



OFFICE OF THE
City Auditor

Stolen Fare Product Investigation

February 23, 2009

The Office of the City Auditor conducted
this project in accordance with the
*International Standards for the
Professional Practice of Internal Auditing*

Stolen Fare Product Investigation

1. Introduction

On October 17, 2008, the Edmonton Transit System Branch Manager contacted the City Auditor to advise him that some Transit Fare Product had been stolen. In two separate instances, individuals were apprehended for selling Edmonton Transit System tickets. The Branch determined that the confiscated ticket strips being sold by those individuals were from the same batch of tickets they had sent to the Corporate Records Centre for confidential shredding.

2. Investigation Objectives

We conducted our investigation in accordance with City Policy C522, *Fraud and Misconduct – Reporting, Investigation and Whistleblower Protection*. Our investigation objectives were to:

- Assess the adequacy of controls in place to safeguard the assets of Edmonton Transit System fare products against loss, misuse and fraud during the confidential shredding process.
- Provide recommendations to correct any identified control weaknesses.
- Attempt to quantify the total loss associated with this particular theft.

3. Scope and Methodology

Our investigative methodology included the following key steps:

- We initially consulted with both Edmonton Transit System security staff (Transportation Department) and the City's Corporate Security staff (Corporate Services Department) to understand the work they had completed to-date.
- Following these initial meetings we determined that:
 - Edmonton Transit System Security contacted the Edmonton Police Service and also forwarded their file to Corporate Security for further follow-up.
 - Corporate Security staff had further investigated the process controls to determine how the tickets sent to be destroyed had been stolen.
- We partnered with Corporate Security to complete our investigation objectives. We took ownership of writing the final investigation report and to disclose the report contents with management.
- We met with staff from various operating areas including the Safety & Security Division and the Business Development Section of the Edmonton Transit System, Corporate Records and the Corporate Records Centre in the Office of the City Clerk, Materials Management Branch and Law Branch in Corporate Services Department.
- We developed recommendations to strengthen the existing process controls.
- We met with Edmonton Police Service (EPS) to obtain the status of their investigation.

4. Observations and Analysis

4.1. Background to Transit Fare Products

Edmonton Transit System sells a variety of different products to transit users including: Day Pass, Adult Ticket Strip, Youth/Senior Ticket Strip, Adult Monthly Pass, DATS Monthly Pass, and Seniors Monthly Pass. These products are sold through various retail venues and through an on-line store. Once these products are printed, they are “marketable currency.”

The overall Transit Fare Product production and distribution process is complex. It follows a sequential set of phases:

- Develop design & production specifications,
- Select the printing vendor,
- Print the Transit Fare Product,
- Distribute and collect the Transit Fare Product (this phase includes the requirement to destroy expired/unsold/un-issued fare products), and
- Manage numerous outlet agreements.

In addition, the Transit Fare Product accounting process (fare product distribution, returns, sales, accounts receivable, and payment receipts), including reconciliations, adds a further dimension to the complexity of the overall process. Stakeholders from several business units throughout the City interact to make these processes work. Since there is no single process owner, the resulting system of internal controls (in a decentralized environment) poses some significant challenges.

4.2. Overview of the Theft

Below is a brief overview of the theft incident in chronological order:

- Prior to June 2008, Edmonton Transit System management decided to shred transit tickets as this particular product was no longer required. The volume of tickets sent to the Corporate Records Centre for shredding was contained within 221 boxes. Each box contained 30,000 tickets, for a total of 6,630,000 tickets. All of the tickets that were sent for shredding in June 2008 had a December 31, 2008 expiry date, giving the tickets a “marketable currency” value of \$16,438,500. Given the significant volume of material to be shredded, the Corporate Records Centre’s vendor conducted the shredding of these tickets over a period of three consecutive weeks (one day each week in June 2008). During the shredding activity there was limited (if any) direct supervision by the City.
- On August 31, 2008, Edmonton Transit System Security staff apprehended two individuals for selling transit tickets at an LRT Station. Both individuals were issued infractions under Bylaw 8353, *Conduct of Transit Passengers* (Section 308 – Offer or Sell Printed Matter on Edmonton Transit Property). Edmonton Police Service was contacted and took over the investigation. Edmonton Transit System management confirmed that the tickets seized (based on their serial numbers) had not been in stock either in its vault or at Central Stores. On September 11, 2008, Edmonton Transit System management confirmed that the tickets seized were among the ones

that were scheduled to be shredded in June 2008. Edmonton Police Service (EPS) subsequently advised Corporate Security that no criminal charges were laid against the two minors detained for selling the bus tickets.

- On September 26, 2008, Edmonton Transit System security staff advised Corporate Security staff of the theft. Corporate Security continued with the follow-up. Their role was to assist the EPS investigation, and to understand what had transpired (i.e. how the security breach occurred).
- On October 17, 2008, the Edmonton Transit System Branch Manager notified the City Auditor of the incident.
- On October 29, 2008, Corporate Security learned of a second incident where two individuals were selling transit tickets in the downtown area. Corporate Security, EPS, and Edmonton Transit System Security discussed information from the first incident and connected the two cases. In this second incident, EPS arrested and charged the individuals under the Criminal Code. Individual A was charged with possession of stolen property under \$5,000 (x2), and possession of the proceeds of crime under \$5,000. Individual B was charged with possession of stolen property under \$5,000.
- On January 26, 2009, EPS advised Corporate Security that the shredding vendor's truck driver had confessed to stealing approximately 100,000 tickets while the shredding was taking place. The driver was charged under the Criminal Code with theft over \$5,000.
- On January 27, 2009, Edmonton Police Service advised the City that it had completed its investigation.

4.3. The Control Environment

4.3.1 Previous Reviews to Strengthen the Overall Control Environment

Over the past six years, a variety of consultants (both internal and external) have reviewed the elements of the control frameworks related to Transit Fare Product processes. Following an earlier bus pass theft that the OCA reported on,¹ Edmonton Transit System hired a consultant to review the overall sequential production and distribution process. That review resulted in a June 2003 report that identified future state opportunities for the *Distribution & Collection of ETS Fare Products*. One of the consultant's recommendations that were agreed to by the City was to supervise the shredding of expired/unsold/un-issued product. This particular control responsibility was assigned to Finance – Transportation and Streets.

In 2005, following another consultant review, Edmonton Transit System piloted its Online Store for retailers.

In November 2007, Corvus consultants were hired by Edmonton Transit System and Finance & Treasury to address Accounts Receivable issues that had arisen with certain retail accounts. This consultant was hired so the City could get assurance that transactions were accurately reflected in SAP. The final January 2008 report did give some assurance on the SAP accuracy of information but also identified business

¹ 2001/2002 Student Bus Pass Theft, Office of the City Auditor, September 18, 2002.

system weaknesses. Specifically, the consultant reviewed the City's records for 25 independent outlets and identified issues for 19 of them. The complete findings section from this review is provided in Appendix 1. A Transit Fare Product Steering Committee, comprised of key stakeholders, was formed in 2008 and directed the completion of detailed reviews and recommendations. This work is currently under development.

Several other studies / reviews have been undertaken into Transit Fare Products processes. The "Transit Fare Products - Product Management - Business Process Improvement - Recommendations Plan" (November 2008) report was an attempt to get consensus from all stakeholders on roles and responsibilities. The "Edmonton Transit Fare Product - Process and Applications Review (January 2009) report identified the processes residing in various applications and to determine if these functions can be replaced with SAP solutions and tools.

In our opinion, the ongoing development and strengthening of internal controls for Transit Fare Product over the past 6 years is not working effectively. The primary cause is that there is not a singular process owner to assume overall responsibility, accountability, and effective integration between the various different business units. Many of the recommendations from the various reviews and studies are split among Transit Business Development, Finance & Treasury, (Client Accounting, Corporate Accounts Receivable, Remittance Processing), Materials Management, Information Technology, Corporate Services Business Systems Support and Corporate Records.

On a go-forward basis, the changes suggested by the various consultants and reviewers needs to be implemented in a timely manner, not through further study and review. To achieve a successful outcome, the various business units need to determine where this ownership function should reside. As an earlier consultant advised Edmonton Transit System management, a process owner must:

- Be attentive to the process on a consistent basis;
- Provide an objective oversight to the process;
- Apply corporate strategy and policy as necessary;
- Effectively manage the process charter;²
- Monitor accountabilities and outcomes; and
- Evolve the process as the environment changes.

Accordingly, the assigned process owner needs to develop a detailed action plan that consolidates all previous recommendations, clearly assigns responsibility for implementation, and puts ongoing monitoring in place to ensure implementation is successful. With transit rides expected to exceed 60.9 million,³ ineffective management of Transit Fare Products poses a significant risk. This second theft of tickets in a short

² Process charter documents roles, responsibilities, accountabilities, timelines and performance metrics. To be effective, it must reflect clear lines of accountability – all business units must sign off on the charter and the escalation process for issues and unsatisfactory outcomes. Commitment is required by all business units to live by the established roles, responsibilities and accountabilities.

³ *ETS Ridership Growth Strategy and Planning Review – Summary Report*, May 2008. Prepared by ENTRA Consultants.

period of time reinforces both the materiality and significance of the risk.
(Recommendation 1)

4.3.2 Management of Transit Fare Products

Responsibility for ordering, storing, reconciling and disposing of inventory resides with various units within the Administration. Products are distributed through the Edmonton Transit Customer Services centre, the ETS on-line store and at independent outlets throughout the city.

A consultant report dated November 4, 2005⁴ stated that specifications for Transit fare product printing and delivery needed to include a zero tolerance for printing errors. This consultant also identified two other noteworthy risks (the security of the product depends on the City's view of the true risk value of the product):

- “Product Viewed as Paper Tickets: Risk of Product Loss - Potential loss to City for product loss is reprint cost and notification of ETS operators to watch for stolen product. This would only be the case for large losses i.e. one or more full month of product.”
- “Product Viewed as Negotiable Product (Cash): Risk of Product Loss - Potential loss to the City for product loss is total face value of product at time produced is valid, i.e., month-specific for passes that limit use versus tickets with open use and 2 year expiry.”

As stated previously, a consultant report dated January 29, 2008⁵ concluded that there were major deficiencies in reconciliation and reporting systems that supported the Transit fare product process.

In January 2009, the City discontinued using a retail franchise outlet as a distributor of Transit fare products for business reasons. Through discussions with various City departments and a review of accounting and vendor records we identified that \$340,562 had been written-off as uncollectible. We were advised that one of the reasons for this write-off was the lack of evidence that the Transit fare products had been received by the outlets.

In our opinion, weaknesses in controls for Transit fare products management are a contributing factor to the excessive amount of ticket purchases and the write-off of revenues and tickets bound for shredding being stolen. It must be recognized that Transit fare products represent a form of “marketable currency” so strong controls need to be in place to minimize the risk of loss.

We believe that some over-printing of Transit fare products is unavoidable to allow for unanticipated product requirements; however, the volumes associated with the incident described above were excessive. Other costs incurred as a result of excess purchase

⁴ *Transit Fare Product Distribution Process – (DRAFT) Discussion Document*, Strategic Services. Prepared by a Consultant, November 4, 2005

⁵ *Edmonton Transit Fare Product Accounting Review – Corvus Business Advisors*, January 29, 2008

include: original printing charges, administrative overhead of handling and recording of product into inventory systems and into a secure vault, administrative costs for removing the product from the current inventory system/vault, cost of transporting the boxed product, and finally the cost for shredding significant volumes of product.

A project team comprised of representatives from Edmonton Transit, the Deputy City Manager's Office, the Finance and Treasury Department, and the Materials Management Branch is analyzing current practices associated with Transit fare products. We believe the scope of work being undertaken by this team should include a comprehensive implementation of purchasing and inventory controls from requisition through destruction. (Recommendation 1)

Finally, Edmonton Transit System has advised us that transitioning Transit fare products to electronic "smart cards" could reduce some of the security risks currently associated with unused fare products. In 2005, the OCA reported on the "ETS – Fare Evasion Review". One of our recommendations was for management to research the potential for implementing a cost-effective fare product and fare collection system that would minimize fare evasion. In our 2007 follow-up of the implementation of this recommendation, we reported that Edmonton Transit System was planning to test "smart card" technology in January 2008, prior to committing to system wide implementation. In January 2009, Edmonton Transit System management reported that based on a consultant report of a positive return and the knowledge gained from both the operational and systems components of this project, they are prepared to begin a system wide smart card implementation if funded.

4.4. Contract – Security Shredding and Disposal

Following a competitive bidding proposal in 2003, the City entered into an outline agreement with Vendor A to provide Security Shredding and Disposal. In approximately 2005, Vendor B bought Vendor A and this new vendor continued to provide the required shredding services.⁶ In September 2008, the current agreement with Vendor B was extended by one year to September 2009. From this point on, we refer to Vendor B as the "Vendor."

The outline agreement has two sets of requirements. The first set includes a few basic requirements for City of Edmonton shredding needs. The second set adds slightly more detail requirements for Edmonton Police Service's shredding needs. This investigation focused only on the City's requirements.

⁶ Explanation of "Consent to Assignment": This was not provided by Vendor A nor requested by the City. Prior to Vendor A assigning its contract with the City to Vendor B, it was supposed to ask the City to approve the assignment. The City can object to an assignment if it has reasonable grounds to do so (reasonable grounds to object may include such things as bad prior experience with the proposed replacement vendor). The clause is supposed to protect the City from being forced to contract with a vendor with which it does not wish to contract. By not objecting to the assignment to Vendor B when the City found out about the assignment, City acquiesced to it (meaning that the City permitted the assignment to occur).

On its website, the Vendor portrays itself as a leading and best practice organization. Their promotional information highlights the following practices: safeguarding of information, strict security practices, unbroken chain of custody, certificate of destruction, legal audit trail, independent auditing, etc. In its contract, the City did not request any of these safeguards that the Vendor promotes.

Over the past several years, both Materials Management and Corporate Records Centre staff have experienced ongoing performance issues with the Vendor. Examples of some of those issues include:

- Inaccurate and incomplete billing information.
- Uncertainty surrounding the disposal of non-recyclables.
- Non-compliance with the contract requirement for a 5/8-inch, cross-cut diagonal cut, or an approved equivalent.
- Skipped pick-up dates without notifying the City in advance of the change in expected arrival dates/times.
- During the three days when the Vendor was shredding the subject tickets, there were operational problems with its shredder. The mechanical blade system jammed repeatedly due to the density of the ticket paper.

In our opinion, the attributes of an effective contract for confidential records destruction should include at least the following attributes:

- Appropriate security clearances for all workers assigned to conduct the confidential shredding.
- Appointing a vendor's representative to deal with potential issues in a timely manner. For example, the accuracy of billings/invoices, and skipped dates for scheduled shredding work.
- Appropriate and cost-effective shredding specifications and a process to ensure compliance with these requirements.
- Annual contract renewal based on actual performance during the previous year.
- Requiring a vendor performance bond or similar instrument.
- Incorporating best practices for confidential records destruction in future contracts.

Currently there are other vendors in the Edmonton region that have the functional capability to provide confidential records destruction services. If the City decides to change vendors, the requirements to process documents for confidential shredding should be changed to incorporate the above attributes. However, in the short term, the City needs to mitigate the risk of another theft occurrence. The 2003 consultant's report (mentioned earlier) identified this risk and presented recommendations to mitigate it. The consultant recommended that the City provide onsite supervision of the shredding activity. Since the current site is not equipped with video surveillance cameras, Edmonton Transit System (working with the Corporate Records Centre staff) needs to immediately implement some compensating controls to address the risk associated with potential theft of Transit Fare Product during shredding operations.

In our opinion, the key stakeholders (Law Branch, Materials Management Branch, City Clerk – Records, and Corporate Security Section) need to develop, implement, and

coordinate an appropriate strategy for dealing with the City’s requirements for confidential records destruction. This strategy may include assessing / considering options such as: (a) requiring client departments to shred their own documents, (b) purchasing a shredder for the Corporate Records Centre, (c) consider shredding documents off-site, (d) pulping documents, and (e) incinerating documents. All feasible options should be analyzed to understand the challenges and risks associated with each, prior to making a cost-effective decision. (Recommendation 2)

It is also our opinion, that the Law Branch (working in partnership with Edmonton Transit System and others as required) should evaluate the feasibility of seeking some form of recovery. (Recommendation 3)

5. Conclusions and Recommendations

The estimated value of the admitted theft or thefts that took place on June 11, 18 and/or 25, 2008 is approximately \$250,000. The actual amount of tickets stolen is unknown. The potential value put at risk was in excess of \$16 million. Edmonton Police Service has now completed its investigation. We believe that the following three recommendations will strengthen internal controls and help avoid a recurrence.

Recommendation #1	Management Response and Action Plan
<p>The OCA recommends that the City Manager:</p> <p>(a) Bring together all business units involved in the Transit Fare Product process and formally assign a “process owner”, and</p> <p>(b) Ensures that all current improvements surrounding Transit Fare Products are implemented in a timely manner to effectively manage all risks surrounding a “marketable currency.”</p>	<p>Accepted</p> <p>Comments: (a) The Office of the City Manager will work with the Senior Management Team to assign formally a “process owner” for all Transit Fare Product processes. The “process owner” will assume overall responsibility, accountability and effective integration between all business units. (b) The assigned “process owner” will be given complete responsibility to develop a detailed action plan that consolidates all previous recommendations, clearly assigns responsibility for implementation, and puts ongoing monitoring in place to ensure implementation is successful.</p> <p>Planned Implementation: (a) April 2009, and (b) A detailed action plan is expected to be in place by May 2009 and will include an implementation schedule of current improvement recommendations.</p> <p>Responsible Party: (a) Office of the City Manager, and (b) Assigned Process Owner.</p>

Recommendation #2	Management Response and Action Plan
<p>The OCA recommends that the General Manager of Corporate Services develop, implement, and coordinate an appropriate strategy for dealing with the City's requirements for confidential records destruction.</p>	<p>Accepted</p> <p>Comments: The Office of the City Clerk (OCC) will ensure secure destruction of confidential records in the custody of the Corporate Records Centre. The OCC is in process of implementing the following strategies: (a) posting of a security guard during shredding processes (beginning February 11, 2009) to ensure all materials identified for shredding are actually deposited in the mobile shredding equipment from the vendor, (b) installing surveillance cameras in the new location of the Corporate Records Centre to enable remote observation of and recording of activity in the area designated for shredding operations.</p> <p>The OCC has met, along with Law and Materials Management, with the vendor to review policies and processes that will further reduce the opportunity for theft of records to occur. In the future the City will inform the vendor that materials of commercial value (e.g., bus tickets, coupons, or other materials which might have cash value "on the street") are scheduled for destruction. The vendor will apply another level of security to that shredding by ensuring a third person at a supervisory level attends the process along with the regular driver and assistant. The vendor also committed to providing a newer model of shredding vehicle will be assigned to the work at the Corporate Records Centre. The newer vehicle directly handles the bins of materials to be shredded, thereby avoiding the need or opportunity for the operator to handle the materials in any way. In addition, cameras mounted on the truck are able to display and record the actual shredding of the materials in internal areas of the truck.</p> <p>Planned Implementation: April 1, 2009</p> <p>Responsible Party: Office of the City Clerk/Corporate Records & Information Management Services Unit</p>

Recommendation #3	Management Response and Action Plan
The OCA recommends that the Law Branch evaluate the feasibility of seeking some form of recovery.	<p data-bbox="643 233 781 266">Accepted</p> <p data-bbox="643 300 808 333">Comments: A review of all relevant documents and material pertaining to the theft of transit tickets and the relationship with the associated Vendor will be undertaken. We will provide a recommendation on proceeding with legal action based on the likelihood of recovery.</p> <p data-bbox="643 533 1182 567">Planned Implementation: April 30, 2009</p> <p data-bbox="643 600 1073 634">Responsible Party: Law Branch</p>

We thank the management and staff members who assisted us with this investigation for their cooperation and support. We also acknowledge the significant assistance of Corporate Security in this investigation.

Appendix 1

Edmonton Transit Fare Product Accounting Review CORVUS Business Advisors - January 29, 2008

(This extract is quoted from the Findings Section of the report.)

Findings

Our review has found major deficiencies in reconciliation and reporting systems that support Corporate Service (*now Finance & Treasury Department*) and Business Development Section staff assigned to manage and account for Edmonton Transit fare product distributions, sales, receivables and receipts. However despite the lack of appropriate tools and support systems our review has found that Edmonton Transit fare product distributions, sales, receivables and receipts **are accurately reflected** in the City financial books and records (SAP).

We commend Corporate Service and Business Development Section staff for their thoroughness and accuracy in accounting for Edmonton Transit fare products despite reconciliation and reporting systems tools obstacles and a burdening workload.

We must impress upon management however that the results of this review could easily have resulted in a massive loss for Edmonton and the need for line-by-line reconciliation of all sales back to May 1, 2005. Knowledgeable and experienced staff have, to this point, compensated for the lack of / non-existent formal reporting and reconciliation processes. Management must recognize that Edmonton Transit fare revenues are at risk and that the only means of effectively mitigating this risk is through the development of appropriate formal reconciliation processes and support tools.

Accountability and responsibility surrounding accounting and transaction processing for this major revenue area must also undergo change. During our review we have found that Edmonton Transit Business Development is accountable and responsible for accounting and monitoring fare product distributions, sales, receivables, and receipts. This Section is poorly qualified and fatigued by what is to our mind an accounting / Corporate Services area of responsibility. Corporate Services should undertake and manage this accounting function and permit Edmonton Transit Business Development to focus on their core competency, sales generation and customer relations management.