

Corporate Credit Card (Data Analytics) Audit

January 16, 2018

THIS PAGE LEFT INTENTIONALLY BLANK

Table of Contents

Execu	utive Summary	
1.0	Background	6
2.0	Audit Objectives, Scope and Approach	8
2.1	Audit Objective	8
2.2	Audit Scope	8
2.3	Audit Approach	8
3.0	Results	
3.1	Split Transactions	9
3.2	Monthly CCC Statements	9
3.3	0	
3.4	Accounts Payable Audits and Monitoring	10
4.0	Observations and Recommendations	
4.1	Split Payments	11
4.2	y	
4.3	Foreign Transactions	14
4.4	Accounts Payable Audits and Monitoring	14

The City Auditor's Office completes all projects in conformance with the *International Standards for the Professional Practice of Internal Auditing.*

Executive Summary

The Corporate Credit Card (CCC) provides employees of The City of Calgary (The City) with a convenient method of procurement for low-dollar value purchases, including employee-related business expenses under \$5,000. On average, from 2008 to 2016, credit card purchases totaled \$65 million per year¹. As of June 2017, there were approximately 3000 credit cards in use across The City.

The CCC is a major component of The City's procurement activities, allowing The City to achieve improvements in efficiency while reducing processing costs. CCC usage is governed by policy which defines the business rules, restrictions and the roles and responsibilities of the individuals and business areas involved in the program. Accounts Payable (AP) is responsible for the issuance and ongoing monitoring of the CCC. AP's role is to ensure CCC policies, procedures and monitoring controls prevent and mitigate fraudulent transactions and reduce financial and reputational risk to the organization. The policy applies to all CCCs and CCC transactions, to all Cardholders and Dept. ID owners and all employees who have responsibility under the program.

For purposes of this audit, data analytics software was utilized to identify potential anomalies in the CCC data from June 2016 to June 2017. Our objective was to review the anomalies in the CCC data analytic results and provide assurance on the effectiveness of related compliance and fraud prevention controls. This was achieved through testing associated credit card monitoring controls and validating the results of our data anomalies with AP.

In our review of anomalies we confirmed that a majority were indicative of non-compliance, although some were false indicators such as duplicate payments. Overall, we determined that existing monitoring controls over CCC were generally operating as designed. We recognize that AP has numerous CCC monitoring practices currently in place. These include conducting risk based audits, monitoring split transactions and outstanding statements, monitoring for fraudulent transactions, enforcing mandatory CCC training before a card is issued and reviewing the terminated employee report to ensure CCCs are canceled following an employee departure.

In our evaluation of non-compliance activity we made three recommendations related to employee training and communication, enforcing accountability to individual cardholders, developing escalation steps to support card suspension and improving efficiency and effectiveness of CCC processes. We also made one recommendation to re-evaluate the process to capture GST on foreign transactions.

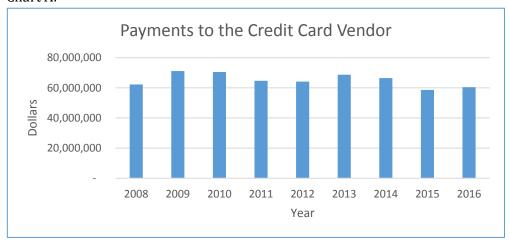
AP has agreed to all recommendations and committed to implementing the recommendations by September 30, 2018. The City Auditor's Office will monitor the status of commitments as part of its ongoing recommendation follow-up process.

 $^{^{}m 1}$ Payments to the CCC vendor from the PeopleSoft system. Excludes Police data.

1.0 Background

The City began its CCC program in 2008 to provide a more efficient and cost-effective means of procuring small dollar goods and services valued at \$5000 or less. Since its inception the average annual purchases are about \$65 million per year as shown in Chart A below.

Chart A:



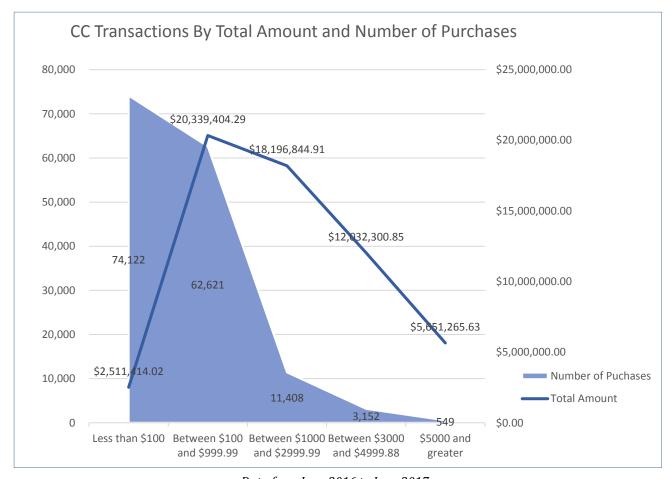
Both AP and Supply manage the CCC. Any exceptions to standard transaction limits, monthly limits and obtaining multiple cards must be extended under an approved business case. AP and Supply jointly review and approve all business case exceptions. AP is the primary monitor of the integrity of the CCC policy to ensure financial and reputational risks associated with the program are managed. Currently, AP have three staff members who monitor approximately 3000 CCCs. Supply provides a supporting role and holds responsibility for monitoring business case exceptions to credit limits and provides custom reports to the Business Units on CCC trends and spend analysis. Supply also reviews approved business case exceptions on a yearly basis.

CCC usage is governed by policy FA-016 (E) and associated procedures for the CCC program. The policy defines the business rules, restrictions and roles and responsibilities of the individuals and business areas involved in managing the CCC. The policy requires that cardholders with transactions must submit a monthly credit card statement and all required supporting documentation to their Dept. ID owner. The Dept. ID owner reviews, approves and submits the statement and supporting documentation to AP within the required timelines. The Dept. ID owner is the primary monitor to ensure that the cardholder adheres to applicable City policies and procedures.

The CCC procedures also requires that cardholders must obtain CCC training and sign a CCC Employee Acknowledgement of Responsibilities and Obligations Form before they can receive a new CCC.

Chart B categorizes CCC transactions by number and dollar value from June 2016 to June 2017. This chart shows that the CCC is being used primarily as intended, that is, for the purchase of small dollar goods and services. The majority of CCC purchases (approx. 49%) are under \$100 totalling \$2.5 million. The largest dollar value purchases were in the \$100 to \$1000 range amounting to \$20 million and representing approximately 41% of the number of purchases.

Chart B:



Data from June 2016 to June 2017

This audit was undertaken as part of the City Auditor's Office 2017/2018 Annual Audit Plan, and reflects the City Auditor's Office utilization of data analytics to enhance the effectiveness and efficiencies of audits. Through the use of data analytic tools, which involved analyzing and classifying data to provide insight into areas of potential risk exposure, we identified anomalies in the CCC. These anomalies in turn highlighted areas of potential risk exposure which warranted further investigation to determine if the anomalies represented true risk events as well as likely causation.

2.0 Audit Objectives, Scope and Approach

2.1 Audit Objective

The objective of this audit was to review the anomalies in the CCC data analytic results and provide assurance on the effectiveness of related compliance and fraud prevention CCC controls.

2.2 Audit Scope

Data analytics were utilized to examine anomalies in the credit card data available from June 26, 2016, through to June 25, 2017. As a result our assurance focused on the effectiveness of controls that were operating during the time these anomalies occurred.

2.3 Audit Approach

Our audit approach included the following:

- Reviewed relevant documentation, policies, procedures, and guidelines.
- Validated the results of the data anomalies with AP and Supply.
- Tested associated credit card monitoring processes and controls.
- Where appropriate, we recommended control enhancements, and identified opportunities to improve efficiencies.

3.0 Results

This audit employed data analytics to analyze the CCC data from June 2016 to June 2017. Data analytics identified anomalies and based on these anomalies we assessed the adequacy of controls to effectively monitor CCC use throughout The City. We focused on the following types of anomalies: split transactions, duplicate payments, deactivated cards for terminated employees, transaction limits, monthly credit limits, foreign exchange transactions, multiple cards per employee, low activity cards and monitoring of CCC transactions.

Overall we assessed AP has reasonable CCC monitoring practices in place to identify non-compliance. These practices include monitoring the Declined Transaction Report weekly to identify split transactions or other irregularities as well as a Merchant Category Code Watch List to identify possible high risk transactions. These irregularities are validated with the cardholder. Furthermore, AP runs a monthly report to ensure CCCs are immediately cancelled for those employees no longer employed by The City.

During testing of controls on monthly credit limits we confirmed that an effective system control is in place which prevents CCCs from exceeding their monthly credit limit. Procedures allow monthly credit limits to be exceeded on an exception basis with the support of an appropriate business case. The employees that did exceed their monthly limit, through the sample of anomalies tested, all had a valid business case. Data analytics also identified three employees who had multiple credit cards. We confirmed each also had a valid business case or a valid business reason for having more than one card assigned to them.

In our validation testing of anomalies some were confirmed to be false indicators. In particular our testing did not confirm the existence of duplicate payments. Our testing also did not confirm any malfeasance or fraudulent activity. Overall, we determined that AP effectively monitors the CCCs. However, despite their best efforts non-compliance to CCC policy continues to occur. We raised four recommendations to further enhance controls and efficiencies of the CCC process.

3.1 Split Transactions

A split transactions is defined as occurring when a cardholder circumvents a single transaction limit by dividing a single purchase with a vendor into two or more smaller transactions. As part of the monthly file download process, AP identifies splits over \$5000. This triggers an audit on that cardholder for that statement period. Although AP actively monitors potential splits, non-compliance continues to occur. There is a need to reinforce cardholder's responsibility to use The City's procurement process for purchases over \$5000 which will reduce split payments. Reducing the volume of split payments will also allow AP to more effectively utilize their resources. In order to address these issues of non-compliance we recommended that AP increase awareness of the policy to cardholders, develop summary reports of trends of non-compliance to senior management and define escalation steps to support card suspensions for employees who do not comply with the policy. See recommendation #1.

3.2 Monthly CCC Statements

In addition to continued non-compliance by the cardholder regarding split transactions, late monthly CCC submissions are also an ongoing issue. AP monitors late statements daily. Our analysis of AP's 2016 data, indicated that 198 statements or 171 cardholders had statements

submissions greater than 90 days. As with split transactions there is a need to reinforce responsibility with the Dept. ID owner and cardholder to reduce instances of non-compliance. We made a recommendation to review internal processes to identify a more consistent approach to suspend cards, report on exceptions, and establish ongoing communication. See recommendation #2.

3.3 Foreign Transactions

Our testing identified foreign transactions totaling approximately \$2100 in GST paid but not claimed back by The City. Since 2007, The City has recorded GST on CCC foreign transactions at zero. Canada Revenue Agency (CRA) began a GST review in 2015, which included reviewing CCCs. Following the completion of this review, Finance plans to revisit the CCC GST recording process taking into account the impact of a possible new credit card provider and CRA's audit conclusions. See recommendation #3.

3.4 Accounts Payable Audits and Monitoring

To support compliance to CCC policy and procedures, AP monitors various activity reports and conducts risk based audits of CCC statements. This involves reviewing approximately 30% of CCC statements each month to ensure each complies with CCC policy and procedures. As the criteria methodology used to select CCC statements for audit uses constant parameters, we identified that approximately 43% of total cardholders have not been audited over the past two years.

Our audit identified additional areas of non-compliance within our sample review including transactions missing detailed receipts, incorrect invoices submitted and missing approvals. We also noted that two employee CCCs were not deactivated in a timely manner. We made a recommendation to reassess the audit methodology/criteria, provide refresher training and to reinforce the use of the Employee Departure/Transfer Checklist. See recommendation #4.

Throughout our testing we also identified an opportunity for improvement, which could enhance efficiency and effectiveness. We noted that current practices involve AP and Supply manually preparing reports from CCC vendor data. AP relies on complex spreadsheets to monitor compliance and Supply produces manually completed spreadsheets focused on CCC spend analysis. Low activity cards are not monitored as they are low risk to AP and we noted instances where some transactions are pushed past their limit by vendors or exchange rates. We suggested enhancement of vendor produced reports to reduce current reliance on manual reports and to improve system controls such as enforcing transaction limits. AP has responded by agreeing to investigate this opportunity.

We would like to thank staff from AP and Supply for their assistance and support throughout this audit.

4.0 Observations and Recommendations

4.1 Split Payments

Although AP actively monitors potential split payments ongoing non-compliance continues to occur. Higher volumes were identified during our testing within Recreation, Transit, Facility Management, Parks and Supply. Outside of normal identification of a potential split, there was no evidence of escalation or follow up.

Policy FA- 016 (E) "All CCCs have a single transaction credit limit and a monthly credit limit. Cardholders shall not circumvent these or any other usage limitations". Further, section 16.4 of the CCC procedures state that "AP is authorized to cancel a CCC at any time in the case of misuse or policy non-compliance". Examples of non-compliance include splitting transactions to avoid transaction limits.

Split transactions increase financial risk to The City as they circumvent the control of having a transaction limit in place. Transaction limits mitigate The City's financial exposure to unauthorized and fraudulent transactions, as well as ensure compliance with Supply policy which requires the purchase order process to be utilized when purchasing goods greater than \$5000.

Using data analytics we identified approximately 2000 potential split transactions² totaling \$8.4 million. From these possible split transactions we selected a sample (or subset) of 30 transactions and reviewed documentation to determine if splits actually occurred. Out of our sample of 30 transactions, 18 (60%) were identified as true splits. AP detected 13 out of the 18 (72%) through their monitoring processes. Cardholders have three transaction limits, \$1000, \$3000 and \$5000. AP actively tests for potential splits that exceed \$5000. For the splits not identified by AP only one was in the \$5000 limit, the remaining were in the \$1000 and \$3000 limits. AP tracks possible splits in a spreadsheet and when we reviewed the 2016 and 2017 spreadsheets we noted that non-compliance for split transactions continues to occur every month.

When AP identifies a split transaction, per their procedure, they send a standard email notification to the Dept. ID owner and copy the cardholder, Supply and Corporate Security. The current email does not direct the Dept. ID owner to take any action regarding this non-compliance. Although AP is monitoring and following up on splits, with the cardholder and Dept. ID owner, our testing identified that non-compliance continues to occur.

Recommendation 1

The Manager Tax, Receivables, Accounts Payable to:

- a) Define and implement summary reports of trends for non-compliance to one level up from Dept. ID owner (e.g. Directors).
- b) Reinforce accountability to credit card users and increase awareness of policy requirements through inclusion of policy reference in existing email notification process.
- c) Define escalation steps to support card suspension per Policy FA-016 (E) Section 5 Consequences of Non-Compliance.

² Potential splits are defined as: two or more transactions occurring on the same day, to the same vendor that exceed a cardholder's transaction limit.

Management Response

Agreed.

Action Plan	Responsibility
Accounts Payable will define and implement summary reports and define escalation steps to support credit card suspension per the applicable policy. Accounts Payable will reinforce the responsibilities of credit card users and increase awareness of associated policy requirements through inclusion of policy references in the existing email notification process	Lead: Manager, Tax, Receivables, Account Payables (TRaP) Support: Communications, Supply, Corporate Security Commitment Date: September 30, 2018

4.2 CCC Monthly Submissions

We analyzed the 2016 CCC Tracking Report which indicated 198 statements or 171 cardholders with statement submissions greater than 90 days.

Policy FA-016 (E) section 2 states "Cardholders with transactions must submit a monthly Credit Card Statement and all required supporting documentation to their Dept. ID owner. The Dept. ID owner shall review, approve and submit the Statement and supporting documentation to Finance within the required timelines." AP procedures state that the Dept. ID owner "must submit the approved statement directly to AP by the 15th of the month following the statement date".

Statements not submitted to AP within policy guidelines opens The City to greater financial risk as the deadline to dispute a transaction with the CCC provider is 60 days.

AP tracks late statements via the CCC Tracking Report and follows up with the cardholder via an email notifications every 15 days. AP informed us that after the 3rd notification they have the authority to suspend the card and indicated that as of 2016 card suspensions are occurring.

A review of comments in the vendor credit card system relating to suspension of cards as well as sample emails received from AP indicated that there were a total of seven suspension requests for four cardholders in 2016 versus 171 cardholders with late statements over 90 days (less than 2.5%). In 2017, there were 17 suspension requests for 13 cardholders. We noted that cardholder suspensions have increased, however, suspension requests are not completed on a consistent basis.

We identified the following statistics in the 2016 CCC Tracking Report:

Days Outstanding	Number of Cardholders with	Number of
	Late Statements	Statements
Over 60 Days	418 (9%)	583 (3%)
Over 90 Days ³	171 (4%)	198 (1%)
Total	4,473 cardholders	22,195 statements

Late statements may be occurring as the cardholder and Dept. ID owner may not be aware of the statement submission requirements outlined in the CCC policy and procedures.

Recommendation 2

The Manager Tax, Receivables, Accounts Payable to:

- a) Review internal processes to identify a more consistent approach to suspend cards when cardholders do not comply with monthly statement submission requirements.
- b) Create a critical summary exception report to identify trends for outstanding statements over 60 days and report to the corresponding Dept. ID owner and one management level up.
- c) Establish ongoing communication of current policy, and procedures on a periodic basis to all relevant CCC and Dept. ID owners for trends of non-compliance.

Management Response

Agreed.

Action Plan	Responsibility
Accounts Payable will review internal processes to identify a more consistent approach to card suspension for cardholders that do not comply with monthly submission requirements. Accounts Payable will develop exception reporting to identify trends of non-compliance with monthly statement submission requirements, and will establish opportunities for periodic ongoing communication of the current policy and procedures related to credit cardholders and Dept. ID owners displaying trends of non-compliance.	Lead: Manager, TRaP Support: Communications Commitment Date: September 30, 2018

³ Note that the number of cardholders and statements for over 90 days are also included in the over 60 days statistic.

4.3 Foreign Transactions

Our data analysis identified 4,645 foreign transactions totaling just over two million dollars. Out of these 4,645 transactions we tested a sample of invoices (selected a subset) of 75 foreign transactions. In this sample we identified 17 out of the 75 invoices that had approximately \$2,100 in GST paid, which was not claimed back by The City. These 17 invoices included five percent GST but were paid in US dollars and the GST was not accounted for.

In 2007, a decision was made by Finance to calculate five percent GST on all Canadian transactions, and zero percent GST on all foreign transactions. At that time it was determined that there might be some individual overstatement and understatement of GST but the savings in employee time would outweigh any minor differences. There has been no process change in recording GST for foreign transactions since 2007. In 2015, CRA began a GST review which included CCC. Tax plans to revisit the CCC GST recording process taking into account the impact of a possible new credit card provider and CRA's audit conclusions.

Recommendation 3

The Manager Tax, Receivables, AP to re-evaluate the 2007 decision rationale and foreign CCC transaction process to accurately record GST.

Management Response

Agreed.

Action Plan	Responsibility
Accounts Payable will engage subject matter experts to ensure the appropriate treatment of GST on foreign CCC transactions	Lead: Manager, TRaP Support: Manager, Corporate Tax and Regulatory Affairs Commitment Date: March 31, 2018

4.4 Accounts Payable Audits and Monitoring

We identified opportunities to improve efficiencies and effectiveness of AP's audit methodology and re-enforce training and awareness for cardholders. AP conducts risk based audits and also monitors various reports to ensure cardholders comply with CCC policies and procedures. However, despite AP's monitoring efforts, non-compliance to CCC policies and procedures continues to occur by cardholders.

AP conducts risk based audits on CCCs and each month audits approximately 500 statement submissions. The selection of statements utilizes a large complex excel spreadsheet to determine who will be audited. AP then reviews each statement to determine compliance to the CCC policies and procedures. An email is sent to the Dept. ID owner and cardholder if noncompliance issues are found. Our review of the excel spreadsheet noted that 43% of cardholders are never audited as these individuals do not fall into one of the established high

risk categories. We identified that if a cardholder is in a pre-defined category, i.e. senior management, administrative assistance, they will always be selected for an audit. Throughout our fieldwork we also identified non-compliance issues such as transactions missing detailed receipts, incorrect invoices submitted and a missing approval. Therefore, it is important that AP conducts audits to ensure cardholders comply to CCC policies and procedures.

Our testing of timely card deactivations found that two employee CCCs were not terminated in a timely manner (past 60 days, which is the bank's target timeframe to dispute a transaction). In both cases the Dept. ID owner did not notify AP via the employee checklist to cancel the CCC in a timely manner.

Cardholders must complete CCC training and sign a CCC Employee Acknowledgement of Responsibilities and Obligations Form before they receive their card. No additional or ongoing training is provided. Formal ongoing training and communication enhances the efficiency and effectiveness of existing processes by ensuring that key information is reinforced. Periodic communication reduces the risk that CCC policies and procedures will be inconsistently followed and non-compliance issues will occur.

Recommendation 4

Finance Lead, Accounts Payable:

- a) Review the audit methodology in order to improve efficiency and effectiveness. For instance, consider selecting a random sample, which may be lower in sample size than the current methodology but is more representative of the whole population.
- b) Provide CCC policy targeted refresher training for the cardholders and Dept. ID owners that have the most non-compliance issues.
- c) Reinforce awareness, through Corporate Take Five, to Dept. ID owners the use of the Employee Departure/Transfer Checklist.

Management Response

Agreed.

Action Plan	Responsibility
Accounts Payable will review the existing audit	<u>Lead</u> : Manager, TRaP
methodology and pursue opportunities to	
improve the overall efficiency and effectiveness	Support: Enterprise Support
of the process. This includes exploring	Systems(ESS), Communications
opportunities to implement electronic routing	
and approval of CCC monthly statement	Commitment Date: June 30, 2018
submissions, and the enhanced reporting and	
analytical capabilities that an automated	
workflow would support. Automated workflow	
will also create resource capacity to allow	
Accounts Payable Analysts to conduct additional	
value-added audit analysis. Accounts Payable	
will continue to reinforce awareness of the	
impacts of non-compliance through general and	

Action Plan	Responsibility
targeted communication and training opportunities. The potential implementation of an automated workflow will also present additional training and communication opportunities through the change management process.	