



TORONTO STAFF REPORT

March 1, 2005

To: Audit Committee

From: Auditor General

Subject: Treasury Services Review – Corporate Finance Division, Finance Department

Purpose:

The purpose of this review is to evaluate the effectiveness of administrative internal controls within the Corporate Finance Division of the Finance Department. The review includes an evaluation of the processes and procedures within the Division in order to ensure that internal controls are effective in mitigating risks related to investment management and support sound investment and borrowing decisions.

Financial Implications and Impact Statement :

The implementation of recommendations outlined in this report will enhance the internal controls over the Treasury Services Unit and improve control over the City's investments.

In addition, it is acknowledged that the implementation of certain recommendations, particularly those relating to the Financial Investment and Debt Management System, may result in increased costs. The extent of these costs has not been determined at the present time.

Recommendations :

It is recommended that:

- (1) the Chief Administrative Officer, in the development and or acquisition of information technology systems ensure that, where appropriate, expert external resources are utilized in the development of Request for Proposal documents. Such a process should ensure that Request for Proposals are complete;
- (2) the Chief Financial Officer and Treasurer implement controls, processes and procedures necessary to ensure data integrity, and support accurate reporting to management. At a minimum, system controls be implemented to address system weaknesses outlined in this report. Improvements to controls include:

- (a) access to the system be aligned with Treasury Services staff duties. Restrict user access and capabilities of Treasury Services staff to their respective functions;
- (b) only authorized users be provided access to the database system for data entry;
- (c) the editing of security settings be approved and documented with access limited to authorized users only;
- (d) a Disaster Recovery Plan specific to the Financial Investments and Debt Management System be developed and implemented;
- (e) changes to a transaction, and the reasons for the changes should be documented and limited to authorized staff only. Wherever possible, no changes should be made to transactions that have been settled;
- (f) the deletion of transactions should not be allowed without proper approval. When the deletion of information is required, the rationale for the deletion, should be documented and retained. A report of all deletions should be generated and reviewed by management;
- (g) Treasury Services staff should be required to change their system password periodically;
- (h) audit trail capabilities must be enhanced. At a minimum, an audit trail should record all changes, when they were made and by whom;
- (i) system controls should be strengthened to provide automatic reasonableness edits;
- (j) trades entered into the system must be in compliance with Investment Policies. Incidents of non-compliance should be automatically flagged by the system by way of a message to the user and documented in a system-generated report to be reviewed by senior management;
- (k) hardcopy documentation of credit rating changes be retained until such time that the Financial Investments and Debt Management System can produce accurate reports for prior reporting periods;
- (l) feasibility of importing of data be considered; and
- (m) the Financial Investments and Debt Management System be configured for an interface with SAP to provide for more efficient and effective posting of entries and reconciliation;

- (3) the Chief Financial Officer and Treasurer ensure Investment Policies include clear guidelines, timelines and protocols for identifying, communicating and acting upon policy exceptions. The guidelines should include clear roles and responsibilities of Treasury Services staff and senior management and should outline documentation and approval requirements of any action related to the exceptions;
- (4) the Chief Financial Officer and Treasurer ensure that a formal review process for reports be developed, documented and implemented. All available reports, with special emphasis on exception reports, be reviewed and consulted regularly to ensure City holdings are in compliance with Investment Policies. Evidence of such review be documented;
- (5) the Chief Financial Officer and Treasurer ensure:
 - (a) the development of a risk management strategy, which incorporates industry standards;
 - (b) this strategy include regular investment strategy meetings with Treasury Services staff; and
 - (c) all strategy meetings and communications in this regard are documented;
- (6) the Chief Financial Officer and Treasurer, in ensuring that trades are conducted in compliance with the Investment Policies and related legislation, determine the appropriateness of technical trading and address technical trading in the Investment Policies;
- (7) the Chief Financial Officer and Treasurer, whenever possible, separate the duties, roles and functions of Treasury Services staff according to Front, Back and Middle Office functions. Respective duties, roles and functions be clearly delineated and documented;
- (8) the Chief Financial Officer and Treasurer take the necessary steps to develop and document its cash flow forecasting methodology;
- (9) the Chief Financial Officer and Treasurer report back to the Policy and Finance Committee by June 30, 2005, on the merits of forming an oversight committee with an oversight role and advisor function to which the Treasury Services Unit would report performance. The Committee, as with the Sinking Fund Committee, should meet on a regularly scheduled periodic basis to review performance reports, and where appropriate, recommend changes to Investment Policies;
- (10) the Chief Financial Officer and Treasurer ensure accurate performance reporting. Appropriate and relevant benchmarks must be utilized in reporting performance results. In the event differences between City of Toronto holdings and the selected benchmark are present, the impact of these differences on performance results must be noted and explained as performance results are reported;

- (11) the Chief Financial Officer and Treasurer ensure that trader authority limits be established, that duties of all positions within the Treasury Services Unit correspond with their respective job descriptions, and that Treasury Services staff duties align with assigned signing authorities;
- (12) the Chief Financial Officer and Treasurer develop ethics policies and statements specific to the Treasury Services Unit. Policies and statements to include guidance regarding personal trading, gifts, offerings, trader ethics, and trader dealings with brokers or outside providers, as well as requirements for reporting deviations from policy to senior management. Acknowledgement Statements should be updated and signed by all Treasury Services staff on an annual basis;
- (13) the Chief Financial Officer and Treasurer, with a view to improving controls over cash and investment management:
 - (a) consider the use of taped lines, or other accepted recording processes to safeguard City interests in the event of a dispute;
 - (b) develop and implement a system to improve or replace the process of manual transposition of trade information;
 - (c) develop and implement policies and procedures to address trades for which a confirmation advice is not received;
 - (d) ensure that trades are reconciled with trade ticket information in the FIDM System upon receipt of the confirmation advice. Outstanding confirmation advices should be tracked using the FIDM System and obtained as soon as possible;
 - (e) ensure that trade tickets are adequately completed and authorized. In circumstances where staff is not available, the rationale for less than three authorizing signatures be documented and reviewed by senior Treasury Services staff; and
 - (f) establish limits on concentrations in volume and dollar amounts. Concentrations over set amounts be explained, documented and reviewed by senior Treasury Services staff;
- (14) the Chief Financial Officer and Treasurer ensure the development and documentation of a formal debenture issuance policy;
- (15) the Chief Financial Officer and Treasurer ensure that cancelled script debentures and retired inventory debentures are dead-marked or destroyed;

- (16) the Chief Financial Officer and Treasurer address and implement all outstanding audit recommendations and report on the status of implementation at the July 2005 the Audit Committee meeting; and
- (17) the Chief Financial Officer and Treasurer ensure that any changes or additions to the City's Investment Policies are reported in the annual investment report provided to City Council. All such changes or additions to the Investment Policies be specifically approved by City Council.

Background :

The Treasury Services Unit, Corporate Finance Division within the Finance Department, is responsible for the preservation of capital through the management of a number of investment portfolios, the management of the City's cash or liquidity position, and the development and implementation of investment and funding strategies to support the City's activities.

According to the City of Toronto 2003 Investment Report submitted to City Council and dated May 31, 2004, the City's 2003 investment portfolios had an average book value of \$2.737 billion and generated \$153.5 million in income in 2003, with an average annual return of 5.61 percent.

To ensure compliance with approved Investment Policies, City Council requirements and governing legislation and regulations, compliance audits of the Treasury Services Unit are completed annually. Until 2003, the Auditor General completed the annual compliance audits and more recently, the City's financial attest auditors, Ernst & Young, under contract to the City, conducted the required compliance audit. These audits have identified key areas for improvement in the Treasury Services Unit, but have not reviewed processes and procedures or internal controls in depth.

The review of the Treasury Services Unit was included in the Auditor General's 2004 Audit Work Plan as the Cash and Investment Management Audit. The results of this review highlights key issues, identifies areas of opportunity for improvement and provides a framework for future reviews.

Objectives and Scope

The objectives of this review were to:

- ensure that internal controls are effective in mitigating significant risks related to investment management;
- validate that investment related processes and procedures, approved by Council, are functioning as intended;
- ensure that appropriate system application controls exist to ensure data integrity and completeness;

- ensure management controls are sufficient to ensure the activities of the Treasury Services Unit are functioning as intended; and
- review recommendations from previous compliance audits issued by the Auditor General's Office and determine the current implementation status.

In this review, we examined funding (the issuance of debt) and investment (fixed income and money markets) activity from January 2004 to June 2004, as well as related policies and procedures in order to determine whether such activities were conducted in an efficient manner and were properly monitored.

The Investment Policies in place at the time of our review were last updated in 1998. In the City of Toronto 2002 Investment Report, the Chief Financial Officer and Treasurer reported revisions to the Investment Policies as a result of changes to the Municipal Act. These revisions, including the authority to invest in commercial paper and asset-backed securities, although not formally incorporated in documented Investment Policies, were considered in our review.

The Policy and Finance Committee, and subsequently City Council, approved a new Investment Policy document in June 2004. The 2004 revisions and updates to the Investment Policies, did not include specific details regarding process controls, key management and administrative procedures or documentation of investment procedures. As such, observations and findings in this regard remain relevant.

Our work in connection with this report included a review of:

- investment policies and current governing legislation;
- departmental policies and procedures, management reports, records and selected transactions;
- trade and debenture issuing processes, and supporting documentation;
- 2003 Ernst & Young compliance report, as well as compliance reports previously issued by the Auditor General's Office;
- 2003 Investment Report to the Policy and Finance Committee dated May 31, 2004; and
- controls and documentation related to the Financial Investment and Debt Management System.

Our review also included various meetings, discussions and interviews with appropriate staff.

Summary of Significant Audit Observations

A summary of significant review observations is provided below. Detailed commentary on each of the areas covered by our review is included in the balance of this report.

During the course of our review, we noted control weaknesses within the Financial Investment and Debt Management (FIDM) Information System. These deficiencies are likely the result of a lack of specific detail included in the original Request for Proposal document at the time the FIDM System was acquired.

Although the successful proponent met the majority of business requirements, these requirements in some circumstances lacked specific detail, in effect limiting the effectiveness of the system.

Limitations of the FIDM System include:

- access to the system for data entry and changes is not restricted;
- no formal Disaster Recovery Plan;
- sufficient audit trail is not maintained;
- transactions are not locked once settled;
- no requirement or automatic prompts to change passwords;
- no on-line review of data for reasonableness;
- no real time error-messaging capability to alert traders to transactions not in compliance with policies;
- data from external rating services, such as Bloomberg, is not imported; and
- no interface with the City's SAP financial information system.

Management oversight and governance practices require formalisation and documentation.

Limitations in this area include:

- no specific details provided in the Investment Policies dealing with exceptions, such as exceeding issuer or term limits, or investments that fall below an established standard;
- no formal process in which policy exceptions are addressed within Municipal Act time requirements;
- no independent risk management function to examine and evaluate risk, and there is no formalized risk management policy, which defines acceptable risk levels and activities in the investment area;
- cash flow forecasting methodology is not documented;

- threshold information, such as the maximum allowable trade for respective members of Treasury Services staff, are not included in Investment Policies; and
- no formal guidance in place, specific to the Treasury Services Unit, regarding personal trading, the receipt of gifts, trader ethics, or trader dealings with brokers or outside providers.

Controls over cash and investment management require improvement. Limitations in this area include:

- no taped lines to record conversations with brokers in times of dispute over transactions;
- details of trades are communicated to the Treasury Services Investment Clerk verbally or via hand-written notes;
- no formal policies or procedures to address trades for which confirmation advices are not received;
- trade tickets are sometimes inadequately completed and authorized with less than three signatures; and
- concentration of volume and dollar value amounts with brokers in both Money Market and Bond Funds.

Comments:

The major issues identified in the report relate to the following:

- Financial Investment and Debt Management System (FIDM)
- Management Oversight and Governance
- Investment Procedures and Processes
- Debenture Procedures and Processes
- Progress on Recommendations from Prior Audit Reports

Detailed comments in relation to each of the areas covered by our review are contained in the balance of this report.

FINANCIAL INVESTMENT AND DEBT MANAGEMENT SYSTEM (FIDM)

The Treasury Services Unit required an investment management system that would facilitate the provision of investment, cash and debt management services to the City. Prior to the implementation of the Financial Investment and Debt Management System (FIDM), the Treasury Services Unit used a generic, commercially available database management system (Microsoft Access) to manage investment management transactions.

An amount of \$150,000 was approved in the 2000 Capital Budget for the acquisition of a Treasury Management System for the Treasury Services Unit. With the capital funding made available, a Request for Proposal (RFP) was issued in 2001 and sent to firms qualified in providing products and services related to investment management systems.

Based on responses and proposals received by the City, it was determined that an amount of \$200,000 more than had been budgeted would be required for successful implementation. In January 2002, Treasury Services staff recommended that an additional \$200,000 be approved for the project. This was approved in the 2002 Capital Budget. In total, full funding of the project was \$350,000.

It should be noted that SAP was invited to participate in the RFP process. However, SAP replied with a “no submission” notice indicating that services offered did not match the requirements as specified in the RFP document. The selected proponent, Quatro Group Software Systems Incorporated, proposed and developed the FIDM System.

As our review did not include an in-depth review of the RFP process for the FIDM System, this report does not include a detailed analysis of the RFP process. However, during the course of our review, we noted weaknesses of the FIDM System that, in our view, are the result of the lack of specific detail noted in the RFP business requirements.

Business requirements outlined during the RFP process should be specific enough to ensure that system specifications meet business objectives. For example, Corporate staff, such as the Information and Technology Division of the Corporate Services Department or the Purchasing and Materials Management Division of the Finance Department, should be consulted and, where appropriate, provide assistance and input in detailing specific and appropriate requirements. If internal expertise is not available, the use of external resources should be considered.

In our review, we noted that although the successful proponent met the business requirements as noted, the requirements in some circumstances lacked specific detail, in effect limiting the effectiveness of the system. The following table outlines the RFP requirements with regards to audit trail, interface with SAP, import ability, compared with the functionality of the FIDM System.

Table 1 – FIDM System RFP Requirements

	RFP Requirement	FIDM System
Audit Trail	The proposed solution must permit user-defined security rules and tracking of date and time for transactions and allow security at field level. Proposed Solutions must have an audit trail.	The FIDM System has only a very limited audit trail built into the system. The FIDM System can only track the last person who updated the investment record and the last time the record was updated.
Interface with SAP	The system should be “capable of interfacing in the future with other City systems such as SAP.”	The FIDM System currently has no interface with SAP and as such the City’s Accounting Department manually posts required entries needed for each trade and performs manual monthly reconciliation.

	RFP Requirement	FIDM System
Importability	The system should “permit import and export of raw data to other file format.”	The FIDM System does not allow the import of data. Data, such as market-pricing data from Bloomberg, is not imported by the system. Quatro’s response indicates that the import of data is not recommended, and “will only be done under extreme conditions and only under the supervision of the Quatro Group supporting the application.”

The Chief Administrative Officer has recently issued a directive to all Department and Program Heads entitled, “Improving Contract Management”. Included in this directive are specific guidelines and checklists including a document which specifically addresses key considerations in the development of a Request for Proposal. In a related document, the Chief Administrative Officer specifically makes reference to the development of specifications in the RFP and is clear that where the purchase is complex or technical, a determination should be made as to whether a “technical subject expert” should be retained to assist in the design of the RFP documents.

While a range of internal staff were assigned to the development of the FIDM System RFP, it is apparent, based on the issues that we have identified, that external technical experts were not used. The directive of the Chief Administrative Officer should ensure that such instances do not occur in the future.

Recommendation:

1. The Chief Administrative Officer, in the development and or acquisition of information technology systems ensure that, where appropriate, expert external resources are utilized in the development of Request for Proposal documents. Such a process should ensure that Request for Proposals are complete.

Further limitations of the FIDM System we observed are as follows:

Access to Database

Access to the database system for data entry and changes to the data, is not restricted. A proper system control allows only authorized individuals to access the system for data entry or updates. We also noted that two Treasury Services staff members have system administrator access capabilities, allowing them to edit security settings and user management.

Disaster Recovery System

A generally accepted practice in organizational treasury operation disaster recovery plans includes consideration for personnel, technology and physical location, as well as regular testing and monitoring of the plan to identify and address shortcomings.

In situations where key Treasury Services personnel are suddenly and unexpectedly unavailable, disaster recovery plans provide for documented procedures and training for back-up staff. With technology failures, disaster recovery plans ensure that all information and transaction activities are backed up and that transactions can be conducted by alternate means. In situations where system problems or electrical failures exist at the Treasury Services site, alternate mechanisms must be in place, perhaps at an off-site location, to ensure business is transacted normally.

The City's Corporate Information Technology Department performs daily back up for the FIDM System to ensure the security of data. However, there is no formal Disaster Recovery Plan for the FIDM System, although we understand that a Corporate Disaster Recovery project is currently in progress.

Audit Trail

The FIDM System does not retain a sufficient audit trail. Trades may be entered, adjusted and deleted with no automatic record of the change or by whom. The system retains only the name of the person who last modified the trade and the time the change was made.

Locking of Transactions

We observed that changes to existing transactions in the FIDM System are permitted, as the system does not lock transactions once they have been settled, thus allowing for the modification of transactions. We understand that in some instances such as the input of yield modifications, changes are required once a transaction has been settled. Changes to a transaction, and the reasons for the changes should be documented and limited to authorized staff only.

User ID

Generally accepted industry systems provide for automatic periodic prompting for changing user passwords. Each trader is associated with a unique user ID in the FIDM System and can only access the system using that unique user ID. However, there is no requirement or automatic prompt requiring Treasury Services staff to change their password periodically.

Data Reasonableness

The FIDM System is not capable of reviewing data entered for reasonableness. Nor does it have the capability of rejecting inappropriate data such as numerical or alphabetical data, and negative or positive values.

Recognition of Policies, Limits and Credit Ratings

The FIDM System does not provide real time error messaging capability to alert the trader that a transaction is not in compliance with policies. The system does not prevent these transactions from being entered.

The FIDM System does not have the capability to track issuer credit rating changes and generate supporting reports. Although non-eligible issuers are noted in the system, no system controls exist to prevent transactions not permitted by Investment Policies.

In addition, although the system can generate a report for a specific day, once the Treasury Services Unit has updated the percentage limit, term limit and credit rating limit, the report produced for prior reporting periods is no longer accurate. The FIDM System does not have a memory function which allows it to produce a report using previously valid percentage limits, term limits and credit rating limits.

Due to the lack of information retained in the system or any hardcopy documentation of credit rating changes, we were unable to verify if credit rating changes were input into the system on a timely basis. There is a risk that the system cannot be used to generate accurate reports of investments no longer in compliance with credit policies.

Import and Interface Capabilities

The FIDM System does not import data from external trading tools such as Bloomberg, and thus requires any changes to be completed manually.

The FIDM System has no interface with SAP. The City's Accounting Department manually posts required entries needed for each trade and performs manual monthly reconciliation.

Recommendation:

2. The Chief Financial Officer and Treasurer implement controls, processes and procedures necessary to ensure data integrity, and support accurate reporting to management. At a minimum, system controls be implemented to address system weaknesses outlined in this report. Improvements to controls include:
 - (a) access to the system be aligned with Treasury Services staff duties. Restrict user access and capabilities of Treasury Services staff to their respective functions;
 - (b) only authorized users be provided access to the database system for data entry;
 - (c) the editing of security settings be approved and documented with access limited to authorized users only;
 - (d) a Disaster Recovery Plan specific to the Financial Investments and Debt Management System be developed and implemented;
 - (e) changes to a transaction, and the reasons for the changes should be documented and limited to authorized staff only. Wherever possible, no changes should be made to transactions that have been settled;

- (f) the deletion of transactions should not be allowed without proper approval. When the deletion of information is required, the rationale for the deletion, should be documented and retained. A report of all deletions should be generated and reviewed by management;
- (g) Treasury Services staff should be required to change their system password periodically;
- (h) audit trail capabilities must be enhanced. At a minimum, an audit trail should record all changes, when they were made and by whom;
- (i) system controls should be strengthened to provide automatic reasonableness edits;
- (j) trades entered into the system must be in compliance with Investment Policies. Incidents of non-compliance should be automatically flagged by the system by way of a message to the user and documented in a system-generated report to be reviewed by senior management;
- (k) hardcopy documentation of credit rating changes be retained until such time that the Financial Investments and Debt Management System can produce accurate reports for prior reporting periods;
- (l) feasibility of importing of data be considered; and
- (m) the Financial Investments and Debt Management System be configured for an interface with SAP to provide for more efficient and effective posting of entries and reconciliation.

MANAGEMENT OVERSIGHT AND GOVERNANCE

Investment Policies: Applicability to Agencies, Boards and Commissions

At its meeting in March 2004, City Council adopted the following recommendations, made by the Audit Committee, with respect to Investment Policy compliance by Agencies, Boards and Commissions:

- (1) the City's Investment Policy, as approved by Council, be distributed to the City's Agencies, Boards and Commissions whenever it is revised or updated and they be directed to comply with this policy;
- (2) the City's Agencies, Boards and Commissions shall report on an annual basis to the Chief Financial Officer and Treasurer to certify compliance with the City's Investment Policy and to report all instances of non-compliance as of December 31, 2003; and

- (3) the Chief Financial Officer and Treasurer report annually to the Policy and Finance Committee on the compliance of the City's Agencies, Boards and Commissions with the City's Investment Policy.

In December 2004, City Council directed that effective April 1, 2005, all Toronto Public Library Board investment funds be managed by the City. Council further resolved that, on a pilot basis, the investments of the Toronto Parking Authority (TPA) remain under the TPA's jurisdiction, and that the TPA be directed to seek the investment advice of the Chief Financial Officer and Treasurer when making all investment trade decisions.

We understand that the Chief Financial Officer and Treasurer will be reporting to the June 2005 Policy and Finance Committee meeting in regard to Investment Policy compliance by the Agencies, Boards and Commissions.

Investment Policies: Procedures for Exceptions

Council approved Investment Policies clearly outline the primary objectives of the City's investment activities and make appropriate reference to the governing legislation upon which policies are based. No specific details however, are provided in the Policies with respect to procedures in place to assist staff in dealing with exceptions to policy, such as exceeding issuer or term limits, or investments that fall below an established standard.

For example, the Municipal Act clearly states the time periods within which municipalities must sell investments valued below an established standard. Investment Policies however, do not set forth guidelines to be used by staff in making these exceptions known to senior management and in acting to remedy exceptions accordingly.

Further, even though the City of Toronto 2003 Investment Report states that it is sometimes necessary to temporarily exceed limits set for financial institutions, a formal process, in which policy exceptions are addressed within Municipal Act time requirements, is not in place.

In order to ensure policy exceptions are appropriately identified, communicated and acted upon, clear guidelines, timelines and protocols are required. To ensure adequate monitoring of exceptions, written guidelines should specify documentation and approval requirements.

Recommendation:

3. The Chief Financial Officer and Treasurer ensure Investment Policies include clear guidelines, timelines and protocols for identifying, communicating and acting upon policy exceptions. The guidelines should include clear roles and responsibilities of Treasury Services staff and senior management and should outline documentation and approval requirements of any action related to the exceptions.

Treasury Services staff has access to a number of system generated reports which are useful in managing investment activity and ensuring compliance with Investment Policies and regulatory requirements. In our interviews with staff, we were advised that reports were regularly reviewed, and anomalies addressed in a timely fashion.

However, we noted that a report generated by Royal Trust (RBC Global Services), the City's custodian, contained information indicating holdings outside of acceptable limits. This matter was not addressed by Treasury Services staff until it was brought to their attention by staff from the Auditor General's Office.

The Auditor General's Office has been in contact with Royal Trust who indicated the security in question was not rated by the three major rating agencies (Standard & Poors, Dominion Bond Rating Service, and Moody's). However, Royal Trust later attributed the holding to a calculation error.

This holding was significant and represented 0.61 percent of total portfolio holdings.

Recommendation:

4. The Chief Financial Officer and Treasurer ensure that a formal review process for reports be developed, documented and implemented. All available reports, with special emphasis on exception reports, be reviewed and consulted regularly to ensure City holdings are in compliance with Investment Policies. Evidence of such review be documented.

Investment Risk Management

Risk management is the process of identifying, assessing and controlling risks associated with all activities that could result in a loss to the City, and includes activities that identify, measure, assess, limit and reduce risk.

Rapid changes in interest rates and investment yields have made the financial environment riskier today than in the recent past. Corporate risk management activities must be strategically assessed, prioritised, controlled and reported adequately.

Investment Policies state portfolios "...will have a unique tolerance for interest rate risk, credit risk, and liquidity risk. The appropriate level of each of these in the portfolio may be determined by a careful examination of the purpose of the portfolio, its income requirements, its term horizon and its liquidity needs."

The Treasury Services Unit, however, does not have an independent risk management function to examine and evaluate risk, and there is no formalized risk management policy, which defines acceptable risk levels and activities in the investment area. Although it appears informal communications do take place, these communications are not documented and there are no formal investment strategy meetings. Strategy meetings can help to mitigate control weaknesses.

Recommendation:

5. The Chief Financial Officer and Treasurer ensure:
 - (a) the development of a risk management strategy, which incorporates industry standards;
 - (b) this strategy include regular investment strategy meetings with Treasury Services staff; and
 - (c) all strategy meetings and communications in this regard are documented.

Treasury Services staff has advised us that on occasion technical trading is conducted. Technical trading involves the purchase and sale of a holding within a very short timeframe, usually less than one day. Although these transactions should be subject to the same scrutiny and processes as all other transactions, the relative speed at which these transactions occur may potentially expose the City to unnecessary risks. Investment Policies, although they address investment management style and management discretion, are silent in the area of technical trading.

Recommendation:

6. The Chief Financial Officer and Treasurer, in ensuring that trades are conducted in compliance with the Investment Policies and related legislation, determine the appropriateness of technical trading and address technical trading in the Investment Policies.

Segregation of Duties: Separation of Office Responsibilities

The Treasury Services Unit has three separate and distinct functions categorized as the Front Office, Middle Office and Back Office. In large institutions, the Front Office is normally made up of traders, portfolio managers and research analysts, and includes functions such as cash forecasting, investment instrument decisions, trading, recording trades and trade approval.

The Middle Office reviews portfolio risks, evaluates policies, benchmarks, and investment strategies, issues and new investment instruments, establishes dollar limits and reports on performance.

The Back Office is the investment operations service unit responsible for trade settlement, principal and income collection, and investment accounting, reporting and reconciliation.

These three areas are separately maintained as part of the internal control system. Generally accepted investment practices require individuals involved in risk measurement, monitoring and control functions to be sufficiently separate and independent from individuals involved in making business decisions. This is an appropriate control to prevent conflict of interest issues.

Treasury Services staff typically perform the functions of all these offices. For example, one staff member can execute trades (Front Office), authorize changes to a list of authorized counterparts and limits, monitor risk management, review the investment strategy (Middle Office), and perform reconciliations with custodian accounts as well as Corporate Accounting. We realize that with a limited staff segregation of duties is limited. However, particularly in the absence of a documented risk management strategy, this practice may potentially place City interests at risk. Clear delineation and documentation of Treasury Services staff roles is required.

Recommendation:

7. The Chief Financial Officer and Treasurer, whenever possible, separate the duties, roles and functions of Treasury Services staff according to Front, Back and Middle Office functions. Respective duties, roles and functions be clearly delineated and documented.

Cash flow forecasting is an important Front Office function. The ability to determine the amount of cash available at a point in time is essential for effective financial decision making and can serve as an effective tool to support cash positions and provide an early warning signal regarding liquidity concerns.

Although a considerable amount of financial data is reviewed to determine cash flow, the Treasury Services Unit does not have a formal, documented cash flow forecasting methodology. As a result, cash flow may not be adequately monitored. For example, our review of the investment and revenue accounts for the period January 2004 to June 2004 indicated significant monthly overdraft and other charges on accounts. In one month alone, over \$39,000 in fees was charged to the investment account.

Documentation of a formal cash flow forecasting methodology will enhance investment management decisions and significantly reduce unnecessary fees.

Recommendation:

8. The Chief Financial Officer and Treasurer take the necessary steps to develop and document its cash flow forecasting methodology.

Oversight Committee

A generally accepted industry practice is the establishment of an investment oversight committee with a governance role, ensuring controllable risks are properly managed and financial performance is acceptable. An oversight committee is responsible for monitoring investments and investment results, ensuring prudent investment of funds, and recommending changes to the Investment Policy.

While there is an oversight committee for the Sinking Fund, there is no such committee for the General Fund.

Recommendation:

9. The Chief Financial Officer and Treasurer report back to the Policy and Finance Committee by June 30, 2005, on the merits of forming an oversight committee with an oversight role and advisor function to which the Treasury Services Unit would report performance. The Committee, as with the Sinking Fund Committee, should meet on a regularly scheduled periodic basis to review performance reports, and where appropriate, recommend changes to Investment Policies.

Performance Measurements and Benchmarks

As noted in the Investment Policies, performance measurement provides the City with a means for rating program performance and aids in evaluating financial performance and the efficiency of internal operations. Performance benchmarks used by the Treasury Services Unit are determined by Royal Trust.

Investment Policies indicate “it is the intention of the investment officers to actively manage assets within the parameters of the respective statements of investment policies and goals.” Active management is defined as the style in which the manager attempts to improve on the benchmark by using his judgement to deviate from the asset holdings that comprise the benchmark. From our observations, Treasury Services staff has deviated from the levels of the individual holdings that comprise the selected benchmark.

For example, in our review of the Custodian’s performance report for the period ending June 30, 2004, the benchmarks noted in the report do not appear to accurately reflect City of Toronto portfolio holdings, and as a result, City of Toronto performance results may be overstated. The following table highlights the differences in the City of Toronto portfolio holdings and the concentration or composition of the benchmark.

Table 2* - City of Toronto Holdings Compared to Benchmark

Holdings	City of Toronto Fund Weight (%)	Scotia Capital Universe Weight (%)	Difference (%)
Canada Bonds	30.71	46.83	(16.12)
Provincial Bonds	30.37	24.63	5.74
Municipal Bonds	21.61	1.30	20.31
Corporate Bonds	17.31	27.23	(9.92)
Total	100%	99.99%	.01%

* Source: RBC Global Services, City of Toronto Benchmark Reports, Period ending June 30, 2004

Although the total difference in the City and benchmark holding is negligible (0.01 percent), when reviewing the weight of individual portfolio holdings, a significant difference exists in Canada Bonds and Municipal Bonds holdings. This may be an indication that the City is investing in a greater proportion of investments with higher risks, such as Municipal Bonds,

compared to the benchmark. Significant differences in holdings should be documented and potential impacts on City investments should be noted.

Recommendation:

10. The Chief Financial Officer and Treasurer ensure accurate performance reporting. Appropriate and relevant benchmarks must be utilized in reporting performance results. In the event differences between City of Toronto holdings and the selected benchmark are present, the impact of these differences on performance results must be noted and explained as performance results are reported.

Trader and Signing Authority

Investment Policies do not include threshold information such as the maximum allowable trade for respective members of Treasury Services staff. Currently, there is no size limit to the investment purchases or sales that can be transacted by individual Treasury Services staff members. Trader authority limits must be established.

Also, from our observation and discussions with Treasury Services staff, all Treasury Services staff conduct trades. There is no signing authority documentation however, for the Financial Analyst or the Investment Clerk. Although we could determine no official signing authority for the position, the April 2004 employment opportunity posting indicates that the Financial Analyst “is responsible for identifying, initiating and performing cash and investment portfolio management and transactions for the City of Toronto’s various investment funds and portfolios.”

The duties of all positions within the Treasury Services Unit must correspond with their respective job descriptions and duties must align with assigned signing authorities.

Recommendation:

11. The Chief Financial Officer and Treasurer ensure that trader authority limits be established, that duties of all positions within the Treasury Services Unit correspond with their respective job descriptions, and that Treasury Services staff duties align with assigned signing authorities.

Personal Trading, Gifts and Ethics

The issues of ethics and conflict of interest are alluded to in the Investment Policies. As part of the Corporate Human Resources annual performance evaluation process and in accordance with Conflict of Interest Policy guidelines, management staff is required to sign annual Conflict of Interest statements. However, there is no formal guidance in place, specific to the Treasury Services Unit, regarding personal trading, the receipt of gifts, trader ethics, or trader dealings with brokers or outside providers. This type of written guidance should be included in Investment Policies to assist traders in determining appropriate trader/broker relationship boundaries.

Deviations from this guidance must be promptly reported to senior Treasury Services staff and reviewed for appropriateness.

Recommendation:

12. The Chief Financial Officer and Treasurer develop ethics policies and statements specific to the Treasury Services Unit. Policies and statements to include guidance regarding personal trading, gifts, offerings, trader ethics, and trader dealings with brokers or outside providers, as well as requirements for reporting deviations from policy to senior management. Acknowledgement Statements should be updated and signed by all Treasury Services staff on an annual basis.

INVESTMENT PROCEDURES AND PROCESSES

The City's investment portfolios are to be managed in a manner that provides the optimum balance between investment return and security of capital. Managing investment portfolios with an average book value of \$2.737 billion requires thorough and effective internal controls.

We have also observed that controls over cash and investment management require improvement. These areas are as follows:

Taped Lines

The use of taped lines is a generally accepted industry standard. The Treasury Services Unit does not tape lines and as such there is no recording of conversations with brokers in times of dispute over transactions. It is our understanding that brokers have taped lines. However, these lines would only be available upon subpoena. Taped lines or other accepted recordings may be an effective method in safeguarding the City's interests in the event of a dispute.

Process Controls

Details of trades are communicated to the Treasury Services Investment Clerk verbally or via hand-written notes. The manual transposition of the information and the recording of the trade transactions in the FIDM System may result in errors. The development of a system that reduces or eliminates the possibility of transposition errors should be considered.

Trade Confirmation Reconciliation

A confirmation advice contains details of a specific transaction and is used for accounting and confirmation purposes. A confirmation advice is normally forwarded to the Treasury Services Unit via mail.

Although the FIDM System has the capability of tracking trades not yet confirmed, and can generate a summary report of these trades, the Treasury Services Unit does not maintain formal policies or procedures to address trades for which a confirmation advice is not received.

To ensure accurate accounting and trade confirmation, trades should be reconciled with trade ticket information in the FIDM System upon receipt of the confirmation advice. Outstanding confirmation advices should be tracked using the FIDM System and obtained as soon as possible.

Trade Ticket Authorization

The authorization of trade tickets is a necessary step in ensuring transactions are within policy requirements. In our discussions with Treasury Services staff, we were advised that three signatures are required on trade tickets in order for the trade to be authorized. However, in some instances, trade tickets are inadequately completed and authorized with less than three signatures obtained for each trade ticket.

Efforts should be made to ensure that the requisite number of signatures is obtained to ensure trade tickets are appropriately authorized. In circumstances where staff is not available, the rationale for less than three authorizing signatures must be documented and reviewed by senior Treasury Services staff.

Concentration

In reviewing City of Toronto transactions, there appears to be a concentration of volume and dollar value amounts with brokers in both Money Market and Bond Funds. Although concentration of value and dollar amounts may be due to competitive rates being offered, it is necessary to ensure against possible improper trader dealings with brokers. Allowable concentration and limits must be established and documented. Concentrations over set amounts must be explained, documented and reviewed by senior Treasury Services staff.

Recommendation:

13. The Chief Financial Officer and Treasurer, with a view to improving controls over cash and investment management:
 - (a) consider the use of taped lines, or other accepted recording processes to safeguard City interests in the event of a dispute;
 - (b) develop and implement a system to improve or replace the process of manual transposition of trade information;
 - (c) develop and implement policies and procedures to address trades for which a confirmation advice is not received;
 - (d) ensure that trades are reconciled with trade ticket information in the FIDM System upon receipt of the confirmation advice. Outstanding confirmation advices should be tracked using the FIDM System and obtained as soon as possible;

- (e) ensure that trade tickets are adequately completed and authorized. In circumstances where staff is not available, the rationale for less than three authorizing signatures be documented and reviewed by senior Treasury Services staff; and
- (f) establish limits on concentrations in volume and dollar amounts. Concentrations over set amounts be explained, documented and reviewed by senior Treasury Services staff.

DEBENTURE PROCEDURES AND PROCESSES

During the review period, the City issued one debenture. Our testing in this area was therefore limited. Further testing will be required as part of a future review.

Effective internal controls are in place and functioning as intended for the City's debenture issuing process. There is a Sinking Fund Committee that provides oversight and guidance, with appropriate approval and reporting processes of the Sinking Fund activities. However, although the process of debenture issuance is well managed with sufficient oversight, there is no formal funding policy documentation.

Recommendation:

14. The Chief Financial Officer and Treasurer ensure the development and documentation of a formal debenture issuance policy.

Other Concerns – Debenture Procedures and Processes

Script Debentures

Script debentures are issued to replace original debentures. The originals have been cancelled and no longer trade in the secondary market. Script Debentures represent Treasury Securities where the City has called back some of its own issues to retire debt. The latest maturity date for the script debentures was May 26, 2004. Since script debentures do not trade, and the City of Toronto, not the banks, is the paying agent, the script debentures can only be negotiated by the Treasury Services Unit, the attempted negotiation is not likely to be successful. The City no longer issues debentures in this form. However, these retired script debentures must be dead-marked or destroyed to avoid confusion.

Inventory Debentures

The City used to issue debentures in bearer form. Inventory debentures were used to facilitate debenture transfers from one investor to another. Authorizing signatures from the City's Chief Financial Officer and Treasurer, the Director of Corporate Finance Division, and the Manager of the Treasury Services Unit are required in order for the debenture to be redeemed. If signatures are forged, the City is indemnified against payments. The City no longer issues debentures in

this form. However, these retired inventory debentures must be dead-marked or destroyed to avoid confusion.

Recommendation:

15. The Chief Financial Officer and Treasurer ensure that cancelled script debentures and retired inventory debentures are dead-marked or destroyed.

PROGRESS ON RECOMMENDATIONS FROM PRIOR AUDIT REPORTS

A fundamental component of internal control systems are regular independent reviews. Recommendations included in these reviews ensure appropriate controls are in place minimising potential risks. On an annual basis, the Auditor General’s Office and more recently, Ernst & Young, performed audits to ensure that the activities of the Treasury Services Unit were in compliance with Investment Policies and governing legislation.

Management of the Treasury Services Unit was provided with a list of audit recommendations from reports from February 1, 1999 to August 25, 2003. Based on the results of our current review and management’s response, several recommendations have not been implemented or addressed. The following table outlines the previous audit recommendations still outstanding:

Table 3 – Outstanding Recommendations

Report Date	Recommendation	Comments
February 1, 1999	Recommendation 5: Consolidated financial reporting of all City investments be reported to Council on a more regular basis than once a year.	Management’s response indicates that the CFO and Treasurer requires Council directive to report on a more frequent basis.
February 1, 1999	Recommendation 7: The document approved by Council entitled “Investment Policy and Procedures” be finalised, particularly in terms of addressing key management administrative procedures.	Key management administrative procedures have not been included in the Investment Policy and Procedures approved by Council in June 2004.
June 14, 2000	Recommendation 7: The Chief Financial Officer and Treasurer should complete Section 5 of the Investment Policy and Procedures as soon as possible.	In the 1998 Investment Policy and Procedures, Section 5 – Investment Procedures, was incomplete. In the 2004 Investment Policy and Procedures, there is no documentation of Investment Procedures.
June 22, 2001	Recommendation 3: as above	

Recommendation:

16. The Chief Financial Officer and Treasurer address and implement all outstanding audit recommendations and report on the status of implementation at the July 2005 the Audit Committee meeting.

Investment Policies in place at the time of our review were updated in 1998. In 2001, revisions to the Municipal Act allowed municipalities to invest in securities such as asset-backed securities, commercial paper and bonds, debentures and promissory notes of specific utility companies. In the City of Toronto 2002 Investment Report, the Chief Financial Officer and Treasurer reported revisions to Investment Policies (as a result of changes to the Municipal Act). These revisions however, were not formally incorporated in documented Investment Policies.

A new Investment Policy document was not presented to the Policy and Finance Committee until May 2004. City Council approval was subsequently received in June 2004.

Recommendation:

17. The Chief Financial Officer and Treasurer ensure that any changes or additions to the City's Investment Policies are reported in the annual investment report provided to City Council. All such changes or additions to the Investment Policies be specifically approved by City Council.

Conclusions :

The purpose of this report was to evaluate as to whether internal controls currently in existence in the Corporate Finance Division, Finance Department, are effective in mitigating the risks related to investment management.

In reviewing internal controls, processes and procedures, as well as system application controls, it is apparent that controls over investment management require improvement. Implementation of the recommendations noted in the report will enhance the internal control processes of the Treasury Services Unit.

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