



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** January 26, 2009
From: Robert Gonzalez, P.Eng. **File:** 10-6000-01/2008-Vol 01
 General Manager, Engineering and Public Works

Alan Cameron
 Director of Information Technology

Re: **Integrated Telecommunications Network Strategy**

Staff Recommendation

1. That staff defer further independent work about researching partnering with private WiFi providers to deploy a City WiFi network; and
2. That staff issue a Request for Interest to ascertain the potential of vendors to use City-owned infrastructure to provide their telecommunication services to the community; and
3. That the vision and goals that provide the conditions that support an open, market-driven, competitive environment as detailed in this report be adopted as the basis for the Integrated Telecommunications Network strategic plan.

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CONCURRENCE OF GENERAL MANAGER		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> <i>AK</i>	NO <input type="checkbox"/>
REVIEWED BY CAO <i>ACTING Mike Kint</i>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Staff Report

Origin

On November 27, 2006, Council approved the following resolution:

1. *That staff develop an integrated telecommunication strategy for the City; and*
2. *That upon completion of the telecommunication strategy, a public request for expressions of interest be issued for interested proponents.*

The purpose of this report is to:

- Inform Council about the findings of the research into the City partnering with WiFi providers to establish a City WiFi network, and to recommend that staff defer any further independent work in this initiative;
- Recommend issuing a Request for Interest to ascertain the vendor interest of using city-owned infrastructure to deliver telecommunication services to the community;
- Recommend a vision and the goals, which will subsequently form the basis of the Integrated Telecommunications Network (ITN) strategic plan prior to incorporating any feedback from the Request for Interest.

City Partnering With A Private Vendor To Build And Deploy A City WiFi Network

The direction to develop an ITN strategy for the City came about as a direct result of private companies approaching the City proposing a WiFi network partnership at no cost to the City. Staff engaged the private companies in discussion while concurrently pursuing the ITN strategy work. With respect to WiFi, it has become apparent that the *build it and they will come* business model previously adopted by vendors for WiFi networks in various communities has been abandoned of late. This understanding has been further confirmed by the results of an extensive Request For Expressions Of Interest issued by the City of Vancouver. The City of Vancouver, at that point, decided to halt any further work on partnering with a private vendor to deploy a WiFi network after proposals indicated that either significant cost or unacceptable business risk would be involved. However, earlier this year, the City of Vancouver issued another Request For Expressions Of Interest for a partner to build a city WiFi network.

In light of the above findings by the City of Vancouver and the fact that the City of Richmond has few business processes that are ready to benefit from a WiFi network it is recommended that City staff defer further independent work about researching deploying a City WiFi network, and await any interest shown by respondents to the RFI recommended herein (see below).

Integrated Telecommunication Network Strategic Plan

The vision for the ITN may be affected by the vendor community's interest in providing telecommunication services using City-owned infrastructure. Therefore, it is recommended that staff issue a Request for Interest (RFI) to ascertain that vendor interest. For example, vendors would be able to help identify the commercial viability of the City leasing infrastructure, such as conduit and fibre, the locations they would want included in any eventual plan, and the types of services that they might envisage providing.

In the meantime, staff would continue to work on developing a draft ITN strategic plan as it is understood that the underlying vision and goals should directly support the City's current vision to be the most appealing, liveable and well-managed community in Canada.

Telecommunication is, however, a broad subject and Council therefore has a broad choice when determining the vision for the ITN. A range of choices is described below and understanding Council's current direction about the ITN is both fundamental to this work and to being able to develop an effective RFI.

(Any future work involving implementing the ITN strategic plan will be linked to funding so that Council can fully understand the implications prior to proceeding).

Integrated Telecommunications Network - Vision:

1. Status Quo: Continue to focus on City operational requirements only.

Continue to develop telecommunication to cost-effectively meet the needs of the City's operations. This vision does not help develop the conditions that support any community need there might be for cost-effective telecommunication.

2. Provide the conditions that support an open, market-driven, competitive environment. (Recommended.)

There is a range of initiatives that the City could undertake to develop this model. For example, the City could:

- Include communication conduit in both new developments and remedial infrastructure work to facilitate vendors who may wish to provide fibre to areas of Richmond, such as Crestwood. (The majority of the cost of laying fibre is incurred in the construction work and not in the cost of the conduit or the fibre. Taking advantage of scheduled construction significantly reduces the cost of laying the communication conduit.)
- Identify areas of Richmond that would benefit from fibre for high-speed communications, lay new conduit as described above, deploy fibre and lease the fibre to vendors.
- Implement Fibre-to-the-Home (FTTH). This essentially removes the barrier to increased vendor competition in the provision of services such as telephone, cable TV, Internet connectivity and video on demand.
- Partner with a vendor to deploy a City WiFi network.

The aforementioned recommended RFI would help establish more fully the range of potential initiatives that this vision could stimulate. As an example, Council supported an agreement with Bell Canada in late 2008, which facilitated high speed fibre telecom services to a building at 11411 No. 5 Road. This initiative utilized existing City infrastructure, guaranteed new revenue and facilitated new services to a new tenant in an existing building.

3. Become a telecommunication provider competing with the private sector.

Supplying telecommunication services as a core service would detract from our current core services, or would require additional staffing and capital to support new infrastructure. The City of Vancouver, as an example, has already determined that it will not compete with the private sector in the provision of telecommunication services.

Integrated Telecommunications Network - Goals:

The goals described in this report are typical of ITN strategies. The recommended ITN Strategy Goals are:

Community:

- Enabling business and community access to affordable Internet;
- Enabling low income residents' access to affordable Internet;
- Improving cellular communication availability;
- Improving mobile availability of Internet access;
- Enabling a competitive environment that results in a broad choice of Internet delivered services to the community.

City Operations:

- Improving the delivery and efficiency of Municipal services, for example, enabling coordinated and converged telecommunications, including IT network services, Traffic services, telephone, collaboration, SCADA, emergency services, and security systems (not those served by E-Comm or those for the RCMP);
- Improving the delivery of emergency operation services (not those served by E-Comm or those for the RCMP);
- Reducing City unit cost of telecommunication provision.

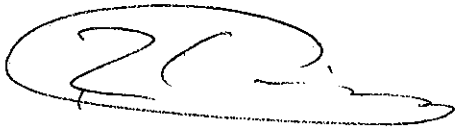
Financial Impact

There is no financial impact to proceed with recommendations of this report. Staff will report back with the RFI findings and costs associated with any proposed services for Council consideration.

Conclusion

Staff have entertained various proposals from private sector WiFi providers and there has been limited value given the costs and range of services.

There are potentially further community wide opportunities, however, that staff recommend exploring through a more comprehensive Integrated Telecommunication Network Strategy that addresses community and market needs and potentially makes better use of existing infrastructure.



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