

# **STRATEGY FOR MUNICIPAL PURCHASES OF GOODS AND SERVICES**

By

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## **ABSTRACT**

This paper explores how the application of purchasing expertise may benefit municipal government operations.

Municipalities are entrusted with public funds and have a responsibility to apply these resources in a cost effective manner for the benefit of all citizens within their jurisdiction. However, fiscal responsibility is not the only factor in municipal decisions. Municipalities are also entrusted with providing essential and non-essential services to the community. If these services are not delivered in a competent manner, risks may be introduced that would affect the community and local government. Or try: If these services are not delivered in a competent manner, the community and local government could be adversely affected.

Recognizing that all organizations are constrained by limited resources and that municipalities are further constrained by onerous legislative requirements and high citizen expectations, this paper analyzes purchasing options in this environment and identifies initiatives to improve performance.

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## GLOSSARY

<b>BC</b>	The province of British Columbia, Canada.
<b>BC Hydro</b>	A provincial crown corporation supplying most properties in the province with electricity.
<b>City</b>	Corporation of the City of New Westminster, a local government located in the centre of the Greater Vancouver Regional District in the Province of British Columbia, Canada.
<b>Community Charter</b>	Legislation developed by the province of British Columbia to regulate the activities of local governments.
<b>ERP</b>	Enterprise Resource Planning System: A computer software program that automates and integrates business operations. Often includes a financial general ledger that is supported by a variety of subledgers. These subledgers may include an accounts payable, accounts receivable, payroll, job costing, inventory and purchasing modules.
<b>GVRD</b>	Greater Vancouver Regional District, a regional district located in the southwest corner of British Columbia, Canada.
<b>OCP</b>	Official Community Plan. A city's plan showing the layout of key community features including residential, commercial and industrial zones; business clusters; density; and institutional zones.
<b>P-Cards</b>	Purchase cards used by organizations for the quick purchase of goods or services. These purchase cards function in a similar manner as credit cards.
<b>PMAC</b>	Purchasing Management Association of Canada. A professional organization for Certified Professional Purchasers, its students and purchasers in industry.
<b>RCMP</b>	Royal Canadian Mounted Police, a federally operated policing service.
<b>RFP</b>	Request For Proposal, document used by organizations to tender a purchase of goods or service.
<b>YM/YWCA</b>	Young Men's / Young Women's Christian Association. An organization that offers fitness activities for youth in a community.

# **1 INTRODUCTION**

As an urban municipality in south western British Columbia, Canada, the City is challenged with the application of best practices when purchasing goods and services for operations and capital projects. The City purchases many specialty items that are unique to our distinct services and are often supplied by a single source. In addition, the City's purchases range from low to high dollar value items, and some goods and services are common throughout the organization. Best practices in purchasing in this environment become complex. This report will explore municipal purchasing best practices by reviewing our operations, the policy environment, the industry, the value chain, and our strategic fit. The report will identify and analyze alternatives, and propose a recommendation and implementation plan.

## **1.1 The City**

### **1.1.1 Overview**

The City lies on the banks of the Fraser River in the heart of the Greater Vancouver Regional District (GVRD). As the oldest city in Western Canada, the City is rich in heritage, traditions and community spirit. The City provides public services, such as police and fire protection; water and electricity supply, sewage and solid waste disposal, roads maintenance, recreational and park facilities, and cultural activities. These services are provided at a level that is valued by the residents of the community. A 2003 citizen survey showed that 87% of respondents appreciate the type and level of City services they receive and are willing to accept reasonable property tax increases to maintain these services and related service levels (City, 2005)

Businesses in the City pay higher tax rates than residents, do not have voting rights, and do not use as many of the City's services. These businesses have recently applied pressure on City

Council to reduce tax rates in an effort to stem the outflow of businesses from the City and to attract new businesses into the area.

The latest census in 2001 showed that the population of the seven square mile City is approximately 54,700 people (Statistics Canada, 2005). Thirty-six percent of the population is between the ages of 25 to 44, 25% is under the age of 25, and 39% is over the age of 44. These statistics show that our population is aging, as there is a greater percentage of over the age of 44 than under the age of 25. The existing recreational and cultural activities, protective services, and customer service provided by the City were developed for the current demographic, and therefore, may need revision in the future. Change comes at a cost. At this time, it is expected that current City resources will be insufficient to manage these future changes.

To address the concerns voiced by local businesses and to prepare for the City's changing demographics; the City must either find new sources of revenue or reduce the cost of delivering its services.

### **1.1.2 Vision & Strategy**

A community strong in tradition does not change readily. Over the years, City operations have continued on a regular basis with few adjustments to process, staff and operations. However, with the election of a new mayor in 2002 and the re-election of councillors that raise customer issues and propose internal technology upgrades, the City has seen many changes in the past two years and is currently in the midst of a strategic planning process. With the assistance of a strategic planning consultant, phase one of this process involved the development of a vision, mission and strategic priorities. Phase two examined the City's resources to determine the feasibility of the City's vision, and phase three has just begun with the development of departmental business plans.

The strategic plan was developed with input from Council, staff and the public. The vision of a thriving City with a strong economic hub, liveable neighbourhoods and a proud riverfront is to be achieved through six strategic priorities. Three of these priorities address current public issues including: traffic and transportation problems, economic development activities and riverfront development initiatives. The other three priorities include: corporate effectiveness and efficiencies, neighbourhood liveability and participation in the 2010 Olympics.

The public's concern with traffic congestion is one of the City's biggest issues. Located in the centre of the GVRD, the City accommodates traffic flow from neighbouring cities throughout the day. From large transport trucks to smaller commuter cars, the City has become a major thoroughfare for the region. Due to traffic congestion, many commuters attempt to find a quicker route through neighbourhoods, thereby upsetting residents. This combination of main road congestion and increased residential traffic has become an issue for City Council.

The City's riverfront has had some residential high-rise development in the past few years; however, it is still a river port, with active rail lines and roadways running along the river. Industry and major transportation routes separate businesses and residents from the river, thereby limiting recreation and public enjoyment. Many of the buildings closest to the riverfront in the oldest part of the City are classified as heritage sites. Therefore, the development of a thriving downtown with modern facilities has not been realized to date.

The City is working actively with the Greater Vancouver Transportation Authority (GVTA) to manage the transportation issues, and the current increase City development shows promise for the riverfront. The City's contribution to these initiatives is through approvals of zoning, and development and building applications.

Growth and development require City resources. Starting from development application through project completion, and the influx of new residents and businesses, City services are required.

Developers require permits, inspections and approvals; new residents require electrical, water, sewer and solid waste infrastructure and services, protective services, and recreational facilities; and businesses require electric, water, sewer infrastructure and services, and protective services. The demand for fiscal responsibility and resistance to tax rate increases will provide challenges as the City grows.

### **1.1.3 Funding**

The City's revenue sources are from property taxation, sale of services, third party contributions and a share of gaming revenues. These sources fund ongoing operations and essential capital maintenance projects as required. Funding for larger discretionary projects proposed to meet visionary goals is expected from developers through amenity agreements, grants from senior levels of government, and other third party funding. If these funding sources are insufficient, the City looks to debt financing. Council expects visionary projects to be funded from third parties and debt since they are discretionary; however, Council has also directed City staff to explore efficiency and cost savings opportunities to reduce the need for significant property tax increases for operations and debt servicing costs.

Over the past several years, annual property tax rate increases of two to three percent have not met the demands of collective agreement wage increases of two and a half to four percent or the rate of inflation at an average of two percent. To produce a balanced budget as required by provincial legislation, City departments have reduced costs and introduced efficiencies where possible. These reductions, however, have not been sufficient to balance the budget in the past few years. The difference has been funded from transfers of gaming revenues into the general operating fund.

Gaming revenues have now become an issue. A majority of the revenues are now being used to fund ongoing operations, and the City's revenues from gaming have dropped by approximately

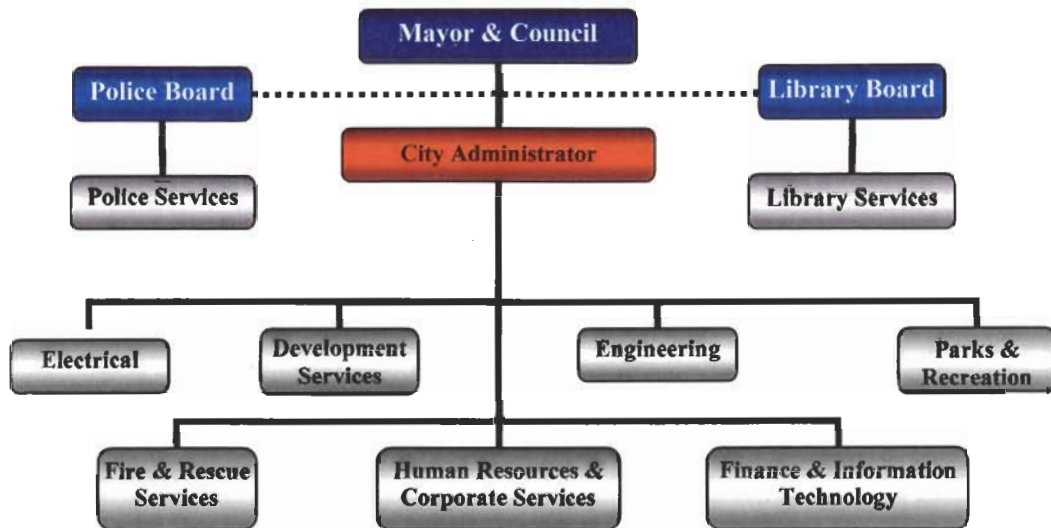
30% this past year. A new casino in a neighbouring municipality has contributed to the decreased revenue. The City expects to see increases in revenues from gaming in the upcoming year when a new casino and hotel are built in the City. This new casino will have increased revenues due to a larger gambling floor with more slot machines than the existing casino. However if casino revenues drop further or the expected revenues are not generated from the new casino, there may be a need to increase property taxes or limit City services.

An alternative to increasing revenues is reducing costs. Council would like to see this reduction in costs without a corresponding reduction in service levels. This is a challenge in any organization. In the City this issue may be addressed by implementing process efficiencies or by improving the City's method of purchasing goods and services. This report addresses the City's method of purchasing goods and services.

#### **1.1.4 Structure**

The organizational structure depicted in Figure 1 below shows the City departments and their respective operations. Purchasing activity is initiated and often performed at the departmental level. Overseeing the operations of the City as a corporate entity is the responsibility of the City Administrator.

**Figure 1: Organization Chart**



This structure is very important as the City tries to remain responsive to customer demands. In a highly political climate with a strong unionized workforce, it becomes difficult to provide timely public services to the community if a corporate approach is used. Each department requires autonomy to make quick decisions for routine operations. As a result, the decentralization of the City's purchases has evolved. This decentralization of purchasing includes departmentally driven internal controls; independent supplier selection; inconsistent tender and contractual documents; and decentralized purchasing documents. Corporate benefits from cross-departmental purchases, including economies of scale and corporate efficiencies, are hard to achieve in this environment

## **1.2 Procurement and Purchasing**

Procurement is the complete process of deciding to purchase, receiving the product, storing the product and paying the invoice. The purchasing process extends from the "decision to purchase" stage through the tendering process to finalizing an agreement with the vendor.



### **1.2.1 The Structure**

Purchasing Services is a section of the Finance & Information Technology department and has one qualified buyer as its only staff member with the title Purchasing Coordinator (Coordinator). The Coordinator's role is to provide a corporate structure for purchasing that includes development and communication of purchasing policies and procedures; purchasing assistance with high cost and sensitive items; and assistance with departmental purchases as requested by departmental staff. The Coordinator has assisted some departments with their purchases and agreements in the past few years with considerable financial and contractual success. However, due to departmental resistance and decentralized records, the Coordinator has not had much success in identifying purchases early in the process to benefit non-responsive departments.

In the past two years, the Coordinator has assisted departments with purchases of approximately \$2 million annually. With the assistance of the Coordinator, departments have realized average savings of 16% and have developed more robust contracts and agreements. The 16% savings are calculated using the price offered by the preferred vendor to that offered by the next lowest priced submission to the City's Request for Proposal (RFP). This calculation is reasonable considering that the departments, without the assistance of the Coordinator would not have selected the lower priced vendor. Departmental staff tends to use vendors it has used before and that are easily accessible. Staff members are not aware of new vendors entering the market due to time constraints, as purchasing is usually an added function to their regular workload. Some staff may shop around but most are too busy with their daily activities to take the time to explore the market. A knowledgeable purchasing agent's assistance may help the department stay current with the suppliers in the market. The following chart shows some of the savings achieved by the City when the Coordinator assisted departments with their purchases in the past few years.

**Table 1** Realized Corporate Savings: By Applying Purchasing Expertise

YEAR	ITEM	AMOUNT PAID	AMOUNT SAVED	% SAVED
2001	Desktop and Laptop Computers	\$448,373	\$234,276	34.3%
2003	Computer Monitors	\$139,995	\$22,476	13.8%
2004	Desktops, Laptops & Printers	\$772,618	\$177,971	18.7%
2004	Vehicles	\$426,689	\$18,518	4.2%

\* In 2002 the Coordinator was implementing the distribution module for the City's new ERP system.

### **1.2.2 The System**

In 2002 the City implemented a new Enterprise Resource Planning (ERP) system. The system included modules for the City's general ledger, accounts payable, accounts receivable, payroll, human resource management, job costing, and distribution. The distribution module contains the purchasing and inventory function. Prior to the change, the City had a legacy system that was no longer supported by the developer. Parts and expertise were hard to find and it did not integrate well with other systems.

Purchasing activities were not recorded in the legacy system; records were manual and the process was informal. Purchases were often made by phoning the vendor, receiving the goods and paying the invoice when received. The only centralized information regarding purchases was attained through the accounts payable system.

The City anticipated corporate efficiencies with the development of a new system. A single source of data entry would integrate with information in related modules and external downloads for production of reports for analysis and decision-making (trying to rework the sentence, but not sure I understand it properly). The City has implemented the system and the benefits are now visible for many of the modules, however, the distribution module in the ERP is still

underutilized. Currently 23% the purchases are processed through the purchase order system, 9% through Purchase Cards ('P-Cards'), and the remaining 70% through accounts payable only. P-Cards are used by authorized City employees to purchase small dollar value items. These cards function as corporate credit cards. Chapter three provides further information regarding the process.

### **1.2.3 The Environment**

In November 2002, the City's voters elected a new mayor. The mayor's election promises included a review of City services and corporate structure. In 2003, a corporate review was conducted to understand the City's organizational structure and a number of recommendations were made. As previously indicated, the City initiated a strategic planning process in 2004 to create a strategy for the City and to look at the services offered by the City.

The organizational review was finalized in the fall of 2003, and the recommended changes to the corporate structure occurred in the spring of 2004. Along with adjustments and changes to the corporate structure by senior management, the organizational review addressed the level of vertical integration in City government. The report recommended horizontal integration in areas of the City government that might benefit from reduced duplication, application of expertise, financial gain, improved decision making and reduced political and legal risk. One of the improvement areas identified in the report was the purchasing function and the method by which the City purchases goods and services.

### **1.2.4 The Process**

The City's current purchasing process provides authority to departmental staff for purchasing of goods and services for all their operations and capital needs. All purchases under \$100,000 may be approved by either departmental staff or the department head. Purchases over \$100,000 must

be presented to Council through a report for approval. The process of identifying a need, selecting a vendor, receiving the goods, and authorizing payment remains in the department.

### **1.3 Issue**

The City benefits economically from large unionized industries including pulp and paper mills, sawmills and breweries. Several union head offices are within City boundaries, and the City's fire and police unions are well supported by the community and by City Council. Potential cost reductions from downsizing or wage adjustments are not readily supported in this environment.

Fifty percent of the City's \$100 million annual budget is used for salaries and wages. A further 26% is for single source vendors such as the GVRD (for water, sewer and solid waste services), leaving 24% for tools and resources required by staff to provide the necessary City services. This 24%, or approximately \$24 million, is an area where applying purchasing expertise might benefit the City.

The City has a highly decentralized structure and purchasing responsibility is distributed to staff throughout the organization. Purchasing records are not centrally located and understanding City commitments is not possible unless significant manual effort is applied to collecting departmental records.

Departments value their ability to make quick purchases as needed to manage their operations. Purchasing goods and services in this environment is often done without the assistance of a purchasing agent and is an added duty to staffs' regular jobs. Staff trained in fire protection, recreation, engineering, etc. are purchasing large quantities of goods and services, often in a rushed manner, resulting in hasty contracts and agreements that may not be reviewed by professionals and that may increase legal, and political risk to the City.

In addition, when purchases are made in an unplanned manner on a regular basis, organizations cannot achieve the economies of scale available to entities purchasing large volumes of goods or services, or may pay more than necessary for emergency purchases. These purchases may not be in the best interest of stakeholders.

Organizations that have transitioned their purchasing practices to a corporate focus of horizontal integration have streamlined the purchasing process and shown a resultant savings of between two to five percent annually (Strategies for Purchasing Transformation 2002-2005, 2nd Research Briefing MAI Institute for International Purchasing Bordeaux Business School). Two percent of \$24 million is \$480,000. With operations at the City vertically integrated and departments requiring autonomy to meet the needs of their customers in a timely manner and ensure the unique nature of their operations is respected, a change to horizontal integration becomes a challenge.

## **1.4 Summary**

The City has an opportunity to reduce costs by changing the method it uses to purchase goods and services. Change has been slow in this municipal environment. Recent events however, including a corporate review of the organizational structure have led to changes. Along with the implementation of a new centralized computer system, a changing trend has developed which may present an opportunity for the City to introduce improvements to its purchasing environment. Constraints limiting the flexibility of change with the purchasing function are internal and external. These constraints are discussed in the following chapter.

## **2 POLICY ENVIRONMENT**

Government entities are well regulated for protection of the public trust. Municipal regulations are government driven and therefore clear legislation exists regarding municipal conduct. The purchasing of supplies and materials is not as regulated by the government as other activities, and therefore more flexibility exists. This chapter describes the policy environment of municipal purchasing and its evolution.

### **2.1 Municipal Environment**

#### **2.1.1 Municipal Legislation**

A local government is generally defined as a government, other than the federal or provincial government, that has jurisdiction over a defined territory; is governed by a body that is locally elected, either directly or indirectly; and has the power to impose property taxes either directly, indirectly or conditionally (Bish, 1999). Municipalities are the responsibility of the provincial governments and are not recognized as a separate government under the Constitution (Bish, 1999).

Municipal authority is granted by the province through the Local Government Act and the Community Charter. Expenditure authority, Section 173 of the Charter, limits expenditures to those authorized by City councils through the budgeting process, and the Treasurer is responsible for the City's financial affairs (Section 149). Beyond this very high level guidance, municipalities are left to run their operations with little additional direction from the Province other than a reporting requirement under the Financial Information Act. This Act requires a municipality to prepare a report once a year listing expenditures to suppliers that are greater than \$25,000 in aggregate per annum.

The province has not legislated detailed procurement expectations for municipalities; however, it has signed an agreement with the federal government for fair trade practices. The province has asked municipalities to support this agreement.

### **2.1.2 Accounting and Audit Standards**

Financial scandals following the terrorist attacks on the World Trade Centre in New York on September 11<sup>th</sup>, 2001 and the subsequent drop in stock market values created a need for the US to address the confidence level of investors. For this purpose, the US introduced the Sarbanes-Oxley Act of 2002 (SOX). This legislation created a new independent governing body with a board of directors responsible for the integrity of public auditing firms. This board has since been established and is required to register public accounting firms, establish standards, conduct investigations and disciplinary proceedings, impose sanctions, and enforce compliance. Recently, audit firms are legally required to test for internal controls and procedures and are not permitted to provide any non-audit services to their clients. Under Sections 103 and 201 of SOX, the new board is responsible for ensuring that firms comply with these added requirements (AICPA, 2005).

Following the lead of the United States (US), Canada has proposed amendments to the Canada Business and Corporations Act (CBCA) to reinforce investor confidence (Berube, 2005). The changes include: director independence, separation of CEO and Chairman of the Board duties, independent director audit committees to recommend corporate auditors, and increased and additional penalties for misrepresentation on financial statements. Standards for audit certification will remain with the Canadian Institute of Chartered Accountants (Western Law, 2005).

The City's external auditors expect the City to follow the SOX requirements, and meet the new internal control standards. These standards will be audited by the external auditors annually.

This change will require the City to ensure that appropriate internal controls are in place for the purchases of goods and services throughout the organization.

## **2.2 External Purchasing Environment**

When municipal legislation and guidelines are silent, external legislation and guidelines become respected standards for internal operations. Since good purchasing practices are silent in municipal legislation, the Sale of Goods Act, the Agreement on Internal Trade, and the Purchasing Management Association of Canada provide guidance for City purchasing efforts.

### **2.2.1 Sale of Goods Act**

The Sale of Goods Act is applicable for agreements between buyer and seller. This Act outlines when an agreement is binding, the duties and rights of each party, and the actions for breach of agreements. All employees buying goods or entering into contracts for an organization should be aware of the Act and the associated legal risks.

### **2.2.2 Agreement on Internal Trade Implementation Act (AIT)**

Following the Free Trade Agreement between Canada and the US, the Canadian federal government introduced an internal agreement with the provinces. This agreement further supported free trade at the provincial level with our American neighbours. The intent of the legislation was to achieve a reduction in or elimination of barriers to free the movement of goods, services, and people between Canada and the US. This legislation is expected to enhance competitiveness of Canadian businesses; build sustainable development; and create a stable domestic market that is open and efficient (Department of Justice, 2005).

British Columbia (BC), along with the other nine provinces and two territories, has entered into this agreement with the Canadian government. BC has asked municipalities to adopt this legislation. Municipalities that have adopted this legislation to date have updated their municipal



purchasing policies to include the AIT and have had Council's approval for the updated policy. Although compliance with the AIT is not legislated by the provinces for municipalities, it is strongly recommended. Non-compliance weakens our country's participation in free trade and the objectives of enhanced competition and an open efficient market.

### **2.2.3 Purchasing Management Association of Canada (PMAC)**

The Purchasing Management Association is a professional organization for Certified Professional Purchasers (CPP), its students, and purchasers in industry. This organization has a set of ethics for its members. These ethics guide good purchasing practices in organizations and include values of honesty, integrity, responsibility, professionalism, conformity to laws, respect for supplier competition and the public interest (PMAC, 2005).

Professional purchasers in industry with PMAC memberships are well respected for their competence and ethics, because there are strict penalties for ethics violations such as suspensions and loss of membership. Employees with purchasing duties in organizations benefit from applying purchasing ethics when addressing challenges by suppliers regarding proper purchasing practices, reasons for supplier selection and a fair competition process for all capable suppliers.

## **2.3 Internal Purchasing Environment**

Municipalities, like all organizations, develop their purchasing structure based on sound purchasing practices and the corporate environment. Sound purchasing practices are often formalized in a purchasing policy document that has been approved by Council. All employees purchasing on behalf of the municipality are required to comply with this policy. The methods used by municipalities when they purchases goods and services are further refined by the internal corporate environment. The purchasing policy and internal considerations are discussed as follows:

### **2.3.1 Purchasing Policy**

The City has a purchasing policy that helps direct corporate purchases. The policy guides staff on principles, ethics, and the tendering process. It sets approval levels, quotation requirements, and exceptions, and establishes a requirement to obtain best value. Best value is important to the City. It includes an assessment of the quality and availability of the product or service, and an evaluation of a supplier's past performance. Through this process the City also looks at obtaining the lowest life cycle costs. The policy is a living document that changes as internal purchasing processes change.

### **2.3.2 Corporate Support and Culture**

The effectiveness of municipal purchasing efforts depends on the support provided by City leaders. The purchasing policy approved by Council must be followed. Checks and review procedures should be in place to monitor compliance, and an accountability process should be adopted to prevent non-compliance. The introduction of changes to purchasing processes is easier in a supportive environment.

Corporate culture may limit the support received from City leaders. Culture is a learned set of behavioural patterns and beliefs (Glossary, 2005). The City's culture has evolved over more than one hundred years and is ingrained throughout the corporate environment and the community. Characteristics of the City's culture include a strong sense of tradition and heritage. The union environment is well supported, departmental services are valued, and change is introduced gradually, if at all.

In this environment, union leaders exercise their considerable power to influence Council decisions. Community groups and very vocal individuals also affect Council decisions. And if the City has a strong senior management team, they may also have a great deal of influence.

Purchasing efforts, however, are internal to the organization. Union issues are limited at this time, since the Purchasing Coordinator is not a union member. The public is not interested in detailed City operations if City services are delivered as expected. Therefore, the senior management team directs internal decisions relating to the purchasing process.

The senior management team consists of departmental leaders and the City Administrator. Within this group, the service departments that respond directly to the electorate are highly valued. These departments have become leaders of internal decisions. Introduction of any corporate change to purchasing methods requires significant communication and acceptance from these departments.

### **2.3.3 Resources**

A strong purchasing function dedicated to obtaining best value for the municipality requires skilled and dedicated staff. Staff hired for the purpose of purchasing goods and services for an organization often hold a CPP designation or are students of the program. These professional purchasers are bound by strong purchasing ethics.

Good purchasing practices help organizations reduce costs and limit legal risk. Cost reductions may be achieved by purchasing in volume. Tendering documents that are well developed help purchasers obtain high value products with few frustrations. Efficiencies may be realized when common items purchased by many are consolidated to be purchased by a few. And if all purchases are centrally recorded and the information is readily available to departments, savings and efficiencies may be realized by researching the database for future purchases.

Legal risk is a risk from uncertainty due to legal actions or uncertainty in the applicability or interpretation of contracts, laws or regulations (Risk, 2005). Legal risk is high in a decentralized purchasing environment where business processes are not audited on a regular basis. In this

environment, processes, internal controls and supervisory review vary considerably from department to department. And due to cost or time constraints, contracts and agreements may be signed without review by the City Solicitor.

In today's demanding work environment, employees are asked to multi-task and do more with less. Often corporate cuts to services come at the expense of legal risk mitigation and increased costs. Employees asked to purchase goods and services along with performing their regular duties find their time stretched and often do not plan their purchases. Their limited knowledge of sound purchasing practices also constrains their ability to purchase effectively.

Departments resist introducing a purchasing professional into their environment for many reasons. They hesitate inviting a professional to critique their purchasing processes. At times, a purchasing agent's initial introduction may produce delays due to a learning curve. However, a perception of lengthy delays is also emphasized when departments do not identify a need until it becomes an emergency.

Profit oriented enterprises recognize the importance of good purchasing practices. Supplier relationships and best value purchases are very important to their business and on-going operations. Although the goals of municipalities differ from those of business, implementing purchasing practices to reduce costs should be a common goal of both.

Putting a priority on cost reductions, corporate efficiencies and legal risk mitigation offer a strong business case for developing a process to determine best practices for City purchases. This process will require a cost benefit analysis to determine an optimal solution. If purchasing expertise is required in the recommended solution, resources should be made available.

## **2.4 Summary**

The Community Charter provides municipalities with broad powers for expending taxpayer money to deliver the services demanded by the community. Legislation and guidance for the purchase of goods and services is through the Sale of Goods Act and PMAC. These entities provide the legal framework and purchasing ethics between sellers and buyers. Significant changes are expected in the policy environment due to recent national security issues and financial scandals. With these expected changes, our purchasing environment and the methods employed by the City for purchasing will need to change. A professional purchasing body exists to help organizations manage this upcoming change.

The City has many internal constraints that limit potential change. The strong union environment combined with a strong sense of tradition and heritage makes change a slow process. Departmental resistance may also prevent a successful change process. Therefore, a cautious approach with good communication is required to transition current purchasing methods to robust processes. Support from City leaders and funding of a new purchasing professional are also key success factors.

The first chapter introduced the City. The second chapter outlined the City's legislative environment and provided an understanding of internal constraints. The next chapter will illustrate the purchasing process within the City through a value chain analysis.

### **3 VALUE CHAIN ANALYSIS**

The City strives to deliver a high level of municipal services at the lowest possible cost. A value chain analysis for a profit oriented company helps the firm understand the activities from which it develops a competitive advantage and creates shareholder value.

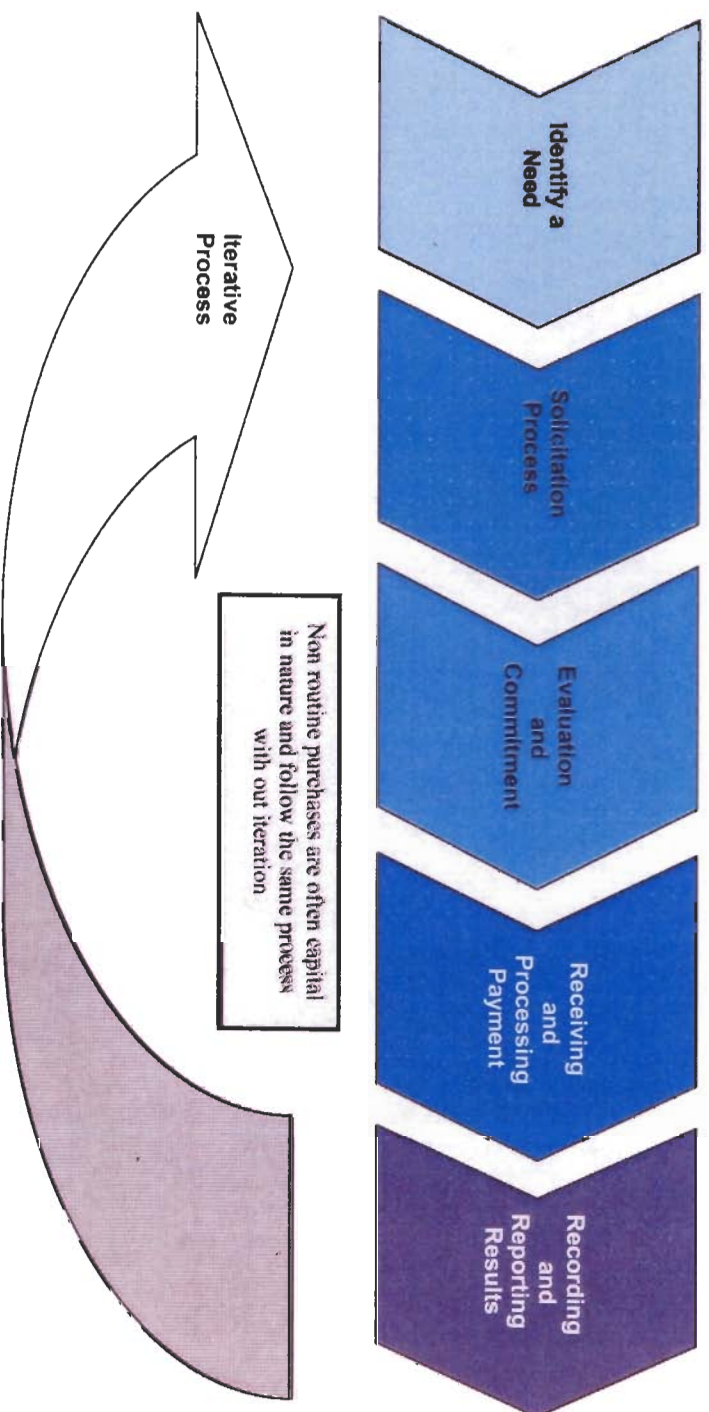
The goals of a profit-oriented firm are not the same as a municipality. However, a municipality may benefit from using the same value chain model to understand its core competencies. An analysis of the value chain may help municipal governments focus their efforts on their strengths and leave ancillary services that are not core competencies to other service providers. This strategic reallocation of resources may assist the City with cost reductions and savings.

The City may also benefit from applying the value chain to its internal processes. For the purchasing process, the value chain will help the City understand its core competencies and strategically align expertise to where the greatest benefit exists. This will allow the City to become more efficient and save money.

Although creating shareholder value is not a municipal goal, shareholder value in a profit-oriented firm equates to taxpayer value in local government.

### 3.1 Industry Value Chain

Figure 2: Industry Value Chain



Based on Bukszar, 2005, and Porter, 1985

The value chain diagram above shows the steps in the purchasing process for large value purchases. Smaller value purchases do not require tender documents, and very small purchases may not require a rigorous evaluation of potential suppliers. However, all purchases require identification of a need, notification to the supplier, receipt of goods, and payment and recording of the transaction. The feedback process adds departmental and corporate value.

An analysis of the industry value chain follows identifying the City's core competencies and how to apply this expertise for maximum corporate benefit.

### **3.1.1 Identify a Need**

A need to purchase goods and services comes from a variety of sources. These sources range from public or political demands for services to regularly scheduled maintenance. Each activity often requires a purchase of supplies to deliver the service. In addition, changes such as legislation, technology and activities in neighbouring municipalities often trigger a need for the purchase of goods and services or the application of purchasing expertise.

Public demand may be for protection from criminals, fires and floods. Maintenance schedules are critical for water supply, roads and sewer discharge services. Political demands often originate with individuals or community groups. Legislative changes occur on a regular basis as cities demand autonomy and the public demands accountability. Neighbouring municipalities may change their service delivery methods which, in turn, may impact demands by local citizens. And technological changes are becoming more common in our society.

Identification of a need is often at the departmental level. Departmental leaders manage departmental resources. If these leaders need to purchase an item, they know the quantity, specifications and timing of the purchase. Therefore, identification of a need is a core competency of city departments.



### **3.1.2 Solicitation Process**

Searching for a vendor to supply a required good or service may be achieved through a rigorous solicitation process. The solicitation process includes preparing a tender document, offering the tender through a bidding process, and receiving responses to the tender.

With proper planning the tender document clearly identifies the requirements of the purchase to ensure that only qualified vendors submit proposals. Efficiencies are gained when the number of proposals is limited to those meeting the City's requirements. A good tender document also ensures that the City receives the intended goods or services. The tender is offered to selected vendors from a bidders list or on BC Bid, an open tendering forum in British Columbia. Responses are received and evaluated.

Departmental core competencies lie with service delivery. Departments also have considerable knowledge of special resource requirements specific to the service offered. Service delivery and maintaining high competency levels in departmental activities occupy much of departmental staff time. Knowledge of best practices in purchasing is not a departmental core competency. Often purchasing is added to an employee's job duties without providing the employee with formal training. Therefore, the employee is often unaware of best practices in purchasing or purchasing benefits and constraints. Departments have indicated that they have experienced difficulties when handling supplier questions. With sound purchasing practices, these questions may be handled professionally.

This solicitation process benefits the City greatly when purchasing high dollar value items. Costs exceed benefit however, if this process is applied to low dollar value purchases. Smaller purchases are purchased more conveniently by departmental staff from easily accessible vendors and paid by a City issued purchase card.

The solicitation process is a core competency of qualified purchasing agents.

### **3.1.3 Evaluation and Commitment**

Responses to tenders and requests for proposals are received by the City by a specified date and time. The responses are then evaluated through a well-defined process that not only looks for lowest cost, but also best value. The process starts before the responses are received allowing for an unbiased, fair evaluation. A clear set of criteria is established to evaluate the proposals. The criteria include a financial component, technological and service expectations, and vendor history.

The evaluation is performed by knowledgeable departmental staff, experts (as required), and purchasing agents. Once in agreement, the supplier is notified and the agreement solidified through a purchase order (PO) or contract. Both the purchase order and contract include both a clear understanding of the agreement, and terms that protect both parties' interests. If the supplier agrees to supply the goods or services on the PO, it also agrees to the City's terms.

### **3.1.4 Receiving and Payment Processing**

Once the solicitation and evaluation processes are complete, the City receives the items ordered. For internal control purposes, the items are received by someone other than the purchaser. This control ensures that two people are aware of the purchase and that the goods are authorized and used for City purposes. To acknowledge receipt of the items, each department enters receiving information into the system. If the system is not used, the City's record of receipt is the signed invoice.

Once an invoice is received, it is processed by a senior staff member with signing authority. The signed invoice is sent to accounts payable for payment processing.

Departmental core competencies include receipt of goods or services and invoice processing. Payment processing is performed by a centralized accounts payable function.

### **3.1.5 Record and Report Results**

Recording and reporting results are very important activities in all organizations. Profit oriented firms recognize the importance of knowing their company's purchasing habits, identifying areas for savings and managing legal risk. For the same reasons, government entities also benefit from evaluating reports generated from a centralized purchasing database.

Reporting to external entities is also important. Local governments are required to report information to the provincial government as legislated. The Ministry of Community, Aboriginal and Women's Services (Ministry) requires an annual expenditure report from each municipality in British Columbia. This report lists each of the City's suppliers that were paid more than \$25,000 in total for the previous year.

Reporting becomes much more efficient when the reports are generated by the system. In the past, preparing the Ministry report was cumbersome and became a manual process when two systems containing the data were not integrated. Six months ago, the City engaged a consultant to create an automatically generated report that combines the purchasing information in the ERP system to that of the P-Card system in order to create an integrated report. The City has saved staff time using the system to generate this report.

Additional reports may also assist staff with making informed decisions about departmental and corporate purchases; however, currently these reports are limited. This is an area where the system can be improved.

Organizations implementing ERP systems often tend to implement 90% of the planned capabilities. Industry data shows that the last 10% of functionality is not addressed or is impacted by budget limitations. Failure to achieve this last 10% reduces the value added benefits. This last 10% includes reports for review of operations and reporting to external entities.

Limiting the reporting function of a new system significantly affects the benefits of implementing the system. Often data entry into the system takes longer than recording the transaction manually. The system benefits are realized when concise informational reports are retrieved.

Therefore, reports from the system that create a schedule of purchases based on expiry dates of contracts may assist the City with planning purchases into the future and with time management. Other reports providing costs analysis and trend analysis help with obtaining best value purchases. The City has found that prices vary from department to department for the purchase of similar or identical products. These purchases may be researched in the system to identify cost savings.

Purchasing processes may also be improved by analyzing purchasing data. Identification of problem areas, such as duplicate invoice payment, is possible with purchasing data analysis. Contract negotiations may be combined for two departments purchasing similar services from the same vendor. Further, employees can network with other departments while becoming more familiar with the purchasing system to improve their processes and skill with the system.

Comprehensive process improvement initiatives also benefit from an analysis of purchasing data. These improvement studies require substantiation of current processes before areas for improvement can be determined. Purchasing data may support the information gathered through enquiry.

Reporting in an organization is most beneficial if the information is captured in a single database and reports are generated from this information. Therefore, support of the purchasing system data entry and report generation should be core competencies of a centralized purchasing function. .

### **3.1.6 Iterative Process**

The iterative process is a value added step that, if standardized through an ERP system, may be very beneficial to an organization. This step analyzes reports to help assess supplier performance and plan future purchases. The feedback loop uses the analysis by flowing information back to the first step of need identification.

To adequately assess the performance of the services delivered, municipalities must measure the results of their efforts or those of their contractors. This measurement can assist cities in determining whether the service delivery was effective, the costs met budget, alternatives exist, or if there is a need to devolve the service. Devolved services are services that are no longer offered by, or the responsibility of the municipality. A local government may consider devolving services when other organizations are ready to pick up the demand or if the municipality is struggling financially to meet essential service demands.

Measured results can show the state of the current infrastructure, where future efforts should be applied, and other immediate concerns. The results may also identify whether the suppliers have met the City's standards and if they should be used again. At this point it is important to record an evaluation of the supplier in the system for future use. Collected data may be shared among municipalities in the GVRD as another method of saving time and effort and achieving economies of scope with neighbouring municipalities. Reports from the system may also be used to identify routine purchase patterns to help schedule future purchases.

Departmental staff members often receive the goods or services. Therefore, tracking supplier performance is considered a departmental core competency. If the system is used to gather purchasing information and if a sufficient number of purchasing agents are added to a centralized purchasing function, a corporate scheduling of purchases becomes the purchasing team's core

competency. Therefore, the core competency for this iterative process is a combined effort by the department and the purchasing agent.

### **3.1.7 Industry Value Chain - Summary**

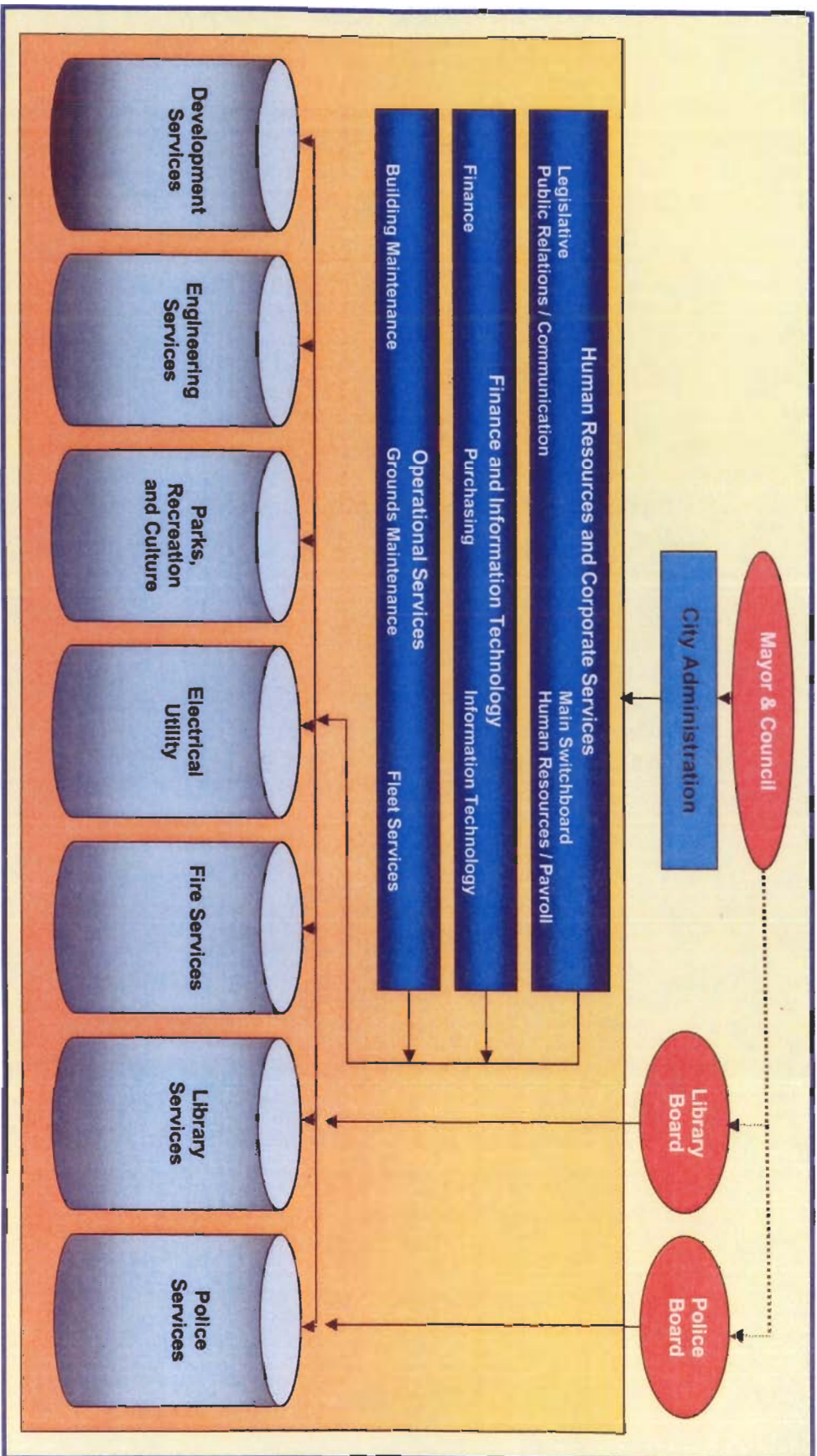
The industry value chain shows the basic steps in the purchasing process. Understanding the unique specifications of items to be purchased is a departmental core competency. Understanding suppliers, tendering documents, negotiating contracts and agreements, and using the purchasing system are a purchasing agent's core competencies. Combining the competencies of both areas can help the City reduce costs and legal risk.

## **3.2 Firm Value Chain**

Municipalities offer a wide variety of services to the community. Many of the services are unique and require specialized training, supplies, materials and equipment. Application of sound purchasing practices to acquire the necessary goods and services for delivery of each municipal service can help the departments reduce costs and legal risk. Many factors must be evaluated to determine the best method of purchasing in the City. These factors form the foundation for assessing the City's purchasing function and determining potential areas of improvement.

The firm value chain shows a corporate view of the City. The value chain is then divided into its components which are the City's departments. A description of departmental operations and their purchasing processes follows.

**Figure 3: Firm Value Chain**



Based on Bukszar, 2005 and Porter, 1985

The value chain above depicts the structure of City functions. The cylinders represent independent departments, showing each primary service and its need for autonomy and efficiency. By providing each department with autonomy, departmental efficiencies may be gained, as the departments are better able to purchase quickly. They are also faster to respond to customer demands. The top blue rectangles are support services that assist the primary services with their corporate needs. These corporate needs include policies and bylaws, labour, financial, buildings, grounds and equipment needs. At the top of this diagram are the leaders of the City: the Mayor and Council are elected officials, the Police and Library Boards are appointed officials, and the City Administrator is hired to lead City operations.

### 3.2.1 Development Services

The Development Services Department ensures that the building activity in the City meets building code requirements through permit issuance and inspections. It also develops the City's Official Community Plan (OCP), issues business licenses, and is responsible for enforcement of City bylaws. Activity in this department is external to the organization with few large purchases and few unique purchasing requirements. Approximately eight staff members purchase goods and services in the department, as needed, either using P-Card, a Purchase Order, or via payment by invoice. The department's main purchase is consultative services provided by specialists in the industry. Goods and services purchased by this department may benefit from improved purchasing processes. In 2004, the purchases in this department totalled \$628,161 as follows:

**Table 2** Annual Departmental Purchases: Development Services

Purchases	< \$10,000		\$10,000 to \$100,000		> \$100,000	
	# of Transactions	\$ Value	# of Transactions	\$ Value	# of Transactions	\$ Value
2003	584	\$153,471	6	\$104,679	0	\$0
2004	644	\$275,487	9	\$352,674	0	\$0



The department uses a job costing module in the City's ERP system. It does not use the purchasing module for purchase order generation. Purchases in this department involve the use of Purchase Card (P-Card) or by supplier invoicing. Some purchasing records are kept at individual workstations, and others are filed in central departmental project files.

### **3.2.2 Engineering Services**

The Engineering Department provides the infrastructure for water supply, sewer discharge, solid waste disposal, roads maintenance, towing operations, parking facilities and operations, fleet services, and additional operating activities and capital projects. Key staff in the department purchase services from large contractors for the numerous capital projects budgeted each year and service maintenance projects such as road paving, water main repairs, etc. Administrative departmental staff members purchase office supplies on a regular basis. Specialty items in this department include many specialized tools, equipment and supplies. These services are unique to the department internally, but are similar to requirements by other municipalities. Approximately thirteen staff members purchase goods and services in the department as needed. Goods and services purchased by this department that may benefit from improved purchasing processes, totalled \$10,114,540 in 2004 as follows:

**Table 3** Annual Departmental Purchases: Engineering Services

<b>Purchases</b>	<b>&lt; \$10,000</b>		<b>\$10,000 to \$100,000</b>		<b>&gt;\$100,000</b>	
	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$Value</b>
<b>2003</b>	5,277	\$2,205,183	121	\$3,035,343	16	\$3,517,381
<b>2004</b>	5,311	\$2,144,234	99	\$2,541,218	23	\$5,429,088

The department consistently uses the purchase order system for purchases of inventory and supplies from large vendors. Current limits on the Purchase Cards are set at \$1,500. Therefore,

smaller purchases are made on P-Card by approximately 26 staff members. Some purchasing records are kept at individual workstations; others are filed in central departmental project files.

### 3.2.3 Parks and Recreation

This department maintains the City's green spaces and operates pools, arenas, community centres, museums, and other cultural and recreational facilities. Each facility has a manager that either purchases or delegates the purchasing responsibility to their staff members. Approximately fifteen staff members have purchasing responsibility. Purchasing is often rushed due to the many demands on staff time. Some purchased items are unique to the Parks and Recreation department, such as pool chemicals and facility infrastructure. These purchases however, are consistent with the needs of many municipalities throughout BC.

Goods and services purchased by this department that may benefit from improved purchasing processes totalled \$4,274,033 in 2004 as follows:

**Table 4** Annual Departmental Purchases: Parks and Recreation

Purchases	< \$10,000		\$10,000 to \$100,000		>\$100,000	
	# of Transactions	\$ Value	# of Transactions	\$ Value	# of Transactions	\$ Value
2003	8,470	\$2,567,950	59	\$1,617,179	6	\$1,574,410
2004	8,699	\$2,823,147	37	\$836,414	3	\$614,472

The department is not using the purchase order system for recording their purchases. Invoices and P-Card are used in the purchasing process. Frequently, a staff member contacts a known vendor to request the necessary supplies. The vendor sends the goods without receiving written confirmation from the City and later sends an invoice. Once the invoice is received, an authorized signatory signs the invoice for payment, and the payment is processed through the City's accounts payable section. This process is preferred by the department because it is quick and easy. P-Cards are also available to 83 staff, but these require matching of each invoice with

the original request and processing through the electronic P-Card approval system. Records supporting each purchase are kept at each location. No central registry of purchasing records exists.

### **3.2.4 Electrical Utility**

The Electrical Utility is a service provided by the City, though it is not commonly provided by other municipalities. As the oldest City in BC, there was a need for electricity in the early days when a provincial source was not available. Once a provincial crown corporation, BC Hydro, was created, the City did not switch to the new regime, and the utility stayed with the City. Today, keeping rates consistent with BC Hydro, the utility generates a healthy financial return that is applied to general capital and operating budgets as needed.

The electrical utility makes unique purchases that require expertise of electrical personnel. These purchases are not consistent with the purchases required by most municipalities, but are consistent with those of BC Hydro.

Approximately thirteen staff members purchase goods and services in the department as needed using P-Card, Purchase Order or invoice payment. Goods and services purchased by this department that may benefit from improved purchasing processes, totalled \$1,090,529 in 2004 as follows:

**Table 5 Annual Departmental Purchases: Electrical Utility**

<b>Purchases</b>	<b>&lt; \$10,000</b>		<b>\$10,000 to \$100,000</b>		<b>&gt;\$100,000</b>	
	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$Value</b>
<b>2003</b>	1,139	\$567,123	27	\$825,020	2	\$227,824
<b>2004</b>	1,215	\$589,299	20	\$501,230	0	\$0

The department uses the purchase order system on a regular basis for inventory control and large dollar value purchases. Records supporting each purchase are kept centrally in the department.

### **3.2.5 Fire and Rescue Services**

The fire department provides fire prevention and suppression services to the City residents. The purchasing function is performed at the administrative level and is managed centrally within the department. Some purchases made in the department are unique to their operations at the City, but are consistent with the needs of other municipalities providing fire services. Approximately four staff members purchase goods and services in the department as needed.

Goods and services purchased by this department that may benefit from improved purchasing practices, totalled \$498,211 in 2004 as follows:

**Table 6 Annual Departmental Purchases: Fire and Rescue Services**

<b>Purchases</b>	<b>&lt; \$10,000</b>		<b>\$10,000 to \$100,000</b>		<b>&gt;\$100,000</b>	
	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$Value</b>
<b>2003</b>	1,060	\$484,870	10	\$255,108	0	\$0
<b>2004</b>	1,144	\$387,089	4	\$111,122	0	\$0

The fire department has issued 17 P-Cards to staff that purchase goods and services. Six of the 17 P-Cards are used regularly. Four staff members also use the purchasing system to issue purchase orders.

### **3.2.6 Library Services**

The City operates one library. This library has four departments with managers purchasing supplies and materials for their operations on an individual basis. The new Chief Librarian is attempting to centralize this function. Book purchasing requires a unique process. Each book must pass an authenticity and copyright evaluation. This need is unique within the City, but

consistent with the purchasing practices of libraries in other municipalities. Approximately six staff members purchase goods and services in the department as needed.

Goods and services purchased by this department that may benefit from improved purchasing processes, totalled \$516,420 in 2004 as follows:

**Table 7 Annual Departmental Purchases: Library Services**

<b>Purchases</b>	<b>&lt; \$10,000</b>		<b>\$10,000 to \$100,000</b>		<b>&gt;\$100,000</b>	
	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$ Value</b>	<b># of Transactions</b>	<b>\$Value</b>
<b>2003</b>	1,923	\$478,381	4	\$104,225	1	\$109,108
<b>2004</b>	1,928	\$502,048	1	\$14,372	0	\$0

At this time the Library has limited access to the City's ERP system. This issue is being addressed. Therefore, the library purchases by 13 P-Card holders and through invoice processing.

### **3.2.7 Police Services**

Police services are highly valued by citizens in all municipalities. These services protect people and property from crime. The Police Services department values its autonomy, and its operations are separated from the City's by a separate governing body, the Police Board. The City and Police department do not have an integrated administration. All financial policing records feed up to the City's general ledger; human resources issues are centrally managed; and facility maintenance is funded by City resources. Although some purchases are unique to police operations, there are many common purchases that may benefit from joint purchasing efforts. At this time, the Policing Services department so not have City assistance in purchasing activities.

Approximately eight staff members purchase goods and services in the department as needed either using P-Card, Purchase Order or through payment by invoice. Goods and services

purchased by this department that may benefit from improved purchasing processes, totalled \$2,676,348 in 2004 as follows:

**Table 8 Annual Departmental Purchases: Police Services**

Purchases	< \$10,000		\$10,000 to \$100,000		>\$100,000	
	# of Transactions	\$ Value	# of Transactions	\$ Value	# of Transactions	\$Value
<b>2003</b>	2,397	\$1,586,668	38	\$916,264	0	\$0
<b>2004</b>	2,788	\$1,627,839	36	\$1,048,509	0	\$0

Police Services value the need for internal controls. The department does not use the system for approvals, but has created manual forms for this purpose. Each form is checked and signed by authorized signatories in the department before sending the items for processing through the purchase order system or for payment at the City. Smaller purchases are purchased through P-Card.

### **3.2.8 Purchasing Division**

Purchasing is a division of the Finance and Information Technology Department. The Information Technology Division joined the department in the past year. Over the past several years the Purchasing Coordinator has assisted departments with their purchases where possible. With the Coordinator's help, the City has benefited from reduced costs of office supplies, computers and printers. The Coordinator also assisted with vehicle purchase and road repair tenders and contracts. By adding purchasing expertise to these areas the City has seen savings of over \$500,000 in the past five years. The Coordinator has only been involved in 5% of the City's purchases to date.

#### **3.2.8.1 Challenges**

The departments have resisted the recent changes to the purchasing function. Some departments have refused to use the central purchasing system to record their purchases and have chosen to

implement manual procedures. Others have refused even the manual procedures and process invoices for payment with no source document or secondary approval of the purchase.

Some issues raised by the departments when resisting the change follow.

The first issue raised by many departments resisting a purchasing professional's assistance is the unique requirements for purchasing specialty items. The departments are concerned that a purchasing professional does not have expertise in the industry and therefore will not add much value when purchasing specialty items or will hinder the process.

A second issue is a concern that delays will be added to the process by imposing supervisory review and inviting purchasing expertise into the process.

The third issue is the cost-benefit ratio. There is a risk that the cost of introducing a dedicated purchasing resource may exceed any benefits achieved. Scepticism exists in the City about potential cost reductions and improved legal and tendering documents. Non-quantifiable benefits achieved through robust contracts and tendering documents are difficult to measure and easily dismissed as unnecessary until an issue arises.

Another area of concern is the net benefits of applying purchasing expertise to small dollar value items. This concern may be valid since costs associated with adding the purchasing function to these purchases are high relative to the value of the purchases.

Further analysis of the industry includes best practices in purchasing. Purchasing professionals employ various tools, including the use of an open bidding process to access all capable suppliers. If the scope is limited and all suppliers are not included, the best value may not be attained. A proper scheduling of routine purchases helps ensure that sufficient time is available for purchasing assistance with the process. Application of purchasing expertise helps with negotiating and preparing contracts and legal documents. Consistent application of legislation,

policies, and procedures helps reduce legal risk. Consistent data entry into the City's ERP system helps with corporate reporting and identifies commitments and volume buying opportunities.

### **3.2.9 Firm Value Chain - Summary**

The firm value chain shows the operational environment of the City and the position of the purchasing function. An analysis of the value chain shows that purchases are made throughout the City in many different ways by many different people. No central registry of the information is maintained, and benefits achieved through economies of scale are only captured when the purchasing coordinator is involved.

## **3.3 Summary**

The City offers a variety of very specialized services. Competencies for each department lie within that department. Obtaining best purchasing value requires a joint effort by the departments and purchasing professionals at the City.



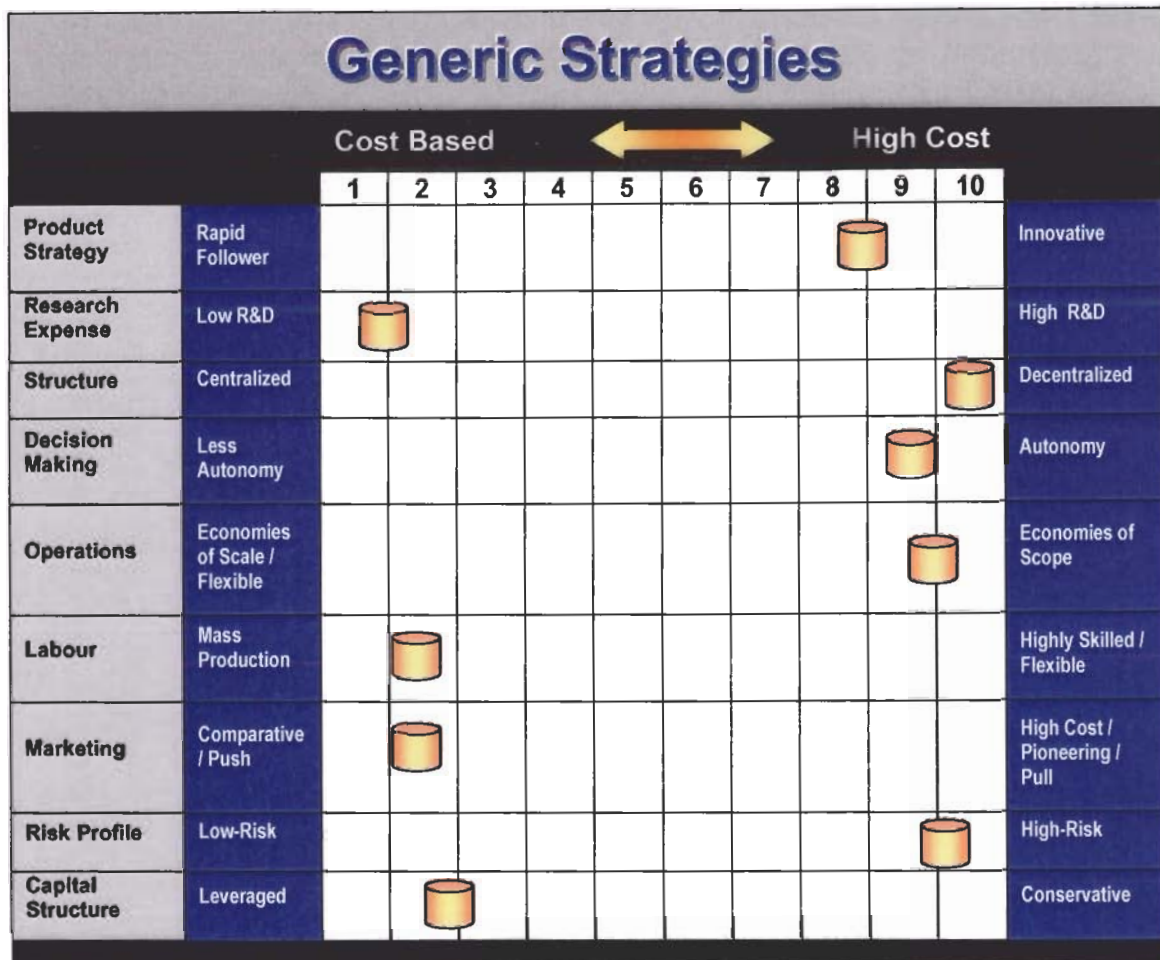
## **4 STRATEGIC FIT**

The Strategic Fit model is an evaluation tool for firms to identify their fit within their industry and to focus their operations in the future. Profit oriented firms using the model determine whether their organization adds value as a low cost producer or as a differentiator. A low cost producer competes on price. A differentiator charges a premium for the products produced.

In a municipal purchasing environment, the objective is to obtain the lowest lifetime cost of an item without sacrificing quality. For accountability purposes, other objectives also include mitigating legal risk, maintaining ethical purchasing standards and streamlining processes. These objectives are not similar to a profit-oriented firm that differentiates its product. However, the low cost approach is very similar. Therefore, only one side of the strategic fit model applies to local government purchasing activities.

The goal for municipal purchasing is low cost. The opposite side is high cost and high quality. The closer the City comes to obtaining low cost without sacrificing quality, the closer it comes to responsibly managing public funds. A balance is also important in this analysis. Obtaining low prices on low value items may cost the City more in staff time. Therefore the analysis will include appropriately applied purchasing expertise. Accountability will also be included in the analysis.

Figure 4: Strategic Fit Model



Purchasing Fit

(Bukszar, 2005)

#### 4.1 Variables Analysis

Ideally a municipality strives for low cost, high efficiency and adequate service delivery. The services offered are essential for the social well being of the community. With pressures from the community and City Council to maintain reasonable property tax rates, the low cost strategy becomes more important. An analysis of the purchasing function and how it fits with this strategy follows.

An illustration of the City's model is shown above. A description of each variable in the model follows.

#### **4.1.1 Product Strategy**

Each department purchases products for their operations as needed in their own unique manner.

The quality of the purchases varies as the method of purchasing varies. Most departments err on the side of high quality items over low cost. This helps reduce staff time returning inadequate items. Purchasing from a known supplier is also valued by these departments to ensure consistency in the items purchased.

Vendors with continued business do not often offer competitive prices since they know that the departments are willing to purchase the goods or services based on reliability.

This may be a reasonable approach to purchasing smaller value items that are purchased rarely.. However, when purchasing larger value items or purchasing smaller value items often, the City may be spending more than it should . Central registry of purchasing information may highlight areas for improvements.

The City sits at high cost for their product strategy. Current purchasing practices favour simplifying the purchasing process and creating an easier process for departmental purchasers. Low prices and overall cost reductions are secondary concerns. The City's position in the model is contrary to the City's goal of achieving low prices and reducing costs where possible. For accountability purposes, the gap should be reduced.

#### **4.1.2 Research Expense**

Another decision an organization makes is the amount of investment in research and development it is willing to make. Often the level of investment leads to new methods of operations and

innovations. The City spends considerable time, money and effort on studies and building plans. These plans, once developed, result in changes to the organization but only if funding is available, and usually following additional studies. The studies are developed for Council's benefit to understand the magnitude of the change and are not necessarily developed for innovation and progress.

Municipal purchasing is currently undergoing a lengthy review process. Since it will require significant change to departmental processes, the review is expected to take considerable time with a long implementation period.

From a purchasing perspective, however, little research is performed by departments when purchasing items. Often purchases are made quickly to meet departmental needs and little planning or study is involved. For low dollar value purchases this process might be reasonable.

For high dollar value items or smaller value items purchased more frequently, this approach could increase the City's costs unnecessarily. Competitive pricing may not be attained if insufficient research is conducted and alternative suppliers and prices are not identified. Lengthy research requires purchasing expertise and takes time. Departmental staff tends to devote the majority of its time to service areas and spends little time researching purchases. A knowledgeable purchasing agent could add value in this environment.

The research expense variable is low on the chart for purchasing. This position is reasonable for infrequently purchased low priced items. The cost of researching these items exceeds the benefit of lower prices.

However, this position is not reasonable for higher priced items or lower priced items purchased more frequently. Researching these purchases often results in lower prices or better quality items for the same price.

Therefore, to best meet the low cost, adequate quality goal of municipal purchasing, a strategic application of research and development is required.

#### **4.1.3 Structure**

The City struggles with the issue of centralization versus decentralization. Some functions at the City, such as human resources, fleet services and finance are centralized, yet other services including purchasing are decentralized.

The owner often has strong centralized control in managing operations in small organizations. As small firms grow, overall control becomes more difficult and managers are hired to run sections of the operations. Synergies developed by increasing staff help the organization achieve efficiencies. An overall review of operations is still important in this larger environment. Therefore, a corporate review of operations is possible through reports generated from a centralized collection of operational data.

Operationally, the City is decentralized. Departments and divisions are granted autonomy to deliver services to the public in the most effective manner possible. For operational purposes, this structure works well for the City.

City leaders are responsible for overall city operations. City operations rely on comprehensive reports generated from operational information. These reports may be produced manually or through a computer system. If the information is captured in a database at source, a report may be generated very efficiently through the system. If the information is collected manually, the reporting process becomes much more cumbersome.

Purchasing information is inconsistently entered into the system at the City. Purchases by P-Card are recorded in a banking system that is uploaded to the City's general ledger in aggregate. Details are available in the banking database and not in the City's system. Invoices paid through

the accounts payable module do not hold purchasing information. The amount paid, supplier's name and a brief note are the only pieces of information recorded in this system.

If used, the purchasing module contains the information recorded in the accounts payable module, and descriptions of the items purchased, the quantities, the price per item, freight charges and much more. Proper use of the purchasing module requires purchasing data entry at the time of commitment. This information is very helpful when researching City purchases and identifying cost saving strategies. Commitment reporting is important for City leaders.

Although operations at the City are highly decentralized, meeting corporate responsibilities is possible through a centralized collection of data and report generation.

#### **4.1.4 Decision Making**

Good decision-making is facilitated by a strong corporate philosophy; clear and effective communication; strong leadership and good guiding principles, goals and objectives. Due to the political nature of local governments, these key ingredients may be impacted by public or political pressure. To address this issue it is important to distance operations from pressures applied by special interest groups or influential citizens. This may be achieved through establishment of clear policies and bylaws set by Council for the benefit of the City as a whole. These policies must be approved and supported by a strong Council with changes to application of the policies or bylaws only possible through an approved change to the documents themselves. With good policies and bylaws in place and careful adherence to these rules, City operations may be more autonomous within the guidelines of the policies and bylaws.

Although the structure is in place for departmental autonomy, City leaders still become involved in operational decision making. City leader decisions are driven by political pressures and a need to mitigate adverse consequences relating to service delivery. Operational autonomy is impacted.

Purchasing decisions are made by departments in a very autonomous manner, unless the value of the purchase is greater than \$100,000. Purchases exceeding \$100,000 must be presented to Council for approval. Purchases under \$100,000 of a sensitive nature are also reviewed by Council.

From the information provided in Tables 2 through 8, most purchases at the City are under \$100,000. Therefore, decision-making is at the departmental level for most purchases. Although departmental autonomy is a low cost approach for small value City purchases; it is a high cost approach for high value items. Adding the expertise of a purchasing professional may assist in lowering costs. To meet the goals of purchasing, the City should move in the direction of low cost for higher value or volume purchases.

#### **4.1.5 Operations**

Operations at the City are varied. Some are volume driven with a need to achieve economies of scale. These include property tax and utility payment processing, solid waste removal, payroll and payment processing, pavement repairs, inspections, library and recreational services etc. Others, including criminal investigation and fire suppression, are more specialized and are provided as needed. Volume driven, routine operations may achieve some economies of scale, but specialized services require economies of scope for efficiency.

The operations variable is highly weighted in favour of economies of scope. The City benefits from economies of scope when departments accept many different roles when providing services to the public. Departments are more autonomous. They are able to respond to customer demands more quickly and are more efficient with their time. For smaller value purchases that are purchased infrequently, adding the purchasing role to departmental tasks is reasonable.

However, for larger purchases in price and volume, the City can benefit more by acquiring these items for lower prices. These purchases benefit more from economies of scale.

A reasonable position for this variable is in the centre to accommodate both small infrequently purchased items and large value or large volume items.

#### **4.1.6 Labour**

The City hires skilled staff and pays high union wages to non-management staff. Expected skill levels are high and the nature of operations complex. As in many organizations today, technology has automated routine processes and the value employees add to an organization is through application of their expertise and skill.

The nature of unions limits the flexibility of organizations. Consistent treatment of staff and application of seniority prevents management from making decisions regarding optimal distribution of labour to the jobs available.

As routine operations become more automated, more and more skilled workers are required. Unions limit management's ability to optimize these resources. Changing the manner by which the City purchases may require hiring a purchasing agent. This new position is expected to be unionized. By hiring a skilled professional, the City should be able to improve current purchasing practices successfully.

At this time, the labour component for purchasing in this environment is considered mass production. Respect for purchasing expertise is not apparent. Employees in each department are given the responsibility of purchasing goods and services and entering into contractual agreements with limited or no purchasing knowledge. The limited amount of skill or expertise applied to the City's purchasing process resembles one component of mass production. Very few



purchases at the City have the benefit of highly skilled purchasing expertise. Therefore, the labour variable is cost based.

A reasonable position for the labour variable, when considering small infrequent purchases and larger value / larger volume purchases is just right of centre.

#### **4.1.7 Marketing**

Comparative / Push marketing is the process of providing incentives to retailers to sell the product once the customer is in the store. High Cost / Pioneering / Pull marketing draws customers to the product and to the store. Most municipal services are essential and marketing is not a large cost. Therefore the push marketing strategy is more applicable in this environment.

However the City does market its image for political purposes. In a municipal environment the customers are the citizens, organizations, and businesses in the area. The City markets its services very well in the local papers. Community events are well attended by Mayor and Council along with senior staff. The local papers routinely carry stories of the Council and City's many activities.

The purchasing function is not marketed well. The department incurs no cost for marketing. Although most departments are aware of the available expertise, many resist using the service for fear of losing their independence. Others resist due to their fear of potential delays with their purchases. New departmental leaders have indicated that they were not aware of the resource until many months after starting with the City.

Marketing the function would not only require financial resources, but it would also require the Purchasing Coordinator to spend additional time. The Coordinator has spent considerable time identifying areas where purchasing expertise may benefit the City. Identification of these benefits

was manual and time consuming. This information was shared with the departments. A purchasing group was created however, due to limited progress, later dismantled.

Over the years, marketing the function has not been successful and today the City does not spend much time marketing.

To change the manner in which the City purchases, the function will need to be highly marketed. This is a costly approach. However, once the benefits are realized and departmental support is achieved, marketing may continue on a maintenance level.

#### **4.1.8 Risk Profile**

Due to the political nature of government where public perception is extremely important to the Mayor and Councillors, low risk is preferable. Also due to the social consequences of errors with respect to law enforcement, fires, water supply, etc., it is important to maintain a high level of standards. This again leads to risk aversion.

Purchasing at the City is at the high-risk side of the spectrum. Purchasing internal controls are at the departmental level creating inconsistency in processes. Two critical internal controls are supervisory review and separation of duties. Departments that stretch their resources may not maintain these internal controls. If this occurs fraud or errors may occur. The risk of misappropriation is high.

Purchasing however, is an internal function that is not highly visible to external parties and therefore not as susceptible to political and social risks.

The external stakeholders impacted by the City's purchasing methods are vendors. Although the City's business is valued, knowledge of product sales and volumes is not known to the vendors. At this time the City has been very fortunate not to have vendors formally question their practices. Therefore, internal perception of this risk is low.

Although the internal control risks and purchasing ethics regarding vendors is not high on Council's priority, the City needs to manage these issues. Supplier and employee fraud is prevalent in industry. In addition, a new supplier may not find the vendor selection process fair. If the media becomes aware of these issues, it may damage Council's political credibility.

Therefore, the risk environment may promote a change in the purchasing function.

#### **4.1.9 Capital Structure**

Investment in capital equipment and software for the purchasing function has been considerable in the past two years. A new computer system was implemented to capture purchasing data. Costs were incurred for training users and adapting the system to internal processes.

Departmental use of the system will help with corporate efficiencies and better buying practices. At this time some departments have resisted using the system. Therefore, although the purchasing function has a very good capital structure, without a corporate mandate to use the system, the system's value is lost to the City.

Therefore, a basic improvement to the purchasing function requires greater use of the system. This is possible, even in a decentralized corporate structure.

## **4.2 Summary**

For the benefit of its citizens, the city should operate efficiently.

The City's purchasing process is inconsistent with efficient, low cost purchases of goods and services. Although it may not be inefficient to allow decentralized purchasing of low priced, infrequently purchased items, it is probably high cost or inefficient to allow decentralized purchasing of expensive or frequently purchased inputs. By dividing City purchases into two categories a better approach to purchasing can be achieved. The first category would be small

value items, and the second category high priced or volume- based items. A decentralized purchasing strategy may be appropriate for small dollar value items and a more centralized strategy appropriate for high dollar value items.

Alternatives to the current methods of purchasing are identified and analyzed in the next chapter.

## **5 ANALYSIS AND ALTERNATIVES**

This chapter introduces and analyses alternative methods of purchasing to identify improvements to the purchasing function at the City.

### **5.1 Analysis**

There are many considerations and city characteristics that drive decision making in the corporate environment. Many of these characteristics impact the viability of alternative processes and changes to existing processes. Each of these criteria should be considered when analyzing alternatives to improving the purchasing process at the city.

City Council is very involved in the community and participates actively in community events. They also provide input into city operations as communicated by the community groups. Change in this environment is slow. If considered, introduction of change requires involved studies and slow methodical implementation plans that will mitigate financial, social, legal and political risk.

The purchasing function is evolving. The policy environment is changing to make organizations more responsible and accountable. An expected change to the external audit process includes a more tightly controlled financial process. Purchases of goods and services are considered financial for external audit purposes. With the City's processes decentralized, there is a risk that some controls may be relaxed. Therefore, there is a need for the City to understand the risks and mitigate these risks where possible.

Net benefits have been realized by the city when applying purchasing expertise to the departmental process. However, departments continue to resist change due to their need for autonomy and their scepticism. Departments are very sceptical as to whether purchasing

expertise will add value to their operations. Application of purchasing expertise is a value added benefit, not a critical need.

Core competencies of departmental staff lie with the services they provide. Purchases of goods and services by these staff members may not be well planned and may be rushed at times. Core competencies of a purchasing professional include not only value added purchasing expertise, but also knowledge of legal risk reduction through preparation and review of tender and contractual documents. Alternatives or options to the current process should respect departmental autonomy and the requirement for quick customer service, while assisting departments with the application of purchasing expertise where it is most beneficial to the department and the City.

Departmental purchases vary in the amount of purchase, the number of transactions, and the type of specialty items purchased each year. Unique departmental needs should be respected.

A robust purchasing function for the City should allow for the difference in processes between small dollar value purchases and high priced or high volume purchases. The strategic fit of the City's purchasing function should achieve a low cost, adequate quality approach to purchasing goods and services.

## **5.2 Identification and Analysis of Alternatives**

With the broad powers provided to municipalities through provincial legislation, many alternatives exist for the purchasing of materials and supplies. Limits are placed on alternatives internally due to low risk tolerance and a lack of departmental support for change. Without internal limitations, the alternatives that exist in industry that may be considered by our municipality include: completely decentralizing the function throughout City departments, or completely centralizing purchasing within the municipality. Another possibility is to create a hybrid solution of centralization and decentralization to best fit the needs of the city. Two

alternatives that may be available but not yet seen in the GVRD are outsourcing the purchasing function or merging purchasing efforts with other municipalities. These alternatives are explored further for feasibility within the constraints of municipal resources and corporate limitations.

### **5.2.1 Decentralization**

Decentralization of the purchasing function allows departments to purchase goods and services with the flexibility they desire. This process involves a call to vendors and receipt of goods by the department, and payment processing through accounts payable. This process is similar to the city's current process for purchases under \$100,000. The alternative, therefore, involves extension of the process to all purchasing activities.

Process limitations exist with this method of purchasing, such as the lack of a central registry of purchasing information. A central registry of information helps staff research historical purchases within the organization and look for opportunities for economies of scale. Access to a corporate vendors' list and obtaining competitive prices is also an advantage of a central registry. Researching competitive prices is possible when reviewing prices received for similar goods by other departments.

Central information registry at the time of commitment provides the city with a source document. Source documents help prevent double payment of invoices. Double payments are a concern and a considerable cost for many organizations. To mitigate this risk, a record of the original purchase is checked against the invoice when received and paid only if no payment was made previously. This simple process adds steps earlier in the process but protects the city from financial loss. Source documents also ensure all commitments by the city are known at all times to departmental and corporate leaders in the City.

Another problem with the decentralized process is that internal controls are managed at the departmental level. Flexibility and inconsistency are introduced into the controls, and although some departments may understand the importance of controls and compliance procedures, others may not, since this is not their core competency. Basic internal control checks, including separation of duties between the purchaser, receiver and payer, may not exist. Relaxation of this control creates an opportunity for fraud. Another important control is a supervisory review of transactions. If this control is relaxed, errors may go unchecked and an opportunity for fraud is created.

A decentralized process may also introduce legal risk. With flexibility and inconsistency introduced into legal commitment documents, including contracts and agreements, the city may not be as protected as it should be. Mitigation of this risk is very important in the City's low risk tolerance environment.

Decentralization introduces inefficiencies at times. If many employees throughout the city are purchasing common goods and services, there may be efficiencies introduced if a single employee purchases the products for all departments. Using the system to record purchases requires training and ongoing usage to remain efficient. Departmental staff members that use the system infrequently are less efficient. Centralizing this expertise may help achieve efficiencies.

Flexibility, autonomy and speed are benefits of decentralization; however, at times these benefits may not exceed the benefits achieved through volume buying and process standardization. Optimization of the purchasing function will require a more complex strategy.

### **5.2.2 Centralization**

A centralized purchasing function is a separate department in an organization that is involved in all purchases made by the firm. All purchasers have purchasing expertise and perform all the



steps in the purchasing process. Complete centralization of the purchasing function provides the city with a central registry of information, consistent application of internal controls, protection from legal risk and source documents for all purchases.

The centralized process begins with an identification of a need by the department. The need might also be identified through the computer system if it is a routine purchase or by the purchasing agent if the purchase requirement is corporately generated. Purchasing agents work with departmental staff through the tendering process and vendor selection. If necessary, contracts or agreements are negotiated and prepared and the commitments are added to the system by the purchasing agent. Goods are received by the department and recorded in the system, and payment approval is provided once the invoice is received. Finally, accounts payable matches the commitment document with the receiving report and invoice prior to payment.

The process is considered lengthy compared to the decentralized process. The process may be shortened by adding purchasing resources at the City. However, the process still adds steps and delays are inherent due to the number of people in the process.

Centralization removes departmental flexibility and autonomy. Purchases and processes are questioned and time consuming responses are required on a regular basis. With labour costs being the largest cost in an organization, this inefficiency may not benefit the City for smaller value purchases. Accountability, however, is important and may be beneficial for larger value purchases.

If a centralized purchasing function is not sufficiently resourced, delays occur in processing purchases. If a change from decentralized purchasing to a centralized function is considered, success of the change largely depends on whether an optimal number of purchasing agents are staffed. If purchasing resources are not adequate, a backlog of work could develop which would frustrate departments. Savings through application of purchasing expertise becomes secondary.

Legal risk reduction, economies of scale, and operational consistency are some of the benefits of centralization. However, these benefits come at a cost. Optimization of the purchasing function will require a more complex strategy.

### **5.2.3 Balance Centralization with Decentralization**

A more complex strategy may be a hybrid solution combining both the centralized and decentralized alternatives. There are two possible solutions. One is to work with the current decentralization process and ask departments to record their purchases in the system. The second is to introduce purchasing expertise where it adds value and within the limitations of available purchasing resources. An analysis of these two alternatives follows:

#### **5.2.3.1 Status Quo Using Central Registry**

This approach will allow departments to remain autonomous and make quick purchases. The central registry will provide the city with commitment reporting, identify of areas where volume buying opportunities exist, and allow departments to research their purchases through the system for updated vendor lists and price comparisons.

A limitation of this approach is the lack of purchasing expertise in the process which may introduce legal risk. Departmental staff members would be required to perform activities for which core competencies are lacking, leaving departmental staff with purchasing duties that are not in their area of expertise. In addition, emergency purchases become more frequent due to poor planning. Costs increase in this environment due to a lack of purchase research.

This option was introduced at the city two years ago. It has not been successful. Although some departments are using the central registry system, other large departments refuse to use it because of time restrictions. Further training has been provided to departmental users; however, when the system is used on an infrequent basis, it continues to be perceived as cumbersome.

#### **5.2.3.2 Strategic Application of Purchasing Expertise**

A hybrid approach combining the benefits of a centralized purchasing process with a decentralized process becomes more complex but may meet the needs of the City better. If a strategic approach is used, this process may help lower costs for larger value items and provide for efficient purchasing of smaller value items.

Changes to the process may include increasing the P-Card limit to accommodate all purchases that do not require purchase orders. Purchase orders would be required for purchases above a certain threshold based upon a cost benefit analysis. The purchasing department would be involved early in the purchasing process, and would generate the purchase orders. The cost benefit analysis to determine the threshold will consider not only where the City will benefit most from application of purchasing expertise, but also the dollar value the City is willing to dedicate to this function.

Considering the amount of work required for tendering, evaluation, negotiation, and preparation of contracts for large value purchases, it is reasonable to estimate that at least one purchasing agent is required for all purchases over \$100,000. These purchases are currently managed by the City's current Purchasing Coordinator. A second new purchasing agent is required for purchases over \$10,000, since these purchases require less paperwork, yet still benefit from purchasing expertise.

This process will require that all information be entered in the computer system at the time of commitment, either through P-Card or through the purchase order system, thereby mitigating City concerns regarding source documentation and commitment reporting. The process will also provide departments with the ability to track contractual progress payments.

To ensure the City is successful in making the change to a strategic purchasing function, a clerical position is required for administrative purposes. This resource can assist departments with

system use and data entry. Departments that use the system infrequently may benefit from this resource for data entry. The Purchasing Coordinator may benefit if this position assists with problem calls related to the purchasing system. The Coordinator will have more time to handle all purchases over \$100,000. This position may also help with office coordination, filing and other related matters.

#### **5.2.4 Outsource**

Outsourcing the purchasing function is another option available to municipalities. Acquisition of purchasing expertise may be on an as needed basis. When the function is no longer required, it is easy to discontinue services. The hourly cost of outsourcing is higher than the hourly cost of internal staff. However, this cost difference may be offset by the flexibility provided by an outsourced party.

Outsourcing is beneficial in organizations when the acquired expertise is not an internal core competency. It is also important that the service is easily separated from operations. An integrated function requires significant communication to obtain best results.

The outsourced service provider should be familiar with the unique purchasing requirements of the City's departments. Training an outsourcing entity might entail substantial cost. And finally, the outsourced party should be well respected in the industry and should be capable of meeting the needs of the City.

Purchasing consultants with their own firms or working in small firms find it difficult to enter the public sector market. Private firms offering purchasing services are better suited to projects-based purchasing demands and less suited to on-going operational requirements. Organizations are often very complex and a multi-disciplinary span of knowledge is required. Very few private firms have this breadth and depth of knowledge, and fewer still are able to retain this expertise.

In addition, there is a considerable amount of integration that exists between purchasing activities and core operations. Organizations with a centralized purchasing function find retaining in-house expertise more beneficial than outsourcing due to the cooperative benefits achieved when departments work closely with purchasing agents.

Organizations purchasing in a decentralized manner often find the assistance more intrusive than beneficial. Employees in these organizations are concerned about being challenged by professionals which may highlight their lack of purchasing expertise. There is also a concern that adding a professional purchaser to the process will add delays or require more preliminary work by departmental staff.

Outsourcing may be possible by using the services of an organization that supplies goods on an automatic ordering basis. The City currently has an agreement with a local office supply vendor to replenish office supplies as requested by departments. This process may also extend to automotive supplies and other purchases at the City. However, at this time, without a corporate understanding of common purchases, coordinating this effort becomes very difficult. Therefore, the City has not pursued this method of purchasing further, nor has it extended the process to study the potential benefit of suppliers stocking City shelves as needed. These opportunities may only be considered once the City is aware of its purchases. This awareness may be possible once all purchasing data is entered into a centralized system.

For these reasons, outsourcing may not be a reasonable alternative.

#### **5.2.5 Merge Purchasing Efforts with other Municipalities**

Merging the City's purchasing efforts with another municipality may be a very good alternative to achieve cost efficiencies, especially for low priced inputs.. The City may achieve efficiencies by rationalizing the duties of administrative purchasing staff. Volume discounts may be achieved

by purchasing commonly used goods including office supplies, furniture, vehicles, computers, and cleaning supplies. Information technology costs may also be reduced by sharing a computer system.

Cities value their independence. They resist combining their purchasing efforts with other municipalities for the fear of losing their unique identity. The staff and purchasing professionals in the GVRD municipalities provide the following reasons.

Some municipalities offer services that others do not. Distinct characteristics such as topography are important. Some municipalities are on hills while others are flat. The types of vehicles required in these cities differ. Therefore, to achieve the benefits of economies of scale, services would have to be standardized across all participating municipalities. Standardized services are more likely to require similar products. Standardizing services limits the unique nature of municipalities. Council decisions become limited and may not be responsive to community demands.

In addition, if the purchasing function is merged, then merging other administrative functions may also be financially beneficial. A mega city may be the next step on this slippery slope.

Although this alternative is financially beneficial, finances are not the only consideration. Timely purchases and the needs of the community play an important role. At this time, the community, proud of its heritage and its individuality, is not ready for a merger of purchasing services.

To gain some of the benefits of cross-municipal purchases, there is a purchasing group in the GVRD that meets on a regular basis. This group is comprised of purchasing agents from GVRD municipalities that work with member municipalities to purchase common goods and services that may benefit from large economies of scale. Again, this process is limited due to the unique nature of the services offered in each municipality. A recent list of common purchases shows

approximately 20 possible purchases are common to the GVRD municipalities. This is a very small number compared to the total number of commodities purchased at each municipality. Although this is another form of merging purchasing expertise, the benefits are limited even with this group.

A merger at this time is not considered a viable option by the public or Council. However, there are opportunities that exist to combine the purchase of goods and services with other GVRD municipalities to obtain price advantages.

### **5.3 Summary**

To meet the City's objective of achieving low cost purchases of municipal goods and services, the City needs to change its purchasing method. A number of alternative methods can be suggested. Of these alternatives it appears that the hybrid approach is the best alternative.

A recommendation is provided in the next chapter.

### **5.4 Recommendation**

The City will benefit financially by adopting good purchasing practices. The community will benefit as the City becomes more accountable within the constraints of the City's policy environment. These benefits are only realizable if the City changes the way it purchases goods and services. An important consideration when changing purchasing processes is to ensure that the overall benefit of the change outweighs the cost of the change.

Each of the alternatives presented in earlier in this chapter had benefits and limitations.

The decentralized model provided the City with flexibility for quick purchases. However, by adopting this model, the City may not be obtaining the best value for its purchases and may miss volume buying opportunities. In addition, inconsistent purchasing practices may lead to higher

legal and corporate risk. As a municipality seeking cost savings and low risk, complete decentralization is not recommended.

Centralization has been used by large organizations in the past. These organizations have found the process lengthy due to the checks and balances required to reduce legal and corporate risk. For smaller value purchases costs often exceed benefits. Therefore, complete centralization of the purchasing function is not recommended.

Outsourcing and is another option available to the City. The City may choose to either outsource the whole function or to use the services of a specific vendor to supply goods and stock shelves as needed. Outsourcing the whole function may not be reasonable given the limited choice of suppliers. However, opportunities may exist through the use of specified vendors. These opportunities will only be possible if the City develops a central registry of purchasing information. Therefore this option is not recommended at this time but may provide opportunities in the future.

Merging efforts with other municipalities is another option. This option is not recommended due perceived loss of independence by our city and its neighbours.

Option 5.2.3 (Strategic Application of Purchasing Expertise) combines the low risk benefits of centralization with the flexibility benefits of decentralization. Strategically applying centralization to sensitive, high volume and high value purchases assists with reduction of risk and costs. Maintaining a decentralized process with smaller value purchases provides city departments with flexibility. This option is recommended.

Option 5.2.3 - The Strategic Application of Purchasing Expertise will improve the way the City purchases. This improvement will introduce a change at the City that will be successful if well planned and implemented. Implementation of this change is discussed in the next chapter.



## **6 IMPLEMENTATION**

Many plans are developed in organizations that are never implemented or are only partially implemented. Often the limited implementation is due to the consultant leaving and the staff returning to their many other duties that were put aside during the review process. Although intentions are good, studies are often shelved until time becomes available to implement the changes. However, in our busy work life, time is in short supply, and the study is often not revisited until someone mentions it several years later. Therefore, as part of a study, an implementation and action plan should be included with clear goals and objectives, timelines and resource application.

As noted earlier, change implementation in the City requires considerable study, a clear, well developed plan and support from City leaders. Although this requirement stems from the City's low risk tolerance, it is beneficial for all entities to include detailed implementation plans in their studies.

The City has prepared and submitted a business plan to senior management and has presented that plan to City staff and senior management in the past year. Considerable discussion occurred during this process. Consultation continued with departmental staff, and individually with departmental leaders. Although resistance still exists, it has been reduced due to senior management support.

Successful implementation is now reliant on continued senior management support and adequate resources. Without introducing additional purchasing expertise and clerical support, the centralized function may not achieve the results expected, and if partially implemented, may be more detrimental to city operations than maintaining the purchasing process as it currently exists.

The first step of implementation is the development of a plan. This plan was prepared earlier this year and considered all the expected changes, in sufficient detail, to provide senior leaders with a good understanding of the process. The plan included a timeline, a list of required resources, highlights of contentious issues, and critical times when support will be expected. The plan may be updated as new issues arise. This plan will be used by the implementation team to manage the implementation, to communicate with others, to time key stages, and to allocate resources. It is also critical that City leaders understand all the issues early in the process so they may decide whether they will support the change through to completion.

## **6.1 The Plan**

The change process includes several plans. These plans include a business plan, an implementation plan, and a communications plan. Other plans may be used depending upon the nature of the project. The business plan identifies an issue and, provides a solution after a concise and clear discussion. The information in the first six chapters of this report is similar to that found in a business plan. An implementation plan is a roadmap outlining the steps to achieve the objective of the business plan. This chapter outlines the components of an implementation plan. A communications plan identifies key stakeholders and identifies the manner and timing of communication to the stakeholders. This communications plan is often a component of the implementation plan.

### **6.1.1 Project Timelines**

The project timeline is included in the business plan and sets out a series of steps required to reach key milestones in the change process. The timeline includes an allocation of resources at each step.

To start developing a timeline it is important to list all known activities in chronological order of implementation. Depending upon the complexity of the project, a software package for project

management or a spreadsheet program may be used to help develop the action plan. Each step in the change process should be charted and resources should be allocated. A clear start and completion date should be determined and recorded on the timeline; milestones should be added to not only illustrate progress, but to keep morale high by celebrating successes along the way.

A timeline showing the change to our purchasing process will include preparation of the project scope document, the project charter, the communications plan, a list of key tasks, and resource allocation for each task.

There are many tasks in the process of changing the method the City uses to purchase goods and services. The first task is to improve the City's ERP system. The system must be updated to facilitate timely data entry and to accommodate commitment reporting. The second step is to increase purchasing limits on authorized P-Cards for ease of purchasing smaller value items. The third step is to hire a clerical assistant. Once hired, all data entry of purchases will be recorded in the centralized purchasing computer system. Developing beneficial reports is the next task.

After the set up phase, the Purchasing Coordinator can dedicate his time to purchases over \$100,000. To add additional value to the purchasing effort a second purchasing agent should be hired. Senior management support becomes critical at this point. Departments must be directed to include the new purchasing agent in all purchases over \$10,000.

The project scope, charter and communications plans are described below.

### **6.1.2 Project Scope**

The project scope defines the project and sets limits on the goals and objectives to be achieved. Activities to achieve these goals and objectives are clearly defined. A clear understanding of the scope of the project is very important. Often projects become larger than first expected due to unforeseen needs identified as the project progresses. If the project is not sufficiently scoped,

these new initiatives may become costly additions which may jeopardize project completion. Therefore, it is very important to identify all or as many as possible, of the project goals and objectives at the outset. If insufficient resources are available, or if time constraints become an issue, there may be a need to reduce the scope of the project. Once the project scope document is complete, it should be signed by each key stakeholder. Some changes to the scope may be necessary as the project progresses. These changes should be added to the scope document as a change order and signed by the stakeholders.

The scope of this project includes applying purchasing expertise early into in the process for all purchases over \$10,000. It is recommended that: all purchasing information be recorded in a centralized purchasing system, reports be generated from the system, commitment reporting and data entry efficiencies be introduced, and P-Card limits be increased. The scope of the project does not include total centralization of the purchasing function. The purchasing agents are only required to assist departmental staff with their purchases. They are not required to purchase all City goods or services over \$10,000 due to limited resources in the purchasing department.

### **6.1.3 Project Charter**

The project charter identifies the key stakeholders and outlines their roles in the project charter document. Key stakeholders include the project champion, project leaders and implementation leaders. The project champion may be one or two people. The champion is a senior member of the firm with sufficient power to support the implementation of the project to completion. Implementation leaders are functional leaders that will ensure the project is sufficiently staffed with resources from their departments and will lead their team through the change process. These implementation leaders are often from the information technology department and from impacted operational departments. A project leader is defined as the person who coordinates the efforts of all participants and has overall responsibility for the success of the project.

A change in purchasing at the city will require the City Administrator to assume the position of the champion, and be supported by each departmental leader. The implementation leaders will be the Assistant Director of Finance and Information Technology, for facilitation of resources including staff, funding and technology, and for preparation of the implementation plan. The Purchasing Coordinator will be the project leader and manage the implementation plan and ensure all milestones are met. Implementation leaders within each department include key employees who ensure resources are made available as required when the implementation enters their department.

Once key stakeholders are identified and their roles well developed in the project charter, each key stakeholder will be required to sign the document indicating their agreement.

Accountability is important in this process. To ensure success of the project, each player in the process must be accountable for their performance and that of their department's. Once underway, the City Administrator, along with departmental leaders, must support the change throughout the implementation process to avoid problems that may arise through non compliance by some departments. The departmental implementation leaders must ensure resources are available when required. The respective departments are responsible for ensuring that there are no problems with resource availability. The purchasing implementation team must be accountable for the overall implementation and communication. Once implementation is complete, the purchasing department will be responsible for communicating performance results.

Depending upon senior management's preference, performance results may include bi-annual reports showing cost savings, risk reductions and efficiency gains.

#### **6.1.4 Communication Plan**

The communication plan is a critical document identifying key stakeholders and the method of communication. This document lists the type of communication required for each stakeholder, the information required in each communication, and the frequency of communication. A project's success is often determined by the level of communication that occurs throughout the implementation process.

For this purchasing project, progress reports should be prepared by the project leader and provided to senior management on a monthly basis, or more often if issues arise. Progress reports should be sent to departmental contacts on a monthly basis and to individual departments as the implementation process nears their operations. This early communication will help departments prepare their resources and notify departmental staff of the upcoming changes.

The progress report will provide a timeline of progress to date, provide a high level view of the implementation time remaining, and key milestones reached. The report will also contain issues that arose over the past month and related resolutions. Successes will also be communicated in the report.

### **6.2 Summary**

The implementation process begins with a plan. Prior to proceeding with implementation, the City must commit to supporting the effort and providing sufficient purchasing resources, as required in the recommendation. Without the required resources, successful implementation is not possible and the on going benefits are not realizable.

## **7 CONCLUSION**

Introduction of sound purchasing practices in municipalities is slowly evolving. Upcoming changes to legislation may drive improvements to internal purchasing controls. However, further benefits may be possible if municipalities improve their purchasing practices to include the application of purchasing expertise where beneficial.

In the City, many cultural characteristics, including a strong support for heritage, community identity and unions, limit how the City changes. The City's low risk tolerance is also a consideration. Introducing change within these constraints becomes complex.

The City is further challenged by the need to be efficient by achieving low cost purchased goods and services. The recommended solution is a balance between process efficiencies for decentralized buying of low priced, infrequently purchased items, and economies of scale from centralized buying of high priced, frequently purchased items.

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