AUDITOR GENERAL’S REPORT

Obtaining the Best Value Through the Use of Vendor Rosters

October 13, 2017

Beverly Romeo-Beehler, CPA, CMA, B.B.A., JD, ICD.D, CFF
Auditor General
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>4</td>
</tr>
<tr>
<td>Program Overview</td>
<td>4</td>
</tr>
<tr>
<td>Managing the Program</td>
<td>6</td>
</tr>
<tr>
<td>AUDIT RESULTS</td>
<td>9</td>
</tr>
<tr>
<td>A. ROSTER DESIGN AND CREATION</td>
<td>9</td>
</tr>
<tr>
<td>A.1. Designing Rosters to Obtain Best Value for the City</td>
<td>9</td>
</tr>
<tr>
<td>A.2. Mandatory Requirements May Unnecessarily Reduce the Pool of Qualified Vendors</td>
<td>13</td>
</tr>
<tr>
<td>A.3. PMMD Should Have Stronger Oversight over the Roster Qualification Process</td>
<td>15</td>
</tr>
<tr>
<td>B. MAKING PURCHASES THROUGH A ROSTER</td>
<td>17</td>
</tr>
<tr>
<td>B.1. Unbalanced Bidding Procedures Should Apply to Roster Activity</td>
<td>17</td>
</tr>
<tr>
<td>B.2. Standard Guidelines Required for Contractor/Subcontractor Relations Management</td>
<td>19</td>
</tr>
<tr>
<td>B.3. Enhancing Oversight of Rosters with Unique Conditions</td>
<td>20</td>
</tr>
<tr>
<td>C. OVERSIGHT AND PROCESS IMPROVEMENT</td>
<td>22</td>
</tr>
<tr>
<td>C.1. Control Procedures Are Not Consistently Being Followed</td>
<td>22</td>
</tr>
<tr>
<td>C.2. Opportunities for Efficiencies and Process Improvement</td>
<td>23</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>25</td>
</tr>
<tr>
<td>AUDIT OBJECTIVES, SCOPE AND METHODOLOGY</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX 1: Management’s Response to the Auditor General’s Report Entitled: “Obtaining the Best Value Through the Use of Vendor Rosters”</td>
<td>28</td>
</tr>
</tbody>
</table>
## EXECUTIVE SUMMARY

**Vendor rosters is a procurement method designed to achieve efficiencies**

A vendor roster is a list of sellers (suppliers, consultants, contractors, etc.) created by the City to purchase a specific type of good or service. By evaluating and pre-qualifying vendors known to be capable of meeting its standards, the City can then save time and resources by making (repeated) future purchases under a simplified process.

**Approximately $88 million per year is spent through rosters**

The City introduced its rosters program around the year 2008, and currently buys approximately $88 million of goods and services per year through its 43 rosters.

**Processes are delegated to the division making the purchase**

When buying through rosters, a number of processes are delegated from the City's Purchasing and Materials Management Division (PMMD) to the operating division making the purchase. Therefore, having sufficient controls at the divisional level as well as oversight from PMMD are crucial.

Our audit was based on roster activity taking place from 2014 to early 2017. During the audit we observed that many aspects of the program were being performed appropriately:

- Program expectations are documented with roles and responsibilities clearly defined;
- PMMD was working with operating divisions and providing guidance when issues arise;
- Purchases made were generally compliant in terms of scope, vendor selection, and staying within the $500,000 per purchase limit.

We also identified some opportunities for improvement which are presented below, roughly aligned with the process flow of the program: a) roster design and creation, b) making purchases, and c) oversight and process improvement.
### Roster Design and Creation

We observed a number of rosters using a rotational selection method in which the City purchases equally from each vendor. This contrasts with competitive rosters that use a bidding system to try to obtain the best value for the City.

#### Rotational selection methods may cause the City to incur higher costs

Rotational methods can cost the City money when it purchases from the most expensive vendor(s), especially in markets where the price varies widely. Out of a sample of three rosters, the potential price difference between selecting the lowest priced vendor exclusively vs. on a rotational basis is estimated to be $940,000 per year. The City can likely save costs by increasing the use of rosters that use value based selection methods wherever possible.

#### Use of mandatory requirements in rosters

All rosters have a qualification stage where the City evaluates potential vendors for their ability to deliver the good or service specified. Some evaluation criteria are scored, while others take the form of mandatory requirements. In our view, mandatory requirements are more appropriately used for conditions deemed critical to delivering the good or service required. This will allow more vendors the chance to compete (particularly smaller local ones), and increase the potential vendor pool for the City.

#### Inconsistencies observed between roster documentation and qualification outcome

We also observed some rosters where the qualification process was inconsistent with the method prescribed in the roster document published. PMMD should maintain adequate oversight to ensure the process is accurate and consistent, and that all unusual outcomes or decisions are appropriately documented.

### Making Purchases

Making purchases through a roster is mainly handled by the operating division, in contrast to roster creation where PMMD is more actively involved. Our observations in this area relate to divisional processes as well as PMMD's role in oversight.
<table>
<thead>
<tr>
<th><strong>PMMDB's Unbalanced Bidding Procedure should be applied to roster processes</strong></th>
<th>An unbalanced bid is a risk in purchasing where vendors attempt to exploit inaccurate City estimates by overbidding on some line items and underbidding on others, resulting in a higher overall cost to the City. In 2017 PMMD introduced steps to reduce this risk; however, these steps were not applied to rosters due to parts of the purchasing process being delegated to the operating division. We recommend updating roster processes to incorporate PMMD's new procedures.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guidelines should be developed on managing contractor/subcontractor relationships</strong></td>
<td>With large projects vendors often subcontract out portions of the work to other companies with expertise in a specific area. This may sometimes create conflicts of interest within a roster, leading to an increased risk of vendor collusion and bids that do not reflect the best value for the City. The City should develop clear guidelines to identify, assess, document and manage contractor/subcontractor relationships in rosters.</td>
</tr>
<tr>
<td><strong>Two rosters are being managed with limited oversight from PMMD</strong></td>
<td>Two rosters (for fuel and gas) reside within the Environment and Energy Division. They are managed almost entirely by the operating division with limited oversight from PMMD. Despite the legitimately unique nature of their purchases, PMMD should develop ways to provide additional oversight, such as through the use of periodic reviews.</td>
</tr>
<tr>
<td><strong>Oversight and Process Improvement</strong></td>
<td>We observed that some controls prescribed by the Rosters Procedure were not consistently followed. For Buyers this included maintaining an up to date roster inventory and performing onsite reviews of purchasing activity, while for the operating division this included the quarterly reporting process. This increases the risk of inaccurate or inappropriate purchases remaining undetected.</td>
</tr>
<tr>
<td><strong>Several control processes are inconsistently performed</strong></td>
<td>Finally, several opportunities for process improvements and efficiencies are presented. These include strengthening the roster reporting process, publishing active roster information, simplifying the roster inventory file, and making use of data contained in the SAP financial system.</td>
</tr>
<tr>
<td><strong>Opportunities identified for improvements and efficiencies</strong></td>
<td></td>
</tr>
</tbody>
</table>
Eight recommendations to help improve program

Conclusion

This report contains 8 recommendations to help obtain better value, improve oversight and strengthen the City's vendor rosters program.

We express our appreciation for the co-operation and assistance we received from management and staff of the Purchasing and Materials Management Division.

BACKGROUND

Program Overview

Vendor rosters are created to purchase a specific good or service

A vendor roster is a list of sellers (suppliers, consultants, contractors etc.) created by the City to purchase a specific type of good or service. Figure 1 briefly illustrates this process:

Figure 1: Summary of Roster Process

1. The City expects a repeated need for specific goods or services
2. City evaluates the submissions and sets up a roster with several qualified vendors
3. City makes subsequent purchases using a simplified process

Rosters are designed to achieve purchasing efficiencies

By pre-qualifying vendors known to be capable of meeting its standards, the City can save time and resources in future (repeated) purchases.
The City procures approximately $88 million per year through rosters

The vendor rosters method was introduced at the City around 2008. The City procures approximately $1.8 billion in goods and services per year, of which $88 million (5 percent) is spent through its 43 rosters. Some examples include:

- Professional consultant services (for IT, environmental assessments, engineering, etc.)
- Contract construction services
- Other specialized work such as executive recruitment.

There are several potential benefits to the use of rosters:

- Time and resources saved in evaluating bids or work proposals, both by simplifying the process and dealing with only a limited number of vendors
- Shorter turnaround time to completing a purchase
- Consistency and improved working relationships with qualified vendors, as rosters are typically established for three years.

Potential risks include reduced competition from limiting the vendor pool, and vendor complacency from knowing that they are qualified for the entire duration of the roster.

Processes are delegated to the division making the purchase

The City's roster program is designed such that a number of processes are delegated from its Purchasing and Materials Management Division (PMMD) to the operating division making the purchase. Thus a crucial element is that the City, either through divisional level controls or oversight from PMMD, is able to continuously protect the integrity of the program and obtain best value from its purchases.

The following section examines the main components and process flow of the program. The "Results" section presents our observations aligned with this flow: a) roster creation and design, b) making purchases, and c) oversight and process improvement.
Managing the Program

Roles and Responsibilities

Rosters program is governed by PMMD

The City's PMMD owns and governs the vendor rosters program. PMMD's procedure titled "Using an Established Roster to Obtain Professional, Consultant or Other Services" (the Rosters Procedure) lays out most of the program processes and requirements.

Program is a collaboration between PMMD and operating divisions

Managing rosters is a collaboration between PMMD Buyers, who are procurement professionals by trade, and staff from the operating division involved in the purchase requests. Table 1 summarizes the major roles in the program and their respective responsibilities:

Table 1: Roles and Responsibilities in a Roster

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
<th>What They Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buyer</td>
<td>PMMD staff assigned to one or more rosters.</td>
<td>Assist the division in creating and maintaining a roster; advise and help address issues; ensure procurement requirements are met.</td>
</tr>
<tr>
<td>Roster Captain</td>
<td>Designated individual(s) from the operating division who receives procurement training from PMMD.</td>
<td>Liaise between PMMD and the operating division; manage the purchasing process; ensure requirements on the division's end are met.</td>
</tr>
<tr>
<td>Evaluation Committee</td>
<td>Team formed from the operating division with technical understanding of the work needed.</td>
<td>Evaluate submissions from prospective vendors wishing to qualify for a roster.</td>
</tr>
<tr>
<td>Divisional Staff</td>
<td>Person(s) making the purchases that the roster was intended for, such as a Project Manager.</td>
<td>Develop specifications for the roster and individual purchases; oversee the work performed by vendors.</td>
</tr>
</tbody>
</table>

The working relationship between these roles is explained in more detail in the following sections.

Creating a Roster

The process begins when an operating division communicates its intent to create a roster with PMMD, either due to a need for a new good or service or the impending expiry of an existing roster.

Figure 2 shows the process flow between PMMD and the operating division in creating a roster:
Getting on the roster is not a guarantee of business

The Roster Captain is the primary point of contact in managing the roster

Rosters range from three to twenty vendors in size, but more commonly around five to eight. Getting on the roster does not guarantee any amount of future business. Although rare, it is possible for a roster to not be used at all.

Making purchases through the roster

Once a roster has been successfully created, the divisional Roster Captain becomes the point person for making purchases, coordinating with divisional staff and managing communication with vendors on the roster.

Figure 3 outlines the process used to make purchases through a roster:
Each individual purchase through a roster cannot exceed an expected value of $500,000. Those in excess must be issued using the City's Request For Proposal or other applicable procurement process.

In examining the roster process flow we note two observations:

- Most rosters are fixed for three years; during this period new vendors cannot join in, and those already on the roster will remain (except in rare cases such as serious performance issues). Therefore, it is important that the initial qualification process shown in Figure 2 is accurate, fair, and optimally designed.

- Comparing Figures 2 and 3 we can see that PMMD is more involved in the roster's creation, but less so during the regular purchasing activities. In order to protect the integrity of the program, PMMD's role in oversight needs to be performed effectively and consistently.

These observations form two of the main review objectives of our audit.

---

1 Assuming a competitive purchasing method, which is used by the majority of current rosters. Section A.1 illustrates the alternative rotational method and the differences between the two.
AUDIT RESULTS

This section of the report contains the findings from our audit work followed by specific recommendations. Our review period included rosters with purchasing activity made between 2014 and early 2017.

A. ROSTER DESIGN AND CREATION

The City creates a roster by issuing a Request for Expression Of Interest (REOI) through PMMD to the public, which invites interested vendors to apply. The REOI provides details of the roster including the nature of the purchase needed, how vendors may qualify for the roster, and how the City decides which vendor on the roster to purchase from.

This section looks at potential improvements to approaching roster design as well as the roster qualification process.

A.1. Designing Rosters to Obtain Best Value for the City

The rotational vendor selection method

There are two main types of rosters used at the City, classified based on how the operating division decides which vendor on the roster to choose from when making a purchase. Table 2 compares their main characteristics:

<table>
<thead>
<tr>
<th>Type</th>
<th>Competitive</th>
<th>Rotational</th>
</tr>
</thead>
<tbody>
<tr>
<td>How a purchase is made</td>
<td>A competitive call is issued (e.g., Request For Quotation).</td>
<td>Operating division selects a vendor and offers to purchase from them directly.</td>
</tr>
<tr>
<td>How the vendor is selected</td>
<td>Vendors bid on the call; the lowest priced qualifying bid wins.</td>
<td>Division selects each vendor on a rotational basis.</td>
</tr>
<tr>
<td>How prices are determined</td>
<td>Prices are formed from the bids received before each purchase.</td>
<td>Price lists are submitted by each vendor when the roster is created and remains fixed for the duration of the roster.</td>
</tr>
</tbody>
</table>
The City spends $5.7 million per year through 9 rotational rosters

In a rotational roster, the City attempts to provide each vendor equal opportunity by making approximately the same amount of purchases over the life of the roster. We identified 9 rotational rosters at the City, with a total spending of approximately $5.7 million per year\(^2\).

When prices vary between vendors this results in higher cost to the City

When item prices are standardized or similar across the market, this arrangement does not have much financial impact. However, when prices differ between vendors it may result in the City incurring higher costs than necessary.

Table 3 shows sample projects from three different rotational rosters observed during our review, along with the cost that would be charged under the lowest and highest priced vendor respectively:

<table>
<thead>
<tr>
<th>Roster ($ spend per yr)</th>
<th>Sample Project Description</th>
<th>Lowest Cost</th>
<th>Highest Cost</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials Consulting ($1.6 million)</td>
<td>Hazardous materials and designated substances assessment for a commercial building</td>
<td>3,100</td>
<td>6,000</td>
<td>2,900 (94%)</td>
</tr>
<tr>
<td>Environmental Consulting ($1.0 million)</td>
<td>Phase I/II Environmental Site Assessment and Record of Site Condition for a change of land use</td>
<td>19,900</td>
<td>24,500</td>
<td>4,600 (23%)</td>
</tr>
<tr>
<td>Geotechnical Investigations ($1.5 million)</td>
<td>Geotechnical, Environmental and Hydrogeological Investigations at several locations</td>
<td>52,700</td>
<td>71,500</td>
<td>18,800 (36%)</td>
</tr>
</tbody>
</table>

We found that purchases made were distributed approximately evenly across each of the 3 to 5 vendors in the rosters above, which was appropriate according to the REOI. However, the nature of these rosters by design puts each vendor on more or less equal footing despite any price differences.

Potentially up to $940,000 per year in cost differences

Based on the amount spent and respective prices, the total cost difference between the lowest and higher priced vendors is estimated to be potentially as high as $940,000 per year for the above three rosters combined.

\(^2\) This is a rough estimate calculated through AGO's review of individual roster files; potentially more unidentified ones may exist. Section C in this report comments on the need for stronger financial data to support analysis.
We acknowledge that even in an RFQ or otherwise value based roster, this full amount may not be realistically translated into savings. The lowest priced vendor will likely have limited capacity, a more expensive vendor may possess specific expertise required, and occasionally there may be emergencies where deployment speed overrides any cost considerations. However, the above examples illustrate the potential cost accepted by the City when a non-competitive vendor selection method is used.

Although cost is considered during the qualification process, prices can still vary. It should be noted that cost is one of the factors considered during the qualification process for rotational rosters, typically forming 20-25 per cent of the vendor's total score. However, the above examples show that even among vendors who qualified, the price can still vary significantly.

Rotational rosters provide two operational benefits over competitive ones: a lower workload due to bypassing the call/bid process; and a quicker turnaround time to completing the purchase. This may be appropriate when purchases are frequently urgent, or when the difference between vendor prices is known to be insignificant. However, in most cases value based methods will result in a lower cost to the City and should be the default method used.

**Roster Size**

A larger roster size may result in more competitive pricing. Even in cases where PMMD and the operating division have decided that a rotational vendor selection method is appropriate, increasing the pool of vendors accepted may improve the roster's price competitiveness.

For example, one roster received applications from sixteen different vendors during its qualification process. The evaluation outcome for the six highest scoring candidates are shown in Figure 4 below:
The (darker) blue bar indicates the scores assigned by the Evaluation Committee. The operating division specified a minimum acceptable score of 75 per cent for this roster, which is shown by the horizontal line. The yellow bar shows the cost of services from each vendor.

The REOI for this roster specified that out of the 16 candidates, only the top three vendors (A, B and C above) could be accepted. However, we can see that while firms D and E scored slightly lower in the technical evaluation, both of them offered highly competitive prices. All of the top six vendors exceeded the minimum threshold of 75 per cent by a margin.

We do not dispute that firms B and particularly C deserve their place by merit of strong technical competencies. However, had a larger roster size been specified, the City could have obtained a vendor pool with more competitive pricing, while still meeting its technical requirements.
PMMMD reviews should take into account unique characteristics of rotational rosters

Buyer Reviews

Finally, as part of PMMMD's oversight role, its Buyers visit the operating division's premises periodically to review its roster activity. The process is standardized and identical for all rosters regardless of purchasing method. Aspects unique to rotational rosters should be taken into account, such as verifying how the winner was selected by divisional staff and that prices charged match that submitted at the beginning of the roster.

Recommendation:

1. City Council request the Director, Purchasing and Materials Management Division, to:

   a. Provide clear guidance on roster design. Unless there is an overriding consideration otherwise, vendor selection methods that prioritize cost should be used.

   b. Update the Buyer review process for rotational rosters, such as including verification of how a vendor was selected, and that prices charged match the original submissions made to the REOI.

A.2. Mandatory Requirements May Unnecessarily Reduce the Pool of Qualified Vendors

Roster qualification metrics can be developed in a variety of ways

Operating divisions, in consultation with PMMMD, are responsible for developing metrics used to evaluate prospective vendors for a roster. A variety of scoring methods can be used, such as:

- mathematical scoring (e.g. lowest bid/proponent's bid x weight)
- subjective scoring (e.g. quality of vendor’s experience)
- pass or fail (e.g. firms must have completed $x of relevant work during the past y years).
In most of the rosters we observed, vendors were first screened using mandatory (pass or fail) criteria, before scoring the remaining ones using a combination of mathematical and subjective criteria.

Some rosters restrict mandatory requirements to standard components such as meeting submission deadlines, while others also apply this to technical/competency evaluations. For example:

- (Roofing Contractor Roster) Respondent must have completed work averaging $5 million per year for the past five years, and completed five public sector roofing projects directly (i.e. not as a subcontractor), costing a minimum of $100,000 each between the 2011 and 2014.

- (IT resources) Vendor must have a minimum revenue of $2 million per year for the past two years.

- (Mechanical Engineering) Respondent must have a Certificate of Authorization from the Professional Engineers of Ontario and have a minimum of ten Professional Engineers.

Where the thresholds are set too high, it may disqualify vendors who are otherwise capable of providing the good or service required. This could reduce the overall competitiveness and quality of the pool of vendors available.

In the roofing roster, we observed that one vendor was disqualified for not meeting the criteria above despite having performed a significant amount of work for the City in the past. In an engineering roster a vendor complained that the mandatory certification (which it lacked) only applied to specific types of work, and that it should have been considered for the remainder of the roster scope. Thirdly, a letter from the Heavy Construction Association of Toronto expressed, among other things, concern regarding the City’s use of mandatory requirements and vendors who were (perceived to be unfairly) disqualified as a result.
### Criteria may disproportionately favour larger firms

Vendors such as the above may or may not have compared favourably against the other candidates based on merit. There is no evidence to indicate that anyone designed these criteria to favour a particular vendor. However, some of the criteria, particularly ones concerning size or volume, may tend to disproportionately favour large national/multinational firms over smaller local ones. The effect could be significant given that once a roster is created it is generally fixed for three years and new vendors may not be added for this duration.

### A weighted scoring method will provide a better balance

There may certainly be conditions critical to a vendor's ability to successfully meet the City's requirements. In our view, mandatory requirements are more appropriately used for such conditions. In other cases, using a weighted scoring method will provide all vendors an opportunity to compete for the City's business, while still allowing operating divisions to take into account any relevant considerations it may have.

**Recommendation:**

2. City Council request the Director, Purchasing and Materials Management Division, to provide guidance in its Roster Procedure on the use of different evaluation criteria during the roster qualification process.

### A.3. PMMD Should Have Stronger Oversight over the Roster Qualification Process

#### The roster qualification process should be consistent with its REOI

When vendors make submissions to apply for a roster, there should be a reasonable expectation that the qualification process is consistent with terms laid out in the REOI.

Based on an audit sample of six rosters, the following discrepancies were observed:

- In a 2015 roster for engineering consulting services, five submissions were received. Based on the total evaluation score, the firms ranked first, third, and fourth were selected while the one ranked second was not
In the same roster (under a different service category), the REOI specified that its applicants must meet a minimum score of 60% in each criteria to qualify. However, in practice a 75% threshold was used instead.

In a roster for Information Technology Resources, 13 vendors were placed on the roster even though the REOI indicated a maximum size of ten.

There may be valid explanations for these deviations. For example, we learned that the IT roster was expanded after discussions between the IT Division, PMMD and the vendors affected. However, there was no documentation on file to explain the rationale or decision history.

If procurement activities are not performed in accordance with published specifications, the fairness of the procurement process may be called into question. This may open the City to vendor complaints and potential legal risk.

While the operating division is generally in a better position to assess the technical capabilities of prospective vendors in their respective fields, PMMD needs to provide adequate oversight to ensure all procurement requirements and standards are met.

Recommendation:

3. City Council request the Director, Purchasing and Materials Management Division, to ensure Buyers provide adequate oversight of the roster qualification process, including a review of the evaluation outcome and documenting the decision process and rationale for deviations from the terms in the call document.
B. MAKING PURCHASES THROUGH A ROSTER

This section examines the way the City makes purchases from vendors on its rosters. During the audit we observed that many aspects of this process were being performed appropriately, including:

- Purchases made were appropriately within the scope of the roster and adhered to the $500,000 purchasing limit
- Purchasing methods followed the method described in the REOI
- All vendors on the roster were invited to bid, and no vendors outside of the roster were awarded purchases.

Our observations here relate to ensuring that risks during the purchasing stage are adequately addressed (some of which affects procurement activity as a whole and not just rosters), and that there are sufficient controls over these areas.

B.1. Unbalanced Bidding Procedures Should Apply to Roster Activity

PMMMD implemented its Unbalanced Bidding Procedure in 2017

For certain types of purchases, the City does not know the exact price or amount of materials it needs, such as in a construction or maintenance project. To reduce the risk in this area, PMMMD implemented an Unbalanced Bidding procedure in 2017 which calls for additional analysis in the City’s bid evaluation process, briefly illustrated as follows:

Figure 5: Unbalanced Bidding Analysis
During the analysis, the main risks being assessed are signs of materially unbalanced bids (where vendors exploit inaccurate City estimates by overbidding on certain line items and underbidding on others), and front-loading (where vendors stack the line items to receive a disproportionate amount of payment up front).

In rosters the bidding process is largely delegated to the operating division, including the receipt and evaluation of bids and determining the winning vendor. Hence, the link between Step 1 and Step 2 above does not apply and Buyers are unable to perform the analysis according to the Unbalanced Bidding Procedure.

The risk of unbalanced bidding cannot be quantified at this time as estimates are not prepared for roster purchases. However, the amount at risk can be significant despite the maximum limit of $500,000 per roster purchase; the City spends on average $35 million per year through rosters in the construction services area alone.

In order to mitigate this risk, as it does for other procurement areas, the City should ensure that the detection and management techniques it developed are equally applied to relevant roster activity. This can be achieved by either adjusting the current process to allow additional Buyer involvement during the bidding stage, or by providing adequate training to Roster Captains to manage this risk at the divisional level, with appropriate guidance and oversight from PMMD.

Recommendation:

4. City Council request Director, Purchasing and Materials Management Division (PMM), to review current roster processes and make adjustments where necessary to ensure that controls developed in PMMD’s Unbalanced Bidding procedure are also implemented in all applicable areas of roster activity.
B.2. Standard Guidelines Required for Contractor/Subcontractor Relations Management

**Subcontracting is common in certain areas, but may sometimes create conflicts**

When the City procures large projects, it is not unusual for vendors to subcontract out portions of the work to other companies with expertise in a specific field. While in most cases this does not adversely affect the City's cost or quality of service received, it may sometimes create conflicts of interest particularly in relation to the bidding process.

**There should be a consistent process to manage potential conflicts**

During the audit we observed three cases within the Architectural and Engineering Services roster (for separate service categories) where a structural engineering firm applying for the roster was also listed as a subcontractor to another firm applying for the same roster. In one of these cases PMMD disqualified both firms involved, while for the other two this appeared to remain undetected.

Additionally, in the above examples vendors disclosed their subcontracting relationships during the qualification process. This is not always the case; in some rosters vendors were not required to submit this information until they bid on a particular project, which makes potential issues more difficult to identify.

When vendors within a roster are not entirely independent from one another, this increases the risk of vendor collusion and bids that do not reflect the best value for the City. Some relationships are manageable and unlikely to result in a material effect to the City. Other cases may be more significant, such as in the examples above where structural engineering likely forms a significant component of the work involved.

At a minimum there should be clear guidelines in place on the responsibility and steps for identifying, assessing, documenting and managing these risks in a roster.
### B.3. Enhancing Oversight of Rosters with Unique Conditions

**Two active rosters that operate under unique circumstances**

The Environment and Energy Division manages two rosters, one for the purchase of natural gas and one for the hedging of fuel prices (a third one relating to electricity was recently discontinued). Several circumstances distinguish these rosters from most others in the City:

- City Council has authorized contracts or agreements for the fuel and gas rosters to be executed by the Deputy City Manager/Chief Financial Officer and the Chief Corporate Officer (or their designates) respectively

- Purchases are made competitively, similar to most other rosters. However, due to fluctuating commodity prices the window for bidding is extremely short, often closing within the same day as issue

- Transactions are not entered into the SAP financial system until the time of payment.

**Currently managed entirely within the operating division**

Due to the above factors, PMMD has taken a significantly reduced role for these rosters. Regular processes such as reviewing the RFQ prior to issue, assisting in communication with vendors, receipt of bid evaluations from the division, or periodic audits are not being applied. These two rosters are in practice operating with almost no oversight from PMMD staff.

---

**Recommendation:**

5. City Council request the Director, Purchasing and Materials Management Division, to develop clear guidelines regarding contractor/subcontractor relationships within a roster, including the need for disclosure, responsibility for monitoring and analysis, and the resolution process when potential conflicts of interest are identified.
| Significant value of purchases made | Without effective controls in place PMMD is unable to ensure, as it does for other roster activities, that purchases are made in accordance with roster specifications and that the City is obtaining the best value on its purchases. The cost associated with these rosters is significant; over a three-year period, more than $20 million was spent under the natural gas roster, while the fuel hedging roster acquired contracts with a face value totaling over $100 million (actual cost varies depending on the settlement rate). |
| PMMD should ensure that the best price is received | While we recognize that it is impractical to engage PMMD for each transaction through the normal process, oversight can still be provided through other methods, such as subsequent periodic reviews. Since the quality of the product is not expected to differ between vendors and that vendors have met the City's credit rating requirements prior to being placed on the roster, the primary focus should be in ensuring that the City is receiving the best price on each call. |
| Schedule A currently does not cover hedging | As a side note, the Procurement Policy's Schedule A allows specific goods or services to be bought without a purchase order or sole source request. While the Schedule's Item 1.1 "Utility usage fees" clearly applies to the purchase of natural gas, it does not appear to cover the use of financial instruments (hedging). If the City's intent is to include price hedging/cost management techniques under this exemption, we recommend that the schedule be amended accordingly. |

**Recommendation:**

6. **City Council request the Director, Purchasing and Materials Management Division, to review controls relating to rosters with unique circumstances such as the ones held by the Environment and Energy Division, and ensure that there is sufficient oversight over its purchasing activity, in particular the bid receipt and evaluation process.**
C. OVERSIGHT AND PROCESS IMPROVEMENT

Outside of the day-to-day purchasing processes, PMMD has several periodic controls to help safeguard the integrity of the program. This section examines these controls and also provides some observations on the overall program processes.

C.1. Control Procedures Are Not Consistently Being Followed

43 rosters were active between 2014-2016

Based on a review of the SAP system, 43 different rosters had purchasing activities during the three years 2014-2016. We selected 6 rosters for different divisions and goods or services procured and compared their control process against requirements laid out in the Rosters Procedure. Table 4 below summarizes our findings:

Table 4: Summary of Control Process Testing

<table>
<thead>
<tr>
<th>Control Process</th>
<th>What is expected or required from the Procedure</th>
<th>What we found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master List</td>
<td>Buyers maintain a comprehensive list of all active and expired rosters in the City</td>
<td>13 out of the 43 active rosters (30% of sample period) were not on PMMD's list.</td>
</tr>
<tr>
<td>Buyer Audits</td>
<td>Buyers perform quarterly onsite reviews to ensure that operating divisions are making purchases in accordance with relevant policies and procedures.</td>
<td>2 out of the 6 rosters were not audited during a one year sample period. An additional 2 rosters were only audited once.</td>
</tr>
<tr>
<td>Quarterly Reports (Roster Tracking Form)</td>
<td>Divisional Roster Captains complete quarterly reports to inform PMMD of roster purchases made during the preceding quarter.</td>
<td>3 out of the 6 rosters reviewed did not complete quarterly reports at all. 1 additional roster completed the reports but never sent them to PMMD (and was never reminded to).</td>
</tr>
</tbody>
</table>

Employee turnover contributed to inconsistency

According to PMMD staff, significant employee turnover and the resulting workload was the main reason that staff could not maintain the procedures consistently. Some of this was observed during the audit; of the six rosters sampled above, only one retained the same Buyer from the rosters' creation to the time of audit.
Vendor rosters is a valuable procurement tool designed to expedite the purchasing process. However, it also delegates many controls from PMMD to the operating divisions. Consistent oversight is required to ensure that operating staff, who are not procurement professionals by trade, continue to acquire goods and services in a fair and transparent manner resulting in the best overall value to the City.

**Recommendation:**

7. City Council request the Director, Purchasing and Materials Management Division, to ensure that the required control processes as specified in its Roster Procedure are consistently implemented and that staff are appropriately following up on any issues identified. Where it is determined that a control is not practical or not working as intended, the Procedure should be reviewed and amended where needed.

### C.2. Opportunities for Efficiencies and Process Improvement

During the audit we identified several opportunities for process improvement, based on reviewing the Rosters Procedure, observing the program in practice, and discussions with PMMD and divisional staff involved. The first two points may help improve the effectiveness of the program, while the latter two may improve efficiency:

**Data needed for program assessment**

There is currently no comprehensive financial reporting of roster activity. A strong reporting process that includes roster activity across the entire City will provide PMMD with better information regarding program performance and usage, and support decision-making moving forward.

To ensure accurate reporting, data in the SAP financial system may need to be strengthened. The input field currently used to identify roster purchases is not validated; this means that transactions with the field entered incorrectly or not entered at all would remain undetected, resulting in purchase amounts being understated.
Rosters currently account for a small percentage of total purchases

Make roster information available to staff

The City currently spends around $88 million per year through rosters, which is just a small percentage of the $1.8 billion in goods and services it procures. Expanding its usage where appropriate will allow more operating staff to take advantage of the efficiency and benefits it provides. One possible way to do this is to increase awareness of the program.

Publishing the roster list may increase usage and acceptance of program

Information on active rosters is currently not published. Instead, divisional staff contact PMMD with procurement related inquiries, who may in turn refer them to a roster if one is available that suits their needs. Publishing the Master Roster List on the City e-net along with relevant information may save time answering inquiries, and more importantly encourage use of the program, either through creating new rosters or leveraging ones already in use by other divisions.

Simplify the master list

The Master List is a shared file jointly updated by all Buyers for their respective rosters. A significant amount of information is keyed in manually, some of which may not be necessary depending on PMMD’s objectives. Other fields such as award values may be more easily obtained from SAP than by manual entry (if needed at all).

Simplifying this process will achieve efficiencies for the division and increase the likelihood of staff consistently maintaining the document.

Revise the quarterly report

The Roster Procedure requires operating divisions to complete and send a report to PMMD every quarter. It is not clear what value this process adds as the SAP financial system already contains the information needed and is likely less prone to human error.

Out of a review of 6 rosters, only 2 Buyers indicated they were making use of this report (to choose a review sample, which could also be done in SAP). The division may be able to save time by moving to SAP based reporting.
Recommendation:

8. City Council request the Director, Purchasing and Materials Management Division, to review the roster management objectives and information requirements to identify opportunities for improving efficiencies and maximizing the use of rosters by divisional staff, including a consideration of:

   a. Developing a reporting process on the roster program's overall activities
   b. Publishing and maintaining an accurate list of active rosters available to City staff
   c. Simplifying input requirements for the roster Master List
   d. Revising the quarterly reporting process.

CONCLUSION

Eight recommendations to help improve program

The vendor rosters program, through which $88 million of purchases per year is made, brings several benefits to the City's procurement process including efficiency, shorter turnaround time, and consistency.

This report presents our observations and recommendations to help improve this program. Reviewing the design of its rotational rosters will help the City to obtain better value on the approximately $5.7 million per year it spends though this roster type. Strengthening PMMD's review processes and guidance will allow it to better protect against the inherent risks associated with this program, while making certain process adjustments may ease the administrative burden in managing this program and increase its usage in the City.
# AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

<table>
<thead>
<tr>
<th>This audit was part of the Auditor General's 2016 audit work plan</th>
<th>The Auditor General's 2016 Audit Work Plan included a review of the vendor rosters program administered by the Purchasing and Materials Management Division.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audit objective</strong></td>
<td>The objective of this review was to assess whether the vendor rosters program is achieving its goal of providing an efficient means of procurement while still maintaining an open, fair, equitable and accessible procurement process.</td>
</tr>
<tr>
<td>The audit included a review in the following areas:</td>
<td></td>
</tr>
<tr>
<td>• The governing framework over vendor rosters, including related policies and procedures</td>
<td></td>
</tr>
<tr>
<td>• Controls over the process used to establish a roster and to qualify vendors for the roster</td>
<td></td>
</tr>
<tr>
<td>• Appropriateness and adherence to the criteria used to select vendors within a roster</td>
<td></td>
</tr>
<tr>
<td>• Maintenance and usage of rosters, and</td>
<td></td>
</tr>
<tr>
<td>• Any other related areas identified during the audit.</td>
<td></td>
</tr>
<tr>
<td>The review period included purchases made through rosters from January 2014 to May 2017.</td>
<td></td>
</tr>
<tr>
<td><strong>Audit methodology</strong></td>
<td>Our audit methodology included the following:</td>
</tr>
<tr>
<td>• Review of relevant PMMD policies and procedures;</td>
<td></td>
</tr>
<tr>
<td>• Selection of a sample of rosters for in-depth review;</td>
<td></td>
</tr>
<tr>
<td>• Review of documentation maintained by either PMMD or the operating division managing the roster;</td>
<td></td>
</tr>
<tr>
<td>• Analysis of financial information;</td>
<td></td>
</tr>
<tr>
<td>• Meetings and interviews with PMMD staff and those from various operating divisions;</td>
<td></td>
</tr>
<tr>
<td>• Review of literature and other audit reports pertaining to the use of rosters.</td>
<td></td>
</tr>
</tbody>
</table>
Compliance with generally accepted government auditing standards

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
APPENDIX 1: Management’s Response to the Auditor General’s Report Entitled: “Obtaining the Best Value Through the Use of Vendor Rosters”

Recommendation 1: City Council request the Director, Purchasing and Materials Management Division, to:

a. Provide clear guidance on roster design. Unless there is an overriding consideration otherwise, vendor selection methods that prioritize cost should be used.

b. Update the Buyer review process for rotational rosters, such as including verification of how a vendor was selected, and that prices charged match the original submissions made to the REOI.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

As PMMD implements SAP Ariba, PMMD will revise the procedure for rosters to provide clearer guidance on roster design, and the role the Buyer will have in the review process for rotational rosters. Timeline Q4 2018

Recommendation 2: City Council request the Director, Purchasing and Materials Management Division, to provide guidance in its Roster Procedure on the use of different evaluation criteria during the roster qualification process.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

As PMMD implements SAP Ariba, PMMD will revise the procedure for rosters to provide clearer guidance on the use of different evaluation criteria. Timeline Q4 2018

Recommendation 3: City Council request the Director, Purchasing and Materials Management Division, to ensure Buyers provide adequate oversight of the roster qualification process, including a review of the evaluation outcome and documenting the decision process and rationale for deviations from the terms in the call document.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

As PMMD implements SAP Ariba and undergoes an Organizational redesign, PMMD will clarify the role of the Buyer in oversight of the roster process. Timeline Q4 2018

Recommendation 4: City Council request Director, Purchasing and Materials Management Division (PMMMD), to review current roster processes and make adjustments where necessary to ensure that controls developed in PMMD’s Unbalanced Bidding procedure are also implemented in all applicable areas of roster activity.

Management Response: ☒ Agree ☐ Disagree
Comments/Action Plan/Time Frame:

PMM will review how to incorporate the unbalanced bidding analysis into the Roster Process. Timeframe Q1 2018.

Recommendation 5: City Council request the Director, Purchasing and Materials Management Division, to develop clear guidelines regarding contractor/subcontractor relationships within a roster, including the need for disclosure, responsibility for monitoring and analysis, and the resolution process when potential conflicts of interest are identified.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

PMM will work with the City Solicitor to develop procedures related to contractor/subcontractor relationships. Timeframe Q2 2018

Recommendation 6: City Council request the Director, Purchasing and Materials Management Division, to review controls relating to rosters with unique circumstances such as the ones held by the Environment and Energy Division, and ensure that there is sufficient oversight over its purchasing activity, in particular the bid receipt and evaluation process.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

PMM will review the current processes for rosters held by the Environment & Energy Office to ensure that there is enough oversight over the use of the roster, and will document any changes as appropriate. Timeframe Q1 2018

Recommendation 7: City Council request the Director, Purchasing and Materials Management Division, to ensure that the required control processes as specified in its Roster Procedure are consistently implemented and that staff are appropriately following up on any issues identified. Where it is determined that a control is not practical or not working as intended, the Procedure should be reviewed and amended where needed.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

As PMMD undergoes an Organizational redesign, PMMD will review the roster procedure to ensure that the required control processes are consistently implemented and clarify the role of PMMD staff in providing oversight of the roster process. Timeline Q4 2018

Recommendation 8: City Council request the Director, Purchasing and Materials Management Division, to review the roster management objectives and information requirements to identify opportunities for improving efficiencies and maximizing the use of rosters by divisional staff, including a consideration of:

a. Developing a reporting process on the roster program’s overall activities
b. Publishing and maintaining an accurate list of active rosters available to City staff
c. Simplifying input requirements for the roster Master List
d. Revising the quarterly reporting process.

**Management Response:** ☒ Agree ☐ Disagree

**Comments/Action Plan/Time Frame:**

As PMMD undergoes an Organizational redesign and implements SAP Ariba, PMMD will review the roster procedure to identify improvements to the process including the reporting on the roster process, revising the auditing process and ensuring the Master List is up to date and published where all City staff can see. Timeline Q4 2018