PLA].'" Speaker Brown, himself, stated that if the attorney general's opinion found conflict between the PLA and Utah's right-to-work law, "there is significant support to renegotiate the [labor hiring] part of the contract." But the Deseret News reported that several Republicans worried that the attorney general would side with the unions rather than interpret the right-to-work law as prohibiting the agreement.[47] Senate Majority Leader Craig Peterson indicated that it might be necessary to call a special legislative session to revise state law to prohibit this type of contract. Legislative Attorney Gay Taylor said lawmakers could refine existing law to prohibit unions from having a monopoly in specified situations perhaps forcing Wasatch to renegotiate its contract. Governor Leavitt, stating that "Two heads are better than one," sought legal opinion from lawyers not in the attorney general's office.[48] Senate President Lane Beattie argued:

> *We may not be able to change [the current agreement]. But we can act to make sure this will never happen again. Unions may think they have manipulated the system and made a great step forward. But we are not a union state and won't become one, and they may have just ended up taking a great step backward.*[49]

Wasatch defended itself by restating its belief that the agreement was the best way to ensure the project was completed on time and done well, while focusing hiring on local construction workers. Narby said:

> We work in other right-to-work states like Arizona and Florida under these same kind [of agreements]. Perhaps it was naive of us, but we wanted to ensure enough quality, skilled craftsmen to build this job. And in (other states) working through the unions provided that. Also, we wanted Utahns on this job, and this is a way to do that.[50]

In a clarification of the contract, Wasatch and the six unions agreed that workers could apply directly to Wasatch for employment or to Utah Job Services, the state labor market agency. The state directed UDOT to audit hiring practices specifically monitoring local hiring policies. Furthermore, UDOT would appoint ombudsmen to handle complaints associated with hiring on the I-15 reconstruction.

Senate President Beattie said he was satisfied with this arrangement and would not try to have the legislature called into special session:[51] "You can go through the [union] halls to get a job, but you won't have to. There will be another way," Beattie declared.[52]

At this point, the attorney general's office bowed out of the dispute: "It looks like they've settled all disputes," said Reed Richards, chief deputy attorney general. "If both sides are happy, and my understanding is that they are, then there's no point for us to continue."[53]

With daunting logistical and engineering tasks in front of it and significant economic carrots and sticks at stake, Wasatch Constructors began the demanding task of operating and rebuilding I-15 at the same time, with the design of the project being a work in progress, and with the clock running. Almost immediately labor shortages loomed. "Utah is a tight labor market, no doubt about it," Brooks said. He said, however, that the I-15 project was attractive because it had plenty of work, and it paid union wages to union and non-union workers alike.[54]

Wasatch Project Manager, Bill Murphy, said, "The magnitude [of the project] does get to me sometimes, [but] I-15 will be built, on time and on budget. I have no doubt." Narby, the top Wasatch executive on the I-15 site, said "I know people, and I know what they can do. I only worry about what I cannot control: the weather, for example. Please give me three mild winters."[55] The fact that the PLA required both union and nonunion contractors to pay union wages gave Narby and Wasatch a degree of control over their labor challenges in a tight construction labor market. Scheduling might be pushed back by weather or other factors Wasatch could not control, but the PLA made labor a more reliable and controllable construction input.

Wasatch's PLA labor strategy and UDOT's design-build strategy began to pay off for the contractor and the state within six months of ground breaking. UDOT's first project evaluation covering essentially the first six months of work, April 15 to October 31, 1997, led to the decision to grant Wasatch $2,490,133 of the possible $2,500,000 in bonuses for this stage of the project. The *Deseret Morning News* reported:

> In announcing the award amount Friday morning, UDOT officials had nothing but good things to say about the contractor. And Wasatch officials were obviously pleased that they had earned the bulk of the money they were shooting for.[56]

UDOT inspected the I-15 project on a daily basis, using dozens of UDOT employees and consultants as monitors. Each month, UDOT and Wasatch jointly reviewed the daily inspections and a score was assigned to each category of evaluation. UDOT's Warne said:" This is a lot of money, and because of that, there is a very rigorous process in place [for evaluating Wasatch's work] that we've developed over the last six to eight months. The process was reviewed by a task force established by Governor Leavitt, [Senate President] Lane Beattie and [House Speaker] Mel Brown."[57]

As the reconstruction progressed, Wasatch continued to score well in UDOT's semi-annual evaluations. At the end of the next six month review period, Wasatch received the full $5 million bonus possible for that period. Warne said: "The full award fee for Wasatch during this period is a reflection of what we've been saying all along—that they are ahead of schedule, they are on budget, the quality is good and they have the management system in place to deliver the project...I certainly think that the first couple of periods are the most challenging, while they're getting up and running and putting their organization together. I think this is a good indication they might just win or earn all or most of the award fee [of $50 million for the entire project]."[58]

UDOT, however, was careful to point out that these bonuses were actually Wasatch's possible profit on the project. Essentially, Wasatch won the bid by not including any (or much) profit in their bid price anticipating that by doing the project right they would earn UDOT's bonuses and that would be most, if not all, of their profit.[59]

Wasatch continued to meet UDOT's goals and continued to receive almost all of the potential bonuses available under the contract. In May 2000, the *Salt Lake Tribune* reported:

> Wasatch Constructors continued breezing through its Interstate 15 construction schedule last year and lost only $14,000 of a possible $5 million profit for the six month period ending in October [1999]...The contractor lost money for overlooking incorrectly placed beams that needed to be replaced on a 400 South bridge abutment in Salt Lake City, and for an incident last August when a drainage grate on the road popped loose and caused a multi-car accident. The award means that in its first 2? years on the job, Wasatch took home roughly $22.4 million of a possible $22.5 million [in awards]."[60]

With I-15 very close to completion in April of 2001, ahead of schedule and well ahead of the

Winter 2002 Olympics, John Bourne, UDOT project director said, "We believe we've got very good quality. We'll see some little dings and nicks that will be replaced," but he expected these problems to be resolved by the completion of the project. With seven of the nine award-fee evaluations completed, Wasatch had received from UDOT 99.6% of the possible bonuses from the timely completion and successful inspection of its work.

According to the original contract Wasatch had to guarantee the quality of its work for up to ten years after completion with the state paying $27 million for this insurance.[61] But UDOT had the option of declining the insurance if it thought the quality of the project was sufficiently solid that the anticipated ten-year maintenance costs would be less that $27 million. That was the dilemma UDOT managers faced in the Spring of 2001 as the project came to completion.[62]

In April of 2002, the I-15 reconstruction was declared the top civil engineering achievement of the year by the American Society of Civil Engineers (ASCE). "The I-15 project contributed greatly to Salt Lake City's ability to stage a successful 2002 Winter Olympic Games and will continue to serve the area for years to come," said ASCE President H. Gerald Schwartz, Jr. "The Interstate exemplifies the ideals of innovation, technical excellence and community benefit."

Warne concluded, "We've been out there day in and day out. We've inspected all their work and felt very good about the quality." He predicted that some work would need to be redone, but there were none of the classic signs of poor quality. UDOT therefore decided to decline paying $27 million for 10 years of maintenance guarantees because Warne concluded, "We anticipate spending perhaps half that much on maintenance."[63] Kay Lin Hermansen, Wasatch spokesperson, said, "It's kind of a compliment to us because the [guarantee] provision was put into the contract to protect the state and the people, and we've obviously delivered a very quality project."[64]

In April of 2002, the I-15 reconstruction was declared the top civil engineering achievement of the year by the American Society of Civil Engineers (ASCE): "The I-15 project contributed greatly to Salt Lake City's ability to stage a successful 2002 Winter Olympic Games and will continue to serve the area for years to come," said ASCE President H. Gerald Schwartz, Jr. "The Interstate exemplifies the ideals of innovation, technical excellence and community benefit."[65]

The primary reason I-15 was completed on time was because the project was bid design-build. This allowed the reconstruction to begin prior to the completion of a full set of engineered specification for the work. The greatest threats to the timely completion of the project were factors that could not be brought under the contractor's control. Weather, therefore, was a major concern. Labor supply in tight labor markets was also a concern. But Wasatch brought that factor under control through the implementation of a PLA. This meant that all work on the project whether by Wasatch on any of its many subcontractors would be relatively attractive to workers within a growing and tightening construction labor market. I-15 construction contractors and subcontractors would have their pick of the labor market. It was a labor market version of guaranteeing three mild winters.

Also, the PLA meant that the majority of workers would be local hires so that the benefit of the higher wages would primarily redound to Utah citizens. Given that Utah tax payers were paying for most of the bill for the project, this local hire component had a feeling of fairness about it. Also, there was a certain symmetry with the explicit requirement that the general contractor partner with local construction companies. Significantly, these benefits clearly did not come at additional costs to Utah taxpayers.

The fact remains that Wasatch Constructors was the low bidder on the project. The alternative

two construction consortiums were not intending to use PLAs. They, therefore, may have been intending to pay their workers less than local union rates, and their bids may have reflected that. Wasatch calculated that even though they might have higher hourly wage rates than their competitors, the ability to lure the cream of the crop out of a competitive labor market would facilitate on-time scheduling at a lower (or at least equivalent) cost and with fewer construction defects. Salt Lake Constructors came in only one percent above Wasatch, so it is difficult to claim that the I-15 PLA substantially lowered the project's cost. But the PLA clearly did not raise the cost.

Many studies attempting to assess the effects of PLAs on construction costs compare project costs on two or more different projects. While informative, these studies always must confront the problem of comparing apples to oranges. Very few construction projects are exactly alike. Cost differences might easily be due to something other than whether or not the project has a PLA. But in the case of I-15, we have a true apples-to-apple comparison. Wasatch was going to use a PLA. In fact, prior to bidding on the project, Wasatch had signed a preliminary agreement with the local unions. Salt Lake Constructors and Lake Bonneville Constructors bid on the project without having arranged for a PLA. All three companies were bidding on the same project, and the PLA contractor came in lowest. Wasatch's lower bid may in part have been due to superior engineers, better previous experience or other factors. But implementing a PLA was part of their game plan—namely controlling the supply and quality of labor in order to enhance the contractor's ability to deliver a quality product on time.

Toyota assembly plant in San Antonio

Much of the current controversy over PLAs concerns the public sector. PLA use in the private sector goes largely unnoticed because there are far fewer legal issues and usually less politics than with public projects. For the most part, private construction users can attached whatever stipulation they chose to their projects. However, the fact that so many large private firms, which exist in competitive business environments and are, therefore, very cost conscious, choose to build with PLAs perhaps says something about their benefits.

Toyota is among the leading worldwide automotive manufacturers. During the past forty years, it has moved from being a domestic Japanese firm to a global producer of automobiles and trucks with a substantial presence in North America. In 2004 it produced almost 2.3 million autos and trucks in North America and had a cumulative North American investment of $16.6 billion.

Much of its success has come from its development and implementation of the Toyota manufacturing system.[66] This method, the original lean production model, has become the standard for producing high quality products at low unit costs. Now nearly all successful manufacturers emulate the kanban (pulled production) and kaizen (continuous improvement) methods pioneered at Toyota. The success of the system is reflected in the high consumer satisfaction with Toyota products and a pattern of repeat purchases. The rising demand for Toyota products in North America has lead the company to build four assembly and six parts plants in the United States, Canada and Mexico since 1986. The assembly plants are located in Kentucky, Indiana, Ontario and Texas. The parts plants are in West Virginia, Alabama, British Columbia, Missouri, California and Baja California. There is a joint venture assembly operation between Toyota and General Motors in Fremont, California, the so-called NUMMI (New United Motor Manufacturing, Inc.) plant. With the exception of the NUMMI plant, Toyota production employees are not represented by unions.

Despite the lack of union presence within the firm, all of the Toyota manufacturing facilities in

the United States have been built under PLAs between Toyota, the AFL-CIO's Building and Construction Trades Department and the local unions within whose jurisdictions the projects have taken place. In all, 36 million work hours have been done under the Toyota PLAs. The success of the relationship between Toyota and the building trades unions, and the utility of the PLAs, is reflected in the completion of numerous green field projects and expansions of those projects on time, without interruption and without even a single arbitration decision in the nineteen years in which Toyota has used the agreements.

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A closer look at the dynamics of the Toyota PLA illustrates how it has developed and been adapted to the needs of various projects. We focus on the most recent green field Toyota plant in San Antonio. This plant, which is scheduled to begin yearly production of 150,000 Tundra pickup trucks in 2006, has a projected cost of $800 million and has been the highest valued construction project in Texas for the past two years. The project will require 2,100 construction workers at its peak. The project has six prime contractors and as many as 300 subcontractors. Project management is being provided by a joint venture between Waldbridge-Aldinger, a Detroit firm with considerable experience in the construction of automotive facilities and Bartlett Cocke General Constructors, a San Antonio company.[67]

The San Antonio project presented a number of issues in adapting the PLA to local conditions. First, Texas's right-to-work law is particularly unfavorable to organized labor. The law prohibits both union membership and agency fee payment as a condition of employment, and it also disallows maintenance of membership clauses, which prohibit resignation from a union during the life of a contract. Texas law holds that union members may resign at any time.

A second issue was a requirement to employ a substantial number of individuals from the San Antonio metropolitan area, Bexar County and the surrounding ten counties. Although Toyota's $133 million public subsidy was smaller than that provided for other recent automotive manufacturing plants in the South, a substantial share came from the City of San Antonio and regional bodies. The local subsidies included $15 million for a rail spur to the plant, $27 million for job training and $24 million for site purchase and preparation. In exchange for the subsidies, Toyota agreed to employ local residents on the construction project. As the San Antonio area has relatively low union density in construction—by some estimates 95 percent of construction workers are nonunion—the use of a PLA required balancing the need to use local workers with the use of union labor (not unlike the Utah project described above).[68]

Finally, and also related to the modest union presence in San Antonio, the local construction industry actively lobbied against the PLA. For example, Doug McMurty, the executive vice president of the San Antonio chapter of the Associated General Contractors (AGC), said:

> It's very early and there have been a lot of rumors circulating. But what we're most concerned about is that Toyota will discriminate against nonunion firms. Our concern comes from the fact that 95 percent of the workforce here has chosen to be nonunion. I don't know that Toyota fully understands that yet, and I can't believe it would be their intention to discriminate against 95 percent of the workforce in San Antonio.[69]

The AGC and individual construction firms requested that city and county authorities broker meetings between Toyota and area general contractors to discuss the use of a project agreement. At various times it appeared that Toyota had decided against using a PLA for the project.[70] But despite such rumors, Toyota negotiated a PLA adapted to the conditions in San Antonio, and the agreement was signed on June 18, 2003. Jim Wiseman, vice president of external affairs for Toyota Motor Manufacturing North America stated:

> Toyota has been using this type of agreement on all its U.S. construction projects since the late 1980s. Those projects have been very successful, been completed on time and within budget, and we wanted to do it in Texas.[71]

The Toyota PLA was adapted to the needs of the Texas project with modifications that favored the employment of San Antonio residents by making it easier for nonunion firms to bring their core workers onto the project and by altering the benefits payments language to eliminate the possibility of double obligations.

A major issue for the project was the promotion of local hiring. Under the Toyota PLA, local unions are given 48 hours to refer a qualified resident of the San Antonio area. If they are unsuccessful, a contractor may hire its own local resident, who would then register with the union hiring hall. If the contractor is unsuccessful in locating an area resident within 48 hours, the union could refer any qualified worker without regard to the residency requirements. If the union were unsuccessful in referring a worker within 48 hours, the contractor could hire from any source.

A second issue was providing conditions, which made the project attractive to nonunion contractors. A frequent complaint by nonunion contractors is that they must use the union referral system and cannot bring their own workers to a PLA-covered project. This disrupts their organization and reduces their efficiency. To address this concern, the Toyota PLA specifically allows nonunion employers to use core employees who are San Antonio area residents without referral by a union. Core employees must possess necessary state or federal licenses for their work, have been on the contractor's payroll for sixty of the one hundred working days prior to the contract date for the Toyota project and have the ability to safely perform the basic functions of their trade. Employers are required to provide a Toyota representative satisfactory evidence of qualifications of core employees at the request of the union having jurisdiction over the work. Additional employees used by nonunion employers are hired in accordance with the referral process outlined above. This type of arrangement, sometimes referred to as a drag-along clause, allows nonunion employers to retain their core workforce while protecting the unions' interests in seeing their own members hired.

A further complaint about PLAs by nonunion contractors is that they require double payments of benefits: The nonunion contractors must support their own healthcare and pension plans while, at the same time paying into the union sector's joint funds for work on PLA-covered projects. The Toyota PLA allows nonunion contractors to divert the benefit payments required under the PLA into their own firms' pension, retirement, annuity, health and welfare, vacation or apprenticeship programs. To qualify, the employee for whom deductions are being made must be a core employee and must elect this option. Also, the plan must be a bone fide benefits plan that has been in effect for the preceding twelve months. Finally, the employee contribution must be the actual cost of the benefit, and the employee must have been a participant in the plan at the time of initial employment on the project. To ensure that nonunion employers do not realize a competitive advantage from this arrangement, any difference between the costs of the nonunion employer's plan and the benefit payments under the PLA go to a funds established by

the parties to benefit directly covered workers on whose behalf the benefit is paid. Again, this arrangement addresses the double payment issue while maintaining equality in labor costs between union and nonunion contractors and assuring that the diverted payments benefit the nonunion employees.

Discussions with individuals involved in the Toyota project suggest that, although there was more nonunion participation in the San Antonio project than most Toyota PLAs, participation was generally limited to site and concrete work. This is not surprising as a central purpose of a PLA is to obtain ready access to a skilled union labor force.

Although not intended to address any issues specific to the San Antonio project, the Toyota PLA includes an unusual arrangement with regard to wage increases. The agreement adopts the applicable local wage rates (which is typical for PLAs), but it also allows for negotiated increases so long as rates do not exceed the average percentage increase in journeymen's rates for in the South Central region. This limitation is referred to as the cap.

The cap acts to mitigate any effects of the Toyota project, which is an unusually large project drawing large numbers of workers, on regional wage increases, while allowing for the effects of labor market conditions in a region which is sufficiently large that the Toyota project will have only a modest effect on settlements.

The Toyota PLA is an example of how PLAs can be successfully adapted to specific conditions. As with the other Toyota projects, the San Antonio plant is headed for on-time completion and has gone forward without significant disputes or disruptions. Further, the working out of the alternative arrangements appears to have been accomplished without substantial difficulties, reflecting the long-standing good relationship between Toyota and the Building and Construction Trades Department (BCTD).

T.F. Green Airport terminal

T.F. Green Airport, which serves Providence, Rhode Island, was for many years a very small operation. It is the nation's first state-owned airport, and it opened in 1931. It did not break the two million passengers per year mark until 1990, and it stayed approximately at that level until 1996. However, in 2004, the airport experienced the second busiest year in its history (2001 was the busiest), serving approximately 5.5 million travelers.[72] As the consulting firm of Landrum & Brown noted in a report on the airport, "Since [1996], the airport has become a low fare gateway to southern New England, and offers a congestion-free alternative to [Boston's Logan Airport] for many travelers."[73]

The recent success of T.F. Green is very good news for the State of Rhode Island, which invested $208 million in the construction of a new airport terminal in the early 1990s.

Prior to the construction of what is now called the Governor Bruce G. Sundlun Terminal, the last major renovation of T.F. Green's facilities was in 1981. The small building, which opened in 1960, had only nine gates and one baggage carousel and resembled an old bus terminal more than a modern American airport. Understanding the need to improve the facilities, the state's voters approved a $29 million transportation bond issue in 1988, which called for upgrading the existing terminal building.[74]

However, in 1990, with the state mired in a deep recession, businessman Bruce Sundlun won the governor's office, defeating a Republican incumbent. Sundlun was a WWII pilot who eluded capture after being shot down over Belgium; a businessman who made a fortune in broadcasting (among other ventures), a member of JFK's administration; and socialite with connections to the rich and mighty (he once flew planes with Jordan's King Hussein). He was not one for small projects. After becoming governor, Sundlun managed to circum-

vent both the legislature and the state's voters, and by executive action convert his predecessor's less ambitious renovation proposal into an approximately $200 million total reconstruction project. His plan was to use the earlier approved $29 million as seed money, get the airlines to agree to tripling their rents at the airport and receive most of the balance in federal funds.[75]

The governor's ambitious plan engendered immediate opposition. Residents of the City of Warwick (where the airport is located) and their elected officials opposed the terminal plan, as they do every project that might increase airport traffic. But so did many other legislators, politicians and ordinary citizens. Some of the sniping was purely political, but much of it was motivated by a genuine concern about the state's ability to pay for such a project. After all, this plan was being discussed during one of the deepest economic recessions in recent memory. Consider that the governor's first official act, on the day of his inauguration, was to order the state's credit unions closed to head off a banking collapse; that public employees faced involuntary furloughs because state government could not meet its payroll; and that the transportation department was turning off street lights to save money. In addition, at least one consultant's report found even the more modest plans proposed by Sundlun's predecessor were probably not worth the money at such a small airport.[76] Needless to say, in this environment, an expensive new airport terminal was not an easy sell.

However, by the time the terminal officially opened on the first day of autumn 1996—after Sundlun had lost his bid for a third (two-year) term—all the arguing and acrimony seemed forgotten. As the Providence Journal reported:

> During the [opening] ceremonies, speaker after speaker praised the terminal project and former Governor Bruce Sundlun for envisioning it.
>
> Warwick Mayor [later U.S. Senator] Lincoln Chafee said 'What stands before us is a near-miracle, a government project that came in on time and on budget. For that we congratulate all the many men and women who accomplished this while also maintaining the highest quality workmanship.'[77]

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Mayor (later U.S. Senator) Lincoln Chafee

Unlike the projects in Utah and Texas described above, the PLA at T.F. Green Airport was, in itself, not controversial and received no major press coverage at all. In fact, the only large controversy during the construction phase was a proposal to spend close to $800,000 on what derisively became known as a cloud machine, a terrarium-like art installation that was to have emitted a vapor sending clouds around the terminal's ceiling. The installation had been recommended by a committee in charge of spending the mandated set aside for public art but became fodder for many of the terminal's critics. The idea was scrapped in favor of cheaper and more conventional sculptures and the like.[78]

The lack of debate over the PLA no doubt reflects the reality of construction in Rhode Island, where nearly all large, transportation-related construction is done by union contractors. The agreement was, however, not a typical PLA but had a number of distinctive features.

No doubt, Gilbane Building Company, the construction manager, felt enormous pressure to contain costs. In 1991, Governor Sundlun complained about the price tag of the project, which, at the time, was $135 million. His concern arose from a comparison he made with a similarly styled and recently built terminal at the Rochester, New York

airport. The governor noted that the Rochester project cost $41 million less than the projected costs for T.F. Green. In a memo to his transportation director, the governor wrote:

> *We need to get a very detailed cost breakdown on the T.F. Green project, and I can tell you ahead of time that I am not going to accept a $41 million difference between T.F. Green and the Rochester project. Would we not do much better to go forward on a strictly competitive bid basis? What does it take to review and terminate the construction management contract?*[79]

The Gilbane Building Company is headquartered in Providence, but is one of the larger construction companies in the country. During the past ten years, it has carried out airport projects at O'Hare, Logan and the El Paso International Airport.[80] Over the years, Gilbane has done many jobs in Rhode Island and was awarded the construction management contract for T.F. Green on a no-bid basis by Sundlun's predecessor. Despite the governor's concern, Gilbane's contract was not terminated. By July 1993, the projected cost of the facility had risen to $200 million, but most of the funding puzzle had been put together, including the airlines' agreement—after the creation of an independent airport corporation—to pay increased rents and the Federal Aviation Administration's pledge to cover about half of the project's cost. Gilbane also agreed to take a substantial risk: for an additional $3.8 million fee, it guaranteed the bottom line cost of the project.[81] That fact was, no doubt, on everyone's mind when the PLA was negotiated in the fall of 1993.

The PLA covered construction of the new terminal, demolition of the old terminal, construction of a temporary terminal, improvements to the airfield (particularly taxiways and drainage), the construction of roadways and parking facilities, and the building of a system to capture and isolate ethylene glycol (used in deicing) before it enters the storm drains.

A very unusual aspect of the agreement was a wage and benefit schedule unique to the project. While most PLAs simply state that wages and benefits shall be paid in accordance with Schedule A (i.e. local) agreements, the T.F. Green PLA included its own wage and benefit rates for 21 different occupations from Asbestos Workers to Tile Finishers/Helpers. Where applicable, differentials were provided for building and road work. The length of the wage/benefit agreements varied across trades, from approximately one to four years, with an agreement to reopen negotiations for wages and benefits after dates specified in the PLA. An expedited interest arbitration clause was included to handle impasses that might occur over the negotiations of new wage and benefit rates.

But perhaps the most important provisions of the agreement concerned scheduling and premium pay. As a prominent Rhode Island labor official said:

> *We couldn't get on the airport at certain times. We were able to get on at times that on other jobs...say after 4:30 pm or after normal quitting time...you would be looking at a time-and-a-half situation or maybe a double time situation if it was a weekend. We took that into account knowing that if we were looking for that [premium pay] on that job it would blow the budget there, and you wouldn't end up with any agreement.*

The PLA contained several relatively standard sections on work time and premium pay. One section calls for an eight hour workday, with time and one-half paid for the first two hours of overtime, and double time paid for ten or more hours of work. Double time was also to be paid for Sundays or holidays.

The agreement also allowed Gilbane to schedule "all or part" of the workforce to work second or third shifts. Second shift workers would work seven

hours for eight hours of pay, and third shift workers 6 ? hours for eight hours pay. The agreement also stated that "the parties…recognize that construction work covered by the terms of this Agreement shall be performed in a manner that will cause the least disruption of the continuing operation of the airport, and therefore to achieve that goal a second (2nd) and/or third (3rd) shift may be established without the scheduling of any previous shifts…"

However, the centerpiece of the scheduling provisions was a Flex Time clause, which the parties agreed to with the understanding that the airport needed to maintain "efficient operations…while complying with…noise mitigation requirements, all federal and state requirements, and…[attending to] the needs of the traveling public." The Flex Time arrangements allowed for several possibilities: a staggered work week of seven days on and two days off; four ten hour days; and eight hour days with adjusted start and quit times. The PLA also allowed for "any other mutually agreed upon alternative work schedule."

The project was completed several months ahead of schedule and, in 1997, received an award for construction management from the Associated General Contractors. Simultaneous with the new terminal's opening, Southwest Airlines selected T.F. Green as its access point to the Southeastern New England/Boston market. Southwest is now the airport's leading airline and the main reason for the airport's current success. Certainly, factors other than the PLA—not least a mild winter in 1995—contributed to the early and within-budget delivery of the terminal. But the project remains a source of pride for all those involved in its construction and is frequently cited as an example of the ability of PLAs to accommodate the specific needs of a construction user and produce a favorable outcome on a public project.

East Side Union High School District

In March 2002, voters in San Jose's East Side Union High School District approved a $300 million bond issue to be used for school construction and renovation. Virtually every high school in the district was to undergo comprehensive renovations, and several new facilities—such as adult learning centers, a gymnasium, and even a cable television and radio studio—were to be built at some of the schools. Although some work had already taken place, in 2004, the district entered into a PLA with the Santa Clara and San Benito Counties Building and Construction Trades Council. The district decided on the PLA, in large part, for a rather distinctive reason: it saw it as a mechanism to expand its vocational education programs into both the blue collar and white collar construction occupations. The district has a well-established vocational education program that is part of its overall career services approach to education.

East Side already had up and running several vocational academies and other programs, including the Oracle Internet Academy, an electronics academy, a teaching academy and specialized programs in biotechnology, computer-assisted design and health care. The district viewed a PLA as a means to establish a program in construction occupations.

Hence, the novelty of the East Side PLA and the sweetener that led to its signing was a provision connecting work under the PLA with establishment of a Construction Technology Academy. The Academy would offer pre-apprenticeship training, summer internships, and jobs in both the trades and white collar construction occupations.

An appendix of the PLA contains the essential elements of the plan:

> *The Parties have agreed to create a Construction Technology Academy ("Academy"), funded by the District, to carry out the*

training and employment objectives of Appendix B. The overall objectives are to (a) offer opportunities and skills necessary to enter post-secondary study [including construction apprenticeship programs as well as college education] and to pursue lifelong learning within the broader context of the building trades industry; and (b) develop and reinforce academic course content standards in order to maximize career opportunities and technical competency.

East Side already had up-and-running several vocational academies and other programs, including the Oracle Internet Academy, an electronics academy, a teaching academy, and specialized programs in biotech, computer-assisted design, and health care. The district viewed a PLA as a means to establish a program in construction occupations.

This point (b) recognized that schools would do a better job if the school curricula were tied more closely to industry needs and directions. In construction, unions as well as contractors, pay close attention to technological trends and customer demands. Thus, connecting the school's curricula to the knowledge held by contractors, unions, and joint apprenticeship boards was seen as an effective method of tying industry directions to school curricula in the case of construction.

A sixteen member steering committee was created by the PLA that would oversee the Academy. Membership on the committee included representatives of the joint apprentice training councils, the building trades council and the school district.

One task of the steering committee was to oversee a summer internship program. described in the PLA.

In addition to the foregoing, which bound the school district, the unions and the joint apprenticeship training councils together, the PLA required contractors on East Side's work to provide jobs for graduates of the district's Construction Technology Academy. The PLA's goal was for students to actually obtain jobs as interns, apprentices or in other unskilled positions.

This novel approach to project labor agreements remains experimental. Nonetheless, those involved with East Side's vocational education program are, thus far, very happy with the PLA. One East Side official familiar with the PLA and its internship program stated:

> The PLA says that contractors working on projects will provide thirty internships of five weeks duration every summer. In the first two weeks our students are introduced to construction and rotated through the trades. They also spend five hours a day at the various apprenticeship training facilities with exposure to classroom and benchwork training. Also our students can intern with the contractors with exposure to estimation, engineering and the legal aspects of construction. We have a four year construction and construction engineering program, and the PLA allows us to connect our vocational education to the world of work. It's a perfect fit. We want our contractors working on our schools in the summer when we are out of session and that's just when the students are available for summer internships. This way the district gets double use out of its construction dollars. We have fifteen vocational education programs from aerospace to office clerical. This construction program connected to the PLA is our most exciting effort because it's not just a partnership with an individual or a company. It's a partnership with a whole industry. Our program is considered a pre-apprenticeship program, and its graduates have priority entering into union apprenticeship programs. And it makes sense for the unions too because first of all, a lot of our students are minority students, and the unions are always trying to recruit minorities.

And second of all, our students have exposure to construction. They know what they're getting into. So the unions know these applicants to their apprenticeship programs are serious.

Because the PLA is new and the Construction Technology Academy program takes four years to

PLA language on the East Side district's construction academy

In order to facilitate the goals of the Academy, the [School] District and [Building Trades] Council agree to create a steering committee, which will conduct meetings at least once a month during the district academic year to develop the goals of the Academy; plan for the presentation and content of training lectures to facilitate employable skills in the construction trades; develop a summer schedule for training; organize and develop summer internship positions; assist in planning curriculum scope and sequencing; design co-curricular activities; identify sources for educational and financial support; and otherwise initiate steps to carry out the goals of the Academy. The committee shall consist of sixteen (16) members, of whom five members shall represent the trade JATC's [Joint Apprenticeship Training Councils], three members of the Building Trades Council, six members from the district, including one member who shall be from district management and one member from a community college district. The district management representative shall be the presiding officer of the steering committee. The steering committee shall make recommendations to the district administration. The Academy Steering Committee, in coordination with the district's career services representative, shall develop and implement a plan for annual assessment of the goals and objectives of Appendix B in order to maximize the employability of the summer interns described below.

1) Annual Training Summer Sessions. Annual summer intern training sessions developed by the Academy Steering Committee shall be made available for qualified district students nominated by the district.

a) Purpose of Summer Training Sessions. The purpose of the summer intern training sessions is to teach the interns employable skills in the construction trades. The skill sets to be taught by the District shall, in part, include materials taken from a curriculum known as "SCANS," which identifies and teaches such general employability skills as dependability, responsibility, working with other people, active listening (i.e., receiving and responding to instruction), organizing work tasks and utilizing technology. The other skill sets shall include the proper use of tools of the construction trades in addition to practical application of skills in the construction trades. The sessions shall include classroom and job visit components.

b) Number of Interns. The goal for the summer program of 2003 shall be twenty (20) internships available for students nominated by the district. For the second year of the contract, the goal for internships available shall not exceed thirty (30) per calendar year.

c) Number and Scope of Training Sessions. For the first year, the number of summer training sessions shall not be less than eight (8) in number. The scope of the training sessions, and the presenters, shall be developed by the Academy Steering Committee. For subsequent years, the scope

and presenters of the training sessions shall be as developed by the Academy Steering Committee. All training sessions shall be hosted by the Trade JATC's according to the scope developed by the Academy Steering Committee.

2) Employment of Interns. Beginning July, 2003, the Building Trades Council shall make arrangements for contractors working under the Project Labor Agreement to employ up to twenty (20) interns selected by the Academy Steering Committee. The interns shall be paid no less than $10.00 per hour for on-the-job training but not for periods of time attending the classroom training sessions. The sessions shall occur over a minimum of four and a maximum of five weeks for summer internship positions beginning in July 2004, the Program Manager agrees to endeavor to employ or make arrangements for the employment of up to thirty (30) paid intern positions of students selected by the district for the same time and rate of pay as for July, 2003. Each year thereafter, the goal shall be to employ up to thirty (30) interns at the same rate and for the same duration unless otherwise agreed to by the district and the council. The employment shall be practical and relevant to the apprenticeship requirements for the building trades, with emphasis on at least five major crafts selected by the Academy Steering Committee for each year of the contract. Due to safety, prevailing wage and related issues, the interns shall not be employed directly on the public works projects that are the subject of the Project Labor Agreement and this Appendix B.

3) Intern Program and Priority on California Apprenticeship Council Approved Program Apprenticeship Lists.

a) Establishment of an Intern Program through the Academy and Program Manager. An intern program for construction trades careers shall be developed by the Academy Steering Committee to help facilitate placement into a California approved apprenticeship program upon successful completion of the classroom coursework and the summer intern sessions.

b) Priority on Apprenticeship List. The training and employment program of the interns shall be developed by the Academy Steering Committee such that graduating interns shall possess the skills, training, and educational background to help the graduate achieve priority on the lists of the Building Trades Apprenticeship Programs for those which maintain a list and direct entry for those programs where direct entry is possible. It is recognized that the Apprenticeship Programs operate according to existing Standards approved by the Division of Apprenticeship Standards of the State of California Department of Industrial Relations and the standards set forth in the collective bargaining agreements for each building trade. Therefore, in order to maximize the opportunity that graduates may achieve a priority standing on an apprenticeship list or direct entry to an apprenticeship program, the Academy Steering Committee shall develop a plan for an annual assessment of the goals and objectives set out in this appendix B and in so doing, shall coordinate with the District's Career Services representative. The annual program assessment by the Academy Steering Committee shall follow the completion of each summer internship program.

complete, the success of this program in eventually landing these students in apprenticeships or in white collar occupations with contractors has yet to be tested. The unions cannot guarantee entry into apprenticeship programs. All they can do is help create a solid pre-apprenticeship program that will enhance the student's ability to qualify for these post-high-school apprenticeships.

The language of the PLA also establishes a limit on the number of interns at thirty per summer. This reflects the unions' concern that they not promise more downstream work than will be available. The PLA is silent on the number of interns after the second year of the contract. This reflects a reality of this innovative contract—the parties are feeling their way along a new path, and they are not sure whether the program can grow, will remain steady or will have to shrink over time.

Another possible issue is how evenly students get spread across the different trades involved on East Side projects. If all thirty students decided they were interested in only electrical work, the electricians' apprenticeship program might feel unduly burdened. These sorts of potential problems underscore that using PLAs to create journeys from school to work in construction is a work in progress.

On the other hand, there is considerable evidence that the construction labor force is aging. The baby-boom generation is retiring, and the need to adequately train and replace the existing skilled construction labor force is unusually problematic in this period. A recent report by the Construction Labor Research Council concluded:

> Labor shortages during the boom period of the late 1990's and early 2000's, as well as greater focus on the aging work force in the United States, have increased awareness in the construction industry of the importance of attracting new entrants...The years 2005 through 2015 will require large numbers of new entrants into the construction trades. Annual new entrants of craft workers into the construction industry are estimated to be 185,000 persons. Needs will be almost evenly divided between growth and replacement. Like other industries, construction will be significantly affected by an increasing number of older workers leaving the labor force. Available to replace them will be young workers whose numbers will be little changed throughout the period. As this, too, affects all industries, the construction industry will be challenged in attracting an adequate supply of qualified new entrants.[82]

This view of the future is shared by the Santa Clara Building Trades. In a report prepared for the U.S. Department of Labor by the Silicon Valley Workforce Investment Network and the Santa Clara Building Trades, entitled Extending the Ladder, the unions and local construction users state:

> We have seen the average age of an apprentice in the Trades rise to almost 30 years of age. At the same time, we have seen the average age of a journeyperson rise to almost 40 years of age, and last but most significant is the fact the average retirement age is now closer to 50 than 60. These statistics represent two very significant realities: (1) the construction industry is on the precipice of a crisis in the availability of skilled trades people, and (2) an enormous opportunity for youth wishing to pursue a skilled career currently exists.[83]

This concept paper—pitched to the U.S. Department of Labor in the hope of receiving a federal grant—grew out of the experience of the Santa Clara Building Trades with the East Side PLA and proposed to extend this model to other school districts:

> At the core of this proposal is a partnership led by employers, labor, high school and community college districts, and the Silicon Valley Workforce Investment Network (SVWIN) Board. These parties have come together to pur-

> sue a unique and creative way to address the needs of the construction industry and youth through a partnership that leverages State and local construction bond dollars to place graduating high school seniors and community college students into full-time, high-wage jobs in the Construction Trades.

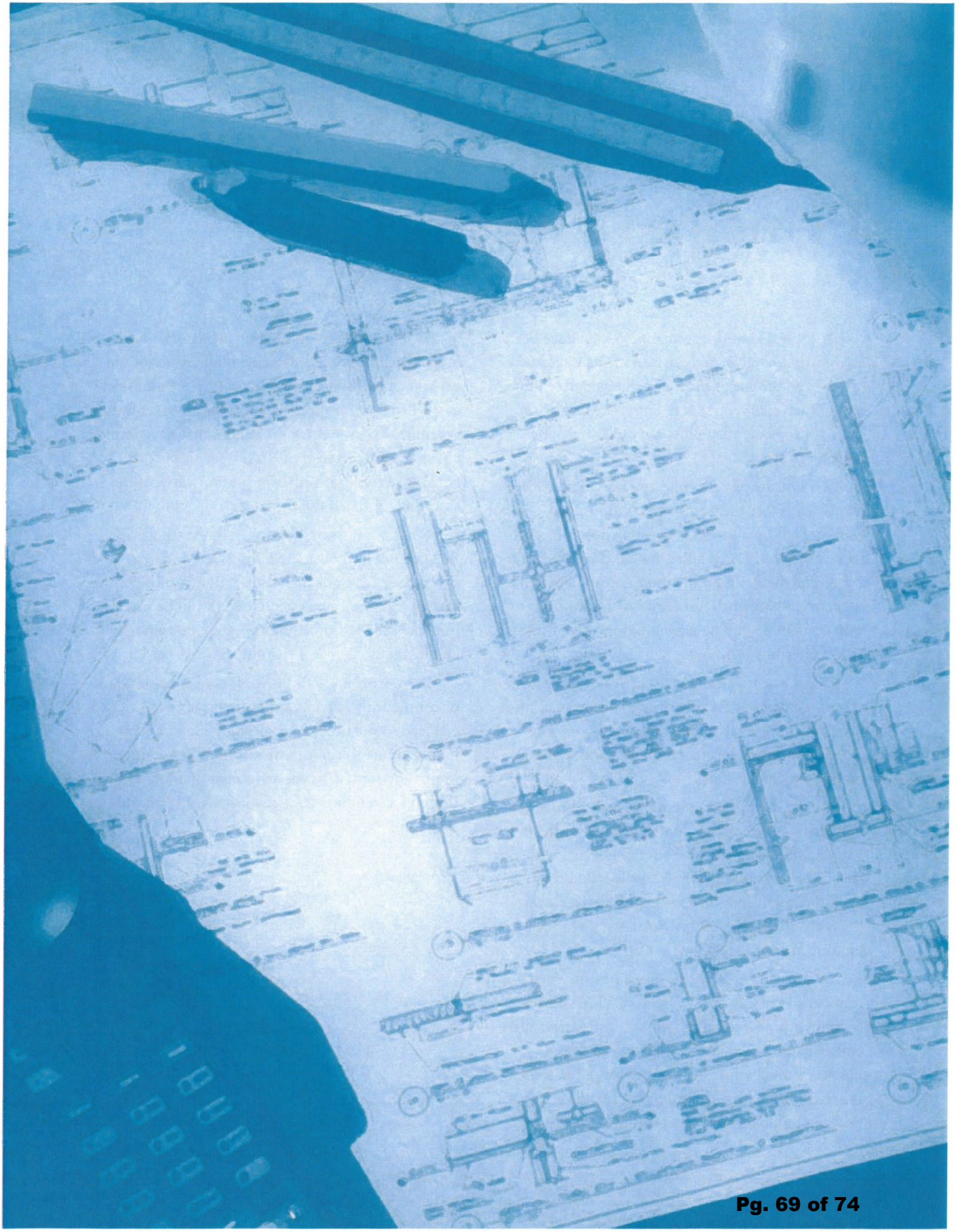
A local union leader involved in the creation of the East Side PLA and the establishment of the East Side Construction Academy explained the key unique provision of the PLA was its requirement for internships combined with language that ensured graduating students would actually get jobs either as apprentices or as material handlers. He argued that the unions were motivated by the need to "get back into the high schools" in order to recruit a qualified pool of younger workers to replace an experienced but aging union work force. The key problem, in his view, was to facilitate effectively the movement of younger workers into the union workforce in the face of apprenticeship admissions regulations that require nondiscrimination and equal and fair access to these programs. He indicated the solution was in the PLA proviso that required participating contractors to provide graduating students with jobs either as apprentices or material handlers. This requirement meant that students would at least transition to non-craft material handling jobs from which their additional experience would give them a leg up on admissions to apprenticeship programs. He stated:

> We all recognized the need to get back into the high schools and the current practice of begging the districts to allow us to talk to students for an hour or hold a career fair was not going to turn the tide. We needed to get back into the schools in an institutional manner.
>
> We realized that previous programs that were providing training/assistance to youth and others in the community to gain them knowledge and experience that would hopefully get them into an apprenticeship were not always successful. In fact some were creating unrealistic expectations on behalf of both the applicants and the programs. Upon graduation/completion there was no job available and they became just another name on the out-of-work list.
>
> We saw the opportunity that this PLA could serve in getting back into the schools in a meaningful way that could also solve the problem created by economic uncertainty we had previously experienced with other programs. By contractually binding, through the PLA, contractors to participate in the academy by requiring them to hire individuals that had graduated from the program, we could overcome the downfall of other programs.
>
> However we knew that we faced some traditional hurdles if we were thinking of circumventing long-established and heavily-regulated apprenticeship placement policies/criteria. So we proceeded to sit down with all the [Joint Apprenticeship Training Councils] to find out what they believed would work to make this happen. With their help, we crafted language that met the needs of the program and yet did not ask JATCs to violate their own selection criteria or placement policies. We achieved this by understanding that most graduates of the academy would do well on the entrance exams and interviews, but some may not score at the very top, which would be needed if they were to seamlessly enter into the apprentice program of their choice. So we worded the agreement to accommodate this by requiring contractors to provide jobs that although not apprentice positions were jobs that the student could easily transition into an apprenticeship with that same employer. It is common, for example, for a material handler which is not an apprenticable occupation, to receive an apprenticeship by virtue of their experience and work history.
>
> The important thing was that we were breaching the obstacle that all other programs could

not. We were putting people into jobs and not onto lists. And by putting people directly to work in the industry of their choice upon graduation, we have achieved something that to the best of our knowledge has not yet been previously done.

Thus, the East Side PLA is innovative in several ways. First, it is an example of a new form of PLAs, which attempts to find new areas of win-win in construction collective bargaining by bringing a new player to the table—the construction user. Second, it is an effort to solve a union problem—getting back into the high schools in an established, institutionalized fashion in order to better compete with other industries for talented students in the context of the worker replacement difficulties posed by the retirement of the baby boom generation. Third, it is an effort to solve a school district's problem of creating meaningful education for the non-college bound, an education that provides the student with an awareness of possibilities, prepares the student appropriately for the demands of the labor market, gives the student experiences that will qualify the student for advancement and allows the student in this case to test drive a full range of blue and white collar opportunities within an entire industry. This is what the East Side vocational education official meant when saying that the advantage of the Construction Technology Academy was that it created a relationship not with an individual or a company but "a partnership with a whole industry." Finally, by requiring participating contractors to provide employment, through the auspices of the PLA, this particular institutionalization of a journey from school to job seeks to overcome the weakness of previous similar experiments by putting students to work rather than putting them simply on job lists. Certainly, this PLA, like other PLAs, was motivated by traditional concerns for work and the conditions of work on the part of unions and an effective supply of skilled and qualified labor on the part of owners. But in the case of this PLA, these traditional motivations were not paramount. The novel and experimental motivations listed above were the fundamental reasons for the signing of this PLA.

A local union leader involved in the creation of the East Side PLA and the establishment of the East Side Construction Academy explained the key unique provision of the PLA was its requirement for internships combined with language that insured graduating students would actually get jobs either as apprentices or as material handlers.



Principal Findings

- Project Labor Agreements (PLAs) have been used for many years, perhaps as early as World War I. However, the use of PLAs has changed over the years. Once reserved for very large, isolated or specialized projects, today PLAs are used on a wide range of projects.

- PLAs are prehire collective bargaining agreements that cover the terms and conditions of employment on a specified construction project or set of projects. PLAs require that all contractors on a project, whether typically union or not, abide by collectively-bargained terms and conditions of employment, including paying union scale, using union referral systems, etc.

- An essential difference between PLAs and area agreements is that the principal parties in most negotiations are the building trades' unions and representatives of construction users, rather than unions and contractors.

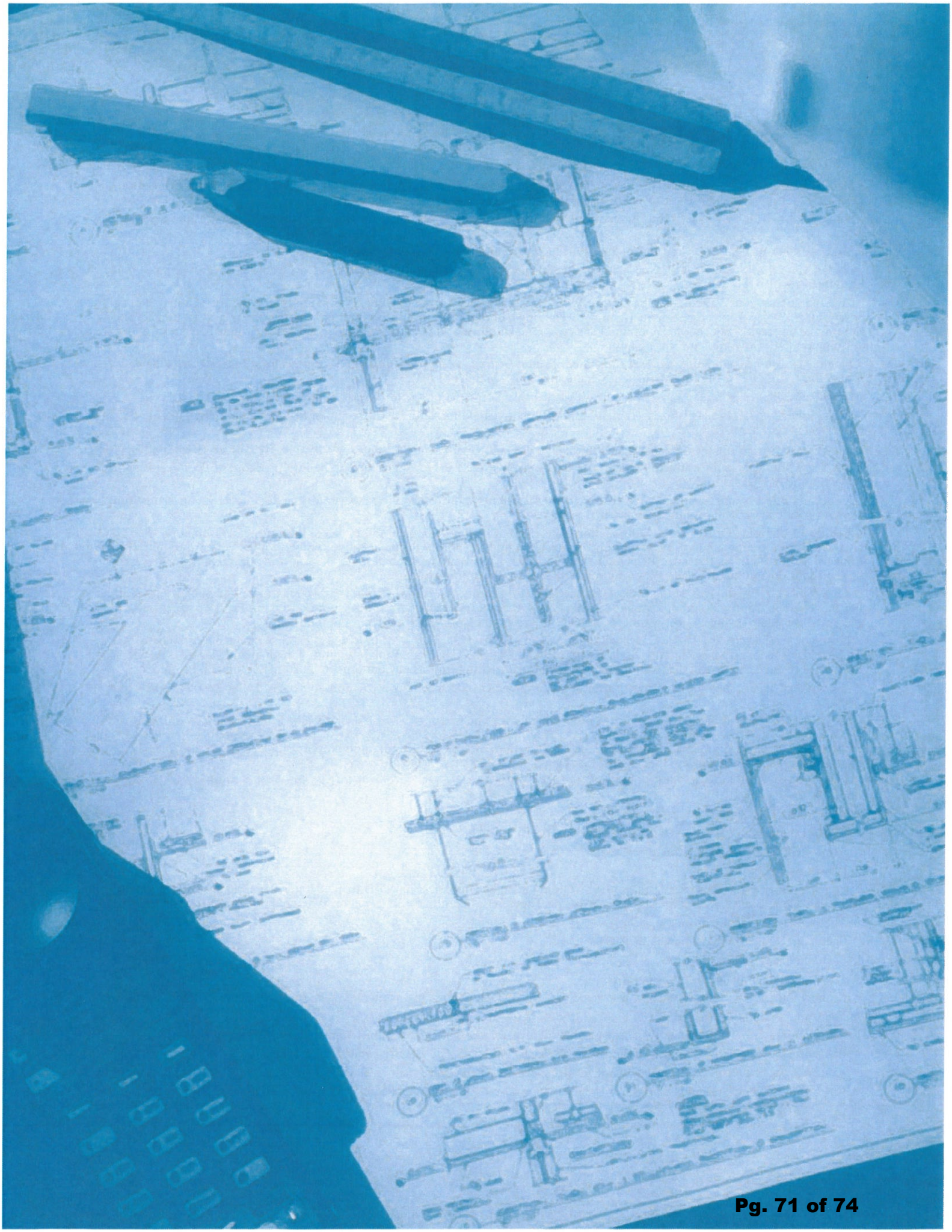
- The use of PLAs on public sector projects has become increasingly controversial over the past 15 years. All levels and branches of government have been brought into the PLA dispute. Court cases during the period have generally been over the issue of whether a PLA violates state or local bidding laws or regulations.

- The controversy over PLAs has spawned a number of studies on the effects of PLAs on the bidding behavior of contractors, construction costs, construction wages and several other issues. However, much of this research is flawed because of inherent difficulties in conducting such research, poor methodology or predetermined conclusions.

- Our research on bidding behavior and costs finds that PLA neither decrease the number of bidders on a project nor increase or decrease a project's cost when other important variables are taken into account. However, previous studies that have found a strong positive effect of PLAs on project cost failed to account for other important variables and, as a result, inflated the presumed impact of a PLA.

- Assuming cost neutrality, other aspects of PLAs should be considered. Interview and case study evidence finds high satisfaction with PLAs by stakeholders and suggests that PLAs can be used to improve scheduling, safety, training and minority employment.

- A problem with PLAs in many areas is a lack of contractor participation in negotiations, which can lead to the needs of a specific industry being ignored. One solution, which is used in a number of jurisdictions, is the development of a model PLA through a standing labor/management committee.



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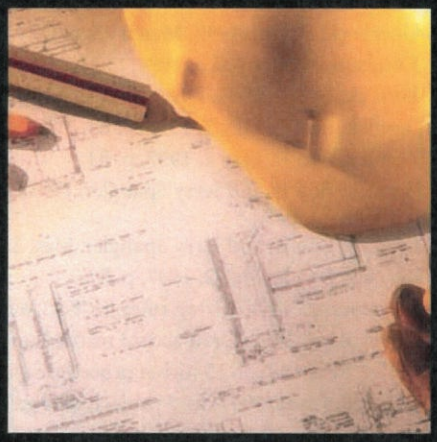

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Index No. F2702

HANDOUT 3.1-D
10/21/19

Santa Clara Valley Water District
Capital Improvement Program Committee
5700 Almaden Expressway
San Jose, CA 95118

October 21, 2019

RE: Project Labor Agreements (PLAs)

Dear Chairwoman Hsueh:

The Business San Jose Chamber represents numerous small to medium size businesses in Silicon Valley. We are writing in opposition to the District's consideration of a pilot Project Labor Agreement on a capital project.

Before you make a decision to change the way the District has historically done contracting since its existence, we request you delay action until you conduct a survey of the contractors who perform work for the District to find out exactly how the adoption of a Project Labor Agreement (PLA) will impact them and the district and encourage participation by local labor, the development of pre-apprentice and apprenticeship programs, and cost control measures.

More than 80% of construction jobs in California are provided by contractors not signatory to a collective bargaining agreement. Because these contractors will be disadvantaged and discouraged from bidding on work covered by a Project Labor Agreement (PLA), the work opportunities for contractors at the Santa Clara Valley Water District will be significantly reduced.

Project Labor Agreements (PLAs) create barriers for local, minority and women-owned construction employers and their employees from participating in building their community because they contain provisions that do not allow for the full utilization of their own workforces. Furthermore, studies show these types of agreements **increase project costs – anywhere from 10-30%** above prevailing wage because they restrict competition. Open competition is healthy and increases quality.

And finally, project labor agreements exclude the men, women, and veterans who have chosen to enter into state approved, unilateral apprenticeship training programs in pursuit of a construction career from the opportunity to work and gain the invaluable on-the-job training experience that provides stability for them, their family and their community.

Limiting work opportunities of 80% of construction workers based on their employers' union-signatory status will severely impact the minority construction community who rely on public work opportunities to build their businesses.

It's disappointing to see the spirit of entrepreneurism blatantly dismissed at Santa Clara Valley Water District leaving opportunities only for the small number of workers who have found their way into union construction programs and further eroding opportunities for smaller minority construction companies and their workers to expand their local businesses and gain invaluable work experience on taxpayer-funded projects in their community.

With the state facing a Craft Professional Demand through December 2022 of 533,136, what Santa Clara Valley Water District should be doing is working on policies that support the development of a diverse construction workforce and fulfilling career in the trades, not disparaging non-union construction workers.

For these reasons, we respectfully request your no vote on a pilot Project Labor Agreement. Please contact me at (831) 245-6446 with any questions.

Sincerely,

Victor Gomez
Executive Director

CC: Director Linda J. LeZotte, Vice Chair
Director Tony Estremera
Beth Redmond, Committee Liaison
Michael Barratz

Project Labor Agreement Information Brief (PLA)

Santa Clara Valley Water District

Oct. 21, 2019

Introduction – Ken Wong, FAC-PPM, FAC-C

- Over 30 years of experience in managing large scale capital projects, contract negotiation, claims and disputes with the federal and county governments
- Administered and negotiated PLAs in the past 10 years
- Held accountable for County of Santa Clara - Countywide PLA negotiation and policy amendment
- Information is based on 2 congressional reports, 1 federal agency impact study and references to State PCC and and other public sources

Project Labor Agreement - Agenda

- Introduction
- Definition of PLA
- Public and Private sectors contracts included PLAs
- PLA project cost impact
- Pros and Cons
- Factors affecting efficacy of PLA
- National and Local PLAs
- Factors to consider in making decision to use PLA
- Conclusion

PLA - Definition PCC Chapter 2.8 (2500 -2503)

- A prehire collective bargaining agreement that establishes terms and conditions of employment for a specific construction project or projects and is an agreement described in Section 158(f) of Title 29 of the United States Code.

  National Labor Relations Act, USC 158(f) – covering employees in the building and construction industry

- The Agreement must include all of the following taxpayer protection provisions:
  - 1. Prohibit discrimination based on race, national origin, religion, sex, sexual orientation, political affiliation, or membership in a labor organization in hiring and dispatching workers for the project.
  - 2. Permits all qualified contractors and subcontractors to bid for and be awarded work on the project without regard to whether they are otherwise parties to collective bargaining agreements.
  - 3. Contains an agreed-upon protocol concerning drug testing for workers who will be employed on the project
  - 4. Contains guarantees against work stoppages, strikes, lockouts, and similar disruptions of the project.
  - 5. Provides that disputes arising from the agreement shall be resolved by a neutral arbitrator

Private sector PLA projects- to be verified

May, 1999 GAO Congressional Report – 93% of PLAs were in private sector
Public sector's increasing use of PLA in recent years – 80/20% (Private/Public)

- Apple
- Toyota
- Facebook
- Walmart
- Samsung
- Tesla
- Hotel, casinos and high-tech industries
- Disney World
- Lowes Hotel
- Trans-Alaska Pipeline

County of Santa Clara Projects with PLA

2017 - Capital construction contracts threshold reduced from $5 million to $2 million with new version of PLA & Targeted Hiring Agreement

Countywide PLA (adopted by the Board of Supervisors in 2017)

- **Animal Shelter $34 M (2018) / Department of Tax and Collection $12 M (2018)**
- **Santa Clara Jail Security $10 M (2017)**

Project specific PLAs

- **James Ranch Expansion and Renovation $48 M (2015)**
- **VMC Ancillary Building $20 M (2015)**
- **County IT/ROV/DOR Berger Drive Building $12.7 M (2015)**
- Valley Medical Center (VMC) Bed Building #1 $350 M (2009 Extension – adopting 2005 PLA)
- VMC Service Building Replacement $55 M (2011)

Multiple projects PLA (2005)

- New Crime Laboratory /Fair Oaks Valley Health Center /Gilroy Valley Health Center /Milpitas Valley Health Center

PLA - Public Works Projects

• Contra Costa County Water District	
Los Vaqueros Dam (1995 - 1997)	$450 million
Bollman Water Treatment (1995 -1999)	$35 million
• Los Angeles Unified School District (1999)	$2.4 billion
• Oakland USD Bond Program (2000)	$200 million
• Lawrence Livermore Labs (1997 -2005)	$1.2 billion
• San Francisco International Airport (1996- 2001)	$2.4 billion
• San Mateo Community College (2003-2007)	$90 million
• Eastside Unified School District (2002)	$298 million
• San Diego Water Authority Emergency Storage (1999)	
• Grand Coulee Dam, WA (1938)	
• Shasta Dam, CA (1940)	

County of Alameda Adopted PS/CBA in 2013

All capital construction contracts over $1 million

- Highland Acute Tower Replacement, Oakland - $682 million
- East County Hall of Justice, Dublin -$154 million
- Santa Rita Jail Security Systems - $45 million
- Cherryland Fire Station -$12 million
- Cherryland Community Center -$22 million
- Castro Valley Parking lot - $4.8 million
- Santa Rita Jail ADA Settlement - $21 million
- County ITD Headquarters - $20 million
- Santa Rita Jail Healthcare - $ 65 million

Federal PLA projects – Cost Impact

- All Federal GSA projects require contractors to submit 2 separate bids, one with PLA and one without, bid award is based on the highest points scored under the best value selection process
- 50 United Nations Plaza, San Francisco - $128 million project
  - PLA bid was 2% lower than the non-PLA bid
  - Completed on schedule & budget – Federal Building of the year
  - Long term relationship with subcontractors
- PJKK Federal Building and Courthouse, Honolulu –PLA for $121 million Phase 1 out of $321 million budget
  - PLA bid was 12% higher than the non-PLA bid
  - 2 years behind schedule and cost overrun
  - Relationship with subcontractors not established

Federal/State PLA projects - Cost Impact

- Federal GAO Congressional Report (1998)
  - New York Thruway Authority – Tappan Zee Bridge 1996
    - $130 million project budget with 4.6 % saving
    - PLA avoided negotiation of 19 local collective bargaining agreements
  - Lawrence Livermore Laboratory 1997
    - $1.2 billion project budget with 0.2 % saving
    - Employed more apprentices and fewer higher-paid journeyman
  - New York State Dormitory Authority 1995
    - Budget not identified but alleged a 26 % additional cost

Local PLA - Community Workforce Agreement Cost Impact – Bay Area (Based on engineers' cost estimates)

- City of Berkeley:
  - Engineers' estimates - $578,426 to $2,700,000
  - Bid prices ranged between -13% to +31%
  - Bidders either refused to comply with CWA or suffered big losses
- City of Fremont
  - Without PLA, 4 bids at prices 32% below similar project in Costa Costa County
- County of Alameda:
  - Peralta Oaks Seismic Upgrade (D/B/B) $24 million bid @ 10% over the estimate and East County Hall of Justice (D/B) $110 million @ 15% over the estimate
  - Both projects had 40% local hiring requirement

PLA/CWA Cost Impact – Types of Project Matter

- City of Berkeley with CWA

  - Street Rehabilitation Project: $1.6 M **(Est)** - low bid at $1.4 M
  - Sanitary Sewer Rehab Proj. 11: $1.3 M **(Est)** – low bid at $1.28 M
  - Sanitary Sewer Rehab Proj. 10: $1.3 M **(Est)** – low bid at $1.057 M

  - Claremont Branch: $2.9 M **(Est)** – low bid at $2.97 M
  - North Branch: $3.8 M **(Est)** – low bid at $4.25 M
  - South Branch: $4.3 M **(Est)** –low bid at $4.6 M

Pros of PLA

1. Provides uniform wages, benefits, overtime pay, working conditions, and work rules for different crafts
2. Provides stable supply of qualified labor for large & long term projects and cost certainty during boom and bust cycles
3. Ensures no labor strife by prohibiting strikes and lockouts
4. Reduces misclassification of workers
5. Provides binding procedures to resolve labor disputes
6. Requires provisions for recruitment, apprenticeship and training programs for under-represented groups (CWA provision)
7. Joint Administrative Committee – partnering opportunity

Cons of PLA

1. Increase costs by mandating union wages and work rules and inhibiting competition (2 general contractors refused to bid – Berger Drive ROV project)
2. Non-union contractors' use of their core employees are highly restrictive, skillful workers from the union hall during boom time are in short supply
3. Employee contributions for union benefits by non-union contractors are non-recoverable at the completion of short-term projects
4. Schedule impact due to union work rules, work hours and shift structure
5. Administration process is burdensome and redundant to public contracting requirements, (SB854) DIR's Compliance and Monitoring Unit for labor compliance (F/T in-house coordinator and 3rd party consultant to monitor)
6. PLAs can only increase not decrease wages and benefits without concessions

Factors affecting Efficacy of PLA

(Intent/Effectiveness)

- Economy and market conditions – supply and demand
- General contractor's relationship with subcontractors
- Size of general contractor – cost of administering the labor compliance program (Div.1 –General Conditions)
- Size and duration of project - stability of long-term employment but may affect the bid price due to build in wage/benefits adjustments
- Political Climate (Executive Orders on federally fund public projects)

Factors affecting Efficacy of PLA
(Intent/Effectiveness)

- Funding source – Federal & State grants/Bond Measure/Capital Funding/P3
- PLA signatories to include relevant trades and be bound by the agreement
- Procurement planning – market outreach/source selection/prequalification/project delivery methods
  - Design Bid Build/Design Build/CMGC(IPD)
  - JOC/ multiple-primes/fixed price/Guaranteed Maximum Price
- Project and contract administration

Political Influence of PLA

- July, 1992 President George H.W. Bush EO 12818 sided with organized labor and required the use of PLA for federally funded projects
- Oct., 1992 President George H.W. Bush revoked EO12818 and prohibited the use of PLA
- February, 1993, President Clinton issued EO 12836 revoked EO 12818
- June, 1997, President Clinton issued a Clinton Presidential Memorandum encouraged the use of PLAs on contracts over $5 million owned by a federally owned department including leased projects
- Feb., 2001, President George W. Bush issued EO 13202 revoking EO12836 and the Clinton Presidential Memorandum and prohibited the use of PLA
- April, 2001, President George W. Bush amended his EO and allowed PLAs be used in projects awarded prior to 2/17/2001
- Feb. 2009 President Obama signed EO13502 encouraged the use of PLAs for federal construction projects over $25 million

Major components of PLA - National Level 2009 with Federal GSA

- Article 1 - Purpose
- Article 2 –Scope of Agreement
- Article 3 – Union Recognition
- Article 4 – Management Rights
- Article 5 – Work Stoppages and Lockouts
- Article 6 – Disputes and Grievances
- Article 7 – Jurisdictional Disputes
- Article 8 – Subcontracting
- Article 9 – Helmets to Hardhats
- Article 10 – to be determined by local collective bargaining

Referral Procedures, apprentice, work rules etc.

Major Components of Local PLA

Community Workforce Agreement CWA)
Project Stabilization/Community Benefits Agreement (PSCBA)

- Between 10 (National) to 27 (County of Alameda) articles plus addendum/addenda
- **County of Santa Clara – Countywide PLA 2017 adopted by the Board of Supervisors**
- Article 1 – Definitions
- Article 2 – Scope of Agreement
- Article 3 – Effect of Agreement
- Article 4 -Work Stoppages, Strikes, Sympathy Strikes and Lockouts
- Article 5 – Pre-Construction Conference
- Article 6 – No Discrimination
- Article 7 – Union Security
- Article 8 – Referral
- Article 9 – Wages and Benefits

Major Components of PLA/CWA (continued)

- Article 10 – Apprentices
- Article 11 - Helmets to Hardhats
- Article 12 – Compliance
- Article 13 – Grievance Arbitration Procedure
- Article 14 – Work Assignment and Jurisdictional Disputes
- Article 15 – Management Rights
- Article 16 – Drug & Alcohol Testing
- Article 17 – Savings Clause (legality)
- Article 18 – Term (5) + (5) years
- Article 19 – Miscellaneous Provisions
- Addendum A – Agreement To Be Bound
  - Subscription Agreement(s) for Trust Fund(s)
- Addendum B – Targeted Hiring Agreement

National PLAs – Building & Construction Trades Department (National Office – Washington DC)

90 versions of PLAs being used in 20 states

- Heavy and Highway Construction Project Agreement

  (For heavy highway construction, improvements, modification, or repairs)

- General Presidents Project Maintenance Agreement

  (For maintenance and repair of existing facilities)

- National Maintenance Agreement

  (For maintenance and repair of existing facilities)

- National Construction Stabilization Agreement

  (For construction of industrial operating and /or manufacturing facilities)

- **Building and Construction Trades Department (BCTD) Standard Project Labor Agreement for all new construction work**

  (Department's 1997 Letter - Standard PLAs per GAO Report)

Factors to consider in making decision to use PLA

Recommended by: Dept of Commerce/Dept. of Defense/General Services Administration/Dept. of Interior/NASA/ Dept. of Transportation & my experience

- History of labor disputes in the area
- Expiration dates of local collective agreements with needed crafts during the performance period
- Availability of qualified craft workers in the area
- Effect of government delays in contract performance
- Probable effects on competition – nonunion contractors and small businesses in the area
- Establish 2 bid prices requirement and utilize best value criteria for contract evaluation and award
- Continuous measurement of the effect of PLA
- Current policy to allow discretion to exempt or include PLA in project below or above the established threshold

Conclusion

- PLAs are more widely used by private sector than public sector
- Changes to the Building & Construction Trades Department's standard PLA require national office's approval which is time consuming
- Construction costs increase (2% to 15%) are expected due to terms, conditions and administration of PLAs
- PLAs may result in cost savings during downturn of the economy if concessions are offered by the unions
- PLAs can be project specific, program specific or Districtwide
- Public entities sometimes adopt other public entities' PLAs

Conclusion

- PLAs are affected by:
  - Funding sources, procurement planning, project delivery methods, contract types, size and duration of the project, complexity, experience in project administration etc.
- If threshold is set too low, PLAs may reduce number of bids received, increase bid prices and discourage small contractors from competing
- PLAs promote development of future craft workers in the trades and address socio-economic issues