

# APPENDIX 1

## REVIEW OF INFORMATION TECHNOLOGY TRAINING

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Auditor General's Office

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## EXECUTIVE SUMMARY

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*City's workforce represents almost 50% of the City's operating budget*

Labour costs account for almost 50 per cent of the City's operating budget. Staff training and education is one of a number of actions the City can take to improve and maximize staff potential.

*City Council recognizes the importance of training and development*

City Council recognized the importance of training and development programs to ensure the City's future when it endorsed the People Strategy in 2003. Staff development and training are also a priority to management as the City faces current and future challenges dealing with a mature workforce, skill shortages, a decreasing current and future labour supply and a diverse and multi-generational workforce.

*The City has implemented the Toronto Public Service People Plan*

In response to these challenges management implemented a Toronto Public Service People Plan for 2008 to 2011. One of the overarching goals of the People Plan is for the City to be "a learning organization". The Plan includes the following four objectives:

- increase support for divisional learning activities and Corporate programs
- support employee training and development with Corporate learning policies and programs
- ensure employees feel valued, recognized and connected to the organization
- ensure supervisors understand and apply key legislation and policies

*Training is a shared responsibility involving the employee and all levels of management*

Training employees of the Toronto Public Service is a shared responsibility involving the employee, employee managers and senior Corporate management. The City's commitment to maintaining a competent workforce requires employee willingness to receive training, identification of specific skills and knowledge required of employees, preparing annual training plans, and funding programs to reduce knowledge and skill gaps.

As part of this shared responsibility the Information and Technology Division delivers training to help meet information technology training needs identified by employees and division management.

***Review addresses whether training activities by the Information and Technology Division are relevant, effective and carried out in a cost effective manner***

The Auditor General's Office performed this review to determine if training services delivered by the Information and Technology Division are relevant, effective, and efficient. We identified opportunities to improve general oversight, administrative efficiency and cost effectiveness in the delivery of information technology training and education.

For the Toronto Public Service to continue its leadership role in the municipal arena and remain a high performance workforce it is essential that City employees are appropriately, effectively and efficiently trained. This is particularly important in the information technology area where new technology solutions are introduced on a regular basis.

Recommendations included in this report may be relevant to the City's Agencies, Boards, Commissions and Corporations and should be reviewed, evaluated and implemented as deemed appropriate.

***Issues identified in previous audit report***

In 2006 the Auditor General issued a report related to training at the Toronto Police Service. Certain issues in that report such as use of performance standards, measuring the effectiveness of training programs, expanding the use of the City's Human Resource Information System, and ensuring divisional training needs of divisions are met also appear in this report.

### **Key Findings**

***The Information and Technology Division is in the process of implementing changes***

The Information and Technology Division continues to implement changes as a result of the 2006 Information and Technology Governance and Organizational Design Review. These include changes in how training and education services are delivered by the Information and Technology Division.

***Issues identified in our review***

The issues identified in our review pertain to the following:

- Developing common computer skills
- More effective use of trainer time
- Evaluating the effectiveness of training
- Implementing a charge-back for “No Shows”
- Implementing performance measures
- Preparation of learning plans
- Centralizing employee training records

The recommendations contained in this report are directed to the Chief Information Officer but a partnership with the Human Resources Division is required. This partnership is consistent with the mandate accorded the Information and Technology Division as a result of the 2006 Information and Technology Governance and Organizational Design Review.

***Improvement in management practices is warranted***

Implementation of the seven recommendations provided in this report will strengthen the overall effectiveness and efficiency of information technology training and education provided to City employees.

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## **BACKGROUND**

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***City workforce represents significant amount of the City’s operating budget***

Labour costs account for a significant amount of the City’s operating budget. Changes in information technology occur at a rapid pace requiring staff to continually update computer skills and knowledge.

The Auditor General’s 2008 work plan included a review of training and education services provided by the Information and Technology Division to meet staff information technology training needs. The project was deferred to 2009 in order to provide management with time to implement training related aspects of the 2006 Information and Technology Governance and Organization Design Review.

***Council endorsed the City “People Strategy”***

In 2003 Council endorsed the “People Strategy” and in September 2008 Council also adopted the Toronto Public Service People Plan. The City’s Human Resource Development Program follows an integrated approach involving formal learning, networks and relationships, and on the job learning. This is a blended approach incorporating education, experience and exposure.

***The Human Resources Division provides strategic direction***

The Human Resources Division is responsible for developing the overall learning or training strategy for City staff. The Division is also accountable for delivery of programs such as ethics, human rights, health and safety, labour relations and executive development. Certain City division staff serve in a training capacity because they have relevant expertise. The Information and Technology Division is one such division. The 2006 Information and Technology Governance and Organizational Review placed accountability for supporting City information technology training needs with the Information and Technology Division.

***Operational highlights***

The Training and Education Unit in the Information and Technology Division is responsible for providing employee training and education that ensures City strategic objectives are supported. The Unit operates with a budget of approximately \$1.2 million and 12 staff members providing a wide variety of computer training to City employees.

The roles and responsibilities of the Information and Technology Training and Education Unit include:

- identification of information and technology training and education needs
- provide business application specific training required by divisions
- development and implementation of a training and education strategy to leverage information and technology training resources
- research and development of appropriate curricula, training methods, coordination of delivery of information technology education and training
- evaluating methods, content and delivery of information technology training received.

***Controls should be in place to ensure training is effective, relevant and cost effective***

Controls should be in place to ensure training is effective, relevant and cost effective. Training services should:

- meet current or future needs
- use effective methods
- use training resources efficiently
- provide anticipated benefits.

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## AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

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***Audit Objective***

The objective of the audit was to review training activities provided by the Information and Technology Division to identify opportunities for improving the management, administration and effectiveness of training services provided by the Division. Specifically the review was to determine if information technology training provided is relevant and delivered in a cost effective manner.

***Audit Methodology***

Our methodology included the following:

- review of related reports
- examination of documents and records
- review of processes and management practices
- interviews with relevant City staff
- review of training activity from January 2006 through March 2009
- other procedures deemed appropriate.

***Compliance with government auditing standards***

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence that provides a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



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## AUDIT RESULTS

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### 1. Need to Develop Common Computer Skills

*Training employees is a shared responsibility*

Training City employees is a shared responsibility involving the employee, the employee's manager and senior corporate management. The City's People Plan Strategy states "*identifying common skills which apply to jobs across all divisions, for example; computer skills.*" The Plan also states that identifying common employee skills is a Corporate responsibility.

The City has yet to identify the common information technology skills required of new and current City employees. Examples of common computer skills include the City's Microsoft Office Suite, email system, and web navigation skills.

*Initiative to identify common computer skills a City employee should possess has not been developed*

The Human Resources Division continues to play a key role in building competencies, leading Corporate learning initiatives and providing consulting services related to Corporate change initiatives. However, a process needs to be established for divisions to identify and communicate training requirements to the Information Technology Division. Such a process will facilitate development of a learning approach consistent with the City's overall learning strategy and program goals. The Division should be more proactive in identifying common required computer skills.

#### **Recommendation:**

- 1. The Chief Information Officer in consultation with the Executive Director, Human Resources Division take steps in accordance with the "People Plan" to identify common computer skills which apply to "jobs across all divisions" to assist in the development of a training program for new and current employees.**

## 2. City Divisions Should Prepare Learning Plans Required by the “People Plan”

*City “People Plan” requires divisions to prepare learning plans. Only a small number of divisions have developed formal learning plans*

The City’s “People Plan” requires divisions to develop learning plans based on emerging technology. According to management, few divisions are preparing formal learning plans. Current technical training needs are determined through informal relationships with divisions. Training needs established on an informal basis may distract from other more relevant training requirements and result in required training not being available due to financial or resource restraints.

*Training efforts should be linked to division programs and goals*

City information technology training and development courses should be linked to divisional program goals and services. As City programs and goals are varied, diverse and geographically dispersed, the challenge is to identify training that satisfies the demands of City divisions.

Preparing formal learning plans will help ensure Information and Technology Division training and development efforts are directly related to City programs and services.

### **Recommendation:**

- 2. The City Manager ensure divisional learning plans are prepared as required by the City “People Plan” and submitted to the Information and Technology Division.**

## 3. Need to Evaluate Effectiveness of Training

*Considerable resources expended to train employees*

Considerable amounts of money, time and resources are dedicated to training City employees. Such effort is only worthwhile if training can be shown to have a positive effect on the individual workplace performance, division operations and ultimately on the delivery of City services to the public.

*Indicators of training effectiveness limited to course evaluations*

Current evaluation of effectiveness of information technology training is generally focused on immediate feedback of participants on each training course. Minimal evaluation is conducted to assess whether or not training has had an impact on how employees perform their tasks.

***Evaluation of training effectiveness is needed***

In view of the investment in training at the City, it is extremely important to ensure that not only information technology training but all training meets the City's objectives. The fact that an evaluation process may be difficult does not absolve divisions from conducting such evaluations. Evaluation processes already implemented in other organizations, such as the Toronto Police Services, should be reviewed and where appropriate adopted.

**Recommendation:**

- 3. The City Manager review the evaluation process relating to the effectiveness of Information and Technology training particularly in regards to the impact of enterprise-wide information and technology training for on-the-job performance as well as its impact on the City as a whole.**

**4. Need to Implement Performance Measures and Monitor Results**

***IT training performance measures do not exist***

Performance measures related to the Information Technology Training and Education Unit do not exist. Performance measures assist in managing and monitoring effectiveness and provide information for making adjustments that improve training quality and efficiency.

***Little change in course curriculum over the past 3 years***

During the period from 2006 to 2008 there has been little change in the number of information technology related courses offered to City employees. During this period, registrations for standard desktop applications such as Microsoft Word, Excel and other Corporate business applications declined by 44 per cent and 74 per cent respectively. Tracking demand for training courses offered is important in making curriculum adjustments to changing City training demands.

Management gathers participant feedback on training provided through course evaluations and periodic surveys. Survey information gathered is part of a user opinion survey which rates services provided by the Information and Technology Division as a whole, so survey feedback related to training is limited.

*Current information gathered doesn't go far enough*

*Other useful measures are available*

While these measures should be continued, they don't go far enough in providing information related to training efficiency and effectiveness. Examples of the types of relevant performance measures include:

- Number of applications received for course training
- Attendance patterns for information technology training
- Actual annual training course attendance
- Average cost per course
- Per cent of satisfied attendees

A comprehensive list of potential performance measures has been provided to management for consideration.

**Recommendation:**

- 4. The Chief Information Officer develop performance indicators to measure the efficiency and effectiveness of the Information and Technology Training and Education Unit and training courses provided by the Unit.**

**5. More Effective Use of Trainers**

*Information and Technology Division performs administrative tasks*

The Information and Technology Division performs administrative tasks required to support information technology training and education services provided to City divisions. These include registering participants, scheduling instructors, arranging training facilities, tracking cancellations and attendance, maintaining a course calendar and generating reports for management.

*IT training developers spend 13 per cent of their available time on administrative tasks*

There is a full time position in the Information Technology Training and Education Unit dedicated to training related administrative duties. For most of 2007 and 4 months in 2008, the position remained vacant resulting in the need for trainers to devote considerable time on administrative tasks. Over the past three years the average annual time spent on administrative matters by trainers was 212 days or approximately 13 per cent of total time. 212 days is approximately one full time equivalent position.

IT trainer time spent on administrative duties is time away from developing course content and conducting training sessions. Administrative tasks are not an appropriate and cost effective use of trainer time.

***Human Resources Division implementing on-line self serve system in 2010***

In 2010 the Human Resources Division plans to implement an on-line “self service” system called that will allow staff to enter training related transactions using a web browser. Many of the manual administrative processes currently required will be automated.

Implementation of the on-line “self service” system will help reduce administrative time spent by trainers and allow more productive use of their time.

**Recommendation:**

- 5. The Executive Director, Human Resources Division ensure enterprise wide courses resulting in corporate wide benefit have priority when the on-line self service system is implemented.**

**6. Implement a Charge-Back for “No-Shows”**

***For the first quarter of 2009 the “no show” rate was 13 per cent***

“No shows” are individuals who register for a course and do not attend without informing the division in advance.

In general, for Information and Technology training, individuals must register in advance in order to attend a course. This is to ensure the number of individuals wishing to attend can be accommodated and use of facilities and resources is maximized. For the first quarter of 2009 there were 81 recorded “no shows” or 13 per cent of 628 total registrants.

In 2008, the Human Resource Division had over 6,000 registrants and approved approximately 70 “no show” charge backs to divisions or 1.1 per cent.

Those who have registered and know they will be unable to attend are asked to inform the Information and Technology Division at least three days prior to the course date.

*The Human Resources Division has a charge-back policy for “no shows”*

The Human Resources Division has implemented a “charge-back” policy for courses attended by City employees. Each course has a maximum capacity. If cancellations are not received three days prior to the course date a specified amount is charged back to the employee’s division. Management informed us that the policy has been successful in reducing the number of “no shows”.

**Recommendation:**

- 6. The Chief Information Officer implement a charge-back policy for training courses similar to the Human Resources Division policy. The policy should charge divisions for registered employees that fail to attend courses without prior notification.**

**7. Employee Training Records Should be Centralized**

*Centralized Training database does not exist*

There is no one single database for maintaining employee training records. The City SAP System includes a Human Resources Information System which is not widely utilized for maintaining and tracking employee training. Divisions maintain separate training records throughout the City.

*Courses sponsored by HR and IT Divisions are maintained in SAP*

Training sponsored by Human Resources and the Information and Technology Division is maintained in the SAP Human Resources Information System. Training not sponsored by these divisions is tracked in separate divisional systems or not at all. A centralized information source strengthens management and control of the City’s investment in training by providing:

- a single source for identifying training gaps
- a single source for monitoring training costs
- a tool for monitoring mandatory legislated training
- a tool for succession planning
- improved data integrity and consistency.

According to management the City has plans to implement a single comprehensive training database. In the interim expanding the use of the SAP Human Resources Information System is a useful initial step toward a central training database.

**Recommendation:**

- 7. The Chief Information Officer in consultation with the Executive Director, Human Resources Division investigate the long term use of the SAP Human Resources Information System as the repository for employee training records.**

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## **CONCLUSION**

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This report represents the results of our review of the training and education services provided by the Information and Technology Division.

The issues identified in our review pertain to the following:

- Develop common computer skills
- More effective use of trainer time
- Need to evaluate effectiveness of training
- Implementing a “Charge-back” for “No Shows”
- Implementing performance measures
- Preparation of learning plans
- Centralizing employee training records.

Implementing the recommendations contained in this report will strengthen controls, improve accountability and result in potential cost savings. Furthermore, addressing report recommendations will enhance efforts to improve on the knowledge and skills of the City workforce.