

Chapter 7

Department of Transportation and Infrastructure Pre-mixed Asphalt Procurement

Contents

Why We Chose this Project.....	259
Background.....	260
Objective and Methodology.....	263
Conclusion.....	266

Department of Transportation and Infrastructure Pre-mixed Asphalt Procurement

Why We Chose this Project

7.1 The Department of Transportation and Infrastructure (DTI) spent \$10.5 million during fiscal 2011/12 on pre-mixed asphalt for use in road maintenance and repair work on provincial roadways. This figure excludes any purchases made on behalf the Province under the *Crown Construction Contracts Act* and any purchases made by NB Highway Corporation for maintenance of its roadways.

7.2 We chose to look into pre-mixed asphalt procurement by DTI due to:

- the significant level of expenditures in this area;
- limited oversight and control through central purchasing;
- issues and concerns raised by the public and private sector; and,
- previous findings by this Office.

Potential for Non-transparent Business Practices

7.3 Purchases of pre-mixed asphalt for use in road repair and maintenance are exempt from the rules under the *Public Purchasing Act* and therefore do not receive the same degree of government oversight and control as purchases done centrally through the Department of Government Services. As with most exempt purchases made directly by a department, the potential for non-transparent business practices is a concern and warrants close scrutiny by our Office.

7.4 We believe the legislature and the public want to ensure that asphalt is purchased in an equitable and transparent manner and for the best possible price from private sector suppliers.

7.5 In fact, questions in regard to the Department's practices around procurement of asphalt have been raised in the Legislative Assembly. An issue was brought forward on April 26, 2013, during the 3rd sitting of the 57th Legislative Assembly questioning the fairness and compliance of the Department's procurement practices. An investigation by the Office of the Ombudsman was cited during this session as a further example of potential shortcomings in the fairness of the Department's business procurement practices.

7.6 Consequently we planned an audit in this area during the summer of 2013.

Background

Overview of *Public Purchasing Act* (PPA)

7.7 Public procurement of goods and services is primarily governed by the *Public Purchasing Act* and the *Crown Construction Contracts Act*.

7.8 The *Public Purchasing Act* (the Act) governs public procurement for all goods and services not related to Crown construction.

7.9 The intent of the Act, as interpreted by government, has been to ensure that all suppliers have a fair and equal opportunity to compete for government contracts. The Act contains requirements to ensure that government suppliers are treated fairly and equally.

7.10 In brief the Act spells out the processes to be followed and the rules associated with the procurement of goods and services. It details such things as tendering rules and contracting processes. It also provides for instances where procurement would be exempt from some or all sections of the Act.

Exemptions to the PPA

7.11 There are two broad types of purchase exemptions allowed for in Regulation 94-157 under the Act. They include those under section 27.1 that require prior approval by the Minister of the Department of Government Services and the department exemptions in sections 30 through 44, which are standing exemptions and do not require the Minister's approval.

7.12 Sections 30 through 44 provide a listing by department of standing exemptions under the Act. Under this exemption and

subject to dollar or other criteria, departments may purchase goods and services directly without being subject to certain, or in some cases all, requirements set out in the *Public Purchasing Act*. For example, they do not need to go through public tender process and are not required to award contracts of supply¹.

Potential Consequences of Exempt Purchases

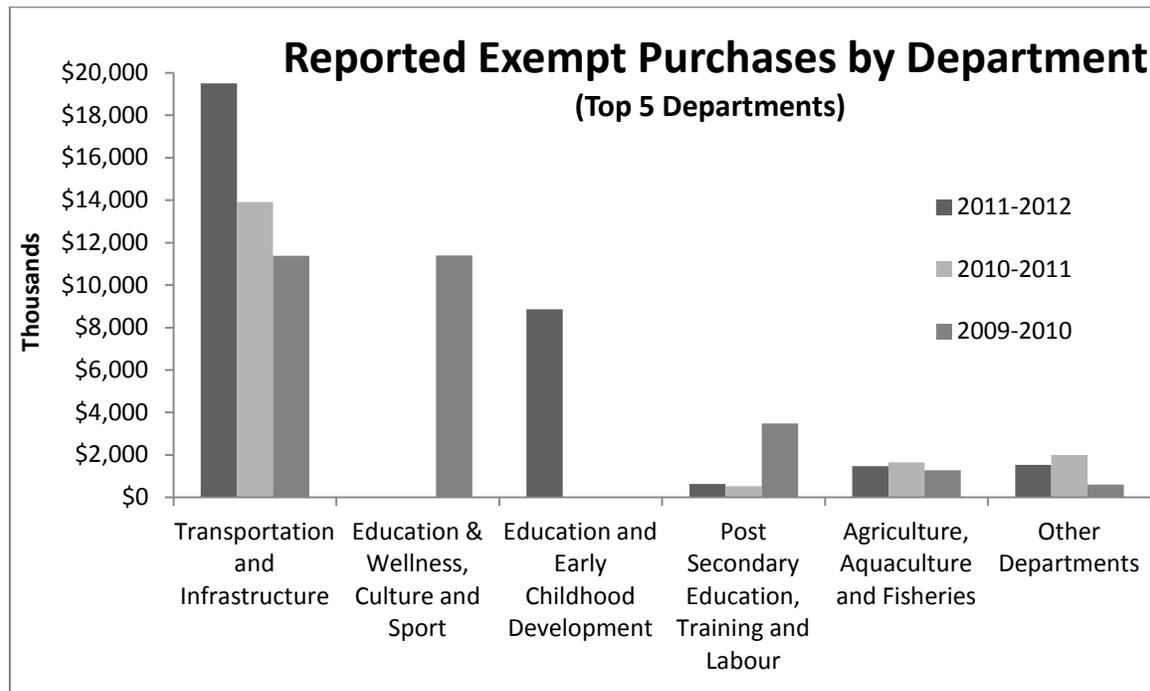
7.13 The impact of such a range of exemptions is considerable. The use of an exemption can result in access to a contract being restricted to only one vendor, thereby excluding other vendors from the usual procurement process. As well, using exemptions to purchase supplies and services may result in decreased competition and this, in turn, could lead to higher prices.

7.14 For purchases made under the exemption, the departments are required to report the total value of these purchases made during the fiscal year to the Department of Government Services (DGS).

7.15 The following chart shows the total value of the exempt purchases as reported to DGS for the three preceding fiscal years. The top five departments, by total exempt purchase value, are shown in Exhibit 7.1.

¹ Contract of Supply means a long term contract for the delivery of goods or services that has no quantities listed, has an effective date and an expiry date and an estimated value and whereby users can obtain goods or services directly from the vendor. (Department of Government Services. *Policy and Procedures Manual*. 2000,11.)

Exhibit 7.1- Exempt Purchases by Department



Source: Data provided by DGS (unaudited). Chart prepared by Office of the Auditor General.

DTI Extensive use of Exemptions

7.16 As shown in Exhibit 7.1, the Department of Transportation and Infrastructure has consistently had the highest amount of exempt purchases.

7.17 Section 44 of Regulation 94-157 under the *Public Purchasing Act* pertains to the Department of Transportation and Infrastructure (DTI). It provides a listing of the special exemptions to which DTI is entitled. Some of the items covered by standing exemptions include:

- sand and gravel;
- concrete mix;
- short term equipment rental; and,
- pre-mixed asphalt.

7.18 Many of the department exemptions are subject to spending caps. The purchase is exempt provided it is under a specified dollar amount. Sand, gravel, concrete and pre-mixed asphalt are exempt regardless of the estimated cost of each purchase. In other words there is no limit as to what can be spent under the exemption for those materials.

7.19 Pre-mixed asphalt for road maintenance is the single largest category of exempt purchases made by DTI under the department procurement exemption (see Exhibit 7.2).

Exempt purchases are acceptable where the department can show that transportation costs or technical considerations restrict the available supply base to local sources of supply.

7.20 In the case of pre-mixed asphalt, which is picked up hot, it must be sourced in close proximity to where it will be used so it can be spread effectively.

Exhibit 7.2- DTI Exempt Purchases by Type

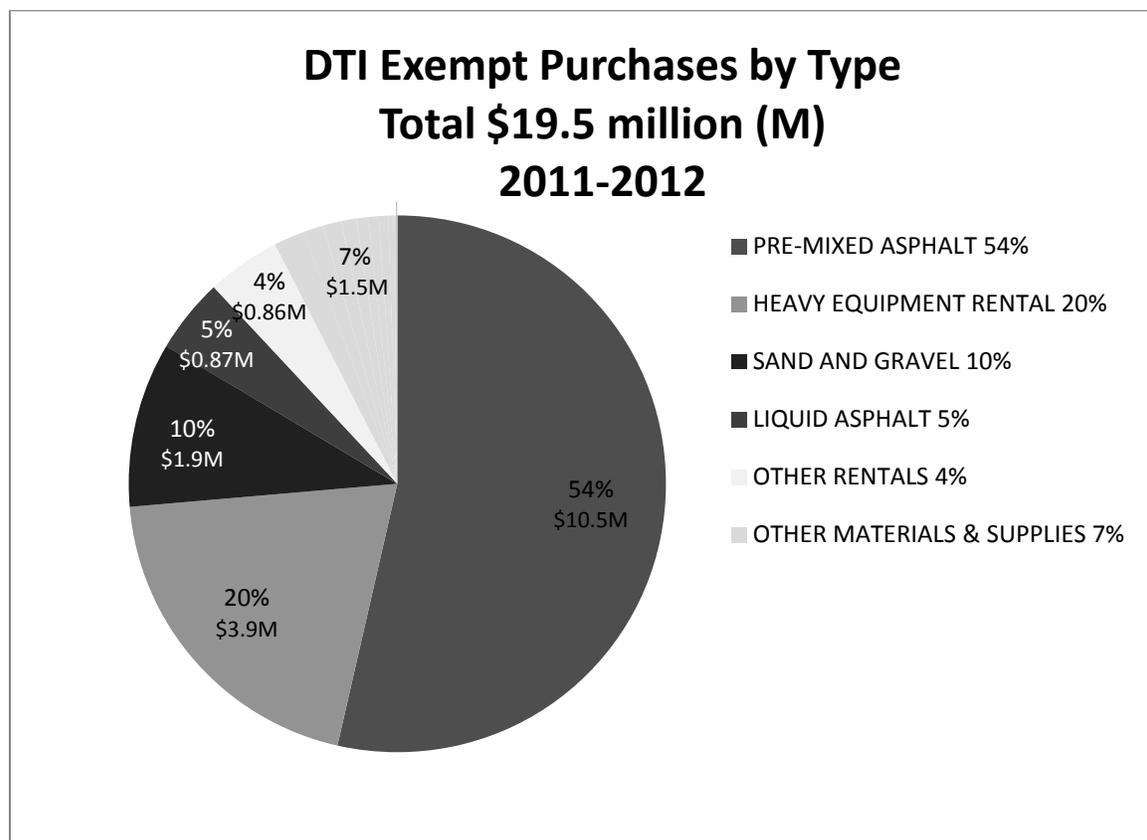


Chart data provided by Department of Transportation and Infrastructure for 2011-2012 fiscal year (unaudited); Chart prepared by the Office of the Auditor General.

Objective and Methodology

7.21 The objective of our work was to determine if DTI's exempt purchases of pre-mixed asphalt are being made with due regard for economy and transparency. We expect DTI to follow the intent of the *Public Purchasing Act* and adhere to best practices in its procurement processes.

7.22 We conducted interviews with DTI and with representatives from the Department of Government

Services. We analyzed supplier payment history, inspected invoices and analyzed account records.

DTI Process for Asphalt Purchases

7.23 Each spring DTI sends a letter to all known pre-mixed asphalt suppliers in the province asking for price quotes for the upcoming construction season.

7.24 All quoted prices received from asphalt suppliers are entered into a supplier pick-up price spreadsheet and an acknowledgement letter is sent to all suppliers who submitted a price quote. Starting in 2013, the complete supplier listing and price sheet is posted on DTI's website. In prior years, the price sheets were prepared by head office and grouped by district. Each district office received their own segregated listing, although some asphalt suppliers showed up in more than one district listing.

7.25 At the beginning of each month the quoted prices are adjusted based on changes in the Ministry of Transportation Ontario (MTO) binder index and the supplier pick-up price listing is then updated.

7.26 Day to day purchasing of pre-mixed asphalt for routine road maintenance is done within and at the discretion of each district, under the direction of the highway supervisor. Determination of where to source asphalt on a day to day or project to project basis is dependent on:

- price;
- location of the work;
- quantities needed;
- knowledge of what the plants are currently mixing (type of asphalt they are producing);
- anticipated traffic volume (demand) at the plant; and,
- perceived or historic turnaround times.

Purchase Decision Relies on Judgment of District Management

7.27 The current process relies on the experience and knowledge of district management to exercise judgment in sourcing asphalt supply, while considering all relevant factors.

DTI Improvement Project on Asphalt Paving Processes

7.28 The Department is involved in implementing a Six Sigma process improvement project as part of the Government's Performance Excellence Process initiative. The project is focusing on the complete asphalt paving process with the objective of reducing production costs. A

significant element of the asphalt paving is the actual purchase and delivery of the asphalt to the job site. The expected benefits of the project are value for money and improved level of service. The stated project goals are to: “gain an understanding of the factors that have the greatest impact on production cost and quality variation, then implement standard leveling practices, eliminate/minimize the impact of constraints, reduce production cost, and improve quality”.²

2010 Report of the Auditor General Volume I Recommendation

7.29 As part of the project, the Department is implementing a daily production rate tool. It can be used to assist in tracking the asphalt sourcing decision making process and analyzing the factors involved. Use of the daily production rate tool should allow for the capture and analysis of the numerous factors that influence the asphalt procurement process and how they may be optimized to achieve the lowest overall cost of asphalt on the road.

7.30 Volume I, Chapter 4 of the 2010 Report of the Auditor General, contained a recommendation to DTI about its asphalt purchase process. The report recommended: *that the Department review its purchase process for asphalt to determine if obtaining bids from asphalt suppliers would save the Province money.*

7.31 This recommendation stemmed from the payment and controls testing of our financial statement audit of the Province of New Brunswick. Within the sample tested was an invoice for pre-mixed asphalt, purchased directly by the Department of Transportation and Infrastructure.

7.32 The purchase was found not to be in violation of the *Public Purchasing Act* or any purchasing controls. The asphalt was purchased directly by the Department following the department exemption regulation within the *Public Purchasing Act*. However, we believed that requesting prices from multiple suppliers would result in cost saving opportunities for the Province.

7.33 At the time the Department’s response was:

We agree with your recommendation that the purchase

² Lean Six Sigma DMAIC Project Charter –Asphalt Leveling Review; Project Number:40-005, date 17-Jul-12

process for asphalt needed to be reviewed and in fact this process was recently undertaken. Quotations from various asphalt concrete suppliers are now solicited. The quotations are adjusted on a monthly basis, based on the change in the MTO [Ministry of Transportation Ontario] Binder Price Index. When choosing an asphalt supplier, the price, haul distance and productivity of work operations to complete the work are considered in order to obtain the most cost efficient supplier.

7.34 As part of our work, we followed up on the status of this recommendation. In regards to soliciting quotes from multiple suppliers, we found that DTI did change the purchasing process and now solicits prices from all known suppliers in the Province.

7.35 The Department did not conduct a detailed analysis of the impact of the 2010 process change on the cost of asphalt. However as part of the current improvement project, baseline asphalt prices have been calculated for use in future analysis of cost savings from process improvement initiatives currently being implemented.

Conclusion

Lack of Data on Considerations Other Than Price

7.36 Asphalt sourcing decisions are complex and involve consideration of many factors over and above the asphalt pick-up price. Plant capacity, turnaround time, and the opportunity cost of idle equipment and labour may all have an impact on the asphalt sourcing decision. Currently there is a lack of historical data on how these and other factors may have influenced this decision. This type of information is critical when evaluating value for money, particularly when the purchase was not at the lowest available price. The performance evaluation tool currently being developed should provide a means of recording and tracking for use in future performance evaluations whether by the Department or our Office.

7.37 We had some initial findings and observations from our preliminary planning phase in regards to the transparency and fairness of the purchasing process. While no vendor selection was made during the price solicitation process by head office, not all supplier prices were sent to all districts. Starting in 2013, the Department rectified this by creating a publicly available province wide listing of quoted asphalt prices. The Department is currently making other procedural changes such as changes to wording of their request letter. We believe these changes should, in future years make the process around price solicitation

clearer and easier to understand.

Decision to Defer Our Examination

7.38 However, as a result of the observations made during our planning phase, we recognized we could add more value and relevance by completing an examination of the new, rather than the legacy process. Consequently, we have chosen to defer continuation of our work to allow the Department the opportunity to complete the implementation of the process improvement project and other procedural changes to the asphalt procurement processes. We plan to proceed with our examination of asphalt purchasing by 2016.