TORONTO

STAFF REPORT
ACTION REQUIRED

Fleet Services Review – Detailed Implementation Plan for the Fleet Services Strategy – Supplementary Information

Date:	October 3, 2016
To:	City Council
From:	Chief Corporate Officer
Wards:	All
Reference Number:	P:\2016\Internal Services\Fleet\Cc16004fleet (AFS #21959)

SUMMARY

This report responds to a request by Government Management Committee at its meeting on September 6, 2016 that the Chief Corporate Officer report directly to City Council to provide additional financial information on maintenance service delivery options 1, 2, 3 and 4, set out in Appendix A of the staff report GM 14.11 "Fleet Services Review – Detailed Implementation Plan for the Fleet Services Strategy" (May 30, 2016) from the General Manager, Fleet Services.

This report provides additional information on current service levels and the impacts of the proposed options. The focal point of this strategy is enhancing both fleet reliability and availability through improved maintenance practices. Through the proposed option, Option 3, annual city-wide savings are expected to be $3.7M per year, after 5 years of implementation.

RECOMMENDATIONS

The Chief Corporate Officer recommends that:

1. City Council receive this report for information.

Financial Impact

Savings associated with this initiative will be included in the 2017 and future year budgets for City Council consideration.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

The Government Management Committee, at its meeting on September 6, 2016, considered Report GM14.11 "*Fleet Services Review – Detailed Implementation Plan for the Fleet Services Strategy"* (May 30, 2016) from the General Manager, Fleet Services. In consideration of this report, the Government Management Committee directed the Chief Corporate Officer to report directly to the October 5, 2016 City Council meeting to provide additional financial information on maintenance service delivery options 1, 2, 3 and 4, set out in Appendix A of the report (May 30, 2016) from the General Manager, Fleet Services.

The Committee Decision Document can be viewed at:
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.GM14.11

ISSUE BACKGROUND

In 2014, FSD initiated an external review of Fleet service delivery by a specialized Fleet Management Consultant - Mercury Associates Inc. (Mercury). This review, was completed in January 2015 and the results were presented to Government Management Committee in September 2015 where Fleet Services Division (FSD) was requested to report back with a detailed implementation plan. This detailed implementation plan presented to Government Management Committee on September 6, 2016 included a summary of four (4) service delivery options as outlined in Table 1.

Table 1 – Summary of Service Delivery Options

Option	Service Delivery Model
1	Improve the current model for maintenance of City vehicles and equipment.
2	Contract out all preventative maintenance and repairs for the entire City of Toronto fleet and manage in-house utilizing city procured contracts.
3	***Recommended Option*** Contract out all preventative maintenance and repairs of Non-Specialized Class 1 and 2 vehicles and manage in house utilizing City procured contracts
4	Contract out all preventative maintenance and repairs of Non-Specialized Class 1 and 2 vehicles and utilize an external fleet maintenance management service provider.

Staff recommends Council approval to proceed with implementing Service Delivery Option 3.

COMMENTS

Annual operating needs were reviewed for each of the proposed alternate service delivery options with the associated incremental annual costs estimated over a 5 year period in 2016 dollars.

Through the proposed option, Option 3, a 67% reduction in vehicle downtime is expected for passenger vehicles (class 1 & 2). A 25% reduction is expected across the remaining classes of vehicles and equipment due to the refocusing and improved specialization of internal resources. Significant improvements are also expected in preventative maintenance execution and delivery. Through this option, annual city-wide savings are expected to be $3.7M per year, after 5 years of implementation.

A summary of costing assumptions, by line, of each impact, has been provided for reference in Appendix A.

The following tables, Table 2 and Table 3, summarize the expected costs/savings by each service delivery option over a 5 year period, in 2016 dollars.

Option 2 (Contracting out all preventative maintenance and repair) has not been costed as due to the specialized nature of a number of vehicles and equipment, maintenance and repair facilities are not available within Toronto, or the greater Toronto area. As such, it was not possible to fully cost this option, therefore eliminating it from further consideration.

Table 2 - Annual Cost / (Savings) of Alternate Service Delivery Options – 5 Years Cumulative

Line	Cost / (Savings) Impact on:	Option 1	Option 2	Option 3	Option 4
1	Facilities	$ 160,000		$ (80,000)	$ (80,000)
2	Complement	$ 2,819,358		$ (163,810)	$ (700,258)
3	Training & Prof. Development	$ 137,797		$ 106,770	$ 106,770
4	Tools	$ 10,544		$ (21,088)	$ (21,088)
5	Parts	$ 605,677		$ 386,529	$ 386,529
6	Service Delivery	$ (1,315,673)		$ (1,315,673)	$ (1,315,673)
7	Preventative Maintenance	$ (1,638,581)		$ (1,638,581)	$ (1,638,581)
8	Fleet Size Optimization	$ (1,000,000)		$ (1,000,000)	$ (1,000,000)
9	Cost of 3rd party service	$ -		$ -	$ 723,308
	Annual Savings	**$ (220,879)**	**N/A***	**$ (3,725,852)**	**$ (3,538,992)**

Table 3 – Capital/Upfront Cost / (Savings) of Alternate Service Delivery Option

Line	Cost / Savings Impact on:	Option 1	Option 2	Option 3	Option 4
10	Facility cost / salvage value	$ 22,758,616		$ (5,000)	$ (5,000)
11	Training and prof. develop.	$ 44,000		$ 6,000	$ 6,000
12	Cost of 3rd party service	$ -		$ -	$ 992,775
	Total Cost / (Savings)	**$ 22,802,616**	**N/A***	**$ 1,000**	**$ 993,775**

* Option costing not applicable due to insufficient market place capacity for heavy duty and specialty maintenance.

A. Detailed Costing Summaries

Further detailed summaries of cost or savings impacts, associated with Options 1, 3, and 4 have been provided below in Tables 4 through 9, as requested by Government Management Committee at the meeting on September 6, 2016.

Option 1

"To achieve optimal service standards and downtime through the in-house delivery of maintenance and repairs for all vehicles and equipment in the City's fleet".

Table 4 – Option 1 Estimated 5 Year Cumulative Annual Operating Cost / (Savings)

Line	Cost / (Savings) Impact on:	Cost/(Savings)	Details
1	Facilities	$ 160,000	One additional upgraded, industry standard facility will be required. Annual expenses include utilities, security, maintenance and custodial requirements.
2	Complement	$ 2,819,358	29 additional staff will be required to improve service levels, meet optimal downtime targets and provide appropriate monitoring of current and future contracts.
3	Training & Prof. Development	$ 137,797	Incremental training costs for 151 staff.
4	Tools	$ 10,544	Additional cost for optimal tool inventory.
5	Parts	$ 605,677	Includes parts, plus Six (6) additional 3rd party (contractor) parts distribution staff ($306K) to meet increased service demand associated with achieving optimal downtime targets
6	Service Delivery	$ (1,315,673)	Additional complement will reduce overtime ($350K) and extra vehicles and reserve equipment currently required to accommodate current downtime rates ($964K).
7	Preventative Maintenance	$ (1,638,581)	Savings on overall repairs by increasing the Preventative Maintenance rate from 20% of all work required to 60%.
8	Fleet Size Optimization	$ (1,000,000)	Improved vehicle turnaround time will reduce fleet inventory requirements by 2%.
9	Cost of 3rd party service	$ -	No additional 3rd party costs associated with any vehicles
	Annual Savings	**$ (220,879)**	

Table 5 – Option 1 Estimated Capital and/or Upfront Costs / (Savings)

Line	Cost / Savings Impact on:	Cost/(Savings)	Details
10	Facility cost / salvage value	$ 22,758,616	Capital construction cost for a new facility with 30 services bays required to achieve optimal service levels and downtime.
11	Training and Prof. Development	$ 44,000	On-boarding costs for additional 29 staff
12	Cost of 3rd party service	$ -	No additional 3rd party costs.
	Total Cost / (Savings)	**$ 22,802,616**	

The above cost analysis demonstrates that improvements to the current status quo operation (Option 1) do not provide any substantive costs savings, while requiring an overall capital investment of approximately $22M. Through this approach improvements

will not be realized for approximately 3 to 5 years or beyond, due to preconditions associated with location siting, approvals, design and construction.

Option 3 – ***Recommended Option***

"To achieve optimal service standards and downtime through contracting out all preventative maintenance and repairs of non-specialized Class 1 and Class 2 vehicles (*passenger vehicles*)." Includes managing all City procured maintenance and repair contracts in-house.

Table 6 – Recommended Option 3 Estimated 5 Year Cumulative Annual Cost / (Savings)

Line	Cost / (Savings) Impact on:	Cost/(Savings)	Details
1	Facilities	$ (80,000)	Closure of 2 facilities will be realized resulting in annual operating savings.
2	Complement	$ (163,810)	Existing positions will be converted to reflect appropriate skill sets required. Net impact is an overall reduction in 2 FTE's.
3	Training & Prof. Development	$ 106,770	Incremental training costs for 117 staff.
4	Tools	$ (21,088)	Net savings in overall investment of new tools due to elimination of Class 1 and 2 repairs.
5	Parts	$ 386,529	Higher margin for parts expected from Class 1 and 2 maintenance contractor but will be partially offset by a reduction in two (2) - 3rd party parts distribution staff ($102K).
6	Service Delivery	$ (1,315,673)	Additional capacity will reduce overtime ($350K) and extra vehicles and reserve equipment currently required to accommodate current downtime rates ($964K).
7	Preventative Maintenance	$ (1,638,581)	Savings on overall repairs by increasing the Preventative Maintenance rate from 20% of all work required to 60%.
8	Fleet Size Optimization	$ (1,000,000)	Improved vehicle turnaround time will reduce fleet inventory requirements by 2%.
9	Cost of 3rd party service	$ -	Contract management will be done in house. Higher margin for parts is expected from Class 1 and 2 maintenance contractor(s) as identified in line 5.
	Annual Savings	**$ (3,725,852)**	

Table 7 – Recommended Option 3 Estimated Capital and/or Upfront Costs / (Savings)

Line	Cost / Savings Impact on:	Option 3	Details
10	Facility cost / salvage value	$ (5,000)	Salvage value of surplus equipment at closed sites.
11	Training and prof. develop.	$ 6,000	On-boarding costs for additional 3 new staff
12	Cost of 3rd party service	$ -	Incremental 3rd party costs added in line #5.
	Total Cost / (Savings)	**$ 1,000**	

In addition to the highest overall savings with no capital investment, the implementation of Option 3 is also expected to provide improved customer service and satisfaction to the operating Divisions. This is possible by creating a more highly skilled, competitive workforce operating within FSD, through a more defined focus area that allows for a streamlined or specialist approach, instead of the current generalist approach.

In particular, improved preventative maintenance (PM) will result in enhanced service delivery and cost savings, through improved maintenance practices, over more costly reactive maintenance and failures. In 2015, FSD's annual PM inspection completion rate was 20%, or, a PM ratio of 20:80 (planned repairs: unplanned repairs). The implementation target associated with Option 3 is 60:40. This represents a 200% improvement, shifting the city's performance towards industry best practices.

Option 3 will result in 45% of the City's fleet by unit volume, or 23% of total work order hours, being shifted to a contract maintenance service provider(s). This represents the non-specialized, light duty (passenger) vehicles within the City's on-road and off-road fleet. This option allows the city to recruit and maintain highly skilled staff specializing only in the remaining heavy duty on-road and off-road vehicles and equipment. The implementation of this Option also ensures that FSD staff receive the training required to ensure they always have the up-to-date skills necessary to provide world class, high quality and efficient service. Additionally, enhanced tools necessary to ensure their success have been factored into the costs associated with this Option.

Option 4

"To achieve optimal service standards and downtime through contracting out all preventative maintenance and repairs of Non-Specialized Class 1 and 2 vehicles (*passenger vehicles*) utilizing an external fleet management service provider to manage all associated contracts".

Table 8 – Option 4 Estimated 5 Year Cumulative Annual Cost / (Savings)

Line	Cost / (Savings) Impact on:	Cost/(Savings)	Details
1	Facilities	$ (80,000)	Closure of 2 facilities will be realized resulting in annual operating savings.
2	Complement	$ (700,258)	Existing positions will be converted to reflect appropriate skill sets required. Net impact is an overall reduction in 6 FTE's.
3	Training & Prof. Development	$ 106,770	Incremental training for costs for 117 staff.
4	Tools	$ (21,088)	Net savings in overall investment of new tools due to elimination of Class 1 and 2 repairs.
5	Parts	$ 386,529	Higher margin for parts expected from Class 1 and 2 maintenance contractor but will be partially offset by a reduction in two (2) - 3rd party parts distribution staff ($102K).
6	Service Delivery	$ (1,315,673)	Additional capacity will reduce overtime ($350K) and extra vehicles and reserve equipment currently required to accommodate current downtime rates ($964K).
7	Preventative Maintenance	$ (1,638,581)	Savings on overall repairs by increasing the Preventative Maintenance rate from 20% of all work required to 60%.
8	Fleet Size Optimization	$ (1,000,000)	Improved vehicle turnaround time will reduce fleet inventory requirements by 2%.
9	Cost of 3rd party service	$ 723,308	Costs for an external management service including monthly fees, and administration cost per work order. Higher margin for parts is expected from Class 1 and 2 maintenance contractor(s) as identified in line 5.
	Annual Savings	**$ (3,538,992)**	

Table 9 – Option 4 Estimated Upfront Cost / (Savings)

Line	Cost / Savings Impact on:	Cost/(Savings)	Notes
10	Facility cost / salvage value	$ (5,000)	Salvage value of surplus equipment at closed sites.
11	Training and prof. develop.	$ 6,000	On-boarding costs for additional 3 new staff
12	Cost of 3rd party service	$ 992,775	One time cost including design and implementation of a data warehouse solution.
	Total Cost / (Savings)	**$ 993,775**	

Option 4 realizes slightly lower net operational savings over a 5 year period compared to Option 3 as it requires annual operating fees payable to the fleet management service provider. Further, it requires a one-time expenditure of almost $1M to develop a data warehouse. This is necessary to merge external maintenance costs with fuel costs from City-owned fuel sites, in effort to manage vehicle and equipment operating expenses and lifecycles.

B. Improvements to Service Levels

The primary goal of FSD is to improve service levels to divisional clients, thereby reducing costs. Well maintained, reliable and available vehicles and equipment are critical to enabling divisional clients to meet their service delivery objectives. In support of this goal, FSD seeks to improve vehicle maintenance turnaround time at the end of the 5 year phased in implementation of Option 3. Table 10 provides a summary of the average vehicle downtime and the target downtime by Class for 2015.

Industry benchmarks for downtime for Class 1 and Class 2 fleet vehicles that are at or beyond optimum life, average 3 to 4 days. The target downtime for FSD for Class 1-2 vehicles is 6 - 8 days. While still greater than industry average, this represents a 67% improvement over current. Continued efforts to optimize fleet age will provide further reductions in downtime.

Vehicles beyond Class 1 and 2 become more specialized and diverse and downtime can be more varied due to differing operational requirements. To improve customer satisfaction for the remaining classes of heavy and specialized vehicles and equipment, (classes 3 – 8), FSD is targeting a 25% improvement over current. A breakdown of current and expected downtime by Class can be found in Table 10 on page 9. Continued efforts to optimize fleet age will provide further reductions in downtime.

The implementation of Option 3 (recommended option) will significantly improve FSD's downtime by reducing the need for internal capacity for preventative maintenance and repairs for Non-Specialized Class 1-2 vehicles (passenger vehicles). This will allow internal capacity to re-focus efforts on preventative maintenance and repairs for the City's heavy duty and specialized vehicles. This is expected to result in fleet-wide improvements for all classes of City vehicles in both turnaround time and repair quality, combined with financial savings and efficiencies.

Table 10 – 2015 Vehicle and Equipment Downtime

Vehicle Class *	Unit Count	Median Downtime (Annual days per vehicle)**	Expected downtime (Annual days per vehicle)	Variance – expected versus Median (Annual days per vehicle)	% Improvement as a Result of Implementation of Option 3
CLASS 1 (Sedans, Minivans, SUVs)	701	19	6	-13	69%
CLASS 2 (Pickups, Cargo Vans)	1,257	23	8	-15	65%
CLASS 3 (Cube Vans, Dump Trucks)	95	27	14	-14	49%
CLASS 4/5 (Utility Trucks, Dump Trucks, Utility Vans)	365	28	23	-6	21%
CLASS 6/7 (Mini Packers, Aerial Trucks, Bus)	176	44	31	-13	30%
CLASS 8 (Garbage Packers, Tractor Trailers, Sewer Trucks)	526	60	48	-12	21%
On-Road Total	3,120	34			

* Based on Registered Gross Vehicle Weight

** Equipment or vehicles with significant downtimes due to unusual or uncharacteristic factors have been removed

C. Third Party Provision of Parts

The 3rd party provision of parts is expected to continue under recommended Option 3. Any future contractor(s) responsible for the City's Class 1 and Class 2 vehicles will be responsible for maintaining their own inventory of parts to meet contractual requirements. Parts required for the in-house maintenance of the City's heavy duty and specialized equipment will continue to be provided through competitively awarded contracts with the expectation that industry best practice measures, including availability and timeliness of supply be met.

The City's current contract for parts provision provides measures based on industry best practice to ensure the availability and timeliness of parts provision. FSD staff continue to work with the vendor to ensure satisfactory parts fill rates are maintained. The current fill rates are outlined in Table 11 below.

Table 11 – NAPA Fill Rates Versus Industry Standards

	NAPA YTD (to April 2016)		NAPA Year End 2015		Industry Standard Fill Rate
	Number of Parts	Fill Rate	Number of Parts	Fill Rate	
Total Parts Supplied	40,919	100%	125,033	100%	100%
Parts Available Same Day	33,789	83%	100,797	81%	85%
Received within 24 hours	4,492	11%	15,026	12%	10%
Greater than 24 hours or on Back Order	2,638	6%	9,210	7%	5%

The costing review and operating impacts outlined in this report illustrate that the implementation of Service Delivery Option 3, combined with FSD's goal of creating and maintaining a highly skilled and specialized workforce that contributes positively to both the timeliness and cost of front line services enjoyed by the residents of the City of Toronto, will in both the short and long term, ensure a sustainable, world class municipal fleet.

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SIGNATURE

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Chief Corporate Officer

ATTACHMENTS

Appendix A-Detailed Costs/(Savings) Summary

Appendix A
Detailed Cost/(Savings) Summary

The following Table 1 summarizes each cost that has been included in the pro forma costing of each option:

Table 1 – Summary of Impact/(savings)Descriptions

Line	Description
1	*Facilities* cost / (savings) result from operational expenses of roughly $160,000 per service facility, including utilities, security, maintenance, and custodial. Closures assume only 25% of operational costs would be saved from location closures, recognizing these facilities would still require maintenance;
2	*Complement* cost / (savings) due to change in number of employees required to meet optimal customer service standards and downtime
3	*Training & Professional Development* costs that reflect a greater emphasis on training for maintenance and repair staff to ensure the highly trained and skilled employees;
4	*Tool* costs/(savings) reflect the incremental investment in tools required to increase service levels to acceptable standards
5	*Parts* costs/(savings) reflect mark-up margins paid by 3rd party maintenance contractors and/or costs associated with 3rd party parts distributions staff required under the option.
6	Improved *Service Delivery* results in cost savings through a decrease in turnaround time of work orders and reaching optimal downtime levels. These savings are expected to be realized by increasing capacity, decreasing staff overtime and reducing extra vehicles and reserve equipment that require on-going maintenance and repair
7	Increase in *Preventative Maintenance* will lead to cost savings through less fix-on-fail work orders. Preventative maintenance work orders costs are typically less than fix-on-fail work orders. Preventative maintenance will also extend the useful life of vehicles.
8	*Fleet Size Optimization* will be realized as a result of a higher preventative maintenance rate and extended vehicle useful life. A reduction of 2% in vehicle purchases over the course of five years (0.4% per year) is expected as a result of FSD's customer service and downtime targets.
9	*Third party service* costs associated with managing class 1 & 2 vehicles.
10	*Facility cost* includes construction costs of a new facility to meet an acceptable service level standard and is based on an estimate received by the City in 2011 for construction of a new facility with approximately 30 bays, adjusted for inflation.
11	One time *Training and Professional Development* costs represent on-boarding cost for new or repurposed positions and are subject to changes in staff levels under each option.
12	One-time cost of the *Third Party Service Provider* includes a data warehouse solution, including dedicated staff for implementation of the data warehouse.