Final Report for Special Experimental Project 14 (SEP-14)

Evaluation Report of Contractor Selection Using Best Value Award

For:	Special Experimental Projects 14 (SEP-14)
Proposed by:	District of Columbia Department of Transportation
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I. Introduction

The District of Columbia Department of Transportation (DDOT) launched the Street and Alley Lighting Program in 2006 in an effort to improve the level of service for more than 70,000 lights, including streets and alleys, pedestrian bridges, overhead signs, tunnels, and navigational lights. Traditionally, DDOT had used a low bid contracting method for their lighting projects. However, DDOT was moving to a performance-based asset management approach, and felt that the low bid process was inadequate for selecting a contractor since it did not provide information on the Offerors' qualifications or provide a measure of the adequacy of how the Offeror plans to accomplish the work. Even more, since this project handed over the management of the lighting assets to a private contractor, it was essential that DDOT chose the best value available to them, not just the lowest price.

The safety of the residents depends on a reliable, functioning lighting system, so DDOT had to be comfortable with the Offeror's technical approach, management plan, staffing plan, QC/QA plan, past performance and facilities as well as their price. Consequently, DDOT proposed to use a Best Value Award contracting method for the project and submitted a work plan for review as a Best Value Award project under the provisions of Special Experimental Project No. 14 for the use of innovative contracting practices.

II. Background

DDOT teamed with an engineering consulting firm, SAIC, to develop the bid documents. The main focus was on the concepts and ideas that were going to lead to program success. Equal amount of efforts was devoted to the definition of the service outcomes, the financial incentives and disincentives to encourage the desired level of performance, the performance measurement system and the controlling system to monitor the contractor's activities, and the implementation of new materials and maintenance processes to make the operation more efficient and effective.

The contract was structured as firm fixed price with a base period of two years and three one year option periods. The request for proposal was due on March 14, 2005. DDOT provided limited information regarding the number and condition of the assets to be maintained. The lack of information was perceived by the industry as too risky and only two firms chose to bid on the opportunity.

The following table shows the milestones of the awarding process.

DATE	MILESTONE
14-Mar-05	Proposal due
19-May-05	Offerors submitted clarifications
13-Jun-05	Evaluation Panel re-scored proposals
5-Aug-05	Offerors submitted Best and Final Offer (BAFO)
12-Sep-05	Offerors submitted 2nd BAFO
19-Sep-05	Evaluation Panel produce final scoring and award recommendation
04-May-06	Contract Awarded

The awarding process was completed after extensive review of the proposals. The evaluation panel requested a second BAFO because the information available was inadequate to reasonably justify a contractor selection and award based on the packages received. This was a long tendering process when compared against typical bidding processes.

The following are the evaluation scores for the two proposals:

CATEGORY	SEVERN CABLE	M.C. DEAN
Technical Approach	12.7	16.3
Management Approach*	23.9	33.7
Price	40.0	30.0
TOTAL	76.6	80.0

* Include staffing, management, QA/QC, and past performance

After extensive negotiations with the offerors, the evaluation panel recommended award to Severn Cable, because the panel found M.C. Dean's price proposal to be unacceptable. The panel conveyed this to M.C. Dean in the request for the final BAFO, and while M.C. Dean reduced their price, it was still unacceptably higher than DDOT's estimate and budget range for the project. The contract was awarded on May 04, 2006.

In order to assess the overall performance of the program, DDOT decided to track two key indicators to monitor success. First was the percentage of non-functional lights repaired on-time and second was the number of service requests recorded at the Mayor's Citywide Call Center. DDOT considered these to be important gauges of program effectiveness and predicted that the success of the program was going to be marked by an increase in percentage of non-functional lights repaired on-time and a reduction in the number of service requests from the public.

To facilitate a positive relationship between DDOT and the contractor, DDOT planned partnering sessions and worked to create open channels of communication among the participants of the program. Any findings or discoveries were then communicated to all team members. In many cases, DDOT organized special meetings and workshops to answer technical questions and promote a better understanding of important processes such as performance evaluations and the performance scoring system.

Moreover, DDOT was determined to maintain forward momentum and adopted a continuous sequence of face-to-face meetings. During these sessions, the team members identified obstacles to the normal delivery of the service and suggested possible mitigation actions. Rapidly, the team realized that the only way to start to reduce the overall call volume was to find problems and resolve them before the public could report them. Consequently, a proactive field monitoring program was put in place; this patrolling effort had a direct impact on the success of the program.

DDOT did not prepared the initial and mid term SEP-14 reports. Instead, DDOT formed a performance evaluation board (PEB) consisted of DDOT staff who met once a year to evaluate the progress of the program and contractor's performance. The final SEP-14 report was prepared at the end of the fifth year of the contract, April 2011. The contract performance period was extended until November of 2011 to allow new bids to be taken.

III. Outcomes

The program started in May 2006 with a percentage of non-functional lights repaired on-time as low as 45 percent. Figure 1 shows the distribution of work orders close on time and late throughout the duration of the contract.

On the first year, the contractor managed to improve performance and finished the year above the contract requirements of 80 percent. The second year was also marked by monthly high percentages with one exception: the month of August. In August 2007, the amount of work orders doubled the average

volume for that year due to a re-lamp work. The contractor closed all the work orders, but performance was affected by the unusual amount of service requests. Nevertheless, the overall percentage of on-time closed work orders for the second year, 85.3 percent, was greater than the percentage recorded on the first year, 84.0 percent.

During the third year, all monthly percentages remained in the upper 90s, again with one exception: the month of August. There are no evident reasons to explain the drop in the contractor's performance during that period; regardless of the drop, the contractor's overall on-time percentage for the third year was 98.3 percent. One important accomplishment achieved at the end of the third year was a significant reduction in the amount of work orders that were opened due to non-functional lights. The reduction in work volume positively impacted contractor's performance as indicated by the high percentages of on-time work orders recorded on the fourth and fifth year of the contract, 99.6 percent and 99.2 percent, respectively.

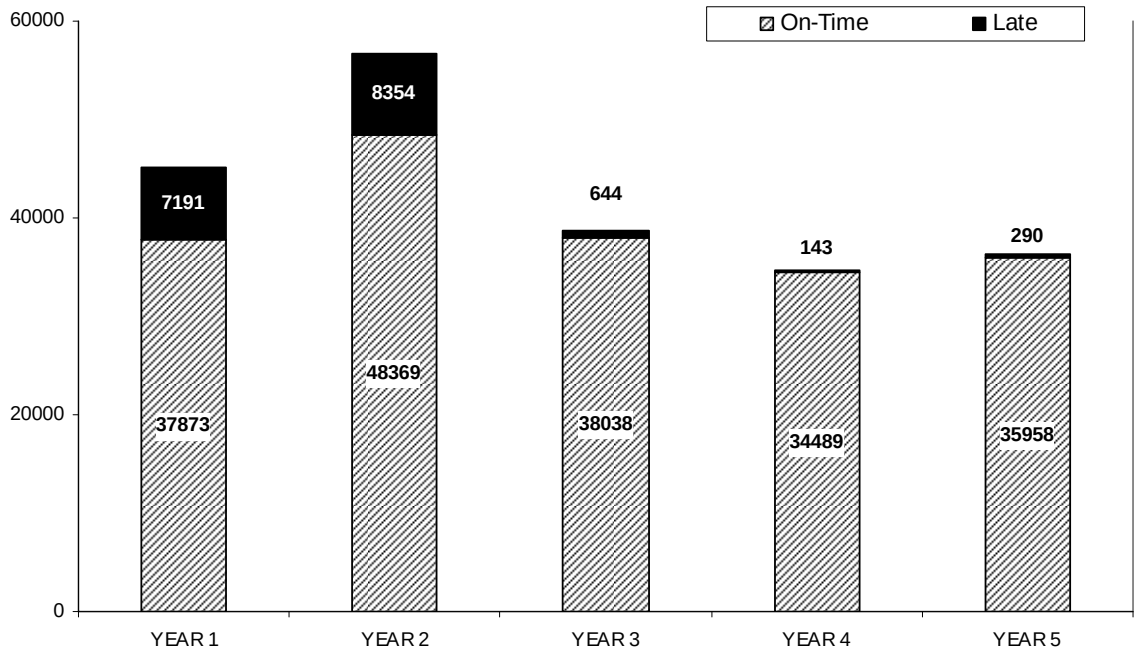

Figure 1 - Non-Functional Light Work Order Distribution*

* YEAR 2 includes a re-lamp of approximately 6,000 units

The CapStat program reports the number of service request recorded by the Citywide Call Center; however, a service request can be opened from at least three other sources—the Contractor, DDOT Patrolling Crews and DDOT Inspection Crews. The District decided that in order to promote proactive maintenance, patrolling crews were needed on the street to constantly survey the area and report deficiencies. Additionally, DDOT inspectors were encouraged to open a service request whenever they came across a deficiency during the inspections.

Figure 2 shows the service request volume registered during the five years of the contract broken by source. During the first three years, the total number of service request increased by more than 28 percent, from 43,188 to 55,450, and then decreased during the last two years to finish below the initial levels. During the first three years of the program, the steady declined in service requests recorded by the Citywide Call Center (from 18,656 to 11,789) was accompanied by an increasing number of service requests recorded by the patrolling crews (from 24,532 to 43,661). The fact that the percentage of work orders that were closed on-time increased despite the increasing work volumes recorded in the first three years, as shown in Figure 2, provides a good indicator of the level of maturity and success of the lighting

program. One important accomplishment achieved at the end of the contract was a significant reduction, more than 58 percent, in the amount of service requests recorded by the Citywide Call Center.

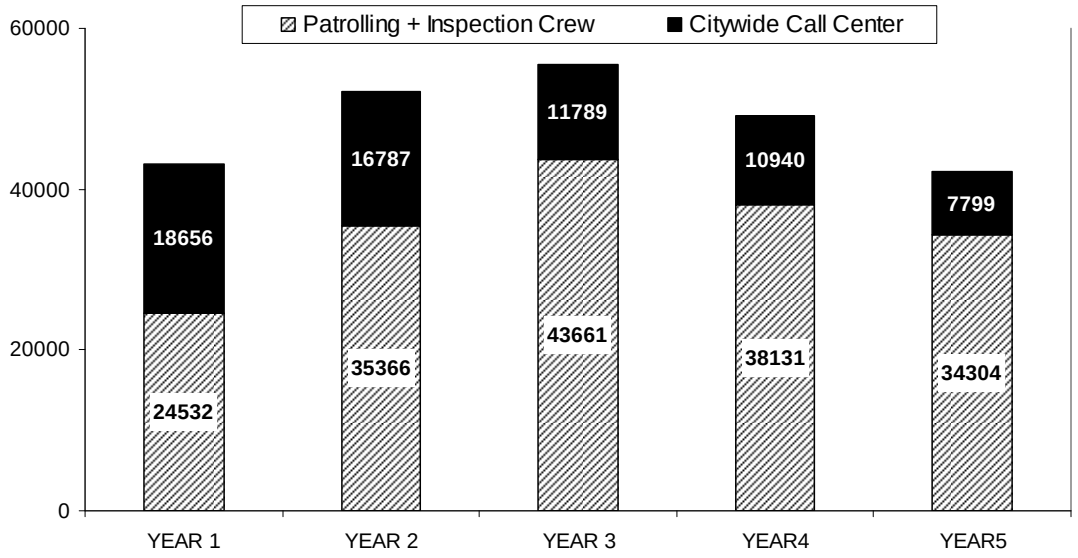

Figure 2 - Streetlights Service Request**

**Source: ISLIMS INVENTORY and PERFORMANCE MANAGEMENT for Streetlights and Parking Meters.

The lump-sum price negotiated with the contractor matched the District budget; therefore, from a cost standpoint, DDOT did not achieve any cost savings from exposing the maintenance service to competition. However, the program provided a better level of service at the same cost. The levels of service have consistently risen through out the performance period of the contract, as shown in Figure 3.

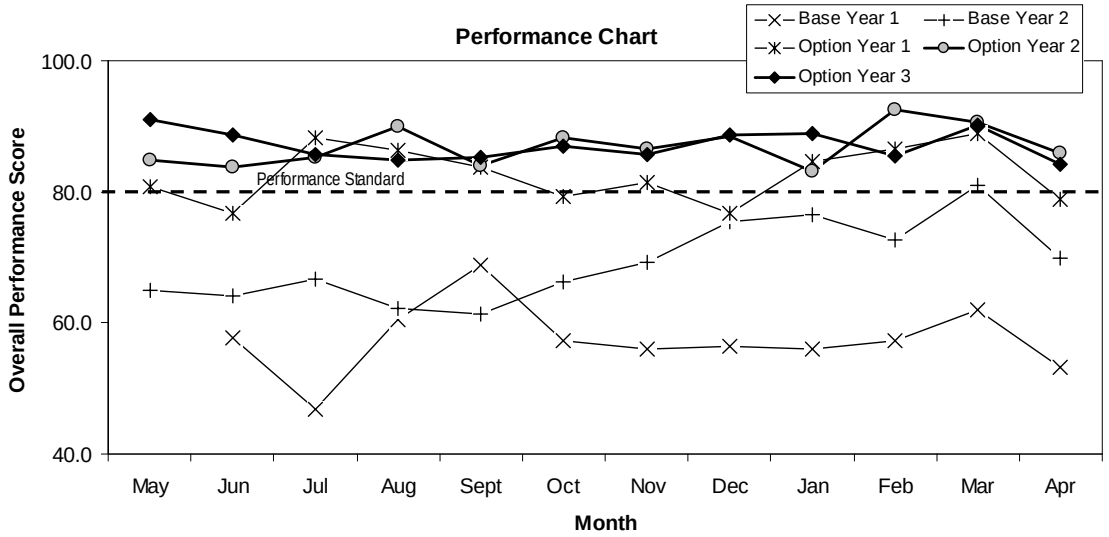

Figure 3 – Contractor Performance Chart from Base Year 1 to Option Year 3

The performance standard is DDOT's desired results expressed on a measurable scale. As shown in Figure 3, the monthly overall performance scores for the last two years of the contract, Option Year 2 and Option Year 3, were above the performance standard.

IV. Lessons Learned

The main lesson learned from the Street and Alley Lighting Program is that it is possible to achieve a high performance level with a public-private partnership. At present, the street lighting service in the DC area is a reliable public service marked by a continuous process improvement. The achievement was possible mainly due to the good relationship between DDOT and the Contractor, the use of data to drive understanding and decision making, and a proactive approach to asset maintenance. The lessons learned that apply to future utilization of a Best Value Award are:

- *Contractor Education*: Ensuring that the potential bidders are familiar with Performance Based Maintenance Contracting's requirements and challenges.

- *Performance Measures*: Clear and well-defined performance measures to decrease contention regarding interpretation.

- *Use Data to Drive the Procurement Process*: An accurate asset inventory to help reducing bidder risk and increase competitive bids.

- *Outreach Efforts*: Reaching out to the contracting community early in the proposal process to gain buy in and generate awareness is critical for a healthy bidding environment.

- *Proactive Maintenance*: Patrolling caught problems before they were reported by the public which had a positive impact on public perception of the Program.

V. Self-Assessment

Al the end of the contract period, DDOT conducted an internal assessment to evaluate the goodness of the Best Value Award. Staff directly involved in the implementation of the innovative contracting method evaluated the approach on three dimensions, people and resources, process, and product, using a Likert scale (5-Strongly Agree / 1-Strongly Disagree). Figure 4 shows the results of the self-assessment (Appendix A shows the detailed answers).

Best Value Award enabled DDOT/TOA to select the right contractor.	4.2
The amount of DDOT/TOA resources that were available for managing the contract was adequate.	4
The process for managing the contract increased in complexity when compared with a traditional low bid approach	3.8
The process for managing the contract required developing new skills.	3
The contractor provided a service conforming to DDOT/TOA standards.	4.4

Figure 4 – DDOT Best Value Award Contracting Method Self-Assessment

Most of the participants agree that the Best Value Award was instrumental in the selection of the right contractor for the D.C. Street Lighting Program and, also, that DDOT had enough resources for managing the contract.

When the participants were asked about the processes associated with the management of the contract, the majority agree that the new approach did increase the complexity of the management processes.

- The complexity was due to the contract being performance based incentive/disincentive contract.

- When selecting a contractor not just on low bid, but weighing other factors, such as assets, experience expertise.

- This type of contract relied heavily on the performances, reliability and accuracy of management tools, i.e. iSLIMS and Cityworks.

The perception about the need for developing new skills for managing the contract was divided among the participants; however, they did indicate that new skills were needed for managing the contract. These new skills include:

- The ability to format a scoring system that rewards good performances while identifying poor performances.

- It was necessary to learn to use GIS in City Works.

- DDOT inventoried the streetlight assets and continues to update a dynamic GIS-based streetlight data system.

Finally, all participants strongly agree or agree that the contractor selected through the Best Value Award contracting method did provide a service conforming to DDOT standards.

VI. Conclusions

Overall, DDOT is satisfied to very satisfied with the Best Value Award contracting methods adopted for the D.C. Street Lighting Program. The cumulative experience and lessons learned through out the implementation of the innovative contracting method has been incorporated to the second generation of the performance-based contract.

DDOT will continue using the Best Value Award method for selecting the next contractor for the DC Street Lighting program.

Appendix A - BEST VALUE AWARD DDOT/TOA SELF-ASSESSMENT

Q1) Best Value Award enabled DDOT/TOA to select the right contractor.	Strongly Agree	Agree	Undecided	Agree	Strongly Agree
Q2) If you Strongly Disagree or Disagree with Statement #1, please indicate your reasons.					
Q3) The amount of DDOT/TOA resources that were available for managing the contract was adequate.	Strongly Agree	Agree	Undecided	Agree	Agree
Q4) If you Strongly Disagree or Disagree with Statement #3, please indicate what additional resources were added or should have been added to the program for managing the contract.					
Q5) The process for managing the contract increased in complexity when compared with a traditional low bid approach	Strongly Agree	Agree	Undecided	Undecided	Agree
Q6) If you Strongly Agree or Agree with Statement #5, please indicate the areas or functions that, in your opinion, became more complex to manage.	The complexity was due to the contract being performance based incentive/disincentive contract.	When selecting a contractor not just on low bid, but weighing other factors, such as assets, experience expertise.			This type of contract relied heavily on the performances, reliability and accuracy of management tools, i.e. iSLIMS and Cityworks.
Q7) The process for managing the contract required developing new skills.	Strongly Disagree	Agree	Disagree	Agree	Agree
Q8) If you Strongly Agree or Agree with Statement #7, please indicate what additional skills were developed or should have been developed for managing the contract.		The ability to format a scoring system that rewards good perfomance while identifying poor permances.		It was necessary to learn to use GIS in City Works	DDOT inventoried the streetlight assets and continues to update a dynamic GIS-based streetlight data system; this system is essential to the development and management of a 2nd generation performance based contract
Q9) The contractor provided a service conforming to DDOT/TOA standards.	Strongly Agree	Agree	Agree	Strongly Agree	Agree
Q10) If you Strongly Disagree or Disagree with Statement #9, please indicate the main reason that, in your opinion, affected contractor's ability to perform according to DDOT/TOA standard.					
Q11) Based on your cumulative experience , please indicate with an X your level of satisfaction with the Best Value Award contracting method adopted by DDOT/TOA for the D.C. Street Lighting program.	Very Satisfied	Satisfied	Satisfied	Very Satisfied	Very Satisfied
Q12) If you are Very Dissatisfied or Dissatisfied with the Best Value Award contracting method, please indicate what changes would you recommend for improving the contracting method.					