

For Information Only
Rationalization of Fleet

Presented To:	Operations Committee
Presented:	Monday, Dec 03, 2012
Report Date	Tuesday, Nov 27, 2012
Type:	Correspondence for Information Only

Recommendation

For Information Only

Signed By

Report Prepared By

Eric Bertrand
Manager of Fleet Services
Digitally Signed Nov 27, 12

Division Review

Roger Sauvé
Director of Transit & Fleet Services
Digitally Signed Nov 27, 12

Recommended by the Department

Tony Cecutti, P.Eng., FEC
General Manager of Infrastructure Services
Digitally Signed Nov 27, 12

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Nov 28, 12

REPORT FOR INFORMATION ONLY

Fleet Services is a Section within the Transit and Fleet Services Division responsible for the design and acquisition of City of Greater Sudbury vehicles, buses and equipment, repairs, maintenance, fuel and disposal of surplus assets. Our services are provided to all departments with the exception of Airport, Police and Fire emergency vehicles.

Fleet Capital Acquisitions

The purpose of the Fleet Capital Acquisition Process is to ensure the City of Greater Sudbury identifies and prioritizes the proper vehicles and equipment to meet current and planned customer requirements. In addition the objectives related to the acquisition process includes:

- 1) To ensure the appropriate value in meeting approved customer service needs will be derived from the vehicles and equipment.
- 2) To ensure that the evaluation process, including the determination of benefits is based on defined and reasonable policies.
- 3) To ensure that the City of Greater Sudbury's long term financial needs for capital vehicle and equipment replacement and acquisition are known and adequately planned for.
- 4) To ensure that the vehicles and equipment are acquired so that they will meet a defined technical standard or specification.

The acquisition process includes:

- Replacements
- New capital
- Analysis of changing needs, trends and issues
- Life Cycle cost analysis
- Benefits analysis (i.e. improved productivity/enhanced service)
- Capital inventory management
- Format for the request process (criteria and guidance)
- Purchasing specifications
- Prioritization of process criteria for capital replacements
- Reporting

Life Cycle Analysis

At the City of Greater Sudbury we group vehicles and equipment in vehicle maintenance categories that are utilized in determining appropriate maintenance schedules, expected life cycles and charge-back rates.

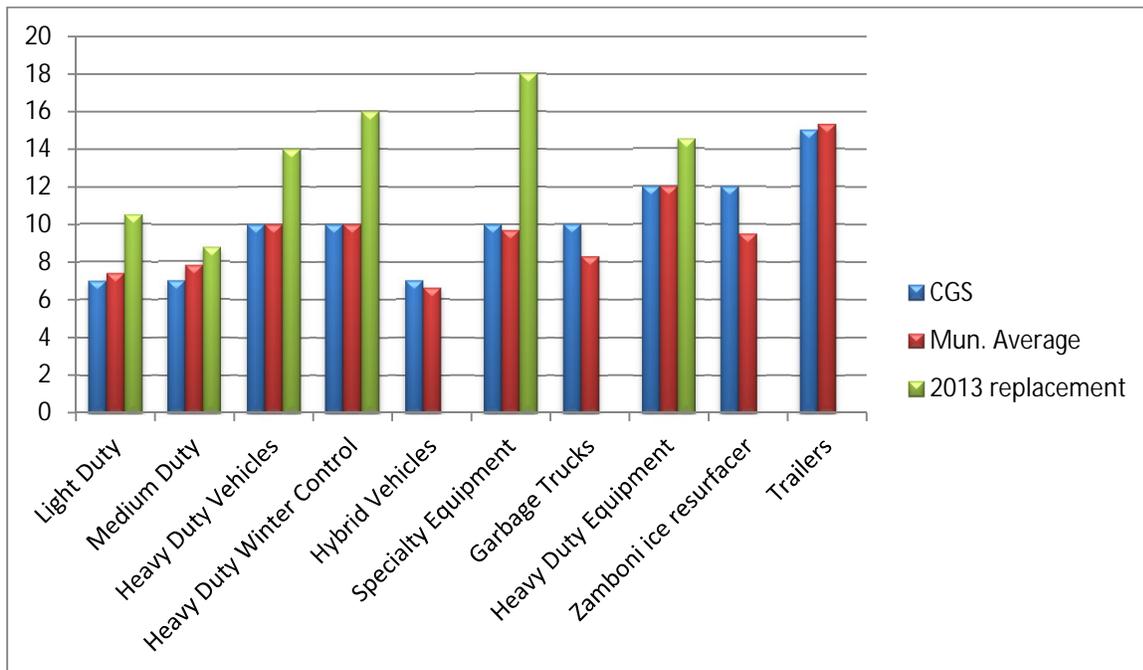
The vehicle maintenance categories and expected life cycles are:

- | | |
|--------------------------------|---------------------|
| 1) Light Duty Vehicles | 7 years/84 months |
| 2) Medium Duty Vehicles | 7 years/84 months |
| 3) Heavy Duty Vehicles | 10 years/120 months |
| 4) Heavy Duty / Winter Control | 10 years/120 months |
| 5) Hybrid Vehicles | 7 years/84 months |
| 6) Specialty Equipment | 10 years/120 months |
| 7) Garbage Trucks | 10 years/120 months |
| 8) Heavy Duty Equipment | 12 years/144 months |
| 9) Zamboni Ice Resurfacer | 12 years/144 months |
| 10) Trailers | 15 years/180 months |
| 11) Retired Vehicle Pool | 1 – 2 seasons |

Fleet Services surveyed eleven Canadian Municipalities to compare their expected life cycles to those we utilize. Hamilton, Niagara Falls, Thunder Bay, Saint John, Vancouver, Brampton, Toronto, North Bay, Calgary, Ottawa and London were the municipalities providing information.

The attached graph illustrates the City of Greater cycles to the comparators average life cycles.

Transit buses are not included in the comparison with other cities. Our current replacement life cycle for Nova buses is 18 years with no major mid life rebuild.



In determining the capital replacement priorities for the annual capital budget the age of the vehicle or piece of equipment is only the “trigger” for initiating Fleet’s evaluation of the asset to determine the capital funds required. The factors that are assessed in this prioritization process include:

- a) Age of the vehicle or piece of equipment
- b) Kilometres or hours
- c) Condition, including body and mechanical
- d) Utilization
- e) Dependability (number of times in for repairs)
- f) Maintenance costs per hour or kilometre
- g) Fuel efficiency measured in litres/hour or litres/100 kilometres

Evaluation forms developed in co-operation with the American Public Works Association members are utilized as a tool to assist Fleet Services with determining the priority replacement list. Through the Capital Budget process, Council approves the years capital funding and Fleet Services proceeds with the acquisition of the replacement vehicles and equipment.

Once the replacement assets are received and put in service the replaced assets are either disposed of through public auction or they are transferred to the Retired Vehicle Pool.

2013 Fleet Capital

During the presentations of the 2013 Capital Budget the Fleet Planned Replacements included the following:

- | | |
|--------------------------------|--|
| a) Light Duty Vehicles | 18 units with an average age of 10.5 years |
| b) Medium Duty Vehicles | 8 units with an average age of 8.75 years |
| c) Heavy Duty Trucks | 2 units with an average age of 14 years |
| d) Heavy Duty / Winter Control | 3 units with an average age of 16 years |
| e) Heavy Duty Equipment | 2 units with an average age of 14.5 years |
| f) Specialty Equipment | 2 units with an average age of 18 years |

Fleet Assets

During 2012 Council approved five (5) new additional Fleet assets, which are as follows:

- a) Two (2) light duty vehicles for Building Services
- b) Two (2) medium duty vehicles for Parks Services
- c) One (1) specialty equipment for Environmental Services

The use of Custodial Use of a City of Greater Sudbury Vehicle was reduced by six (6) vehicles, three (3) in Transit/Fleet Services and three (3) in Water/Wastewater.

Scheduled for 2013 is the reduction of one (1) Custodial Use vehicle in the Assets Division and one (1) vehicle from Ontario Works.

Further reductions in Custodial Use vehicles or due to utilization are still to be determined and are dependent on two factors:

- 1) The conditions in the Vehicle Use Policy: This policy is under development at present however its purpose is to ensure that CGS Employees have a vehicle to use when the work they are performing requires it. In many cases Employees can be permitted to use their personal vehicle and be reimbursed at the per kilometer rate in CGS's mileage policy or the relevant Collective Bargaining Agreement. Alternatively, Employees may be able to use a pool vehicle that is available or to have the use of a vehicle while on standby.
- 2) The business plans of departments, divisions and sections utilizing Fleet Assets

The following chart details the number of Fleet assets by maintenance category.

Category	2005	2011	2013	Variance since 2005
Light Duty Vehicles	190	136	131	-59
Medium Duty Vehicles	121	118	118	-3 (note 1)
Heavy Duty Vehicles	25	12	12	-13
Heavy Duty – Winter Control	71	48	46	-25 (note 2)
Hybrid Vehicles	0	35	35	+35
Specialty Equipment	110	99	105	-5 (note 3)
Garbage Trucks	7	7	7	0
Heavy Duty Equipment	31	23	23	-8
Zamboni Ice Resurfacer	18	18	18	0
Trailers	55	49	53	-2 (note 4)
Totals	628	545	548	-80

Note 1: includes the addition of two 4x4 plow trucks for Parks.

Note 2: includes two vehicles reduced in size to the medium duty class.

Note 3: includes the addition of three asphalt grinder attachments, one sidewalk grinder attachment, asphalt heater attachment and one litter vacuum.

Note 4: includes two trailers purchased by Land Reclamation for towing ATVs and two trailers purchased for W/WW to carry trench boxes.

Retired Vehicle Pool and Rentals

The corporate demand for seasonal vehicles is significant. These are typically required for periods of approximately six months or less. The seasonal requirements are filled by utilizing assets from the Retired Vehicle Pool or by entering into short term rental agreements.

The following chart illustrates the rental requirements for the past three years as well as the projection for 2013.

	2010	2011	2012	2013
Rentals Required	48	26	21	21

The number of rentals required by the City of Greater Sudbury to carry out scheduled work is directly related to the number of vehicles available through the Retired Vehicle Pool. Fleet attempts to maintain sixty-five to seventy retired vehicles. To maintain this pool requires annual replacement of light duty vehicles and medium duty vehicles. When fewer vehicles are replaced annually the size of the Retired Vehicle Pool is reduced, increasing the demand for leased vehicles.

1160 Lorne St.

With the development of the 1160 Lorne St. Building and the consolidation of Transit and Fleet Services at the one site there are several synergies that will be realized. Some of these include:

- a) Improved supervision of Transit/Fleet staff including an enhanced ability to schedule work and draw on employee's strengths.
- b) Ability to provide a wider service range to our internal customers with increased productive man hours.
- c) Efficiencies in parts inventory management as we move from three (3) warehouse sites to one (1) centralized site.
- d) Efficiencies through consolidated maintenance functions, which are now separated geographically, including welding, body work, painting, and tire repairs.
- e) Rationalization of Transit/Fleet Services vehicle with anticipated reductions.
- f) Ability to offer services to other departments, such as Fire.

Fleet Initiatives

Transit/Fleet Services has undertaken several initiatives aimed at rationalizing fleet assets, rightsizing fleet assets and improving the efficiency of our vehicles and equipment as well as generating savings. The following details some of the initiatives currently being developed;

Reductions in custodial use:

To date there has been a reduction of six (6) vehicles used for custodial use purposes. Three (3) of these are from Transit/Fleet Services and three (3) are from Water/Wastewater. The custodial use reductions are a result of attrition, when a position became vacant it was filled with no provisions for custodial use of a vehicle. Of the six (6) vehicles four (4) were retained for carrying out daily duties within the area and two (2) were returned and re-assigned to other areas.

Rightsizing of vehicles:

As vehicles and equipment are tendered for replacement, meetings with the end-user are held to ensure that the vehicle or piece of equipment specified is properly matched to the work it is intended to carry out. Some examples of this are:

- a) In the W/WW Division commercial vans have been replaced with cab and chassis units equipped with service bodies and a crane. This allows for adequate load and trailer towing capacity as well as use of the crane significantly reduces the dependence on contracted services. This has resulted in an approximate savings of \$50,000.00 annually for contracted crane rentals.



- b) One ton commercial vans are being replaced with cab and chassis units equipped with service bodies. This allows for adequate load and trailer towing capacity as well as improves Safety and Health issues where employees are no longer exposed to shifting loads and fumes from parts and equipment being stored inside the vehicle.
- c) Where there is no need for carrying of heavy loads we are replacing one ton commercial vans with mini-vans. This allows for enhanced employee comfort and fuel efficiencies.
- d) Legacy vehicles (Ford Crown Victoria) are being replaced with Hybrid vehicles or compact vehicles which results in lower maintenance costs, increased fuel efficiency and reduced Green House Gas emissions.



- e) Heavy Duty trucks that had limited capabilities have been replaced with medium duty 4x4 trucks equipped with a dump body, plow and sander. The utilization of the unit is significantly reduced as it now can perform a wide variety of tasks including winter control functions.



Fleet Management and Inventory Control

Fleet has implemented the use of Diamond Solutions electronic fleet management and inventory control systems at our Transit garage. This system provides for accurate control and reporting of repairs, maintenance, fuel transactions and parts inventory. Annual inventory counts are being conducted to determine the accuracy of our inventory control at all Fleet warehouse sites.

Extra Clear Diesel Fuel:

The City of Greater Sudbury has entered into an agreement with our current provider to supply us with Extra Clear Diesel at a price of 1.5 cents lower than the Clear Diesel product previously supplied. Based on historical consumptions we estimate an approximate annual savings of \$60,000.00 for the product.

Transit Electric Cooling Systems:

Transit buses were traditionally built with hydraulically driven engine cooling systems. This type of system requires significant horsepower to properly operate the cooling system components. Developing horsepower requires the engine to run at higher loads which in turn burns fuel. Now available are Electric Cooling systems which do not require the hydraulic pump and the engine is not required to run at the higher loads, thus reducing fuel consumption. Transit has outfitted the newest seven (7) buses with electric cooling and we ran a fuel comparison to determine fuel efficiency. The electric cooled buses are 18% more fuel efficient.

On average a CGS bus travels 70,000 kilometers per year and requires 57 litres/100 kilometres for hydraulic cooling and 47 litres/100 kilometres for electric cooling. The fuel savings per bus would be approximately 7,000 litres annually.

Transit and Fleet Services will be purchasing new buses equipped with the electric cooling and will also carry out retrofits to existing units as budget funding allows.



Summary:

In providing support and services to City of Greater Sudbury departments, divisions and sections Fleet utilizes best practices and establishes goals that keep in mind the needs of our internal customers, Senior Management, Council and our citizens. Fleet Services is responsible for fleet assets from the time they are designed until they are disposed of (cradle to grave).

Fleet strategies and the number of fleet assets are dependent on City of Greater Sudbury policies, procedures and work plans for delivering services to the public. We provide support and guidance to our customers regarding the type of unit required, rightsizing, utilization and maintenance scheduling. We do not determine the number of vehicles and equipment required to carry out their work plans.

Upon reviewing the Life Cycle Analysis comparing our strategy to those of other municipalities, Fleet recommends adopting an expected life cycle of eight (8) years/96 months for both light duty and medium duty classed vehicles. This would be implemented for 2013 and would be utilized in determining 2014 Fleet Capital priorities and recommended replacements.

Fleet services will play a pivotal role in assisting management personnel in applying the Vehicle Use Policy to effect a reduction in the number of custodial vehicles over time.

Fleet remains committed to providing our services in the most cost efficient and timely manner possible. We are also committed to energy savings and the reduction of harmful Green House Gas emissions.

Fleet will continue to provide support and guidance to our customers keeping in mind the needs and goals established by Senior Management and Council.