



Associated Builders and Contractors

Golden Gate Chapter

December 1, 2000

To: PLA Opponents

From: Kevin Dayton, Government Affairs Director

Re: Price Waterhouse Study of PLA for Los Angeles Unified School District

The PLA for the Los Angeles Unified School District's Proposition BB construction was required to end after one year unless the school district or unions could prove the PLA saved money.

Price Waterhouse Coopers prepared the enclosed study for the school district. Here are the conclusions:

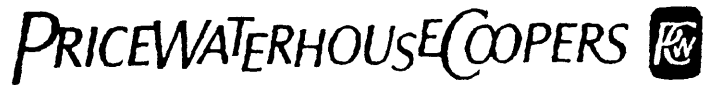
- Impact of the PLA is hard to measure, because the district built only 1% of the Prop. BB projects under the PLA and because the unions and the school district failed to keep records or baseline data. (How convenient!)
- Anecdotal evidence suggests the PLA made no difference on construction. There may be an increase in costs and decline in safety rates, but this is not a unanimous assessment. Clearly, there have not been cost savings as promised.
- There have been no work stoppages, but this is not related to the PLA.

The school board still voted 5-2 to continue with the PLA.

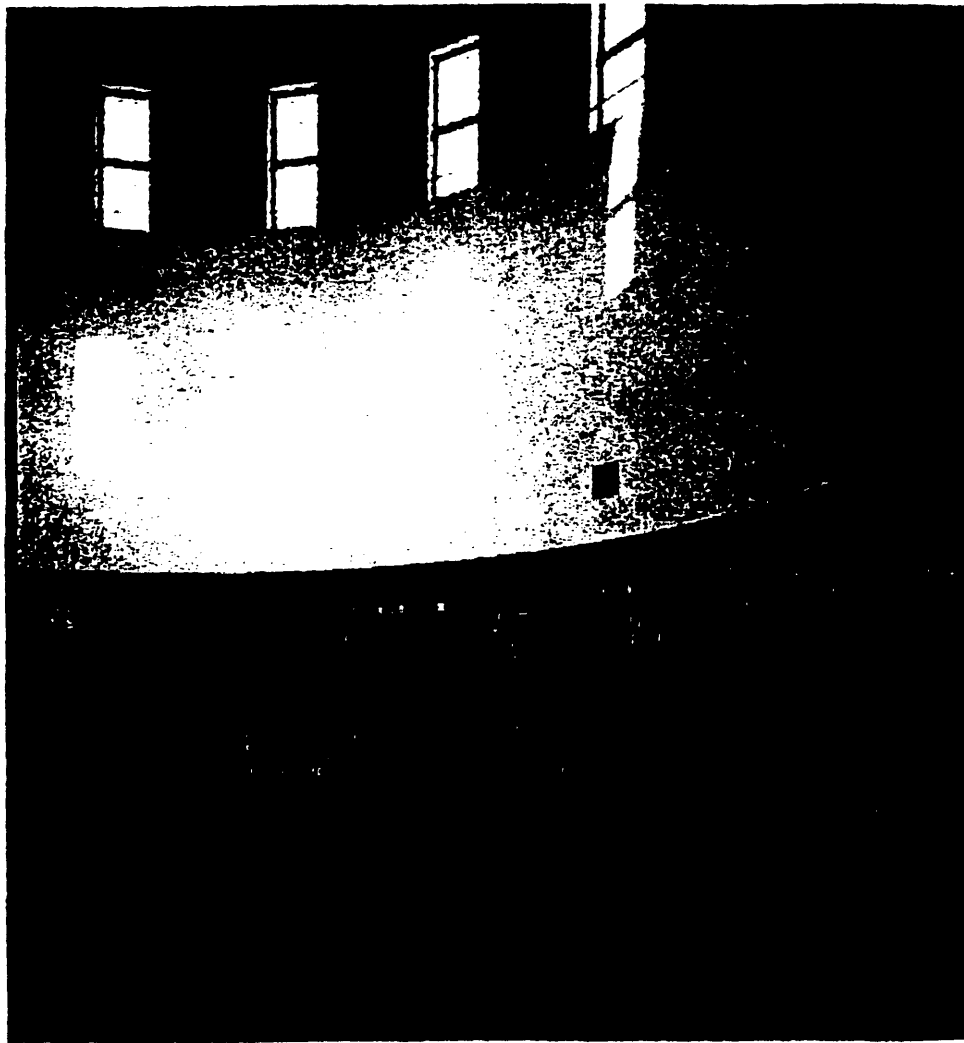
OUR CONCLUSION:

PLAs have nothing to do with the public good and everything to do with politics!

The Golden Gate Chapter is waiting for the City of Sacramento to release its study on the PLA for the Sump 2 Improvement Project and the Sacramento Regional Transit District to release its study on the PLA for the South Sacramento Corridor expansion.



Economic Evaluation of Project Stabilization Agreement
For Construction Projects Funded by Proposition BB



Report Submitted to the Los Angeles Unified School District

by PricewaterhouseCoopers LLP

November 2, 2000

November 2, 2000

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Mr. Robert Buxbaum, Chief Facilities Executive
Facilities Services Division, Room 1153
Los Angeles Unified School District
355 South Grand Avenue
Los Angeles, CA 90071

Re: ***An Economic Evaluation of the Project Stabilization Agreement for Construction Projects Funded by Proposition BB***

Dear Mr. Buxbaum:

PricewaterhouseCoopers LLP ("PwC") appreciates having had this opportunity to continue to support the Los Angeles Unified School District ("LAUSD" or "District"). Pursuant to LAUSD's July 30, 1999 RFP for an *Economic Evaluation of Project Stabilization Agreement for Construction Projects Funded by Proposition BB*, our proposal of the same title dated August 27, 1999, our Agreement No. 0000431 with the District for the period November 10, 1999 through November 9, 2000, and as modified as a result of our draft Interim Progress Report dated April 5, 2000, we hereby submit this report as our final deliverable and task under this contract.

BACKGROUND AND INTENT

The original intent of this work was to use existing District data and systems to define, design and develop methods for evaluating the economic impact of the Project Stabilization Agreement ("PSA") and to work with District managers and staff to implement resulting methods and reporting.

With regard to our April draft progress report to the District and subsequent discussions with District management regarding the limited number of projects available and limited data, we provided guidelines on what data we believed should be collected and agreed that the revised intent of our work would be to return in August to develop and provide the District with an independent assessment of the information that could be made available at that time.

We re-scheduled our work with District management in August, began our final fieldwork September 11th, completed our fieldwork as of October 13, 2000, and began finalizing the results of our work into a final report as of October 16th. This report presents a description of our work along with our findings, conclusions and recommendations.

At the heart of this work is Section 3.5 of the PSA:

“The parties recognize that the District has elected to enter into this Agreement in expectation of projected cost savings. As such, the District shall enter into this Agreement on a trial basis for the duration of the first identified set of projects undertaken. This Agreement shall expire at the end of one year unless the District and/or Council demonstrate that expected economic savings to the District have materialized at a level sufficient to justify continuing the Agreement. ...”

A primary focus of our work has been to independently investigate whether or not the District has or can demonstrate that expected economic savings have materialized to date at a level sufficient to justify continuing the Agreement. To complete our work, we have reviewed electronic and manual file data, examined various reports and schedules, held and attended meetings, and interviewed key persons involved in and knowledgeable about the PSA program and its impacts (See *Attachment A: Contact Lists*).

Per District records and reports available to us, as of October 10, 2000:

- 5,618 projects (not contracts) are currently scheduled for completion with whole or partial Proposition BB funding.
- 1,914 projects (34%) have been awarded through a competitive bid process.
- 1,774 of those formally awarded projects are under construction or completed.
- 159 of those under construction or completed projects (9%) are subject to the PSA, with another 113 PSA projects awarded and ready to begin construction.
- Completed PSA projects number 46 at this time (4% of formally bid projects, and 1% of total Prop BB projects).

CONCLUSION

Through this work, and as presented in this report, we are unable to conclusively determine whether the PSA has to date had either a net positive or net negative economic impact for the District. This is primarily due to the relatively small number of projects underway or completed under the PSA, the lack of performance tracking and comparison data maintained by the District and the Building & Construction Trades Council, and other compounding and masking impacts that local economic and other factors are having on the data needed to measure the impacts of the PSA.

In the absence of adequate empirical data, we have compiled anecdotal evidence that suggests that at least to date there has been neither a significant positive nor a significant negative net impact as a result of implementing the PSA.

The resources closest to the pre and post PSA implementation contract work and potential significant impacts are the District Construction Managers. Based on our

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interviews and discussions with them covering each of the areas and measures we were pursuing in the course of our work (cost, schedule, quality, safety, workforce composition, etc.), the Construction Managers were consistent in their remarks that to date the PSA has not had a noticeable favorable or unfavorable impact at the contractor and work scene level (See *Attachment B: Construction Manager Interview Results*). While the Construction Managers are unanimous in their opinion that the PSA has not had a noticeable impact to date, it is important to note that their PSA related experience is limited to only a small fraction of early PSA work and none of the major PSA related construction contracting is yet underway. This anecdotal evidence is not sufficient to reach a conclusion regarding what impacts the PSA may or may not eventually have.

Two other potential benefits of the PSA are the prohibition against work stoppages and the elimination of shift differentials (additional pay) for multiple work shifts. There have been no work stoppages either before or after the PSA implementation, thus the continuity of work impact has had no benefit to date. However, work continuity benefits are typically only material on very large blocks of contracts and over an extended period of time, neither of which is yet the case with the District's Proposition BB PSA work. Additionally, the District has not quantified forecasts for cost or benefits that may be realized through the use of the PSA provision of not having to pay shift differentials. District management expects not paying shift differentials to be of benefit once major construction projects are underway and shiftwork is used to accelerate critical work. (Additional more minor anecdotal points are presented in *Attachment C: Additional Anecdotal Points*.)

If the District continues with the PSA, going forward it will be important for District staff to formalize efforts to implement and enforce the agreement and to put in place appropriate tracking to produce a basic set of periodic management reports.

LIMITATIONS ON USE OF OUR REPORT

This project has been completed and our report is intended solely for the information and use of the Los Angeles Unified School District Board of Directors, management, and other staff and advisors within the organization, in connection with assessing the District's experience to date with the PSA trial, and is not intended to be and should not be used by anyone other than these specified parties or for any other purpose. Our analyses and conclusions are based on PSA related information available to us through the end of our field work on October 13, 2000, and, as agreed with the District, this effort was a review and an evaluation with much less rigor applied than would be the case with more extensive investigations or audits. Furthermore, our report is intended to be used in conjunction with a full range of input from the District's management, staff, legal, contracting and advisory resources and should not be used in isolation separate from these other information and advisory resources.

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We believe we have obtained sufficient appropriate evidence and that our examination provides a reasonable basis for our representations in this report, and we further believe we have applied sufficient professional judgment in expressing the report's findings and conclusions. To the extent practical, we endeavored to collect evidence from different sources to test for consistency. We did not find inconsistent evidence between the various sources, i.e., differences between data points, differences between data points and staff input, or differences between staff and outside sources. Should the Council or others inside or outside the District prepare studies on this matter, they may have access to a different range and depth of information, may use different assumptions and analysis techniques, and therefore may reach different results and conclusions than are represented in this report.

APPROACH, PHILOSOPHY, AND WORKPLAN APPLIED

Per agreements and discussions with District management, we developed and applied objective systematic methodologies and techniques for evidence gathering and evaluation to support a conclusion. Our review included such procedures as we considered necessary in the circumstances. Although our investigation was independent, we did rely on District managers and staff to provide relevant data as requested and are not aware of any instances where they failed to do so.

As we understand the background to this work, the anticipated cost savings of implementing the PSA were based primarily on undocumented prospective financial expectations and assumptions. The original justification was based primarily on a general assumption that in pursuing Proposition BB new school construction and major rehabilitation efforts there would likely be significant cost and schedule overruns that could be mitigated with a PSA/PLA. The District and/or Council are faced with demonstrating that cost and schedule performance are significantly improved with the PSA, and that incremental benefits more than offset any costs associated with implementing and using the PSA. The two most significant areas for demonstrating performance improvement are (1) areas where known problems existed and have been successfully mitigated by the PSA, and (2) areas where new PSA policies, procedures and practices have been successful in improving cost and schedule performance that would not have otherwise been realized if it were not for the PSA.

We were most intent on demonstrations of cost benefit where pre-PSA baseline or prospective cost data were available against which PSA performance could be measured and improvements statistically demonstrated. We were also intent on finding demonstrations where baseline or prospective data could be extrapolated or reasonably assumed and PSA performance and trends could be directly or indirectly measured so as to demonstrate cost benefits. In the course of our work, we also sought anecdotal evidence and the opinions of various parties involved with or knowledgeable on the benefits and costs associated with the PSA issues.

We and District management at the beginning of this assignment believed that information required to support this effort would for the most part be available from the District's systems, staff, advisors and contractors. Our common belief was that criteria could be set against pre-PSA baseline data and that available evidence, once evaluated, would meet basic generally accepted requirements to measure PSA impacts against those criteria, i.e., that source data would be relevant, reliable, neutral (free from bias), understandable (not misleading) and complete. What we found once our work began was that essential baseline data was not available and tracking processes and data were insufficient or not available.

Given the approach, philosophy and expectations noted in the previous paragraphs, we targeted our efforts on finding evidence in those areas that were expected to yield significant benefits from implementing the PSA. Specifically, per a reading of the PSA, benefit areas where PSA performance versus baseline or prospective performance was expected to demonstrate significant improvement were:

Section 1.2: "reducing construction costs" by ensuring that all Project Work will occur <more> "efficiently, cooperatively, economically and without interruption".

Section 1.4: "improved working conditions", "improved delivery of medical care", "reduction in the time and expense necessary to process and resolve disputes", and "significant savings".

Section 4.5: "increased numbers of skilled construction workers from the residence and population of the District", defined as "Los Angeles Unified School District High School graduates and local community residents from the District's attendance area".

Section 6.4(b): work "...covered by this Agreement shall not be entitled to any differentials or additional pay based upon the shift or work schedule of the employee."

Purported costs that might offset PSA benefits were noted to us as:

- Costs of setting up and administering PSA administrative and management processes.
- Costs passed through to the District by contractors who might have to pay health and welfare, pension and other benefits above and beyond what they would have otherwise paid.
- Costs passed through to the District by contractors who might have to pay working dues and non-initiation of application fees above and beyond what they would have otherwise paid.

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- Opportunity cost differentials of qualified bidders who might have bid, won and completed work at a lower cost except that they did not do so because of the PSA

✓
The primary aim of our Approach, Philosophy and Workplan was to independently investigate whether or not the District can demonstrate that expected to-date net economic savings have materialized at a level sufficient to justify continuing the Agreement.

* * * * *

As reported herein, we compiled available experience-to-date benefit and cost information per the guidelines above, solicited and compiled anecdotal evidence, and exercised our judgement in evaluating the effects from the PSA versus effects from other influences. Although we are unable to conclusively determine whether the PSA has had either a net positive or net negative economic impact for the District, there is anecdotal information which suggests that the PSA has to date had neither a significant positive nor a significant negative net impact. __

We appreciate having had this opportunity to provide additional services to the LAUSD and look forward to additional future opportunities to assist the District in sustaining and growing its operations. Please direct any questions regarding our work or report to Mr. Mark Blumkin at (407) 236-5146, or Mr. Evandro Braz at (212) 259-2979.

Sincerely,



Evandro F. Braz, Partner
Engineering & Construction
Management Consulting Services

Attachments:

- A: Contact Lists**
- B: Construction Manager Interview Results**
- C: Additional Anecdotal Points**
- D: Typical Measures and Metrics**

Attachment A: Contact Lists

Interviews:

Buxbaum, Robert	LAUSD, Interim Chief Facilities Executive
Crum, Julie	LAUSD, Director – Facilities Support Services
Curtis, Charla	LAUSD, Labor Compliance Coordinator
Hemingway, Karen	LAUSD, Branch Director, Contract and Insurance Services
Holmes, Paul	LAUSD, Director – Modernization-Existing Facilities
Littman, Kathi	LAUSD, Director – School Building Planning
Lorenzo, Rory	LAUSD, Senior Project Manager-Existing Facilities
Martin, Kelly	Paul, Hastings, Janofsky & Walker LLP
Rascoe, Kirk	LAUSD, Director – Equal Opportunity Programs
Reed, Bill	Perspective Enterprises, Community Outreach Program
Smith, Geoffrey	LAUSD, Prop BB Bond Manager
Stetzer, Suzette	Aon Risk Services, Vice President
Stevenson, Milton	LAUSD, PSA Coordinator
Tang-Wong, Tybuoy	LAUSD, Acting Labor Compliance Officer
Ventura, Tom	LAUSD, Deputy Director – Modernization-Existing Facilities

Additional Information Sources:

Adams, Joseph	Perspective Enterprises, Community Outreach Program
Carter, Judy	LAUSD, Computer Applications Specialist
Hamby, Beth	LAUSD, Computer Applications Specialist
Kajiya, Keith	LAUSD, Assistant Program Manager – Program Controls
Leslie, Tom	LAUSD, Chief Construction Inspector
Merriman-Garrett, Yvette	LAUSD, Assistant Chief – Public Works Contracts
Perry, Pablo	LAUSD, Data Reporting Systems Trainer
Phillips, George	LAUSD, Area Facilities Services Director
Roberts, Lynn	LAUSD, Director – Maintenance and Operations
Schweska, Regina	Perspective Enterprises, Community Outreach Program
Tsuno, Richard	LAUSD, Chief – Public Works Contracts
Zepeda, Victor	Perspective Enterprises, Community Outreach Program

Focus Groups Participants:

Aja, Phillip	LAUSD Project Manager
Aziz, Emad	Painters DC#36
Bauer, Mike	Painters Apprenticeship
Cadena, Ed	Turner Construction, Senior Project Manager
Hall, John C.	Plumbers Local Union 78
Hensley, Bill	Vanir Construction
Hoggard, Shane	Associated Builders Commission
Irwin, Jim	Painters DC#36
Kionka, Sandy	High Point
Kumar, Vijey	CRSS , Assistant Project Director
Lacko, Robert	JGM, Project Manager
Lairson, Terry	Plumbers Local Union 78
Lopez, Alex	Painters DC#36
Miller, Bob	CMTS, Project Manager
Miller, Ralph	Plumbers Local Union 78
O'Brien, Angus	Los Angeles Engineering
Oda, John	Bovis, Project Manager
Prunty, James	Associated General Contractors of California
Rooker, Brad	Sheet Metal Workers Local 108
Santos, Joaquin	Laborers Union 802
Schneiderman, Gerald	Hollywood Damage Control & Recovery
Selvaggio, Ron	Helix Electric, Inc.
Shipp, Alex	HNTB/Yang, Bond BB Project Manager
Slawson, Richard	Los Angeles/Orange Counties Building & Construction Trades Council, Executive Secretary
Tyler, Wm. Larry	Terra-Cal Construction
Voight, Dave	Painters DC#36
Wu, William	PMA & CCG, Senior Construction Manager
Yang, Bill	HNTB/Yang, Bond BB Project Manager

Attachment B: Construction Manager Interview Results

The resources closest to the pre-PSA and PSA implementation contract work and potential significant impacts are the District Construction Managers. Interviews with representatives from the various District Construction Managers are consistent in their remarks that to date the PSA has not had a noticeable favorable or unfavorable impact regarding project cost, schedule, quality, safety, workforce composition, or any other noteworthy project component.

However, while the Construction Managers are unanimous in their opinion that the PSA has not had a noticeable impact to date, it is important to note that their PSA related experience is limited to only a small fraction of early PSA work and none of the major PSA related construction contracting is yet underway.

We interviewed representatives from ten of the eleven districts, administered the questionnaire inserted below, and walked through a discussion of each of the areas and measures we were pursuing in the course of our work. It is our understanding that the eleventh district was formed after the implementation of the PSA and was not included in these discussions because representatives would not have the necessary comparative information for projects prior to the PSA.

We found consistent remarks from the District Managers that to date the PSA has not had a noticeable favorable or unfavorable net impact, i.e., at the contractor and work scene the PSA has so far been a non-event. The questions and responses are tabulated below [number of responses are shown inside the brackets]. Tabulations shown here are the results of conversations with the various District Construction Managers. Additional comments from other focus groups are noted where applicable:

1. Approximately how much of your personal workload this calendar year has involved PSA contracted work?
 - [2] None.
 - [2] No more than 10%
 - [5] No more than 50%
 - [2] More than 50%
2. How do you think PSA contracts have changed the District's administrative workload?
 - [0] Significantly less
 - [0] Somewhat less
 - [7] No real difference
 - [3] Somewhat more
 - [0] Significantly more
 - [1] No opinion

Representatives citing that there has been a slight increase in the administrative workload associated with PSA projects noted that the increase was most likely an additional step of paperwork required of contractors and their subcontractors during the bidding process. Construction Managers were not able to relate any notice of notable increases in District responsibilities, and stated that their comments as to extra work on the part of contractors were assumptions and not the product of observation. Any supposed additional steps taken had no effect on subsequent contract requirements.

3. Do you believe the number of contractors bidding on projects since the inception of the PSA has
- [0] Gone up
 - [9] Stayed about the same
 - [2] Gone down

Additional comments regarding the static level of competition included the expectation that the PSA would increase the number of contractors bidding on projects, and that there would be "new blood" introduced into the mix. This desired increase in competition has, according to the Managers, not been realized yet and to date essentially the same contractors are bidding on the same work.

Two Managers citing a decrease in the number of contractors later qualified their responses during open discussion, mentioning that they had each seen a single large contractor bow out of LAUSD bidding pools as a direct response to the PSA. However in each case they noted a new contractor had been added to the bid list, resulting in a net gain of zero, which is in line with normal bidder turnover.

In similar discussions with the Associated Builders & Contractors and other Merit Shop Contractor representatives, which we were not in a position to question or validate, the unanimous response was that they had all refused to participate in District work under the PSA. Representatives that commented agreed that the primary driver of this decision came from their employees, who are reluctant to pay dues and fees to unions for services they may not benefit from. One representative mentioned that, of the 90 contract members of one organization in the Los Angeles area, only one is involved in LAUSD project work.

4. Where PSA has been used in contracting, do you believe that the effect on change order amounts has been to
- [1] Decrease them
 - [1] Increase them
 - [9] No real change

Open discussion regarding change orders indicated that they are not connected to the PSA, but rather the product of incomplete drawings and unknown conditions. The response that change orders had decreased was later withdrawn, the representative mentioning that the original response was based on the theoretic benefits of a Project Labor Agreement and not

actual LAUSD project experience. Comments that there was an increase were specific to a single project and not indicative of a trend or impact of the PSA.

Associated Builders & Contractors members commented that they believed there has been an increase in change order amounts.

5. Generally speaking, where PSA has been used in contracting, do you believe that instances of building code violations and/or re-inspections has
- [0] Significantly gone down
 - [2] Somewhat gone down
 - [9] Not really changed
 - [0] Somewhat gone up
 - [0] Significantly gone up

The expectation was that building code violations and re-inspections would decrease, as reflected in two of the responses. However, during open discussion it was unanimously agreed that to date there has been no change as a result of the PSA; the same contractors are performing the same work with the same recurring problematic areas. A comment was also made that inspectors are still bound to uphold building codes, meaning that they would continue to use the same procedures and standards to examine both pre-PSA and PSA project work.

6. Where PSA has been used in contracting, do you believe that instances of schedule slippage and overruns has
- [0] Significantly gone down
 - [1] Somewhat gone down
 - [10] Not really changed
 - [0] Somewhat gone up
 - [0] Significantly gone up

Schedule overruns vary by trade and are believed by the District Construction Managers to be consistent throughout the entire Proposition BB program. Changes in schedule were considered to be predominantly the result of scope changes, errors and omissions, and unknown conditions, as is typical of the construction industry.

Examples of work stoppages were non-existent, as agreed upon by the District Construction Managers, the Associated Builders & Contractors, and the Building Trades Commission. The Building Trades Commission and other Union representatives attribute the absence of work stoppages to the Continuity of Work Agreement, dated June 1, 1987.

7. Do you think there have been or are likely to be any changes in claims and/or liquidated damages with the use of the PSA?

[0] Significantly gone down
[0] Somewhat gone down
[10] Not really changed
[1] Somewhat gone up
[0] Significantly gone up

While there has not been sufficient time to adequately determine whether or not PSA projects will experience increases or decreases in claims, the Construction Managers feel that overall no change is expected. Again, it was mentioned that to date the same contractors are having the same problems with little or no attention to extraordinary improvement.

8. With the use of PSA in contracting, do you think there have been any changes to the frequency of delays associated with the availability of labor to meet workforce composition requirements (LAUSD graduates, M/WBE, etc.)?

[1] Significantly gone down
[8] Somewhat gone down
[2] Not really changed
[0] Somewhat gone up
[0] Significantly gone up

[Note: Based on the subsequent discussion, we suspect that the respondents were confused by the wording of this question. It seems that they intended to report that "availability" had somewhat gone down, although the question was aimed at "frequency of delays".]

The representatives stated that the shortage of labor, regardless of workforce composition, is a function of the rising economy. As for workforce composition, attention is paid to M/WBE issues, as per contract requirements, but we were told that LAUSD graduate information is not considered a responsibility of the contractors and is therefore not tracked.

Conversations with the Associated Builders & Contractors cited that the union hiring halls were empty and were of little service to the contractors.

The Building Trades Commission and other Union representatives mentioned that non-union contractors performing under the PSA were not requesting additional labor from the union hiring halls beyond the required core workforce. They were all in agreement that not a single referral had been made to a non-union contractor under the PSA. Later in the conversations, however, they were not able to provide us with referral records for any PSA or non-PSA basis as their procedures do not track referrals on a per project basis. In addition, the union groups do not track LAUSD graduate information or community residence data per the PSA, but indicated that they are waiting for the District to provide guidance as to how this is to be done.

9. Do you think there has been an increase or decrease in safety violations after the PSA implementation?

[0] Significantly gone down
[4] Somewhat gone down
[7] Not really changed
[0] Somewhat gone up
[0] Significantly gone up

While violations are thought to have decreased, several of the District Construction Managers agreed that the decreases were not tied to the PSA but were the result of a more realistic schedule and workload imposed by the District. Earlier schedules were often aggressively compressed, creating an unusually high density of trades and laborers at a single project site.

Related anecdotal point: Statistical information tracked by the OCIP administrators at Aon Risk Services indicates that safety violations have actually risen over the last several months. However this data does not include comparative pre-PSA project information.

10. Do you believe your dealings with PSA contractors are

[0] Significantly better
[1] Somewhat better
[10] Not really different
[0] Somewhat worse
[0] Significantly worse

The one respondent regarding "somewhat better" indicated that the improvement was not attributable to the PSA but was simply a matter of normal changes in contractor relationships from time to time.

11. Does it appear to you that, all things considered, the overall cost of work performed has changed as a result of using the PSA in contracting?

[0] Significantly gone down
[0] Somewhat gone down
[7] Not really changed
[4] Somewhat gone up
[0] Significantly gone up

In conjunction with responses recorded in previous questions, there has been an overall perceived recent increase in project cost. This increase, however, is attributable to the economic trends for construction in the area. There has been no change in production, although the Construction Managers mentioned a desire for change order expenditures to decline.

Representatives of the Associated Builders & Contractors and other Open Shop Contractors mentioned that, in addition to the rising economy, District project costs were likely escalating as a result of inefficiencies generated by multiple trade groups performing work simultaneously, particularly on small projects. They also represented that they expected that

there has been an increase in overhead costs precipitated by the mandatory use of single-task oriented labor versus the open shop labor practice of cross-trained labor.

12. Does it appear to you that, all things considered, the overall quality of work performed has changed as a result of using the PSA in contracting?

(0) Significantly gone down

(0) Somewhat gone down

(10) Not really changed

(1) Somewhat gone up

(0) Significantly gone up

The quality of work was not reported by the District Construction Managers to have increased or decreased, particularly since there has been no change in the standards to which the contractors must adhere. They pointed out that owners, architects, and inspectors cannot interpret and apply building codes and work standards any differently. Problematic contractors and sub-contractors still cause the same kinds of difficulties. The District Construction Managers took the opportunity to reiterate that to date the PSA has truly been a "non-event".

Union representatives were adamant that the District has benefited from an increase in work quality resulting from the greater participation of union contractors in District work.

Attachment C: Additional Anecdotal Points

- Analysis of the Pick data was extremely limited by the available data breadth and depth and the limited data relating to PSA contracts versus non-PSA contracts. We did not find any material trends or variances in the data available to us. What minor differences we did find can be explained by any number of contracting variables, and none could be traced to direct impacts from the PSA.
- Given allowances for normal bidder turnover and general bidding activity in the LA area, the increases and decreases in bidding firms by type of contract appears to be normal activity and turnover and do not appear to have been impacted by the PSA, i.e., to date there has been no notable PSA impacts on bidding competition and therefore by inference contract award values.
- Interviews with management at the LAUSD and at the various district construction offices yielded no comments regarding any significant additional administrative or management workload with respect to the PSA.
- Within the limited PSA activity to date and the limited information available to us for a cursory review, we did not find instances that might suggest that any PSA related extraordinary contractor costs are being passed through to the District by contractors. Such extraordinary costs to consider in this regard include any mix of health and welfare, pension, working dues, and non-initiation of application fees that some contractors and subcontractors might pay above and beyond what they would have otherwise paid without the PSA.
- Given the limited PSA contract bidding and limited statistical data available to us during this work, we were not able to evaluate whether there might be any notable opportunity cost differentials to date of qualified bidders who might have bid, won and completed work at a lower cost except that they did not do so because of the PSA. Such an assessment will require a study of substantial contract bidding activity, which has not yet taken place, and will likely require research and substantiation of analysis assumptions with contractors who would be expected to bid but did not.
- We requested and reviewed selected contract files. Under the scope of this work our review was not large enough to be statistically significant; however, we did not observe any apparent favorable or unfavorable PSA impacts to date.
- We reviewed a limited number of workforce records. Within the scope of this work our review was too small to be statistically significant; however, we did not observe any apparent favorable or unfavorable PSA impacts on workforce composition, especially with regard to alumni and local residents.

Attachment D: Typical Measures and Metrics

The primary aim of our Approach, Philosophy and Workplan was to independently investigate whether or not the District can demonstrate that expected to-date net economic savings have materialized at a level sufficient to justify continuing the Agreement. To that end we set out to acquire available baseline and tracking data on typical measures and metrics such as:

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Administrative Cost ratio = defined administration and oversight costs / total contract costs	Ratio of administrative and oversight costs incurred by the District that are in addition to contract costs as a burden rate on top of actual contract costs is an indicator of how effective and cooperative the contracting arrangements are	A decreasing ratio implies decreased burden placed on construction management and oversight as a result of using the PSA	Would need to distinguish between marginal costs to consider (increased staff positions, increased paid overtime, etc.) versus increased workload covered by existing staff at no marginal cost
Bidding Credibility indicator = Number of bid protests / number of bidders)	The number of bid protests per total bidders is a general indicator of the bid process clarity and rigor as well as the quality of bidders being attracted	A declining indicator implies higher likelihood of quality bidding and contracting as well as lower bid process costs	
Bidding Quality = #qualified bidders / #unqualified bidders	Poor bidding quality implies greater bid process costs due to having to screen and justify eliminating unqualified bidders, i.e., the higher the Bidding Quality rating the lower the bid processing costs for a given bid award	If the Bidding Quality rating increases with PSA, it implies that the PSA is a cost saving device	If the construction economy is growing, fewer qualified and unqualified bidders will bid on work, and visa versa, which masks the PSA influence

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Change Order Variance = Final contract cost/ initial contract cost	Cost delta between original and final contract as driven by the results of all change order types	If smaller rate of CO increase is encountered for PSA based contracts, implies PSA is a cost saving device because there are less unknown costs at the time of issuing the contract.	Multiple factors influence this rate: poor original estimate, poorly scoped and priced bid, poor execution against plan, etc.
Competitiveness per bid = # of bidders per RFP	Competitive pressure toward lowest possible bid by virtue of number of contractors bidding on a given contract, i.e., the more bidders the more intense the competition for the work and presumably the lower the final qualified bid for the work	If a greater number of contractors are bidding, it implies that the PSA is increasing the level of competition and thereby implies that overall costs should be lower	The construction business activity for the trade at the time the project is put out to bid also impacts the number of bidders, i.e., if the market is growing fewer contractors will bid on the project
Cost Variance = Final cost/ estimated cost	Final cost at project completion vs. estimated cost of project (as adjusted by approved scope changes)	If smaller rate of increase over estimate is encountered, implies PSA is a cost saving device	Differences between estimated and final cost are also driven by the accuracy of the estimate and ability to update estimates for each type of change order. Estimating techniques must remain consistent and up-to-date for meaningful comparison of the metric.

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Default Cost factor = Default costs / total costs	Default Cost factor is an indication of contract oversight costs relative to general reliability of contractor selection, contracting, work relations and program oversight	Defaults, litigation or required mediation costs increases the costs of final construction, a lower factor implies lower total absorbed costs	
Default Index = Default instances / total costs	Default Index is a general reliability indicator over contractor selection, contracting, work relations and program oversight based on the number of instances when the contractor defaults on the agreement or a dispute between contractor and LAUSD requires either mediation or litigation.	Generally speaks to contract/labor stability. If there are excessive defaults, litigation or required mediation, it implies needed improvements in contractor and/or labor relations stability	Default, litigation, mediation are also a function of contract complexity and project difficulty. One would expect more issues with larger, more complex projects.
Discrepancy factor = Discrepancy count/contract price	Ratio of punch list discrepancy items (contract punch lists + code violations) to contract price	A decreasing ratio implies improved project quality and reduced project oversight workload, is also an early indicator of future warranty and maintenance impacts and costs	Cost and schedule impacts are captured elsewhere, this is a pseudo measure of quality of work and a pseudo indicator of future warranty and maintenance impacts and costs

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Diversity index = Total identified minority hours/total project hours	Ratio of identified minority hours to total hours is an indicator of meeting and exceeding minority involvement compliance objectives	As ratio increases, implies social goals of program being better served	Especially relevant if exceeding minimum requirements is a benefit to the District, especially sensitive to data capture effectiveness
Grievance Cost factor = Direct and indirect costs associated with grievances	Costs of dealing with grievances and arbitration per project is an indicator of ineffective labor management and relations and a measure of non value adding costs against the work	A decreasing rate would imply improved labor management and relations and decreased non-value adding costs for the District	
Grievance Rate = Grievances files per total costs (or total labor hours)	Occurrence of grievances/ arbitration per project is an indicator of ineffective labor management and relations	A decreasing rate would imply improved labor management and relations	
LAUSD Graduate Participation index = Graduate hours worked /total workforce hours	Ratio of LAUSD graduate hours worked vs. total labor force hours is an indicator of achieving the District's desire to provide employment opportunities for its graduates	As ratio increases, implies social goals of program being better served	Especially sensitive to data capture effectiveness

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Liquidated damages factor = Liquidated damages + processing costs / contract price	Ratio of liquidated damages + processing costs compared to contract price indicates the overall burden of coordination and control breakdown costs above and beyond those planned	A decreasing liquidated damages factor would indicate reduced costs for the District, generally as a result of improved project planning, coordination and control	Supporting data to evaluate PSA influence may take many months to finalize, ratio must include administrative and legal costs and may involve settlements.
Lost Time Due to Accidents ratio = hours reported lost due to accidents / total costs (or total labor hours)	Occurrence of lost time due to accidents and injuries is a serious issue due to its direct impact on the well being of contract workers	A decreasing ratio would indicate that worker safety and resulting well being is improving as a result of the PSA	
MWOB Participation index = MWOB entity participation costs/ total costs	Ratio of MWOB entity participation vs. total project costs is an indicator of meeting and exceeding MWOB compliance	As ratio increases, implies social goals of program being better served	Especially relevant if exceeding requirements is a benefit to the District, especially sensitive to data capture effectiveness
NLRB Occurrence rate = NLRB filings per total cost (or total labor hours)	Occurrence of NLRB filings per project hours is an indicator of ineffective labor management and relations	A decreasing rate would imply improved labor management and relations	
Prevailing Wage Violation Index = Number of prevailing wage violations / total labor hours	Prevailing wage violations are a general indicator of contractor management quality and reliability and reflect on the District's reputation in the contractor and general public arenas	A declining index would suggest a better quality of contractor management and improved District reputation in the contractor and general public	

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Residence Participation index = Total local residence hours /total workforce hours	Ratio of school district residence employed hours (includes resident graduates) vs. total labor force hours on project	As ratio increases, implies social goals of program being better served	Especially sensitive to data capture effectiveness
Safety Violation Rate = reported safety violations /total costs (or total labor hours)	Occurrence of violations per contract cost (or total labor hours) is an indication of how safe the working conditions are on the work premises	A decreasing ratio would imply that safety conditions are improving.	Violations refers to checklist items and warnings, not lost time due to accidents which is captured separately
Schedule Adherence = Final duration days/ Original duration days (after scope change adjustments)	Ratio of original (scope adjusted) project duration to final project duration (excluding scope changes, any delays for work stoppage or extraordinary - circumstances)	If the ratio decreases, it would imply improved schedule performance	Ratio reductions can benefit the District if returning the work area to needed District uses more quickly benefits the District. Must factor out any delays due to work stoppage (measured elsewhere) or extraordinary work prior to calculating ratio.
Schedule Quality = Final duration days/ Original duration days	Ratio of original project duration to final project duration (includes all scope changes, any delays for work stoppage or extraordinary circumstances)	If the ratio decreases, i.e., fewer changes and surprises, it would imply improved bid schedule quality and adherence	Ratio reductions can benefit the District if returning the work area to needed District uses more quickly benefits the District. Must factor out any delays due to work stoppage (measured elsewhere) or extraordinary work prior to calculating ratio.

Metric, Calculation and Unit of Measure	Metric Comments	Implication as to PSA Impact	Factors to consider during data analysis that may mask PSA's influence
Unit Cost = Total cost / total units	Cost per each, cost per ft ² , cost per linear ft, etc. where total cost includes overheads and absorption	If unit cost is lower for PSA-based projects, implies PSA cost saving	Unit costs vary over time based upon material costs and market conditions, also vary due to different situations and conditions at the point of work
Warranty index = Warranty costs /contract price	Ratio of warranty costs (direct and indirect costs) to contract price	A decreasing ratio implies improved project quality, ratio increases may be an indicator of poor contractor performance	Supporting data to evaluate PSA influence may take many months to evolve
Work Stoppage factor = Stoppage duration/total project duration	Ratio of worker stoppages (lost labor days) to total labor days under contract is a measure of work continuity effectiveness -	A decreasing factor would imply a more continuous and effective stream of work	May require adjustments for partial work stoppages or secondary impacts on other work efforts.
Workers comp ratio = workers comp claim costs/contract costs	Ratio of worker comp claims costs to contract price is a serious issue due to its direct impact on the well being of contract and District workers	A decreasing ratio would indicate that worker safety and resulting well being is improving as a result of the PSA	