

To: Warden and Members of County Council

From: Director of Public Works

2022 Additional Fleet Procurement Request

RECOMMENDATION

1. That Oxford County Council authorize staff to proceed with procurement of the additional fleet vehicles as specified in Report No. PW 2022-31 entitled “2022 Additional Fleet Procurement Request”, and approves funding from the Fleet Reserve and Land Ambulance Fleet and Equipment Reserve.

REPORT HIGHLIGHTS

- The purpose of this report is to obtain County Council approval for the procurement of 12 fleet vehicles previously planned for replacement in 2023 and 10 fleet vehicles planned for 2024 replacement due to the lengthy delivery times being experienced.
- Vehicle replacements include: two 1-Ton Utility Trucks, one ¾-Ton Pick-up, seven ½-Ton EV (Electric Vehicle)/HEV (Hybrid Electric Vehicle) Pick-ups, three Compact Pick-ups, four Cargo Vans, one PHEV (Plug in Hybrid Electric Vehicle)/HEV SUV, two Ambulances and two Tandem Snow Plow Trucks in accordance with the County’s *Asset Management Plan, 2021-2025 Green Fleet Plan* and the *2022 Business Plan and Budget Long-Term Capital Plan*.

Implementation Points

Upon approval of the recommendation contained in this report, staff will begin the procurement process for the 22 vehicles identified. During the procurement process, the tender documents will state that the County will take possession of the units in the year (2023 or 2024) as identified in the County’s 2022 Long Term Capital Plan to ensure the planned replacement schedules are not prematurely advanced. Additionally, Paramedic Services has a Vendor of Record for ambulance purchases, so a formal tender process is not necessary. However, the orders for two Ambulances to be received in 2023 require a prepaid deposit to secure the purchase.

Financial Impact

The proposed fleet vehicle replacements shown in Table 1 were included in the approved 2022 *Business Plan and Budget Long Term Capital Plan* at a budget of \$1,653,200. Upon completion of preliminary fleet pricing analysis, it was determined that the projected cost is estimated at \$1,957,415 (including non-refundable HST). Updated cost amounts, funding sources and budget amounts for the proposed vehicle procurements required in 2023 are summarized in Table 1 below, demonstrating that the supply chain and demand challenges, and rising inflation, have increased cost estimates for these vehicles significantly in the past six months, now in excess of \$300,000.

Table 1: Updated Cost Estimate Total / Budget Summary (2023 delivery)

Vehicle Description	Updated Cost Estimates	Budget Amount	Projected % Over Budgeted amount
220637 – WW-WD- One Ton pickup-utility box – Gas	\$100,400	\$94,800	5.9%
220638 – WW-WD- One Ton pickup-utility box – Gas	100,400	94,800	5.9%
220339 – R-S- ½ Ton pickup – EV/HEV	65,000	54,000	20.4%
220655 – WW-WT- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220656 – WW-WD- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220752 – TWM-WM- Compact Pickup – HEV/Gas	37,000	35,000	5.7%
220110 – E-F- Cargo Van – Gas/Diesel	77,500	77,500	-
220570 – WW-BL- Cargo Van – Gas/Diesel	77,500	77,500	-
220360 – R-H- Tandem Axle Plow truck – Diesel with Grip Start/Stop Idling System	418,000	330,000	26.7%
220386 – R-S- Tandem Axle Plow truck – Diesel with Grip Start/Stop Idling System	418,000	330,000	26.7%
1192 – PS - Ambulance – Hybrid	248,380	225,800	10%
1193 – PS - Ambulance – Hybrid	248,380	225,800	10%
Non-Refundable HST (1.76%)	33,855		
TOTAL ESTIMATED EXPENDITURES	\$1,957,415		
PREVIOUS BUDGET ESTIMATE	\$1,653,200		
PROJECTED BUDGET SHORTFALL	\$304,215		

The proposed fleet vehicle replacements shown in Table 2 were included in the approved 2022 *Business Plan and Budget Long Term Capital Plan* for replacement in 2024 at a budget of \$616,500. Upon completion of preliminary fleet pricing analysis, it was determined that the updated cost is estimated at \$681,792 (including non-refundable HST), representing an increase of approximately \$65,300, resulting from the same economic pressures as described earlier in this report. Projected cost total amounts, funding sources and budget amounts for 2024 procurements are summarized in Table 2 below.

Table 2: Updated Cost Estimate Total / Budget Summary (2024 delivery)

Vehicle Description	Updated Cost Estimate	Budget Amount	Projected % Over Budgeted amount
220660 – WW-WD- 3/4 Ton pickup – Gas/Diesel	\$79,800	\$79,800	-
220113 – E-F- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220116 – E-F- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220662 – WW-WT- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220750 – TWM-WM- ½ Ton pickup – EV/HEV	66,500	54,000	23.1%
220913 – E-C- Compact Pickup – HEV/Gas	38,500	35,000	10.0%
220665 – WW-WD- Compact Pickup – HEV/Gas	77,500	77,500	-
220905 – CS-L- Cargo Van – Gas/Diesel	80,700	80,700	-
220680 – WW-WT- ½ Ton Van – Gas/Diesel	77,500	77,500	-
220917 – E-C- SUV – EV/HEV	50,000	50,000	-
Non-Refundable HST (1.76%)	11,792		
TOTAL ESTIMATED EXPENDITURES	681,792		
2024 PRELIMINARY BUDGET	616,500		
PROJECTED BUDGET SHORTFALL	\$65,292		

As with previous fleet procurements, vendors only require a commitment in the form of a purchase order at the time of vehicle order placement. Funds are not paid out until the vehicles have been received in expected condition. Securing these replacement vehicles now is deemed appropriate to ensure continuity of the delivery of essential County services that rely on appropriate and well-functioning vehicular equipment, including emergent patient transportation.







Once the fleet procurement processes are completed and vendors are awarded, staff will update the replacement costs in the *Asset Management Plan*. As part of the 2023 Business Plan and Budget process, staff will also update the fleet replacement costs in the *Long Term Capital Plan* as well as update the annual contributions to the Fleet Reserve and Land Ambulance – Vehicles and Equipment Reserve based on the unit type in order to ensure that these reserves have sufficient funds to support the increased unit costs.

Communications

All of these vehicles will be procured in accordance with the County’s Purchasing Policy. Once awarded, the tender results will be publicly displayed on the *Bids & Tenders* online portal and all bidders will be notified of the results.

With the anticipated arrival of fully-electric truck models in 2024, the County will seek opportunities to highlight this initiative as it has in previous years to demonstrate the progress of the *Green Fleet Plan* and the commitment to 100% Renewable Energy.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
		3.iii.			

DISCUSSION

Background

The *Long Term Capital Plan* that was approved in the 2022 Business Plan and Budget process included funding to procure replacement units in accordance with the *Asset Management Plan*. For 2023, this plan included provisions for the purchase of two 1-Ton Utility Trucks, three ½-Ton EV/HEV Pick-ups, one Compact Pick-up, two Cargo Vans, two Ambulances and two Tandem Snow Plow Trucks. In addition, 2024 included the purchase of one ¾-Ton Pick-up, four ½-Ton EV/HEV Pick-ups, two Compact Pick-ups, two Cargo Vans and one PHEV/HEV SUV.

The assets are nearing the end of their useful life and are scheduled to be replaced in 2023 and 2024, respectively. In order to align with the 2021-2025 *Green Fleet Plan*, Units 339, 655, 656, 113, 116, 750, 752, 913, 665 and 917 are to be tendered to include Electric Vehicle or Hybrid options, thus resulting in an increase to the estimated replacement cost.

As with a number of industries, vehicle manufacturing has been faced with unprecedented challenges related to supply and demand. Current market challenges have impacted the price of vehicles and associated equipment. While manufacturing capacity has been reduced due to material and shipping factors, the demand side of the market has not changed, as validated by industry contacts and through planned County procurements completed earlier in 2022. Vehicle pricing is increasing and procurement is backlogging due to manufacturing shortages of products available to build vehicles, and pricing of these materials is reaching significant highs due to increased steel prices and general inflation.

Currently, order timelines for all vehicles have been 40 to 60 weeks or longer for delivery, which indicates that orders will not be received in the year they are budgeted for. As unprecedented demand for these Electric vehicles, Plow trucks, Pickup trucks, Vans, Ambulances and SUV's is increasing due to delays in manufacturing, estimated delivery times are increased by suppliers who, in some cases, are extending expected delivery times.

In regards to Paramedic Services, an evaluation of the non-ambulance emergency response vehicles determined that the delay in procurement will not negatively impact the operational needs. However, Paramedic Services has experienced significant delays in the procurement of ambulances for 2022, with expected arrivals delayed into 2023. Therefore, in order to maintain a reliable ambulance fleet, it is recommended that the ordering process for two ambulances be initiated in 2022.

These industry delays are making the early ordering of all vehicles crucial in order to ensure timely deliveries. As Electric ½-Ton pickups are not scheduled to be available until late 2023, it is imperative that the County's order is secured as soon as possible to ensure the delivery of these vehicles in 2024.

Comments

The proposed vehicle replacements identified in this report were selected using analysis based on Vehicle Replacement Rating (VRR) and lifecycle strategies as illustrated in the *Asset Management Plan*. An updated analysis of VRR of the County's entire fleet is completed by staff during each annual budget cycle to validate which vehicles are required to be replaced, and looks for opportunities to extend vehicle life for units that are in better-than-anticipated condition. The VRR takes into account the age of the vehicle, current vehicle mileage and all costs associated with keeping the vehicle in service including repair and maintenance costs, fuel costs, licencing fees and insurance fees. Moreover, as outlined in Report No. [PW 2021-35](#), staff continue to improve fleet utilization by evaluating the demand of vehicles and "right sizing", i.e. reviewing vehicle type with consideration for realistic operational use.

For the purposes of the analysis, mileage projections were used for 2023 and 2024 based on historical vehicle use. Upon completion of Public Works fleet analysis, a total of 35 vehicles were identified to have a projected replacement rating by 2023 (17) or 2024 (18). In addition, Paramedic Services plans to replace two units in 2023. Based on this listing, the vehicle types were reviewed and 12 units were selected in 2023 and 10 units in 2024 as a means to mitigate current procurement risk.

The units proposed to proceed with procurement in 2022 generally have longer lead times or are related to newer EV technologies which are experiencing longer waiting lists. In addition, delivery of cutaway chassis for ambulances have experienced significant delays due to available parts being reallocated and utilized to outfit more commonly-purchased commercial and industrial vehicles. The remaining units will be budgeted and procured in 2023 and 2024 as originally planned.

While a number of these vehicles will leverage alternative fuel sources, this is not possible for all vehicles due to vehicle nature (i.e. ¾-Ton pickups and vans aren't available as EV/HEV), or due to accessibility to fuel (i.e. tandem snow plows based at Highland and Springford Patrol Yards are not close enough to the CNG station in Woodstock). Staff believe it is necessary to proceed with the procurement process in order to mitigate the current industry challenges while properly supporting the County's operational needs.

Currently, approximately 25% of County vehicles in operation use alternative fuel sources. Further to this, the percentage increases to over 31% when factoring in all vehicles that are currently on order or planned to be ordered as part of the 2021/2022 Business Plan. Vehicle alternative fuel sources include Gas/CNG combination, CNG only, Propane only, Electric Vehicle and Hybrid-Electric. As some of the proposed early procurement replacements will be moving from Gas/CNG combination to EV/HEV vehicles, these changes will not impact the total alternative fuel percentage; however, it will result in a significant decrease in green house gas emissions. Including the future proposed procurements outlined in this report, approximately one-third of County fleet vehicles will be converted to green alternative fuel sources.

In order to support the continued transition to a greener fleet – mainly for electric vehicle expansion – charging infrastructure will be vital to success. As a follow up to the early procurement request, staff are reviewing the anticipated charging needs to support the expanding fleet, looking at how existing charging infrastructure will be leveraged, as well as strategic deployment of new units to support the planned EV fleet units. Locations will be selected to optimize overnight charging coupled with high-traffic fast charging options that can be leveraged during business hours as needed. Charging infrastructure will be considered as part of the respective 2023 and 2024 budgets.

With the current industry challenges, there are risks associated with cost increases when trying to purchase in advance. Staff will ensure wording is included in the tender documentation pertaining to this to try and mitigate potential cost increases. However, based on internal experience over the last year, increases may be unavoidable without losing the order, and in addition, the EV ½-Ton pickups have not been released to market and pricing may change. If substantial pricing changes occur with any of these procurements, staff will seek additional Council approval as required.

Conclusions

To align with the County's *Asset Management Plan* and *2021-2025 Green Fleet Plan*, staff is requesting Council approval to proceed with the procurement process to acquire the vehicles as set out in this report to ensure County operations are supported in the coming years.

SIGNATURES

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