



CITY OF VANCOUVER

A19

ADMINISTRATIVE REPORT

Report Date: November 28, 2007
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Meeting Date: December 11, 2007

TO: Vancouver City Council

FROM: General Manager of Engineering Services

SUBJECT: Replace Leases with City-Owned Units - Streets Operations Branch

RECOMMENDATION

- A. THAT Council approve the allocation of \$721,100 from the Truck and Equipment Plant Account to add 18 City owned units to the Streets Operations Branch fleet to replace 20 existing leased units.
- B. THAT the capital and operating costs be repaid to the Truck and Equipment Plant Account through annual charges of \$222,300 with funding to be provided from the existing Streets Operations Operating Budget.

COUNCIL POLICY

Council approves 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.

PURPOSE

The purpose of this report is to seek Council approval to replace 20 leased units with 18 City-owned vehicles. These units will be used by the Streets Operations Branch.

BACKGROUND

In response to recommendations from a 2004 Truck & Equipment Rental Audit done by the Internal Audit Group there is an initiative underway by the Equipment Services Branch (EOS) to review all long term leases. The review is based on the operational need for the unit and the cost effectiveness of converting the leases to City owned units. When a review indicates that fleet additions are appropriate, staff will seek approval from Council for these additions.

DISCUSSION

The Streets Operations Branch (Streets Operations) is currently leasing 20 units of various types. These leases were initiated between 2003 and 2007 to accommodate additional staffing as a result of the increasing need for streets services. This increase is due to more construction of underground utilities, a higher demand for asphalt and sidewalk crack sealing and levelling, an increase in smaller paving projects and growth in streets related capital projects.

Streets Operations and EOS completed a review of the Streets Operations fleet requirements and determined that there was an ongoing need for 18 of the 20 leased units and that purchasing these units will be more cost effective than leasing. Detailed descriptions for the vehicle and equipment functions and justifications of the continued use of the required units are listed in Appendix A. The two surplus units will be returned to the leasing agencies.

Currently, the 18 leased units are funded by the Streets Operations Operating Budget and are subsequently charged to various Streets related Capital and Operating Programs. The leased units are also used on Cut Repair Projects which are funded by charging directly to underground utility customers such as Water and Sewer Operation, TELUS, Terasen, Shaw, etc for required street cutting services.

It is proposed that capital and operating expenses for 18 newly purchased units will be funded through existing budgets and revenues within Streets Operations.

SUSTAINABILITY IMPLICATIONS

The operational requirements of the existing 20 leases were assessed to determine the appropriate type and size of vehicles and equipment. As a result, seven of the leased vehicles will be right-sized to smaller and more fuel efficient units and two of the units will not be required.

FINANCIAL IMPLICATIONS

Table 1 lists the 18 leased units proposed to be added to the fleet, the date they were acquired and the associated external lease costs. Also listed in Table 1 are the proposed City-owned units to replace the external leases and the anticipated internal rate for repayment of capital costs.

Approximately \$72,400 can be saved annually by purchasing appropriate City-owned vehicles. Additionally, there will be further savings of \$2,000 in vehicle operating costs as a result of right sizing seven vehicles to more efficient models. Savings in capital and operating cost combined result in a total annual savings of approximately \$74,400.

Approximately \$37,200 of the savings will allow for more work to be accomplished within existing capital budget. An estimated \$18,600 will allow for more maintenance work to be accomplished within existing operating budget. The remaining \$18,600 will contribute towards the Cut Repair Program which will allow Streets Operations to reduce charge out rates to underground utility customers.

Table 1: Vehicle Information and External Lease Rate vs. Internal Capital Rate Comparison

Vehicle Number	Lease Vehicle Class	Leased Since (m/d/yr)	External Lease Rate/Year	Proposed City-Owned Vehicle Class	Internal City Rate/Year (Capital)	Potential Savings Per Year
A5425	Truck, Dump, 1 Yard	10/12/2006	\$16,800	Truck, Dump, 1 Yard	\$11,000	\$5,800
A5426	Truck, Dump, 1 Yard	10/12/2006	\$16,800	Truck, Dump, 1 Yard	\$11,000	\$5,800
A5427	Truck, Dump, 1 Yard	10/25/2006	\$16,800	Truck, Dump, 1 Yard	\$11,000	\$5,800
A5361	Truck, Pickup, Crewcab	4/15/2005	\$8,300	Truck, Pickup, Crewcab	\$5,800	\$2,500
A5384	Truck, Pickup, Crewcab	11/18/2005	\$9,100	Truck, Pickup, Crewcab	\$5,800	\$3,300
6EC08855	Truck, Pickup, Heavy	1/3/2006	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
6EC08858	Truck, Pickup, Heavy	10/23/2006	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
6EC08861	Truck, Pickup, Heavy	12/25/2005	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
6EC08864	Truck, Pickup, Heavy	1/10/2006	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
6ED25657	Truck, Pickup, Heavy	5/30/2005	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
6S668106	Truck, Pickup, Heavy	6/6/2005	\$12,000	Truck, Pickup, Crewcab	\$5,800	\$6,200
A5348	Truck, Pickup, Heavy	2/1/2005	\$9,300	Truck, Pickup, Crewcab	\$5,800	\$3,500
A5351	Truck, Pickup, Light	3/7/2005	\$7,200	Truck, Pickup, Crewcab	\$5,800	\$1,400
A5352	Truck, Pickup, Light	3/7/2005	\$7,200	Truck, Pickup, Crewcab	\$5,800	\$1,400
A5135	Truck, Van, Power Tailgate, Single Axle	3/14/2003	\$9,600	Truck, Van, Power Tailgate, Single Axle	\$8,700	\$900
10055L25603	Trailer, Arrow Board	4/20/2006	\$6,000	Trailer, Arrow Board	\$3,800	\$2,200
A5392	Trailer, Flat Deck, Tandem Axle, Lift Deck	3/3/2006	\$4,900	Trailer, Flat Deck, Tandem Axle, Lift Deck	\$2,600	\$2,300
A5375	Trailer, Tilt, Single Axle	6/16/2005	\$5,100	Trailer, Tilt, Single Axle	\$4,800	\$300
Total			\$189,100		\$116,700	\$72,400

The cost breakdown of the proposed City-owned units, including the estimated one-time capital costs and annual operating costs are shown in Table 2. There will be a one-time charge of \$721,100 for capital costs for the 18 units. The units will cost \$222,300 per year to operate and will be funded by existing Streets Operating Budget.

Table 2: Anticipated Capital and Operating costs for City-Owned Units

Vehicle Number	Proposed City-Owned Vehicle Class	Expected Vehicle Life	One-Time Capital Costs	Annual Rental Rate		
				Capital	Operating	Subtotal
A5425	Truck, Dump, 1 Yard	8 Years	\$66,600	\$11,000	\$10,000	\$21,000
A5426	Truck, Dump, 1 Yard	8 Years	\$66,600	\$11,000	\$10,000	\$21,000
A5427	Truck, Dump, 1 Yard	8 Years	\$66,600	\$11,000	\$10,000	\$21,000
A5361	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
A5384	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6EC08855	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6EC08858	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6EC08861	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6EC08864	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6ED25657	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
6S668106	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
A5348	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
A5351	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
A5352	Truck, Pickup, Crewcab	8 Years	\$37,700	\$5,800	\$5,400	\$11,200
A5135	Truck, Van, Power Tailgate, Single Axle	10 Years	\$59,500	\$8,700	\$8,900	\$17,600
10055L25603	Trailer, Arrow Board	10 Years	\$25,700	\$3,800	\$1,400	\$5,200
A5392	Trailer, Flat Deck, Tandem Axle, Lift Deck	10 Years	\$11,500	\$2,700	\$4,600	\$7,300
A5375	Trailer, Tilt, Single Axle	10 Years	\$9,900	\$4,700	\$1,300	\$6,000
Total			\$721,100	\$116,700	\$105,600	\$222,300

CONCLUSION

There is an ongoing need for 18 units of various types in the Streets Operations fleet. It is more economical to purchase City-owned units than it is to continue to lease as there is an estimated savings of \$74,400 that can be realized annually. Therefore, it is recommended that Council authorize the addition of 18 vehicles to the Streets Operations fleet at a cost of \$721,100 to be funded by the Truck and Equipment Plant Account and that the estimated \$222,300 in operating costs be funded by the existing Streets Operating Budget.

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Appendix A: Vehicle Justifications and Usage

Number of Units	Leased Vehicle Class	Replacement Vehicle Class	Vehicle Justification and Usage
Two (2)	Truck, pickup, crewcab	Truck, pickup, crewcab	<p>Eleven crewcab pickups are required because of an increase in demand for Streets Operations services. Streets Operations is responsible for construction and maintenance of streets, curbs and sidewalks. These activities include cutting, paving, grinding, and compacting of concrete and asphalt, and forming of curbs, gutters and pole bases. Streets Operations also executes specialized streets services as part of Cut Repair Projects which consist of work performed for underground utility customers such as Water and Sewer Operations, TELUS, Shaw, Terasen, etc. There is no budget for these projects because they are self financed by charging a unit rate directly to the utility company for which the work is performed.</p>
Seven (7)	Truck, pickup, heavy	Truck, pickup, crewcab	<p>Since 2004, Streets Operations has seen an increase of:</p> <ul style="list-style-type: none"> ➤ 70% (\$3.5 Million) in Capital Projects, ➤ 27.3% (\$1.5 Million) in Cut Repairs Projects, and ➤ 6.2% (\$0.64 Million) in Maintenance Projects. <p>Streets Operations has vehicles and employees assigned to crews that perform distinct tasks. Crews are formed and the sizes and tasks of the crews are determined on a continuous basis depending on the type of projects.</p>
Two (2)	Truck, pickup, light	Truck, pickup, crewcab	<p>The Streets Operations Branch has grown from approximately 240 full time employees in construction and maintenance in 2004 to approximately 300 full time employees in 2007.</p> <p>With the increase in staffing required to meet service levels, options such as scheduling of shifts to increase utilization of existing vehicles was considered. However, in order to comply with noise bylaws, Streets Operations vehicles and construction equipment are restricted to operate on one shift from 7am to 3pm. It is also difficult to perform street work in limited light. Therefore, new employees cannot be accommodated by the existing vehicles on a different shift.</p> <p>As a result, 11 new light pickup trucks with a crew cab and an 8' long box are required to be added to the Streets Operations fleet to transport the increase in number of staff and materials to worksites. To maximize the performance of these units a crew cab is required to transport 4-5 employees per vehicle. A long box is required to transport lengthy materials like 2x4 studs and PVC piping. Other cargo may include traffic control devices such as cones and barricades, various types of signs and sign mounts, road marking equipment, small amounts of aggregate and concrete or catch basin stones.</p>
Three (3)	Truck, dump, 3 yard	Truck, dump, 1 yard	<p>One yard dump trucks are required to meet the increased demand for construction and maintenance of the City's streets, curbs, and sidewalks.</p> <p>As described above, Streets Operations has seen Capital Projects increase by 70%, Cut Repairs Projects increase by 27%, and Maintenance Project increase by 6.2% since 2004. These three units were leased in 2006 to deal with additional projects. The leased units traveled over 11, 000 km during the past year and the utilization of the leased units was slightly higher than existing units of this vehicle class in the fleet.</p> <p>One yard dump trucks will be used to transport up to one cubic yard of bulk materials such as sand, gravel, and asphalt and have been right sized for their payload requirements. These units are desirable for accessing tight laneways since they are smaller than single and tandem axle dump trucks, and 3 yard dump trucks. The available payload capacity is sufficient and allows Streets Operations to transport material to support smaller job sites. Also, 1 yard dump trucks are the smallest trucks with a configuration suitable to be equipped with salters and plows; therefore, they can also be used as backup vehicles during snow and winter season.</p> <p>Streets Operations has considered their staffing and workload needs and has determined that the addition of these three dump trucks will provide sufficient</p>

			resources for their operations.
One (1)	Truck, van, power tailgate, single axle	Truck, van, power tailgate, single axle	<p>A power tailgate van (cubevan with a power tailgate), is required for the two-man Concrete Grinding Crew (CGC) that was formed in 2005 and the existing Hot Pour Crew (HPC). The CGC performs sidewalk repairs using a new method by grinding the sidewalk flat instead of filling unlevelled sections with asphalt. This repair method has substantially reduced the amount of time spent to level sidewalks. Moreover, it results in more than triple the lifespan of the sidewalk and better esthetics compared to using asphalt to level sidewalks. HPC is responsible for sealing asphalt cracks on City streets.</p> <p>The cubevan was leased to start up the new CGC crew, to study the effectiveness of the new technique of sidewalk repair, and to easily transport and store heavy and expensive hot pour routers and concrete grinders. The unit is also used to transport staff to worksites. Outfitting requirements include lockable storage for expensive tools like concrete grinders, hot pour routers and their replacement parts, a hydraulic lift for easy loading and unloading of stored equipment that can weigh up to 100 kg, and custom shelving to store small replacement parts, hoses, signs, safety equipment, rain gear, and other tools.</p> <p>The cubevan is the only vehicle of its kind in the Streets Operations fleet and is right sized to meet the outfitting and operational requirements. The average annual mileage traveled by this unit over the past two year is 10,000 km which is higher than the average annual mileage traveled by pickup trucks used by other Streets Operations crews.</p>
One (1)	Trailer, arrow board	Trailer, arrow board	<p>Due to the increase in the number and scope of construction projects, an additional arrow board trailer is required in the Streets Operations fleet to warn and redirect traffic on major construction sites.</p> <p>Streets Operations currently utilizes three City owned arrow board trailers and leases additional trailers for short terms as required. In the past, Streets Operations managed on average 3-4 projects simultaneously which has now increased to 5-6. Adding one more arrow board trailer will ensure that the public is safely directed through and around construction sites and will help to ensure the safety of construction and maintenance crews.</p>
One (1)	Trailer, flat deck, tandem axle, lift deck	Trailer, flat deck, tandem axle, lift deck	Streets Operations currently has four double drum ride on rollers of two different sizes for construction and maintenance crews. A trailer is required to transport each of these double rollers to worksites. Currently, Streets Operations has two trailers available to transport two of the double drum ride-on rollers. Two additional trailers are required to transport the other two double drum ride-on rollers.
One (1)	Trailer, tilt, single axle	Trailer, tilt, single axle	The tandem trailer will carry the larger double drum ride-on roller and the single axle tilt trailer will carry the smaller double drum ride-on roller. Each trailer has been right sized to carry the weight of the corresponding double drum ride-on roller.