

2

ACQUISITION OF COMPUTER AND NETWORK COMMUNICATIONS EQUIPMENT

The Finance and Administration Committee recommends the adoption of the recommendations contained in the following report, January 10, 2006, from the Commissioner of Finance:

1. RECOMMENDATIONS

It is recommended that:

1. The Region transition to a purchase option to acquire future computer and network equipment (I.T. equipment).
2. Leasing proposals for I.T. equipment be considered when and if a business case analysis indicates that leasing is clearly more beneficial than purchasing for a particular situation.
3. Capital funds in the amount up to \$1.2M budgeted for the Data Centre Infrastructure project be partially re-allocated as required.

2. PURPOSE

The purpose of this report is:

1. To inform Committee and Council on a review of the current practice of leasing to acquire I.T. equipment.
2. To seek Council approval for the Region to transition to purchasing as the preferred method of financing future acquisitions of I.T. equipment.

3. BACKGROUND

In 2000, Council approved a Technology Life Cycle (TLC) management program and the use of lease financing for the acquisition of computer and network communications equipment. The TLC management program covered the following equipment: desktop and notebook computers and peripheral devices such as monitors and keyboards (collectively referred to as PCs); computers used as servers, plus disk drives and tape devices for servers (collectively referred to as servers); printers - (PCs servers and printers collectively are referred to as computer equipment) - and network devices such as firewalls, routers, switches, hubs, telephone private branch exchanges (PBXs) and voice mail systems (collectively referred to as network equipment).

In August of 2002, Council authorized a 3-year master lease and financing agreement with Hewlett-Packard Financial Services Canada (HPFS) for any subsequent leases. All new acquisitions of I.T. equipment are now done with lease financing through HPFS.

As the term of the HPFS master lease and financing agreement will expire July 31, 2006, the Region is reviewing the need to issue an RFP for a new master lease and financing agreement for I.T. equipment acquisitions versus considering other options.

4. ANALYSIS AND OPTIONS

Many things have changed since the decision was made to lease I.T. equipment. The Region now has several different types of equipment that it can effectively keep for other than a 3 or 5 year life cycle. The present rate of software change, which is a major driver forcing the replacement of computer technology, has slowed. Therefore hardware devices are useable for longer periods of time. Furthermore, the Region experienced favourable lease financing rates over the past few years. Also, vendors indicate that there are now more opportunities in the market place to dispose of purchased equipment at reasonable residual value rates should the needs of the Region change as it grows. The following analysis looks at the current environment and re-examines the leasing versus purchasing alternative.

Leasing provides benefits including:

- Avoiding the use of capital up front for the purchase of I.T. equipment when capital can be better spent on alternative projects.
- Evening out cash flows over the term of the lease.
- Easy disposal since the equipment is returned to the leasing company at the end of the lease term.

However leasing has drawbacks:

- Additional costs if the equipment is kept for either less than or longer than the lease term.
- Unrealized value if the equipment is upgraded or the configuration changed after the start of the lease term.
- Additional charges if the equipment is returned with missing or broken components or with excessive wear and tear.
- Equipment must be replaced at the end of the lease term versus the end of the useful life of the equipment.
- The master lease agreement contains quarterly lease rate review points. When interest rates increase, lease rates can increase as well resulting in increased cost of leasing to the Region.

The purchasing alternative can compensate for these drawbacks.

To review the options of lease versus purchase of I.T. equipment, staff looked at three aspects: the practices of other municipalities; the financial impact; and the operational aspects of lease versus purchase of I.T. equipment.

4.1 Practices of Other Municipalities

During 2005, Information Technology Services staff conducted a survey of other major Canadian municipalities concerning their practices for funding PC's, servers, and printer equipment. Responses were received from thirteen municipalities: nine from Ontario, one from Saskatchewan and three from British Columbia. They are summarized below in Table 1.

Respondents Who Lease Equipment	Respondents who Purchase Equipment	Notes
1 Municipality Leases PC's and servers but purchases printers. 3 Municipalities purchase printers but lease "multi-function" devices that are used as both copiers and printers.	12 Municipalities Purchase PC's, printers and servers.	The length of time that the equipment is kept varies among Municipalities.

Table 1

Respondents provided a number of reasons for their practices. Common themes included having the option to extend the useful life of the device; whether or not favourable leasing terms are available to them; the work required to adhere to the lease terms and conditions for the return of the equipment versus having better control of the utilization of the equipment if it were purchased.

In summary, it appears that the current practice of many municipalities is to move to capital purchase for I.T. equipment rather than lease financing.

4.2 Operational Impacts of Lease versus Purchase

The Region's experience with lease financing of I.T. equipment illustrates the following.

- The Region has entered into lease and financing contracts with leasing companies, typically for a 3-year terms using the tender process. However, because the lease schedules survive the 3-year term, the business relationship with the leasing company can be as long as 9 years. For example, a 5-year lease for servers in the 3rd year of the master lease term extends the relationship with the original leasing company to eight years, even if a new leasing vendor is chosen.
- The Region pays for a repair and maintenance contract for the term of the lease to keep leased equipment in good operating condition. However when broken equipment is returned to the leasing company at the end of the term, out-of-term repairs are being charged to the Region.
- When components of the equipment, such as a PC mouse or key board cannot be located at the end of the lease term, the leasing company charges the Region for replacement of the missing item.

- Keeping the equipment for a shorter or longer term than specified by the lease, because of unforeseen operational reasons, results in additional charges to the Region.
- The Region experiences significant overhead costs managing and administering leasing schedules and invoices. Specifically, they verify finance rate changes quarterly against contract clauses and lease schedules against ordered and installed equipment. Many staff are involved in carrying out the above tasks.
- The Region is identifying new technology life cycles such as a 72-month term for flat panel computer screens. This results in an additional number of lease schedules and additional administration costs.

4.3 Financial Impact of Lease versus Purchases for the Base Model PC that the Region Deploys

The Region leases PC's using operating leases with a three year term. Servers, network equipment and printers are leased for a five year term. Thin client devices are leased for a six year term. At the end of the lease term the equipment is returned to the leasing company. During 2005, staff conducted an analysis comparing leasing costs versus the cost of purchasing PCs and thin client devices, printers and servers. Table 2 below illustrates that purchasing computer equipment result in savings over the term of the Technology Life Cycle compared to continuing to lease I.T. equipment.

Financial Comparison of Purchase versus Lease of I.T. Equipment

	PCs & Thin Clients 3-year term	PCs & Thin Clients 4-year term	Printers 5-year term	Servers 5-yr term
Present Value of Lease Alternative for 1 complete cycle	\$5,900,345	\$6,697,207	\$1,760,269	\$15,825,535
Present Value of Buy Alternative for 1 complete cycle	\$5,731,305	\$6,245,392	\$1,675,253	\$14,442,927
Savings of Purchase vs. Lease per equipment life cycle	\$169,039	\$451,815	\$85,017	\$1,382,608
Average savings of Purchase vs. Lease each year	\$56,346	\$112,954	\$17,003	\$276,522

Table 2

Note: Discount Rate for PV Calculations = 4%

4.4 Summary of Analysis

Purchasing I.T. equipment now appears to consistently benefit the Region to a greater or lesser degree which varies with quantity and type of equipment acquired. In addition to the cost savings shown above, there are additional "soft cost" savings such as the savings in staff time from elimination of the need for lease administration and lease schedule management.

It is possible that in the future there may be occasions where it will be better for the Region to lease - for example when the equipment has a defined life cycle or where it is difficult to dispose of and the Region can negotiate beneficial leasing terms. In such situations it is recommended that staff bring forward proposals to lease such I.T. equipment together with the business case for leasing.

5. FINANCIAL IMPLICATIONS

Lease costs for I.T. equipment leases are paid from the General Capital Reserve. Migrating from lease financing to purchasing will require that the Region fund “cost spikes”. During the transition period from leasing to purchasing, these spikes will put additional pressures on the reserve in 2006, 2007, 2008, 2009 and 2011 as shown in Table 3 below. Leasing payments are discontinued as the transition progresses. The lease payment funds are then “freed-up” and will reduce the pressures on reserves, eventually providing net savings to the Region over the ten year period.

The 2006 equipment purchases can be accommodated through the reallocation of capital funds from the Data Centre Infrastructure project, which will be partially deferred to 2007.

Table 3 below illustrates an annual snap-shot view over a ten year period of the differentials between the cash flow to fund I.T. equipment purchases minus funds freed-up by I.T. equipment coming off lease. Positive numbers indicate that additional funds are required. Numbers in brackets indicate less funding is required. In the early years, most equipment is still on lease. Therefore the need for lease funds from reserves together with the need for purchase funds creates additional pressures. In the later years, most equipment is purchased and the funds freed-up from leasing reduce pressures on General Capital Reserve.

Cash Flow Net Differential								
	<i>Aug 1, 2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012 - 2015</i>	<i>10 Year Totals</i>
PCs, Laptops	\$370,432	\$1,662,484	(\$405,318)	(\$1,642,770)	(\$1,646,815)	\$679,428	(\$3,400,007)	(\$4,328,566)
Thin Clients	\$10,524	\$269,227	\$0	\$0	\$0	\$91,347	\$279,751	\$650,849
Printers	\$350,623	\$16,412	\$302,996	\$204,686	(\$169,875)	(\$734)	(\$255,605)	\$448,503
Servers	\$500,469	\$1,799,600	\$1,382,037	\$2,131,082	(\$830,323)	\$392,505	(\$3,221,313)	\$2,154,057
Annual Totals	\$1,232,048	\$3,747,723	\$1,279,715	\$692,998	(\$2,647,013)	\$1,162,546	(\$6,597,174)	(\$1,129,157)

Table 3

Notes:

PCs are kept for 4-years in the above analysis

The above analysis has no allowance for inflation or equipment price increases.

6. LOCAL MUNICIPAL IMPACT

With purchased equipment, Council has the option to donate equipment that the Region no longer requires to local public service agencies or other charitable organizations.

7. CONCLUSION

The results of the above analysis indicate that today the reasons that favoured leasing in the past have changed. A new policy transitioning to the purchase of I.T. equipment will be cost effective to the Region over time. In addition to significant cost savings, purchasing eliminates some of the staff intensive overheads associated with managing leasing terms while allowing the flexibility to keep equipment for a lifecycle term that suits staff needs of the Region today. Furthermore, decisions on when to replace I.T. equipment will be under control of the Region.

The Senior Management Group has reviewed this report.