City of Richmond

Report to Committee

To:	Community Safety Committee	**Date:**	October 26, 2004
From:	Jim Hancock Senior Director	**File:**	09-5130-01/Vol 01
Re:	**Fire Department Transition/EComm Update**		

Staff Recommendation

That the staff report dated September 30, 2004, regarding Fire Department Transition/EComm Update, from the Managers of Emergency & Environmental Programs and Finance & Administration, be received for information.

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Staff Report

Origin

The dispatch function for Richmond Fire was transitioned to EComm on May 5, 2004. This report provides an update on the fire transition, as well as information regarding the development of a records management system for Fire, and potential changes relating to the dispatch platform (CAD system software).

There have also been developments at EComm with regard to financial issues and this report will provide current information in this regard.

Analysis

1.   **Richmond Fire Dispatch Transition**

The changeover to EComm dispatch for Richmond Fire occurred at 10:45 a.m. on May 5, 2004. A considerable degree of pre-planning work was undertaken to ensure the changeover would be seamless, with no disruption in service to Richmond residents. The decision to transition dispatch services to EComm has proven to be a very positive safety initiative for the City with the following key benefits:

Moved From		*Moved To*
Outdated and archaic systems	⟶	*Modern, dependable and hardened systems*
Multiple calls by dispatchers	⟶	*Automated call out for quicker response times*
Lack of shared information with other agencies	⟶	*Combined events with shared agency information on combined technology platforms*
Liability exposure due to dated systems	⟶	*Secure systems for enhanced response operations and levels of safety to the community*

The downside of moving the dispatch function to EComm is that we lose the local communications centre approach to incident management. However, sound incident management is achieved through the advanced technological benefits the transition to EComm provides, i.e. mapping capability, mobile workstations in fire vehicles, etc. Further, this change has necessitated the broadening of the Battalion Chiefs' role to greater operational focus and awareness, including scheduling/re-positioning of resources, etc. The need for greater focus on operational control will mean that the administrative role for Battalion Chiefs will be reduced.

As projected in our initial staffing assessment, the fire staff complement will be reduced by 5 positions by the end of 2005. These savings were reflected in the original financing plans for EComm.

2.   Fire Records Management System

A user group made up of fire agency representatives from Richmond, Vancouver and Port Moody have been researching various aspects of a fire agency records management function. A considerable degree of work has been done in outlining the operational needs and requirements of such a system. Richmond has fully participated on the user group, as a records management system is a key requirement for Richmond Fire. The current model for tracking Richmond Fire incident information is severely limited as we are operating on a very dated system with technology that can no longer be supported. In addition, the amount of incident information we can track is limited. These concerns will be addressed and incident tracking will be greatly enhanced by a new fire records management system (Fire RMS).

The user group has recommended that the three agencies (Richmond, Vancouver and Port Moody) participate in a shared Fire RMS system that will be integrated with the computer aided dispatch system. This system will also integrate with various City of Richmond databases. A Fire RMS system developed by a local company, FDM, is considered the product best suited to fire needs. This is a proven product that is used extensively in large fire departments throughout Canada and the U.S. The Fire RMS system would be housed and managed by EComm.

The FDM RMS system will include information on incidents, property, inspections, preventative maintenance, equipment, permits, employee scheduling, training and personnel. Having this information properly stored and easily retrievable is critical to effective fire and rescue operations. The RMS will be implemented over a 3-year time frame starting with incidents and inspections in 2005.

The total capital cost of the Fire RMS system is estimated at $361,400 (2004 carryforward of $186,371 and 2005 capital submission of $175,029). The 2005 operating budget submission for Fire RMS levy is $171,500 with an additional level request for the incremental increases. These costs are described further in the Financial Impact section of this report, and have been included in the 2005 Fire Department operating budget submission and 5-year financial plan for Council's consideration. The City of Vancouver is assuming full liability for the Fire RMS system, with Richmond and Port Moody joining as participants and ratepayers. This approach ensures that EComm is not assuming any additional financial liability for the Fire records management function.

3.   Potential Changes to Dispatch Platform

The EComm Board has struck a committee to review issues pertaining to the current software system used for the dispatch function (Altaris CAD). From the outset, this software function had to be customized for police dispatch, resulting in considerable customization costs. We are at a point now where this CAD system is outdated and because the software function is a customized one, upgrades are not readily available. The cost to develop these upgrades is very costly. As a result, a new system for police dispatch (Versaterm) was implemented on a pilot basis for testing by Richmond RCMP. The results of this pilot have been successful, and there is a desire by the police agencies to move to the Versaterm dispatch platform.

This issue presents financial challenges in two aspects. Firstly, the capital cost for the Altaris CAD system has not yet been paid down. Further, there will be significant operational costs for

those agencies remaining on the Altaris CAD dispatch platform when police transition to Versaterm, as there will be fewer payers into the system. Because the system is dated, there is no desire by the remaining agencies to continue with the Altaris CAD dispatch software. Further, the Versaterm dispatch platform (police system) is not a suitable dispatch platform for Fire or Ambulance, due to differing operational requirements, etc. Therefore, research on a different dispatch software system for Fire and Ambulance is now being undertaken.

With respect to the Altaris CAD system, the City of Vancouver police will assume liability for the capital cost portion. Early indications are that costs for a new dispatch software system for Fire agencies will remain relatively in line with current CAD levies. Therefore, we do not expect significant cost increases for a new Fire CAD system. Ambulance may combine with Fire on a new CAD system, or purchase a separate CAD system specific to emergency medical services.

The CAD committee that was struck by the Board will be reviewing and reporting on the operational and financial impacts of these issues.

4.   EComm's Financial Position

A Deficit Reduction Committee was struck by the EComm Board to address on-going concerns regarding EComm's accumulated debt. As at December 31, 2003, EComm's cumulative deficit was $11,417,800, and their long-term debt was $146,155,119. The cumulative deficit is due to funding shortfalls, the costs associated with customizations, lack of appropriate distribution of corporate overhead costs, delays in agencies transitioning to dispatch and an overall lack of committed participants to the dispatch function. Previously, EComm's cash flows were insufficient to pay down the long-term debt as originally anticipated. Therefore, the long-term debt was re-financed and payments to the MFA were delayed pending development of a restructuring plan to match EComm's cash flows. EComm is now in a financial position to make the required debt payments.

In February 2004, the Board approved the recommendations of the Deficit Reduction Committee, which included the following significant changes:

- Not all agencies were paying overhead costs due to previous agreements. The Committee recommended that all agencies be assessed overhead to ensure equitability. This change will generate additional revenues for EComm. Richmond is not impacted by this change as Richmond has paid the overhead costs since joining EComm.
- Capital costs associated with the CAD start-up were being included in the dispatch levy. This cost is more appropriately associated with the radio levy. As a result, the Committee recommended these costs be moved from the dispatch levy to the radio levy. As there is considerable membership in the EComm radio system, the impact of this change will be more broadly distributed.
- Increase in the portion of overhead attributable to the radio model – increased from 30% in 2003, to 35% in 2004 and 40% in 2005.
- An annual 3% inflationary increase in the levy.
- An amount of 1% for working capital will now be collected and accumulated by EComm.

It is expected with these changes that the cumulative deficit will be eliminated by 2015.

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- In 2006, the cumulative deficit will be $21.2 million.
- In 2007, EComm will be operating on a break-even basis, i.e. no longer incurring operating losses.
- By 2015, the cumulative retaining earnings will be $0.

A key assumption in arriving at this break-even scenario was that there would be no significant changes or additional costs incurred by EComm. As noted in Section 3 of this report, a change to the dispatch platform for police is being implemented. This would result in the need to undertake a further detailed review of the financial implications of this change, which could impact the work done by the Deficit Reduction Committee to eliminate the cumulative deficit position currently being experienced by EComm.

At this point, the overall impact of the actions taken by the EComm Board to address the deficit issue is generally positive for Richmond. As a class A shareholder of EComm, we are obligated to share in both funding and ongoing operations and any additional costs related to capital assets. The steps outlined by the Deficit Reduction Committee will significantly reduce our liability in this regard. These changes will, however, result in inflationary cost increases to our annual levies for RCMP and Fire. These estimated costs are explained further in the Financial Impact section of this report.

Financial Impact

The following provides a summary of budgeted and projected costs for participation in the EComm system for Richmond Fire-Rescue and RCMP radio, dispatch services, CAD and records management system (RMS) levies. These costs include not only EComm charges, but also City costs that are related to the EComm function.

FIRE-RESCUE

Contracts: EComm Levy	2004 Projected Actual EComm Costs	2004 EComm Budget[1] (per City 5 year plan)	2005 Projected EComm Costs	2006 Projected EComm Costs
Radio & User Equipment levy (including Fire Hall Alerting)	$447,428	$460,059	$480,930	$483,213
Dispatch levy	$140,950	$187,115	$221,991	$233,091
CAD levy	$11,560	$18,419	$19,768	$20,756
RMS levy *	$0	$133,000	$210,137	$268,879
Total EComm Costs	$599,938	$798,593	$932,826	$1,005,939

* The RMS levy is the total operating costs, inclusive of the additional level submission. The Fire-Rescue RMS also has a capital budget impact (2004 carryforward of $186,371 for phase 1 of the RMS and 2005 Capital Plan submission includes $175,029 for phase 2 of the RMS project).

Other City Costs	2004 Projected Actual City Costs	2004 City Budget[1] (per City 5 year plan)	2005 Projected City Costs	2006 Projected City Costs
Radio repairs & maintenance	$44,247	$44,247	$45,132	$46,035
IT Support (RMS)	$33,500	$33,500	$83,750	$85,425
Dispatch Firefighters	$397,094	$395,936	$321,777	$0
City Reduction		(45,540)		
Total City Costs	$474,841	$428,143	$450,659	$131,460

Total EComm & City Costs	$1,074,779	$1,226,736	$1,383,485	$1,137,399

1 Source: EComm Levy Estimates, Richmond Fire-Rescue, 5-Year Preliminary Projections 2005 – 2009, May 20, 2004 and City of Richmond Summary of Total EComm Charges, June 4, 2004.

RCMP

EComm Costs (Direct from EComm)	2004 Projected Actual EComm Costs	2004 EComm Budget[2] (per City 5 year plan)	2005 Projected EComm Costs	2006 Projected EComm Costs
Radio building levy	$69,270	$68,775	$72,041	$74,922
Dispatch levy	$1,624,230	$1,490,170	$1,798,023	$1,941,864
Total EComm Costs	$1,693,500	$1,558,945	$1,870,064	$2,016,786

'E' Division flow-through of EComm costs (@ 90%)	2004 Projected Actual RCMP/EComm Costs	2004 City Budget[2] (per City 5 year plan)	2005 Projected City Costs	2006 Projected City Costs
Radio & User Equipment	$547,944	$547,944	$570,957	$586,308
CAD	$22,379	$22,379	$16,200	$16,848
Mobile Workstations (@90%)	$276,577	$276,577	$278,796	$278,796
RMS (@90%)	$126,270	$126,270	$137,003	$148,648
Total Richmond City Costs	$973,170	$973,170	$1,002,956	$1,030,600

City Costs	2004 Projected Actual City Costs	2004 City Budget[2] (per City 5 year plan)	2005 Projected City Costs	2006 Projected City Costs
Front Counter/Switchboard	$492,700	$492,700	$499,400	$511,885

Total EComm & City Costs	$3,159,370	$3,024,815	$3,372,420	$3,559,271

[2]Source: EComm Levy Estimates, Richmond RCMP, 5-Year Preliminary Projections 2005 – 2009, May 20, 2004
and City of Richmond Summary of Total EComm Charges, June 4, 2004.

RCMP & FIRE-RESCUE SUMMARY

RCMP & FIRE	2004 Projected Actual City Costs	2004 City Budget (per City 5 year plan)	2005 City Projected Costs	2006 City Projected Costs
Total Richmond City & EComm Costs	$4,234,149	$4,251,551	$4,755,905	$4,696,670

Based on the financial data above, the 2004 projected actual costs are expected to exceed the 2004 approved budget by $17,402 (0.4%). Staff have reviewed this issue and determined that there is sufficient funding in other cost centres within protective services to cover the over-expenditure for all costs in 2004.

Projected EComm-related operating and capital costs for 2005 will be brought forward for Council's consideration as part of the 2005 budget submission and 5-year plan process. With Council's approval, it is anticipated that the Fire RMS capital outlay will be $361,400 (2004 carryforward of $186,371 and 2005 capital budget of $175,029). An additional level request relating to the increased operating Fire RMS costs will be brought forward for Council's consideration also.
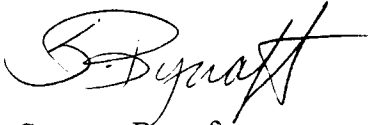
Conclusion

While the transition to the EComm system has been a long and intense process, it represents an enhanced service to the community through better opportunities for information sharing and communications between agencies, standardized response protocols, improved response times and the capability to manage combined events in a more cohesive manner.

The radio system has been successful, with 17 participants, including police and fire agencies as well as BC Ambulance. Richmond is spearheading an initiative to develop protocols for inter-agency interoperability, which is the next step in achieving the overall vision of the radio system. In regard to the dispatch function, Richmond was at a state where new systems were required and we would have had to purchase our own, independent systems had the opportunity to join EComm not presented itself. The cost to purchase and implement an independent dispatch and records management system for Richmond RCMP and Richmond Fire were estimated in a July 22, 2002 staff report to Council to be significantly higher than joining the EComm system -- $7,403,717 for a combined, independent dispatch/records management system compared to those costs as highlighted in the Financial Impact section – an estimated savings of $3 million.

In addition, Richmond has the added benefit of a very robust system that is secured, and designed to continue operations in a major emergency or disaster situation.

Recent actions by the EComm Board to reduce EComm's deficit position should prove effective over the longer term, and reduce the degree of liability for Richmond as an EComm member. Richmond is represented on the EComm Board, the EComm Governance and Audit Committees by Councillor Kumagai.

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