

Strathcona County
Fleet Services

Procuring fuel-efficient and environmental vehicles/equipment

Introduction

Fuel-efficient vehicles have become a significant consideration for municipalities across Canada and around the world, for both the benefits of fuel cost savings and the reduction of harmful emissions. Fleet Services is committed to utilizing best practices for procurement with a strong focus on fuel-efficiency to ensure that Strathcona County realizes these benefits with its fleet operations. This document outlines the steps utilized at the onset of the procurement process to incorporate new technologies and fuel sources to capture valuable opportunities.

Vehicle selection

In terms of both capital investments and total cost of ownership, fleet vehicles are among the most expensive purchases Strathcona County will make on an annual basis. Vehicle selection is a critical step to ensure the right fit for productivity and costs right from the start. Fleet Services considers a number of factors when selecting the most appropriate vehicles to support annual vehicle and equipment replacement programs. Each of these factors are considered and weighed against department business requirements:

- Size and type of vehicle to meet departmental work requirements
- Engine size
- Fuel economy
- Emissions / carbon foot print
- Maintenance programs

How does Fleet Services make the best procurement decisions?

Fleet Services follows a strategic approach that involves thorough research and assessment of all factors that could impact budget, capital expenditure decisions, leasing options and cost of ownership.

1. Use and operation

Examining the intended use for the vehicle, Fleet Services focuses on the required vehicle features and capabilities, and considers things such as size, style and carrying capacity –what types and amounts of supplies, products or equipment will the vehicle need to carry?

Downsizing the vehicle is advised if operations do not necessitate a larger vehicle. By reducing unnecessary vehicle weight, valuable fuel savings are realized. Additionally, vehicles that require service and flat deck bodies are manufactured from lightweight materials (aluminum) to reduce overall vehicle weight, which reduces fuel economy.

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2. Standardizations and specifications

Fleet Services performs in-depth research and review of current North American standards and guidelines. Currently, this includes the Tier 3 standards phase-in from 2017–2025 which applies to vehicles up to 14,000 lbs gross vehicle weight. Once fully phased in, Tier 3 tailpipe Parts per Million (PM) and NOx+NMOG emission limits for light- and medium-duty passenger vehicles are the most stringent in the world. The attached chart indicates the standards that Fleet must follow:

Tier 3 fleet average NMOG+NOx SFTP standards									
Emission	2017*	2018	2019	2020	2021	2022	2023	2024	2025
NMOG+NOx (mg/mi)	103	97	90	83	77	70	63	57	50
CO (g/mi)	4.2								

Fleet Services identifies engine choices that improve fuel economy, curb emissions, comply with legislation, reduce costs and more. Where possible, it is recommended to downsize to smaller engines that tend to be more fuel-efficient. Fleet Services considers engine specifications that utilize the three types of fuels currently used by Strathcona County fleet:

- Gasoline
- Diesel Fuel
- Diesel Efficient Fuel

Fleet Services has moved away from the use of diesel engines in light duty engines, due to improved fuel economy and lower emissions using gasoline power. When creating specifications for engines for heavy trucks and equipment, Fleet Services considers the most fuel-efficient engines that produce near zero emissions using ultra low sulfur diesel fuel.

The department has partnered with ESSO to test their new Diesel Efficient Fuel for the Transit Buses, with benefits of reduced emissions, improved fuel economy at an estimated 2% and reduced maintenance costs. Fleet Services continues to evaluate the results of this test.

Additionally, Fleet Services has proposed an initiative seeking approval as part of the 2019 to 2023 Business Plan to research alternative fuel options and provide recommendations for Strathcona County's fleet.

Procurement Approach

Procurement Services works in concert with Fleet Services to ensure the County acquires the vehicles for the best overall value. The best overall value is determined through the careful specifications drawn up by Fleet Services based on industry standards and client department operational requirements. Procurement Services looks to Fleet Services as the subject matter experts. Procurement Services then decides the best approach to the market for the acquisitions. Fleet Services reviews every compliant bid to ensure that the County's specifications are met.

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Fleet Services and Procurement Services adhere to the spirit of the Procurement Policy in meeting the County's requirements on sustainability.

Conclusion

Fleet Services capitalizes on research, review and stringent standards and specifications to make sound decisions related to fuel-efficient vehicle selection. As technologies improve and alternative fuel sources are integrated into fleet operations, more benefits will be realized. Strathcona County fleet has made great strides in being a leader in the fleet arena, and fuel efficiency provides another opportunity to showcase the County's achievement of excellence.