

City of Mississauga Corporate Report



<p>Date: May 29, 2020</p> <p>To: Mayor and Members of Council</p> <p>From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works</p>	<p>Originator's files:</p> <hr/> <p>Meeting date: June 10, 2020</p>
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Subject

Fleet Management Practices: Acquisition and Disposal

Recommendation

That the report from the Commissioner of Transportation and Works, dated May 29, 2020 and entitled "Fleet Management Practices: Acquisition and Disposal" be received for information.

Report Highlights

- This report describes a number of factors relevant to the City's Fleet Management Practices as related to acquisition and disposal of vehicles and equipment, including considerations for evaluating options.
- The following provides a summary of these significant factors and considerations:
 - Fleet Services (Works Operations and Maintenance Division, Transportation and Works Department), Mississauga Fire and Emergency Services (MFES) (Community Services Department) and MiWay (Transportation and Works Department) operate independently and request capital budget approval for the replacement of all existing vehicles and equipment on an annual basis. Replacement schedules are impacted by the availability of capital funding.
 - Unfunded vehicle and equipment replacement increases maintenance costs of the City's fleet and increases the total cost of ownership.
 - Effective life cycle analysis, planning and timely replacement are critical to managing fleet costs, availability, reliability and safety, and for mitigating environmental impacts.
 - The goal of Fleet Services, MFES and MiWay is to make data-centered decisions that will maximize the useful life of the assets, at the lowest possible ownership cost.
 - Life cycle replacement schedules may be extended or shortened based on current vehicle condition, repair history and cost, and availability of capital funding.

- Following an effective, responsible and sustainable Fleet Capital Asset Management Strategy meets the City's strategic goal of **"Build and maintain infrastructure – to deliver infrastructure in a sustainable way"**.

Background

Fleet Services (Works Operations and Maintenance Division) manages the entire life cycle of the City of Mississauga's Corporate fleet, which comprises approximately 1,600 vehicles and equipment. Fleet Services has one main service depot, three satellite locations and a staff complement of 28.

MFES Capital Assets section (Community Services Department) manages the entire life cycle of the City of Mississauga's Fire fleet, which comprises approximately 38 non-emergency vehicles and equipment and 37 emergency response vehicles and equipment. MFES Fleet has one main service depot and a staff complement of 12.

MiWay Transit Vehicle Maintenance section (Transportation and Works Department) manages the entire life cycle of the City of Mississauga's transit fleet, which comprises approximately 498 revenue vehicles, and 78 support vehicles and equipment. MiWay fleet has one main service depot and one satellite location and a staff complement of 193.

Fleet Capital Asset Management Strategy

Fleet Services, MFES and MiWay follow a Fleet Capital Asset Management Strategy that comprises several practices and approaches:

Vehicle and Equipment Capital Budget Process

Fleet Services, MFES and MiWay assess capital budget requirements for the replacement of all existing vehicles and equipment on an annual basis. Replacement schedules are impacted by the availability of capital funding approved by Council.

Procurement of Leased Vehicles for Business and Personal Use

Lease vehicles for officials and staff are covered under Policy # 04-05-03 *"City-leased Vehicles provided for Business and Personal Use"*. Currently, vehicles are leased for the Mayor and the City Manager. The policy was amended in July 2017 to remove the Leadership Team, and currently, these vehicle considerations are included in employment contracts.

Vehicle leasing follows typical City medium-value acquisition procurement processes. The vehicles are returned to the lessor at the end of the lease term.

Procurement of Leased Vehicles for Business Use

A procurement process is conducted annually for leased vehicles for Parking Enforcement. These are for the work of Parking Enforcement officers and are not for personal use. Fourteen

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vehicles were leased for 2020. These vehicles are leased for a 12-month term due to the high mileage of approximately 70,000 km/year per vehicle.

The City's high-value acquisition procurement process was conducted with award to the lowest acceptable bidder. The vehicles will be returned to the lessor at the end of the 12-month lease term.

Procurement of Owned Vehicles and Equipment

Procurement processes are conducted annually for the replacement of various fleet vehicles and equipment. The specifications and requirements are determined by the business unit. Typical competitive procurement processes are followed, depending on the value, with award of contracts to the lowest acceptable bidder.

Disposal of Vehicles and Equipment

Disposal of vehicles and equipment is covered under Policy # 03-06-10 "*Disposal of Surplus City Assets*". Vehicles and equipment may be sold through auction. In some cases, depending on the condition of a surplus vehicle or equipment, it may be offered for trade-in. The trade-in allowances, if offered, are deducted from the bidders' bid price to determine the lowest acceptable bidder. The City reserves the right to decline trade-in if the allowance is too low and a better return is expected through auction.

Comments

Strategy for Managing Fleet Capital Assets

Establishing an effective, responsible and sustainable asset management strategy meets the City's Strategic goal of "***Build and maintain infrastructure – to deliver infrastructure in a sustainable way***".

Vehicle and Equipment Capital Funding Practices

Not adequately funding vehicle and equipment replacement is not an effective method to manage resources, as this practice has adverse effects on the operating costs to maintain vehicles and equipment and increases the total cost of ownership.

Appendix 1 attached to this report depicts the optimal replacement time. As vehicles and equipment age operating costs increase and the capital cost (residual value) decreases. Ideally, vehicles and equipment should be replaced when the capital and operating cost curves intersect and the total cost of ownership begins to increase. However, since the bottom of the total cost curve shown in Appendix 1 is relatively flat this suggests that there is a period of time where lowest ownership cost can be achieved, rather than at a specific point in time.

Determining when vehicles and equipment should be replaced

In order to ensure that appropriate vehicles and equipment are replaced during the period of time when the total cost of ownership is lowest. Each asset's eligibility for replacement is determined based on four criteria:

- age;
- meter (kilometres driven or hours of use);
- maintenance and repair cost; and,
- mechanical condition.

This is a comprehensive method of empirically validating and evaluating asset replacement decision-making and establishing priorities, while maximizing the useful life of the assets at the lowest possible cost. The most important factor is that this approach moves the replacement cycle decision-making into a data-centered model based on vehicle/equipment metrics, as demonstrated in the example used by Fleet Services Appendix 2 attached to this report.

Fleet Services, MFES and MiWay request capital budget approval for the replacement of all existing vehicles and equipment on an annual basis. All non-emergency (MFES) and non-revenue (MiWay and Fleet Services) vehicles have an expected lifecycle of approximately 10 years or approximately 200,000 km. This lifecycle may be extended or shortened based on current vehicle condition, repair history and cost, and availability of capital funding.

Conclusion

Effective lifecycle analysis, planning and timely replacement are important for controlling vehicle and equipment costs, availability, reliability and safety, as well as mitigating environmental impacts. The goal of Fleet Services, MFES and MiWay is to make data-centered decisions that will maximize the useful life of the assets, at the lowest possible ownership cost.

Attachments

Appendix 1: Economic Theory of Vehicle Replacement – Lowest Cost of Ownership

Appendix 2: Fleet Equipment Criteria and Data Centered Replacement Planning



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