REPORT FIN-2015-037

TO:	Mayor and Members of Council
FROM:	Paul Creamer, Director of Finance/Treasurer
MEETING DATE:	December 2, 2015
SUBJECT:	Fleet Management File No. A09 FLE

RECOMMENDATIONS

That Report FIN-2015-037 regarding the Fleet Management Study be received; and

DISCUSSION

Purpose

The purpose of this report is to introduce the Fleet Management Study completed by BDO Canada. The report includes an overview of the Township's fleet, best practices for fleet management and observations/recommendations for the effective and efficient management of fleet in the Township.

Background

Council at its Capital Budget meeting held on January 14, 2015 requested that Township staff prepare a report detailing the usage, lifecycle and corporate rotation of vehicles.

Township staff, through report FIN-2015-026, recommended that BDO Canada LLP be retained to complete a Fleet Management Study that provided the findings, recommendations and appropriate action plan for the effective and efficient management of fleet in the Township.

The study included:

1. Interviews of key personnel to understand the current state and any expected changes

2. Analysis of the total costs of fleet inventory to the Township
3. Comparison of the Township's fleet management to similar municipalities
4. Cost/benefit analysis of various financing options
5. A recommended policy for appropriate internal controls and reporting to manage fleet inventory
6. Presentation to Council

FINANCIAL IMPLICATIONS

The report projects an average annual capital expenditure of $325,000 and $213,000 for annual maintenance over the next 20 years. The actual budget impacts will be determined during budget deliberations.

APPLICABLE LEGISLATION AND REQUIREMENTS

N/A

ATTACHMENTS

Township of Puslinch Fleet Management Analysis – Final Draft – For Discussion Purposes Only; December 2, 2015; BDO

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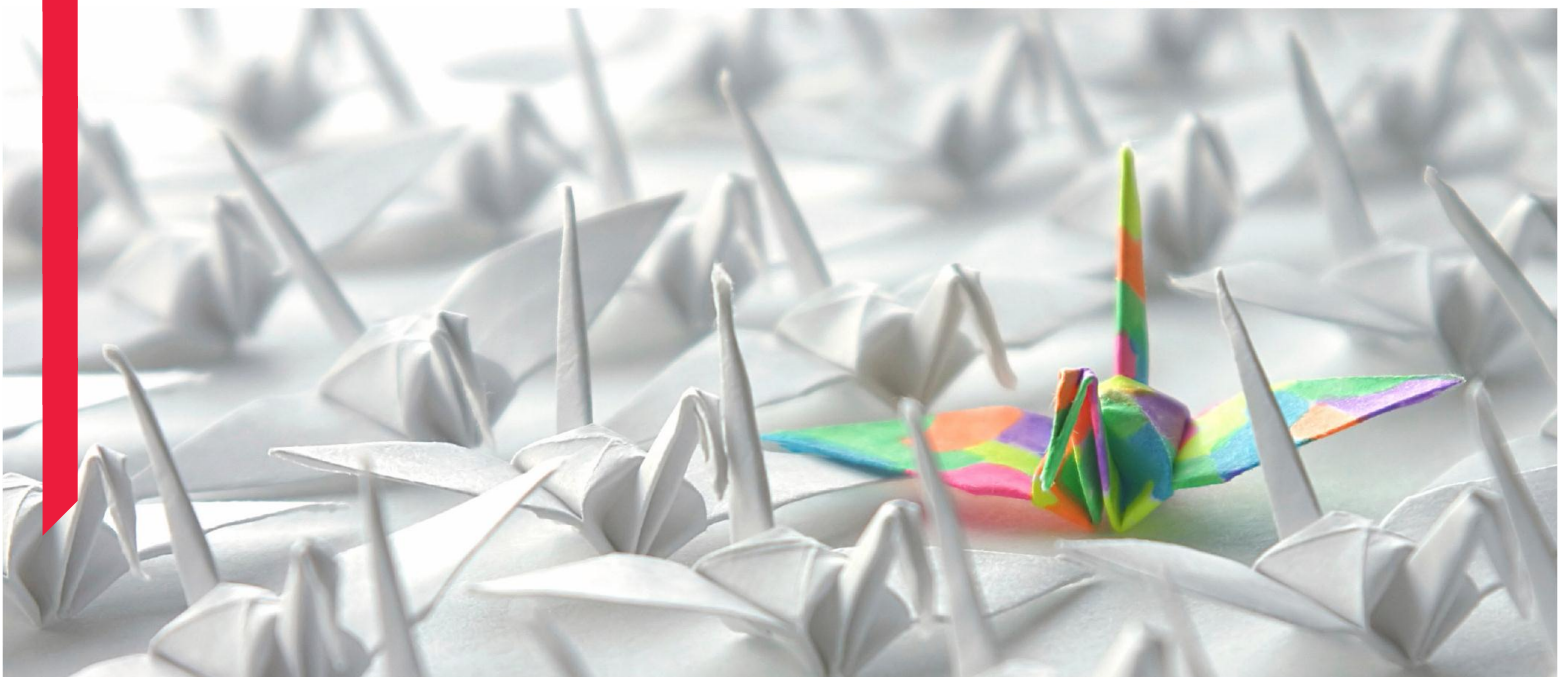

DECEMBER 2, 2015

TOWNSHIP OF PUSLINCH – FLEET MANAGEMENT ANALYSIS

FINAL DRAFT

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1. Background

The Township of Puslinch, Ontario (the "Township" or "Puslinch" or the "municipality") engaged BDO Canada LLP ("BDO") to perform a Fleet Management Review. The review consisted of the following tasks:

- Inspections of inventory and asset listings;
- Meetings with Department Heads from the Public Works, Parks, Building and Bylaw ("Building"), Recreation, Administration and Fire departments to gain an understanding of how the inventory is deployed across departments/the organization and the exact purpose and use (past, present and future);
- Inspection of key policies, financial records and other documents of the Township;
- Review, comparison and analysis of the life cycles, fleet utilization, internal control mechanisms at other municipalities for comparison to those at Puslinch;
- Analysis of the total costs of the fleet inventory to the organization;
- Completing comparisons to and utilization of manufacturer cost data; and
- Interviews and inspections of key documents from several other municipalities of similar size and characteristics (see Table 1).

Table 1: Peer Group

Peer Group Township	Population	KMs of Road	Square KMs
Puslinch	7,029	185	214.4
Adjala-Tosorontio	10,603	610	372.3
The Blue Mountains	6,453	154	286.8
Wellington North	11,477	314	526.28
West Grey	12,286	700	876.02
Lake of Bays	3,506	219	677.58
Thorold	19,931	293	83
Kincardine	11,174	483	580
Greenview	5,299	120	329

The objectives of the tasks above were the following:

- Analyze the various options available to the municipality based on cost and effective and efficient use of vehicles – such as paying mileage, leasing, financing vehicles and/or departmental shared use;
- To identify internal control enhancements;
- To identify opportunities for improved management information & reports.

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Through conducting interviews and the review of these documents, BDO obtained an understanding of the Township's existing fleet inventory, their related costs, their use and the policies, controls and reporting in place to ensure their efficient use. BDO was able to analyze the various options available to the Township for financial optimization of the fleet. This document also outlines our findings, and other process enhancement recommendations derived through our review process.

The focus and perspective of the review is financial optimization based in nature, with attention to costs, asset life cycle, maximizing utilization rates (where possible to measure), financing, internal controls and utilization oversight. However, the review is not to give assurance over the best operational practices from a technical perspective. We were subject and exposed to operational facts and information in order to gain an understanding of asset use and departmental operations. If any information came to our attention that appears to be unordinary and inconsistent with our knowledge of best practices in the municipal sector it has been reported below. Operational best practices for the various departments being studied have been taken as our benchmarks. For example, the latest Master Fire Plan for the Emergency Services/Fire department has been taken as our benchmark for the appropriate fleet to deploy for the Fire department and to service the municipality. In addition, the operational requirements outlined by the departmental Directors to BDO were used as the benchmark for the appropriateness of the size of the fleet for Building and By-law Services, Recreation, Parks and Public Works.

2. Fleet Overview

The municipal fleet is a significant and vital component of the Township's assets and one that, because of regular use, requires regular maintenance and replacement. The Township's fleet currently includes 22 pieces of large equipment serving the Public Works, Fire, Parks, Recreation and Building departments.

The fleet represents a large part of the Township's capital outlays. Careful, prudent analysis and planning of the fleet expenditures is a vital element of the Township's capital and strategic planning. These assets are also a vital component in providing appropriate and timely service to taxpayers and thus an optimization of service output and costs must be found.

The Township's estimated replacement cost of the existing fleet, simply a replacement of each of the existing components, at existing useful lives, not taking into account any growth over the next 20 years is $6.6 million[1]. Equipment replacement should be based on a sustainable long-range scheduled program. The schedule should be designed to replace equipment when it is near the end of its efficient service life and before any major components fail (such as a motor or transmission) and that the cost of maintenance no longer outweighs the benefit of the amount spent. At current values and using the Township's current standard replacement cycle, the schedule shows an annual average replacement cost of $331,000. This report provides analysis and evaluation of these management estimates.

[1] Equipment Replacement Schedule.xls

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Furthermore the average annual operational cost, based on general ledger data provided, has averaged approximately $218,000[2].

The Fleet must be balanced to meet local service expectations and maintain the public infrastructure to a safe and reliable standard within the municipal budgetary constraints. Most of a municipal fleet must be ready to respond immediately to emergency conditions such as winter storms and fires. The Public Works fleet should be able to meet the locally expected level of service and achieve the standards of the legislation for minimum road maintenance in a safe manner; the Building department fleet must be adequate to allow an appropriate service level for building applications and permits and by-law enforcement, in safe manner; and the Fire department fleet must be sufficient enough to achieve appropriate response times, a safe community and preserve the safety of all staff and volunteers.

3. Fleet Components and Life Cycling Benchmarking Analysis

BDO obtained asset lifecycle data from eight representative sample municipalities which are similar in size, location, population and industries to each other and Puslinch. This data was compared to Puslinch's current asset lifecycles and analyzed below.

The existing fleet consists of assets used by the Fire, Public Works, Recreation, Parks and Building departments. Currently the Township uses years as a measure and to drive the replacement of an asset.

Table 2: Summary Benchmark Results by Asset Class

Asset Group	Benchmark min/max useful lives	Puslinch vs. Benchmark
Fire Trucks	15-25	Puslinch uses 20 years
Dump Trucks	10-20	Puslinch uses 8-10 years
Pickup trucks	5-10	Puslinch uses 5 years
Backhoe	9-15	Puslinch uses 10 years
Graders	15-25	Puslinch uses 25 years
Recreation equipment	N/A	Puslinch uses 10-40 years
Tractor	5-10	Puslinch uses 10 years

3.1. Fire

The Fire department's large equipment consists of two pumper trucks, one aerial truck, one rescue truck, and two tanker fire trucks.

Pumper truck #32, purchased in 2013 is required to draw water from dry hydrants.

Pumper truck #31 is the primary pumper to respond to residential calls, it has the equipment to deal with first and initial attack by the Fire crew.

[2] Fuel - $101,000; Mileage - $7,000; Maintenance - $85,000; Insurance - $20,000; and Equipment lease- $5,000 = $218,000

The aerial truck is a critical tactical asset and also acts as a backup pumper. According to Fire staff, it is past its useful life at 24 years and should be replaced by a newer, similar aerial truck.

The rescue truck is a specialized, multi-purpose vehicle. It is used to respond to all calls, carries all of the specialized equipment, water, trench, heavy duty extraction equipment, contains the command centre, the rehabilitation centre, and is used for citizen emergencies.

Tankers are required to secure water at fire incidents and are used to block traffic to protect on scene emergency workers at roadway incidents.

All Fire department assets are planned to be replaced over a 20 year life cycle which is reasonable compared to the peer group. 20 years is also consistent with the Master Fire Plan.

3.2. Public Works

The Public Works department has two tandem dump trucks, two single axel dump trucks, a one tonne dump truck, two staff pickup trucks, two graders and a backhoe.

The tandem dump trucks, single axel dump trucks and the 1.0 tonne dump truck are used for salting, sanding, ploughing roads, moving gravel, ditching, forestry and summer road maintenance operations.

All of the dump trucks are planned to be replaced over 8-10 year life cycles. Many of the Township's peers have life cycles in the 10-20 year range. Therefore, the Township should reconsider the life cycles applied to the dump trucks and consider extending them. However, the high percentage of gravel roads relative to the peer group could be a reason for accelerated depreciation to the Township's trucks. Therefore, through monitoring and ongoing analysis by management changes to the estimated life cycles for the trucks should be considered if experience begins to point to longer life cycles being more appropriate.

The graders are used for gravel maintenance, snow and ice removal. They have a life cycle of 25 years which is on the high end of the range of the peer group but close to some peers. Caution through ongoing monitoring of performance is recommended, but the life cycle is appropriate.

The backhoe is used for ditching, digging graves, forestry, summer road maintenance operations and snow removal. Its life cycle is 10 years which is on the low end of the peer group. 12 years would be considered more reasonable but 10 years is appropriate if the use is on the high end.

One of the pickup trucks is used by the Director of Public Works. The other pickup truck is a shared staff pickup mainly used by the department foreman to travel site to site.

Both trucks have a 5 year life cycle which is the lowest of the peer group, 7-8 years would be more reasonable. However, it is known that the Township tends to trade in trucks prior to the end of their life for favourable trade-in values which results in greater safety and performance of the truck fleet as well as lower overall cost of the truck assets over the long run. Therefore, the current practice is appropriate as long as it continues to yield optimized long term costs.

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3.3. Recreation Centre

The recreation centre is a newly constructed asset that has a small hockey arena. A floor scrubber and ice machine are owned and used in the operation. Both assets life cycles are difficult to benchmark as the peer group did not have similar assets on hand. Based on our knowledge the current life cycles and reasoning behind them appear reasonable.

3.4. Parks

The Parks department has a lawn tractor that is required to cut grass and a pickup truck that is required to travel from park to park and is a shared use vehicle with Public Works. Both assets have a 10 year life cycle which is consistent with the peer group and reasonable.

3.5. Building

The Building department has two pickup trucks one used by the Chief Building Official ("CBO") and one used by the Building Inspector to travel to sites, court and solicitors. The CBO truck has a 5 year life cycle and the Building Inspector trucks has 10 year life cycle. The basis for the life cycles is their expected mileage which is appropriate. Based on the peer group analysis 7-8 years would be more reasonable. However, it is known that the Township tends to trade in trucks prior to the end of their life for favourable trade-in values which results in greater safety and performance of the truck fleet as well as lower overall cost of the truck assets over the long run. Therefore, the current practice is appropriate as long as it continues to yield optimized long term costs. Oversight by Finance is recommended to ensure cost optimization.

4. Interdepartmental Transfers/Shared Use of Vehicles

BDO obtained an understanding of the use of assets and the potential for departmental shared use.

Most fleet assets would not qualify for shared use as their needs are specific to the departments they currently service. However, with regards to pickup trucks the opportunity to share use of trucks provides many potential benefits such as:

- Maximizing the utilization of the assets and thus possible and potentially reducing capital outlays; and
- Providing access to assets previously unavailable to employees/departments therefore increasing the service potential of the municipality.

Based on our discussions with other municipalities and experiences, the issues that result from interdepartmental transfers include:

- Lack of availability of priority assets due to the shared use; and
- Decreases in service due to the lack of availability of the assets.

Therefore, careful consideration of how these opportunities and risks will affect the Township specifically is required. The departments that require trucks are the Public Works, Parks, Building and potentially Fire departments. Public Works requires trucks for project execution which is consistent but also for response to seasonal and emergencies which requires consistent access to trucks. Therefore, shared use of Public Works trucks with Building for

example is not practical and not recommended. However, shared use of Public Works and Parks would be appropriate in the event that shared use does not disrupt the essential operations of Public Works. At the current time, all of the trucks have high utilization (usage in excess of 20,000 kms/year) and shared use is not recommended however it should be considered in the future and for all purchases prior to allocation to any single department.

5. Fleet Maintenance

An organized fleet acquisition and maintenance program is essential to ensure that equipment is responsive and cost effective.

A comprehensive fleet management program includes:

a) An appropriate budget
b) Appropriate equipment purchases
c) A responsible replacement timetable
d) A preventative maintenance program to support the replacement schedule

Organized maintenance combined with scheduled replacement provides a template for staff to follow when determining the appropriate amount of repair to extend the reliable service life to full term. A solid preventative maintenance program includes having trained personnel inspect the condition of various components of the vehicles and equipment in the fleet.

Currently minor fleet repairs are performed by in-house staff, major component repairs are done by external vendors. The cost of maintenance going forward has been estimated in the – Recommended Cost of Fleet section below at about $85,000 per year which appears to be appropriate given the size of the fleet as it represents about 3% of the fleet cost and industry best practice is in the 3-5% range.

6. Mileage vs. Financing Options

The Township has several options to access the service potential of vehicles including leasing/renting, outright purchasing, paying mileage or other alternative arrangements such as sharing of assets between municipalities or outsourcing of services. Sharing arrangements and outsourcing are outside of the scope of the analysis but should be investigated at a senior level as opportunities arise. Leasing, mileage and purchasing are the three main options that were evaluated for the purposes of this report.

Leasing is a financing option that should be considered mainly for cash flow optimization purposes unless a unique fleet arrangement with a vendor that integrates generous interest rates can be obtained. Over the long run, outright purchasing or mileage options are usually the lowest cost alternatives especially given that municipalities do not generate an internal rate of return on invested capital. Therefore the option that reduces costs over the long run is generally the most appropriate approach.

For many of the assets that the Township owns, such as fire trucks, leasing is not a viable option. The Township is engaged in shared service arrangements with other municipalities and these types or arrangements should continue to be pursued where prudent.

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Leasing/renting options do exist for the Public Works assets (graders, backhoes), however, outright ownership is recommended unless cash flow issues exist since it is the less expensive option in the long term based on BDO's analysis of other similar sized municipalities.

Paying mileage for employee use of personal vehicles for the benefit of the Township is an economic option in some cases. The equipment where this is of most likely consideration is with regards to the Township's pickup truck fleet. BDO evaluated the cost of ownership of each of the pickup truck assets which is summarized in the table below.

As demonstrated in Table 3, due to the current utilization of the Township's fleet, outright ownership is the most appropriate financing option for the fleet. The cost per kilometre driven for ownership was found to be $.36 compared to $.5 for mileage. The point at which the acquisition of another municipal truck makes sense based on the cost of mileage is approximately 11,895KMs. Similarly, if a municipal truck is only being used for 11,875KMs or less then it makes sense to sell the truck and pay the employees using the truck mileage.

The basis of the cost of the truck was estimated over 200,000KMs which is the average useful life stated by Ford Motor Company for the F-150 Pickup Truck for commercial use (4x2 Regular Cab Styleside 6.5 ft. box 126 in. WB as well as the average utilization period applied by the peer group. Note that at 150,000KMs the break even and cost per kilometer were 15,450KMs and $.42/KM respectively.

Note that the kilometres in the table below do not exclude the personal use miles incurred by the fleet such as miles incurred commuting. This information was not accessible to BDO and has been recommended as part of recommendation 7.7 below.

TABLE 3: ESTIMATED COST OF OWNERSHIP

LIST OF PUSLINCH TRUCKS AND KMS INDICATED BY INTERVIEWED STAFF:	KILOMETRES	MILEAGE COST ($.5/KM)	ESTIMATED ANNUAL COST OF OWNERSHIP
Pickup truck - Director - Public Works	27,500	$13,750	$9,807
Pickup truck - Staff - Public Works	33,000	$16,500	$11,170
Pickup truck - Park	26,500	$13,250	$9,562
Pickup truck for Inspector - Building	36,000	$18,000	$11,913
Pickup truck for CBO - Building	15,000	$7,500	$6,716

Assumptions: $.50/km for mileage
Operating costs in line with 2015 Ford F150 (cars.com/ford/f150/2014/costofownership)
Litres/100km: 13.8
Cost of gas per litre: $1.05
Estimated annual cost of insurance: $1066
Estimated annual maintenance & repairs: $1073
Estimated fees & taxes: $441
Estimated cost of financing: $424
Estimated capital cost (per km): $.18

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A summary of BDO financing recommendations is below:

TABLE 4: RANGE OF MUNICIPAL FLEET INVENTORY TYPES		
ASSET CATEGORY TYPE	ASSET CATEGORY TYPE DESCRIPTION/EXAMPLES	OPTIMAL FLEET STRATEGY*
Fire Trucks	20-Pumper, Aerial, Tankers, Rescue	Owned - there is no alternative and the need for the asset is clear.
Public Works heavy vehicles	Tandem, single axel and one tonne dump trucks	Owned - all assets are required for consistent use and consistent access. Ownership is the most cost effective alternative.
Light trucks	Public Works, Building pickup trucks	Detailed analysis of each truck was performed. In all cases ownership was recommended due to the lower cost compared to mileage and leasing.
Public works/Parks equipment	Graders, backhoes, lawn tractor	Owned - all assets are required for consistent use and consistent access. Ownership is the most cost effective alternative.
Recreation equipment	Floor scrubber, ice machine	No other options exist for both assets. Ownership is required.

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7. Summary of BDO Observations/Recommendations

Detailed descriptions of BDO's analysis and findings is characterized in the body of the report in the preceding sections. A summary of those conclusions and findings is presented below.

7.1. Useful life analysis

BDO performed a benchmarking analysis of eight peer municipalities and compared their asset lifecycles to Puslinch's in section 3. A summary of the benchmarking analysis is included in Table 5 below.

Table 5: Summary Benchmark Analysis by Asset Class

Asset Group	Benchmark min/max useful lives	Puslinch vs. Benchmark	Conclusion
Fire Trucks	20-25	Puslinch uses 20 years	20 is reasonable compared to the peer group. 25 should be strived for where reasonable most of the peer group strive for 25 years.
Dump Trucks	10-20	Puslinch uses 8-10 years	8 is lower than the group. The Township should consider extending closer to 10 or 12 years; however if favourable trade-ins are being obtained this is reasonable.
Pickup trucks	5-10	Puslinch uses 5 years	5 is the low end of the range. 7-8 years is more reasonable. However, BDO is aware that the Township tends to trade-in trucks prior to the end of their useful life which is appropriate in the event that this decreases the long term cost of fleet replenishment.
Backhoe	9-15	Puslinch uses 10 years	10 is on the low end of the peer group. 12 would be more reasonable but 10 is reasonable if the use is on the high end.
Graders	15-25	Puslinch uses 25 years	25 is on the high end of the range but close to the second peer. Caution is recommended.
Recreation equipment	N/A	Puslinch uses 10-40 years	No issues.
Tractor	5-10	Puslinch uses 10 years	10 years is reasonable based on the peer group.

Fleet management is an asset management discipline and the main objective is to provide the appropriate service level at the lowest long-term cost. If opportunities present themselves to dispose of an asset prior to the end of its useful life at a favourable salvage value that lowers the long-term cost of operating the fleet, these opportunities should be pursued. However, these opportunities are to be performed on a case by case basis and should take into account, maintenance savings and improved fuel efficiency of obtaining the new asset as savings. The challenge with early disposal is that vehicles depreciate at a decelerating rate. Therefore, often significant long-term savings are had when older assets are stretched to their useful limit – but the cost of maintenance is a key factor to carefully watch at those times.

For municipalities with a small fleet, such as Puslinch's, it is essential for assets to be ready to be in use and in appropriate working condition to realize the required service levels. Therefore, extending the utilization of an asset should not be pursued if it increases the risk that the asset may not be able to achieve desired service levels. In these cases, as the risk increases, alternative replacement assets should be targeted and purchased and the at-risk asset sold or kept if it is an appropriate spare/backup asset.

7.2. Interdepartmental Transfers/Shared use of Vehicles

BDO explored the possibilities for interdepartmental transfers in section 4 and determined that due to the complications with the risk posed to operations as well as the current load imposed on the truck fleet, interdepartmental transfers are not appropriate at the current time. In the future, in the event of an asset having excess forecasted capacity the potential to loan the asset to another department should be periodically explored. Furthermore, when personal use mileage data becomes available the analysis should be re-performed to determine whether shared use is beneficial.

7.3. Fleet Maintenance

The cost of maintenance going forward has been estimated in the Estimated Cost of Fleet section below (7.10) and section 5 above at about $85,000 per year which appears to be appropriate given the size of the fleet as it represents about 3% of the fleet cost and industry best practice is in the 3-5% range.

7.4. Mileage vs. Financing Options

BDO performed a detailed analysis of the options available to the Township regarding funding the provision of fleet assets to provide appropriate services to the municipality in section 6 (Table 3). The options evaluated were paying mileage to staff, financing and leasing assets. Due to the current utilization of the municipal fleet as well as the costs associated with these options outright purchasing of municipal assets was deemed to be the most cost effective option for the Township. Furthermore, when personal use mileage data becomes available the analysis should be re-performed to determine whether mileage is a preferred option over financing.

7.5. Hours vs. Kilometres vs. Years

BDO noted that most of the municipal assets life cycling is based on years. A combination of hours, kilometers and years is used by the peer group to estimate the life cycle of assets. These key drivers can all be tracked and used to update the Equipment Replacement Schedule. Hours and kilometres can better demonstrate the actual use of the asset and demonstrate the differences in use versus other municipal peers. Validating the differences in use and workload was difficult due to the unavailability of this data.

7.6. Fire Master Plan Fleet recommendations

BDO obtained the Master Fire Plan, recently performed by Dillon Consulting and noted that it recommended a shared use truck to be utilized during calls which will reduce the need to use personal use vehicles for calls.

Some of the costs incurred in adding another vehicle to the fleet would offset some of the mileage charged by the Fire staff which has ranged between $6,000 - $8,000 per year since 2012 (estimated savings of $2,000).

The plan also recommended the replacement of Aerial #33 which is currently 25 years old. Also, 25 years is greater than the typical range employed by the peer group with 20 years being the average. Therefore, it is recommended that Aerial #33 be replaced in 2016 with a newer asset that currently has significant life remaining to service the municipality's needs and contribute to improved fire department performance in 2016.

7.7. Mileage-Hours Tracking

BDO noted through the review process that there is not a formal process to track mileage-hours incurred on municipal assets. BDO was unable to obtain a log evidencing the annual mileage/hours incurred by the assets. Furthermore, BDO was unable to obtain the number of kilometres incurred for personal versus municipal use. This is important to track potentially for internal control as well as taxable benefit calculation purposes.

It is essential for periodic tracking of miles/hours to be tracked and analyzed, especially by the group responsible for asset management such as Administration such that optimization of utilization of assets can occur. Patterns in use that present optimization opportunities may be identified through more consistent monitoring and evaluation. Also, tracking miles will provide further support for disposals of assets that have shorter than the benchmark average useful lives such as the pickup trucks. Furthermore, this would help with monitoring the condition of the fleet as it would identify if the amount of use on a vehicle has changed and if the projected replacement can be modified (extended or moved up) based on this. At the very least, monthly reporting should be implemented to tracked mileage/hours incurred by the municipal fleet which would drive more meaningful analysis by Finance, insight and further process improvements.

7.8. Asset disposals

BDO noted that asset disposals have not always required the involvement of the Finance department prior to disposal. Asset disposals are significant financial events and often are tied to the acquisition of another asset and always have financial accounting implications. Furthermore, the Township has finance professionals that have expertise in evaluating financial transactions and can thus provide advisory services on these transactions. Recently a Capital Acquisition Form has been implemented by the Township which is an excellent step in the right direction to improving the asset disposition decision making process. Consistency in filling out, seeking approval and performing review of the Capital Acquisition Forms is recommended.

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7.9. Recommended Cost of Fleet

Based on the application of the recommended lifecycles and estimated costs to operate the recommended fleet, Puslinch should commit to an average annual equipment replacement amount of approximately $325,000 excluding HST and inflation, and $213,000 in order to operate, maintain and insure the recommended inventory of vehicles and equipment over the next 20 years.

In total, the $6.5M (see Appendix I) to replenish the fleet is based on estimated replacement costs less the salvage value of the vehicles. The costs have been obtained through third party sources such as benchmarks of other municipalities and vendor quotes.

The $213,000 per year to operate the fleet (see Table 6 below) is based on the 2012, 2013 and 2014 average operational costs plus additional cost to operate the new truck. There will be years when the replacement schedule dictates replacement costs above or below this average amount. It is considered a valuable strategy to maintain a dedicated equipment reserve fund to keep the tax burden consistent year over year. For years when fleet capital expenditures are lower, the excess will be deposited into the reserve. For years of need greater than the average, funds will be supplemented from the reserve. Using the above concept, Council will have confidence that the fleet is being kept current and will maximize efficient use of the tax dollar. The program will assure sustainability of a dependable fleet and avoid the challenge of dealing with potential tax increases when needing to replace multiple large pieces of equipment in the same year.

TABLE 6: FLEET OPERATIONAL COSTS

COST	PUBLIC WORKS	PARKS & RECREATION	BUILDING	FIRE & RESCUE SERVICES	TOTAL
Fuel	$82,803	$2,153	$6,548	$10,071	$101,575
Mileage	$0	$373	$0	$4,807	$5,180
Maintenance	$49,101	$0	$1,374	$34,880	$85,355
Insurance	$7,880	$1,340	$2,680	$8,926	$20,826
Total	$139,784	$3,866	$10,602	$58,684	$212,936

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Appendix 1: 20 Year Fleet Replenishment Plan

Description	Asset ID	Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	Useful Life applied	Original Useful Life
Fire and Rescue Services																								
Pump 32	5040	2012																	331				20	20
Aerial 33	5033	1991	600																				20	25
Rescue 35	5035	2000					360																20	20
Pump 31	5031	2005										490											20	20
Tanker 38	5038	2007												360									20	20
Tanker 39	7006	2010															360						20	20
Departmental truck	xxxx	2016	35								35								35				8	8
Public Works																								
Tandem Dump	8016	2013-301						250								250							8	8
Tandem Dump	8014	2012-302					250								250								8	8
Plow truck-303 single axle	8008	2015-303								225								225					8	8
Single Axle Dump	8013	2011-304				250								250								250	8	8
1.5 ton dump truck	7003	2008-305			75										75								10	10
Pickup truck - Director	TBD	2015-04					30					30					30					30	5	5
Pickup truck - Staff	7009	2012-05		30					30					30					30				5	5
Backhoe	8001	2008-06			100										100								10	10
Grader	8003	2000-502									350												25	25
Grader	8002	1999-501							350														25	24
Building																								
Pickup truck for Inspector	7005	2015										33										33	10	10
Pickup truck for CBO	7005A	2013			30					30					30					30			5	5
Optimist Recreation Centre																								
Olympia Ice Machine		1977		80																			25	25
Floor Scrubber	TBD	2015										8											10	10
Parks																								
Lawn Tractor	7007	2005		30										30									10	10
Pickup truck - Staff	7008	2011-04						35										35					10	10
Total			635	140	205	250	640	285	380	255	385	561	0	670	455	250	390	260	396	30	0	313		
Total cost of fleet over 20 years $6,500,000. Average annual capital expenditure $325,000.																								