



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Date: June 30, 2004
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Meeting Date: July 20, 2004

TO: Vancouver City Council

FROM: Chief Constable
in consultation with the Director of Finance

SUBJECT: Transition of Vancouver Police to Versaterm PoliceCAD®

RECOMMENDATION

THAT Council approve the transition of the Vancouver Police Department from Altaris CAD to Versaterm PoliceCAD® to take advantage of integrated technology for dispatch and records management and of multi-jurisdictional functionality; and that the one-time costs of this transition, estimated to be \$440,000, be provided from funds reserved for Police CAD system implementation.

COMMENTS OF THE CHIEF CONSTABLE

The PRIME-BC vision is for universal police information sharing. Six years ago when E-Comm began a process to select a common CAD system, no one could foresee the drastic technological changes in police information sharing that have occurred, and the impact of PRIME-BC to make real-time information sharing a reality. There was no anticipation of the role of the Internet in the delivery of these services. We recognize that this vision can best be achieved by using one vendor's products exclusively throughout the province as demonstrated by the Capital Regional District system's performance. With this in mind, and the substantial costs of completing and further refining Altaris CAD and its interfaces, there is a strong business case to be made justifying a change to Versaterm PoliceCAD® at the earliest opportunity.

After the recent implementation in the Capital Regional District, the CAD-RMS system worked flawlessly, interfaced fully without middleware, used intuitive commands and delivered on Automatic Vehicle Route Recommendation and Automatic Vehicle Locator. On April 20, 2004 Richmond RCMP became the first agency to implement PoliceCAD® at

E-Comm. There were no technical issues and features worked as specified. Our investigations of other Versaterm CAD-RMS implementations have not identified any performance issues. Supported by the analysis, it is our belief that the resulting Police RMS-CAD system will enhance officer safety and user satisfaction. The system will be more effective in solving crime as a result of the increased information flow and reduced 'work-arounds' currently in place. Adopting an off-the-shelf system will be less costly as we go forward and the vendor's proven responsiveness to user issues and regular upgrades will permit long range strategic system planning.

I recommend that Council support the strategic direction of PRIME-BC. The transition to Versaterm PoliceCAD® is a key to this and should be undertaken at the earliest opportunity to minimize costs. Optimistically, that could occur by November 2004. As our service provider, E-Comm will be advised to cease further development of Altaris CAD to reduce costs and to stabilize and maintain the system until a transition is completed.

CITY MANAGER'S COMMENTS

The City Manager supports the recommendation of the Chief Constable. The tri-service CAD initiative at E-Comm was an innovative attempt to bring dispatch services of the various emergency services together in the hope of achieving service and financial synergies. However, it is clear that the PRIME Corp offer to lower mainland police agencies of a fully integrated but separate police CAD / RMS will mean that the expectation of broad tri-service participation in Altaris CAD will not be realized.

It makes little sense to leave the Vancouver Police Department, the largest municipal force in the province, as the only police agency not on the PRIME Corp system. From the perspective of both service and multi-jurisdictional information sharing, this transition has public safety benefits for the City. Moreover, if this transition is not approved, the City will face significant costs associated with interfacing Altaris CAD, not only with the provincially-mandated PRIME Corp RMS, but with other police related information systems. Vancouver Police will also be faced with carrying all of the costs of maintaining and upgrading the police component of Altaris CAD. On the other hand, the offer of PRIME Corp to pay the capital costs of implementing the new Versaterm PoliceCAD®, as well as the first year licencing and maintenance costs, and the expectation of significantly lower annual costs thereafter, indicate that this transition is possible without costs to the City beyond those we are committed to with Altaris CAD.

The City Manager RECOMMENDS approval of the forgoing.

COUNCIL POLICY

There is no applicable Council policy. Although there are no anticipated financial implications for the City arising from this report, it does represent a significant change in direction for the provision of police dispatch and records management services that are funded by the City.

PURPOSE

The purpose of this report is to seek Council approval for the transition of the Vancouver Police Department from Altaris CAD to Versaterm PoliceCAD®.

BACKGROUND

In 2001, Vancouver Police Department moved to a computer aided dispatch system owned and operated by E-Comm. This system, known as Altaris CAD, was developed as part of the E-Comm initiative to provide integrated computer-aided dispatch service to police, fire and ambulance agencies throughout the lower mainland.

While the concept was that an integrated tri-service CAD system would provide operating synergies among the emergency service organizations, the new system has not attracted users to the extent anticipated. Currently, Vancouver Police, Port Moody Police, Vancouver Fire (along with a number of smaller fire departments outside the lower mainland that were formerly dispatched by Vancouver Fire) and BC Ambulance utilize Altaris CAD. The RCMP continues to use their CIIDS system for dispatch and other municipal police forces have not expressed an interest in joining the system. As a result, the existing user agencies will bear the cost of the Altaris CAD.

Computer-aided dispatch is one component of the systems that support both Police and Fire agencies in their day-to-day operations. The other major system relates to the significant volume of records that each agency require in their operations. At the time Altaris CAD was developed, it was recognized that integrated records management systems would be required for each agency. In fact, one of the conditions that the RCMP attached to joining Altaris CAD was that an integrated RMS system be available.

In 1999, Council approved the participation of the Vancouver Police Department in a pilot project to implement a records management system for police agencies that would be integrated with Altaris CAD. Port Moody Police and Richmond RCMP were also part of the pilot project that became known as PRIME-BC. Although not initially involved in the pilot, the Ministry of the Solicitor General and the BC Chiefs of Police were strong supporters of the project because of the potential to expand the system beyond the lower mainland, creating a multi-jurisdictional information sharing network.

As Altaris CAD did not offer a RMS, the departments, working with E-Comm, selected MacDonald Dettwiler Associates/Versaterm as the RMS supplier. The project went live in January 2001 and Vancouver Police transitioned onto the system in March 2001.

The development of the pilot PRIME-BC RMS was followed closely by the provincial government and, in 2002, the Solicitor General announced that PRIME-BC would be adopted as the provincially mandated RMS for police forces in British Columbia. A new organization - PRIME Corp - was created as a subsidiary to E-Comm to manage this development. Moreover, the province agreed to fund the initial implementation and configuration for the RMS system for all police agencies. Once on the system, each agency is to share in the operating costs of the system through a charge based on sworn strength. Vancouver Police is one of the first police agencies in the lower mainland to move onto the new multi-jurisdictional system, making the transition during July 2004.

In addition to offering to fund the implementation of the RMS system, the province also undertook to move the RCMP from its CIIDS dispatch system to Versaterm PoliceCAD®. At the same time, the province agreed to offer the dispatch system to all policing agencies in BC, including the Vancouver Police Department. Like RMS, the province will pay all of the capital costs of implementing Versaterm PoliceCAD® as well as first year licencing and maintenance costs for those agencies choosing to take advantage of the offer. After the first year, member agencies would pay annual licencing and maintenance fees. Essentially, the PRIME-Corp offer would provide integrated, multi-jurisdictional police CAD and RMS on a province-wide basis.

DISCUSSION

1. Transition to Versaterm PoliceCAD®

This offer from PRIME-Corp is based on the same concept that was adopted in the initial development of E-Comm, however, it is focussed on police agencies only, it provides a fully integrated CAD/RMS solution and the entry costs are being paid by the province. The impact of this on Altaris CAD is that it is now certain that no additional police agencies will be attracted and Vancouver Police Department will be the only police agency remaining on the system.

Altaris CAD is a first-of-its-kind system that was developed exclusively for E-Comm based on the PRC Police CAD system. Because it provides integrated CAD to three separate branches of emergency services - Police, Fire and Ambulance - it is highly customized software making it a very expensive system to operate and support. With the high degree of customization and the myriad of interfaces and security requirements, there are significant risks associated with the stability of its operation and a reluctance by other policing agencies to join the system.

If VPD is to remain on Altaris CAD and also use the provincially-mandated PRIME Corp RMS, interfaces will have to be upgraded between the two systems to ensure the VPD has real time records management and to improve the stability of the Altaris CAD system, resulting in the City incurring additional expenses. Moreover, in the near future, upgrades to the system will be required to link to the upgraded Canadian Police Information Centre (CPIC) system that provides on-line access to criminal record information conservatively estimated at \$150,000. Finally, if VPD remains on the system, E-Comm has concluded that the police component of Altaris CAD should be segregated from the Fire and Ambulance components to ensure that new functionality for these latter agencies, including remote reporting/query through the internet can be provided without consideration of the police security issues.

Vancouver Police have undertaken a review of the Versaterm PoliceCAD® solution and have concluded that it can provide the functionality required at lower cost than the Altaris CAD currently in use. The department reviewed a number of installations in North America, including Tampa Bay, Florida - which handles a call load almost twice the size of Vancouver - Austin, Texas and the recently completed installation of the PRIME-Corp solution in the Capital Regional District on Vancouver Island. Moreover, because it is an off-the-shelf product designed specifically for police use, both uniformed staff and civilian dispatchers found it more intuitive and were able to transition without the level of training required with Altaris CAD.

2. Impact on other Altaris CAD Users

E-Comm and the non-police partners in Altaris CAD - Vancouver Fire Services and the BC Ambulance Service - support separating the police and other components of Altaris CAD. From an operational perspective, a separation would significantly reduce system security costs and permit the use of less expensive Internet technology to connect Fire and Ambulance remote stations. Currently the full network must meet RCMP security standards, which are expensive to implement and maintain and well beyond their needs and often become an obstacle the productivity of Fire and Ambulance services. For E-Comm, the complexity of maintaining and enhancing a tri-agency system and the change management issues that surround it are significant. When one agency makes a change to its system component, the others need to fully test their functionality to make sure it has not been affected. By eliminating Altaris CAD/Versaterm RMS police interface issues and the extensive Altaris CAD customization that currently exists, E-Comm expects a more stable CAD platform for Fire and Ambulance, which will enhance both agency and E-Comm employee satisfaction.

Examination of this issue by E-Comm Technical and Finance staff has resulted in a conclusion that despite initial costs to separate the police and fire systems, that cost is less than maintaining the status quo. Moreover, a separation within the Altaris CAD system is anticipated to cost approximately \$1.1 million, costs that would be borne by the City through its E-Comm requisitions. Moving VPD to Versaterm PoliceCAD® would avoid these costs as well as leave a more stable CAD system for Police and Ambulance.

At present, Vancouver Fire, along with a number of other regional fire services, is looking at developing the required records management system for their service on the same basis as PRIME-BC did for police RMS. One of the options for this transition is to expand the implementation to include a fully integrated Fire CAD system and transition this functionality from Altaris CAD as well. Council will receive a report on this initiative in the near future.

FINANCIAL IMPLICATIONS

1. Costs Associated With Altaris CAD

Table 1 summarizes the current cost related to Altaris CAD for Police.

TABLE 1: Altaris CAD Costs

	One-Time Costs	Annual Costs
Total Altaris CAD capital costs to date	\$14,291,000	\$1,806,300
Annual Altaris CAD Operating Costs		\$1,085,510
VPD Share of Capital Costs (VPD share is approximately 30%)	\$4,287,322	
One-time Exit Costs from Altaris CAD (Capital costs less payments to Dec 2003, plus interest costs)	\$5,147,898	\$541,844
VPD Share of Operating Costs (VPD share is approximately 30%)		\$325,653 ¹
Total Current Annual Costs		\$867,537
Additional Costs for VPD to remain on Altaris CAD:		
▪ GIS costs	\$100,000	
▪ Separate Police server	\$1,105,000 ²	\$143,370

Note 1 As noted above, these represent full cost recovery levies which are currently not in place. However, over the life of Altaris CAD, these costs will have to be recovered from VPD.

Note 2 There has been no decision from E-Comm related to these costs should VPD remain on Altaris CAD, however, the CAD users group believe that separating police CAD from Fire/Ambulance CAD will be necessary to ensure system stability, to address police security concerns and to allow non-police agencies to take advantage of remote access opportunities.

E-Comm has invested approximately \$14.3 million in Altaris CAD to date. Of that investment, the share attributable to Vancouver Police is approximately \$4.3 million. If VPD moves off Altaris CAD, the City (for the Police Board) will continue to be responsible for its share of these costs. Annual cost of this commitment is \$541,844 extending out to 2013 at which time a decision on continuing with Altaris CAD would be made.

If VPD remains on Altaris CAD, additional development and maintenance costs will be incurred. Separating the police CAD component of Altaris CAD to meet operational needs and system integrity will cost approximately \$1.1 million. In addition, an interface will be required to the upgraded CPIC system with costs estimated at \$150,000. These costs will be avoided if the department moves to the Verstatem PoliceCAD® system.

Altaris CAD operating costs in 2004 are \$1,085,510 of which \$325,653 are allocated to Vancouver Police. However, E-Comm has not increased its operating levies to the VPD to this full cost recovery level and a shortfall is being accumulated that will have to be eliminated by increased levies in future years. Moving the VPD off Altaris CAD could mean savings from system operations.

2. Costs Associated with the Transition to Verstaterm PoliceCAD®

As noted above, PRIME-Corp has committed to users that it will pay the implementation costs as well as the costs of installing the servers, first year support and licensing (Appendix 'C').

There are financial and operational advantages for transitioning Vancouver Police to PoliceCAD® at an early stage of the PRIME-BC Project. Vancouver's size and call volume make it easier to implement a system that configures Vancouver's complex data first and then adds smaller agencies. To add Vancouver later introduces a greater risk of data corruption or conflicts with other agencies resulting in additional costs that Vancouver may be required to pay. The additional cost of a delayed transition to Verstaterm PoliceCAD® is anticipated by PRIME Corp staff to be as high as \$325,000.

The City of Vancouver will be expected to pay agency specific costs, such as user equipment, as we do now under the existing E-Comm Members' Agreement. In addition, there will be one-time transition costs for training and hardware/software conversion to the new system. These costs are estimated to be approximately \$440,000 (Table 2).

Table 2: Projected One-time Transition Costs to Verstaterm PoliceCAD®

E-Comm Staff Training Train-the-Trainers is a PRIME-BC covered cost	\$258,300
Cost of converting E-Comm Network and VPD workstations	\$100,000 ¹
Cost of converting VPD CAD workstations	\$1000
VPD Sworn Staff Training (soft cost)	\$33,000
VPD Civilian Staff Training (soft cost)	\$26,500
VPD Training (hard cost – printing, binders etc.)	\$1,300
False Alarm Reduction Program (FARP) Extract	\$5,000
Altaris Data conversion to VPD WebCAD application	\$15,000
Total Projected One-time Change-over Cost	\$439,800

Note 1: These are the costs of separating VPD from Altaris CAD and are a conversion cost that may be paid by PRIME Corp as part of the Verstaterm implementation.

The most significant transition cost will be training for E-Comm staff on the dispatch floor. PoliceCAD® training time is estimated at one day for call-takers and two days for dispatchers. Three training scenarios have been considered with a range of costs from \$258,300 to \$446,000, however, if a decision on a Vancouver transition is made quickly, there will be ample time to notify staff, schedule training and combine Verstaterm PoliceCAD® training with other regularly scheduled training, minimizing these costs. These costs will be billed to the City through E-Comm and will be funded from funds reserved in prior years for Police CAD system implementation.

Based on the experience in the Capital Regional District, training time for sworn officers is estimated to be approximately three hours and can be managed within the departmental training schedule and budget.

As a result of sharing costs among a number of agencies operating on a common platform with shared multi-jurisdictional servers, PoliceCAD® annual operating costs are expected to be significantly lower than those paid to support Altaris CAD (\$134 per officer compared to \$282 per officer). These costs will be levied to Vancouver Police commencing in year two. The net operating savings will be allocated to the retirement of the Altaris CAD capital costs.

3. Project Business Case and Anticipated Impact on Vancouver Levies

Vancouver Police and E-Comm/PRIME Corp staff have reviewed the financial impacts of the transition to Versaterm PoliceCAD® compared to remaining on Altaris CAD. Table 3 summarizes the financial analysis included in Appendix A that indicates a net savings to the City of transitioning to Versaterm PoliceCAD®, even after accounting for the retirement of the Altaris CAD capital costs. These net savings are estimated at \$350,000 by 2007 and will continue in future years. The operating cost savings will be directed to retire the Altaris CAD debt by 2013 as originally scheduled.

Table 3: Summary of Anticipated Cost Savings from Transition to Versaterm PoliceCAD®

Year	Anticipated Cost Savings
2004	\$(339,600) ¹
2005	186,040
2006	248,380
2007	257,060
Total Savings	\$ 351,880

Note 1: Training and other one time transition costs are anticipated to begin in 2004 and may continue into 2005.

These savings result, in part, because users will not be responsible for capital and first year operating costs of the new system and because of significantly lower per officer operating costs of the new system.

E-Comm/PRIME Corp staff have proposed a financial plan that will facilitate the transition of the VPD to Versaterm PoliceCAD® with minimal financial impact on the City's. The intent is to hold the City's net levy for CAD/RMS services to the level that the City is now committed to pay for Altaris CAD and PRIME-BC RMS. Under this plan, the City's can expect to pay increased costs to satisfy its commitments to E-Comm for Altaris CAD and the PRIME-BC pilot project, however, these costs will not be impacted by the move to Versaterm PoliceCAD® and RMS.

To minimize the costs associated with the transition, it is proposed that no further upgrades to Altaris CAD be performed until the Police component has transitioned to the PRIME Corp solution.

CONCLUSION

With the Provincial plan to rollout a common police Records Management System (RMS) and a the offer of a common CAD for police agencies in the province, there is an opportunity to transition the Vancouver Police Department to a system that offers benefits of enhanced officer safety, cross-jurisdictional information sharing, and the ability to better investigate and solve crime. Under the proposal being put forward by PRIME Corp, this transition can take place without the City incurring costs beyond those currently committed to Altaris CAD, without the requirement for the City to fund the additional investment required in Altaris CAD to provide an interface to the provincially mandated records management system and other critical police information systems, and without the need for further systems development work in Altaris CAD.

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**Appendix A- Cost Benefit Analysis
Altaris CAD versus PoliceCAD**

	Altaris CAD				Versaterm PoliceCAD			
	2004	2005	2006	2007	2004	2005	2006	2007
Potential Benefits								
E-Comm Staff time Savings	0	0	0	0	(50,000)	(50,000)	(50,000)	(50,000)
Annual Support Savings	0	0	0	0	(75,480)	(75,480)	(75,480)	(75,480)
Potential Benefit	0	0	0	0	(125,480)	(125,480)	(125,480)	(125,480)
Capital Costs								
Altaris CAD - Capital Cost	541,884	541,884	541,884	541,884	541,884	541,884	541,884	541,884
Police CAD - Capital Costs	-	-	-	-	0	0	0	0
	541,884	541,884	541,884	541,884	541,884	541,884	541,884	541,884
Operating Costs - Annual Levies								
Altaris CAD-E-Comm Operations Budget	108,377	267,161	280,579	294,545	108,377	54,000	-	-
PoliceCAD® E-Comm Operations Budget	-	-	-	-	0	82,000	85,280	88,691
Misc IT Tasks (Adhoc reports/extracts)	-	-	-	-	25,000	25,000	25,000	25,000
PoliceCAD® Annual Licencing Costs								
Workstations	-	-	-	-	-	-	-	-
Maplights	-	-	-	-	0	15,000	15,600	16,224
AVL Mobile	-	-	-	-	0	20,000	20,800	21,632
AVL Mobile/MAPLite Integration	-	-	-	-	0	10,000	10,400	10,816
VPD - IT Workstation	-	-	-	-	600	600	600	600
One-Time Transition Costs								
E-Comm Staff Training	-	-	-	-	258,300	-	-	-
Conversion of Dispatch Workstations	-	-	-	-	100,000	-	-	-
Conversion CAD Workstation	-	-	-	-	400	-	-	-
VPD Staff Training (Officer Soft Cost)	-	-	-	-	33,000	-	-	-
VPD Staff Training (Civilian Soft Cost)	-	-	-	-	26,500	-	-	-
VPD Staff Training (Hard Costs)	-	-	-	-	1,300	-	-	-
FARP Extraction from Police CAD	-	-	-	-	5,000	-	-	-
Altaris CAD Migration to WebCAD	-	-	-	-	15,000	-	-	-
Annual Costs	650,261	809,045	822,463	836,429	1,115,361	748,484	699,564	704,847
Net Costs	650,261	809,045	822,463	836,429	989,881	623,004	574,084	579,367
				Altaris CAD Costs				3,118,198
							PoliceCAD Costs	2,766,336
							Net Savings	(351,862)

PRIME-BC CAD Funding Confirmation Letter

On Province of B.C. Letterhead

December 19, 2003

DCC Jim Chu
Vancouver Police Department
312 Main Street
Vancouver, B.C.

Dear Deputy Chief Chu:

Re: Prime-BC Integrated Versadex PoliceCAD, Lower Mainland Region

I am writing this letter to clarify the position of Prime-BC in relation to providing a PoliceCAD for use by the police departments in the lower mainland. I will also clarify the Province's position relative to the PoliceCAD provided within the Prime-BC project.

At the November 2003 Prime-BC Steering Committee meeting and PrimeCorp meeting, Versadex PoliceCAD was brought within the project scope for the lower mainland. This decision was based on the same business case and operational rationale that provided the same PoliceCAD for use by the CRD police departments. Effectively this decision permits Prime-BC CAD funding to be allocated to the installation and configuration of the server plant, software and support for the Versadex PoliceCAD component for use by all departments in the lower mainland. The server plant hardware, Versadex PoliceCAD software (see attachment "A"), installation costs for the server plant, and first year Versadex warranty and support costs are covered by the project. After the first year of support the costs for the following years will be allocated to the police departments. This follows the same model that was adopted for implementation of Prime-BC RMS. The Province does not provide direct financial support to PoliceCAD for the lower mainland outside of the initial \$14.5 million in Prime funding provided to PrimeCorp.

Police departments would have to manage costs for any hardware and software upgrades that may be necessary within their departments or within EComm. Network costs to connect a police department with the CAD server, training and any other internal organizational change that may have to be implemented to utilize the CAD are a department cost.

The Solicitor General under the Bill 12 amendments to the Police Act may approve or designate "an approved information management system(s)". Work is now underway to designate the Versadex RMS components. At this time we are not planning on designating the Versadex PoliceCAD. The Province's position on the CAD is that it is clear what advantages it provides within the Prime-BC RMS operating environment over other interfaced CADs. This is evidenced by the Prime-BC Steering Committee and PrimeCorp's decision to make it available in the lower mainland. The inclusion of Police CAD within the scope of the lower mainland project provides police departments with the availability of this CAD if they so choose to use it. If a police department does not wish to use this CAD they may interface

their existing CAD to the RMS, but the costs of developing an interface and maintaining the interface is the department's.

I trust this clarifies the status of PoliceCAD in the lower mainland. If you have any questions please do not hesitate to call me.

Sincerely,

Frank Potter
Provincial Project Director Prime-BC
Police Services Division
Ministry of Public Safety & Solicitor General

cc. Kevin Begg, Director PSD
Russ Sanderson, GM PrimeCorp
Insp. Daryl Wiebe, PM Prime-BC

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