

**PORTLAND OREGON'S WASTE TRANSPORT CONTRACT:  
A CASE STUDY IN UTILIZING PROGRESSIVE  
PROCUREMENT METHODOLOGY TO ACHIEVE  
SUSTAINABILITY GOALS**

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**ABSTRACT.** As a profession that accounts for approximately \$1.5 trillion of annual government spending within the US, public procurement has the opportunity for tremendous impact. While public agencies have historically utilized the invitation to bid process to secure services, other options exist including the request for proposal process. Through the use of alternative procurement methodologies, agencies have the opportunity to affect social change including the provision of local jobs and the protection of the environment. This paper represents a case study of a regional government that employed a strategic and collaborative approach to solid waste transport that produced several tangible and desired results for the agency.

## **INTRODUCTION**

Public agencies have historically utilized the invitation to bid process for service contracts of all types. This practice has seemingly supported the misconception that public procurement officers are more interested in securing the lowest bid price than ensuring quality and value, let alone affecting social or environmental change. However, as a profession that spends over \$1.5 trillion annually within the United States (Thai, 2007), public procurement professionals need to recognize their potential for impact.

This paper presents a case study on a large transport contract negotiated by a regional government that employed a less than traditional approach to the procurement. Through a request for proposal process, the agency was able to secure quality services from a financially solid contractor, while at the same time protecting the environment and proving local economic benefit. According to Tether (1977), so great is the overall volume of public procurement that it may be considered an implement of social change. Further, as government agencies within the United States spend up to thirty percent of the gross national product (Callender & Matthews, 2000), they are presented with an opportunity to dramatically impact the economy (Thai, 2007).

This paper will share the story of the procurement life cycle; from planning and development to contract negotiation and award. A collaborative effort that blended the expertise of industry professionals, elected officials, procurement staff, solid waste planners and legal counsel, this RFP was truly a success story for the procurement profession. It demonstrated the importance of procurement planning in carrying out a solicitation that had significant impact to the local economy and to the environment.

## **BACKGROUND AND HISTORY**

In 2007, the Metro Regional Government of Portland, Oregon (Metro) embarked on a journey to secure a long-term contract to haul solid waste from its transfer stations to a disposal site up the Columbia Gorge, some seventy miles away. The term of the contract was anticipated to be ten years, with the overall contract value estimated at \$180 million. Since 1989, Metro had contracted with a trucking firm to provide these services. As was the predominant procurement practice in the 1980's, the contract had been let through an invitation to bid (ITB) process, with the bidder providing the lowest cost per load being selected. The ITB has historically been the preferred method of acquiring public goods and services (Babich & Pettijohn, 2004). In theory, it is an impartial procurement tool that ensures openness, fairness, and

competition (MacManus, 1992). The ITB will continue to have its place in the public procurement “tool box”, however it must be realized that it is not the best approach to every acquisition.

Over the years, the contract had become a challenge to manage by the solid waste division of the agency. While residential and commercial solid waste continued to be picked up and transported to a final disposal site, numerous problems developed with the contractual relationship. Through corporate restructuring and buyouts, the trucking firm was no longer locally owned, but part of a large national corporation based out of Chicago, Illinois. Besides the name change of the contractor, this also meant that profits were leaving the state and not being spent locally. This resulted in a continued lack of investment into the maintenance and replacement of the trucks and trailers dedicated to the contract. As a result, federal and state regulatory agencies cited the contractor for environmental issues such as leaking trailers and waste spills. Obviously this did not place the agency in a positive light as the contract owner and manager. Metro promotes sustainability, environmental protection, and quality of life as part of its mission to the citizens of Portland ([www.oregonmetro.gov](http://www.oregonmetro.gov)).

The transportation of solid waste throughout the region was a prime example of a logistics need that was best addressed through a collaborative effort with the procurement office. Logistics management has been identified as one of the key supporting structures in the supply management process (Stanley and Matthews, 2008). A 2005 survey by the Institute for Supply Management (ISM) indicates that logistics management is a core function and responsibility within procurement and supply management in 83% of the responding organizations ([www.ism.ws](http://www.ism.ws)).

## **PROCUREMENT PLANNING STAGE**

With almost two years until the existing contract was due to end, agency staff began a dialogue with the local community. Procurement played a key role in the coordination and planning of this large procurement, with such involvement being identified as an emerging practice for the profession. Procurement planning has replaced such routine duties as purchase order issuance and order tracking (Matthews, 2004). According to ISM (Wright, 2009), the realization that meeting sustainability goals through progressive supply management practices is a powerful opportunity, even during the current economic downturn in the economy.

### Industry Input

Several public meetings were held that invited input into the new contract, and specifically, determining what was important in the selection process for a new contractor. Local citizens, community groups, neighborhood associations, and environmental advocates attended meetings and conveyed their concerns and priorities. This led to the development of a draft request for proposal (RFP) that was shared with the transportation industry. Although trucking had historically been the industry that hauled the regional waste, rail and barge were also considered viable alternatives and therefore included in the process. There is no single mode of transportation that is best for all situations. Each mode has its own set of advantages and disadvantages. For example, transport by railway has the ability to move large volumes of materials, but also has limited accessibility. While three of the five modes of transportation were deemed practical, ultimately only two modes proposed on the RFP, which will be discussed later in this paper.

**Figure 1**  
**Advantages and Disadvantages of Transportation Modes**

<b>MODE</b>	<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
<i>Motor Carriage</i>	High availability Ease of accessibility Reliable service	Impacted by weather Limited international use
<i>Air Freight</i>	Faster shipments International use Handle sensitive cargo	Higher shipping costs Requires other modes
<i>Rail</i>	Move large volumes Low cost structure	Limited accessibility
<i>Water</i>	International use Transport heavy, bulky items	Limited accessibility
<i>Pipeline</i>	High dependability Ideal for oil industry	Equipment investment Maintenance costs

Source: Logistics and Transportation, NIGP, 2007

### Procurement Planning

According to Thai (2007), the participation of procurement professionals in the planning stages of an acquisition is the first step in the procurement cycle. Such involvement allows procurement to add value to their organizations and is critical to the future of the profession. According to the Institute for Supply Management, procurement and supply management professionals must take responsibility for the “design and management of a seamless value-added process across

organizational boundaries to meet the real needs of the end customer (ISM, 2008). The benefits of such collaboration between procurement and the end user include a better understanding of the operational needs of the client, and the ability to enhance the quality of the service that is ultimately delivered to the public at large. Further, the early involvement of procurement in key acquisitions can result in quantifiable benefits to and organization, such as lower operating cost and improved return on investment (Stanley and Matthews, 2008).

### **Solicitation Development**

Ultimately the RFP document was finalized and attempted to include the various input by interested stakeholders. The challenge was to balance the RFP requirements and maintain a fair and open process while securing a contract that met Metro’s objectives. Providing an avenue for open communication by potential suppliers, so that they might voice their ideas and objections, has been identified as a best practice by the National Association of Procurement Officials (Randall, 2005). Of particular interest were issues such as environmental impacts (diesel emissions, nitrous oxide levels, particulates, etc.) provision of local jobs, economic impact to the region, quality of service, and overall cost. Such factors are consistent with what procurement industry leaders are employing in their supply chain decisions. Even during a struggling economy, organizations that create value via emissions reductions and social improvements have the most potential for emerging from the recession with a competitive advantage (Wright, 2010).

The procurement office and solid waste division worked with an industry consultant and presented the document to the Metro Council for approval. This seven-member elected body was not prone to simply rubber stamp the RFP, but rather participated in a public hearing that made final revisions to the solicitation, including the weighting of the selection criteria. The final criteria for the selection of a transport contractor consisted of cost, operational considerations (including financial strength), environmental impacts, and socioeconomic impacts. The following table represents the scoring and selection criteria contained in the solicitation:

**Figure 2**  
**RFP Selection Criteria**

<b>Criterion</b>	<b>Available Points</b>
Cost	45
Operational Considerations	25
Environmental Impacts	20
Socioeconomic Impacts	10

This procurement demonstrated innovation, including the requirement that the selected contractor pledge to employ at least half of its truck drivers from Gilliam County, which is a region with high unemployment in addition to the home of the final disposal site. During the time the RFP was issued, Oregon held the distinction of having one of the highest unemployment rates within the US, at just above 8% (Oregon Department of Employment). The solicitation also required a good faith effort by the new contractor to consider hiring part of the workforce from the prior contractor, again to promote jobs and economic stability in a depressed area of the state. Along with the criteria for reducing environmental impacts and employing sustainable business practices, the RFP featured a history of the current contract and a background of the agency and its mission. Many felt this demonstrated transparency in government, and were instrumental in creating a highly competitive environment. Non-traditional by most agency standards, this solicitation may very well have represented thinking that was “outside of the box”.

### **SOLICITATION PHASE**

Final revisions were made to the RFP based upon receiving ultimate approval from the Metro Council. The solicitation was released publicly in January 2008 with a due date of March 12, 2008. The total time on the streets was significantly longer than the standard practice of three weeks, but due to the size and profile of the project it was felt a longer period was appropriate. Many questions were posed during the open period for such, which resulted in three addenda. Much of the concern expressed by the potential proposers centered on the proposed contract terms and conditions. Based upon a best practice as identified by the NIGP, the proposed form of contract was included as an attachment to the RFP (Thai, 2004). Of particular concern were the provisions surrounding contract termination for convenience, which was later successfully negotiated into the final agreement. The agency addressed many of the issues via addendum, including desired environmental protections and the direct purchase of diesel fuel. Metro elected to defer some of the contract issues until contract negotiation, realizing that not all items could be successfully resolved during the open RFP period.

Questions regarding the solicitation were submitted to the chief procurement officer, who routinely conferred with the project manager, legal counsel, and solid waste management team prior to issuing responses. While the technical expertise of the project manager was indeed critical, the procurement office was much more versed in

handling proposer inquiries in an equitable fashion. Every precaution was taken to preserve the integrity of the public bidding process, as the agency believed that an appeal could be likely and therefore a sound procurement process would establish a strong position. As more and more appeals and protests are filed by disgruntled bidders, the role of the procurement office becomes ever more important (Ziegler, 2006).

#### **Dealing with a Late Offer**

As the open solicitation period came to an end, an unexpected occurrence came about which drew the immediate interest of the procurement office and the office of the Metro attorney. All proposals were due at 2:00 PM on the closing date, and as previously mentioned, the open RFP period was nearly three months. On the due date, a proposal was delivered by a major Washington state trucking company that was thirty minutes late. Although the proposal was left at the front desk, it was ultimately returned to the proposer unopened, as was the agency policy. There have been numerous court decisions regarding late bids and proposals, which consistently state that the government cannot consider late proposals or consider that failure to submit a proposal on time is a minor informality that can be waived by the public agency. In the case of *ARS vs. Greensville County*, the Virginia Supreme Court ruled that a bid submitted two minutes after a 2:00 PM bid deadline could not be considered by the government. This was despite the agency's attempt to award the contract to the late bidder, as well as the Circuit Court's determination that the late bid could be considered (Jackson, 1997).

Based on the policies and practices of Metro, consideration of selected case law regarding late offers, and upon the advice of the Metro Attorney, the procurement officer returned the late proposal to the offeror unopened. To protect the integrity of the public procurement process, the National Institute of Governmental Purchasing (NIGP) identifies such action as a best practice (Babich and Pettijohn, 2004).

### **EVALUATION AND SELECTION**

A total of eight responsive and timely proposals were submitted by the transportation industry (excluding the late offer previously mentioned). Prior to the issuance of the RFP, various transportation modes were contacted regarding the upcoming contract, and consistent with trends within the US, trucking was the predominant mode of transportation (Stanley & Matthews, 2007). Seven proposals were received from the trucking industry and one from waterway transport. The agency's solid waste had historically been transported via truck, but

Tidewater Barge submitted a responsive and viable proposal that included the trucking of the waste to a dock facility, followed by the ultimate transport via barge up the Columbia River. The proposal fared well in the evaluation process and rated the third highest of all proposals during initial evaluation. While the local railroad participated in the industry discussion prior to the issuance of the RFP, they determined that submitting a proposal for this contract was not in their best interests. Therefore, they continued to focus on current customers and rail routes rather than submit a proposal to Metro. Ironically, while this mode did not propose, many buyers view rail as the most sustainable means of transportation due to its inherent fuel efficiency and associated lower green house gas emissions (Hannon, 2009).

### **Evaluation Committee**

Metro engaged external expertise in the selection process. A key member of the project team was a consulting engineer that was experienced in public solicitations within the waste industry. CH2M Hill is a worldwide leader in environmental engineering and project management, and provided a consultant that greatly aided the RFP evaluation team and its mission to select the best proposal. In fully understanding the importance of high-performing teams, it must be realized that the use of outside consultants as team members can be quite valuable (McCue & Pitzer, 2005). In addition to the outside consultant, the agency relied upon industry experts within the public sector waste transport industry. Evaluation committee members from the Oregon Department of Transportation (ODOT) and the Oregon Department of Environmental Quality (DEQ) proved to be an invaluable resource during proposal evaluation and selection. The use of outside expertise in government decision making and policy development has certain, distinct advantages. These include bringing outside objectivity and ideas to the process, as well as providing a broader background of expertise if the contract decision is questioned.

### **Proposal Scoring**

Based on the selection criteria listed in the RFP, the proposals were evaluated and scored accordingly. The goal was to ensure the process was fair and equitable, and that points were assigned in a logical and consistent manner. Value modeling was employed as a scoring technique to achieve these goals. Essentially a quantitative technique, value modeling is a multi-criteria decision analysis based on the multi-attribute utility theory (Von Winterfelt & Edwards, 1986). This method uses a series of defined steps in order guide the evaluation committee through to an informed and value-based decision. In a practical sense, value modeling allows subjective criteria to become more objective and



therefore more defensible. The basic steps in value modeling are outlined below:

- Establish decision goal and specify a hierarchy of objectives.
- Develop performance measures to assess performance.
- Add assigned scores to the performance measures.
- Assign weights to the objectives.
- Calculate value scores and conduct sensitivity analysis.

The committee scored the proposals as follows. After an initial round of scoring, the three lowest scoring proposals were eliminated from further consideration, leaving the remaining five to compete for contract award. Each of the final five proposers was subjected to a thorough reference check process, as well as a detailed analysis of their financial strength. Most proposers submitted their financial information in a separate sealed envelope, as requested by Metro, and realized that the information would not be made public or provided to their competitors. Since the prior contractor had ongoing issues with financial stability, Metro looked closely at this area. One proposer stated that their financial information and annual reports were available online and that Metro should research them to make an evaluation of their financial condition. The agency chose not to do so. Still another proposer was reluctant to submit copies of audited financial statements, but was agreeable with having an agency representative come to their place of business. The team agreed that this was appropriate and, after conferring with the legal office, made their financial records available at their home office. The financial analysts on the team took them up on this offer.

Cost was evaluated based on the estimated tonnage over the course of the contract, and scored proportionately. For example, the best cost proposal (lowest bid price) received the full amount of points in this area, while other proposers received a portion of the points based on how their prices compared.

**Figure 3  
Evaluation Results**

<b>Criteria</b>	<b>Ecology</b>	<b>MBI</b>	<b>R&amp;J</b>	<b>Tidewater</b>	<b>Walsh</b>
Cost	32.3	45.0	37.2	38.7	44.7
Environmental	13.8	13.0	8.5	11.0	12.9
Socioeconomic	5.9	6.3	3.6	4.6	6.3
Operational	20.5	13.6	18.8	17.1	18.0
<b>Total</b>	<b>72.5</b>	<b>77.9</b>	<b>68.1</b>	<b>71.5</b>	<b>81.8</b>

### **Contract Negotiation and Award**

The agency named Walsh Trucking as the top ranked firm and entered into negotiations with their management team. Over several weeks the parties bargained on a variety of issues until agreement in principle was reached. A formal notice of intent was issued to all proposers and, much to the delight of the Metro project team, no appeals were filed with regard to the decision.

Negotiation is a technique that is certainly more prevalent in the private sector, but nonetheless does play a part in the government procurement process. Even though negotiation is looked upon with a certain amount of risk by some, it is a viable tool for the procurement and supply management profession both today and in the future. A recent study identified negotiation as a key attribute that is imperative to operating at a world-class level in procurement. (Guinipero, 1998). Although negotiation is in some cases a prohibited practice in public procurement, professionals within the field would do well to mimic their private sector colleagues when the practice is allowed. In fact, the use of the RFP process to negotiate the desired contract is identified by the American Bar Association as a recommended practice for government (NIGP, 2001).

## **PROCUREMENT OUTCOMES**

With the award of the transport contract to Walsh, Metro and the Portland region received numerous, tangible benefits. Due to the competitiveness of the offers received, the agency entered into a service contract that represents a per ton rate that was one of the lowest on the west coast of the US. This was in large part due to the trailer that was proposed by Walsh. It featured a custom design with a tandem vehicle axle that allowed loads up to 35 tons, which was significantly higher than the 29 ton loads the agency was accustomed to. This equated to fewer trips on the Oregon roadways to the disposal site and contributed to less traffic congestion.

### **Environmental Impacts**

A key element of the specifications was the use of equipment that met the new emission standard of the Environmental Protection Agency (EPA), which the US agency is charged with establishing standards that preserve the environment for future generations ([www.epa.gov](http://www.epa.gov)). This area of the selection criteria and ultimate performance standard of the selected contractor was of particular interest to the region. During the public hearing that approved the solicitation and its selection criteria, the Friends of the Gorge testified in support of this criterion, and actually proposed its scoring value be increased. The

Friends of the Gorge is a local not-for-profit organization that focuses on preserving the quality of life in the region and lobbies in support of policies that reduce traffic in the Columbia Gorge and improves air quality. The enhanced air quality standard for diesel engines manufactured in 2009 and beyond required enhanced filtering systems that significantly reduce the emission of particulate matter. In summary the environmental impacts evaluated by Metro included:

- Reduction of vehicle engine emissions.
- Use of alternative fuels including biodiesel.
- Reduction in nitrous oxide emissions.
- Reduction in greenhouse gases.
- Sustainable business practices employed.
- Minimization of noise in surrounding neighborhoods.

### **Employment for Truck Drivers**

In accordance with the RFP requirements, as well as the proposal submitted by Walsh, a minimum of half of the truck drivers on the Metro contract would be based out of Gilliam County. This provided much needed living wage jobs to the community (Mortenson, 2008). In fact, two of the largest employers in the region are the results of Metro contracts. In addition to the waste transport contract, the landfill and ultimate disposal site for the region's waste is operated by a third party operator under Metro contract. Therefore, it was not a surprise when a Gilliam County Commissioner testified in favor of the Walsh contract when it was presented to the Metro Council for approval.

Additionally, the contract specifically required the use of local suppliers, the establishment of a local maintenance facility, and the prohibition of trucks using exhaust braking system ("Jake brake") while operating within the county.

### **Performance Standards**

A number of performance standards were negotiated into the service contract with Walsh. First of all, the parties agreed to a calculation for fuel use variation. That is, the contractor was incentivized to increase the fuel efficiency of its vehicles, based upon estimated fuel usage per load. Along with labor, fuel was a significant cost for the contractor and any efficiency would be of benefit to both them and Metro. Therefore, all fuel savings were split between the agency and the contractor (25% and 75% respectively).

In order to maximize the payloads and minimize the hauls, the parties agreed that the new prototype trailers were capable of hauling 35 tons of waste. For loads over 33 tons, the contractor was paid an incentive and for loads under that amount, they were assessed a penalty.

Other performance requirements of the Contractor included the replacement of existing truck and trailer feet with new equipment every 800,000 miles, the testing of all trailers used for waste hauling, and installation of fully functioning RFID (radio frequency identification) technology on all trucks to facilitate the automated load weighing process.

According to Van Weele (2005), success for both the contracting organization and the contractor depends largely upon clearly establishing the working relationship and performance standards, as well as a mutual commitment to continuous improvement.

### **Reporting Requirements**

The contractual obligations of Walsh Trucking included periodic reporting to Metro in several areas. These reports were to be submitted on a quarterly basis and included the number of loads transported, average tonnage of the loads, vehicle maintenance and downtime, and waste spillage incidents. In addition, the contractor was required to report on the use of local businesses and provision of local jobs. Also required was an ongoing inventory of contractor equipment dedicated to the Metro contract, as well as any incidents of over-weight loads, driver accidents, or third party complaints.

### **Sustainable Operations**

The contract called for Walsh to employ sustainable business practices in their overall operation, even for areas that were not directly related to the hauling of Metro's solid waste. While questioned by some within the organization, the following requirements were intended to prompt behavior that was beneficial to the region, and also consistent with the mission and goals of Metro. These practices included:

- Use of recycled oil and lubricants.
- Reuse of lumber and wood products.
- Use of recycled paper with a minimum recycled content of 30%.
- Use of EPA approved paper products.
- Use of recycled paint at contractor facilities.
- Use of energy efficient lighting.
- Use of environmentally friendly cleaning products.

Due to the significant impacts this contract had in the area of sustainability, it was recognized by the State of Oregon, Department of Administrative Service with a Procurement Excellence Award in the category of Sustainability. Metro's project manager accepted the award at the annual procurement conference, Partners in Public Procurement.

## CONCLUSION

Undoubtedly, this procurement had the luxury of more planning time than most. The strategic approach of initiating the RFP more than a year prior to the current contract expiration was indeed a beneficial approach. But by deliberately focusing on the strategic aspects of procurement and less on routine transactions, procurement professionals can better meet the government's demand for increased efficiency and effectiveness (Matthews, 2005). By dedicating the proper time and, perhaps even more importantly, the proper resources, Metro was able to secure a contract through a collaborative process that was of extreme value to the agency. While past efforts on service contracts may have resulted in settling with a minimally qualified bidder that performed adequately, this solicitation process delivered an agreement with a leading contractor that was committed to perform at a high level. Further, they were financially sound and able to provide quality transport equipment operated by experienced operators that were well compensated.

From a contracting value perspective, the agreement with Walsh trucking was a sound arrangement that produced tangible benefits and was well developed; protecting the interests of the public entity. On the sustainability side, the impacts of this contract were also significant. Vehicle emissions were reduced, thereby improving air quality in the region, and with higher yield loads of solid waste, traffic congestion was reduced through fewer transport loads to the disposal site.

In just about any procurement project, there are lessons to be learned. After concluding the contract or purchase award, procurement professionals can always look back and see what they could have done differently. In this case, the procurement resulted in a look forward. That is, how can future procurements be structured, so that similar results are achieved? That is the lesson to be learned

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