

## ADMINISTRATIVE REPORT

Report Date: August 28, 2012  
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Meeting Date: October 30, 2012

TO: Vancouver City Council  
FROM: General Manager of Engineering Services  
SUBJECT: Engineering Services Superintendent Vehicles: Lease Conversions

### **RECOMMENDATION**

- A. THAT Council approve the allocation of \$134,000 from the Truck and Equipment Plant Account for the Engineering Services fleet to purchase four (4) electric sub-compact passenger vehicles to replace existing leased units.
- B. THAT the annual costs of the vehicles, including the asset loan repayment (for the portion funded from the Truck and Equipment Plant Account), be paid through annual charges of \$28,800 with funding to be provided from the existing Engineering Services budget in 2012, and future funding will be managed within the context of the annual budget process.

### **REPORT SUMMARY**

Engineering Services completed a review of Superintendent vehicle use and determined that the Superintendent vehicle fleet could be reduced from 81 to 58 units to support Engineering's Superintendent positions. Of the 58 units remaining, four (4) are leased vehicles. The current annual cost to the City for the leased units is \$38,200. The one-time purchase and outfitting cost (asset cost) will total \$134,000 and will be funded from the Truck and Equipment Plant Account. Over the estimated 10 year lives of the vehicles, the City will realize a positive Net Present Value related to the elimination of the lease payments of approximately \$20,600. Internally, annual budget savings of \$9,400 are achieved by converting these leases to City-owned units. It is recommended that these four (4) leased units be replaced with City-owned units.

### **COUNCIL AUTHORITY/PREVIOUS DECISIONS**

Council approves all expenditures from Reserves, including the Truck and Equipment Plant Account.

Council approves all increases in service levels, including the addition of vehicles and equipment to the fleet.

### ***Background/Context***

In 2010 Engineering Services conducted a review of their Superintendent vehicles to evaluate operational requirements and opportunities for fleet-pooling. In conjunction with the Equipment Services Branch (EQS), the review also looked at opportunities to reduce costs and options for more fuel efficient vehicles.

The Superintendents within Engineering Services require vehicles to carry out their respective work functions. In general, the Superintendents use the vehicles for transportation to oversee their crews at jobsites, to monitor work progress and to transport materials and equipment to their crews as required. At the time the review was initiated there were 81 Superintendents. There are currently 75 Superintendents within Engineering Services.

As a result of the review, which was completed in fall of 2010, the following actions were recommended to support operational requirements, reduce costs, and reduce GHG emissions:

1. Eliminate take home vehicle use.
2. Pool Superintendent vehicles so that the overall number of vehicles used by Superintendents can be reduced from 81 to 58 vehicles.
3. Replace four (4) leased units with City-owned units.

The first two (2) actions have been completed. The elimination of take home vehicle use was finalized beginning in 2011. The pooling and resulting 23 vehicle reduction in Superintendent fleet size was completed in early 2012. These 23 vehicles were either decommissioned and removed from the fleet entirely (17 leased vehicles) or re-allocated from Superintendents to operational crews that required additional vehicles to respond to service level adjustments (6 City-owned vehicles). The effects of these first two (2) recommendations provide overall annual cost savings of \$110,400 through the reduced lease and insurance costs. These savings are summarized in Table 3 in Appendix A. The emissions savings resulting from the changes is estimated at 370 tonnes per year, which is a 3.4% reduction in the Engineering fleet overall. This reduction is primarily a result of eliminating take home vehicle use, as there was no planned reduction in operational use of vehicles, only a reduction in the number of vehicles available for use.

The final action to be completed is to replace four (4) leased units with City-owned units, and is presented here for Council approval. The four (4) leased units currently belong to Streets, Traffic and Electrical Operations.

### ***Strategic Analysis***

Table 1 compares the cost of leasing from external agencies to the proposed City-owned vehicles and shows that owning will result in annual savings of approximately \$9,400.

Table 1 Annual Lease Costs vs. City-Owned Vehicle Costs

Vehicle Number	Lease Vehicle Class	Leased Year	Annual Lease Cost*	Proposed City-Owned Vehicle Class	Annual City-Owned Cost**	Potential Savings Per Year
A5333	AUTO, PASSENGER, COMPACT	2004	\$7,900	AUTO, PASSENGER, SUB-COMPACT, ELECTRIC	\$7,200	\$700
A5501	AUTO, PASSENGER, COMPACT	2008	\$8,800	AUTO, PASSENGER, SUB-COMPACT, ELECTRIC	\$7,200	\$1,600
A5325	AUTO, PASSENGER, MID-SIZE	2004	\$11,200	AUTO, PASSENGER, SUB-COMPACT, ELECTRIC	\$7,200	\$4,000
A5380	AUTO, PASSENGER, COMPACT	2005	\$10,300	AUTO, PASSENGER, SUB-COMPACT, ELECTRIC	\$7,200	\$3,100
<b>Total</b>			<b>\$38,200</b>		<b>\$28,800</b>	<b>\$9,400</b>

\* Annual Lease costs include the lease payment, maintenance, fuel and insurance.

\*\* Annual City-Owned Vehicle costs include the asset loan repayment, maintenance, fuel and insurance.

Engineering Services has an existing lease budget for these vehicles in 2012, and a lease budget has been proposed for 2013. If these vehicles are approved for purchase the lease budget would no longer be provided and a lower City owned vehicle budget would be recommended during future annual budget processes.

With the elimination of the lease costs, the City will realize a positive Net Present Value of approximately \$20,600 over the estimated 10 year life of the vehicles and annual savings of 9,400.

### *Implications/Related Issues/Risk (if applicable)*

#### *Financial*

The cost breakdown of the proposed City-owned units, including the estimated on-time asset costs and annual budget requirements are shown in Table 2.

Table 2. One-Time Asset Costs and Annual Budget Requirement

Current Unit Number	Vehicle Description	Expected Vehicle Life	One-Time Asset Costs	Annual Budget Requirements		
				Asset Loan Repayment	Ongoing Asset Costs	Subtotal
A5333	AUTO, PASSENGER, COMPACT, ELECTRIC	10 years	\$33,500	\$4,300	\$2,900	\$7,200
A5501	AUTO, PASSENGER, COMPACT, ELECTRIC	10 years	\$33,500	\$4,300	\$2,900	\$7,200
A5325	AUTO, PASSENGER, COMPACT, ELECTRIC	10 years	\$33,500	\$4,300	\$2,900	\$7,200
A5380	AUTO, PASSENGER, COMPACT, ELECTRIC	10 years	\$33,500	\$4,300	\$2,900	\$7,200
<b>Total</b>			<b>\$134,000</b>	<b>\$17,200</b>	<b>\$11,600</b>	<b>\$28,800</b>

\*Asset Loan Repayment calculation includes purchase and outfitting costs, plus interest less the anticipated resale based on expected depreciation over the life.

\*\*Ongoing Asset Cost includes insurance, fuel, and maintenance on an annualized basis.

A one-time expenditure of \$134,000 for the four (4) units will be provided from the Truck and Equipment Plant Account. This expenditure will be repaid to the

Truck and Equipment Plant Account over the expected lives of the units through an annual amortized asset loan repayment contribution.

The total annual budget requirement for the four (4) units is estimated to be \$28,800 and includes asset repayment (for the portion funded from the Truck and Equipment Plant Account), maintenance, fuel and insurance. This will be funded using the existing 2012 Engineering Services budget, and future funding will be managed within the context of the annual budget process. The annual budget savings related to the elimination of the lease costs and replacement with the asset loan repayment costs will be \$9,400 and are anticipated to be fully realized in 2013.

### ***Environmental***

All new and replacement equipment in the City fleet go through an environmental and right-sizing review process. This is to ensure that the selected equipment meets the goals of supporting operations, providing best value, and leading the way on sustainable fleet practices.

The options that were considered for these vehicles included gasoline, electric, hybrid gasoline-electric, natural gas, and propane.

An electric vehicle option is recommended for the sub-compact passenger vehicle. The cumulative reduction in GHG by replacing these four (4) leased vehicles with City-owned electric powered units is 11.3 tonnes per year. The total annual cost of the recommended electric powered vehicles will be approximately 5% more than equivalent gasoline powered vehicles. This increase is primarily a result of the increased purchase cost of these vehicles. The electric powered vehicles have significant annual maintenance and fuel savings which offset 95% of the purchase price increase. The City has a contract in place for the purchase of electric vehicles.

### ***CONCLUSION***

There is an on-going need for four (4) Superintendent vehicles in the Engineering Services fleet. It is more economical to purchase City-owned units than it is to continue to lease as there is an estimated savings of \$9,400 that can be realized annually. Therefore, it is recommended that Council authorize the addition of four (4) units to the Engineering Services fleet. The addition of these units requires a funding allocation of \$134,000 from the Truck and Equipment Plant Account. The existing Engineering Services budget will provide the \$28,800 required to cover the total annual asset repayment and on-going asset expenses of the new units in 2012. For future years the overall asset costs will be managed in the context of the annual budget process.

\* \* \* \* \*

Appendix A: Annual Savings Resulting from Fleet Reduction (17 Leased Vehicles)

Table 3: Annual Savings Resulting from Fleet Reductions

Unit Number	Description	Annual Savings*
A5321	Auto, Passenger, Compact	\$ 6,900
A5322	Auto, Passenger, Compact	\$ 6,900
A5323	Auto, Passenger, Compact	\$ 6,900
A5330	Auto, Passenger, Compact	\$ 4,800
A5331	Auto, Passenger, Compact	\$ 4,800
A5409	Auto, Passenger, Compact	\$ 7,300
A5411	Auto, Passenger, Compact	\$ 7,300
A5419	Auto, Passenger, Compact	\$ 6,800
A5420	Auto, Passenger, Compact	\$ 6,800
A5421	Auto, Passenger, Compact	\$ 6,800
A5495	Auto, Passenger, Micro Compact	\$ 5,900
A5515	Auto, Passenger, Micro Compact	\$ 6,500
B5320	Truck, Pickup, Compact, 4x4	\$ 5,700
B5334	Truck, Pickup, Compact, 4x4	\$ 5,700
B5335	Truck, Pickup, Compact, 4x4	\$ 5,700
B5336	Truck, Pickup, Compact, 4x4	\$ 9,900
A5606	Truck, SUV, Compact, 4x4	\$ 5,700
<b>Total</b>		<b>\$ 110,400</b>

\*Annual savings includes lease rate and insurance payments only, as maintenance and fuel are expected to transfer to remaining units.