**Agenda – Council – March 24, 2010**

**Report "A" – Executive Policy Committee – March 17, 2010**

**Item No. 4 Winnipeg Fleet Management Agency Audit**
**eFile FA-2**

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On March 17, 2010, the Executive Policy Committee concurred in the recommendation of the Audit Committee and submits the following to Council:

1. That the Winnipeg Fleet Management Agency Audit dated February 18, 2010 be received as information.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

**Report "A" – Executive Policy Committee – March 17, 2010**

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On March 17, 2010, the Executive Policy Committee concurred in the recommendation of the Audit Committee and submitted the matter to Council.

COMMITTEE RECOMMENDATION:

On March 4, 2010, the Audit Committee received as information the Winnipeg Fleet Management Agency Audit dated February 18, 2010, and forwarded the matter to the Executive Policy Committee and Council.

Winnipeg

# Audit Department

## *Winnipeg Fleet Management*
## *Performance Audit*
## *Final Report*
## *February 2010*

*Leaders in building public trust in civic government*

## Table of Contents


Executive Summary ..... 3
Mandate of the City Auditor ..... 6
Audit Background ..... 6
Audit Objectives ..... 6
Audit Approach ..... 7
Audit Scope ..... 7
Audit Conclusions ..... 7
Acknowledgement ..... 9
Winnipeg Fleet Management Background ..... 10
  Services Provided ..... 10
  Organizational Structure ..... 11
Key Risks ..... 11
Performance Analysis ..... 12
  Financial ..... 13
  Operational ..... 14
  Customer Satisfaction ..... 17
  Training and Development ..... 19
  Best Practices Review ..... 20
Observations and Recommendations ..... 24
  Management Oversight ..... 24
  Contracting for Professional Services ..... 26
  Performance Measurement ..... 30
  Information Technology Management ..... 33
  Life Cycle Cost Management ..... 38
  Human Resource Management ..... 40
  Leasing ..... 46
  Inventory Management ..... 49
  Fuel Revenue ..... 51
Integration of Winnipeg Police Fleet into WFMA ..... 54
Appendix 1 - Audit Process ..... 57
Appendix 2 – WFMA Service Provision ..... 58
Appendix 3 – Organizational Chart ..... 59
Appendix 4 – WFMA Training Strategy ..... 60
Appendix 5 – Fleet Performance Measures ..... 61
Appendix 6 – RTA Overview ..... 62
Appendix 7 – Life Cycle Model ..... 63
Appendix 8 – Summary of Recommendations ..... 64
Appendix 9 – RTA Implementation Schedule ..... 68
Appendix 10 – Deloitte Benchmarking Study ..... 70

## EXECUTIVE SUMMARY

In May 2003 the Winnipeg Fleet Management Agency (WFMA) received Council approval to operate as a Special Operating Agency (SOA) in accordance with the Policy and Framework for Alternative Service Delivery and the City's authority to create special service units. Effective March 25, 2009 WFMA reports to a Board of Directors. The Board of Directors is made up of the Chief Administrative Officer (CAO), the Deputy CAO's and the Chairman of the Alternative Service Delivery Committee (ASD).

The WFMA is governed by its operating charter. The charter formally outlines WFMA's function, mandate, terms, conditions and requirements governing its operations. The mandate for the WFMA is to provide economical, state-of-the-art, safe and eco-friendly fleet vehicle, equipment and other asset management services to the various City of Winnipeg departments, in support of their service.

Fleet acquisition and disposal services are provided to all City departments and other services such as preventative maintenance, repairs, fuel management, insurance and licensing and power tool rental services are provided to some departments.

The purpose of this audit is to report to the Audit Committee and Council on the efficiency and effectiveness of WFMA. The audit was identified in the City Auditor's 2007-2009 Audit Plan and endorsed by the Audit Committee. The objectives of this audit were to:

- review the operational performance of the agency;
- provide recommendations to improve the operational efficiency, and effectiveness of the agency; and,
- determine the extent reported service performance results are complete, relevant, accurate, balanced and meaningful.

Since 2003 WFMA has made a number of positive improvements. They have reduced the size of the City's fleet from approximately 2,100 units in 2003 to 1,668 units in 2008. The fleet has been standardized to reduce the diversity of parts and specialty equipment required to service the fleet. Despite these positive changes to the fleet, the value of the parts inventory has increased by 136%.

WFMA has reduced staffing by 3.8%, eliminated one satellite service site and contracted out the light, routine service maintenance for approximately 600 vehicles to a lower cost provider. The result has been a 44% increase in total expenses, an outcome that appears inconsistent with a smaller fleet. We discuss these trends in further detail in the Observations & Recommendations section of the report.

### Key Observations and Recommendations

We have made a number of recommendations to improve the efficiency and effectiveness of the WFMA. A summary of all recommendations is attached as **Appendix 8**.

Although the WFMA was set up as an SOA in order to allow for greater autonomy in day to day decision making it is evident that corporate departments such as IT, HR and Finance need to play a greater role with respect to oversight of WFMA operations. Enhanced corporate oversight is required to ensure the decisions and actions of the SOA are in the best interest of the City and are consistent with good management practices and governing authorities.

WFMA needs to develop an Information Technology strategic plan. In its first six years of operations, nearly $2 million has been expended on IT consulting services with the fleet management information system (RTA) still not fully implemented. Included in this amount is $476,000 which has been spent by WFMA on development of a new fleet management system. WFMA is now questioning whether this new system will meet their requirements. IT projects need to be prioritized and business cases prepared to support the need for each significant project. Improved contract management controls need to be implemented to ensure the City received value for monies expended. WFMA should also ensure all contracts comply with the City's Material Management Policy and Administrative Standard No. FM-002. WFMA still has considerable work to do in order to fully utilize the RTA fleet management system, which is a key business support tool. WFMA's current implementation has resulted in the design of very complex (inefficient) processes that require the use of offline spreadsheets and databases. We have provided a proposed re-implementation plan for the RTA system to ensure it can properly support the requirements of the business.

The WFMA produces an annual report that includes some information on results achieved. Overall, the information that is provided is incomplete with respect to key performance indicators that would enable a comprehensive review of the performance of the WFMA. WFMA needs to develop and report on key performance indicators for all significant areas of the business including: vehicle operation and utilization, vehicle maintenance, shop management, parts management, vehicle replacement and staffing. Reporting on the performance of these elements of its operations will provide information to Council on whether WFMA is achieving its goals and objectives and provides a cost-competitive service to its customers. We have provided a detailed list of recommended performance indicators (measures) to WFMA management to enable more comprehensive performance reporting in the future.

We have also recommended several changes to the quality and transparency of performance information. WFMA should calculate a shop rate based on actual costs instead of discounting private sector rates which provide no meaningful information. Standard repair times need to be implemented to measure the performance and productivity of the mechanics. Fuel charged to customers should clearly identify cost components to include the actual cost for fuel, distribution and labor cost and any surcharges.

WFMA needs to expand the information used in the life cycle costing methodology to take into account the total cost of ownership. Including preventative maintenance and estimated repair costs over the life of the unit will allow WFMA to make more informed acquisition and disposal decisions, saving customers money in the long-run. Funds collected up front from WFMA customers to pay for repairs to vehicles as they get older should be retained with WFMA.

We recommended that WFMA management develop a strategic staffing plan which would include a workforce analysis that encompasses any planned outsourcing of functions and a review of the current organizational structure. While the number of staff decreased at WFMA, the composition changed significantly. In 2003 there were 0.2 administrative employees for each employee from operations by 2008 this increased to 0.6. Management must also develop a training and development plan for staff. The average training cost for all City staff (excluding Police and Fire Paramedic Services) is $300/year; WFMA spent approximately $1,387/year in 2008. Employee attendance at out-of-town conferences also needs to be reviewed.

## MANDATE OF THE CITY AUDITOR

The City Auditor is a statutory officer appointed by City Council under the *City of Winnipeg Charter Act*. The City Auditor reports to Council through the Audit Committee (Executive Policy Committee) and is independent of the City's Public Service. The City Auditor conducts examinations of the operations of the City and its affiliated bodies to assist Council in its governance role of ensuring the Public Service's accountability for the quality of stewardship over public funds and for the achievement of value for money in City operations. Once an audit report has been communicated to Council, it becomes a public document.

## AUDIT BACKGROUND

The audit was identified in the City Auditor's Audit Plan for 2007 to 2009 and endorsed by the Audit Committee. The mandate for the Winnipeg Fleet Management Agency (WFMA) is to provide economical, state-of-the-art, safe and eco-friendly fleet vehicle, equipment and other asset management services to the various City of Winnipeg departments, in support of their service. This includes vehicle and equipment acquisition and disposal, repair and maintenance services, fuel supply and management and insurance, licensing and registration. WFMA bills each department for the services they provide.

For the year ended December 31, 2008, WFMA earned total revenue of approximately $37.4 million and incurred total expenditures of approximately $35.8 million. Revenue has increased by $10 million (36%) since 2003, while expenditures have increased by $10.9 million (44%).

The purpose of this audit is to report to the Audit Committee and Council on the efficiency and effectiveness of the WFMA service.

## AUDIT OBJECTIVES

The objectives of this audit were to:

- review the operational performance of the agency;
- provide recommendations to improve the operational efficiency, and effectiveness of the agency; and,
- determine the extent reported service performance results are complete, relevant, accurate, balanced and meaningful.

## AUDIT APPROACH

The Audit Department engaged two consultants to provide expertise in this audit. Deloitte & Touche LLP was contracted to research best practices for automotive fleet operations; their report is attached as **Appendix 10**. Siere Solutions was contracted to review the following elements of the WFMA operations: life cycle costing, shop service standards, fleet management information systems and the maintenance facility operation. We have incorporated the work of both consultants throughout the report.

We have conducted the audit in accordance with generally accepted auditing standards. **Appendix 1** provides a flowchart of the audit process.

## AUDIT SCOPE

The audit covered the period May 2003 to December 31, 2008. This period includes the initial creation of the WFMA by Council. The scope of our audit included the transactions, processes, policies and practices in place at WFMA during this period. We believe that this scope affords us the ability to analyze emerging trends in the industry without a pervasive risk of losing context in the examination due to continually changing social, environmental and economic circumstances.

We have undertaken appropriate procedures in an attempt to verify the accuracy of the information we were provided. At various times during the review, due to information system limitations, we were unable to obtain information to support our analyses.

## AUDIT CONCLUSIONS

The audit work performed led us to the following conclusions:

- From an operational perspective, WFMA has worked with departments to reduce the size of the fleet and increase standardization to reduce the diversity of parts. WFMA has also made enhancements to the fuel delivery system by improving security and installing technology to provide better information on fuel consumption. Financially, WFMA has exceeded the revenue and net income projections defined in the 2003 Selection Report, partially due to their monopoly status and the ability to pass on costs to other City departments who are captive customers (total expense has increased by 25% over the same period). While the size of the fleet has decreased significantly and has been standardized to reduce the diversity of parts, the value of inventory has increased by 136% since 2003. WFMA has partially implemented a fleet management system and life cycle cost methodology. WFMA still has considerable work to do to fully implement the fleet (RTA) information system and associated life cycle costing methodology and to control parts inventory. Contracting for professional services needs to be better managed to ensure value for money is achieved. Similarly, expenditures on training and development need to be better managed to ensure the organization is making the best use of limited training and development funds. At this point in time, due to the lack of available performance

information on key aspects of WFMA operations such as mechanic productivity, it is difficult to assess how well WFMA has performed since it has become an SOA beyond the bottom line. Better performance information is required to demonstrate the benefits and the cost-competitiveness of the Winnipeg Fleet Management Agency to its customers.

- We provided ten recommendations to improve the efficiency and effectiveness of the WFMA. Key recommendations address the following areas:
    - Management Oversight – the governance directives for HR, Finance and IT need to be revised to define the oversight role of these corporate functional groups over SOA operations. The SOA Board of Directors should meet regularly to provide direction to the COO of WFMA Management and to review the performance of the COO. The new COO should ensure that the WFMA management team is empowered to perform their delegated responsibilities and are held accountable.
    - Contracting for Professional Services - WFMA should ensure that a cost/benefit analysis or business case is prepared to support the need for all projects prior to entering into a contract with a consultant. Further, all consultant contracts should have properly defined deliverables, require regular status updates and invoices should include hours worked and a detailed description of work performed.
    - Performance Measurement - WFMA should develop and report on, a comprehensive set of performance measures for each key area of the business. The performance information should provide insight into whether WFMA is achieving its goals and objectives.
    - Information System Management - WFMA needs to develop an Information Technology strategic plan to ensure projects are prioritized and that the City receives value for monies expended in this area.
    - Life Cycle Cost Management - WFMA needs to expand the information used in the life cycle costing methodology to take into account the total cost of ownership. Including preventative maintenance and estimated repair costs over the life of the unit. This will allow WFMA to make more informed acquisition and disposal decisions, saving customers money in the long-run.
    - Human Resource Management – WFMA should develop a strategic staffing plan which would include a workforce analysis that encompasses any planned outsourcing of functions, a review of the current organizational structure and a training and development plan for staff.
    - Leasing – we recommended that a Master Lease Agreement be approved by the Board and used on all new leases entered into by WFMA. We further recommend that WFMA expand the data it uses when determining the operating lease rate and that funds collected up front to pay for repairs to vehicles as they get older are retained within WFMA. Individual customer accounts, by vehicle or department, should be developed to track operating lease revenue and associated costs which would allow the customer to assign end of the lease gains or losses against the cost of a replacement vehicle.
    - Inventory Management - WFMA management should undertake a comprehensive review of parts inventory management practices with a view to reducing the investment in inventory. Storekeepers should be fully trained on inventory management and control practices.

- The WFMA produces an annual report that includes some information on results achieved. Overall, the information that is provided is incomplete with respect to key performance indicators that would enable a comprehensive review of the performance of the WFMA. WFMA needs to develop and report on key performance indicators for all significant areas of the business including: vehicle operation and utilization, vehicle maintenance, shop management, parts management, vehicle replacement and staffing. Reporting on the performance of these elements of its operations will provide information to Council on whether WFMA is achieving its goals and objectives and provides a cost-competitive service to its customers. We have provided a detailed list of recommended performance indicators (measures) to WFMA management to enable more comprehensive performance reporting in the future.

## ACKNOWLEDGEMENT

The Audit Department wants to extend its appreciation to the management and staff of the Winnipeg Fleet Management Agency. In addition, we acknowledge the assistance provided by Deloitte & Touche LLP and Siere Solutions.

**Members of the Audit Team**

Bryan Mansky, MBA, CMA, CIA
Audit Manager

Diane Jansen, CA
Project Leader

Micheal Giles, CA
Auditor



February 2010

Brian Whiteside, CA•CIA
City Auditor

Date

## WINNIPEG FLEET MANAGEMENT BACKGROUND

In May 2003 the Winnipeg Fleet Management Agency (WFMA) received Council approval to operate as a Special Operating Agency (SOA) in accordance with the Policy and Framework for Alternative Service Delivery and the City's authority to create special service units.

The WFMA reports to the Board of Directors responsible for SOA's. The Board of Directors is made up of the Chief Administrative Officer (CAO), the Deputy CAO's and the Chairman of the Alternative Service Delivery Committee (ASD).

The WFMA is governed by its operating charter. The charter formally outlines WFMA's function, mandate, terms, conditions and requirements governing its operations. It includes details on reporting relationships, job responsibilities, delegations of authority, financial and human resource policies, etc. Any proposed amendments to the charter are presented to Council for approval.

### *Services Provided*

The services offered by WFMA include:

- ***Fleet Acquisition and Disposal Services*** - WFMA provides all the requirements for acquiring fleet equipment, from the creation of the specifications to the tendering and inspection of the equipment when it arrives. WFMA identifies which units to resell and directs vehicles and equipment to the appropriate disposal network resulting in the optimization of the disposal revenue.

- ***Fleet Maintenance Services*** – WFMA provides preventative and corrective maintenance as well as manufacturing and fabrication requirements. WFMA performs maintenance and repair services at two maintenance facilities and one fabrication shop in Winnipeg.

- ***Fuel Management Services*** - WFMA provides various types of fuel (gas, diesel, kerosene, propane) to customers using a charge-back system based on consumption. Customers have access to fuel on a 24 hour, 7 day basis at six major fueling stations operated by the WFMA.

- ***Insurance and Licensing Services*** - WFMA provides complete insurance and licensing services for all customer vehicles.

- ***Power Tools Services*** - This is a rental service where WFMA provides motor driven tools to City departments engaged in outdoor construction and maintenance activities.

City departments are required to utilize the services offered by the WFMA; however, not all services are provided to all departments. Fleet acquisition and disposal services are provided to all City departments and WFMA provides the other services to varying degrees. A detailed listing of the services provided to each City department is provided in **Appendix 2**.

### *Organizational Structure*

Currently the WFMA has a full-time equivalent (FTE) complement of 110.6 staff to deliver fleet management services to other City departments. Seven FTE's were assigned to the administration of the agency (supervisory position), 71 FTE's worked in operations (mechanics, stores, etc), 26 FTE's provided fleet support services (life cycle costing, customer service, etc) and 6.6 FTE's worked in the areas of finance, project management and safety. An organizational chart of WFMA, as at February 2009 is included in **Appendix 3.**

## KEY RISKS

The following potential key risks associated with the management of a fleet agency were considered in the conduct of the Audit:

- Inability to monitor and maintain compliance with various legislative authorities such as vehicle insurance and licensing, environmental regulations and health and safety standards;
- Lack of a life cycle costing methodology leading to suboptimal vehicle decisions;
- Information systems that do not capture the appropriate data to be able to provide useful information to manage the fleet operation;
- Inadequate performance information to effectively manage the WFMA;
- Lack of qualified staff;
- Inadequate financial resources to reinvest in assets and infrastructure; and
- Lack of communication with customers leading to strained relationships;

## PERFORMANCE ANALYSIS

The WFMA 2003 Selection Report identified several performance indicators in the areas of finance, operations, customer satisfaction and training and development. The 2003 Selection Report states that the WFMA's performance would be measured against these targets. Bottom line financial results were to be the mechanism for measuring the success of the Agency. Existing information systems at the time did not provide the data necessary to establish a baseline measure. As a result of the current state of information systems, we were only able to obtain and analyze some data related to the performance indicators. Exhibit 1 shows the performance measures established for the WFMA in the 2003 Selection Report.

**Exhibit 1**

| Goal | Performance Measurement | Measure of Success / Target |
|---|---|---|
| Financial | Annual financial targets as outlined in the Business Plan Selection Report | Financial targets met and/or exceeded |
| Operational | Reduce the cost of operation | Overhead costs reduced |
| | Optimize fleet maintenance asset management | Expenditure minimized |
| | Implement RTA (Fleet Management Information System) to replace EMMS | Fleet management information system implemented |
| | Meet and/or exceed productivity rates | Initial benchmarking implemented |
| | Improve fuel distribution system | Operating costs reduced and assurance of environmental compliance provided |
| Customer Satisfaction | Obtain customer satisfaction feedback | Feedback sought and action taken |
| Training and Development | Implement a comprehensive training strategy | Strategy implemented |
| | Provide cross-training opportunities | Training provided |
| | Obtain staff feedback | Feedback sought and action taken |

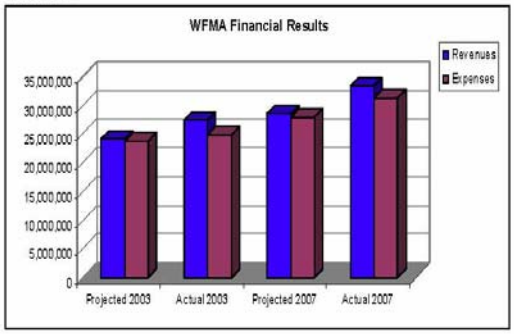
**Source: WFMA 2003 Selection Report**

We reviewed the performance indicators identified in the 2003 Selection Report in the areas of finance, operations, customer satisfaction and training and development. We also included additional performance information that we feel is critical to understanding the overall performance of the WFMA.

## *Financial*

The financial results of WFMA are independently audited on an annual basis and a summary of the information is presented below in comparison to the financial targets set out in the 2003 Selection Report. The projected results as shown in Exhibit 2 illustrate that both revenues and expenses were expected to increase over time. The actual results confirm that this trend did indeed occur for both revenues and expenses.

**Exhibit 2**




**Source: 2003 WFMA Selection Report and WFMA Audited Financial Statements**

Although the actual financial results achieved by the WFMA from 2003 to 2007 appear to show that WFMA has met projections, a better indication of financial results may be if the WFMA generated the profit originally projected. Exhibit 3 below illustrates that net income from operations far exceeded the initial projections.

The 2003 Selection Report projected net income from operations would increase steadily for the period 2003 to 2007 (on average 4.3% per year). As well, the 2003 Selection Report indicated there would be a transfer to the City equivalent to what WFMA would have paid in various taxes. Actual net income from operations for the period 2003 to 2007 was $10 million greater than projected in the 2003 Selection Report and transfers to the City exceeded projection by more than $8 million. Since its inception WFMA has transferred $ 12,245,000 to the City.

**Exhibit 3**

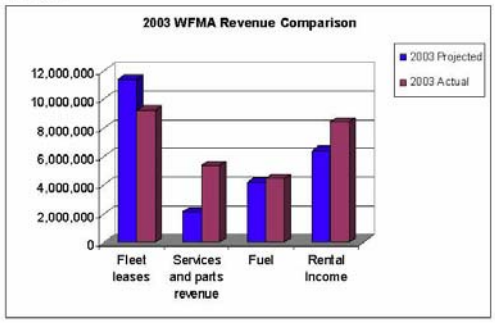
WFMA Net Income

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|
| Projected | $265,000 | $321,000 | $470,000 | $349,000 | $600,000 | N/A |
| Transfer to City | $122,000 | $148,000 | $216,000 | $161,000 | $276,000 | N/A |
| Actual | $2,517,000 | $1,362,000 | $3,239,000 | $3,464,000 | $2,145,000 | $1,608,000 |
| Transfer to City | $328,000 | $1,031,000 | $4,410,000 | $1,862,000 | $1,494,000 | $3,120,000 |

**Source: 2003 WFMA Selection Report and WFMA Audited Financial Statements**

We further analyzed the financial results by questioning why revenues were significantly higher than projected even in the first year of operation (see Exhibit 4). Revenue from fleet leases was lower than forecast, however other items such as revenue from services (insurance and licensing) and parts and rental income were significantly higher than forecast.

Exhibit 4

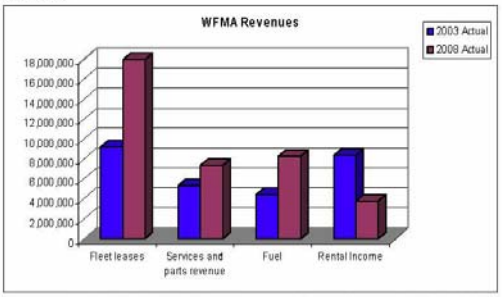



Source: 2003 WFMA Selection Report and 2003 Audited Financial Statements

Information surrounding the start-up year is of interest as it can depict the level of analysis that went into creating this SOA. Analyzing revenue trends as the SOA matures provides greater insight into the overall management of the operation. In Exhibits 5 we compared actual WFMA Revenue for 2003 and 2008 to identify any major changes in the composition of revenue.

Fleet lease revenue increased by $8.8 million (95%) over the period. Services and parts revenue increased by $2 million (37%) and revenues related to the sale of fuel increased by approximately $3.8 million (86%). Typically, increasing the revenue stream would be seen as a positive, but the increased revenues come at the expense of departments who are required to purchase these services. Part of the increase can be explained by increased costs which are passed on to the customer and the acquisition of new vehicles; however during this same time period, the overall size of the fleet has decreased and there is increased standardization, which would lead one to conclude that these types of revenues should not have increased to this level. WFMA has achieved the results for this performance indicator; however, we will further discuss the WFMA revenues in the Observations and Recommendations section of the report.

Exhibit 5




Source: 2003 Audited Financial Statements and PeopleSoft Database

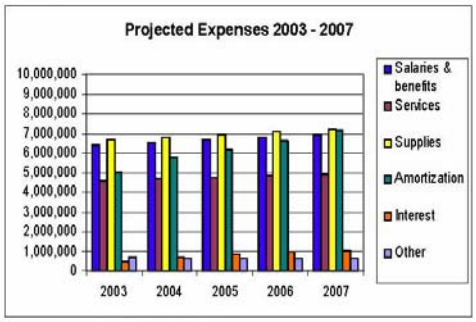
## *Operational*

Operational performance indicators relate to the efficiency and effectiveness of the WFMA's operations. We will discuss each performance measurement listed in the 2003 Selection Report below.

### Reduce the Cost of Operation

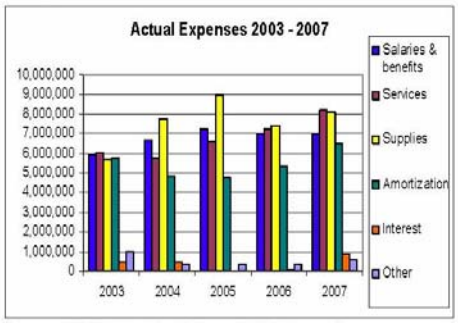
One of the operational performance indicators identified in the 2003 Selection Report was a reduction in the cost of operating the City's fleet. The measure of success for this indicator was a reduction in overhead costs. Exhibits 6 and 7 below show projected and actual expenses for 2003 to 2007 respectively.

Exhibit 6




Source: 2003 Selection Report

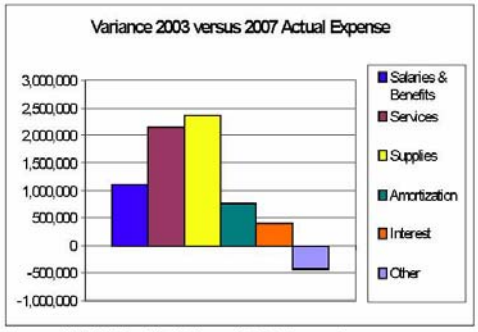
Exhibit 7




Source: WFMA Audited Financial Statements

Expenses were on average 6% higher than projected for the period 2003 to 2007. Exhibit 8 shows the variance between <u>total</u> actual expenditures for the period 2003 to 2007. Total expense increased by 25%.

Exhibit 8



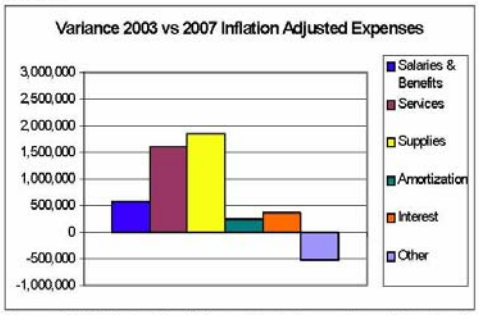

Source: WFMA Audited Financial Statements

We then wanted to determine how actual expenses changed from 2003 to 2007. To ensure comparability, we factored in inflation and the variances are shown in Exhibit 9. Overall, expenses have increased by 16% since 2003, with inflation factored in and all expense categories have increased except "other".

The two largest variances are in the areas of services and supplies. Services expense increased by 35.6% or $2.2 million, which is comprised of a 28% increase in consulting and training and a 21% increase in vendor repairs.

Supplies expense increased by 41.4% or $2.4 million. The increase in supplies expense is mainly due to a 52% increase in fuel expense and a 24% increase in parts expense.

Exhibit 9




Source: WFMA Audited Financial Statements and Bank of Canada Inflation rates

Based on the above data WFMA has not reduced their operating cost including overhead expense since the SOA was established in 2003. Expenses have continued to increase, outpacing the inflation rate, despite the fact that during this period both the size of fleet maintained by WFMA and number of staff employed by WFMA decreased. As well, WFMA has a newer fleet which should have led to a corresponding decrease in the cost of maintenance. Therefore, we do not believe WFMA has achieved the target for this performance indicator.

Further analysis was performed by Sierre Solutions to determine whether WFMA has decreased its overall expenditures as compared to fleet expenses prior to the SOA being established. WFMA has claimed fleet operating costs have decreased from approximately $42 million in 2000 to under $26 million in 2007. Further analysis of the 2000 figure reveals that there are significant concerns with comparability to the 2007 figure. A portion of these costs should not be assigned to WFMA as these costs were allocated to another agency, Glacial Sand and Gravel and other City departments.

The 2007 figure is also questionable since there are a number of pieces of equipment that have not been included in the current cost calculation because they have not come up for replacement. When the Equipment Replacement Reserve was retired a decision was made not to charge a capital lease rate on equipment until it was replaced. It is anticipated that all equipment will be replaced within the next five to seven years, but until that point this figure is not complete and the ability to compare to past data is limited.

### Optimize Fleet Maintenance Asset Management

Another performance indicator identified in the 2003 Selection Report was to optimize fleet maintenance asset management and the measure of success was to minimize the expenditure on fleet maintenance. As shown above, it appears the WFMA has not reduced its operating costs since 2003 so it is difficult to conclude that this performance target has been met. WFMA has not developed standard repair times for completing preventative maintenance on vehicles. The lack of this information makes it difficult to evaluate the efficiency of shop operations. As well, the WFMA life cycle costing methodology does not factor in anticipated ongoing maintenance costs for most of their vehicle acquisitions. By not assessing the total cost of ownership, the expense for fleet maintenance over the life of the equipment could exceed the initial savings in capital expenditure.

WFMA has however, made a number of positive improvements in this area. They have reduced the size of the City's fleet from approximately 2,100 units in 2003 to 1,668 units in 2008. The fleet has been standardized to reduce the diversity of parts and specialty equipment required to service the fleet. One satellite service site has been eliminated and WFMA have contracted out the light, routine service maintenance for approximately 600 vehicles to a lower cost provider. While these are positive initiatives, the absence of objective performance information leaves us unable to conclude that they have achieved intended results for this performance indicator.

### Implement Fleet Management Information System

The 2003 Selection Report identified the implementation of a fleet management information system, specifically Ron Turley and Associates (RTA) as critical to success. At the time of our review, RTA was not fully implemented and we identified several concerns with the implementation which are discussed later in the report. For this reason we would conclude that the intended results for this performance indicator has not been achieved.

### Meet and/or Exceed Productivity Rates

As per the 2003 Selection Report, the WFMA was to implement some initial benchmarking for productivity rates. Based on our analysis we were unable to find reliable information on the actual productivity of operations. Given that productivity rates are not measured by WFMA we reviewed other measures of performance reported by WFMA. For example, a key efficiency

measure for a fleet service is the shop rate which is the hourly rate charged to customers to provide a specific type of service. The shop rate should be sufficient to cover both the variable and fixed costs of the operation.

WFMA determines their shop rate, by conducting an annual review of the shop rates being charged by various comparable garages and then discount those rates by 10 – 12% to get the rate charged. This methodology does not provide any insight into the efficiency of the operation as WFMA actual costs for providing the service are not considered. WFMA quotes a 2008 shop rate of $82/hour; however, our calculations determined that a conservative estimate would be $105/hour to cover costs, a 28% increase over the quoted rate.

A key productivity metric would be the efficiency of mechanics and their ability to perform maintenance within industry standard timeframes. The scheduling module of the RTA system has not been implemented so WFMA has not adopted standard repair times. The absence of this information prevents us from evaluating the productivity of the mechanics.

WFMA Annual Reports identify other measures of performance such as size of fleet, book value of fleet and fuel price. We note that these are not measures of performance and relate more to the customer's operations. The lack of use of a shop rate based on actual costs and the failure of WFMA to identify and track any productivity measures leads us to conclude that the intended results for this performance indicator have not been attained.

### Improve Fuel Distribution System

The final operational performance indicator in the 2003 Selection Report is to improve the fuel distribution system. WFMA has taken active steps in improving the inventory management of fuel and in establishing a fund to address the environmental responsibilities involved in operating these sites. WFMA has committed approximately $2.3 million to date on new fuel site construction and fuel site remediation.

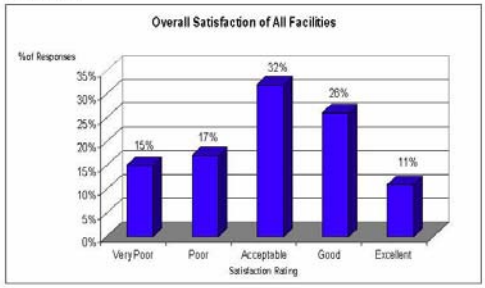
WFMA is in the process of implementing Black Box technology which will track mileage, fuel consumption, idling time and other performance metrics for each vehicle. WFMA is also in the process of implementing a new system whereby a magnetic fuel ring will be installed on all City vehicle gas tanks. When the gas pump is put into the tank, the system will know that it is an authorized vehicle and can be filled. The liters pumped will be tracked by the system for that specific vehicle. All sites are being upgraded to include in tank monitoring and leak detection measures. Security cameras are also part of the upgrade process for new sites. We believe that WFMA has achieved the performance target that was established for this performance indicator.

## *Customer Satisfaction*

One of the benefits of establishing the WFMA listed in the 2003 Selection Report was a focus on customer service and retention. In order to determine how successful WFMA is in achieving this benefit, obtaining customer satisfaction feedback and taking action on any deficiencies noted was one of the performance indicators identified in the report.

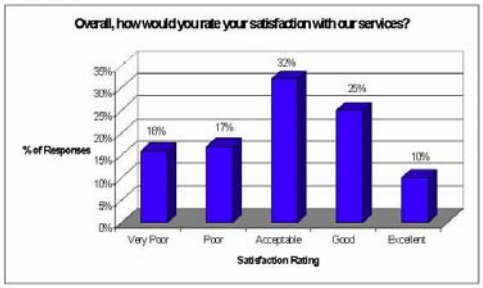
In August 2007, WFMA conducted a Customer Satisfaction Survey. The survey was distributed to Public Works, Water and Waste as well as other City departments, 126 surveys were

**Exhibit 10**




**Source: WFMA August 2007 Customer Satisfaction Survey Results**

**Exhibit 11**




**Source: WFMA August 2007 Customer Satisfaction Survey Results**

completed. Exhibits 10 and 11 show the Overall Satisfaction of All Facilities and Overall Satisfaction with WFMA Services.

For both questions, 69% and 67% of survey respondents respectively rated their satisfaction in the services provided by WFMA as being acceptable or higher. Almost 1/3 of the survey respondents however, rated their satisfaction of the services provided as poor to very poor. As this was the first survey conducted by WFMA since the SOA was established there is no baseline which can be used to determine whether customer satisfaction has improved or worsened since 2003.

A series of interviews were also conducted by Siere Solutions with WFMA's major customers, Public Works and Water and Waste Departments. As a result of these interviews it became apparent a significant gap may exist between the quality of service WFMA believes they are providing and how it is being received by its clients. The most prevalent concerns related to the cost of service and whether in fact there has been any improvement in services as a result of the change in structure to an SOA and with the implementation of RTA.

WFMA has undertaken several initiatives to improve customer satisfaction. WFMA has implemented a priority schedule at the repair facilities to better coordinate work and allow customers to make appointments reducing downtime. Customers are sent email notifications when their vehicles are ready for pickup. WFMA publishes a quarterly customer newsletter and "on-demand" customer bulletins to provide important fleet information to customers. An intranet website was launched in 2008 to further improve customer relations. A WFMA Quick Reference Card was also developed to assist customers with who to contact at WFMA for various fleet concerns. These are included in every vehicle's safety information pouch.

WFMA management feels that the above steps have improved customer satisfaction based on the type and level of customer complaints received. WFMA has not conducted a customer satisfaction survey since implementing these changes, however based on the interviews conducted by Siere Solutions with WFMA key customers some gaps may still exist. We believe that WFMA has made progress in improving customer service; but until a follow-up survey is undertaken, we are unable to conclude that they have achieved the intended results planned for this performance indicator.

## *Training and Development*

The training and development performance standards measure the effectiveness of training provided to WFMA employees. We will discuss each performance measurement listed in the 2003 Selection Report below:

### Implement a Comprehensive Training Strategy

The WFMA Training Strategy is included in **Appendix 4.** Although the training strategy provided is a good starting point it is not a comprehensive training plan which would ensure that appropriate training is provided to assist employees in their development. A more comprehensive training and development plan would for example, determine what training would be required to meet basic job requirements, outline skills and abilities required in the future to meet WFMA goals and assess and address any gaps. Although WFMA has made progress on this performance indicator we do not believe that the intended results have fully been achieved.

### Provide Cross Training Opportunities

WFMA has provided a considerable amount of training in the areas of health and safety, equipment specific training, management and RTA. Exhibit 12 shows a breakdown of the cost of training, conferences and personal development for 2006 – 2008. It also shows the number of conference attendees.

Exhibit 12

| Account Description | 2006 Actual | 2007 Actual | 2008 Actual |
|---|---|---|---|
| Meal Expense | $12,753 | $6,602 | $8,555 |
| Seminars Convention Travel | $19,136 | $1,109 | $251 |
| Training Workshops and Tuition | $148,304 | $138,349 | $167,016 |
| Conferences | $6,302 | $14,057 | $3,714 |
| Total | **$186,495** | **$160,117** | **$179,536** |
| Average Training Cost/Employee | $1,361 | $1,269 | $1,532 |
| Number of Conference Attendees | 38 | 52 | 44 |

Source: PeopleSoft Database

During the same period, WFMA had the third highest average training cost per employee compared to other City departments. Only Police Services and Fire Paramedic Services were higher. The average for all other City departments (excluding Police and Fire Paramedic Services) was approximately $300 per employee annually.

In reviewing the training that has taken place to date, it is unclear how the organization evaluates the effectiveness of the training provided. In some cases, the effectiveness can be measured in the immediate application of learned skills; however, in other cases it is not so clear. As well there does not appear to be any clear strategy or justification as to who attends specific training and conferences and the number of conference attendees. Although WFMA has made progress by investing in considerable training we are concerned that employees may be provided with training which may not be appropriate or the most beneficial for their

development. In other words, WFMA may not be getting the best value for the training dollars they spend. Based on this we do not believe that this performance indicator has been fully met.

### Obtain Staff Feedback

WFMA employees are requested to complete a course evaluation form for all training they attend, including in house and external training. Evaluations are reviewed by the trainer for in house training and the supervisor responsible for human resources. WFMA has made some changes in their orientation and RTA training for example based on the results of these evaluations. We believe that they achieved the intended results for this performance indicator.

Training and development is discussed more fully in the Operations and Recommendations section of this report.

## *Best Practices Review*

Deloitte & Touche LLP was engaged by Audit to assist the department in researching best practices for automotive fleet operations. Five organizations were included in the study:

- City of Calgary fleet management department
- City of Edmonton fleet management department
- City of Ottawa fleet management department
- Province of Manitoba fleet management agency
- Privately owned fleet management company.

A series of questions grouped into the following categories was provided to each of the organizations.

- Mandate
- Use of vehicles
- Vehicle replacement
- Chargeback and vehicle replacement funding
- Maintenance
- Fleet and fuel monitoring
- Reporting
- Other

Best practices were determined for each category. A copy of the report is included in **Appendix 10**. Highlights of the report are discussed below.

### Mandate

Best practices identified in this area include:

- Mandates should be clearly defined and priorities of the greater organization should be understood by fleet management and its customers.
- A centralized fleet management which manages the entire life cycle is the preferred model.

- Allowing captive customers the option to opt out of services, provided justification for opting out is given which includes a business case.
- Fleet management take an active role in assisting customers in assessing vehicle requirements, particularly in regards to specialty vehicles.

WFMA does have a clearly defined Mandate and does take an active role in assisting customers in assessing their vehicle requirements. For light vehicles, one city wide tender is done. If the customer wants a vehicle different from what is being tendered, they need to do a business case to support the change. WFMA uses some aspects of life cycle cost management, however they do not consider the cost of repairs when making acquisition decisions, or determining vehicle replacement.

The 2003 Selection Report indicated customers have the right to opt out of using the WFMA services after 3 years if a business case is presented to Council supporting an alternative course of action. The Agency's 2006 Selection Report however states that customers will continue all services with the WFMA and that the City working with WFMA will determine the process, conditions, timing and approvals required for a customer to use an alternative fleet management service.

## Use of Vehicles

Best practices identified in this area include:

- Personal use of fleet vehicles should be tracked and charged back to the employee.
- The needs assessment review should identify options for vehicle access including determining the need for an assigned vehicle, access to a vehicle pool or personal use of the employees own auto.

The WFMA does not monitor personal use of fleet vehicles. It is the responsibility of the customer to monitor an employee's personal usage. Customers have indicated to us that personal usage of fleet vehicles is minimal. The WFMA does not conduct a formal needs assessment review. The customer will assess their operational requirements and will determine whether employees require a vehicle full time. WFMA provides the customer with mileage and fuel consumption information. It is the responsibility of the customer to monitor this information although WFMA will question the customer if mileage is excessively high or low.

## Vehicle Replacement

Best practices identified in this area include:

- Adoption of the life cycle costing model provides the best value to the customer over time. The customer should be strongly encouraged or required to follow recommendations made by fleet management.
- The customer is allowed to participate in end of lease disposal gain or loss as an incentive for customers to properly maintain their vehicles.

Although WFMA does use some aspects of life cycle costing to determine its vehicle replacement schedule, they do not consider repair costs over the life of the vehicle as part of their assessment. Standard industry vehicle life cycles are used. The customer is required to follow the vehicle replacement schedule determined by WFMA.

WFMA does not allow the customer to participate in any end of lease disposal gains or losses. Customers are charged for abnormal wear and damage to their unit in addition to their regular monthly rates, so there is an indirect incentive for customers to maintain their vehicle.

### Chargeback and Vehicle Replacement Funding

Best practices identified in this area include:

- Establishment and funding of adequate reserves for vehicle replacement is preferred.
- Chargeback of fuel and maintenance directly to the customer provides incentive for the customer to monitor fuel consumption and perform regular maintenance.

WFMA does not have a vehicle replacement fund. Capital acquisitions are funded through market financing and through an operating line of credit held with the City. WFMA charges customers on a pay-as-you-go basis. The capital portion of monthly lease payments made by the customer is used toward payments on these loans.

WFMA charges its customers directly for fuel and maintenance. WFMA is the only jurisdiction surveyed that charges its customers the discounted market rate for fuel. All other jurisdictions charge their customers the actual cost of fuel. As well WFMA is the only jurisdiction surveyed which uses a discounted industry rate for its shop rate. All other jurisdictions use the actual cost of maintenance which includes direct and indirect costs.

WFMA controls its own part supply. In most jurisdictions surveyed parts supply is controlled through either supply or material management. In one jurisdiction finance controls part supply.

### Maintenance Expense

Best practices identified in this area include:

- Twenty four hour seven days a week emergency service
- Replacement vehicles are made available when required.

WFMA does provide 24 hour, 7 days a week emergency service to its customers. Replacement vehicles are not generally provided to customers when their vehicle is in for repair. WFMA does provide rental vehicles if available to customers when requested.

### Fleet and Fuel Monitoring

Best practices identified in this area include:

- Technology exists to assist in controlling unauthorized purchase or use of fuel.
- Regular collection of performance information and metrics assists in managing the fleet and evaluating fleet performance.

WFMA is in the process of implementing Black Box technology which will track mileage, fuel consumption, idling time and other performance metrics for each vehicle.

WFMA is also in the process of implementing a new system whereby a magnetic fuel ring will be installed on all City vehicle gas tanks. When the gas pump is put into the tank, the system will know that it is an authorized vehicle and can be filled. The fuel pumped will be tracked by the system for that specific vehicle. All sites are being upgraded to include in tank monitoring and leak detection measures. Security cameras are also part of the upgrade process for new sites.

Most jurisdictions surveyed collect information for several performance indicators, including billable hours per mechanic, standard repair time versus actual repair time, cost per kilometer for each unit, average unit cost, etc. WFMA is primarily assessed on its financial performance and does not collect information on the performance indicators monitored by these other jurisdictions.

### Information and Reporting

Best practices identified in this area include:

- Systems with web interface ability facilitates the exchange of information with customers.
- Regular meetings with customers assist in addressing performance problems and issues as they arise.

WFMA provides regular reporting to its customers. WFMA publishes a quarterly customer newsletter and "on-demand" customer bulletins to provide important fleet information to customers. An intranet website was launched in 2008 to further improve customer relations.

### Other

Best practices identified in this area include:

- Fleet managers take an active role in promoting driver safety.
- Fleet managers take an active role in promoting "green" initiatives.

WFMA relies on its customers to perform their own safety training as this function was never transferred to WFMA or mandated for them to perform. WFMA has undertaken a number of "green" initiatives including the use of hybrid vehicles, bio diesel and black box technologies.

The above best practices and the current state of WFMA are further analyzed in the Operations and Recommendations section of this report.

## OBSERVATIONS AND RECOMMENDATIONS

The remainder of this report details our observations and recommendations. We believe the issues identified are important and implementing the recommendations will assist management in better managing WFMA operations. A complete summary of our recommendations is attached as **Appendix 8**.

### *Management Oversight*

The WFMA, as of March 25, 2009, reports to the Board of Directors responsible for SOA's. The Board of Directors is made up of the Chief Administrative Officer (CAO), the Deputy CAO's and the Chairman of the Alternative Service Delivery Committee (ASD). The WFMA was established as a SOA in order to provide the Agency with greater autonomy in day to day decision making by exempting the SOA from certain administrative rules and reducing the amount of external involvement in detailed operations. The premise behind a SOA is that they should be competitive with the private sector because they are provided this increased level of autonomy in comparison to departments within the government structure. WFMA management is struggling to meet this mandate.

Through our review, we identified issues that may be a reflection of poor management decisions and/or lack of oversight by both WFMA management and the City's corporate functional groups. For example, a number of decisions made by the former Chief Operating Officer (COO) with respect to the RTA system have not yielded positive results. Starting in 2003, the former COO has engaged a number of IT consultants to perform development work on the RTA Fleet Management system. IT consulting costs have exceeded $2 million dollars since 2003, yet in many cases the expected deliverable was not defined in the contract and there was minimal oversight over the work performed. The RTA software was purchased by WFMA in 2002 for approximately $33,400 US and is still not fully functional after this level of expenditure. WFMA has expended approximately $476,000 on development of a new fleet management system, to potentially replace RTA and are now questioning whether this new system will meet their requirements.

As well, the former COO made a number of decisions regarding compensation including the payment of undocumented overtime to WAPSO employees and acting pay that was more than required under the WAPSO agreement, which are of concern. These issues are discussed in more detail in a later section of this report.

We are also concerned with the lack of oversight shown by other WFMA management. In our opinion, WFMA management, including the Supervisor of Finance should have questioned the need for some of the consulting and compensation expenditures. Unsupported invoices should have been investigated prior to payment and breaches in the procurement policy should have been addressed. WFMA management should have been much more involved in the negotiation and administration of the various contracts with the consultants, in particular new contracts, where they related to their areas of responsibility. We do note, that the WFMA Supervisor of Finance did state that they attempted to question the COO about the expenditures but did not receive satisfactory

responses. The City's Corporate Controller had identified issues related to WFMA's procurement practices several years ago and contracted with the external auditors in 2007 to review. In an internal report regarding this review, it was concluded that WFMA violated the spirit and intent of the City's purchasing policy. The Corporate Controller and Manager of HR Planning and Services met with the COO of WFMA at that time to ensure that the City's purchasing policy would be applied to all future contracts. The Supervisor of Finance was aware of the Corporate Controller and former COO having discussions regarding contract procurement concerns. In our recent review of contracts, however several additional issues, including the ones noted above were identified and we are concerned that the Supervisor of Finance did not escalate these issues to the Corporate Controller. In our opinion, the Supervisor of Finance should not have relied on previous conversations between the Corporate Controller and the past COO as being sufficient, given that the procurement concerns related specifically to the actions and decisions of the former COO.

Finally, we are concerned that although the former COO may have driven much of the activity at WFMA in the past, the current management team appears to have not obtained better control or understanding of ongoing contracts since the departure of the COO approximately six months ago. At our request the Manager, Business Technology and Services from the Corporate Support Services Department spoke to WFMA management to obtain a better understanding of three of the largest, ongoing IT consulting contracts. WFMA management were unable to confirm what WFMA needed to spend in order to complete the outstanding work on these contracts and could not map the work activities currently taking place back to an active contract.

As a result of the autonomy initially given to the SOA, the corporate functional departments (IT, Human Resources, Finance) appear to have had a minimal oversight role over their respective areas within the WFMA. The former COO did not appear to have actively sought assistance or advice from these corporate groups, but rather appeared to separate WFMA from the rest of the City. This is a concern as decisions made by WFMA could impact other areas of the City such as corporate-wide information systems or even setting precedent for issues surrounding collective agreements. An increased oversight role may have raised questions on decisions made within the WFMA. As well, corporate departments may have been able to provide resources and/or expertise at a lower overall cost, which may have reduced the financial expenditure of the City as a whole.

***Recommendation 1:***
We recommend the following steps be taken to improve management oversight of WFMA operations:

a. The new COO ensure that theeach WFMA management member is empowered to perform their delegated responsibilities and are held accountable.

b. The SOA Board of Directors meet regularly to provide direction to the COO of WFMA and to review the performance of the COO.

c. The CAO should review and revise the various governance directives, including, FM-100 Governance Structure Financial Management, HR-001 Human Resource Governance and IT-001 Information Technology Governance to define the oversight role of these corporate functional groups over other City departments

and SOA operations. The oversight role should include regular monitoring of activity in each area.

***Management Response***

1a. Agreed. The COO will empower the WFMA management team to perform their delegated responsibilities. We are currently reviewing the job descriptions for positions within the Agency, including the management team to ensure that the roles, responsibilities, requirements and expectations of the role represent what is required in the role both currently and in the future. These roles, responsibilities, requirements and expectations will be reviewed with each individual currently holding these positions to identify gaps and creating a matrix for measurability. Based upon current responsibilities, the COO will immediately empower the management team. Based upon recommendation 6a, WFMA is scheduling completion of its review of key job descriptions by January 2010 and its review of the training required by current staff by June 2010.

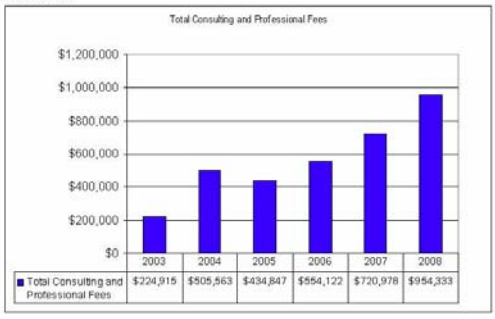
1b. Agreed. The SOA Board of Directors and the COO will meet monthly.

1c. Agreed, as part of the process to build the new Internal Services model any affected Administrative Standards will be amended to reflect the new governance structure. It is anticipated the new structure will be complete by December, 2009.

## *Contracting for Professional Services*

Since 2003 the WFMA has engaged several consultants and other professionals to provide assistance and advice to WFMA regarding IT systems and development, organizational structure, business strategy and training and development. Exhibit 13 shows actual consulting and professional fees expensed by WFMA from 2003 -2008.

Exhibit 13




Source: PeopleSoft Database

Consulting and professional fees have increased from approximately $225,000 in 2003 to in excess of $954,000 in 2008. Approximately $3.4 million has been spent on consulting and professional fees by WFMA since 2003. Much of the increase is due to increased spending on IT related consulting. Several issues were identified relating to the contracting processes for both IT consulting and other professional services.

Since the commencement of operations as an SOA, WFMA has entered into a number of contracts for consulting services. In our review of a sample of these contracts we had expected to see:

- Clear descriptions of the scope of the work contracted;
- A description of deliverables and key milestones;
- The requirement to provide regular status reports to WFMA management;

- Compliance with Materials Management Policy and Administrative Standard FM-002 in regards to contract management.

We also expected functional management including the supervisors responsible for IT, HR and finance to be involved in the contracting process. Instead, we observed many contracts that did not have a supporting cost/benefit or business case analysis to support proceeding and practices that did not comply with City procurement policy and good procurement practices and delivered immeasurable value.

A significant portion of the development work for the RTA fleet management system, as well as all IT project management, was contracted with two companies that were owned and operated by the same individual. Exhibit 14 shows the contracted amounts and actual spend for these two companies from 2007 -2009.

**Exhibit 14**

| Contract Amounts | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|
| Private Company X | $100,000 | $395,000 | $483,000 | $978,000 |
| Private Company Y | $200,000 | $100,000 | $90,000 | $390,000 |
| **Total** | **$300,000** | **$495,000** | **$573,000** | **$1,368,000** |

| Actual Spend | 2007 | 2008 | YTD as of May 2009 | Total |
|---|---|---|---|---|
| Private Company X | $214,690 | $341,270 | $319,500 | $875,460 |
| Private Company Y | $201,080 | $132,524 | $80,865 | $414,469 |
| **Total** | **$415,770** | **$473,794** | **$400,365** | **$1,289,929** |

**Source: PeopleSoft database**

The contracts with these two related companies were negotiated solely by the former COO of WFMA, who also approved all invoices and directed much of the work performed by the consultant. The nature of the work performed by these two companies is unclear. The contracts included "statement of work" descriptions; however the descriptions did not necessarily relate to the actual work performed and did not detail specific milestones and/or deliverables. Status reports were not requested by WFMA nor were they provided by the consultant. The contracts appear to be more for hours of service to be provided versus specific projects to be completed. There also appears to have been little transfer of knowledge of the work performed by the various consultants to WFMA staff, particularly in regards to the RTA fleet management system. This was evident in the lack of understanding of some aspects of RTA by WFMA staff. The obligation of the vendor to transfer knowledge to WFMA staff was not specified in the contract.

The COO would create a new contract when the value of the original contract was reached, with no clear connection to any specific project. The termination clause in the Company "X" contract indicates the City is liable for the full amount of the contract upon termination, which is not typical in City contracts and was not vetted by the City's Legal Services group.

WFMA entered into 5 separate contracts for the development of a new fleet management system. The contracts were with 3 different companies and WFMA did not

go out for tender on any of the contracts, although the contracts for one company exceeded $230,000. The contracts were not vetted by Legal Services and we are concerned that the City's right to ownership of the software developed by these consultants may not be adequately protected or clearly stated in the contract.

Contracts were also negotiated by the former COO with other IT consulting firms. We observed similar issues with those contracts and noted that the contracts used by WFMA do not appear to be standard City contracts. Only one contract was tendered since 2003; however the Request for Proposal was so narrowly worded only one bid was received.

It is also appears WFMA were not correctly classifying some of the IT contracts as consulting contracts and as a result may not be complying with the single source requirements as per the Materials Management Policy Section B4 and Administrative Standard FM-002 (AS FM-002). AS FM-002 classifies IT consulting as the provision of service for the purpose of providing advice but does not include the actual supply of data, conversion of data, etc. In the majority of IT contracts negotiated by WFMA, the consultant appears to go beyond the service of providing just advice and is actually performing a great deal of the actual IT work, including project management and development.

According to AS FM-002, WFMA can single source for consulting services as long as the estimated value of those services does not exceed $100,000. For services not classified as consulting, WFMA can single source for the service as long as the estimated value does not exceed $100,000 and meets other conditions as defined in the Materials Management Policy section B4.1. We do not believe that all the IT contracts negotiated by WFMA should have been classified as consulting. In 2008, for example we believe 6 IT contracts were incorrectly classified as consulting. As these contracts are not classified as consulting they can only be single sourced if they do not exceed $100,000 and conditions defined in the Materials Management Policy section B4.1 are met. These conditions include emergency situations; supply is only available from a single supplier, etc. WFMA did not evaluate whether any of these contracts complied with the conditions identified in section B4.1. As well, WFMA split contracts so as not to exceed the $100,000 limit even though the work contracted for all related to the same project. As a result, in our opinion, WFMA breached the Materials Management Policy and should have tendered some of the work.

We also reviewed several contracts WFMA entered into with other consulting firms to obtain assistance and advise WFMA on its organizational structure, work and process flows, job capabilities and duties, job descriptions and leadership training. Since 2003 WFMA has spent approximately $468,000 on consultants providing these types of services. We do note that all the reviewed contracts were awarded in compliance with City policy.

Once again, WFMA management was unclear as to the nature of the work done on some of these contracts or whether all of the deliverables were actually completed and utilized by WFMA. The City's corporate HR staff was not involved in the contracting process for any of these contracts. In one case an employee on pre-retirement leave was hired as a consultant by WFMA. Although it appears that WFMA was unaware that this was against City policy, involvement by corporate staff from Legal and HR may have prevented this from occurring. The need for greater oversight by corporate functional

departments was previously identified in the management oversight section of our report.

As was the case with the IT consulting contracts, these contracts were negotiated solely by the former COO of WFMA. We were informed that the supervisor responsible for HR at WFMA had limited involvement in the negotiation process and the ongoing oversight of these consultants.

***Recommendation 2:***
We recommend WFMA make the following improvements in regards to contract management:

a. WFMA should comply with single source requirements as per the Materials Management Policy Section B4 and Administrative Standard FM-002 (AS FM-002). The COO should ensure that a cost/benefit analysis or business case is prepared to support the need for all projects prior to entering into a contract with a consultant. Further, all consultant contracts should have properly defined deliverables, require regular status updates and invoices should include hours worked and a detailed description of work performed. WFMA should ensure it retains the ownership and control of systems for which it has contracted development. Finally, contract terms and conditions should be vetted by Legal Services.

b. WFMA should review all outstanding consulting contracts to determine what work remains and whether work on the contract should be continued. If contracts are continued clear deliverables should be established and regular status updates should be provided by the consultant. Invoices should be reviewed and approved by the appropriate supervisor. Project overruns should be approved by the COO prior to the expense being incurred.

***Management Response***

2a. Agreed. WFMA will work with Materials Management and Legal to ensure that any contracts for professional services comply with all City policies and delegations in the SOA Operating Charter. With regards to IT services, WFMA will work with the Project Management Office (PMO) from Corporate Support Services to create bid opportunities utilizing cost/benefit analysis within the approved business case process to provide supporting documentation as well as defining the expectations, specifications and deliverables required during the project. The contracts being put into place will define the level of detail required with regards to documentation of time, work performed and status updates on the project. This process can be put into effect immediately with any new contracts required.

2b. Agreed. The Acting COO has placed all outstanding consulting contracts on hold with the exception of one contract relating to the current fuel system upgrade and remediation project. This project has a deadline set by the Province which needs to be met in order to ensure fuel distribution can continue at all City fuel sites.

Upon completion of the review of the RTA implementation and the operational processes and procedures, WFMA's management team will review the status of the projects that have been placed on hold to ensure that they continue to fit into the new strategic plan and if any of the work to date can be revised to fit into the new

plan. This review will be completed in conjunction with the RTA and Operational review scheduled to be completed by the end of 2010.

## *Performance Measurement*

Very few performance measures have been established by WFMA to monitor how effectively and efficiently they are managing the City's fleet operations. The 2007 WFMA Annual Report lists the following measures of performance (Exhibit 15).

**Exhibit 15**

| Description | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| Number of fleet units managed | 1,700 | 1,584 | 1,530 | 1,610 |
| Net book value of fleet assets in service | $24,142,000 | $26,617,000 | $34,284,000 | $41,593,000 |
| Debt/worth ratio | 11.6 | 18.3 | 11.9 | 11.5 |
| Hourly repair shop labour rate | $68.00 | $73.00 | $78.00 | $80.00 |
| Average fuel price per litre | $0.68 | $0.83 | $0.88 | $0.92 |

**Source: 2007 WFMA Annual Report**

A number of these measures are not true measures of performance. In the case of the number of fleet managed, these numbers are influenced by the needs of customers and will be impacted more by an increase or decrease of their services over those actions performed by WFMA. These activities will also influence the net book value measure along with the fact that as equipment is replaced the net book value will increase. The average fuel price is a result of issuing a tender and selecting the low cost supplier, it is not influenced by the activities within WFMA.

One key performance indicator in operating a fleet service is the shop rate. WFMA currently calculates their shop rate by conducting an annual review of the shop rates charged by various garages in the City of Winnipeg, employing heavy-duty mechanics. An average rate is determined based on this review and that rate discounted by 10 – 12% in order to obtain the rate charged by WFMA to its customers. Exhibit 16 shows the shop rate calculated by WFMA since 2004.

**Exhibit 16**




**Source: WFMA 2004-2008 Selection Reports**

In most shop environments, a shop rate is calculated by taking all of the costs associated with operating the garage and dividing it by the number of hours of work that typically can be scheduled into the facility. When calculated using the variables of total cost against

productive hours, it can be an effective measure of the efficiency of the operation. The shop rate as currently calculated by WFMA does not reflect a level of efficiency or competitiveness with an external supplier as it is not calculated based on actual performance.

We recalculated the shop rate with the assistance of WFMA management using a template provided by the Canadian Association of Municipal Fleet Managers. Using 2008 financial information we determined shop related expenses. The shop costs are not tracked separately in PeopleSoft by WFMA and as a result some estimates had to be made with the assistance of WFMA management to determine which expenses to include in our analysis. The annual productive hours available for garage employees was determined with the assistance of WFMA management. The analysis and resulting shop rate is shown in Exhibit 17.

**Exhibit 17**

| *Shop Rate Expenses* | *Amount* |
|---|---|
| Personnel | 6,002,266.43 |
| Facility | 991,405.93 |
| Office Operating | 1,321,538.09 |
| Shop Operating | 750,587.37 |
| ***Total Expenses (Total of Shop Rate Annual Cost)*** | ***9,065,797.82*** |

| *Annual Productive Hours Available* | |
|---|---|
| Total productive hours per year per employee | 1,624 |
| Total shop employees | 53 |
| ***Total Productive Hours Available*** | ***86,072*** |

| *Shop Rate* | | |
|---|---|---|
| Total Expenses (Total of Shop Rate Annual Cost) | | 9,065,797.82 |
| Total productive hours per year | | 86,072 |
| ***Shop Rate (expenses / productive hours)*** | ***$*** | ***105.33*** |

**Source: PeopleSoft Data Base**

Based on our analysis the WFMA's shop rate should be approximately $105/hour and not the $82/hour used by WFMA management. Charging the lower rate means that WFMA may not sufficiently cover off their actual cost of providing the services.

The best practice information we obtained included a number of areas where performance measures would be useful in a fleet environment. These include:

- Utilization Statistics
- Annual Replacement Investment
- Weight Average Life Cycle
- Fuel Cost per Kilometer by Vehicle Type
- Maintenance Shop Rate
- Maintenance Costs Statistics
- Parts Inventory Statistics

A detailed list of specific performance measures for fleet operations is also included in **Appendix 5**.

Although WFMA does maintain a number of statistics related to the above areas, they do not regularly compile them or report on this information. In other cases, they do not have the data to calculate the metric. The information does not exist to calculate the shop utilization rate, so WFMA cannot determine if they are near capacity. Productivity rates for mechanics are not maintained, due in part to the absence of standard hours for repair work, so it is difficult to know how efficient mechanics are at performing repairs.

The mandate of WFMA is to provide efficient and effective fleet, manufacturing and equipment management services to civic departments. Although the above information does provide some indication on the effectiveness of WFMA in reducing the overall fleet size of the City and the newness of the fleet, there is little or no indication from these measures on the competitiveness or effectiveness/efficiency of the fleet operation. At this point in time, it is difficult to understand how competitive or uncompetitive WFMA is, as they do not have valid performance data that can be compared to industry.

***Recommendation 3:***
We recommend WFMA make the following improvements related to performance measurement:

a. WFMA should develop and report on, a comprehensive set of performance measures for each key area of the business. The performance information should provide insight into whether WFMA is achieving its goals and objectives.

b. WFMA should calculate and charge customers the actual shop rate taking into account actual labor and overhead costs incurred and the productive hours available for garage staff. The template provided by the Canadian Association of Municipal Fleet Managers should be used to provide comparability to other jurisdictions.

c. WFMA should also evaluate the feasibility of tracking shop related costs separately in PeopleSoft.

***Management Response***

3a. Agreed. We have implemented a number of Performance Measurements which are measured by other municipal fleets across Canada, through the Canadian Association of Municipal Fleet Managers (CAMFM). We will put additional performance measures in place to gauge actual performance on items such as Life Cycle Costing, Customer Satisfaction, and Mechanic/Shop Productivity and compare whenever possible against the CAMFM measurements. The new performance measures reported in the 2008 Annual Report will be tracked on an ongoing basis and any new measures will be determined and implemented during the operational review which is scheduled by the end of 2010.

3b. Agreed, with regards to the repair facilities, but with the exception of Manufacturing and the LCCM Group. WFMA's original pricing in its business plan was to be competitive to market and to set rates at below market. Currently, we are breaking down the components of WFMA in order to calculate our rates based upon business groups: Repair Facilities, Manufacturing and LCCM operations. Each of these groups

must be calculated independently due to the nature of the work performed and the billing structure for each component. The Repair Facilities and the Manufacturing Facility are based upon shop rates for the type of work being performed and the CAMFM model should be effective for this calculation. The LCCM operation is based upon markup from leases, rental rates, fuel and insurance, therefore should be calculated in a different manner. Once these calculations have been performed, a decision can be made on the chargeback method/pricing strategy to be used for charging departments. The calculations of shop rates for the repair facilities and the manufacturing facility will be completed by June 2010.

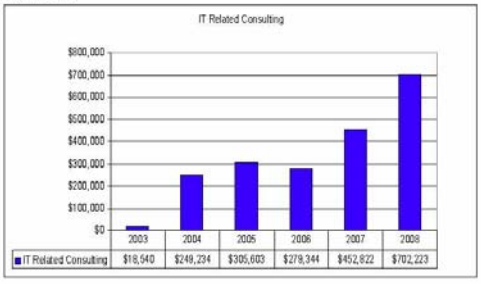
3c. Agreed. WFMA currently has separate Department IDs in PeopleSoft to track costs and revenues. We will review the current allocation of these Department IDs to ensure they are being utilized correctly to help perform the calculations described in Recommendation 3b. The review and any changes if required of the PeopleSoft Department IDs will be completed by the end of 2009 with any changes implemented in 2010.

## *Information Technology Management*

### Long-term Information Technology Planning

In its first 6 years of operations, WFMA has spent approximately $2 million on IT related consulting, increasing from approximately $18,500 in 2003 to approximately $702,200 in 2008. Exhibit 18 shows IT related consulting fees incurred by WFMA since 2003.

Exhibit 18




**Source: PeopleSoft Database**

The majority of the IT consulting spending during this period related to development associated with the RTA fleet management system. The software was originally purchased by WFMA in 2002 for approximately $33,400 US and is still not fully functional. WFMA has expended approximately $476,000 on development of a new fleet management system to replace RTA. This is discussed in further detail later in this report.

In order to successfully manage, control the cost, and obtain value from IT initiatives an organization would typically:

- Develop an IT strategic plan which links to the organization's business objectives;
- Create a business case which outlines the cost and benefits of each potential IT project;
- Prioritize IT projects based on criticality and level of work required;
- Create detailed work plans with milestones and budgets;
- Monitor the project on an ongoing basis comparing actual progress to work

plans, critical milestones and budgets.

WFMA does not have a short-term or long term IT strategic plan. This lack of planning is contributing to increased expenditures on IT consulting and has resulted in an implementation of RTA that has become exceedingly complex and has compromised the functionality of certain modules to the extent that it cannot fully meet the needs of the users. We were also informed about a number of other IT related projects that were in progress; however, there is no overall direction or plan of where WFMA wants to be from an IT perspective. There does not appear to be any type of prioritization of projects or formal implementation timelines or work plans. Projects have been started and then delayed as other projects were created. For example, WFMA purchased a time and attendance software package for $30,000 in December 2008, and to date no work has been done to implement the software. WFMA management assigned the resources to work on other areas and now want to evaluate the potential for PeopleSoft to fulfill the requirements. Although WFMA does have a supervisor responsible for IT, we were informed that the former COO made all the IT decisions on a day-to-day basis, with limited involvement or input into the decision making or oversight process by the responsible supervisor.

## Fleet Management System

The Ron Turley & Associates (RTA) fleet management system is used by WFMA to support operations in key areas, including life cycle cost management, fleet maintenance, acquisitions, disposals and inventory management. Although RTA is considered a premium fleet management system, it is generally applied to operations utilizing a similar fleet type, such as a trucking company. An overview of the RTA system can be found in **Appendix 6.**

As previously mentioned in the Long-term Information Technology Planning section of this report, WFMA does not have an IT strategic plan. There are currently 54 outstanding projects related to the system and operation. Included in these projects is the development of a new fleet management system. To date WFMA has expended approximately $476,000 on this project. The project is still in the developmental stage, with user testing not yet completed, however WFMA is uncertain as to whether this new system will be functional and meet their operational requirements. The new system has been developed in a different language than RTA and as a result there may be issues related to implementation. No business case or cost benefit analysis was performed to support the development of the new system.

The Audit department also contracted with Siere Solutions to perform a review of WFMA's current fleet management information system, RTA. WFMA's approach when implementing the RTA system was to attempt to collect very detailed levels of data in the event they might require it for future life cycle reporting. This resulted in the design of very complex processes to track vehicles and operational costs. As a result of the approach taken, parts of the RTA system are not able to be utilized to fully meet the needs of WFMA. As a consequence of this approach considerable data is collected offline in spreadsheets and databases, which has not been incorporated into the system. WFMA has acknowledged that some modules still do not operate as they would like and other modules, such as shop scheduling, are not useable.

Siere Solutions indicated that a number of issues and inefficiencies exist with the current implementation of the RTA system. Examples of some of the unnecessary complexity and inefficiencies in the RTA system, which were noted by Siere Solutions, are discussed below.

**City Part Numbers**

WFMA staff created city part numbers to address problems with part numbers in the old system, which included duplicate part numbers and different configurations for part numbers. The absence of a standard numbering format and the input of new city part numbers, however, have affected other areas within the RTA system. For example, the city part number is different from the vendor part number, but the storekeepers require the vendor part number when ordering parts. As a result, storekeepers must take the time to cross-reference the city part number to the vendor part number. Ultimately, storekeepers will often just call the vendor and ask them for the part number based on equipment type and model number.

City part numbers also restrict WFMA's ability to interface with online vendor systems. Siere Solutions believes there is a benefit in being able to interface with vendor systems in order to reduce the number of transactions, to speed up ordering and to increase availability of parts.

WFMA implemented city part numbers to reduce duplicate numbers in the system. While there has been some improvement, there is still duplication of part numbers within the system.

**Asset Set-up and Vehicle Maintenance Reporting Standards**

WFMA utilizes a vehicle-numbering scheme that involves the use of multiple entity numbers related to a single piece of equipment. For example, a riding lawn mower will have one entity number for the mower and a second number for the deck. A larger vehicle may have several entity numbers related to it which results in unnecessary complexity in setting up leases, completing work orders and billing customers.

The Vehicle Maintenance Reporting Standards (VMRS) code contains specific work statements about the repair being performed. For example, a repair to the front end of a vehicle would require a specific VMRS code. WFMA uses approximately 800 VMRS codes for the repair and maintenance of vehicles. Comparable private entities and municipal groups are using less than 200 VMRS codes.

All work performed in the shop requires a dedicated work order for each asset/entity that is being serviced. Units with more than one entity number may require more than one work order to service the equipment. WFMA breaks down VRMS codes into subcomponents increasing the number of lines for repairs on the work order and increasing the administrative workload of the mechanics. In most garage operations, a work order may contain 1 or 2 lines; however, at WFMA the same repair may use up to 16 lines on the work order.

WFMA uses the Paperless Shop module of RTA that offers real time and live recording of repair work. At present, the mechanic is required to log into each work order line to perform work and log out when work is completed. Performing this same task up to 16

times for a single work order creates inefficiency without an associated benefit to the overall operation.

**Specification/Data Accuracy**

The specifications in RTA, such as engine type, size, etc. are intended to provide critical data for the Storekeepers to be able to order parts. The specifications currently in the system either do not provide this data or the specifications in the system are inaccurate or incomplete. Access to update the specifications is limited so that most individuals, including storekeepers, are unable to update information as new data is gathered.

**RTA Accessibility and Accountability**

There are a number of system functions within RTA where access has been restricted to the extent where certain staff now have limited ability to perform all their duties. A number of functions, such as the ability to use the printing, adding parts to orders and updating of specifications should be accessible by delegated storekeepers. Limited access privileges increases the amount of time and steps in the process for storekeepers to complete tasks. Allowing the appropriate access would enable storekeepers to perform their responsibilities in a more efficient manner, manage information in the RTA system more effectively and would make them accountable.

**Scheduling**

The Paperless Shop module of RTA is used to generate work orders and track costs within the system, however the scheduling component has not been implemented. As a result, WFMA cannot identify required parts until the equipment arrives at the shop for repair. Normal purchasing channels are then used to source required parts. If parts are in stock, the work is performed immediately; however, delays frequently occur due to the need to order parts from vendors.

**Service Standards**

WFMA currently does not have specified service standards within RTA. Service standards indicate the amount of time (labor), parts, equipment, etc. needed to perform a repair. The absence of these standards makes it more difficult to manually schedule work in the shop and prevents measuring mechanic productivity. The scheduling module, when implemented, would use these standards to determine the optimal time for the service to take place. This information is readily available through industry sources and allows for the creation of standardized work orders.

Currently, WFMA does not use standardized work orders. Work orders act as the authorization for a mechanic to undertake work. The work order provides information to the mechanic on the parts and specialty equipment required and how long it should take to complete the service and are specific to the equipment and service being performed. The creation of standard work orders will reduce the time required by Quality Control to review work orders.

**Warranty**

Warranty tracking is required to ensure that fleet operations do not repair and therefore incur costs for repairs, which are covered under warranty. Warranties can exist for both vehicles and parts. Currently, WFMA uses the RTA system to track warranties at the vehicle level only. They have not yet implemented warranty tracking at the part level. WFMA is working through a process to resolve part level warranty tracking, however no timelines are set to resolve this issue.

**Tire Module**

WFMA does not use the tire inventory and tracking module within RTA. WFMA do manage tire inventory through the regular inventory recording process in RTA and are considering developing an offline database for tires. The RTA tire inventory and tacking module would track the life cycle of tires that are in use allowing WFMA to monitor wear and tire performance. Siere Solutions has indicated that the tire module within RTA could be used and have included it on the proposed implementation plan.

**Customer Invoicing**

WFMA does not use the customer billing and invoice function in RTA. WFMA currently uses a series of spreadsheets and databases to produce monthly billings to customers. WFMA indicated that capital and operating lease information is not in RTA and this prevents them from using the RTA invoicing and billing process. Siere Solutions has indicated that the RTA module could be used by WFMA; however it will require some restructuring of data into the system in terms of complexity.

***Recommendation 4:***

We recommend WFMA make the following improvements related to IT management:

a. WFMA should develop a long-term IT strategic plan to maximize the benefit derived from information technology, to ensure alignment with WFMA goals and objectives and to optimize the resources spent on Information Technology.

b. WFMA should undertake a comprehensive review on the status of RTA implementation and the new fleet management system under development. Corporate information technology staff should be involved where applicable. A comprehensive plan to deal with the RTA performance problems, including whether the newly developed system will address these problems, should be developed. A draft RTA implementation plan that includes the identification of key tasks, associated timelines and resource requirements was developed by Siere Solutions and is attached as **Appendix 9**.

***Management Response***

4a. Agreed. The Acting COO has currently placed all IT projects on hold in order to assess and realign WFMA's IT strategic plan with an assessment of its operational processes and procedures to ensure that both are working towards the long term strategic plan for the SOA. Part of this process will be to conform to the IT investment process that features the preparation of business cases and the approval of the IS Investment Steering Committee. Once WFMA's IT strategic plan is approved we will work with the Project Management Office from Corporate Support Services to determine the availability of resources to work with WFMA on future IT

projects. In conjunction with the Operational Review and the RTA review, this strategic plan can be developed by the end of 2010.

4b. Agreed. WFMA has also realized that a comprehensive review of its operational processes and procedures is required in order to ensure that we are working as effectively and efficiently as possible. These two reviews are required in conjunction with each other in order to fully develop an implementation plan which ties the RTA system to our processes and procedures. The management team would require the assistance of an outside party such as Siere Solutions and the Project Management Office from Corporate Support Services during this process to ensure the project is implemented in a timely and effective manner. Having an agency-wide project management system in place will effectively schedule resources to ensure achievable time lines are met on projects. This review is scheduled for completion by the end of 2010 based upon the schedule presented by Siere Solutions and the added complexity of the operational review which may lead to further review of some job descriptions in the operations group.

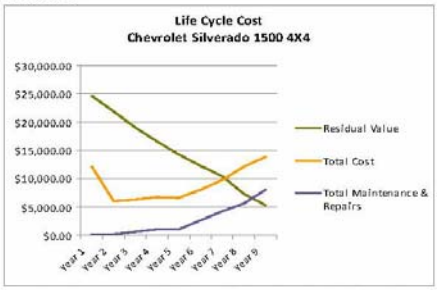
## *Life Cycle Cost Management*

The 2003 Selection Report identified Life Cycle Cost Management (LCCM) as a key component of changing the delivery of fleet operations. LCCM is a cost analysis model, which can assist in the financial decisions regarding fleet equipment by considering all unit or activity costs. Life cycle costing establishes the total cost of ownership by identifying the individual costs relating to the procurement of a product or service. Management would then use this analysis to make acquisition and disposal decisions. For example, the purchase decision for a new vehicle, would take into account the initial acquisition costs as well as the preventative maintenance and repair costs, fuel consumption, insurance, resale value, etc. for the expected life of the vehicle. The vehicle with the lowest acquisition cost may not be the most cost effective choice when operating costs over the life of the vehicle are also considered. Life cycle costing can also assist management in determining the optimal time to dispose of a vehicle, prior to incurring excessive repair costs. The adoption of a life cycle costing module was identified as a best practice and may provide the best value to the customer over time. For more detail on the various elements of life cycle costing as it relates to the purchase of equipment, refer to **Appendix 7.**

Although WFMA has made progress in the area of LCCM, they have not implemented all aspects of LCCM. When determining which vehicle to purchase WFMA will look at residual value, fuel consumption, where available, and initial purchase price. In determining the useful life of a vehicle or piece of equipment, WFMA generally relies on industry standards and only makes adjustments for high usage. The cost of repairs over the life of the vehicle is not considered to determine the optimal time to replace a vehicle.

Exhibit 19 illustrates an actual example obtained from Siere Solutions of a LCCM analysis done on a light fleet truck.

Exhibit 19




Source: www.edmunds.com, Canadian Black Book January 2009

The analysis takes into account the following assumptions:

- 3% fuel consumption increase per annum;
- 188% average repair increase per annum after 5 years;
- Maintenance and repair cost include GST;
- Based on 20,000 km. per year.

The analysis demonstrates that the cost of ownership increases dramatically after year five, identifying that as the optimal point to replace the vehicle. As of December 2008, WFMA had approximately 134 vehicles of this same type in their fleet. The average age of these vehicles was 55 months and the average mileage driven was 21,600 kilometers per year. WFMA has determined that this type of vehicle should typically be replaced after 7 years of service, two years longer and with higher kilometers than the example. We reviewed WFMA service records and calculated the average annual repair cost in 2008 for vehicles older than 5 years and vehicles less than 5 years old. Vehicles older than 5 years comprised 52% of the 134 vehicles in this fleet and had an average repair cost of approximately $3,900. Vehicles less than 5 years old had an average repair cost of $1,800 during 2008. This analysis demonstrates that the cost of repairs increases significantly as the vehicle ages and also illustrates that a 7 year life cycle for this vehicle may not be the lowest overall cost option and best point in time for replacement

Further, it is important to note that these costs may be understated as the calculation is based on WFMA's quoted shop rate, which is not reflective of actual costs. WFMA's shop rate was discussed in more detail earlier in this report.

WFMA has indicated that in many cases they do not have sufficient history on repair costs related to a specific vehicle. They also indicated that information in RTA prior to 2005 is not reliable. This however, does not prohibit WFMA from estimating repair costs over the life of the vehicle using the manufacturer's recommended repair guidelines and the WFMA shop rate and cost of parts.

***Recommendation 5:***

WFMA should implement a comprehensive LCCM model that considers the total cost of ownership. The model should include, at a minimum, acquisition costs, preventative maintenance and repair costs, fuel consumption, insurance and resale value. This information should be used for both acquisition and disposal decisions. Where historical data is not readily available, WFMA should use industry or manufacturers guidelines adjusted for their own internal standard repair times and shop rate.

***Management Response***

WFMA currently uses acquisition costs, resale values and fuel consumption, when fuel numbers are available in their evaluations. WFMA also tracks historical data in several different databases, such as billing, fuel, maintenance and amortization. With the review of the RTA implementation, one of the steps is to determine if RTA is capable of capturing more of this data. Utilizing both our internal WFMA staff and personnel from Business Technology Services (BTS), reports can be developed to capture data from each of these systems in order to perform more in depth LCCM analysis at either the unit or type level. WFMA has used and will continue to use industry standards, but also will be using information available through the Canadian Association of Municipal Fleet Managers (CAMFM).

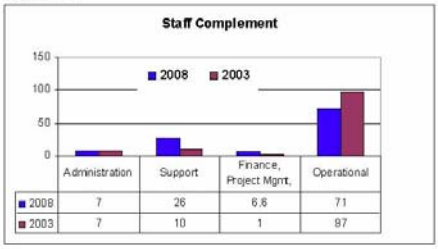
WFMA will work with Business Technology Services (BTS) from Corporate Support Services to tie in the historical data with regards to customer billings for lease information, so this information can be captured in the reports required for a comprehensive LCCM model. Also, WFMA will be working with BTS to transfer the current replacement planning model from an MS Excel workbook to a database so it can be linked back to the Fleet Management Software (RTA). This project will be scheduled for completion by June 2011 depending on the definition of the scope of the project and confirmation of available resources from BTS.

## *Human Resource Management*

### Staffing

Between 2003 and 2008, staffing decreased by just over 4 FTE's, a 3.8% decrease. Total staffing for 2003 was 115 FTE's and for 2008 110.6 FTE's. While overall staffing decreased by 3.8%, the composition of the staff changed significantly. Operational staff (mechanics etc.) decreased by over 26% (26 FTE's) while non-operational staff increased by 120% (21.6 FTE's). Exhibit 20 shows the change in staff levels by area.

**Exhibit 20**




| | Administration | Support | Finance, Project Mgmt. | Operational |
|---|---|---|---|---|
| 2008 | 7 | 26 | 6.6 | 71 |
| 2003 | 7 | 10 | 1 | 97 |

**Source: WFMA 2003 and 2008 Organization Charts**

The largest increase was in support staff, which increased by 16 positions since 2003. Included in this increase are 8 positions in fleet and operational support, 4 positions for human resources and administration, 2 positions in fuel and 2 positions in customer service. Given the decrease in the number of mechanics and operational staff, it is unusual that operational and fleet support staff would increase during the same period.

We also looked at the ratio of non - operational employees compared to operational employees for 2003 and 2008. In 2003 there were .2 non - operational employees for each operational employee and in 2008 this changed to .6 non - operational employees for every operational employee.

One of the benefits of implementing the RTA system is that it should have streamlined a number of processes, allowing for a reduction in non-operational staff requirements. Also, WFMA is now operating fewer service sites; has rationalized its fleet by over 500 units and has contracted out some work. We would have expected that these efforts would have resulted in a larger overall workforce reduction.

## Training and Development

WFMA provided Audit with their Training Strategy which is included in **Appendix 4**. Although the Training Strategy provided is a good starting point, it is not a detailed formalized training plan which would ensure that appropriate training is provided to assist employees in their development and acquiring the skills necessary for their position. As WFMA currently spends in excess of $175,000 annually on training we expected to find a more comprehensive training and development plan which would have included details on what training would be required to meet basic job requirements, outline skills and abilities required in the future to meet WFMA goals and assess and address any gaps.

One of the consequences of not having a formalized training and development plan is that employees may be provided with training which may not be appropriate or the most beneficial for their development. WFMA may not be getting the best value for the training dollars they spend. WFMA regularly sends employees to various conferences for training purposes. Exhibit 21 shows the amount expensed by WFMA on training and conferences for the period 2006 – 2008. It also shows the number of conference attendees (ie: one individual could attend several conferences per year)

Exhibit 21

| Account Description | 2006 Actual | 2007 Actual | 2008 Actual |
|---|---|---|---|
| Meal Expense | $12,753 | $6,602 | $8,555 |
| Seminars Convention Travel | $19,136 | $1,109 | $251 |
| Training Workshops and Tuition | $148,304 | $138,349 | $167,016 |
| Conferences | $6,302 | $14,057 | $3,714 |
| **Total** | **$186,495** | **$160,117** | **$179,536** |
| Average Training Cost/Employee | $1,361 | $1,269 | $1,532 |
| Number of Conference Attendees | 38 | 52 | 44 |

Source: PeopleSoft Database

During the same period, WFMA had the third highest average training cost per employee compared to other City departments. Only Police Services and Fire Paramedic Services were higher. The average for all other City departments (excluding Police and Fire Paramedic Services) was approximately $300 per employee annually. Although we recognize the benefits of providing employees with job related training, we are concerned with the number of employees attending the same conference and that several WFMA employees appear to be attending the same conference year after year. For example, 7 fleet employees attended the RTA conference in 2009, 14 attended in 2008 and 14 attended in 2007. In our opinion, there would be minimal benefit to sending this many individuals to a conference on a software package which has had significantly customized modules built on to it by WFMA and is still not fully functional. WFMA did

not do a cost benefit analysis to determine whether it would have been more cost advantageous for WFMA to bring an RTA trainer to Winnipeg. Ten employees during the period reviewed regularly attended more than 1 conference per year. Some employees regularly attended up to 4 conferences per year. WFMA also regularly paid for 1 or 2 of their IT consultants to attend the RTA conference. These conferences are held in prime locations (San Antonio, Texas, Orlando, Florida, Las Vegas, Nevada) and as a result they can be quite costly to attend.

The City does not have a comprehensive policy or Administrative Standard concerning out of town travel for training. A decision of Council C321 from 1991 exists and does establish a process for authorizing out of town travel. It also provided guidelines to be followed, including the number of trips per year, number of people attending a conference and provided direction concerning claimable expenses and accommodations; however, it did not include guidance in other areas such as insurance/health coverage and frequent flyer points. The guideline permitted individual employees to take 1 trip (other than business travel) per year and that not more than 3 employees attend the same function (other than business travel). While C321 has not been rescinded, we do note that it is not widely communicated or easy to obtain.

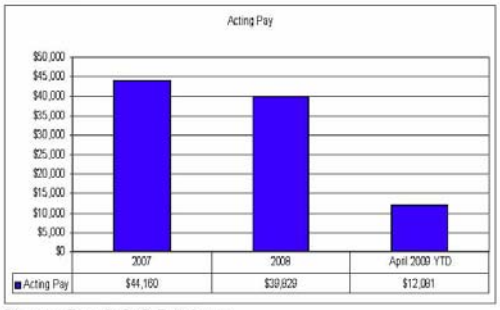
## Employee Compensation

The WFMA employs 110.6 FTE's who fall under either the CUPE or WAPSO collective agreement. Total salary and benefits expense for 2008 amounted to approximately $7.4 million. We reviewed payroll records for the period January 2007 to April 2009 and noted a number of issues related to acting pay, overtime and allowances.

### Acting Assignments

Our review focused on acting assignments undertaken by WAPSO employees only. During the period of our review, 21 individuals worked on acting assignments, although 6 employees accounted for 70% of total acting pay paid out since 2007. Exhibit 22 shows acting pay payments since 2007.

**Exhibit 22**




**Source: PeopleSoft Database**

The WAPSO agreement allows for individuals to be paid acting pay when on acting assignments. Specifically, Section 1-4 (c) of the WAPSO agreement states:

"*When an employee in the Administrative series is required to assume essentially all of the duties and responsibilities of a higher rated position for a continuous period in excess of 6 weeks he or she shall be paid no less than the lowest step that provides for at least a 5% increase in his or her*

*regular salary. This temporary salary adjustment will commence at the end of the first 6 weeks of continuous acting time in the position, but will not include payment for the first 6 weeks."*

WFMA paid acting pay immediately when the employee moved into an acting role, instead of waiting the 6 weeks as per the WAPSO agreement. In some cases individuals were put into acting positions, when the position had not yet been approved and in other cases acting pay was paid while the employee was waiting for a re-class in their position. Acting pay was also paid when individuals were covering for staff on vacation. In all these cases, the payment of acting pay would be more than required under the collective agreement.

We observed that several acting assignments were for long periods of time, for example one WFMA employee received acting pay from the fall of 2003 to the spring of 2009. Total acting pay paid during the period of our review to employees who were on acting assignments for longer than one year amounted to approximately $58,000.

**WAPSO Overtime Pay**

Internal overtime guidelines developed by the HR Leadership Group indicate any overtime hours worked beyond regular hours must be approved by an employee's supervisor as overtime before being considered as overtime hours. If not approved, any time worked in excess of regular time is not considered "overtime". After 100 approved overtime hours, an employee is entitled to compensation at time and a half for all additional approved overtime hours. In January 2009 WFMA paid out 294 hours for additional overtime to 9 WAPSO employees. Payments for 150 hours for additional overtime were also made in 2006 and for 322 hours in 2007. The total cost of this additional overtime bank time to WFMA for all three years was approximately $26,500. No support for these overtime hours was maintained by WFMA. The former COO determined who worked additional overtime and the number of hours that each employee should be paid.

**Allowances**

City and WFMA employees may be required to use a vehicle for business purposes as part of their regular job responsibilities. Currently, there is no directive, guidance or policy provided to City Departments or agencies, including WFMA, regarding auto use, other than the provisions contained within the collective agreements. The WAPSO and CUPE collective agreements provide guidance on the rate per kilometer that staff will be reimbursed for personal use of their vehicle while on City business.

The WFMA does not perform a needs assessment to determine whether City staff should use their own vehicle for business purposes, receive a fleet vehicle or have access to a pool vehicle. Each department currently performs their own assessment, however there is no specific guidance provided to them. One of the best practices identified in the Deloitte Use of Auto Audit Study report was that a vehicle assessment and reassessment process be in place and that WFMA provide guidance based on specific employee or customer needs. WFMA would have detailed information on employee usage and cost and would be in the best position to develop this guidance based on their experience.

Prior to September 2008 the City of Winnipeg provided car allowances to those employees who were categorized as "required" for using their own personnel vehicle for company business. These employees were paid a monthly allowance plus a rate per kilometer for actual mileage driven. In September 2008 the WAPSO and CUPE collective agreements were reviewed and as a result the guidelines surrounding the car allowance were updated. Employees are now reimbursed for actual kilometers driven only and do not receive a monthly allowance. Fourteen WAPSO WFMA employees (56%) received car allowances up to September 2008, when the City revised its guidelines on car allowance. The total cost of this car allowance to WFMA for the period 2007 – 2008 was approximately $63,400 or $3020 per month. After the new guidelines for car allowance reimbursement were implemented many of the employees receiving car allowances under the old guidelines claimed very little mileage each month. The total car allowance paid by WFMA for October 2008 – April 2009 amounted to approximately $4,000 or $570 per month. The former COO determined who would receive a car allowance. It does not appear that car allowances were provided to employees based on the amount of travel or actual mileage driven by an employee.

As per the WAPSO agreement employees are entitled to an annual shoe allowance if required for work and a driver's license allowance if the employee is required to use their car for business. The WFMA in general has made both payments annually to all WAPSO employees. Although the amounts in total are not significant, it is unlikely all WAPSO employees require these allowances and WFMA appears to be interpreting this aspect of the agreement fairly broadly.

***Recommendation 6:***
We recommend the following steps be taken to improve human resource management:

a. WFMA management conduct a workforce analysis to determine the appropriate staffing levels for operational and non-operational staff. In conjunction with this review, WFMA should also examine its current organizational structure to determine if it is the best structure to meet the objectives of the agency.

b. WFMA should develop a strategic staffing plan which encompasses any planned outsourcing of functions and any business or organizational changes which may impact staffing in the future.

c. WFMA should develop a formalized training and development plan to ensure that employees receive the training they require to perform their duties. Justification for training should be provided and approval obtained from their manager and the COO.

d. The SOA Board of Directors should establish guidelines for out of town travel. The guidelines should establish a process for authorizing out of town travel and should provide guidance for attending conferences and provide direction for the following areas as a minimum: claimable expenses, accommodations, insurance/health coverage, and collection of frequent flyer points.

e. The COO of WFMA should ensure that all current and future acting agreements are consistent with the terms of the WAPSO agreement, section 1-4 (c).

f. The COO should ensure that the WFMA adhere to the internal overtime guidelines developed by the HR Leadership Group. Documented support for the overtime hours worked should be retained by the WFMA.

g. WFMA should develop guidance for City departments to follow when determining if staff should use a personal vehicle for business purposes or whether a fleet or pool vehicle should be used.

h. WFMA should only pay allowances, such as shoe and drivers license, to those individuals who would be required to incur the related expense in the normal execution of their duties.

***Management Response***

6a. Agreed. WFMA management is currently working with Public Works HR and Corporate HR to evaluate its job descriptions and duties. Management is evaluating its current organizational structure to determine the requirements needed to meet its objectives. There have been several decisions for changes in the current establishment, but these changes have been placed on hold until the COO position has been filled on a permanent basis, in case there is a change in direction. This process is scheduled to be completed by January 2010.

6b. Agreed. During the review of its operational processes and procedures and the review of the RTA system, WFMA management will take into consideration any plans to outsource functions and will work with Corporate HR to develop a course of action to deal with any impact on the future staffing requirements for WFMA. This process will be an ongoing process, especially during the operational review. Any changes to the current structure will be scheduled in conjunction with the operational review and scheduled for completion by the end of 2010.

6c. Agreed. Upon completion of the review of job descriptions and duties, management will perform a work force planning analysis and work with individuals to develop a training program to ensure that individuals have the tools required to perform their role. Further training to prepare individuals for advancement to more senior roles will also be considered as part of this training plan. The Corporate Training Division will be utilized for specific individual training needs as well as providing training sessions at WFMA to multiple staff. If the training cannot be provided by internal training sessions, additional courses will be reviewed on an individual basis. The initial step of developing a training program to ensure individuals have the tools to perform their roles is scheduled to be completed by June 2010.

6d. Agreed. The SOA Board of Directors will meet with the COO's from the SOA's to establish guidelines for out of town travel. Guidelines should be in place by the first quarter of 2010.

6e. Agreed. The Acting COO and WFMA's Supervisor of Administrative Services has been working with Corporate HR to ensure that all current and future acting agreements are consistent with the terms of the WAPSO agreement. This has already been implemented.

6f. Agreed. WFMA has developed a form to be used by WAPSO staff in order to document and receive pre-approval for any overtime required by WAPSO staff. This

has already been implemented. WFMA will have to work with Corporate HR in order to implement the appropriate policy with regards to Duty Supervisor call out; this can be ready for implementation in 2010.

6g. Agreed. WFMA is currently working on a recommendation to present to the CAO, for the personal use of city owned vehicles. The report is scheduled to be presented to the CAO in December 2009.

6h. Agreed. WFMA management will work with Corporate HR to determine the requirement for these allowances on an annual or biannual basis according to the current union agreements; from there it will review its staffing complement to categorize each position. This review is scheduled to be implemented in January 2010.

## *Leasing*

### Master Lease Agreement

WFMA has created a Master Lease Agreement for its vehicle and equipment leases with WFMA's customers. The agreement is more formalized and comprehensive than the Vehicle and Equipment Order Form currently used by WFMA and will allow for a standardized agreement with all customers. The Vehicle and Equipment order form is used by WFMA to outline the type of vehicle or equipment to be purchased for the customer and includes an estimate of associated capital and operating lease payments. The form is authorized by the customer and the department finance representative and provides authority for WFMA to make the purchase. The Master Lease Agreement will be used by WFMA in addition to the Vehicle and Equipment Order Form which forms part of the Agreement.

In our view the Master Lease Agreement provides significantly more detail to the customer concerning the lease and includes, lease terms and conditions, details on areas of responsibility for both WFMA and the customer, lease coverage and exclusions, billing types and optional services. The Agreement also describes how WFMA calculates the capital and operating lease rates and appears to be a much more complete and comprehensive document than the Vehicle and Equipment Order Form.

The Master Lease Agreement has not been approved by the Advisory Board which is comprised of the directors form the various City departments. In a number of cases the Vehicle and Equipment Order Form, which is currently being used to obtain customer signoff on the lease payment amounts has not consistently been signed off by the customer and the department financial representative.

### Lease Revenue

WFMA has transitioned from a prepayment system to a pay-as-you-go system with customers entering into capital and operating lease agreements with WFMA for all of their new fleet acquisitions. The capital lease relates to the actual purchase cost of the vehicle and equipment including related financing costs. The operating lease relates to the costs of repairs and maintenance on the vehicle or equipment over the life of the unit. WFMA customers can enter into a wet lease arrangement which is a full service lease that includes a capital and an operating rate component or a dry lease which

includes fleet acquisitions, procurement and disposal services only. The dry lease contains a capital rate component only, repairs and maintenance are paid for on a pay when used basis. Dry leases are typically only used on equipment or a component of equipment where it is anticipated to have minimal maintenance during its life, as would be the cases for a lawn mower deck or a truck box.

WFMA calculates the capital rate component of the lease using the base price of the vehicle, less the resale value, and then applies a finance charge, PST and a 2% management fee. The operating component on a wet lease is approximately equal to the cost of the vehicle less its residual value plus a 2% inflation factor. Any damages or excessive use repairs are charged to the customer on a pay as you go basis. The capital and operating lease amounts are charged to the customer over the length of time the vehicle is retained by the customer.

In most life cycle cost systems, the operating costs are based on defined services that would be required over the equipment's anticipated life based on expected kilometers or hours of operation. In WFMA's case, rather than calculating specific anticipated costs they are using the original capital cost of the equipment as their basis for the operating lease amount. This appears to be quite high, particularly since many of the vehicles have extended warranties under which most major repair costs are covered.

An analysis prepared by WFMA for the period 2004-2008, identified a $20 million surplus of operating lease revenue over actual operating costs to repair those vehicles. We do note that the cost side may be understated due to the shop rate used in the calculation. Due to limitations in the information we were able to obtain, we were unable to perform a detailed analysis on specific vehicles.

Initially, one might conclude that WFMA may be charging excessive rates; however, by spreading the operating lease cost over the life of the vehicles, WFMA is in fact collecting up front for repairs which will occur as the vehicle ages. At this point, equipment is relatively new and operating costs are low; however, these fees will need to be drawn upon as the equipment ages and operating costs increase beyond the monthly fee. A portion of this $20 million amount may be needed to pay for future repairs as the fleet ages. To date, WFMA has not set up any reserve for future repairs and has instead turned over at least a portion of this excess to the City through contributions to the General Revenue Fund. Effective January 1, 2009, WFMA's operating Charter was amended to indicate that WFMA would target a debt to worth (equity) ration of 4.1. Retained earnings transfers to the City will be eligible for distribution once WFMA's debt worth ratio reaches and is maintained at a target of 4.1 or better.

Although WFMA does track actual repair costs by unit, and can compare these costs to the operating lease payments received for that vehicle, they do not allow the customer to apply any excess payments to future vehicle purchases. As well WFMA also does not allow the customer to participate in any end of lease disposal gains. Allowing the customer to apply excess payments and gains on lease disposals to replacement purchases was identified as a best practice and may provide incentive to the customer to better maintain their vehicles. This would also provide increased transparency to the customer of actual repair costs incurred on their vehicles

***Recommendation 7:***

We recommend WFMA make the following improvements related to leasing:

a. The Master Lease Agreement should be approved by the SOA Board of Directors and used on all new leases entered into by WFMA.

b. WFMA should use historical data to estimate operating lease costs and to determine the operating lease rate. If sufficient historical information is not available WFMA should consider preventative and regular maintenance recommended by the manufacturer and build in standard repair times, shop rates and cost of parts to determine the cost of repairs over the life of the vehicle.

c. WFMA should ensure funds collected up front to pay for repairs to vehicles as they get older are retained within Fleet. WFMA should periodically review the debt worth target included in its Charter to ensure it is still relevant and adequately provides for funds needed for future vehicle repairs. WFMA should also consider whether a pay as you go method would be a more cost efficient method of billing for repair services provided.

d. WFMA should develop individual accounts by vehicle or by customer to track operating lease revenue and associated costs. The customer would then be allowed to apply any balance remaining at the end of the lease term against the cost of a replacement vehicle. In the case of a deficit, the customer would pay WFMA the difference.

***Management Response***

7a. Agreed. Depending on the long term planning for the Agency, there may be changes affecting the Master Lease Agreement. These changes will impact the final version required to be approved. Otherwise, WFMA recommends distributing the latest copy of the Master Lease Agreement to all Directors for the City Departments for review, upon receipt of their comments, presenting the final copy to the Board of Directors for Approval. Upon approval, signed copies from each department should be retained at WFMA. If there are no changes to the current lease agreement, this can be scheduled for completion by January 2010, if there are changes to be made, this target date will have to be adjusted to reflect the changes.

7b. Agreed. WFMA commenced by using a formula to calculate operating lease rates based upon the capital cost of the components covered under the operating lease. Now that we have collected historical data for the past few years on our current units, we have compared our historical costs to our calculated formula to ensure that these rates are accurate. Also, recently, on some specialized units we have been comparing our rates to vender quoted maintenance agreements. The utilization of manufacturer specified maintenance is proving to be helpful in further refining our rates. The operating lease rate also contains a component to cover administrative overhead which needs to be captured, as stated in recommendation 3b; we need to analyze our markup in the LCCM group to ensure these costs are covered as well. The reporting methodology stated in recommendation 5 will also contribute to refining this operating lease rate calculation. This will be scheduled for completion by June 2011, in conjunction with recommendation 5.

7c. Agreed. WFMA should work with the directors of the departments to compare the pros and cons of both the Operating Lease vs. the Pay-as-you-go methods of chargeback for repairs and maintenance. The pay as you go method would be a

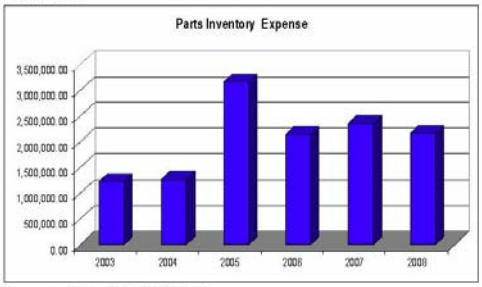
more cost efficient method of billing for WFMA, but the original purpose of the operating lease rate was to level out the preventative and predictive maintenance of the unit over the life of the unit to help departments in their budgeting process. As the units get older, repair costs increase and departmental budgets would be affected in the later years of the lease agreement. Note that this has already been shown to be of benefit to the customers. The COO will schedule a meeting with the directors in the fall of 2009 to discuss these options.

7d. Agreed. With the development of a database to capture the historical billing data stated in recommendation 5, this accrual of operating lease revenue could also be captured by tying in the costs from the RTA system. The allocation of the portion of the operating lease revenue to cover administrative overhead would also have to deduct from this balance prior to determining what amount is remaining at the end of the lease. This project will be scheduled for completion in June 2011 with the assistance of BTS and dependent on the definition of the scope of the project and on the availability of resources from BTS. This recommendation will only be implemented under the current Operating Lease agreement.

## *Inventory Management*

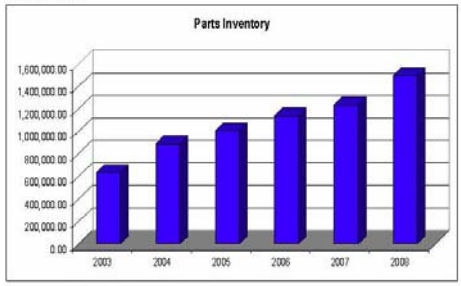
WFMA has made significant progress in rationalizing the City's fleet from approximately 2100 units in 2003 to 1668 units in 2008. With the rationalization of the City's fleet, a corresponding decrease in WFMA's parts inventory would be expected. To the contrary, we observed that the value of WFMA's parts inventory increased by approximately $865,000 or 136% during the period 2003 – 2008. Exhibits 23 and 24 illustrate parts expensed by WFMA and the year-end parts inventory balance respectively for the years 2003 to 2008.

**Exhibit 23**




**Source: PeopleSoft Database**

**Exhibit 24**




**Source: PeopleSoft Database**

Key WFMA parts inventory statistics are shown in exhibit 25.

Exhibit 25

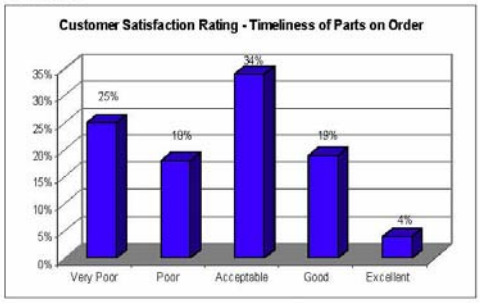
| Ratios | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|
| Inventory Turnover | 1.66 | 3.33 | 2.00 | 1.99 | 1.58 |
| Inventory Period (days of inventory on hand) | 219.36 | 109.45 | 182.56 | 183.79 | 230.66 |
| Percentage Increase in Inventory value year over year | **39.89%** | **13.23%** | **13.15%** | **8.58%** | **21.35%** |

Source: PeopleSoft Database

Inventory turnover is characterized as low; generally 1.5 - 2.0 times per year. This may indicate potential overstocking or obsolete inventory. The value of inventory has been increasing consistently year over year, despite the fact that approximately 40% of the value of outstanding parts in 2008 was not used in that year.

In August 2007, WFMA asked its customers to rate the timeliness of parts on order as part of their customer satisfaction survey. Exhibit 26 shows that 43% of customers rated the timeliness of parts on order as poor to very poor.

Exhibit 26




Source: 2007 WFMA Customer Satisfaction Survey

As discussed in the fleet management section above the lack of scheduling in the shop is likely one of the causes for the poor ratings. Required parts may not be identified until the vehicle is in the shop and then result in delays if the part is not in stock and needs to be ordered from the vendor.

WFMA has identified a number of issues which may be contributing to the low turnover and build up of parts inventory. They are discussed below.

The RTA system contains duplicate and inaccurate part numbers that could result in storekeepers ordering inventory, even though there might be stock on hand. Further, parts are assigned both a City and vendor part number that can create confusion and take extra time to properly order and issue parts. New storekeepers do not have a good understanding of inventory management and control practices. Senior storekeepers understand the principles, but restricted access privileges prevent them from properly carrying out the function. As a result, staff may take short cuts and order parts without checking stock on hand, thereby increasing unnecessary inventory levels.

Parts have been set up in the system based on purchased quantity, not a use quantity. This results in a significant amount of paperwork to put excess back into inventory. When parts are requested by a mechanic they are assigned and charged to the work order; however, if they are not used they may not be returned to stores appropriately.

This could result in over stated parts expense and elevated parts inventory when a physical count is performed.

Finally, WFMA management indicated some purchases may not be set up with part numbers because it is felt that they will not be purchasing the part frequently. WFMA has a significant number of "one of" part purchases and some of these purchases may have been of the same part and should have been set up with a part number in the system.

To remedy these issues, WFMA is currently reviewing outsourcing its parts inventory management. The contracted company would own and manage WFMA parts inventory. To date, WFMA has not developed a business case to evaluate the cost and benefits of outsourcing the parts inventory function. Until the RTA system is fully functional and operating more effectively it will be difficult to make a fair assessment of the cost and benefits of outsourcing.

***Recommendation 8:***
We recommend WFMA make the following improvements related to inventory management:

a. WFMA management should undertake a comprehensive review of parts inventory management practices with a view to reducing the investment in inventory. Storekeepers should be fully trained on inventory management and control practices.

b. Prior to outsourcing the parts inventory management, WFMA should prepare a business case outlining the associated costs and benefits of undertaking such an initiative. This analysis should take into account any changes implemented in RTA as outlined in recommendation 4 above.

***Management Response***

8a. Agreed. This should happen in conjunction with the operational review listed in recommendation 4b above. Also, upon completion of the review of job descriptions and responsibilities for storekeepers, training programs will be investigated to see what is available. This review is scheduled to be completed by June 2010.

8b. Agreed. Upon completion of the review stated in recommendation 8a, WFMA management will prepare a business case with regards to keeping this service internal or outsourcing. Included in this business case, WFMA will provide the advantages and disadvantages of each option and the steps required next for each option. This business case will be scheduled to be presented to the CAO by June 2010.

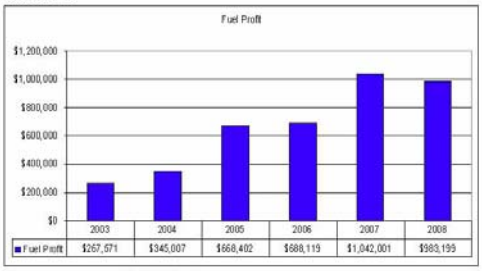
## *Fuel Revenue*

WFMA manages the operation of the fuel distribution network that services all City of Winnipeg fleet vehicles, excluding Transit and some undercover Winnipeg Police Service vehicles. WFMA is responsible for the maintenance, inventory management, charge back systems and long term planning for the fuel sites. WFMA works with the Materials Management Branch of the City of Winnipeg for the tendering of the fuel contract. Customers have access to fuel on a 24 hour, 7 day a week basis.

The chargeback of fuel directly to the customer was identified as a best practice and provides incentive for customers to monitor fuel consumption. WFMA charges its customers for fuel used. Customers are charged the higher of the actual cost of fuel to WFMA or market, less 2% for GST and an additional discount of three cents. Market is obtained off the MJ Ervin website. Our review of fuel prices charged by WFMA since 2003, indicated WFMA almost always charged the customer the discounted market price of fuel, as the price paid by WFMA was almost always lower. Depending on the fluctuation in fuel prices the difference between market and the actual cost of fuel was sizable, particularly when the market price was increasing.

WFMA has made approximately a $4 million (11%) return, on its fuel sales since 2003 or $0.13 for each litre of non-bio diesel fuel sold. Total profit earned by WFMA on fuel sales is shown in Exhibit 27 (The profit does not include the cost of WFMA fuel staff).

**Exhibit 27**




**Source: PeopleSoft Database**

WFMA management indicated part of this margin is to offset the cost of fuel staff and upgrades to the fuel distribution facility; however, this is not transparent to WFMA's customers. Approximately $2.3 million has been committed to date on new fuel site construction and fuel site remediation by WFMA. In addition $420,000 for potential environmental liability was recorded by WFMA when the Agency was set up to cover off future fuel distribution expenses. WFMA currently has 3 FTE employees working in the fuel operations area.

We do note that prior to 2009 WFMA was charged by the City's fuel supplier a price determined on the 1st of each month. Starting in 2009, with the new fuel contract, WFMA is charged a price that is determined daily. This change increases the need for WFMA to implement a pricing strategy that will ensure funding is available for current and future fuel distribution expenses.

***Recommendation 9:***

We recommend WFMA make the following improvements related to fuel revenue:

a. WFMA must develop a transparent pricing strategy for fuel and associated fuel distribution and upgrade expenses. The price charged to customers should be broken down to show the actual cost of fuel to WFMA and a related overhead (to cover cost of staff and fuel distribution system maintenance and upgrade) and profit margin.

b. We recommend that WFMA management evaluate the feasibility of partially contracting out the fuel management service to allow customers the option of purchasing fuel from private sector businesses.

***Management Response***

9a. Agreed. The current pricing model used by WFMA takes the average market price and reduces it by a GST factor and includes an additional 3 cents per liter. With this

current formula, there is a discrepancy between the allocations of expenses from the various types of fuel users. The pricing strategy must include, direct expenses, portion of administrative overhead, upgrades, remediation and profit. When the Green Fleet Plan is finalized, there may be a required charge for this program as well. This new pricing strategy will be ready for implementation for the 2010 year.

9b. Agreed. WFMA is currently working with the City departments to evaluate the feasibility of partially contracting out the fuel management system. There are several areas of concern with regard to contracting out these services. This current review will be finalized by the end of 2009 based upon the current fuel contract. Analysis of a new fuel contract with contracted services will be available by the end of 2010 for implementation in 2011.

## INTEGRATION OF WINNIPEG POLICE FLEET INTO WFMA

The Audit Department was asked to evaluate the feasibility of integrating the Winnipeg Police Service's (WPS) fleet operation into the WFMA. In this section, we will evaluate whether there is any merit to the integration, or partial integration, of the Winnipeg Police Service's Vehicle Service Unit (VSU) with the WFMA. Integration of two groups providing similar services can lead to improved efficiencies that result in financial and operational benefits for the City overall. The following analysis is based on a comparison of current performance information and other pertinent information.

At present, the WFMA does provide acquisition, disposal, and occasional fabrication services for the majority of police vehicles[1]. The WPS's Vehicle Service Unit (VSU) is solely responsible for life-cycle costing, repairs, maintenance, inspections and some fabrication of the police fleet vehicles.

From an operational efficiency perspective, we estimated the 2008 WFMA shop rate was at least $105/hr, compared to the VSU 2008 shop rate of $72/hour, using the same shop rate calculation methodology[2]. The shop rate is a key indicator of the efficiency of a garage operation. Given the differential in the shop rates the VSU garage appears to operate more efficiently than the WFMA facilities; therefore, the costs incurred to service the police fleet will be lower if the responsibilities remain at the VSU.

From a customer needs perspective, police vehicles often carry greater demands in use than other types of vehicles because police vehicles are consistently required to respond to incidents quickly and safely. Operating vehicles in this manner depletes the integrity of the vehicle's working parts much quicker than an average vehicle's normal wear-and-tear rate. To mitigate the risks posed to the public from these demanding driving conditions, the VSU completes a full 63-point inspection on each police vehicle every time its oil is changed. The inspection includes examining the driving controls, body interior, body exterior, undercarriage, engine and braking systems for the vehicle. The VSU does not release vehicles until they are satisfied with the safety of these items. The WFMA has contracted out the maintenance of the light fleet, which is what the majority of the WPS fleet would be considered. The VSU inspections are more comprehensive than what would be received if the police vehicles were sent out to the WFMA's external oil change service providers. A reduction in the quality of these inspections could have a detrimental impact on the integrity and availability of the police fleet and ultimately impact public safety.

While it appears that the VSU is already operating more efficiently than the WFMA, we also examined the information systems of the two groups to evaluate the potential for any integration benefits. The VSU is capturing and tracking information in a basic database program developed by the Manager, Services Division (Division #30). The program is used to track vehicle costs, perform life-cycle costing, and to produce reports

[1] Winnipeg Fleet Management Agency provides acquisition, disposal and fuel services for all police vehicles that are not used in covert operations. Vehicles that *are* used in covert operations are only handled by approved police staff.

[2] Some expenses such as utilities are not included in the VSU shop rate calculation. The impact of these expenses would not significantly change the VSU shop rate.

for management, Manitoba Public Insurance and Manitoba Justice. It has been custom-designed for the VSU and the annual maintenance cost is a small portion of the Manager, Services Division salary. Previously in this report we provided an overview of the WFMA information system, RTA, and highlighted the many issues surrounding this information system. Utilizing the RTA system, in its current state of implementation, would result in a reduction in the quality of information available to WPS management.

Aside from the efficiency of operations numerous other issues need to be resolved before any integration of the services can be contemplated including:

- Does the WFMA have the capacity to service the police fleet in a timely manner?
- What resources would have to be maintained at the VSU to handle and remove firearms and other materials prior to sending the vehicle for service?
- What special arrangements would have to be created for work performed on covert operation vehicles, chemical handling and bomb disposal units?
- Should the mechanics who would work on the police fleet continue to be required to undergo a criminal background check?
- Does the facility where work is conducted on the police fleet need to be secure to prevent tampering by outside parties?

These are critical questions that need to be addressed before any degree of integration can move forward. We also note that assigning the responsibility for police vehicles to the municipal fleet management group is not a common practice. In fact, we found that only 2 of the 22 municipal government agencies[3] that are members in the Canadian Association of Municipal Fleet Managers have any shared responsibilities for police vehicles.

Looking to the future, integration may be beneficial, but the WFMA must first demonstrate the ability to deliver services in an efficient and effective manner. When the RTA information system is fully functional and performance information supports the assertion that WFMA is an efficient operation, then integration should be considered. A broad range of integration models exist and the business case will need to consider all possible scenarios and analyze all relevant information.

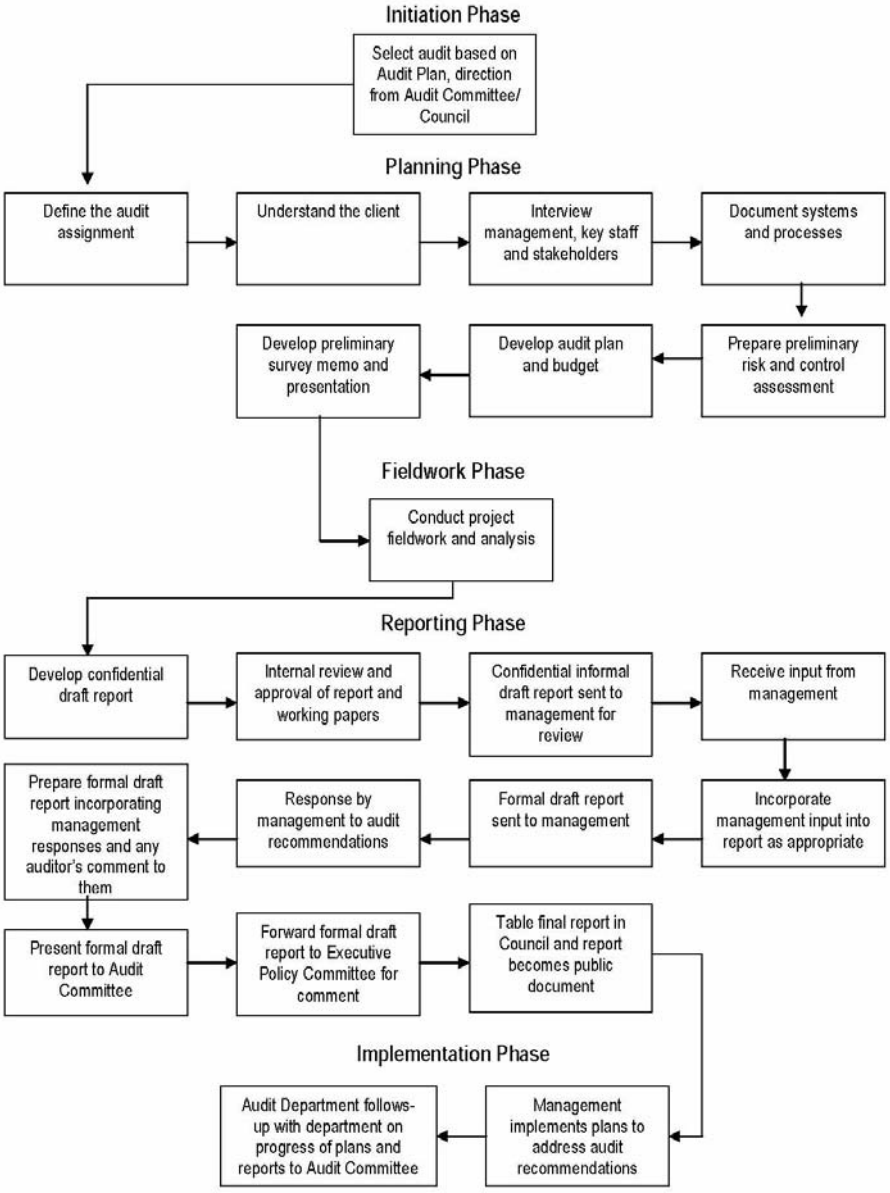
***Recommendation 10:***
The Vehicle Service Unit of the Winnipeg Police Service should not be integrated with the WFMA at this point in time. WFMA management should review the potential for integrating the two groups, which must be supported by a comprehensive business case developed with the cooperation, input and concurrence of the WPS. The evaluation should be conducted at a minimum two years in the future, to allow WFMA sufficient time to demonstrate the ability to provide efficient and effective services.

***Management Response***
Agreed. At the present time WFMA is not ready to integrate the Police services until the RTA and operational review have been completed. The CAO has requested that WFMA work with WPS to develop a Business Plan for the options relating to the integration of

[3] The Mobile Equipment Services Branch for the City of Edmonton maintains one dedicated police garage for police vehicles [http://www.edmonton.ca/city_government/city_organization/municipal-fleet-maintenance.aspx] while the Fleet Services department maintains police vehicles in Ottawa [http://www.ottawa.ca/city_hall/ottawa_performance/ombi/2005_results/fleet_en.html]

WPS Vehicle Service Unit with WFMA. This business plan will be scheduled for presentation to the CAO by June 2011.

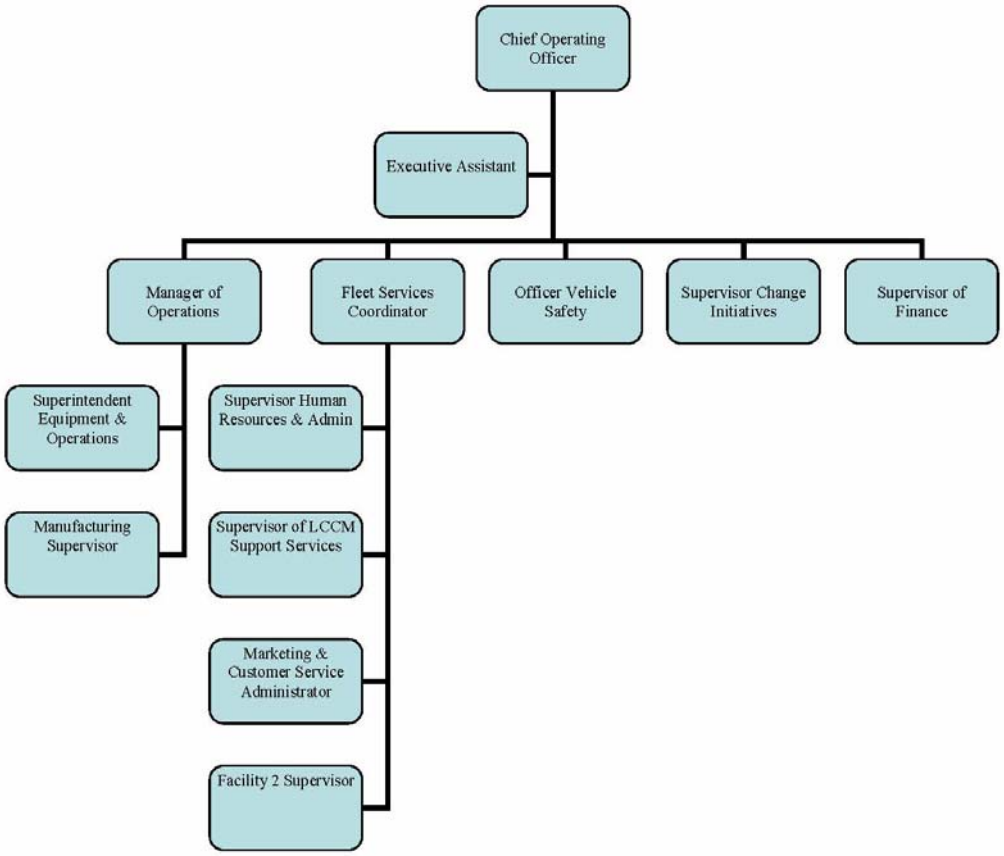
## APPENDIX 1 - AUDIT PROCESS



## APPENDIX 2 – WFMA SERVICE PROVISION

| User | Life Cycle Cost Management Services | | | | Other Services | |
|---|---|---|---|---|---|---|
| | Fleet Acquisition and Disposal | Preventative and Corrective Maintenance | Fuel Management Services | Manufacturing and Fabrication Services | Insurance and Licensing Services | Power Tool Services |
| Public Works Department | Yes | Yes | Yes | Yes | Yes | Yes |
| Police | Yes | No | Yes | Yes | Yes | No |
| Water & Waste (Regional Operations) | Yes | No | Yes | No | Yes | Yes |
| Water & Waste (all other divisions) | Yes | Yes | Yes | Yes | Yes | Yes |
| Transit (except buses) | Yes | No | No | Yes | Yes | No |
| Planning Property and Development | Yes | Yes | Yes | Yes | Yes | N/A |
| Fire/Paramedic (Fire Trucks) | Yes | No | Yes | Yes | Yes | No |
| Fire/Paramedic (Ambulances and light fleet) | Yes | Yes | Yes | Yes | Yes | No |
| Community Services | Yes | Yes | Yes | Yes | Yes | N/A |
| Corporate Services | Yes | Yes | Yes | N/A | Yes | N/A |
| Property Assessment | Yes | Yes | Yes | N/A | Yes | N/A |

## APPENDIX 3 – ORGANIZATIONAL CHART



## APPENDIX 4 – WFMA TRAINING STRATEGY

### WFMA Training Strategy

The City of Winnipeg Administrative Standard No. HR-003 (Employee Education and Development) relating to employee education and development for staff is the basis for staff development and WFMA supports this directive.

Where operational requirements allow, staff are encouraged to attend the Corporate training sessions to enhance their educational training. WFMA has also supported key corporate training sessions by hosting the training session at the WFMA complex to encompass more of our staff to attend and to ensure staff receive this key training. The Corporate training information is currently tracked on the PeopleSoft system.

Although Corporate training has a comprehensive listing of classes, these may not always cover the required technical training for the WFMA staff. In-house training has been provided at WFMA to the staff by bringing in trainers relating to specific technical topics. All in-house sessions are followed by an evaluation form where there is a section to complete for further educational requirements. These forms are reviewed by the Supervisor of Human Resources and Administrative Services, a listing compiled and brought forward to the appropriate section Manager.

As well as the in-house training, staff are encouraged to attend apprenticeship training, technical trade schools, community college programs and university offered courses. There have also been opportunities to have technical training completed by a vendor, which appropriate staff were sent to. All of the training, excluding the Corporate training, is tracked by WFMA to include the date completed as well as related renewal information. This information will provide our supervisors with a listing of the skills, knowledge and abilities of the staff so these can be utilized in our daily operations.

A key component to the success of any business is to maintain the corporate knowledge. By having staff create a listing of their tasks and related procedures, both of these are utilized to provide the basis of cross training staff so the knowledge is passed over not only for relief purposes, but for preparation of lines of progression. The cross training is documented on a training checklist used to aid the trainer to train on all tasks.

## APPENDIX 5 – FLEET PERFORMANCE MEASURES

**Potential Fleet Performance Measures:**

**Vehicle operation and utilization**

- Daily, weekly, monthly, annual usage in kms, hours as per average usage in that class of vehicle
- Fleet accident rate ie: accidents per million kms driven
- Average vehicle repair cost per accident

**Vehicle maintenance/shop management**

- Preventive maintenance schedule adherence rate
- Number of vehicles awaiting service as a percentage of average number of vehicles serviced per day
- Downtime rate - % of vehicles out of service for repair as a percentage of total vehicles in the fleet
- In-house cost per transaction as a percentage of commercial transaction cost
- Maintenance and repair cost per vehicle unit per year
- Mechanic productivity rate - hours charged to work orders as a percentage of total paid hours
- Mechanic efficiency rate - average time to complete a specific service as a percentage of recognized completion time
- Comeback rate - percentage of completed repairs returned to shop for rework

**Parts management**

- Percentage of orders filled from stock
- Parts order fill time
- Inventory turn over rate
- Inventory utilization rate

**Vehicle replacement**

- Average life to date usage by vehicle type
- Average age of fleet
- Average actual replacement cycle versus recommended cycle
- Average annual replacement expenditure as a percentage of average annual replacement cost
- Replacement backlog as a percentage of total fleet replacement cost

**Staffing**

- mechanic to supervisor ratio
- mechanic to parts technician ratio
- ratio of administrative and managerial personnel to direct service personnel
- ratio of vehicles to fleet management personnel

# APPENDIX 6 – RTA OVERVIEW

**Ron Turley and Associates (RTA) System Overview**

The RTA system contains the following features:

### Vehicle and Asset Tracking

The Vehicle Inventory module contains all necessary vehicle information. RTA tracks historical repair and cost information for each vehicle. Preventative maintenance information can be tracked and scheduled by miles, kilometers, fuel usage, days, or several other trackable categories. When a service is performed the system automatically updates the vehicle master record, schedules future services and resets the preventative maintenance information. Vehicle cost can be viewed for the life, year to date and month to date costs. RTA tracks both the OEM warranty as well as parts warranty.

### Work Order System

The work order system allows for the real time management of service and repair work in the shop. Fleet information and repair history can be tracked and viewed while the vehicle is being repaired. Scheduling system allows work orders to be created in advance or work orders can be entered after the work has been completed. RTA will notify if repeat work is done and as the work is completed and the data posted to the work order, RTA will update the vehicle repair cost and history, deduct parts used form parts inventory, update the vehicles preventative maintenance information, calculated and display mechanic productivity, update all repair cost reports, produce an audit trail and create a customer invoice.

### Parts Inventory and Purchase Orders

Parts used are automatically deducted from inventory through the Work Order system. RTA tracks parts warranty, part failure statistics, usage quantity and vendor price history. RTA produces reports on low/high use parts, parts lists and inventory turnover. RTA has a full purchase order tracking system, with vendor invoice tracking.

### Tire Inventory and Tracking

Tires are assigned a unique tracking code which allows the user to track whether a tire is in inventory or on a vehicle. RTA produces replacement projection reports which can assist in budgeting and predictive tire maintenance.

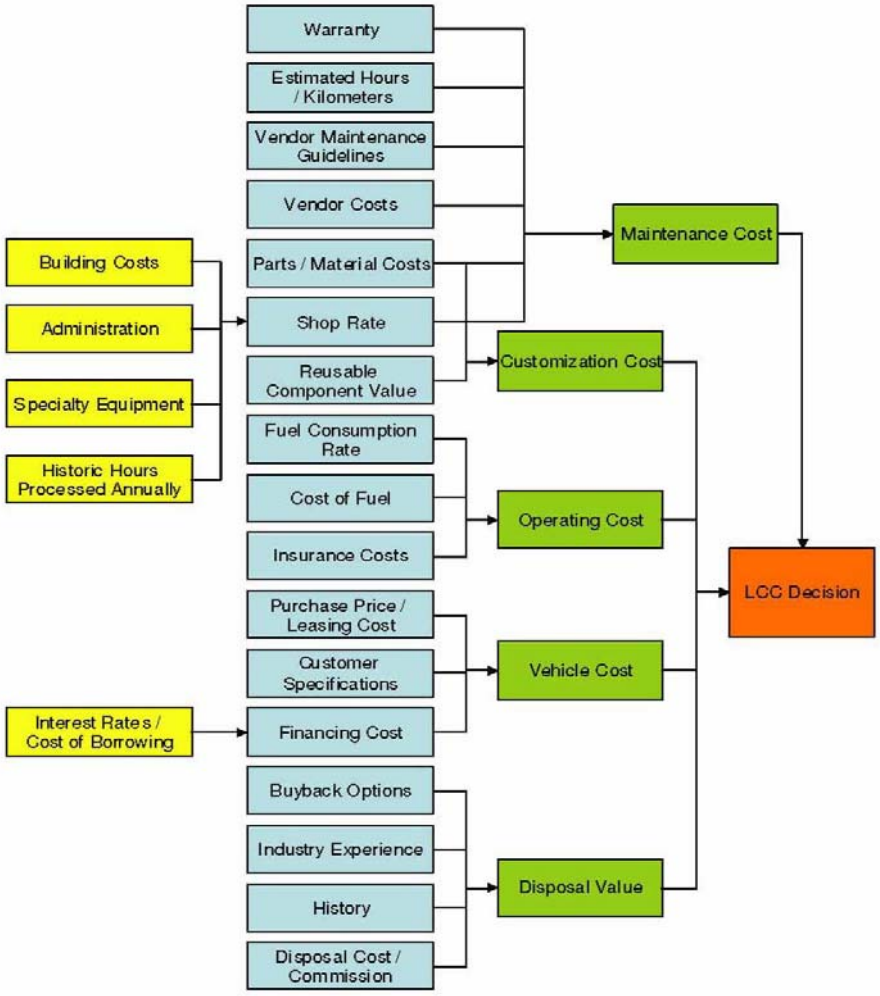
### Fuel Inventory and Usage

RTA will track fuel delivered to or used from each fuel pump, as well as fuel purchased on the road. Mileage and fuel usage are used to update preventative maintenance schedules. Electronic fueling systems can be interfaced to the RTA system directly.

Other features of RTA include customer invoicing, departmental billing, vehicle class code tracking, make/model cost reporting, cost by repair code, mechanic productivity tracking, mechanic certifications, user level security, mounted equipment tracking, tool checkout, motor pool, paperless shop, work order estimating, service bulletins, parts tagging and bin labels.

## APPENDIX 7 – LIFE CYCLE MODEL

**Life Cycle Model**




http://www.ogc.gov.uk/implementing_plans_introduction_life_cycle_costing_.asp

## APPENDIX 8 – SUMMARY OF RECOMMENDATIONS

### Management Oversight

**Recommendation 1:**

a. The new COO ensure that each WFMA management member is empowered to perform their delegated responsibilities and are held accountable.
b. The SOA Board of Directors meet regularly to provide direction to the COO of WFMA Management and to review the performance of the COO.
c. The CAO should review and revise the various governance directives, including, FM-100 Governance Structure Financial Management, HR-001 Human Resource Governance and IT-001 Information Technology Governance to define the oversight role of these corporate functional groups over other City departments and SOA operations. The oversight role should include regular monitoring of activity in each area.

### Contracting for Professional Services

***Recommendation 2:***

a. WFMA should comply with single source requirements as per the Materials Management Policy Section B4 and Administrative Standard FM-002 (AD FM-002). The COO should ensure that a cost/benefit analysis or business case is prepared to support the need for all projects prior to entering into a contract with a consultant. Further, all consultant contracts should have properly defined deliverables, require regular status updates and invoices should include hours worked and a detailed description of work performed. WFMA should ensure it retains the ownership and control of systems for which it has contracted development. Finally, contract terms and conditions should be vetted by Legal Services.
b. WFMA should review all outstanding consulting contracts to determine what work remains and whether work on the contract should be continued. If contracts are continued clear deliverables should be established and regular status updates should be provided by the consultant. Invoices should be reviewed and approved by the appropriate supervisor. Project overruns should be approved by the COO prior to the expense being incurred.

### Performance Measurements

***Recommendation 3:***

a. WFMA should develop and report on, a comprehensive set of performance measures for each key area of the business. The performance information should provide insight into whether WFMA is achieving its goals and objectives.
b. WFMA should calculate and charge customers the actual shop rate taking into account actual labor and overhead costs incurred and the productive hours available for garage staff. The template provided by the Canadian Association of Municipal Fleet Managers should be used to provide comparability to other jurisdictions.

c. WFMA should also evaluate the feasibility of tracking shop related costs separately in PeopleSoft.

## Information Technology Management

***Recommendation 4:***

a. WFMA should develop a long-term IT strategic plan to maximize the benefit derived from information technology, to ensure alignment with WFMA goals and objectives and to optimize the resources spent on Information Technology.
b. WFMA should undertake a comprehensive review on the status of RTA implementation and the new fleet management system under development. Corporate information technology staff should be involved where applicable. A comprehensive plan to deal with the RTA performance problems, including whether the newly developed system will address these problems, should be developed. A draft RTA implementation plan that includes the identification of key tasks, associated timelines and resource requirements was developed by Siere Solutions and is attached as **Appendix 9**.

## Life Cycle Cost Management

***Recommendation 5:*** WFMA should implement a comprehensive LCCM model that considers the total cost of ownership. The model should include, at a minimum, acquisition costs, preventative maintenance and repair costs, fuel consumption, insurance and resale value. This information should be used for both acquisition and disposal decisions. Where historical data is not readily available, WFMA should use industry or manufacturers guidelines adjusted for their own internal standard repair times and shop rate.

## Human Resource Management

***Recommendation 6:***

a. We recommend that WFMA management conduct a workforce analysis to determine the appropriate staffing levels for operational and non-operational staff. In conjunction with this review, WFMA should also examine its current organizational structure to determine if it is the best structure to meet the objectives of the agency.
b. WFMA should develop a strategic staffing plan which encompasses any planned outsourcing of functions and any business or organizational changes which may impact staffing in the future.
c. WFMA should develop a formalized training and development plan to ensure that employees receive the training they require to perform their duties. Justification for training should be provided and approval obtained from their manager and the COO.
d. The SOA Board of Directors should establish guidelines for out of town travel. The guidelines should establish a process for authorizing out of town travel and should provide guidance for attending conferences and provide direction for the following areas as a minimum: claimable expenses, accommodations, insurance/health coverage, and collection of frequent flyer points.

e. The WFMA COO should ensure that all current and future acting agreements are consistent with the terms of the WAPSO agreement, section 1-4 (c).
f. The COO should ensure that the WFMA adhere to the internal overtime guidelines developed by the HR Leadership Group. Documented support for the overtime hours worked should be retained by the WFMA.
g. The WFMA should develop guidance for City departments to follow when determining if staff should use a personal vehicle for business purposes or whether a fleet or pool vehicle should be used.
h. The WFMA should only pay allowances, such as shoe and drivers license, to those individuals who would be required to incur the related expense in the normal execution of their duties.

## Leasing

***Recommendation 7:***

a. The Master Lease Agreement should be approved by the SOA Board of Directors and used on all new leases entered into by WFMA.
b. We recommend that WFMA use historical data to estimate operating lease costs and to determine the operating lease rate. If sufficient historical information is not available WFMA should consider preventative and regular maintenance recommended by the manufacturer and build in standard repair times, shop rates and cost of parts to determine the cost of repairs over the life of the vehicle.
c. We also recommend that WFMA ensure funds collected up front to pay for repairs to vehicles as they get older are retained within Fleet. WFMA should periodically review the debt worth target included in its Charter to ensure it is still relevant and adequately provides for funds needed for future vehicle repairs. WFMA should also consider whether a pay as you go method would be a more cost efficient method of billing for repair services provided.
d. We recommend that the WFMA develop individual accounts by vehicle or by customer to track operating lease revenue and associated costs. The customer would then be allowed to apply any balance remaining at the end of the lease term against the cost of a replacement vehicle. In the case of a deficit, the customer would pay WFMA the difference.

## Inventory Management

***Recommendation 8:***

a. WFMA management should undertake a comprehensive review of parts inventory management practices with a view to reducing the investment in inventory. Storekeepers should be fully trained on inventory management and control practices.
b. Prior to outsourcing the parts inventory management, WFMA should prepare a business case outlining the associated costs and benefits of undertaking such an initiative. This analysis should take into account any changes implemented in RTA as outlined in recommendation 5 above.

## Fuel Revenue

***Recommendation 9:***

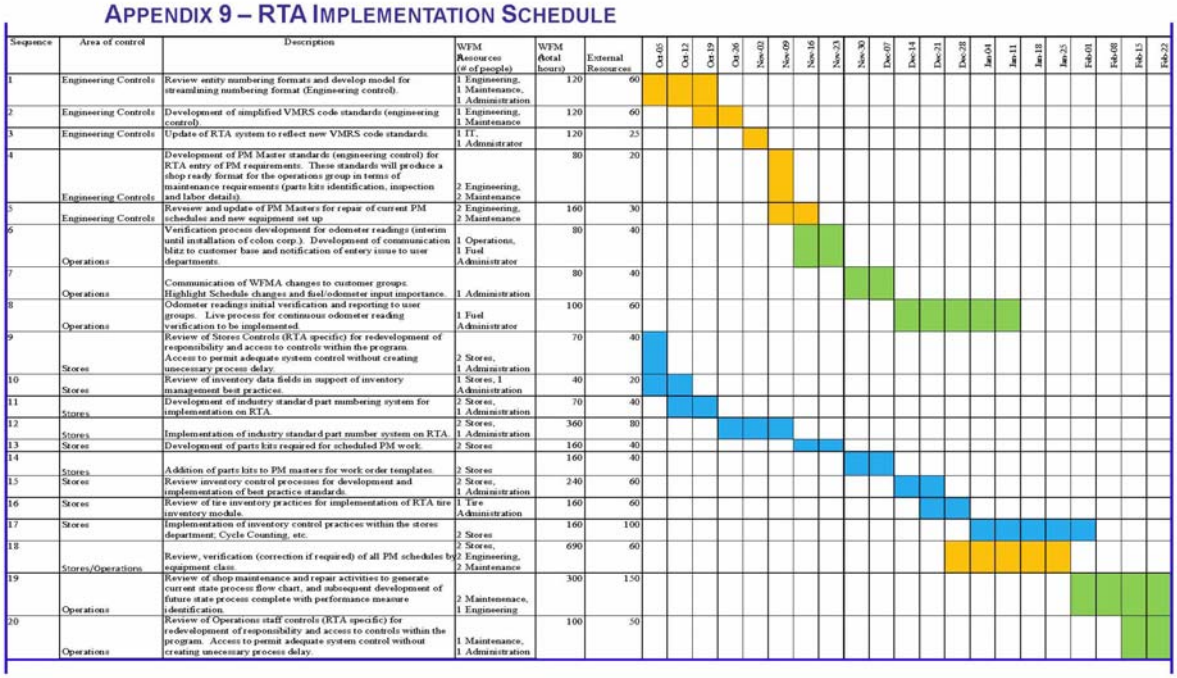
a. WFMA must develop a transparent pricing strategy for fuel and associated fuel distribution and upgrade expenses. The price charged to customers should be broken down to show the actual cost of fuel to WFMA and a related overhead (to cover cost of staff and fuel distribution system maintenance and upgrade) and profit margin.
b. We recommend that WFMA management evaluate the feasibility of partially contracting out the fuel management service to allow customers the option of purchasing fuel from private sector businesses.

## Integration of Winnipeg Police Fleet into WFMA

**Recommendation 10:** The Vehicle Service Unit of the Winnipeg Police Service should not be integrated with the WFMA at this point in time. WFMA management should review the potential for integrating the two groups, which must be supported by a comprehensive business case developed with the cooperation, input and concurrence of the WPS. The evaluation should be conducted at a minimum two years in the future, to allow WFMA sufficient time to demonstrate the ability to provide efficient and effective services.

## APPENDIX 9 – RTA IMPLEMENTATION SCHEDULE

| Sequence | Area of control | Description | WFM Resources (# of people) | WFM (total hours) | External Resources |
|---|---|---|---|---|---|
| 1 | Engineering Controls | Review entity numbering formats and develop model for streamlining numbering format (Engineering control). | 1 Engineering, 1 Maintenance, 1 Administration | 120 | 60 |
| 2 | Engineering Controls | Development of simplified VMRS code standards (engineering control). | 1 Engineering, 1 Maintenance | 120 | 60 |
| 3 | Engineering Controls | Update of RTA system to reflect new VMRS code standards. | 1 IT, 1 Administrator | 120 | 25 |
| 4 | Engineering Controls | Development of PM Master standards (engineering control) for RTA entry of PM requirements. These standards will produce a shop ready format for the operations group in terms of maintenance requirements (parts kits identification, inspection and labor details). | 2 Engineering, 2 Maintenance | 80 | 20 |
| 5 | Engineering Controls | Revesew and update of PM Masters for repair of current PM schedules and new equipment set up. | 2 Engineering, 2 Maintenance | 160 | 30 |
| 6 | Operations | Verification process development for odometer readings (interim until installation of colon corp.). Development of communication blitz to customer base and notification of entery issue to user departments. | 1 Operations, 1 Fuel Administrator | 80 | 40 |
| 7 | Operations | Communication of WFMA changes to customer groups. Highlight Schedule changes and fuel/odometer input importance. | 1 Administration | 80 | 40 |
| 8 | Operations | Odometer readings initial verification and reporting to user groups. Live process for continuous odometer reading verification to be implemented. | 1 Fuel Administrator | 100 | 60 |
| 9 | Stores | Review of Stores Controls (RTA specific) for redevelopment of responsibility and access to controls within the program. Access to permit adequate system control without creating unecessary process delay. | 2 Stores, 1 Administration | 70 | 40 |
| 10 | Stores | Review of inventory data fields in support of inventory management best practices. | 1 Stores, 1 Administration | 40 | 20 |
| 11 | Stores | Development of industry standard part numbering system for implementation on RTA. | 2 Stores, 1 Administration | 70 | 40 |
| 12 | Stores | Implementation of industry standard part number system on RTA. | 2 Stores, 1 Administration | 360 | 80 |
| 13 | Stores | Development of parts kits required for scheduled PM work. | 2 Stores | 160 | 40 |
| 14 | Stores | Addition of parts kits to PM masters for work order templates. | 2 Stores | 160 | 40 |
| 15 | Stores | Review inventory control processes for development and implementation of best practice standards. | 2 Stores, 1 Administration | 240 | 60 |
| 16 | Stores | Review of tire inventory practices for implementation of RTA tire inventory module. | 1 Tire Administration | 160 | 60 |
| 17 | Stores | Implementation of inventory control practices within the stores department; Cycle Counting, etc. | 2 Stores | 160 | 100 |
| 18 | Stores/Operations | Review, verification (correction if required) of all PM schedules by equipment class. | 2 Stores, 2 Engineering, 2 Maintenance | 690 | 60 |
| 19 | Operations | Review of shop maintenance and repair activities to generate current state process flow chart, and subsequent development of future state process complete with performance measure identification. | 2 Maintenenace, 1 Engineering | 300 | 150 |
| 20 | Operations | Review of Operations staff controls (RTA specific) for redevelopment of responsibility and access to controls within the program. Access to permit adequate system control without creating unecessary process delay. | 1 Maintenance, 1 Administration | 100 | 50 |



| Sequence | Area of control | Description | WFM Resources (# of people) | WFM (total hours) | External (hours) | Mar-01 | Mar-08 | Mar-15 | Mar-22 | Mar-29 | Apr-05 | Apr-12 | Apr-19 | Apr-26 | May-03 | May-10 | May-17 | May-24 | May-31 | Jun-07 | Jun-14 | Jun-21 | Jun-28 | Jul-05 | Jul-12 | Jul-19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Stores | Development of preffered supplier guidelines (part families), RFP and implementation of contracts. | 1 Stores, 1 Administration | 320 | 180 | | | | | | | | | | | | | | | | | | | | | |
| 22 | Operations | Determination of capacity levels by mechanic within repair facility | 2 Maintenance | 60 | 40 | | | | | | | | | | | | | | | | | | | | | |
| 23 | Operations | Population of data within RTA as required for all Personnel fields - Certifications etc. | 1 Administration | 40 | 40 | | | | | | | | | | | | | | | | | | | | | |
| 24 | Operations | Development of usable versus non usable vehicle (standard) to enable decision making with respect to hold vehicle for repair, or release to field for repair later. | 2 Maintenance | 60 | 40 | | | | | | | | | | | | | | | | | | | | | |
| 25 | Operations | Begin preliminary review of RTA dispatch and PM schedules (refining and removal of issue). | 2 Maintenance | 560 | 300 | | | | | | | | | | | | | | | | | | | | | |
| 26 | Stores | Implementation of stores keepers exception reporting for part ordering. | 2 Stores | 280 | 120 | | | | | | | | | | | | | | | | | | | | | |
| 27 | Operations | Go - Live PM Dispatch and Schedule | 2 Maintenance | 80 | 60 | | | | | | | | | | | | | | | | | | | | | |
| 28 | Stores | Implementation of Stores reporting for measurement of Stores Facility Effectiveness. | 1 Administration, 1 Info Tech. | 144 | 80 | | | | | | | | | | | | | | | | | | | | | |
| 29 | Operations | Implementation of Operations reporting for measurement of Maintenance Facility Effectiveness. | 1 Maintenance, 1 Administration, 1 Info Tech. | 144 | 80 | | | | | | | | | | | | | | | | | | | | | |
| 30 | Engineering Controls | Implementation of reporting for measurement of Life Cycle Costs. | 1 Life Cycle, 1 Administration, 1 Info Tech. | 144 | 80 | | | | | | | | | | | | | | | | | | | | | |
| 31 | Engineering Controls | Redevelopment of customer billing processes into RTA based reporting structures | 1 Life Cycle, 1 Administration, 1 Info Tech. | 360 | 120 | | | | | | | | | | | | | | | | | | | | | |
| 32 | Engineering Controls | Implementation of revised customer billing processes in RTA based structures (Motor Pool etc) | 1 Life Cycle, 1 Administration, 1 Info Tech. | 120 | 40 | | | | | | | | | | | | | | | | | | | | | |

Deloitte.

# City of Winnipeg
# Audit Department
# Use of Auto Audit Study

February, 2009

# Table of contents

Introduction 1
Approach and work plan 2
Overview of selected organizations 5
1 – Mandate 7
2 – Use of vehicles 12
3 – Vehicle replacement 16
4 – Chargeback and vehicle replacement funding 20
5 – Maintenance expense 28
6 – Fleet and fuel monitoring 31
7 – Information and reporting 38
8 – Other 41
9 – Performance metrics 44
Summary of best practices 47
Appendix A – Specific terms of reference 49
Appendix B – Scope of review 51

## Introduction

Deloitte & Touche LLP ("Deloitte") was engaged by the City of Winnipeg Audit Department ("the Audit Department") to assist the Audit Department in researching best practices for automotive fleet operations. We understand that the work performed by Deloitte is to assist in an audit of the automotive fleet operations of the City of Winnipeg being completed by the Audit Department. The specific terms of reference for the research developed by the Audit Department and provided to Deloitte are included as Appendix A.

Deloitte initially identified eleven potential jurisdictions or organizations as potentially comparable organizations and potential candidates to include in the study. This eleven included ten government jurisdictions as well as one private entity as potential comparable organizations. The government organizations identified were the cities of Calgary, Edmonton, Regina, Saskatoon, London, Moncton, Ottawa, Hamilton and Lincoln, Nebraska as well as the Province of Manitoba. The private organization identified was Private Lease Systems Inc.

Through discussions with the Audit Department, the following five organizations were selected for inclusion in the study:

- City of Calgary fleet management department
- City of Edmonton fleet management department
- City of Ottawa fleet management department
- Province of Manitoba fleet management agency
- Private Lease Systems Inc.

In addition to the information gathered in this report two other potential sources of benchmarking information related to public sector fleet management have been identified. Findings from those sources are not included in this report as information from those two sources is available only to members of those organizations. The two organizations are:

- Ontario Municipal Benchmarking Initiative
- Canadian Association of Municipal Fleet Managers

© Deloitte & Touche LLP and affiliated entities.

## Approach and work plan

Deloitte's approach to the engagement included gathering and reviewing all available and relevant information and documentation for each of the five organizations as well as conducting a series of interviews with selected individuals from each of the organizations to gain an understanding of their approach to the administration of their automotive fleet operations and their thoughts on best practices. The scope of review is included as Appendix B.

### Work plan

To conduct the study Deloitte developed and undertook the following work plan:

- Revisited documentation provided on the City of Winnipeg fleet operations to gain an understanding of their organization, structure and operations.
- Reviewed the specific questions or terms of reference provided by the Audit Department and based on our knowledge and experience in the fleet vehicle and equipment industry augmented that list with a number of other specific and relevant questions or topics we believed could be relevant and of assistance to the Audit Department in undertaking their work.
- Conducted initial research on each selected organization by gathering and reviewing all documentation available in the public domain such as organization's websites, published reports, etc.
- Contacted each of the five organizations, confirmed their participation, identified organizational representatives, provided them with the expanded list of questions or terms of reference developed and made arrangements for an initial interview.
- Conducted a combination of telephone, email and in person initial interviews to gather responses to the list of questions and identify any other issues of interest.
- Reviewed the interview notes and findings and provided follow-up questions to each organization.
- Conducted follow up interviews with each organization to clarify earlier findings and obtain responses to follow up questions.
- Prepared a draft written report on our findings, commentary and analysis.
- Provided copies of our written commentary and analysis back to each organization for their review to confirm accuracy, our understanding and solicit any further input.
- Prepared a final report.

### Questions or terms of reference

The expanded series of questions, grouped by categories, which we provided to each organization, is provided below. It should be noted that due to differences in ownership, structure or operations not all questions were applicable and consequently answered by all five organizations.

#### Mandate

- Who has the overall responsibility to acquire, maintain and dispose of vehicles – mandated to central fleet agency or decentralized to departments/divisions?
- If there is a central fleet agency – what is the mandate and scope of services provided?
- If there is a central agency – is there an ability to opt out of utilizing those services?
- Who maintains ownership of vehicles – decentralized departments, central fleet agency, other?
- Are there established guidelines for matching needs to wants? If so, what are they?
- Who handles licensing and insurance? Central or department?

### Use of vehicles

- Are there established guidelines for determining which employees can take a vehicle home? If so, what are they?
- Are there established criteria for determining which employees require a vehicle full time versus the reimbursement for use of personal vehicles?
- For employees who take a vehicle home, how is personal usage monitored? Reimbursed to agency?

### Vehicle replacement

- What is the average age of a fleet vehicle by type? (Car, light truck, full size truck, heavy duty equipment)?
- Do they use a lifecycle costing model to determine ideal time to replace vehicle?
- Is then an incentive program to encourage customers to treat vehicles in a manner that maximizes final sales value?

### Chargeback and vehicle replacement funding

- What rate methodology is used to charge for services? Market? Direct cost? Full cost? Other?
- What type of warranty is purchased for different types of vehicle types? Who pays for the warranty? Who decides on warranty level?
- Who pays for the vehicle? Fuel? Insurance? Maintenance?
- What is the basis for the establishment of the vehicle replacement fund?
- What technologies or strategies are employed to reduce vehicle operating cost? (cruise control, tire inflation monitoring, sizing vehicle to use, preventative maintenance, rotate high use to low use, other)

### Maintenance

- For maintenance of vehicles – is service offered 24/7? Are some services contracted out? Which ones?
- For scheduled maintenance to be performed by a central fleet agency, do they pick up and drop off vehicle?
- What is the average downtime for a vehicle?
- Do customers adhere to scheduled appointments for preventative or corrective maintenance?
- Is a replacement vehicle provided when maintenance is performed?

### Fleet and fuel monitoring

- Are vehicles monitored for mileage? Fuel consumption? Idling time? Who analyzes the data?
- What mechanisms are in place to prevent unintended use of vehicles? Keys locked in secure location? Logging in/out of vehicle?
- What controls are in place over access to fuel?
- Are immobilizers installed on all vehicles?
- Are GPS devices installed on all vehicles?
- What performance metrics have been identified for the use of fleet vehicles? What are the metrics and the targets? (E.g. average kilometres/miles traveled per vehicle type per year, average fuel cost per vehicle type per year.)

### Reporting

- What is the nature and frequency of reporting provided to customers?
- What software packages are used to support fleet management?

### Other

- What would you consider are the key attributes of your current business model or operations?
- What is the entity's role in ensuring that vehicle operators are adequately licensed and trained?

- What environmental initiatives are in place?
- In the past two to three years, have you adopted any new processes, technologies, policies, which have led to significant improvements to operations or financial results?

### Performance metrics

The results of our findings and analysis are presented sections 1 to 9 under the same subject headings.

## Overview of selected organizations

While the five organizations identified and researched were comparable, and thus relevant, in many ways to the City of Winnipeg fleet operations, the structure, scope, nature of operations and their fleet under management varied significantly. In order to provide context and understanding of each of the five organizations we have developed the following overview of each organization.

| | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Name of the Entity | Winnipeg Fleet Management Agency ("Winnipeg") | Fleet Management Group ("Calgary") | Mobile Equipment Services Branch ("Edmonton") | Fleet Services Group ("Ottawa") | Fleet Vehicle Agency ("Manitoba") | Privately Owned Fleet Management Company ("Private") |
| Type of entity | Special Operating Agency of the City of Winnipeg | Part of a department of the City of Calgary | Part of a department of the City of Edmonton | Part of a department of the City of Ottawa | Special Operating Agency of the Province of Manitoba | Private Company |
| Recent financial information (in $000's) | • 2008 Financials<br>• Revenue - $37,384<br>• Expenses - $35,461<br>• Net Income - $1,923 | • 2008 Operating budget net income – ($2)<br>• 2007 Capital Expenditures – $33,196 | • Revenue – $105,800<br>• Expenses – $101,800<br>• Net Income – $4,000 (including transit) | • Recoveries – $63,227<br>• Expenses – $63,881<br>• Net Income – ($654) | • Revenue – $39,978<br>• Expenses – $36,810<br>• Net Income – $3,168 | • Information is unavailable |
| Services provided | • Vehicle and equipment leasing<br>• Vehicle licensing, registration and insurance<br>• Asset management<br>• Fleet maintenance<br>• Fabrication technologies<br>• Fleet safety training<br>• Small tool rental<br>• Administration<br>• Fuel provisioning<br>• Vehicle remarketing | • Vehicle and equipment leasing<br>• Vehicle licensing, registration, insurance<br>• Asset management<br>• Fleet maintenance<br>• Short term rental vehicles<br>• Administration<br>• Traffic ticket administration | • Vehicle and equipment leasing<br>• Vehicle licensing, registration, insurance<br>• Asset management<br>• Fleet maintenance<br>• Fuel provisioning<br>• Maintenance engineering services<br>• Fabrication technologies<br>• Fleet safety training | • Vehicle and equipment leasing<br>• Vehicle licensing, registration, insurance<br>• Asset management<br>• Fleet maintenance<br>• Fuel provisioning<br>• Information systems<br>• Administration | • Vehicle and equipment leasing<br>• Vehicle licensing, registration, insurance<br>• Asset management<br>• Limited fleet maintenance<br>• Limited fuel provisioning<br>• Short term rental vehicles<br>• Information system outsourcing<br>• Radio services | • Vehicle leasing<br>• Vehicle licensing, registration, driver abstracts<br>• Asset management including third party fleets<br>• National service card program<br>• Maintenance Management program<br>• Accident Management and Driver Safety Training Program<br>• Taxable Benefit Reporting<br>• Vehicle remarketing<br>• Fleet consulting services (i.e. Green Initiative Consulting. |
| Services provided (cont'd) | | | | | | |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| | | | | | | Lease v. Allowance, etc.)<br>• Consumer leasing |
| Managed fleet size<br>(Number of units based on most recent public information) | Total units – 1,668<br>• Passenger vehicles – 231<br>• Light duty trucks – 476<br>• Medium duty trucks – 186<br>• Heavy duty trucks – 89<br>• Equipment – 381<br>• Specialty – 305 | Total units – 3,010<br>• Passenger vehicles – 102<br>• Light duty trucks – 1,320<br>• Heavy duty trucks – 745<br>• Equipment – 805<br>• Specialty – 38 | Total units – 4,206<br>• Passenger vehicles – 471<br>• Light duty trucks – 956<br>• Heavy duty trucks – 581<br>• Equipment – 638<br>• Specialty – 167<br>• Other (including transit) – 1,393 | Total units – 2,968<br>• Passenger vehicles – 531<br>• Light duty trucks – 656<br>• Heavy duty trucks – 363<br>• Equipment – 271<br>• Specialty (including transit) – 1,147 | Total units – 2,907<br>• Passenger vehicles – 332<br>• Vans and buses – 692<br>• Trucks and heavy equipment – 1,676<br>• Truck attachments – 45<br>• Specialty – 162 | Total units – 58,000<br>Total fleets – 1,100 |
| Employees | • 107 employees | • 231 employees | • 520 employees (including transit) | • 152 employees (does not include transit) | • 63 employees | • 160 employees |
| Facilities | • 2 maintenance facilities<br>• 1 fabrication shop<br>• 6 fuelling stations located across the city | • 7 maintenance facilities<br>• Fabrication shop | • 4 general maintenance facilities<br>• 1 police garage<br>• 1 bus maintenance facility<br>• 1 EMS garage<br>• 1 fire service center<br>• 14 fuelling stations located across the city | • 7 maintenance facilities<br>• 3 specialized transit maintenance facilities<br>• 25 fuelling stations located across the city | • 1 maintenance facility in Winnipeg<br>• 2 fuelling stations in Winnipeg<br>• 1 radio maintenance facility in Dauphin | • Offices in Toronto, Montreal, Edmonton, Calgary and Vancouver<br>• In house Remarketing Centres<br>• No maintenance or fuel facilities |

While the nature of the business of the organizations selected for the study is very similar to the City of Winnipeg fleet manager, the overview provided above highlights the significant differences between organizations which have a significant effect on the way the organization operates, their operating metrics and financial results. Significant differences identified include:

- Structure of organization – operating department, special operating agency or private enterprise
- Captive or non-captive customer base
- Captive fuelling and maintenance operations vs. outsourced fuelling and maintenance
- Diverse nature of fleets – relatively homogeneous smaller vehicle fleet versus fleet with many specialty vehicles and large equipment

These factors result in significant challenges in identifying operating metrics which are genuinely comparable between organizations.

## 1 – Mandate

This section provides an overview of the nature of the comparable entities, and the key services that each entity provides.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What is the formal mission statement of the organization? | • To provide economical, state-of-the-art, safe and eco-friendly fleet vehicle, equipment and other asset management services to the City of Winnipeg and other public sector organizations. | • To be the best in the business. | • To effectively supply complete fleet services at a competitive price to satisfy our customers' needs. | • We strive to provide courteous, professional, efficient fleet services and solutions focused on customer needs for a diverse City fleet. | • Manitoba is committed to provide their clients with a complete range of quality fleet management services to assist in the efficient delivery of public programs. | • Fleet Management is our Business!<br>• Delivering cost-effective solutions for your specific fleet requirements. |
| What is the mandate and scope of services provided? | • Winnipeg's business vision is to become the best public fleet service provider in North America.<br>• Most customers are departments of the City of Winnipeg.<br>• There are several external, public-sector and non-profit customers that receive fuel and fabrication services. | • Provide asset management services to their customers.<br>• All customers are departments of the City of Calgary. | • The business vision is to offer high quality customer service while providing a complete range of fleet services to its customers.<br>• All customers are departments of the City of Edmonton. | • Ottawa's mandate is to ensure that the vehicles used to provide daily city services to the public are safe, reliable and cost effective.<br>• All customers are departments of the City of Ottawa. | • The mandate of Manitoba is to supply asset management services to their customers in a timely and efficient manner.<br>• Majority of customers are departments of the Province of Manitoba.<br>• Limited number of other "public domain" customers. | • Private's mandate is to provide fleet management services and the programs needed to operate a fleet of vehicles.<br>• Mostly private sector customers; however there are also a limited number of public sector customers. |
| Who maintains the overall responsibility to acquire, maintain and dispose of the vehicles? | • Winnipeg maintains overall responsibility to acquire and dispose of the vehicles.<br>• With a few departmental exceptions (Police, Fire Paramedic and Transit) Winnipeg provides maintenance for all vehicles. | • Calgary maintains overall responsibility to acquire and dispose of the vehicles.<br>• Departments are responsible for maintaining vehicles and are encouraged to use Calgary facilities. | • Edmonton maintains overall responsibility to acquire, maintain and dispose of vehicles.<br>• Edmonton tries to work with their customers so that decisions on the acquisition, maintenance and disposal of vehicles are made in unison. | • Ottawa maintains overall responsibility for the acquisition, maintenance and disposal of vehicles. | • Manitoba maintains the overall responsibility to acquire, and dispose of the vehicles.<br>• Most maintenance of vehicles is done at independent facilities, but Manitoba is responsible for the scope and cost of the maintenance. | • Responsibility dependent on arrangement with customer.<br>• Some arrangements where they maintain overall responsibility for the vehicle and others where they merely provide fleet management services. |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Is there an ability to opt out of utilizing fleet management's services? | • All city departments that were existing customers of fleet services, before it was set up as a Special Operating Agency, may opt out of utilizing the services provided they present a valid business case to Council.<br>• Departments that were not existing customers when the SOA was created reserve the right to opt out of utilizing the service. | • City departments are not required to use Calgary's services, however they virtually all do.<br>• Historically, if a department has gone to the private sector for their fleet management, they will soon return to Calgary due to the cost savings and quality. | • City departments are required to use Edmonton's services. | • Most city departments are required to use Ottawa's services.<br>• Only city vehicles excluded from this requirement are the police vehicles; however they still use Ottawa for maintenance. | • Provincial departments are not required but are encouraged to use Manitoba's services.<br>• Department can opt out if they can present a business case to Treasury Board which demonstrated valid support for not using Manitoba.<br>• Over the past 10+ years no departments have gone outside of Manitoba for fleet or asset management services. | • Not applicable as their customers choose which services they require. |
| Who maintains ownership of the vehicles? | • Winnipeg maintains ownership of all vehicles throughout the lease period. | • Calgary maintains ownership of all vehicles throughout the lease period. | • Edmonton maintains ownership of most vehicles throughout the lease period.<br>• Exceptions are some police units and a limited number of external customers' vehicles, buses and rented/hired equipment. | • Ottawa maintains ownership of all vehicles throughout the lease period. | • Manitoba maintains ownership of most vehicles throughout the lease period.<br>• Exceptions are a limited number of non government department vehicles which they merely manage. | • Ownership entirely dependent on the type of arrangement with each customer. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Are there established guidelines for matching needs to wants? | • Winnipeg provides recommendations to its customers that are designed to help determine the proper vehicle choices for the customers' operational requirements. | • Calgary prepares a needs assessment when a customer requests a vehicle and will provide a recommendation on the type of vehicle required based on the operational requirements identified by the customer.<br>• Recommendation is not binding on the customer and they can make an alternate selection even if it falls outside of the guidelines of the needs assessment.<br>• In the past customers have made decisions which Calgary did not believe were in the best interest of the customer.<br>• For specialty vehicles the needs assessment is more rigorous and Calgary works closely with the customer in establishing specifications for the desired vehicles. | • Edmonton follows the City of Edmonton Vehicle Procurement Guide.<br>• The business unit will inform Edmonton of their needs and Edmonton will work with the business unit to translate their vehicle and equipment needs into technical specifications.<br>• Edmonton will also work with the business unit to develop the long-term replacement and growth requirements and will base changes to the fleet on this business plan and operational needs. | • Ottawa performs a needs assessment to determine the type of vehicle that the customer requires based on the operational requirements that the client identifies. The client is required to follow the guidelines set by the needs assessment.<br>• For specialty vehicles the needs assessment is more rigorous and Ottawa works closely with the customer in establishing specifications for the desired vehicles.<br>• Ottawa also participates in purchase arrangements already put in place by the provincial government for the purchase of specialty vehicles such as ambulances. These purchase arrangements are often long term resulting in a more homogeneous specialty fleet and it creates the opportunity for maintenance efficiencies. | • Manitoba prepares a needs assessment when a customer requests a vehicle and will provide a recommendation on the type of vehicle required based on the operational requirements identified by the customer.<br>• Recommendation is not binding on the customer and they can make an alternate selection even if it falls outside of the guidelines of the needs assessment.<br>• In the past customers have made decisions which Manitoba did not believe were in the best interest of the customer.<br>• For specialty vehicles the needs assessment is more rigorous and Manitoba works closely with the customer in establishing specifications and evaluating options for these vehicles. | • Private will work with their customer to provide recommendations to help their customers determine what the proper vehicle choice is for their organization's operational requirements. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Who handles vehicle licensing and insurance? | • Winnipeg handles all licensing, registration and insurance for vehicles it manages.<br>• The City of Winnipeg is self-insured for all equipment that is not covered by Manitoba Public Insurance Corporation.<br>• All licensing, registration and insurance costs are passed back as direct charges to the customers. | • Calgary handles all licensing, registration and insurance for vehicles they manage.<br>• The City of Calgary is self-insured.<br>• All licensing, registration and insurance costs are passed back as a direct charge to the customer. | • Edmonton handles all licensing, registration and insurance for vehicles they manage.<br>• The City of Edmonton is self insured so Edmonton pays into the appropriate insurance reserve for each vehicle they manage.<br>• The City of Edmonton also maintains group co-insurance for claims in excess of $2,000,000.<br>• All licensing, registration and insurance costs are passed back as a direct charge to the customer. | • Ottawa handles all licensing, registration and insurance for vehicles they manage.<br>• The City of Ottawa is self-insured so Ottawa pays into the insurance reserve for each vehicle that they manage.<br>• All licensing, registration and insurance costs are passed back as a direct charge to the customer. | • Manitoba handles all licensing, registration and insurance for vehicles they manage.<br>• All insurance is purchased through Manitoba Public Insurance Corporation ("MPIC"). Manitoba is an approved MPIC agent. As an MPIC agent, Manitoba receives a commission on each insurance sale, a portion of which is returned to the customer as a partial refund.<br>• All licensing, registration and insurance costs are passed back as a direct charge to the customer. | • Private can handle all licensing, registration and insurance depending on provincial requirements for vehicles they manage.<br>• Whether they provide this service to a customer is dependent on the agreement with the individual customer.<br>• Part of the service they will provide includes managing all annual renewals for customers to ensure that the insurance, license and registration do not lapse. |

## Discussion and observations

The mandate of each of the organizations was very similar which is to provide fleet asset management services in a timely and efficient manner. Each organization provides asset management services from "cradle to grave", which includes acquisition, leasing, maintaining and disposing of the vehicles and equipment. For four of the five organizations, the majority of their customers are "captive" in that all or virtually all of their customers are members of the same larger organization as the fleet manager. Some comments arose regarding lack of clarity in role and whether their primary objective is to minimize costs for their larger organization or to focus on customer service to their customers.

Of the four public sector organizations with captive customers, customers for only two were allowed to opt out of the fleet services provided, however in both cases it appeared opting out rarely occurred. Manitoba's requirement for the presentation of a business case to opt appears to be a good measure to ensure that adequate thought and analysis has been conducted to support opting out by a department. A perceived benefit from allowing the customers to opt out of using the fleet service is that it will encourage the fleet manager to maintain a cost effective service while providing quality customer service. Conversely, certainty around having a captive customer base and predictable volumes of business provides a benefit to the fleet manager and thus the greater organization.

All organizations assisted their customers with a form of needs assessment to determine the appropriate type of vehicle required. The recommendations made by the fleet managers however in each case were not binding to their customers allowing customers the ability to make

choices which might not be the most cost effective. Participants in the study expressed some frustration over this ability as this hindered the fleet manager from ensuring that the fleet was right sized and operating using the most appropriate vehicles possible.

All organizations noted that the procurement process for specialty vehicles was very similar to that for regular fleet vehicles, except that there was a much greater level of input required from the customer for specialty vehicles. As speciality vehicles are usually smaller volume but higher cost purchases, Ottawa's practice of utilizing existing longer term procurement arrangements already in place through the Province of Ontario appears to allow Ottawa to obtain preferential pricing and purchase relatively homogenous equipment which results in maintenance savings over a period of time.

All fleet managers managed licensing, insurance and registration. This is seen as particularly beneficial to ensure policies do not lapse as well as leaves the complexity of this process in a central location. All treat these expenses as a flow-through expense where the costs incurred by the fleet manager are immediately attributed back to the customer.

The nature of the fleets polled differs in the types of vehicles that they manage. The majority of the fleets have passenger vehicles, trucks, heavy equipment and ambulances. Some of the groups have either historically managed or currently manage the fire trucks, transit vehicles and police units.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- The mandate and role of the fleet manager within their larger organization should be clearly defined and priorities of the greater organization well understood with respect to the fleet manager.
- A centralized fleet manager which manages the entire life cycle from procurement, leasing, maintenance and disposal is the preferred model in a large government organization.
- Allowing captive customers the option to opt out of services can be beneficial, encouraging efficiency in the fleet manager; however the justification for opting out should require a well developed business case.
- If the fleet manager mandate bears responsibility for a cost efficient fleet for the greater organization then the practice of allowing customers to make choices contrary to the fleet manager's recommendation should be reviewed in as it pertains to the fleet mandate.
- The fleet manager takes an active role in assisting customers in assessing their new vehicle needs as well as continually reassessing their existing needs.
- For procurement of specialty vehicles, the fleet agency should work closely with the customer in assessing needs and determining specifications.

## 2 – Use of vehicles

This section provides an overview of the intended uses of the fleet vehicles, with emphasis placed on the personal use of fleet vehicles.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Are there guidelines for which employees can take a vehicle home? | • Guidelines determining whether a vehicle can be taken home are established and enforced by the customers. | • Guidelines as to whether a vehicle can be taken home are established generally by the City of Calgary and then supplemented with customer guidelines. | • Guidelines as to whether a vehicle can be taken home are established by the customer.<br>• The City of Edmonton has specific guidelines which dictate when an employee is allowed to take a vehicle home, and it requires a vehicle take-home permit as noted in city policy A1421. | • Guidelines as to whether a vehicle can be taken home are established by the customer. | • Guidelines as to whether a vehicle can be taken home are established by the customer. | • Guidelines as to whether a vehicle can be taken home are established by the customer. |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Are there guidelines for determining which employees require a vehicle full-time versus the reimbursement of the use of personal vehicles? | • The ability to be reimbursed for the use of a personal vehicle is determined by the requirements of the customers.<br>• Where fleet vehicles are not available for use by required users, City of Winnipeg policy is to reimburse employees, on a per km basis, for the use of personal vehicles. | • According to Calgary very few city employees use their personal vehicle for work purposes, so this is not a significant issue.<br>• However, Calgary does prepare utilization reports for their customers. These will help to show their customers when a vehicle is underutilized and it therefore could be beneficial to access a pool vehicle or use an employee's own vehicle if possible. | • This is determined by the operational requirements of the business units. Most of Edmonton's vehicles and equipment are work related fleet vehicles like a sander or a bus which makes the use of personal vehicles unlikely.<br>• The car allowance policy is expensive, and as such many business units use pool vehicles as a method of reducing the personal car allowance claims. Allowance claims are primarily submitted for business travel and travel to training courses. | • Ottawa will assess each case to determine whether the cost of reimbursement is greater than the cost required to procure and maintain a city vehicle.<br>• Ottawa also reports to their customers three times a year with their utilization figures. This will identify vehicles that are underutilized. Where possible, these vehicles could be replaced by personal vehicles or pool vehicles. | • For an employee to use their personal vehicle for work purposes, it must be written into their employment contract due to union standards. This will therefore make it less likely that an employee would use their own vehicle. On occasion, employees use their personal vehicles to run errands for their employers, and they are reimbursed using established rates.<br>• Manitoba does not normally provide their customers with information on underutilized vehicles. | • Private can provide their client with analysis and metrics showing when it is worthwhile for an employee to use a company vehicle vs. their own personal vehicle. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| How is personal usage monitored? Is it reimbursed to the agency? | • Customers' operators must obtain approval from their departments to use city-owned vehicles for personal use. | • Customer's operators must obtain approval from their department to use their city vehicles for personal use.<br>• Estimates are that 1% of the total fleet usage may be personal use.<br>• Odometer readings are provided by the end operator to Calgary so it is able to determine the allocation for the unit between personal and business use and apply the taxable benefit related to the personal use portion. | • Based on Section 2.04 of city policy A1421, a City vehicle shall not under any circumstances be used for private purposes, such as shopping or travel from a work location to their place of residence at lunch time. Therefore, reimbursement for personal use is not usually necessary. | • City of Ottawa policy prohibits personal use of vehicles so personal use of vehicles is not an issue for Ottawa. | • Customers are required to submit kilometres driven monthly through the "Keys" web interface data collection tool.<br>• The level of personal use is monitored and reported back to the customer through the Monthly Distance Report. Employees authorized to drive personal distance pay $29.98 plus GST bi-weekly by payroll deduction, with that amount reimbursed to the driver's department. That charge authorizes a driver to drive up to 500 personal kilometres per month. Excess distance surcharges are billed by and paid to the driver's department for kilometres in excess of 500 per month at rates established by class of vehicle.<br>• Manitoba does calculate the annual taxable benefit to the customer's employee and issues a T4 slip for the calculated benefit, or passes the information back to the customer payroll system. | • Operators are required to submit their kilometres driven to Private through their web interface data collection tool.<br>• Kilometres are allocated to either personal or business use and Private provides their customers with a detailed breakdown of usage by unit.<br>• Private provides an online program that captures the taxable benefit to the customer's employee and can pass that information back to them. |

## Discussion and observations

Personal use of employer vehicles is minimal for the municipal entities, but higher for Manitoba and Private. Minimal personal use for municipal fleets is due to customer policies and the geographic concentration of the municipal fleets. In each case whether vehicles can be used for personal use is a policy of the customer and not the fleet manager.

Manitoba, Calgary and Private do assist their customers in tracking personal use and in the case of Manitoba provide assistance and personal use information electronically to their customer's payroll department to collect the charges on behalf of their customer.

The issue of whether an employee requires an assigned vehicle, access to a vehicle pool or should use their personal vehicle and claim mileage charge reimbursement is an issue which should be discussed during the needs assessment process which the fleet managers all undertake with their customers. The fleet managers provide guidance based on specific employee or customer needs.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- When personal use of vehicles is allowed the fleet manager collects personal use information and provides that information and applicable charges back to customer payroll service for processing.
- The vehicle need assessment and reassessment process includes an assessment for individual employees of the customer to determine the option for vehicle access best suited to their needs. Options are an assigned personal vehicle, access to a vehicle pool or personal use of the employees own auto, if employment agreements allow that arrangement.

## 3 – Vehicle replacement

This section provides an overview on the best practices in the comparable jurisdictions on the replacement and misuse of fleet vehicles.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What is the average age of a fleet vehicle by type? | • Average ages of vehicles by broad category types are as follows:<br>☐ Passenger – 2.6 years<br>☐ Light duty – 4.4 years<br>☐ Medium duty – 6.4 years<br>☐ Heavy duty – 4.6 years<br>☐ Equipment – 5.9 years<br>☐ Specialty – 8.3 years | • Calgary does not track the age of the units by type.<br>• They do believe however that approximately 40% of their current fleet is in use beyond the end of their prime useful life. | • Average age by broad category of vehicles is as follows:<br>☐ Heavy duty – 7.4 years<br>☐ Medium duty – 7.3 years<br>☐ Light duty – 5.6 years<br>☐ Police – 4.6 years<br>☐ Motorcycle – 9.2 years<br>☐ Specialty vehicles – 8.5 years | • The average age for vehicles is 6.5 years and the average age for equipment is 5.2 years.<br>• The average age of the fleet has been decreasing in recent years however this is primarily due to growth in the fleet as opposed to accelerated replacement; therefore, Ottawa does not find this to be a pertinent fleet statistic. | • The average age of a fleet vehicle is about 3.8 years.<br>• No further breakdown by type of vehicle was available. | • The average age of a passenger vehicle in the corporate fleets is 2.5 to 3 years, while the average age of a truck in the corporate fleets is slightly higher.<br>• In their opinion the average age of a vehicle in the corporate fleet is likely less than that of a municipal fleet as private corporations tend to turn over their fleet more quickly than their government counterparts. |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Is a Lifecycle costing model used to determine the ideal time to replace a vehicle? Is the lease life determined by the Lifecycle model mandatory? | • A lifecycle model is used to help determine the appropriate replacement point for vehicles and equipment.<br>• The number of lease years determined by the model are mandatory. | • Calgary utilizes a form of the lifecycle costing model. They determine the ideal time to replace the vehicle using a number of factors including the intended use of the vehicle, average driving conditions, types of roads being driven on as well as the customer driving history.<br>• They do not identify an optimal life or replacement cycle by type of vehicle, as it is dependent on many different factors as noted above.<br>• The optimal replacement cycle for vehicles recommended by Calgary is not mandatory for their customers to follow with the customer having the final decision. | • A lifecycle model is used to help determine the appropriate replacement point for the asset. | • A lifecycle model is used to help determine the appropriate replacement point for the asset.<br>• Each vehicle may have a different useful life influenced by a number of factors.<br>• As a starting point, Ottawa has adopted the following industry guidelines:<br>☐ American Public Works Association standard for their light duty vehicles (7 years) and their heavy duty vehicles (10 years);<br>☐ Ontario Medical Authority for ambulances of 4.5 years;<br>☐ National Fire Protection Association (NFPA) standard of 15 years for fire apparatus;<br>☐ These guidelines are also used to determine the depreciation cost per year and the annual contribution to the vehicle replacement reserve.<br>• The optimal replacement cycle for vehicles recommended by Ottawa is not mandatory for their customers to follow with the customer having the final decision. | • A lifecycle model is used to help determine the appropriate replacement point for the asset.<br>• Once past the optimal life Manitoba will analyze the cost of maintaining the vehicle over the past year or undertaking a current major repair, to determine whether the cost of maintenance is exceeding what the cost would be to lease a new vehicle.<br>• The actual replacement decision lies with the client regardless of Manitoba's recommendation.<br>• Some customers will continue to use the vehicle past its optimal life for various reasons. Manitoba will not force the entity to replace the vehicle. | • Private utilizes a lifecycle model to determine the optimal term of a vehicle depending on the type of vehicle and the expected mileage per year.<br>• This model is also used to help determine the type of vehicle that the client should select for their fleet.<br>• Private also utilizes an economic life model that tracks the costs that each unit incurs and will also let the customer know when the unit's maintenance costs exceed the cost of replacing the unit. |

© Deloitte & Touche LLP and affiliated entities.City of Winnipeg – Audit Department – Use of Auto Audit Study

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Is there an incentive program to encourage people to treat their vehicles in a manner that maximizes final sales value? | • Customers are charged for abnormal wear and damage to vehicles, in addition to regular monthly rates; therefore, there is an indirect incentive for customers not to incur additional maintenance expenses. | • As the maintenance expenses are on a fee for service basis there is an indirect incentive for the customer not to incur additional maintenance expenses.<br>• At point of sale, if maintenance expenses are incurred to enable the sale, the customer is charged for these expenses. | • As customers are charged for abnormal wear and damage to their unit in addition to the regular monthly rates, there is an indirect incentive to the customer to not incur additional maintenance expenses.<br>• On disposal, proceeds of disposition are deducted from the remaining book value of the vehicle. Any residual book value is charged back to the customer, while any remaining proceeds in excess of book value is normally retained by Edmonton and contributed to the replacement reserve fund. | • Customers are charged for the maintenance hours they incur which would encourage customers to be careful with their unit. | • An incentive exists to maintain the vehicle and optimize the end of term residual value as the gain or loss over the agreed upon residual value upon disposal of the vehicle is credited or charged to the customer.<br>• While somewhat indirect, regular maintenance expenses are charged to the customer on a per kilometre basis. This rate will be adjusted year over year to reflect actual maintenance history.<br>• As well, if excessive maintenance is required the customer may be charged directly. | • An incentive exists to maintain the vehicle and optimize the end of term residual value as the gain or loss over the agreed upon residual value upon disposal of the vehicle is credited or charged to the customer.<br>• Maintenance charges flow directly to the customer, providing an incentive to treat vehicles in a manner which maximizes final residual value. |

## Discussion and observations

The average age for a fleet vehicle fluctuates significantly between the different organizations due factors such as nature of the fleet, intended purpose and recent growth of the fleet. Average fleet ages are also skewed by the inclusion of heavy machinery or specialty items in the calculation. Within government organizations Manitoba's fleet is younger due in large part to the amount of use for many of the vehicles due to geographic spread of their customers. Ottawa's average fleet age is somewhat skewed due to its recent growth of new vehicles which reduced the average age of the overall fleet. As Calgary does not mandate the disposal of their vehicles after the prime useful life expires, there is a large portion of their fleet (40%) that is still in service but past their useful life resulting in the average age being skewed toward a higher than normal average age. Private's low average age is due in large part to the nature of their customers being in the private sector and having different needs and priorities.

Each organization utilizes a form of lifecycle management model to manage their fleet. In each case however adoption the lifecycle model can be over ruled by the customer, consequently decisions can be made which are not optimal to the overall cost of the fleet.

Most organizations create incentives to prevent or minimize the misuse of employer leased vehicles. Incentives are direct costs of maintenance charges as well as sharing the end of lease disposal gain or loss.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- Adoption of the life cycle costing model provides the best value to the customer over a period of time however in order to ensure optimal efficiency, customers should be strongly encouraged or required to adopt the recommendations provided by the fleet manager.
- Allowing the customer to participate in end of lease disposal gain or loss provides an incentive for customer to properly operate and maintain their vehicles.

# 4 – Chargeback and vehicle replacement funding

This section provides an overview of the methodology for determining rates charged to the customers, as well as the manner in which funding for replacement vehicles is obtained.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What is the methodology used to set rates used to charge for services? | • Winnipeg charges for services based on the calculated hourly shop rate. The rate is set by comparison to industry shop rates. | • Calgary incorporates a measure of profitability into the rates used to charge for their services. This is necessary for Calgary, as they are required to pay a return on equity charge to the City of Calgary. | • Edmonton does not incorporate a measure of profitability into their rates. Their goal is to instead develop rates to recover the full cost of providing departmental services to customers. This includes the direct costs, indirect cost and administrative costs. | • Ottawa does not incorporate a measure of profitability into their rates. Their goal is to instead develop rates to recover the full cost of providing departmental services to customers. This includes the direct costs, indirect cost and administrative costs. | • Manitoba incorporates a measure of profitability into their rates. This profitability is used to cover indirect overhead and administrative expenses, pay a form of profit share to the Province of Manitoba each year and to build up their pool of retained earnings for financing purposes. | • Private incorporates a profitability margin into the services they provide. |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What rate methodology is used to charge for leases? | • Lease rates may either be paid in total at the front of the lease or on a pay-as-you-go system.<br>• Leases may or may not include a built in maintenance charge, depending on the terms of the agreement.<br>• Monthly vehicle lease charges are included in a fixed monthly charge which includes:<br>☐ the capital cost of the vehicle;<br>☐ a cost of capital charge;<br>☐ an overhead expense component; and<br>☐ an estimated maintenance charge (optional). | • The monthly vehicle lease charge is fixed and calculated as:<br>☐ (Purchase price – estimated residual value)/estimated lease term;<br>☐ Estimated lease term based on estimated optimal vehicle hold period. | • The monthly vehicle lease charge is included in a fixed monthly charge which includes:<br>☐ The capital cost of the vehicle;<br>☐ Insurance, registration and licence costs;<br>☐ An overhead expense component. | • The monthly vehicle lease charge is incorporated into a fixed monthly management fee that includes:<br>☐ The capital cost of the vehicle;<br>☐ Insurance, registration and licence costs;<br>☐ An overhead expense component.<br>• The management fees are split into two base categories, one for Heavy and one for Light duty vehicles.<br>• The overhead costs can include many different expenses such as safety costs, procurement costs, administrative costs and training services. | • The monthly vehicle lease fixed charge is determined by Manitoba which includes:<br>☐ Cost of capital charge;<br>☐ Capital cost of the vehicle;<br>☐ An overhead expense component. | • Private will set a fixed or variable monthly lease rate based on:<br>☐ Capital cost of the vehicle;<br>☐ Cost of capital at a floating or fixed rate, depending on customer.<br>• Required depreciation based on vehicle usage. The index used, upon which the rate is based, is one month banker's acceptance rates for float based funding, and the fixed rates are normally tied to the Government of Canada Bond rate. The index is combined to an appropriate adder such that the total rate approximates the actual all in funding available in the financial market for leased assets.<br>• Rates normally used for the floating rate are the one month and three month banker's acceptance rates, while the fixed rates are normally tied to the Government of Canada Bond rate. An adder or profit margin is then added to these rates. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What rate methodology is used to charge for vehicle licensing, registration, insurance? | • Insurance, registration and licensing costs are directly flowed through to customers, plus administration fees for providing these services. | • The insurance, registration and licence costs are included in the variable portion of the rate which is calculated as:<br>☐ (Overhead Charges + 10% Return on Equity Charge to the City of Calgary)/Total Equity of the Fleet. | • The insurance, registration and licence costs are included in a fixed monthly charge which includes:<br>☐ The capital cost of the vehicle;<br>☐ Insurance, registration and licence costs;<br>☐ An overhead expense component. | • The insurance, registration and licence costs are included in a fixed monthly management fee that includes:<br>☐ The capital cost of the vehicle;<br>☐ Insurance, registration and licence costs;<br>☐ An overhead expense component. | • The insurance, registration and licence costs are flowed though directly to the customer, except that Manitoba does reduce the cost of insurance by a portion of the fee earned from MPI on the purchase of insurance.<br>• The remainder of the fee is retained to offset administrative costs. | • Provincial insurance, registration and license costs are flow through. A program based on an administrative fee per occurrence is available if the customer opts to outsource this responsibility. |
| What rate methodology is used to charge for fuel and maintenance expenditures? | • Fuel and maintenance costs are charged directly to customers monthly, by vehicle, based on:<br>☐ the higher of cost or market for fuel, based on publicly available information; and<br>☐ the calculated shop rate, set by comparison to industry rates. | • Fuel and maintenance costs are charged directly to the customer on a monthly basis by vehicle based on:<br>☐ Actual costs of fuel purchased;<br>☐ Actual costs of maintenance which includes direct internal costs of maintenance, external maintenance charges and a 7 % surcharge for shop supplies.<br>• Internal maintenance includes direct labour costs at a loaded labour rate plus materials with mark-up. | • Fuel and maintenance costs are charged directly to the customer on a monthly basis by vehicle based on:<br>☐ Actual costs of fuel purchased;<br>☐ Actual costs of maintenance which includes direct internal costs of maintenance labour, parts and an allocation of overhead based on usage for the month (i.e. the number of kilometres driven.) | • Fuel and maintenance costs are charged directly to the customer on a monthly basis by vehicle based on:<br>☐ Actual costs of fuel purchased;<br>☐ Actual costs of maintenance which includes direct internal costs of maintenance labour and parts.<br>• The shop labour rate is determined as maintenance expenses divided by the billable hours multiplied by the number of maintenance hours for the unit. | • Fuel and maintenance costs are charged directly to the customer on a monthly basis by vehicle based on:<br>☐ Actual costs of fuel purchased;<br>☐ A per kilometre charge which covers actual maintenance costs plus an overhead component. | • Fuel and maintenance costs are charged directly to the customer on a monthly basis by vehicle based on:<br>☐ Actual costs of fuel purchased (less a fuel discount);<br>☐ Actual cost of maintenance incurred during the month (less national program discounts). |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Who pays for the vehicle, fuel, insurance, maintenance, and tire expense? | • All vehicle, fuel, insurance and maintenance costs are initially paid for by the fleet manager.<br>• These costs are either recovered directly from customers or charged to customers through the fixed and variable monthly lease charges. | • All vehicle acquisition, costs are initially paid for by the fleet manager.<br>• These costs, plus a profit component, are either recovered directly from the customer or charged to the customer through fixed and variable monthly charges noted above. | • All vehicle, fuel, insurance and maintenance costs are initially paid for by the fleet manager.<br>• These costs are either recovered directly from the customer or charged to the customer through fixed and variable monthly charges noted above. | • All vehicle, fuel, insurance and maintenance costs are initially paid for by the fleet manager.<br>• These costs are either recovered directly from the customer or charged to the customer through fixed and variable monthly charges noted above. | • All vehicle, fuel, insurance and maintenance costs are initially paid for by the fleet manager.<br>• These costs are either recovered directly from the customer or charged to the customer through fixed and variable monthly charges noted above.<br>• Fuel and maintenance is charged to the fleet manager through the use of the Fleet Card, and is then charged back to the customer. | • All vehicle, fuel, provincial insurance and maintenance costs can be initially billed to Private.<br>• Private then provides a consolidated billing to the customer.<br>• Fuel and maintenance is charged to the fleet manager through the use of Private's National Service Card, and is then charged back to the customer. |
| Who controls the parts supply? | • Winnipeg controls the parts supply. | • The supply management department controls the parts supply. | • The material management branch has parts staff in Edmonton's shops that control the parts. | • The finance department controls the parts inventory; however this is being reviewed for a possible move into Ottawa. | • Manitoba controls its own parts supply chain. | • Not applicable. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Is there a vehicle replacement fund? | • Winnipeg does not have a vehicle replacement fund.<br>• Capital acquisitions are funded through market financing and though an operating line of credit held with the City of Winnipeg. | • Calgary does not have a Vehicle Replacement Fund. Instead, the capital for replacing the vehicles is provided through retained earnings and debt financing. All financing is obtained through the City of Calgary. | • Edmonton has a vehicle replacement reserve fund which has been built up over the course of many years. The fixed portion of the customer's payments is intended to recover an amount sufficient to replace the vehicle at the end of the unit's useful life. | • Ottawa has a vehicle replacement reserve fund in place. A portion of each customer vehicle fee goes toward the reserve fund, which is in essence equal to the amortization on the unit. When the useful life is complete, approximately 93% of the unit cost will have been allocated to the reserve fund to reduce the significant cost of purchasing a replacement vehicle.<br>• The reserve fund is occasionally supplemented by funding that is provided by the City of Ottawa. | • Manitoba does not have a Vehicle Replacement Fund. Instead, the capital for replacing vehicles is provided through retained earnings and debt financing.<br>• All financing is provided through the Province of Manitoba. | • Not applicable. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What type of warranty is purchased? | • Generally, the only warranty is the standard manufacturer's base warranty. | • For the majority of the units, the standard manufacturer's base warranty is the only warranty coverage in place as it is included in the purchase price.<br>• If there are additional warranties requested for a unit, the customer will be directly responsible for those additional costs.<br>• Calgary tracks their warranty work in their maintenance management system and is then billed back to the vendor providing the warranty. | • The level of warranty coverage is determined by the engineer or technical service officer assigned to the customer with the cost of the warranty treated as part of the vehicle purchase price.<br>• Generally the only warranty is the standard manufacturer's base warranty.<br>• Edmonton tracks the warranty work order in a spreadsheet. This spreadsheet is used to monitor the recoveries received from the vendors providing the warranties. | • Ottawa decides on an appropriate level of warranty for the vehicle, which is generally just the standard manufacturer's base warranty.<br>• Ottawa uses the M5 (Asset Works) system to track their maintenance work and bill it to clients. The warranty work is not billed to the client. The work is either performed by the Vendor supplying the warranty or is performed by Ottawa and billed to the Vendor. | • Generally the only warranty is the standard manufacturer's base warranty.<br>• Warranty work is not normally performed at Manitoba's maintenance shop. Vehicles are normally taken back to the vendor dealerships for repairs or maintenance under warranty.<br>• Warranty work that is performed by 3rd party garage is billed directly back to the vendor by the third party garage. | • Generally the only warranty is the standard manufacturer's base warranty. Manufactures' extended warranty programs can be billed through Private as well. |
| What technologies or strategies are employed to reduce vehicle operating costs? | • Winnipeg has initiated the use of hybrid and electric vehicles in departments that require light fleet operations.<br>• Black Box technologies are being implemented to provide more robust and timely information, in order to provide better preventative maintenance for vehicles. | • Calgary has an anti-idling policy in place that is used to try and reduce fuel consumption and emissions.<br>• Calgary has their drivers recertify their license every five years or earlier if there is evidence of misuse. This helps to ensure that drivers use their unit in an appropriate manner. | • Every employee who drives a city vehicle must get a city driving permit. Part of the training process teaches the driver how to conserve fuel and treat their vehicles and equipment with care.<br>• The City of Edmonton has also instituted an anti-idling policy where vehicle engines must be shut off if the expected idling time exceeds 30 seconds. | • Ottawa concentrates on right sizing the fleet to ensure that the appropriate vehicle has been selected based on the customer's needs.<br>• They have also begun introducing hybrid vehicles into the fleet.<br>• Tire pressure and the tracking of tire wear are monitored. | • Manitoba has an anti-idling policy in place to reduce fuel consumption and emissions.<br>• Manitoba provides access to vehicle operating information to their customers to allow them to monitor usage and operating costs. | • Private monitors items such as fuel consumption and maintenance expense per unit. These are then reported to the client on a monthly basis to ensure they are aware of the potential inefficiencies in their fleet. Private conducts Fleet Best Practices Seminars, Analytical Tools and Annual Business Activity Reviews that include the creation of Action Plans to reduce costs. |

## Discussion and observations

At each organization, all direct and indirect costs associated with managing and operating the fleet are ultimately recovered from the customer through various combinations of monthly fixed and variable charges. In the case of Calgary, Manitoba and Private, there is an expectation that they will recover more than their costs and generate a "profit" or excess of revenue over expenses, all or part of which will be passed back to shareholders or the controlling organization (i.e. the City or Province). Consequently, Calgary, Manitoba and Private set rates which include a "profit" component. In the case of Calgary and Manitoba the "profit" expectation would receive input from the City of Calgary or Province of Manitoba respectively.

Except for Private, monthly charges to customers include a fixed and variable component. What is contained in the fixed and variable component, what it is called and how the amounts are determined varies between all five organizations. The only consistent handling is for fuel which is charged back at the actual cost to the customer by vehicle each month.

Except for Private, all other organizations recover their indirect operating administrative costs through either a direct overhead charge or an overhead "recovery" charge which is factored into rates underlying the monthly charges. Visibility of where these charges are added varies by organization. Organizations which offer maintenance services would recover some of their overhead expenses through service labour rates and mark-ups on parts. Private employs a different model, establishing most charges at cost and then charging a fee for service, depending on the customer's requirements.

Organizations which provide internal refuelling options have adopted technology to track, monitor and control fuel purchases through the use of key fobs and fleet fuel purchase cards particular to specific vehicles. Organizations which allow customers to purchase fuel and maintenance from third party providers provide each vehicle with fleet fuel purchase cards particular to specific vehicles. Purchasing through these credit cards can also provide the opportunity for the fleet manager to arrange discounts with gasoline vendors and maintenance providers.

Edmonton and Ottawa both have vehicle replacement funds in place. These are funded by a portion of the lease payments that are made by their customers each month. It essence amounts to placing the monthly amortization on the vehicle into the replacement fund. Manitoba and Calgary utilize their retained earnings and debt financing to replace their vehicles.

Across all organizations, the common practice is to choose the standard manufacturer's warranty on the vehicle.

A number of the entities have either implemented or are beginning to implement strategies to reduce vehicle operating costs. The strategies that are currently in use are:

- Anti-idling policies.
- Driver training and strategies to limit improper driving techniques.
- Right sizing of the vehicles assigned to the departments and operators based on their needs.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- For fleet managers that are part of a government department, establishment and funding of adequate reserves for vehicle replacement is preferred.

- Charging back fuel and maintenance purchases directly to the customer creates an incentive for them to monitor fuel consumption and attend to regular maintenance.

## 5 – Maintenance expense

This section provides an overview of the maintenance facilities and services provided by the fleet agencies.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Is service offered 24/7? What percentage of maintenance is outsourced? | • Winnipeg offers service 24 hours a day, five days a week and emergency 24 hour service, 7 days a week.<br>• 33% of maintenance is outsourced.<br>• The types of work that are outsourced include oil changes, body work and any capacity overruns that Winnipeg cannot service internally. | • Calgary offers emergency service 24 hours a day and seven days a week through its maintenance facilities.<br>• Approximately 20% of maintenance work is outsourced.<br>• The type of work that is outsourced will depend on the available capacity of the Calgary shops and what they cannot handle internally. | • Edmonton offers emergency service 24 hours a day and seven days a week through its maintenance facilities.<br>• The vast majority of maintenance services are conducted internally with only a minor portion outsourced.<br>• The type of work that is outsourced will depend on the available capacity of the Edmonton shops and what they cannot handle internally.<br>• Edmonton has mechanics in the Police Headquarters building that maintain the police vehicles. Mechanics who work on police vehicles are required to undergo a security check. | • Ottawa offers emergency service 24 hours a day and seven days a week at one of its ten maintenance facilities.<br>• Approximately 30% of maintenance work is outsourced.<br>• The vast majority of the work outsourced is specialized work. Examples would be auto glass repair, engine rebuilds, transmissions, springs and suspensions.<br>• Police services are wholly responsible for their fleet. Ottawa maintains most of the police vehicles on a charge back basis. All of Ottawa's mechanics are subject to a police record check upon initial hire. | • Manitoba facilitates access to emergency service 24 hours a day and seven days a week through access to service coordinators who are able to speak to repair facilities and approve required repairs.<br>• Manitoba's own maintenance facility is only open from 7:30am to 5:00pm Monday to Friday.<br>• Only a small percentage of maintenance is conducted internally at their maintenance facility.<br>• The vast majority of maintenance is outsourced to independent facilities across Manitoba due to the nature and vast geographic distribution of their fleet. | • Private facilitates access to emergency roadside assistance service 24 hour a day and seven days per week and access to licensed technicians via telephone, who are able to speak to repair facilities and approve required repairs.<br>• Private does not operate maintenance facilities so all maintenance is undertaken by third party service providers. |

*Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Does the organization pick up or drop off the vehicle when scheduled maintenance is performed? | • Winnipeg does not offer a drop off or pick up service. | • Calgary will pick up and drop off vehicles however they will charge the customer at the hourly maintenance labour rate.<br>• As customers pay directly for the service, very few customers take advantage of this service. | • Normal service level agreement does not include drop off and pick up service.<br>• Customers can opt to have the drop off and pick up service included in their service level agreement if they choose. | • Ottawa does not offer a drop off or pick up service. | • Manitoba does not provide pick up or drop off service for their customers, except for Executive (Minister, Deputy Minister and Equivalents) vehicles that are located at the Legislature, or in the downtown area. Manitoba also operates a shuttle service for customer drivers located in Winnipeg who bring their assigned vehicles to Manitoba's own maintenance facility. | • Not applicable. |
| What is the average downtime for a vehicle? | • Average downtime per vehicle is not tracked. | • Average downtime per vehicle is not tracked. | • Since 2004 average downtime per vehicle is not tracked. | • Average downtime per vehicle is not tracked. | • Average downtime per vehicle is not tracked. | • Average downtime per vehicle is not tracked. |
| Is a replacement vehicle provided when maintenance is performed? | • Winnipeg will supply replacement vehicles, if they are available from the internal pool or short-term rental pool, at no additional charge to the customer. | • Calgary does not provide a replacement vehicle when maintenance is required. | • Edmonton does not provide a replacement vehicle when maintenance is required, however Edmonton does have a small pool of rental vehicles available to customers if required. | • Ottawa does not provide a replacement vehicle when maintenance is required. | • Manitoba does not normally provide a replacement vehicle when maintenance is required, however may provide a replacement vehicle on an ad hoc basis, if a vehicle is available that day in the short term rental supply pool. | • Not included in any maintenance service packages, however it may be available from specified vendors in their National Service Network. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Do customers adhere to scheduled appointments for preventive or corrective maintenance? | • Winnipeg's customers will not always adhere to the scheduled maintenance appointments.<br>• Winnipeg does not penalize the customers for missing appointments. | • Calgary's customers will not always adhere to the scheduled maintenance appointments. Calgary does not penalize the customers for missing appointments. | • Edmonton's customers will not always adhere to the scheduled maintenance appointments. Edmonton does not penalize for missed appointments. | • Ottawa has approximately 1/3 of its maintenance appointments missed. A number of the missed appointments are major clients such as Roads, who will miss appointments due to work commitments when winter events arise. Ottawa does not penalize for missing appointments. | • For the most part, customers adhere to scheduled appointments for preventive maintenance. There is not a policy in place for penalizing customers for missing scheduled appointments. | • They do provide online reporting to track preventive maintenance and provincial commercial vehicle requirements and forecast future requirement. |

## Discussion and observations

Twenty-four hour seven days a week emergency maintenance is available from each organization, however it is provided in different ways. For those organizations which undertake the majority of their maintenance internally this requires that at least one facility is open at all times. Twenty-four hour, seven days a week emergency maintenance service is particularly relevant to fleets which contain emergency vehicles or equipment.

Even for organizations which provide internal maintenance services some maintenance work is outsourced to third party vendors due to either a lack of capacity or expertise. Manitoba outsources the majority of their work due to the vast service area that it must maintain.

None of the organizations routinely provide pick up and drop off service, however the service can be arranged. Replacement vehicles are available from Edmonton and Manitoba, depending on availability

Vehicle downtime did not appear to be a significant concern as none of the organizations track it.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- Twenty-four hour seven days a week emergency service is provided however delivery of that service varies in accordance with the emergency needs of the fleet.
- Replacement vehicles can be made available if required.

## 6 – Fleet and fuel monitoring

This section provides an overview of the manner in which each fleet agency monitors their fleet.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Are vehicles monitored for mileage, fuel consumption and idling time? | • Currently, the engine hours and odometer readings are captured via manual input from the operators during the fuelling process.<br>• Winnipeg is in the process of implementing Black Box technologies that track mileage, fuel consumption, idling time and other performance metrics for vehicles. | • No specialized technology has been deployed on the vehicle to automatically monitor mileage, fuel consumption or idling time.<br>• Mileage is reported and fuel purchases recorded upon which mileage and fuel consumption could be determined and monitored.<br>• Mileage can only be verified when units are brought in for maintenance.<br>• Fuel consumption is monitored by Calgary through the use of their internal fuel depot.<br>• It is not possible to track idling time as Calgary does not have black box technology installed in their vehicles. | • No specialized technology has been deployed on the vehicle to automatically monitor mileage, or fuel consumption. However, Edmonton has recently started to collect engine idle time and run hours with black box technology in a select number of vehicles. Units are monitored for kilometres travelled, fuel consumption in litres, hours of operation and warranty kilometres. | • No specialized technology has been deployed on the vehicle to automatically monitor mileage, fuel consumption or idling time.<br>• Mileage is reported and fuel purchases recorded upon which mileage and fuel consumption are determined and reported.<br>• Ottawa publishes a scorecard which tracks the city fuel sites and the savings in comparison to the non-city gas bars. Approximately 90% of customers now use the city gas bars to take advantage of the rates quoted in the scorecard. | • No specialized technology has been deployed on the vehicle to automatically monitor mileage, fuel consumption or idling time.<br>• Mileage is reported and fuel purchases recorded upon which mileage and fuel consumption could be determined and monitored. | • No specialized technology has been deployed on the vehicle to automatically monitor mileage, fuel consumption or idling time.<br>• Mileage is reported and fuel purchases recorded upon which mileage and fuel consumption could be determined and monitored.<br>• This data is analyzed and placed into a report which is provided to the customer on a monthly basis.<br>• Private can also provide GPS tracking and reporting solutions through outsourced providers. |
| Are vehicles monitored for mileage, fuel consumption and idling time? (cont'd) | | | | • Cost per kilometre is monitored and provided and compared to the Ontario Municipal Benchmarking Initiative and the Canadian Municipal Fleet Manager Benchmarking Initiative. | | |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What mechanisms are in place to prevent unintended use of vehicles? | • Winnipeg does not have any specific mechanisms in place.<br>• It is the customers' responsibility to prevent unintended use. | • Calgary does not have any specific mechanisms in place. Vehicles are leased to customers and it is their responsibility to prevent unintended use. | • Edmonton does not have any specific mechanisms in place. Vehicles are leased to customers and it is their responsibility to prevent unintended use. | • Ottawa does not have any specific mechanisms in place. Vehicles are leased to customers and it is their responsibility to prevent unintended use.<br>• Ottawa does provide periodic utilization reports to the customer which the customer may use to monitor usage. | • Manitoba does not have any specific mechanisms in place. Vehicles are leased to customers and it is their responsibility to prevent unintended use.<br>• Manitoba does provide access to regular utilization reports which the customer may use to monitor usage. | • Private does not have any specific mechanisms in place. Vehicles are leased to customers and it is their responsibility to prevent unintended use.<br>• Private does provide access to utilization reports which the customer may use to monitor usage. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What controls are in place over access to fuel? | • Customers purchase fuel from WFMA cardlock controlled sites located throughout the city.<br>• Each unit is given a fuel card that is programmed to dispense a limited amount of type-specific fuel.<br>• Employees are required to enter odometer readings, or hour meter readings, as applicable, at the time of refuelling.<br>• Variances between odometer/hour readings are compared each day to confirm accuracy and monitor for theft.<br>• WFMA has begun fitting units with fuel rings that ensure only the units with rings can be filled up at refuelling stations.<br>• Major fuel sites are being upgraded to include in-tank monitoring and leak detection measures. | • Customers purchase fuel through either Calgary operated fuel depots or from private service stations using a PH&H card.<br>• Controls over fuel access at Calgary operated fuel depots include:<br>☐ Employees are required to enter their employee number, unit number and mileage prior to accessing fuel;<br>☐ Calgary uses Fuel Focus software for its internal fuelling stations.<br>• Controls over fuel access at private service stations include:<br>☐ Employees are required to present a PH&H card specific to vehicle;<br>☐ Employees must sign for purchases.<br>• As fuel purchase and mileage information by unit are compiled in the information system exceptions would be noted such as incorrect fuel for vehicle, fuel purchase exceeds vehicle capacity, multiple fuel purchases in the same day or short period; this only applies to Calgary operated fuel depots. | • The majority of customers utilize the internal Edmonton run fuel centers.<br>• To use the internal filling locations controlled through the FuelMaster software, the customer must have the key-fob associated with their authorized vehicle.<br>• Fuel can only be dispensed if a valid customer number is entered while in possession of the key-fob. | • More than 90% of the customers use the city run gas bars.<br>• To use the internal filling locations, the employee must use their employee card and a key-fob associated with their vehicle.<br>• Ottawa uses Coencorp software (www.coencorp.com) for their internal fuelling station network.<br>• Ottawa also runs exception reports on the gasoline purchases which note items such as:<br>☐ Purchases a grade of fuel inconsistent with predetermined vehicle fuel requirements;<br>☐ Fuel purchases greater than vehicle fuel capacity. | • Customers primarily use private service stations for their fuel purchases, as there are only two locations run by Manitoba which are both located in Winnipeg.<br>• Customers are given a FleetCard which can be used to pay for gas and maintenance expenditures at independent stations, which enables Manitoba to track whether the fuel expenditures are reasonable.<br>• Manitoba also has a number of validation checks that are run on the FleetCard expenses at private filling stations. A unit will be flagged for follow up if:<br>☐ Fuelling takes place more than once in a day;<br>☐ Fuel purchases are greater than vehicle fuel capacity;<br>☐ Grade of fuel purchased is inconsistent with predetermined vehicle fuel requirements. | • Private has a number of controls in place to monitor fuel consumption. A unit will be flagged for follow up if:<br>☐ It fuels up twice in one day;<br>☐ Purchases more gas than the vehicle capacity or;<br>☐ Purchases a grade of fuel inconsistent with predetermined vehicle fuel requirements. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Are immobilizers installed on all vehicles? | • Winnipeg does not install immobilizers. | • Calgary does not install immobilizers. | • Edmonton does not install immobilizers. | • Ottawa does not install immobilizers in its vehicles other than the original equipment manufacturer provided devices. | • Immobilizers are installed on each vehicle operated by Manitoba. | • Private will install immobilizers at the request of the customer. |
| Are GPS units installed on all units? | • Winnipeg has not installed GPS units on its vehicles | • Calgary has not installed GPS units on all their vehicles; installed based on customer request at this time. | • GPS units have been installed on select units based on customer needs however collection of data in terms of fleet management has been limited to date. | • GPS units have been installed on selected units such as heavy machinery and ambulances but are currently used for locator purposes only.<br>• This technology has not been implemented in the regular fleet. | • Manitoba has not installed GPS units on their vehicles. | • Private will install GPS units at the request of the client. |
| What performance metrics or tools are used to evaluate the performance of the fleet? | • Winnipeg primarily uses bottom line performance for evaluation of the fleet operations.<br>• Other reported measures include:<br>- Shop Labour Rate per Hour;<br>- Average Fuel Price per Litre;<br>- Average full service lease rate per day;<br>- Average age of light, heavy and specialty flees;<br>- Total fuel consumption; and<br>- Kilometres/hours of use. | • Calgary tracks the mileage so that it can provide the data to the customer in their annual report. Calgary also tracks the average age of the fleet. | • Edmonton tracks a number of metrics using the SAP software. The key metrics that it calculates are:<br>☐ The kilometres since the last inspection;<br>☐ The utilization based on kilometres;<br>☐ Hours or kilometres;<br>☐ The tracking of vehicles with and without warranties. | • Ottawa has identified a number of performance metrics that it feels are key to their ability to evaluate their fleet. These include:<br>☐ The cost per kilometre for each unit;<br>☐ Average unit cost year over year. | • Manitoba tracks a number of items used to evaluate their operations including:<br>☐ Fuel consumption;<br>☐ Average age of the fleet;<br>☐ Average acquisition cost;<br>☐ Average disposal proceeds;<br>☐ Average lease rate per kilometre. | • Private tracks a number of metrics that can be used for evaluation purposes such as:<br>☐ Cost per vehicle;<br>☐ Cost per kilometre;<br>☐ Fuel consumption per unit. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What performance metrics are tracked and used to evaluate the performance of the fleet manager? | • Fleet manager performance is primarily assessed through bottom line performance and the debt/worth ratio of the Agency. | • Calgary is ISO certified, which helps to ensure that appropriate standards are set and followed.<br>• Calgary concentrates primarily on productivity measures in relation to their mechanics. They track the billable hours of a mechanic in comparison to the total number of available hours to ensure that the shops are operating efficiently.<br>• Calgary also sends bi-annual surveys to their customers to evaluate the service they have provided. | • Any performance metrics are related to fleet evaluation. | • Ottawa has identified a number of performance metrics that it feels are key to their ability to evaluate their operations. These include:<br>☐ The cost per kilometre for each unit;<br>☐ Average unit cost year over year;<br>☐ Billable hours per year per mechanic;<br>☐ The standard estimated repair time in comparison to the actual repair time.<br>• Ottawa also compares its operations to other municipalities through the Ontario Municipal Benchmarking Initiative and the Canadian Municipal Fleet Managers Benchmarking Initiative. This helps Ottawa evaluate ways in which they are ahead of their peers, and also manners in which they can improve.<br>• Ottawa does not send out recurring surveys to their customers, but have sent them in the past. They do however meet with the clients on a monthly basis to allow their clients to raise any potential issues with the services that Ottawa is providing. | • Manitoba also performs evaluations of their maintenance and parts services.<br>• For their maintenance division, they will:<br>☐ Compare their labour efficiency rate (Billable hours/Net Available Hours) to the Mitchell Standard;<br>☐ Evaluate the number of times that a vehicle has to return for maintenance right after a repair has been performed.<br>• For parts services, they will perform comparisons to the cost of purchasing from an outside dealer vs. holding the part in inventory.<br>• Manitoba performs occasional surveys relating to their maintenance services, billing system, etc. | • Private monitors a number of internal metrics by functional area.<br>• Private also performs an annual survey of its customers to determine where there is a need for improvement in the services they provide. |

## Discussion and observations

Each of the organization compiles vehicle use and operating cost data which can be used for vehicle evaluation and monitoring purposes. This information is utilized by both the fleet manager to understand and evaluate their fleet operations and is also provided to the customer in most cases to allow them monitor the performance of their own fleet of vehicles.

The ability and ease of tracking fleet utilization and operating information varies dependent on the systems in place. Manitoba and Private track mileage on a monthly basis, while others only capture that information at fuelling or maintenance time. Accurate tracking of mileage on a monthly basis or at fuelling time is reliant on the accuracy of the self reporting.

A number of metrics are tracked by the different organizations which are used to manage and evaluate their respective fleets and their fleet management operations. The following have been identified:

- Kilometres travelled
- Fuel purchased
- Kilometres at maintenance time
- Kilometres since the last inspection
- Utilization based on kilometres
- Utilization based on hours
- Utilization based on litres consumed
- Tracking of vehicles with and without warranties
- Cost per kilometre
- Average cost per unit
- Billable hours per Mechanic
- Standard repair time versus actual repair time

Edmonton has recently begun to track idle time through its automated data collection initiative. This is a relatively new initiative as most entities are unable to actually track this data even though they are actively seeking to improve idling time.

Some organizations also survey their customers periodically in an effort to evaluate the services that they provide their customers. Ottawa participates in an Ontario benchmarking study to assist in evaluating their operations and fleet.

Whether fuel is purchased from internal fuelling stations or third party stations each organization has implemented certain controls over fuel purchases such as frequency of refuelling, incorrect grade of fuel and fuel purchases in excess of vehicle capacity.

Vehicle immobilizers are not widely used, the exception being Manitoba. This is due to an initiative by the Manitoba Public Insurance Corporation and the Province of Manitoba.

GPS units are also not routinely installed in the fleet units; however some have been installed at the request of certain customers for heavy equipment and ambulance services.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- All organizations have adopted technology to assist in controlling unauthorized purchase or use of fuel from either at internal fuelling stations or third party suppliers.
- Regular collection of information and metrics as noted below assists in managing the fleet and evaluating the fleet manager performance. Examples of information tracked and metrics determined by the surveyed organizations which are used to manage and evaluate their respective fleets and their fleet management operations are:

Kilometres travelled
Fuel purchased
Kilometres at maintenance time
Kilometres since the last inspection
Utilization based on kilometres
Utilization based on hours
Utilization based on litres consumed
Tracking of vehicles with and without warranties
Cost per kilometre
Average cost per unit
Billable hours per Mechanic
Standard repair time versus actual repair time

## 7 – Information and reporting

While not specifically required in our mandate, Deloitte made inquiries to the comparable entities about best practices surrounding each entity's reporting capabilities.

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What software applications are used to support fleet management? | • Winnipeg uses RTA fleet management software and other supporting spreadsheet and timekeeping programs. | • Calgary is using the Maximus M5 fleet management software.<br>• Maximus M5 fleet management software is a software application specifically designed for fleet management. | • The City of Edmonton uses SAP ECC 5.0. Fleet maintenance is primarily supported through the SAP Plant Maintenance Module.<br>• Edmonton utilizes a number of different SAP modules which are all integrated with the City of Edmonton system. | • Ottawa utilizes the Maximus M5 fleet management software.<br>• Maximus M5 fleet management software is a software application specifically designed for government fleet management. | • Manitoba utilizes an internally custom developed software application specifically designed for their own use called "Keys".<br>• Keys also has a web interface for customer access and reporting.<br>• Manitoba also has entered into a licensing agreement with the Yukon Territory to use Keys. | • Private utilizes an internally custom developed software application with a web interface for customer access and reporting. |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What is the nature and frequency of reporting provided to customers? | • Winnipeg holds regular client meetings with its customers and provides monthly reports that include capital and operating leases held, insurance and registration charges, fuel purchased, repairs and maintenance over and above operating lease charges.<br>• On an annual basis, Winnipeg will produce a reporting package that includes the replacement plan for each unit, projected capital and operating lease costs for each unit, historical costs, damages and consumables charged, short-term rental charges, fuel, insurance and internal rental charges. | • Calgary provides monthly reporting to their customers that shows a detailed listing of work orders for each unit so that the customer is aware of any maintenance issues that have arisen. In addition, customers have on-line access to the fleet maintenance system.<br>• Calgary also provides their customers with an annual utilization report showing the kilometres driven per unit.<br>• There is a Vehicle Equipment Coordinator in each City department. Calgary will contact this person for reporting purposes or when issues arise. | • Limited monthly reporting is provided to customers.<br>• Some of Edmonton's larger customers receive detailed monthly statements showing the fuel, parts and labour expenses.<br>• There is no specific contact at City departments that Edmonton contacts when fleet management issues arise.<br>• On an annual or ad hoc basis, a report is provided to the customer which summarizes by month:<br>☐ Equipment costs;<br>☐ Revenues and internal recoveries;<br>☐ Kilometres or hours of use. | • Ottawa meets monthly with each customer to discuss any concerns or issues.<br>• Ottawa's major departments have a dedicated fleet contact. Smaller departments are unlikely to have a formal set up in place.<br>• Ottawa provides three different reports at different times of the year to the customer:<br>☐ End of 1st quarter provides an analysis of the fleet and how their fleet is currently performing.<br>☐ End of 7th month report provides analysis of the condition of the fleet to assist the customer in developing their budget and replacement plan for the upcoming year.<br>☐ Final year end report which provides an analysis of the fleet, mileage, number of collisions, vehicles with abnormally high or low usage, costs for the year and the fuel consumption for the year. | • Manitoba's customers can access information regarding their vehicles history online via the Keys system.<br>• Monthly information available includes:<br>☐ Unit utilization;<br>☐ Maintenance charges;<br>☐ Fuel charges;<br>☐ Lease commitments;<br>☐ Insurance and registration amounts. | • Private's customers are able to view the details of their fleet online by accessing their fleet management system.<br>• Manual reports are only provided on request. |

## Discussion and observations

With the exception of Edmonton, all of the organizations have or are in the process of deploying a software solution designed for the fleet management business. Manitoba and Private have developed solutions in house where as Calgary and Ottawa have invested in third party software designed for the industry.

Both Manitoba and Private's web interface capabilities are seen as critical to their success. The web interface facilitates the regular exchange on information between the fleet manager and their customers. Manitoba has also developed an interface with their customer's accounting system which allows electronic monthly billing.

The level of reporting, both internally and to customers varies significantly between organizations. While Manitoba, Calgary and Private provide continuous access to reports via the web interface, Ottawa provides less formal reporting but meets with their customers on a monthly basis to discuss their current operations and any issues that they may have the fleet's services.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- Systems with a web interface ability facilitates the regular exchange on information between the fleet manager and their customers. This allows the fleet manager to gather information on a timely basis as well the share fleet information with the customer on an ongoing basis.
- Regular meetings with customers assists in addressing problems and issues as they arise, identifies opportunities to improve fleet performance and enhances the relationship with the customer.

## 8 – Other

While not specifically required in our mandate, Deloitte made inquiries regarding the success factors, safety and environmental issues:

| Question | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What is the entity's role in ensuring that vehicle operators are adequately licensed and trained? | • The responsibilities of ensuring that vehicle operators are adequately licensed and trained rest with the customers.<br>• Winnipeg funds an operator training service performed by its main customer department.<br>• Winnipeg relies on its customers to perform their own safety training. | • Calgary mandates that every operator has both a Provincial license and a City issued license. This was implemented for insurance purposes. All operators are required to follow the policies as set out in the Fleet Operator's Handbook.<br>• Calgary also provides training services for their operators, such as:<br>☐ Review committees;<br>☐ In class training;<br>☐ Requirements for operators and units to re-certify at minimum every five years. | • Edmonton requires that every city vehicle operator obtain a City Driving Permit.<br>• As part of the course to receive the driving permit above, the operators must take training and safety courses.<br>• Driver training has improved the ability of the fleet operators. However, due to a lack of experienced qualified operators, there has been an increase in the collision rate. | • Ottawa is responsible for licensing all of the vehicles and the operators of city vehicles.<br>• Although training is the responsibility of the customer, Ottawa provides training for operators on behalf of the customers.<br>• Ottawa also has a number of safety programs in place including the training program noted above, general safety programs (i.e. load safety, transport of dangerous goods, etc.) and fleet safety. | • The responsibility rests with the customer leasing the vehicle to ensure that their operator is adequately licensed and trained.<br>• Manitoba relies on their customers to perform their own safety training.<br>• Training programs that Manitoba offers are in place for their own employees (i.e. mechanics, maintenance staff). | • Private provides their client's vehicle operators with three different types of safety training:<br>☐ In class discussions;<br>☐ Simulators for both cars and equipment;<br>☐ Training videos. |

*Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| What environmental initiatives are in place? | • Winnipeg has instituted a number of green initiatives for their fleet, such as:<br>☐ hybrid vehicles in the fleet;<br>☐ the use of Biodiesel; and<br>☐ Black Box technologies. | • Calgary has instituted a number of green initiatives for their fleet, such as:<br>☐ Anti-idling program.<br>☐ Hybrid vehicles in the fleet.<br>☐ Use of Biodiesel.<br>☐ "Right sizing" the fleet to ensure that the appropriate vehicle is being used for the job.<br>☐ ISO 14001 certified which is the environmental standard. | • Edmonton has instituted a number of green initiatives for their fleet, such as:<br>☐ Anti-idling program;<br>☐ Fuel conservation training. | • Ottawa has a number of green programs in place within their fleet operations, such as:<br>☐ Anti-idling program;<br>☐ Use of hybrid vehicles;<br>☐ "Right sizing" of fleet;<br>☐ Smart car program used by the Police department and By-law officers;<br>☐ An emissions reduction plan. | • Manitoba has a member of their staff whose focus is on improving the "green" aspects of their operations.<br>• In recent years, Manitoba has instituted the following:<br>☐ Anti-idling program;<br>☐ Hybrid vehicles in the fleet;<br>☐ Introduced E85 fuel compatible vehicles in the fleet;<br>☐ Begun the pursuit of a Biodiesel initiative. | • Private utilizes two main initiatives to reduce the environmental impact of their fleets:<br>☐ An initiative to reduce fuel consumption through educating their clients on best driving practices;<br>☐ Right sizing of the fleet to help ensure that the vehicles being used are appropriate for the operating requirements of the task. This also improves fuel efficiency. |
| What would you consider the key attributes of your business model or operations which are critical to your success? | • Customer satisfaction<br>• Full fleet services for its customers<br>• Participation in customer needs assessment and fulfilment<br>• WFMA is an autonomous unit within the City of Winnipeg with special delegations and exemptions outlined in its operating charter<br>• Life cycle cost management | • Providing quality service to their customers.<br>• Attaining high levels of customer satisfaction, as their customers are able to opt out of their services.<br>• Ensuring that the drivers and the units are operating safely. | • Life cycle fleet replacement model.<br>• Customer charge-back rates that contribute to a reserve for ongoing vehicle replacement.<br>• Fleet availability vs. downtime.<br>• Preventative maintenance program.<br>• Labour productivity management.<br>• Repair rate performance measurement.<br>• Parts request fill demand rate.<br>• Customer satisfaction. | • Providing fleet services to the City of Ottawa at a cost effective rate.<br>• Provide high quality service to meet client expectations.<br>• Provide a reliable fleet for their customers. | • The Keys software application.<br>• Vast knowledge base derived from years of experience.<br>• Investment in their IT group.<br>• Offering flexibility in the services that they provide. | • Specialization and customer service as Private is solely focussed on fleet management, whereas the majority of their competitors operate fleet management as a segment of a larger corporate entity. |

| Question | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| In the past two to three years have you adopted any new processes, technologies, policies which have led to significant improvements to operations or financial results? | • Introduction of vehicle safety information packets<br>• Alternative fuels and hybrids<br>• Tire management<br>• Customer news letters and bulletins<br>• APWA accreditation<br>• Enhanced fuel site management<br>• Standardization of part numbers<br>• Increased funding for operator training | • There have not been any major changes to the operations in the past two to three years. | • Edmonton's efficiency and effectiveness was reduced significantly when the SAP Plant Maintenance application software replaced the old legacy fleet management software which had been custom developed over 20 years.<br>• The integration of the system has proven to be more difficult than initially anticipated. | • Ottawa's fleet has been reduced recently, as all transit buses are now managed by the transit authority. | • Beginning in 2008, Manitoba opted to treat gasoline as a flow through expense, rather than it being included in the per kilometre rate charged to customers, thereby reducing Manitoba's risk of losses due to fluctuations in gasoline prices. | • Over the past number of years, Private revamped their online fleet management system. Their strategic consulting services department identifies Fleet Best Practices for discussion with their customers. |

## Discussion and observations

While each of the organizations felt that ultimate responsibility for training and safety resided with the customer, four of the organizations provide training or training support to their customers. Training ranges from driver and operator training to handling of dangerous goods.

While "green" initiatives may not be undertaken for purely cost efficiency purposes, "green" initiatives are gaining importance, particularly in the area of vehicle operations given the effect vehicle operations have on the environment. Each of the organizations is involved in conservation or "green" initiatives ranging from driver training to the use of hybrid vehicles in the fleet to the introduction of biodiesel as an alternative fuel.

In response to questions regarding the relative success factors for their organizations, the common thread in the response what their ability to deploy their specialized knowledge and work with their customers to provide effective fleet solutions.

## Best practices

Based on the research findings and our observations we have identified the following best practices:

- Fleet managers take a key role in promoting driver safety among its customers.
- "Green" initiatives are prevalent and as service providers to many government customers, the fleet managers can take a leading role in promoting conservation and "green" initiatives which their customers can adopt. Some of the initiatives identified are:

Driver training
Anti-idling programs
Hybrid fleet vehicles
Use of biodiesel
Right-sizing of the fleets

## 9 – Performance metrics

| Performance metric | Winnipeg* | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Statistics date | August 6, 2009 – provided by Acting COO of Fleet Management Agency | | 2007 Branch audit | 2006 Audit report | March 5, 2008<br>Note: Statistics assume that maintenance costs are split over 1,000 light duty units. | |
| Utilization statistics:<br>A. Avg. km's/year<br>B. Avg. hrs used/year | A. Passenger – 15,562 km/unit<br>Light truck – 16,967 km/unit<br>Medium truck – 14,884 km/unit<br>B. Heavy truck – 1,079 hrs/unit<br>Equipment – 550 hrs/unit<br>Specialty – 759 hrs/unit | | | C. Passenger – 32,978 km/unit<br>Light truck – 17,983 km/unit<br>Heavy truck – 14,367 km/unit<br>Ambulance – 20,307 km/unit<br>D. Machinery – 777 hrs/unit | E. Light duty – 20,293 km/unit<br>Ambulances – 35,232 km/unit<br>F. N/A | |
| Annual replacement Investment | $14.4 million for 2009 | | | $11.4 million to replace 93 units | $28,318/unit | |
| Weighted average lifecycle | Passenger – 5.6 years<br>Light truck – 6.8 years<br>Medium truck – 8.7 years<br>Heavy truck – 9.3 years<br>Equipment – 10 years<br>Specialty – 10.3 years | | | Light cars, trucks – 84 months<br>Heavy trucks – 120 months<br>Equipment – 180 months<br>Ambulances – 54 months | 3.7 – 3.8 years<br>Replace every 5 years or 150,000 kms<br>Ambulances – 8 years | |

* Winnipeg Fleet Management Agency (WFMA) information was added by the City of Winnipeg Audit Department, in consultation with the WFMA.

| Performance metric | Winnipeg | Calgary | Edmonton | Ottawa | Manitoba | Private |
|---|---|---|---|---|---|---|
| Fuel cost per kilometer or hour of use by vehicle type | G. Passenger – 10 cents/km<br>Light truck – 20 cents/km<br>Medium truck – 34 cents/km<br>H. Heavy truck – $5.94/hr<br>Equipment – $2.60/hr<br>Specialty – $3.95/hr | | | | $0.976/L. 16.695 cents/km | |
| Maintenance shop rate | $82 per hour | | $92.46 per hour | | $69 per hour for mechanics | |
| Maintenance costs:<br>I. Parts cost/unit<br>J. Labour cost/unit<br>K. Outsource %<br>L. Maintenance by Type<br>M. No. of mechanics/unit<br>N. Billable hr/mechanic<br>O. Sq. Ft./unit | P. $730 per unit<br>Q. $1,432 per unit<br>R. 33% of maintenance outsourced<br>S. Passenger – 10 cents/km<br>Light truck – 20 cents/km<br>Medium truck – 17 cents/km<br>Heavy truck – $5.67/hr of use<br>Equipment – $14.80/hr of use<br>Specialty – 89 cents/hr of use<br>T. 67vehicles per mechanic<br>U. 1,367 hrs per mechanic<br>V. 22 square ft. per unit | | | W. $1,479 per unit<br>X. $2,616 per unit<br>Y. Ottawa outsources 32% of maintenance work<br>Z. Ambulance – $0.28 per km<br>Light truck – $0.17 per km<br>Machinery – $14.25 per hr<br>Heavy truck – $0.86 per km<br>Passenger – $0.14 per km<br>AA. 35 vehicles per mechanic<br>BB. Not available<br>CC. 403 square ft per unit | DD. $1,633/unit<br>EE. N/A<br>FF. N/A<br>GG. N/A<br>HH. 91 vehicles per mechanic<br>II. 1,066 hrs per mechanic<br>JJ. 33.7 sq ft/unit | |

| Performance metric | Winnipeg | | Calgary | Edmonton | Ottawa | | Manitoba | | Private |
|---|---|---|---|---|---|---|---|---|---|
| Parts inventory: | OO. | 4,610 items | | | SS. | 18,003 items | WW. | 1,225 items | |
| KK. No. of items | PP. | $1,121,562 | | | TT. | $2,359,319 | XX. | $154,000 | |
| LL. Value | QQ. | 1.58 turns | | | UU. | 1.2 turns | YY. | 10.6 | |
| MM. Inventory Turns | RR. | $672 per vehicle | | | VV. | $795 per vehicle | ZZ. | $154 per vehicle | |
| NN. Value/unit | | | | | | | | | |

© Deloitte & Touche LLP and affiliated entities.

## Summary of best practices

The following provides a summary of best practices identified in the various topic or subject areas.

- The mandate and role of the fleet manager within their larger organization must be clearly defined and priorities of the greater organization well understood with respect to the fleet manager.
- A centralized fleet manager which manages the entire life cycle from procurement, leasing, maintenance and disposal is the preferred model in a large government organization.
- Allowing captive customers the option to opt out of services can be beneficial, encouraging efficiency in the fleet manager; however the justification for opting out should require a well developed business case.
- If the fleet manager mandate bears responsibility for a cost efficient fleet for the greater organization then the practice of allowing customers to make choices contrary to the fleet manager's recommendation should be reviewed in as it pertains to the fleet mandate.
- The fleet manager takes an active role in assisting customers in assessing their new vehicle needs as well as continually reassessing their existing needs.
- For procurement of specialty vehicles, the fleet agency should work closely with the customer in assessing needs and determining specifications.
- When personal use is allowed the fleet manager collects personal use information and provides that information and applicable charges back to customer payroll service for payment.
- The vehicle need assessment and reassessment process includes an assessment for individual employees of the customer to determine the option for vehicle access best suited to their needs. Options are an assigned personal vehicle, access to a vehicle pool or personal use of the employees own auto, if employment agreements allow that arrangement.
- Adoption of the life cycle costing model provides the best value to the customer over a period of time however in order to ensure optimal efficiency, customers should be strongly encouraged or required to adopt the recommendations provided by the fleet manager.
- Allowing the customer to participate in end of lease disposal gain or loss provides an incentive for customer to properly operate and maintain their vehicles.
- For fleet managers that are part of a government department, establishment and funding of reserves for vehicle replacement is preferred.
- Charging back fuel and maintenance purchases directly to the customer creates an incentive for them to monitor fuel consumption and attend to regular maintenance.
- All organizations provide twenty-four hour seven days a week emergency service however the delivery of that service varies in accordance with the emergency needs of the fleet.
- Replacement vehicles can be made available if required.
- All organizations have adopted technology to assist in controlling unauthorized purchase or use of fuel from either at internal fuelling stations or third party suppliers.
- Regular collection of information and metrics as noted below assists in managing the fleet and evaluating the fleet manager performance.

- Examples of information tracked and metrics determined by the surveyed organizations which are used to manage and evaluate their respective fleets and their fleet management operations are:

Kilometres travelled
Fuel purchased
Kilometres at maintenance time
Kilometres since the last inspection
Utilization based on kilometres
Utilization based on hours
Utilization based on litres consumed
Tracking of vehicles with and without warranties
Cost per kilometre
Average cost per unit
Billable hours per Mechanic
Standard repair time versus actual repair time

- Systems with a web interface ability facilitates the regular exchange on information between the fleet manager and their customers. This allows the fleet manager to gather information on a timely basis as well the share fleet information with the customer on an ongoing basis.
- Recurring meetings with customers can assist in addressing problems and issues as they arise, identify opportunities to improve fleet performance and enhance the relationship with the customer.
- Fleet managers can take a key role in promoting driver safety among its customers.
- "Green" initiatives are prevalent and as service providers to many government customers, the fleet managers can take a leading role in promoting conservation and "green" initiatives which their customers can adopt. Some of the initiatives identified are:

Driver training
Anti-idling programs
Hybrid fleet vehicles
Use of biodiesel
Right-sizing of the fleets

## Appendix A – Specific terms of reference

The Audit Consulting Services to be provided on the Use of Audit are as described below:

**IDENTIFY BEST PRACTICES IN BOTH THE GOVERNMENT AND PRIVATE SECTOR ENVIRONMENTS**

The best practice areas for research should include at a minimum the following:

### Mandate

- What is the mandate and scope of services provided by a central fleet agency?
- Who has overall responsibility to acquire, maintain and dispose of vehicles – is it mandated to a central fleet agency or decentralized to departments/divisions?
- If fleet services are provided by a central agency – is there an ability to opt out of utilizing those services?
- Who maintains ownership of vehicles – decentralized departments, central fleet agency, other?
- Are there established guidelines for matching needs to wants? If so, what are they?
- Who handles vehicle licensing and insurance? Central or department?
- What is the nature of the fleet? Is it light vehicles or does it include heavy and specialized equipment?
- What is the size and breakdown of the fleet? Cars, trucks, etc.

### Use of vehicles

- Are there established guidelines for determining which employees can take a vehicle home? If so, what are they?
- Are there established criteria for determining which employees require a vehicle full time versus the reimbursement for use of personal vehicles?
- For employees who take a vehicle home, how is personal usage monitored? Reimbursed to agency?

### Vehicle replacement

- What is the average age of a fleet vehicle by type? (Car, light truck, full size truck, heavy duty equipment)?
- Do they use a lifecycle costing model to determine ideal time to replace vehicle?
- Is then an incentive program to encourage customers to treat vehicles in a manner that maximizes final sales value?

### Chargeback and vehicle replacement funding

- What rate methodology is used to charge for services? Market? Direct cost? Full cost? Other?
- Do customers share in unusual gains/losses on disposal of vehicles?
- What type of warranty is purchased for different types of vehicle types? Who pays for warranty? Who decides on warranty level?
- Who pays for the vehicle? Fuel? Insurance? Maintenance? Tires?
- Is there a vehicle replacement fund? What is the basis for the establishment of the vehicle replacement fund?
- What technologies or strategies are employed to reduce vehicle operating costs? (e.g. cruise control, tire inflation monitoring, sizing vehicle to use, preventative maintenance, rotate high use to low use, other)
- What is the source of capital to finance vehicle and equipment purchases?

### Maintenance

- For maintenance of vehicles – is service offered 24/7? Are maintenance services conducted internally or are maintenance services contracted out? Which ones?
- For scheduled maintenance to be performed by a central fleet agency, do they pick up and drop off vehicle?
- What is the average downtime for a vehicle? Is a replacement provided if maintenance performed by central fleet agency?

### Fleet and fuel monitoring

- Are vehicles monitored for mileage? Fuel consumption? Idling time? Who analyzes the data?
- What mechanisms are in place to prevent unintended use of vehicles? Keys locked in secure location? Logging in/out of vehicle?
- What controls are in place over access to fuel?
- Are immobilizers installed on all vehicles?
- Are GPS devices installed on all vehicles?
- What performance metrics are tracked and used to evaluate fleet management? Please provide a listing of the metrics and the targets. (E.g. average kilometres/miles traveled per vehicle type per year, average fuel cost per vehicle type per year.)

### Reporting

- What is the nature and frequency of reporting provided to customers?
- What are the vehicle reporting requirements for customers? How is this reporting facilitated?
- Are special reports available such as personal use of vehicles, etc.?
- What software packages are used to support fleet management?

### Other

- What would you consider are the key attributes of your current business model or operations which are critical to your organization's success?
- In the past 2 to 3 years have you adopted any new processes, technologies, policies which have led to significant improvements to operations or financial results? If so can you provide a brief explanation of those changes?

## Appendix B – Scope of review

In conducting the review, Deloitte examined and performed analysis on various documents and obtained information from personal interviews. The information Deloitte utilized is as follows:

| | City of Winnipeg | City of Calgary | City of Edmonton | City of Ottawa | Province of Manitoba | Private Fleet Management Company |
|---|---|---|---|---|---|---|
| Documents reviewed | • N/A – information gathered and added to this study by the City of Winnipeg Audit Department, through discussions with the acting COO of Winnipeg Fleet Management Agency. | • None available | • 2007 Mobile Equipment Services Branch Audit – October 17, 2007 | • 2006 Audit of Fleet Services<br>• 2007 Audit of Misuse and Abuse | • March 31, 2008 Province of Manitoba Fleet Services Annual Report | • None available |
| Websites reviewed | www.winnipeg.ca | www.calgary.ca | www.edmonton.ca | www.ottawa.ca | www.gov.mb.ca | |
| Individuals interviewed | • City of Winnipeg information provided by Monty Perham, Acting COO of Winnipeg Fleet Management Agency | • Bernie Trahan, Director of Fleet Services<br>• Jacquie Deitch, Manager of Business Operations | • Bill Cook, Director of Audit Services<br>• Steve Rapanos, Manager of Mobile Equipment Services | • Roy Kostuch, Manager Audit Services<br>• Ken Wetzel, Manager of Technical Support<br>• Don Dinelle, Manager of Operational Support and Policy | • Bill Reynolds, Manager Strategic Planning<br>• Albert Ogonoski, Manager Finance<br>• Kathryn Bernhardt, Manager Support Services | • Director Strategic Consulting Services |

Deloitte.

Proud to be the Official Supplier of Professional Services to
the Vancouver 2010 Olympic and Paralympic Winter Games

