



STAFF REPORT ACTION REQUIRED

The Management of Information Technology Projects – Opportunities for Improvement, Toronto Transit Commission

Date:	January 14, 2008
To:	TTC Audit Committee
From:	Jeff Griffiths, Auditor General
Wards:	All
Reference Number:	

SUMMARY

The objective of our audit was to review Toronto Transit Commission practices related to the development, management and implementation of information technology projects in order to identify opportunities for improvement as well as cost savings.

The key message conveyed in this report relates to the need to coordinate information technology issues with the City. The City's recent restructuring of its information technology management process and the hiring of a Chief Information Officer with overall City responsibilities provides an opportunity for the TTC to develop closer information technology relationships with the City.

This report contains 15 recommendations. The implementation of these recommendations will improve the management of information technology projects at the TTC and provide opportunities for cost savings.

RECOMMENDATIONS

The Auditor General recommends that:

1. The Chief General Manager of the TTC and the City Manager be required to develop a formal working protocol on all issues relating to Information Technology. Such a protocol to include ongoing communication and collaboration, the sharing of information technology systems and software licenses, the development of new systems, the acquisition of new systems and the sharing of resources including staff and consulting services.

2. The Chief General Manager of the TTC, during any preliminary deliberations relating to Information Technology development and acquisitions, consult on a priority basis with the Deputy City Manager and Chief Financial Officer at the City in order to determine whether or not there are opportunities to take advantage of available SAP applications. Further, the City and the TTC ensure that the benefits and advantages accruing to the City as a result of the establishment of the SAP Competency Centre are shared with the TTC.
3. The Chief General Manager of the TTC develop a formal process for the review and follow-up of recommendations made by the Auditor General. Such a process to take into consideration the review of audit reports relating to City Divisions and its Agencies, Boards and Commissions. Further, the Chief General Manager of the TTC review all audit reports previously issued by the Auditor General pertaining to information technology issues in order to ensure that all appropriate recommendations which may have relevance to the TTC are implemented.
4. The Chief General Manager develop detailed guidelines or criteria relating to the two-step approval process for the development of large information technology projects. The Chief General Manager ensure that business cases for all proposed information technology projects are prepared in accordance with the two-step TTC approval policy.
5. The Chief Information Officer at the TTC, in consultation with the Chief Information Officer at the City, develop guidelines, including specific templates for the development of comprehensive business cases for all information technology projects. Information Technology projects not be considered or initiated unless detailed business cases have been prepared, evaluated in detail and approved by senior management. Approval for all such business cases should be in writing.
6. The Chief Information Officer review detailed cost estimates for information technology projects for accuracy and reasonableness prior to submission to the Technology Advisory Council. Such a review be clearly documented and approved.
7. The Chief Information Officer, in approving information technology projects, develop and establish separate budgets for sub-projects within each large information technology project. Such a process will ensure that costs are more easily managed and controlled.
8. The Chief Information Officer identify areas where the Information Technology Services Department has skill shortages or insufficient staff resulting in repetitive and extensive long-term use of consultants:
 - a. present the appropriate business cases justifying meeting long-term operational demands by increasing staffing levels, such increases to be

financed by the transfer of funds from consulting budgets to salaries and wages budgets;

- b. where possible, ensure sufficient TTC staff are trained in skills required frequently and on a long-term basis, thus reducing the TTC reliance on contractors to perform such duties; and
 - c. ensure that the continuous operation of critical management information systems is not dependant upon a single individual or small groups of consultants.
9. The Chief Information Officer ensure that measurable deliverables, standards, acceptance and payment criteria are included in all consultant contracts. Invoices not be paid unless they contain an adequate level of information to support such payment. Standard consultant contracts in place at the City be used as a guideline in developing contracts at the TTC.
 10. The Chief Information Officer, in consultation with the City's Chief Information Officer, establish minimum documentation standards required in support of information technology projects.
 11. The Chief General Manager review the role and mandate of the Technology Advisory Council, particularly in relation to monitoring of the ongoing progress of major technology projects. The Technology Advisory Council be required to review the progress of information technology projects in terms of costs and completion dates.
 12. The Chief Information Officer review the Project Management Framework to ensure Project Status Reports provide a comparison of actual costs with original estimated costs and timelines.
 13. The Technology Advisory Council periodically report to the General Manager on major information technology projects and related information technology priorities. The reporting process for each project should at a minimum include:
 - a detailed description of each large information technology project;
 - progress to date;
 - budget and milestones, including historical budget information;
 - return on investment; and
 - related performance measures.

Consideration be given to initiating a similar reporting process to the Commission.

14. The Chief Information Officer review and update the Project Management Manual to ensure existing project management processes, procedures and

templates are relevant and applicable to the TTC's information technology environment. Periodic updates should be undertaken to ensure procedures are complete, current and consistent with industry best practices. Consultations be held with the Chief Information Officer at the City in connection with the review and update of the Project Management Manual.

15. The Chief Information Officer ensure that, subsequent to the completion of all information technology projects, final "close-out" reports are submitted to the Chief General Manager through the Technology Advisory Council. Such reports to include a comparison of original cost estimates, benefits and timelines to actual results. Further, the Chief Information Officer, upon completion of a project, ensure that consultants' performance is documented and made available to all appropriate staff including those at the City.

FINANCIAL IMPACT

The implementation of recommendations in this report will improve financial controls over the management of information technology projects at the Toronto Transit Commission. The extent of any resources required or potential cost savings resulting from implementing the recommendations in this report is not determinable at this time.

DECISION HISTORY

This review was conducted as part of the Auditor General's Annual Work Plan and was conducted in accordance with generally accepted government auditing standards.

COMMENTS

The Auditor General's report entitled "The Management of Information Technology Projects – Opportunities for Improvement, Toronto Transit Commission" contains 15 recommendations and is attached as Appendix 1. Management's response to each of the recommendations contained in this report is attached as Appendix 2.

CONTACT

Alan Ash, Director, Auditor General's Office
Tel: 416-392-8476, Fax: 416-392-3754, E-mail: aash@toronto.ca

Ben Smid, Senior Audit Manager, Auditor General's Office
Tel: 416-392-8478, Fax: 416-392-3754, E-mail: bsmid@toronto.ca

SIGNATURE

Jeffrey Griffiths, Auditor General

ATTACHMENTS

- Appendix 1: The Management of Information Technology Projects – Opportunities for Improvement, Toronto Transit Commission

- Appendix 2: Management’s Response to the Auditor General’s Review of The Management of Information Technology Projects – Opportunities for Improvement, Toronto Transit Commission