STREET PAVING:

Current contract management practices put asphalt price and supply stability at risk

A REPORT FROM THE CITY AUDITOR September 2006



Office of the City Auditor Portland, Oregon

ORTLAND ORTEGO

CITY OF

PORTLAND, OREGON

OFFICE OF THE CITY AUDITOR Audit Services Division

Gary Blackmer, City Auditor

Drummond Kahn, Director of Audit Services 1221 S.W. 4th Avenue, Room 310 Portland, Oregon 97204

(503) 823-4005 FAX (503) 823-4459 www.portlandonline.com/auditor/auditservices

September 27, 2006

TO: Tom Potter, Mayor

Sam Adams, Commissioner Randy Leonard, Commissioner Dan Saltzman, Commissioner Erik Sten, Commissioner

Susan Keil, Director, Portland Office of Tranportation

Ken Rust, Interim Chief Administrative Officer, Office of Management & Finance

Jeffrey Baer, Director, Bureau of Purchases

SUBJECT: Audit – Street Paving: Current contract management practices put asphalt price

and supply stability at risk, Report #324C

Attached is Report #324C containing the results of our third in a series of audits on Portland's street paving program. This report evaluates the asphalt supply contracts in the street preservation program. The audit was included in our annual audit schedule and was conducted in accordance with generally accepted government auditing standards.

As a follow-up to our recommendations, we ask the Director of the Portland Office of Transportation and the Director of Purchases to provide a status report in one year, detailing steps taken to address the report's recommendations. This status report should be submitted to the Audit Services Division and coordinated through the Commissioners in Charge of Transportation and Purchases.

We appreciate the cooperation and assistance we received from personnel in the Portland Office of Transportation, the Bureau of Maintenance, and the Bureau of Purchases in conducting this audit.

GARY BLACKMER

ity Auditor

Audit Team: Drummond Kahn

Doug Norman Katherine Gray Still John Hutzler

STREET PAVING:

Current contract management practices put asphalt price and supply stability at risk

Summary

The City's new strategy for negotiating asphalt supply contracts worked well to obtain lower asphalt prices and volume discounts from its vendors. However, because the contracts were poorly written, a reliable supply of asphalt cannot be assured. Moreover, the Bureau of Purchases (Purchasing) has granted a price increase outside of contract provisions, putting at risk asphalt price stability and predictability. In addition, the Portland Office of Transportation (PDOT) has not taken full advantage of volume discounts, which could potentially have saved the City an additional \$100,000.

The asphalt supply contracts resulted from the City's efforts to obtain lower prices for certain commodities by engaging in alternative procurement strategies such as conducting multiple rounds of bidding with vendors. In the case of asphalt, two of the four vendors who won contracts were given "primary" status and promised the majority of the City's business. However, PDOT has purchased asphalt from "secondary" vendors in a manner that conflicts with contract provisions.

Because of the problems described in this report, we believe that the City's ability to benefit from this strategy when prices are renegotiated may be weakened. To address these problems we recommend that:

- PDOT ask the City Attorney to review the asphalt supply contracts and recommend language for contract amendments that would better protect the City's interests.
- City Purchasing not approve price increases beyond the adjustments provided for in the contracts.

- PDOT abide by the City's contractual commitment to the primary vendors.
- PDOT develop an accurate process for identifying the most cost-effective primary asphalt vendor for each paving job.

Background

The Street Preservation Program in Portland's Office of Transportation is responsible for maintaining over 3,900 lane miles of Portland streets valued at \$3.6 billion. Street Preservation's in-house personnel and equipment pave approximately 50 miles of Portland streets each year. In FY 2005-06, this work involved the purchase of approximately 100,000 tons of asphalt, costing more than \$3 million.

The City purchases asphalt from local asphalt plants under contract to the City. The most recent contracts resulted from the City's effort to obtain lower prices for a number of commodities by engaging in alternative procurement strategies. A consultant hired by the City to implement the strategy led asphalt vendors through several rounds of bidding which resulted in contracts with four of them. Two vendors were granted "primary" status, based on having offered the lowest per-ton asphalt prices, while two were designated as "secondary" vendors. Central to the negotiation strategy, and a provision in the contracts, was the commitment that secondary suppliers "will not receive any City business" over the course of the year "unless the two primary suppliers cannot meet the needs of the City." In addition, vendors were told that they would be given the opportunity to re-bid for primary vendor status on an annual basis. This would help to motivate vendors to continue to offer the City the best prices over the potential five-year term of the contracts.

Objectives, Scope, and Methodology

The purpose of this audit was to determine if the City's current asphalt contracts allowed the Street Preservation Program to purchase high quality asphalt in an efficient manner, and to assess contract compliance. The audit was included in our FY 2005-06 Audit Schedule.

In order to understand the requirements of the current asphalt supply contracts, we reviewed the contracts and discussed them with the City Attorney. We conducted numerous interviews with managers and staff in Purchasing and in PDOT's Street Preservation Program to determine how asphalt purchasing decisions were made under the previous contracting method, and to learn how the current contracts were developed and used. We also examined documentation for both current and previous contract negotiation processes and their outcomes.

We surveyed seven other jurisdictions in and near the Portland metropolitan area to compare the City's asphalt prices to those of other local jurisdictions. Finally, we developed a model to assess the cost-effectiveness of the current contracts and the City's implementation of them.

We conducted our work in accordance with generally accepted government auditing standards.

Strategy led to favorable asphalt pricing

The City's negotiating strategy appears to have created a more competitive pricing environment and resulted in lower asphalt prices relative to other jurisdictions. We found that the base prices paid by the City for asphalt from July 2005 through March 2006 were well below those of most other jurisdictions in the Portland area (see Figure 1).

Figure 1 Asphalt prices in Portland and seven other jurisdictions

Jurisdiction	Price per Ton*	Year	
Vancouver, WA	\$39	2006	
Washington County	\$33 to 34	2006	
Gresham	\$31	2006	
Clark County, WA	\$30 to 36	2004-2005	
Clackamas County	\$29 to 35.50	Nov. 2005-Apr. 2006	
Portland	\$27.25 to 29.25	2005-2006	
Beaverton	\$27 to 31	2004-2005	
Marion County	\$25 to 27.50	2005-2006	

^{*} B and C mix asphalt concrete

Source: Audit Services interviews and City of Portland asphalt supply contracts

In addition, the City obtained agreements for significant volume rebates from three of its contracted vendors. None of the jurisdictions we contacted receive rebates from their vendors.

Despite the apparent success of the negotiation process, we found numerous problems with Portland's asphalt supply contracts and their management that could jeopardize the City's ability to assure a stable and competitively priced supply of asphalt. Moreover, these problems may weaken the City's ability to benefit from this strategy when prices are renegotiated in the future.

Contracts fail to ensure the reliability of the City's asphalt supply

According to Purchasing, one of the City's primary objectives in negotiating the asphalt supply contracts was to ensure the availability of asphalt over a definite and extended period. However, the contracts contain a provision allowing vendors to cancel these contracts on 30 days notice for any reason at their sole discretion. If this provision were used by vendors, the City could find itself without a contracted supplier of asphalt during the paving season. Thus, the contracts do not ensure that vendors will provide asphalt to the City for the term of the contracts. The City Attorney's Office reports that it reviewed these contracts to form only and not for specific content.

Price stability undermined by price adjustment approved by City Purchasing

Purchasing has put asphalt price stability and predictability at risk by approving a price increase to a primary vendor outside of contract-specified adjustments. The City's asphalt supply contracts provide for quarterly price adjustments based on a state index of asphalt costs, in order to offer both the City and its asphalt vendors the ability to take into account significant price fluctuations (greater than 10 percent up or down). In March 2006, both primary vendors requested and were granted this adjustment, which was equivalent to a five percent increase in the cost of asphalt to the City.

Purchasing, however, granted an additional six percent price increase that was requested by one of the primary vendors for "extraordinary operating cost increases." This additional price increase has cost the City approximately \$7,500 in additional asphalt costs in less than three months of Spring paving. While this amount is small compared to overall asphalt expenditures, granting price increases outside of the contract provisions eliminates the price stability the contracts are intended to provide. In addition, if vendors believe such price increases can be approved, the City loses its ability to ensure stable pricing in future contracts.

PDOT's purchase of asphalt from "secondary" vendors conflicts with contract provisions

PDOT's Street Preservation Program is using secondary vendors in a manner not permitted by the contracts. The contracts require the City to use primary vendors for all jobs unless they cannot meet the City's needs. Street Preservation managers state that their use of a secondary vendor was, in some cases, due to the inability of a primary vendor to meet their needs. However, the contracts indicate that the other primary vendor should have been contacted before turning to a secondary vendor. In other instances, Street Preservation managers used a secondary vendor due to its close proximity to the job site, a rationale not permitted under the terms of the contracts. In no instance have managers documented the reason for the use of secondary vendors.

This problem is due in part to confusion regarding the City's contractual obligations. Purchasing claims that the City is free to buy as its needs dictate and that, when paving is in the vendor's "neighborhood," it can use that vendor. The Street Preservation Program also believes it may use secondary vendors as needed.

While the extent to which secondary vendors are used is limited – such purchases represent about 13 percent of asphalt expenditures over the first nine months of the contract – their use in this manner violates contract provisions. Furthermore, use of secondary vendors outside of the terms promised by the City compromises a strategy that was effective in getting a low price and undermines the City's ability to benefit from this strategy over the anticipated five-year term of these contracts.

PDOT could have obtained about \$100,000 more in volume discounts

During the negotiation process, vendors were asked to improve their bids with rebates or other discounts in order to potentially win "primary" vendor status and thus obtain most of the City's asphalt business. Three of the four vendors offered annual rebates to the City based on the dollar value of asphalt purchased during the contract year. Of these, one is now a primary vendor which will pay a maximum five percent rebate if the City buys \$2.5 million or more in asphalt purchases.

As of June 15, 2006, the Street Preservation Program had purchased approximately 46 percent of its total asphalt from this primary vendor, earning about \$30,000 in rebates. We analyzed the costs associated with paving jobs, including those which vary with location (such as haul costs), asphalt costs, and rebates. We found that the Street Preservation Program could have cost-effectively purchased most (but not all) of its asphalt for these jobs from this one primary vendor, thereby maximizing the rebate. This would have resulted in approximately \$100,000 more in rebates during the first year of the current asphalt supply contracts.

The failure to take advantage of the rebate results in part from the fact that Street Preservation managers have not used a reliable method for determining the most cost-effective vendor to use for each job under the current set of contracts. Previously, cost-effectiveness was assessed during the contracting process itself. That is, a manager within the Street Preservation Program analyzed the asphalt price bid by each vendor combined with haul costs to eight representative job sites. The results were used to create a map designating which areas of the City would be served by which vendors. This map became part of the contract and controlled Street Preservation's asphalt purchasing decisions.

Although they are now contractually obligated to choose between two primary vendors for each job, Street Preservation has more freedom in its vendor selection since the contracts no longer identify which vendor must be used in different areas of the City. While Program managers have the intention of selecting a cost-effective vendor for each job, we were told that this decision is largely based on avoiding the potential costs associated with a paving crew that is idled while waiting for an asphalt delivery. However, managers told us they are applying a cost of \$50 per minute for "idle time," which is significantly greater than the \$11 per minute figure that we have estimated based on hourly charges for the paving crew and equipment. As a result, managers have over-estimated the cost impact of distance between the asphalt vendor and the job site, and have not given adequate consideration to the price of asphalt and the cost benefits of rebates.

Our analysis of paving jobs indicates that several factors should be considered in determining the most cost-effective vendor to use for each paving job. These include the costs associated with each job location (i.e., haul costs and "idle time"), the price of asphalt, and the value of annual rebates. With the current set of contracts, the Street Preservation Program should use a more comprehensive approach that takes into account these factors when deciding which of the two primary vendors should supply each job.

Conclusions and Recommendations

The City's current asphalt supply contracts are poorly written and have not been well-managed. The City has failed to take advantage of financial benefits provided by the contracts, and the contract provisions are not adequately understood by managers in the Street Preservation Program or Purchasing. Furthermore, if the City wishes to use this negotiation strategy with its asphalt vendors in the future, it will need to restore credibility that it will abide by its commitments. To address problems identified in this report, we recommend that:

1. PDOT ask the City Attorney to recommend a contract amendment that would prevent early termination by contractors except for breach of contract by the City.

The City's current asphalt supply contracts do not ensure that vendors will provide asphalt to the City for the duration of the contracts. Contract amendments should limit the suppliers' rights to early termination for cause (that is, breach by the City).

2. Purchasing not approve price increases beyond the adjustments provided for in the contracts.

Granting price increases outside of the contract provisions eliminates the price stability the contracts are intended to provide. In addition, if vendors believe such price increases can be approved, the City loses its ability to ensure stable pricing in future contracts. Only contractually agreed-upon price adjustments should be approved.

3. PDOT abide by the City's contractual commitment to the primary vendors.

The Street Preservation Program has used secondary vendors in a manner that violates contract provisions. This compromises a strategy that was effective in getting a low price and undermines the City's ability to use this strategy over the anticipated five-year term of these contracts. The Program should purchase all of its asphalt from the primary vendors, unless they cannot meet the City's needs. It should also adequately document the justification for purchases from other vendors.

4. PDOT develop an accurate process for identifying the most cost-effective primary asphalt vendor for each paving job.

By overestimating the cost impact of the distance from asphalt vendors to job sites, PDOT's Street Preservation Program failed to obtain approximately \$100,000 in rebates during the first year of the new asphalt supply contracts. In addition to the costs associated with job location, Program managers should take into consideration the price of asphalt and the value of annual rebates when deciding which primary vendor to use for each job.

RESPONSES TO THE AUDIT





PORTLAND, OREGON

OFFICE OF PUBLIC UTILITIES

Sam Adams, Commissioner

1221 S.W. Fourth Avenue, Rm. 220 Portland, Oregon 97204-1994 (503) 823-3008 FAX: (503) 823-3017

E: samadams@ci.portland.or.us www.commissionersam.com

July 14, 2006

Gary Blackmer City Auditor 1221 SW 4th Ave. Portland, OR 97204

Dear Auditor Blackmer:

I recently had the opportunity to review the report issued by the Audit Services Division focusing on the policies and practices of the Bureau of Maintenance (BOM) Street Preservation Program's asphalt supply contracts. It is clear that your office expended a great deal of time, effort, and thought to the development of this report; it is thorough, thoughtful, and focuses on an important issue.

I want to thank you both for this work and for providing me with the chance to share my response to this recent audit. I can assure you that your findings will be given serious thought and attention, and that they will be folded into a larger effort I initiated upon becoming the Commissioner-in-Charge of the Portland office of Transportation (PDOT). Shortly after the mayor assigned oversight of PDOT to me about two years ago, I began systematically scrutinizing its practices in search of increased efficiencies and cost savings. This report dovetails well with these already underway efforts and will certainly be incorporated into our work in this area.

I believe that it is critical that we ensure the city operates in the most efficient way possible and because of that, my office intends to address the findings you outlined in this audit as soon and as thoroughly as possible.

Again, thank you for your hard work and the recommendations that you have provided. They will be of great help to me and a great benefit to the citizens of Portland.

Best,

Sam Adams

Portland City Commissioner

A.M

Cc: Portland City Council
Sue Keil, Director, PDOT
Sam Irving, Director, BOM
John Rist, Business Operations Division Manager, PDOT
Liane Welch, Street Preservation Division Manager, BOM





Sam Adams Commissioner

September 20, 2006

Susan D. Keil Director

Gary Blackmer City Auditor 1221 SW 4th Avenue Portland OR 97204

Eileen Argentina System Management

Dear Mr. Blackmer:

Don Gardner Engineering & Development

The Portland Office of Transportation is pleased to respond to the audit on the Street Preservation Program's asphalt supply contracts. I appreciate the independent review and work of the Audit Services Division. In our efforts to efficiently maintain and improve Portland's transportation system, it is important to use best practices to obtain lower asphalt prices, volume discounts, and supply stability from vendors.

Sam M. Irving, Jr. Maintenance

The audit makes recommendations for improvements, which PDOT supports. PDOT will:

Paul Smith Ask the City Attorney to recommend a contract amendment that would prevent early termination by contractors except for breach of contract by the City.

Planning

Abide by the City's contractual commitment to the primary vendor.

John Rist **Business** Services Develop an accurate process for identifying the most cost-effective primary asphalt vendor for each paving job.

These efforts will improve our ability to obtain lower asphalt prices and create supply stability from our vendors.

PDOT will improve its procedures for estimating the cost impact of the varying distances from asphalt plants to job sites. This cost analysis will include costs associated with job location, the price of asphalt, and the value of annual rebates. In instances where the primary vendor cannot meet the City's needs, PDOT will document the justification for purchases from other vendors.

I appreciate the thorough review of our contract management practices for asphalt purchases. PDOT will make every effort to implement the changes recommended by the audit.

Sincerely,

Susan D. Keil

Director

Cc:

City Council

Sam Irving, BOM Director

usan D. Keil

John Rist, PDOT Business Services Division Manager Liane Welch, BOM Street Preservation Division Manager



CITY OF PORTLAND, OREGON

OFFICE OF MANAGEMENT & FINANCE

Tom Potter, Mayor

Ken Rust, Interim Chief Administrative Officer

Bureau of Purchases Jeffrey B. Baer, Director 1120 SW Fifth Ave Rm 750 Portland OR 97204 (503) 823-6855 www.portlandonline.com/omf/purchasing

MEMORANDUM

TO:

Gary Blackmer, City Auditor

FROM:

Jeff Baer, Director Bureau of Purchases

SUBJECT:

FINAL DRAFT OF REPORT ON ASPHALT SUPPLY CONTRACTS (REPORT #324C)

DATE:

September 20, 2006

On behalf of the staff of the Bureau of Purchases, I am pleased to offer a response to the City Auditor's document *Street Paving: Current contract management practices put asphalt price and stability at risk.* As the Director of the Bureau of Purchases and the Purchasing Agent for the City of Portland, I am committed to pursuing continuous improvement of the City's procurement processes. The Auditor's report presents several areas where immediate and direct improvements can be made. My staff and I will develop and implement a plan addressing the issues raised in the Auditor's report and any related items that we may identify during the process.

The Auditor's Office recommends that:

1. PDOT ask the City Attorney to recommend a contract amendment that would prevent early termination by contractors except for breach of contract by the City.

The Auditor is concerned that because the suppliers have the option to exercise a 30 day termination of the contract, that we cannot be assured that asphalt will be reliably available to the City with consistent pricing throughout the term of the contract. I agree with the findings that it is not a best practice to provide a supplier the opportunity to terminate a contract with 30-days notice for convenience. The City had contracted with Silver Oak Solutions to negotiate this and other commodity contracts as part of the City's Strategic Sourcing Initiative. Our understanding is that this option was included by Silver Oak as a negotiation lever. This contract term was not questioned because of the City's desire to give the contractor a great deal of leeway in carrying out its strategic sourcing practices, and because the risk of the supplier exercising the option was, at the time, deemed very low. Since the option has been found to increase the City's risk of losing a negotiated price agreement before its completion date without penalty to the supplier, I have directed staff to no longer use this option unless it can clearly be found to be in the City's best interest.

Additionally, staff has been directed to review existing contract forms to make sure the standard terms and conditions reflect best practices and protect the City's interest. Further, any terms negotiated outside of the standard contract terms and conditions will be called to my attention and reviewed by the City Attorney's Office for approval. At this time contract amendments with the recommended changes have been prepared and are in the process of being executed.

2. Purchasing not approve price increases beyond the adjustments provided for in the contracts.

The price agreements allow for price increases based on a state index of asphalt costs. One supplier was granted an increase based on other costs, including the price of aggregate and fuels. The request was carefully documented and showed that continuing to provide asphalt to the City based on current pricing would be a hardship for the supplier, which might have resulted in early termination of the agreement and a loss of material supply for the City. Although the price agreement is silent concerning price increases based on these other factors, granting the added increase appears to be questionable despite the justifying documentation. The Bureau of Purchases will remedy this by ensuring that all future contracts will include the appropriate known price adjustment terms, and will not allow price increases outside of the confines of the contractual terms and conditions.

3. PDOT abide by the City's contractual commitment to the primary vendors.

The Auditor indicates that there was confusion in the understanding of the contract terms and conditions regarding use of the suppliers. The Bureau of Purchases will work with PDOT to ensure that future contract language is clear and succinct. This practice will also ensure that the City's suppliers clearly understand the terms and conditions of the contract and their related performance expectations.

4. PDOT develop an accurate process for identifying the most cost-effective primary asphalt vendor for each paving job.

Although the remedy for this request lies primarily with PDOT, my staff will work with the project manager to redefine any terms or conditions that may result in better contract utilization and compliance by the City and its suppliers.

In conclusion, I appreciate the opportunity to respond to the issues raised by the City Auditor. The Auditor's staff was diligent and fair in their scrutiny of this price agreement, and consulted with me before releasing the final draft of their report. We were able to discuss the findings, provide clarity to the issues, and alleviate some of the concerns. This has been a positive and educational experience, and I am confident that incorporating these suggestions will help to ensure that the City has an accountable and efficient procurement process in place.

Cc: Tom Potter, Mayor
Sam Adams, Commissioner
Gary Blackmer, City Auditor
Ken Rust, Interim Chief Administrative Officer
Susan Keil, Director, Portland Office of Transportation
Sam Irving, Director, Bureau of Maintenance
Liane Welch, Manager, Street Preservation Program
Steve Townsen, City Engineer
John Rist, PDOT Finance Director

Audit Services Division
Office of the City Auditor
1221 SW 4th Avenue, Room 310
Portland, Oregon 97204
503-823-4005
www.portlandonline.com/auditor/auditservices

Street Paving: Current contract management practices put asphalt price and supply stability at risk

Report #324C, September 2006

Audit Team Members: Doug Norman

Katherine Gray Still John Hutzler Gary Blackmer, City Auditor Drummond Kahn, Director of Audit Services

Other recent audit reports:

Financial Transaction Review: Few results identified for further study (#334, August 2006)

Street Paving: More proactive maintenance could preserve additional city streets within existing funding (#324B, July 2006)

Bureau of Technology Services: Customers see improved service, but improved communication would help (#314C, July 2006)

This report is intended to promote the best possible management of public resources. This and other audit reports produced by the Audit Services Division are available for viewing on the web at: www.portlandonline.com/auditor/auditservices. Printed copies can be obtained by contacting the Audit Services Division.