BUSINESS CASE

Fleet Maintenance – Review of In vs Out sourcing

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Executive Summary

At the request of employees and CUPE 503, Fleet Services conducted a review of the work outsourced by Municipal Fleet Maintenance (Fleet Maintenance), which showed that between 01 September 2014 and 01 September 2015, the organization paid $5,770,382.85[1] to vendors for Maintenance work. Out of this, 7,669.5 hours of work was sent to vendors that had a higher door rate than the City, which warrants a review to identify and look into opportunities and ways, if any, to reduce these costs.

Currently, Fleet Maintenance services are being provided through eight (8) different facilities, each of which is assigned clients/units based on geography and in some cases on the capacity of the facility (equipment, bays, etc.). These maintenance facilities are staffed in accordance with the workload as much as possible, within the Fleet Maintenance positions complement/establishment. No maintenance facility has any surplus of labour available to take in more work. The way that work is currently being outsourced to specific vendors is for the most part based on Standing Offers and the main reasons for outsourcing are related to, but not limited to costs, expertise and labour availability.

Understanding that the in-sourcing of maintenance work has bigger implications than just financial, this business case reviewed and analysed a number of options in order to determine if it would be beneficial for the organisation to in-source work, and if so, how much and how. The options reviewed consisted of status quo, strategic in-sourcing (by maintenance location), maximum in-sourcing (which implies reallocation of work between the different maintenance locations in order to maximize return on investment in terms of potential savings), and the issuance of guaranteed contracts to vendors (with a view of benefiting from lower door rates).

Using three (3) business needs as the comparison factors (client experience, cost savings and operational effectiveness), we found that the strategic in-sourcing of maintenance work would be the most beneficial course of action for the organisation. Although the potential savings are less than if we were to reallocate work between the maintenance facilities in order to maximize the return on investment associated with in-sourcing, this option still achieves significant savings and is by far the best in terms of client support and operational effectiveness.

Successful implementation of strategic in-sourcing requires a growth of five (5) Vehicle Equipment Technicians (VETs), which would be allocated between three (3) maintenance facilities. A portion of the savings achieved will compensate for these growth positions, therefore no additional funding is required. Total net savings realized will be just over $100,000.

As a note, the financial analysis of this business case only looks at the benefits in terms of savings related to labour. That being said, other savings could also be potentially achieved through in-sourcing and have not been quantified here. For example,

[1] To put this business case in perspective, the total cost of outsourced work for the same period in 2013-2014 is $5,960,383 and $6,300,672 for 2015-2016 (in accordance with M5 data).

outsourced work is subject to taxes which the City does not have to pay if we do the work ourselves (internally). Similarly, the cost of parts is likely to be cheaper when they are procured through our internal Fleet Parts program, as we pay standing offer pricing instead of retail pricing**.** These potential savings were not taken into consideration in this business case but could be added benefits to the in-sourcing of maintenance work.

Business Needs

The City of Ottawa's Fleet Services procures, maintains, repairs and replaces the City's diverse municipal fleet of over 4,500 vehicles and equipment in support of city programs, including solid waste and recycling, drinking water, wastewater, roads, traffic, forestry, police, paramedic and fire services, etc. Municipal Fleet Maintenance (Fleet Maintenance) is responsible for the maintenance and repairs of both light and heavy vehicles and equipment through the appropriate use of internal resources and vendors.

Fleet Maintenance spent $5,770,382.85 in outsourced work between 01 September 2014 and 01 September 2015[2] (which includes all cost associated to labour, parts, taxes and other miscellaneous expenses). In particular, in the current fiscal environment and at the behest of CUPE 503, Fleet Maintenance undertook a review of the way that we allocate work in order to identify any opportunities for cost savings.

At the present time, management of maintenance work is decentralized, in the sense that each maintenance facility is responsible for specific fleet units and for the assignment of the completion of the associated work (be it internally or through outsourcing). Vendors are also used for a number of reasons including but not limited to cost (where contracting-out is less expensive), requirement of specialized expertise or skill set, and for lack of City labour/time (more costly to City but lack of City capacity).

When focussing on the labour aspect of the work for each of the maintenance locations and the associated costs, we find that a subset of work could potentially be in-sourced with a view of generating savings (through cost avoidance), as summarized in Table 1:

[2] Data extracted from M5.

Table 1 – Saving Potential by In-sourcing Maintenance Work

Maintenance Location	Labour Hours[3]	Actual Commercial Labour Costs	Labour Costs if work done Internally[4]
EPS West	6.33	$698.05	$569.89
Clyde	703.76	$85,713.87	$63,338.38
Iber	468.70	$59,640.72	$42.183.03
Moodie	2306.48	$300,775.41	$207,583.32
Manotick	749.45	$94,956.07	$67,450.29
Swansea (incl Trim Rd)	2943.46	$333,631.87	$264,911.07
EPS East (incl Don Reid)	491.32	$58,091.09	$44,218.96
TOTAL	**7669.50**	**$933,507.08**	**$690,254.96**

Based on this, a number of options are available to reduce costs associated with outsourcing and in order to evaluate each option, the following business needs were identified:

1. Impact on Front Line Services. In accordance with Fleet Services' vision, we strive to empower our clients to achieve their goals which means that our operation has to be seamless to them. As such, cooperation is key; we have to be able to work with clients and adapt to ever-changing priorities, respond quickly and effectively to demand and minimize the amount of time that units are unavailable to conduct their operations. The preferred option should allow control on prioritization of work in order to better adapt to client's needs (and any related changes). Clients are also located throughout the city and given its size and geography, the maintenance location has an impact on the quality of the support (in terms of convenience) and on downtime. In that sense, we want to be able to support the clients from as close to their location as possible (not to mention the costs and staff time associated with the transport of units).
2. Cost Efficiency. In the current environment, it is important for everyone to find efficiencies within their areas of responsibilities and to be financially responsible and accountable. For this reason, it is essential that the preferred option does not increase operational costs to Fleet and its clients, and optimally it should reduce overall costs associated with fleet maintenance.
3. Internal Operational Effectiveness. The preferred option should not slow down fleet maintenance operations or translate into longer downtime by creating a "bottle neck" in production (nor should it depend heavily on overtime commitments to be successful and meet goals). As a result, it is

[3] Any work performed by vendors that have door rates lower than ours ($90/hr) or for which we do not have the capability to perform was eliminated and not considered in the efficiency review.
[4] Internal door rate for 2016 is $90 per hour.

essential to have enough qualified labour available to handle any reasonable increase in work, to have the right tools and equipment to perform the required work, and that the maintenance facilities (internal or external) be able to handle the equipment assigned to it (right number and size of bays, enough parking, etc.).

These three (3) Business Needs are used throughout the business case as comparison factors for the four (4) options analysed, and in Table 7, they are weighted based on their importance in relation to each other in the strategic environment. More specifically, because Fleet Services' mission revolves around enabling our clients to achieve their goals, which ultimately all result in a service to the public, the impact of each option on front line services is deemed the most important factor. Furthermore, one of the main reasons why this Business Case is being conducted is to review Fleet Maintenance's business model with regards to outsourcing in order to potentially generate savings, which makes cost efficiency the second most important factor. Finally, internal fleet operational effectiveness is very important in terms conducting a sustainable operation and is closely linked to the other two factors discussed previously as a potential enhancer, which makes it the third most important comparison factor.

Strategic Alignment

This opportunity supports the following 2016-2018 Term of Council Priorities found in the City of Ottawa 2014-2018 Strategic plan adopted by Council on July 8, 2015:

1. Service Excellence (SE3 – Develop positive, effective and engaged employees committed to the service promise). Staff is of the opinion that part of the work being outsourced is work that they could do better, at lower cost, and in a timelier manner. They have identified this at many occasions and demonstrating to them that we value their input and that we have faith in their skills and expertise would go a long way towards increasing their level of engagement. This Business Case has also been prepared following a request from CUPE 503, and representatives from the staff and the Union have participated to different phases through the research and development of the document; their inclusion in exploring the options and implementation of the chosen course of action will also increase the level of success achieved.

2. Financial Sustainability (FS1 – Demonstrate sound financial management and FS2 – Align strategic priorities to Council's financial targets). The choice of the preferred course of action will be financially responsible to the tax payers and clients, and will contribute the financial sustainability of the Municipal Fleet Maintenance Program.

Options or Solutions Analysis

Table 1 shows a total of 7,669.5 hours outsourced work for the period that was reviewed, at a cost of $933,507.08 in labour. Based on these numbers, this business

case looked at the following options with a view of improving the cost efficiency and effectiveness of the Fleet Maintenance Operation:

Option 1 – Status quo. Currently, maintenance services are being provided through eight (8) different maintenance facilities, which are assigned clients/units based on geography and in some cases capacity of the facility (equipment, bays, etc.). These maintenance facilities are staffed in accordance with the workload as much as possible, within the Fleet Maintenance positions complement/establishment (note that no maintenance facility has a surplus of labour available to take in more work). The main reasons for outsourcing are related but not limited to costs, expertise and labour availability. This option is presented to provide a baseline for comparison purposes.

Table 2 – Status quo Qualitative Analysis

Business Need	Advantages	Disadvantages
Impact on Front Line Services	1. With some exceptions, clients benefit from being supported either from their location or from the closest maintenance facility.	1. Clients in some locations would like extended hours of support, which cannot be supported by the current level of staffing. This is mitigated by on-call staff.
Cost Efficiency	1. N/A. This option serves as the baseline.	1. 30% of the amount spent in outsourced labour (for the period of September 2014 to September 2015) is for work that could have been done internally at a cheaper rate.
Internal Fleet Operational Effectiveness	1. When internal labour is not available, outsourcing allows Fleet Maintenance to continue providing support to clients and limiting downtime.	1. We have little control over the priority of work from our vendors, which often translates in longer downtime for the clients; 2. Vendor work has to be inspected once it comes back to ensure compliance, which takes resources away from other work; in addition, not all work can be inspected (i.e. would have to pull the unit apart) which makes quality assurance a challenge. 3. Administrative work associated with outsourcing is greater than for work done in-house; 4. Flexibility is limited (due to limited labour), in the sense that any unexpected work or resulting campaign automatically leads an increase in outsourcing and/or extended downtime.

Option 2 – Strategic in-sourcing. This option consists of in-sourcing by location the work that we have the skills and expertise to do, at a lower cost, through a growth in FTEs driven by each maintenance location's individual requirements. More specifically, each maintenance location has a certain amount of work being outsourced because of the lack of labour available, which can in turn be translated in a number of FTEs (see table 3). This option maintains the support concept in place (maintenance locations assigned geographically) while adding labour strategically amongst the existing maintenance facilities in order to create efficiencies and savings (through cost avoidance).

Table 3 – Strategic in-sourcing FTE requirement per location

Maintenance Location	Labour Hours[5]	Associated FTE Requirement[6]
EPS West	6.33	0.00
Clyde	703.76	0.45
Iber	468.70	0.30
Moodie	2306.48	1.49
Manotick	749.45	0.48
Swansea (incl Trim Rd)	2943.46	1.90
EPS East (incl Don Reid)	491.32	0.32
TOTAL	**7669.50**	**4.95**

Note that we can't hire partial FTEs, and that savings associated with each associated FTE are proportional to the amount of outsourced work that can be redirected to them, i.e. if not enough work is available, the FTE ends up costing the city (notwithstanding the other benefits of having extra labour available). More specifically, we know that the total cost of an FTE for a VET 3 in 2016, including wage/salary, benefits, overhead costs, etc., is $110,214.16, therefore any amount of labour hours that when multiplied by our door rate would generate less than the cost of a FTE will result in extra costs to the corporation.

For example, if we look at the Manotick garage, the labour hours associated with outsourced work that could be imported with a view of generating savings currently costs the city $94,956.07 and translate in 0.48 FTE (based on 1550 hours of productive hours per FTE). At our door rate ($90 per hour), these hours of labour would result in an internal cost of $67,450.29, thus generating a saving of $27,505.78. That said, because the number of hours of work that we would be importing is less than the maximum output of the associated FTE, the funds recuperated through the door rate only covers the associated percentage of the FTE cost which in this case means that even though it would cost less to do the work internally, the reality is that growing a FTE in order to have the labour available to take on that work would ultimately cost the city $15,258.09 more than if the work continued to be outsourced.

[5] Any work performed by vendors that have door rates lower than ours ($90/hr) or for which we do not have the capability to perform was eliminated and not considered in the efficiency review.
[6] Based on an employee working 1,550 productive hours per year.

Table 4 – Strategic In-sourcing Qualitative Analysis

Business Need	Advantages	Disadvantages
Impact on Front Line Services	1. Increase of labour in some locations could lead to creation of new shift, therefore expanding the "window of support" to clients; 2. No change the current model of supporting the clients from the closest maintenance; 3. Increase in work completed internally allows for more clients support for shifting priorities; 4. Increase in labour can also result in reduction in downtime.	1. N/A.
Cost Efficiency	1. Has the potential to generate up to approximately $118,000 in savings per year, in labour costs only. 2. Can be phased in and implemented gradually, thus showing it can generate savings on a smaller scale before expanding; 3. Increase in labour available (not committed to the in-sourcing) could be used for revenue generating opportunities (for example motorcycle repairs for RCMP & Gatineau) or reduction of overtime costs; 4. Maintenance facilities are already equipped to take on the expanded work (i.e. no capital investment required – existing space hand hoists can handle the additional load).	1. Requires an investment of $99,220.16 per year (which includes wages, benefits, EI, CPP, etc.)[7], plus $10,944 in Program Support[8], per technician, for a total of approximately $441,000 to achieve the maximum savings.
Internal Fleet Operational Effectiveness	1. Less outsourced work means more control on priority and in some cases quality of work; 2. Labour efficiencies gained by reducing the duplication of work (inspection of vendor work upon return) and associated administrative work; 3. Increase in labour force creates more flexibility to respond to unplanned work or events (for example bad weather while limiting disruption to scheduled work.	1. N/A

Option 3 – Maximize in-sourcing. This option consists of reallocating clients and units amongst the maintenance locations in order to create the optimal deltas between labour

[7] As per direction from Human Resources, the total cost of an employee to the City in 2016 is 26.45% on top of the salary. Using a Vehicle Equipment Technician 3 as a baseline, this translates in $99,220.16 per year per employee.

[8] As per direction from Financial Services, the Program Support allocation (for HR, IT, Supply, Finance, Legal etc.) is $10,944 per FTE

available and labour requirement in order to grow the Fleet Maintenance FTE establishment in a way that would allow the most in sourcing and maximize the return on investment. The work could be reallocated in a number of ways, but for the purpose of this business case, the most cost efficient option would be to reallocate extra work from Clyde and EPS West to Moodie, and the extra work from Iber, Manotick and EPS East to Swansea, which would create an FTE requirement as follow:

Table 5 – Maximum in-sourcing FTE requirement after work reallocation

Current State			After Work Reallocation
Maintenance Location	**Labour Hours**[9]	**Associated FTE Requirement**[10]	**FTE Requirement**
EPS West	6.33	0.004	0.00
Clyde	703.76	0.45	0.00
Iber	468.70	0.30	0.00
Moodie	2306.48	1.49	1.95
Manotick	749.45	0.48	0.00
Swansea (incl. Trim Rd)	2943.46	1.90	3.00
EPS East (incl. Don Reid)	491.32	0.32	0.00
TOTAL	**7669.50**	**4.95**	**4.95**

Table 6 – Maximum In-sourcing Qualitative Analysis

Business Need	Advantages	Disadvantages
Impact on Front Line Services	1. Increase in work completed internally allows for more clients	1. May require some work to be reallocated to other maintenance facilities, which would inconvenience clients by creating a

[9] Any work performed by vendors that have door rates lower than ours ($90/hr) or for which we do not have the capability to perform was eliminated and not considered in the efficiency review.
[10] Based on an employee working 1,550 productive hours per year.

	support for shifting priorities; 2. Increase of labour in some locations could lead to creation of new shift, therefore expanding the "window of support" to the affected clients.	requirement for more resources to transport the units, along with the associated increased downtime; 2. Reduction of labour in some locations could lead to elimination of some shifts, which would reduce the "window of support" to the affected clients.
Cost Efficiency	1. Has the potential to generate up to $240,000 in savings per year, in labour costs only.	1. Requires the investment of approximately $551,000 per year for an increase of five (5) FTEs in order to be able to generate the maximum saving; 2. Depending on how the work would be reallocated, the "receiving" maintenance facility may not be equipped properly which would translate in an additional Capital funding pressure[11].
Internal Fleet Operational Effectiveness	1. Less outsourced work translates in more control on priority and in some cases quality of work performed; 2. Labour efficiencies gained by reducing the duplication of work (inspection of vendor work upon return) and associated administrative work.	1. Requires reallocation of work and employees between maintenance facilities in order to maximize the "return on investment" for the additional FTEs. This could potentially result in maintenance support being un-proportional geographically with the needs and create inefficiencies, thus requiring more resources (staff, money and time to transport units a longer distance); 2. Movement of staff combined with the extra shifts would have a negative effect on employee morale and engagement.

Option 4 – Guaranteed work contracts to vendor(s). This option consists of establishing Standing Offers with one (1) or a number of vendors, guaranteeing them a certain amount of work in return for lower door rates, and a guaranteed level of service. In order to explore this, we surveyed the market by issuing a Request for Information (RFI) to which only four (4) vendors responded. Their responses are summarized in Table 7. It is important to note that this option does not imply a reduction in FTEs and that the "guaranteed" work that would be issued to vendor(s) would be comparable to what is currently being outsourced.

Table 7 – Summary of RFI responses

[11] This has not been explored further at this time and therefore no value, if any, can be assigned to this yet.

Item	Definition	Summary of responses
Ability to Provide Service	The City of Ottawa covers a significant geographic area, and requires service 24 hours a day, 7 days a week, year-round. The City often requires transportation or towing of vehicles from facilities distributed across the whole of the city. Please explain how you would provide this service – i.e. service trucks, staffing, service locations and operating hours. Additionally, please identify any fees or charges that would result from these services	Limited number of Maintenance Facilities (between 1 and 3, depending on respondent) to cover the entire City. None of the respondent's staffing levels or shift structure is currently adequate to our needs and would require changes (which they indicated they would be willing to do). Hours of operations vary, but are more restrictive than the City's. On-call service is available for after hours, at a premium.
Ability to Prioritize Work	The City of Ottawa requires work to be prioritized to meet the requirements of our clients. Please explain how you would prioritize City work, and the potential impact on existing customers, if provided a contract for a fixed amount of guaranteed work. As well, explain how changes to priority could be communicated between you and Fleet Services.	Responses varied from assigning a limited number of bays and/or technicians for City work, to prioritizing the City as a major client. Responses do not address how to deal with changing priorities.
Cost Effectiveness	The City of Ottawa requires that contracted work be competitive with internal labour rates. Please provide the hourly productive labour rate currently charged to the City of Ottawa. If a contract for a fixed amount of guaranteed work were issued, how would this affect your labour rate?	For the applicable type of work, only one respondent could offer a door rate lower than the City's (by $5/hr), during normal hours of operations only. Everything after hours is significantly more expansive than the City's rate.
Downtime	The Fleet Services Branch is held to strict performance targets by our clients. How do you currently work with the City to meet those targets? If a 'guaranteed work' contract were awarded, how would that change?	Responses include increases in resources, strict inspections / diagnostic timelines and dedicated technicians that would know the equipment in order to expedite repairs.
Labour and Facilities	Municipal maintenance and repair workload is often inconsistent, coming in waves. How do you currently manage staffing and facilities capacities to meet these requirements for the City and other customers? If a 'guaranteed work' contract were awarded, how would this change?	Answers vary but revolve around moving staff between shifts, distributing work between facilities (for those who have more than one), and laying off/recalling temporary employees.

Electronic Data Exchange	Contracted work represents a significant administrative burden on Fleet Services. Do you currently provide invoicing or work order data to other customers through a vendor portal? If so, please provide examples.	They all have the ability to exchange data electronically.

Table 8 – Guaranteed work contracts to vendors Qualitative Analysis

Business Need	Advantages	Disadvantages
Impact on Front Line Services	1. N/A.	1. We become more dependent on vendor performance (i.e. we have no control on the priority of our work in relation to the vendors' other clients, and we have limited control in changing our own priorities for the work that is at the vendors). 2. Fewer Maintenance Facilities means longer transport time, and more resources required to perform that task (financial and human). This also creates additional downtime. 3. In case of emergencies (for example a snow event), we can't entirely depend on vendors to keep the fleet on the road.
Cost Efficiency	1. Outsourcing a very specific type of work (for example) could allow savings based on tools, training and equipment no longer required).	1. Based on the responses received as a result of the RFI, the current cost of outsourcing could be slightly reduced by issuing guaranteed contracts, but the door rates would still be higher than the City's.
Internal Fleet Operational Effectiveness	1. Vendors have the ability to adjust the size of the workforce with seasonal requirements. 2. Outsourcing strategically could allow Fleet Maintenance to concentrate on core business, proficiencies and critical objectives to become more efficient in these areas.	1. Completely outsourcing a specific type of work (or more) could lead to the loss of that expertise within the organization. 2. We have little control over the priority of work from our vendors, which often translates in longer downtime for the clients; 3. Vendor work has to be inspected once it comes back to ensure compliance, which takes resources away from other work; in addition, not all work can be inspected (i.e. would have to pull the unit apart) which makes quality assurance a challenge. 4. Administrative work associated with outsourcing is greater than for work done in-house.

Table 9 (below) is a visual representation of how each option compares to the others, both on a business needs basis and as a whole. More specifically, each business need is given a weight based on its importance (with the most important being given a 3), and for each of these, the options are ranked from 1 to 4 (4 being the best option) in accordance with Tables 2, 4, 6 and 8. The total for each option is obtained by multiplying the weight of each business need by the respective rankings for that option and adding the results. For example, for Option 1, Total = (3x3)+(2x1)+(1x2)=13. In the end, the best option will have the highest total.

Table 9 – Option Comparison

BN / Option	Impact on Front Line Services	Cost Efficiency	Internal Fleet Operational Effectiveness	**Total**
	Weight 3	Weight 2	Weight 1	**N/A**
Option 1: Status Quo	3	1	2	13
Option 2: Strategic in-sourcing	4	3	4	22
Option 3: Max in-sourcing	2	4	1	15
Option 4: Guaranteed vendor contracts	1	2	3	12

Financial Analysis

The internal door rate is the hourly rate charged by the Fleet Maintenance to its internal clients for work performed on their equipment. This rate, established at $90 per hour for 2017, is the sole funding source for the Fleet Maintenance budget (compensation for staff included). This means that although two (2) of the options analysed here require a growth in FTE, no direct funding pressure would be required to compensate for these employees, as this would be funded through the door rate.

Knowing that the cost of a VET 3 to the City is $99,220.16[12] per year plus $10,994[13] for Program Support allocation, for 1,550 productive hours[14], we can determine how many

[12] As per direction from Human Resources the total cost of an employee to the City in 2016 is 26.45% on top of the salary.

VETs are required to fulfill the workload, as well as how many labour hours financially justify a VET growth (i.e. associated savings greater than costs).

It is also assumed that all other costs associated with maintenance work (parts, taxes and miscellaneous costs) are comparable whether the work is done in-house or outsourced (these costs may be less but will not be more).

	Option 1 – Status quo		Option 2 – Strategic in-sourcing		Option 3 – Maximum in-sourcing	
Garage	**Cost of outsourcing**	**Cost of in-sourcing**	**Cost of outsourcing**	**Cost of in-sourcing**	**Cost of outsourcing**	**Cost of in-sourcing**
EPS West	$698.05	$0.00	$698.05	$0.00	$0.00	$0.00
Clyde	$85,713.87	$0.00	$85,713.87	$0.00	$0.00	$0.00
Iber	$59,640.72	$0.00	$59,640.72	$0.00	$0.00	$0.00
Moodie	$300,775.41	$0.00	$0.00	$207,583.32	$0.00	$271,491.60
Manotick	$94,956.07	$0.00	$0.00	$67,450.29	$0.00	$0.00
Swansea	$333,631.87	$0.00	$0.00	$264,911.07	$0.00	$418,763.36
EPS East	$58,091.09	$0.00	$58,091.09	$0.00	$0.00	$0.00
TOTAL	$933,507.08		$744,088.42		$690,254.96	
Extra employee costs[15]	**N/A**		$86,739.87		$0.00	
Potential Saving	**N/A**		**$102,678.80**		**$243,252.12**	

Based on the returns of the RFI for Option 4, it was determined that a detailed financial analysis was not possible due to the fact that the door rates vary from one vendor to the next, from normal business hours to after hours, and some of them only committed to reducing their current door rate without providing an exact number. That said, we know that the door rates would be lower than with the Status quo, but still higher than if we were insourcing some of the work such as with options 2 and 3.

[13] As per direction from Financial Services, the Program Support allocation (for HR, IT, Supply, Finance, Legal etc.) is $10,944 per FTE

[14] Assumption based on 365 days/year, minus 104 days (weekends), minus 30 days (vacation), minus 25 days (to account for training, administration and other leave (bereavement, sick, special, etc.)), at 7.5 productive hours per day (8 hours minus 2 paid breaks of 15 min each): (365-104-30-25)x7.5=1545=Approximately 1550 productive hours per year.

[15] Represents the difference between the cost of an employee to the City and the savings achieved by in-sourcing work should the work in-sourced not be sufficient to cover the cost of the employee.

It is important to note that the numbers used in this analysis and the associated results are for comparison purposes only and it is not expected that these exact savings will be achieved through the implementation of any of the options reviewed in this business case. The results shown here are a reflection of the environment within which we were operating at the specific time that the information was extracted, and are subject to a number of variables (which will be reviewed later). The key takeaways here are that in-sourcing the work for which the vendors' door rates are higher than ours will lead to cost savings (through cost avoidance).

Furthermore, this business case only looks at the cost of labour associated with the maintenance of city vehicles/units, but other savings could be achieved through in-sourcing. For example, outsourced work is subject to taxes which the City does not have to pay if we do the work ourselves (internally). Similarly, the cost of parts is likely to be cheaper when they are procured through our internal Fleet Parts program, as we pay standing offer pricing instead of retail pricing. These savings would be difficult to quantify as they are specific to the work being done, but they should also be taken into consideration

Risk Analysis

Risk of variation of the expected outcome. Some of the risks specific to each option have been mentioned in a previous section of this Business case (Tables 2, 4, 6 and 8), and as we noted previously, it is not expected that the exact savings identified in the financial analysis will be achieved; instead, we established that in-sourcing the right work will lead to cost avoidance but the quantification of the savings is dependent on a number of factors and variables, and changes to any of them will impact, positively or negatively, the expected outcome of any of the options over time. More specifically:

1. Composition, usage and age of the fleet. Any changes to the fleet composition (heavy vs light, leased vs owned, etc.), to its usage, or to its age will directly impact the maintenance requirements and consequently the associated workload and costs. We know that a fleet review is currently in progress and the outcome may have an effect on the current life cycling model (therefore on the maintenance requirements).

2. Door rates. The savings discussed in this business case are achieved through cost avoidance and are based on the deltas in door rates between each vendor and Fleet Maintenance. These are influenced by a number of variables and change regularly; assuming that the workload remains similar, a larger delta would increase the savings and vice versa.

3. Total cost of an employee to the city (excluding Program Support allocation). The total cost of an employee to the city is calculated by adding 26.45% on top of

to the employee' salary[16] (to cover benefits, EI, etc.). For Fleet Maintenance employees, this is funded through the door rate and therefore, any change that could affect the total cost of an employee to the city will also have an effect on the Fleet Maintenance door rate (and in turn on the potential savings associated with in-sourcing).

4. Special projects. Any project that would create additional and/or unplanned workload would have an impact on the labour available and outsourcing requirements.

Overall Risk Assessment.

Option 3 is the riskiest of all the options due to its complexity related to the numerous "moving pieces". It requires the same investment in FTEs as Option 2, and although it has the potential of generating greater savings, it requires changes to the current support model that would have a negative impact on the operational effectiveness and clients' experience. Option 2 mitigates these risks by sustaining the current support model while growing the FTE complement where required in a way that allows for a cost effective in-sourcing of work. Savings are still achieved, while minimizing the impact on the rest of the City's operation. Risks of not completing the project (Option 1) or delaying it are minimal, in the sense that we know what to expect. Status quo is operationally viable, although not optimal, and given the fact that the workload is already higher than what the workforce can sustain internally, it is expected that outsourcing costs will either stay the same or continue to increase over time. That said, Option 4 shares essentially the same risks as Option 1, but does show some potential as far being less costly (although the extent of the associated savings cannot be determined at this time).

Recommendation

It is recommended that Option 2, Strategic in-sourcing, be adopted. Not only will this option generate savings through cost avoidance, but it will also improve the operational effectiveness of the Fleet Maintenance organisation and client experience through a more productive and flexible labour, while also enhancing employee engagement. It is the less risky option on a way forward, in an environment where we have to be financially responsible.

Implementation Plan

The recommended option requires a growth of five (5) FTEs (VET 3), which will be funded through the savings created through cost avoidance, and it can be implemented as soon as the growth is approved. Two (2) of these FTEs will be allocated to the Swansea garage, two (2) to the Moodie garage, and one (1) to the Manotick garage.

[16] As per direction from Human Resources the total cost of an employee to the City in 2016 is 26.45% on top of the salary. Using a Vehicle Equipment Technician 3 as a baseline, this translates in $99,220.16 per year per employee.

In order to maximize the benefits out of the five (5) new FTEs, staff responsible for the allocation of work will have to pay particular attention to the work that is being outsourced in comparison to the work done internally (cost, time/labour requirement, etc.). This is not a new practice but staff will be reminded of the expectations through clear and constant communication, and they will be provided with the tools and information that they require to make the appropriate decisions.

Acceptance Sign-off

Lead Department

Prepared By:	Yan St-Louis, Manager Municipal Fleet Maintenance	**Date:**	[month][day], [year]
Signature:	_____		
Approved By:	Don Dinelle, Manager Fleet Services	**Date:**	[month][day], [year]
Signature:	_____		
Approved By:	[name], [title]	**Date:**	[month][day], [year]
Signature:	_____		

Business Partner(s)

Submitted To:	[name of business partner], [title]	**Date:**	[month][day], [year]
Signature:	_____		
Submitted To:	[name of business partner], [title]	**Date:**	[month][day], [year]
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Submitted To:	[name of business partner], [title]	**Date:**	[month][day], [year]
Signature:	_____		