OFFICE OF THE
City Auditor

Google Procurement Process Review

August 25, 2014

THE CITY OF
Edmonton

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

Google Procurement Process Review
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Google Procurement Process Review

Executive Summary

In 2010, the Information Technology Branch initiated the Workspace Edmonton (WE) program. The vision and direction for Workspace Edmonton was to provide City of Edmonton employees with the capability to work anytime, from any place, with any device.

On April 21, 2011 the Corporate Leadership Team approved the Workspace Edmonton recommendation to implement Google Apps Premier Edition (GAPE) with Microsoft Office and SharePoint being maintained where required to meet business needs. On August 24, 2011, Executive Committee approved entering into a sole source agreement with Google Inc.

Our objectives for this review were to determine:

- Whether the process leading to the decision to sole source the procurement of Google cloud-based productivity tools was justified given the technology that existed at the time the decision was made, and

- If the assumptions used to forecast the $9.2 million cost avoidance over 5 years were comprehensive and reasonable at the time the business case was prepared and whether the savings are still attainable in the current environment.

Process Leading to the Decision to Sole Source

Based on our review of the documentation and interviews with project staff, it appears that the Information Technology Branch undertook sufficient due diligence to justify the recommendation to sole source to Google. However, the report to Executive Committee did not explicitly identify a potential for a challenge of non-compliance with the New West Partnership Trade Agreement or include a cost/benefit analysis.

Assumptions used to Forecast the Cost Avoidance

Based on our review the assumptions used in the business case were optimistic. Costs exceed the estimates in the business case in two areas.

1. Implementation of desktop productivity tools was estimated at $5.5 million. The actual cost to April 2014 is $11.1 million. The increase in costs was funded by reallocating budget from the Central Software System component of the Workspace Edmonton Initiative that is not being implemented as planned.

2. We estimate that the cost avoidance for the first five years will be $2.4 million rather than the $9.2 million forecast in the business case.

    The Administration estimate that the five year cost avoidance would be $5.6 million if the business case assumptions were updated to reflect the current licensing environment and planned license optimization activity.

We made two recommendations: the first to reinforce the need for future privacy impact assessments for technology changes and the second to support the optimization of licenses.

Google Procurement Process Review

1. Introduction

Following a discussion on Google Mail and Calendar on July 8, 2013, Executive Committee made the following motion that was subsequently approved by City Council on July 15, 2013.

> That the City Auditor be requested to include in his annual work plan and report to Audit Committee, the following:

> a. The decision not to issue a Request for Proposal for Google Mail and Calendar.

> b. Cost of lost productivity, transfer of data, implementation of any other elements of Google, the real savings and costs of moving forward with other Google applications, such as presentations, Docs and spreadsheets.

2. Background

In 2010, the Information Technology Branch initiated the Workspace Edmonton (WE) program. This initiative was originally named the "Next Generation Office." This program was created to establish the foundation for productivity and collaboration technologies for City business areas to leverage for the next decade. The vision and direction for Workspace Edmonton was to provide City of Edmonton employees with the capability to work anytime, from any place, with any device.

The Workspace Edmonton Initiative covers two primary components:

1. Desktop Productivity Tools – Moving away from the purely client-computer based office productivity suite towards a web-based solution, with data and services accessible on and off the City's network.

2. Central Software System (Virtualization) – Transition software installed on user desktops to a server based solution.

The business case for the Workspace Edmonton initiative shows that the City will avoid $9.2 million in operating costs over five years by implementing the desktop productivity tools. These tools include Google Apps, Microsoft Office and Microsoft SharePoint. The business case also shows the estimated cost for implementation to be $12.0 million as shown in Table 1.

Table 1 – Workspace Edmonton Implementation Cost
(millions of dollars)

	Estimated Cost
Desktop Productivity Tools	$5.5
Central Software System	6.5
TOTAL IMPLEMENTATION	**$12.0**

On August 24, 2011 the Executive Committee approved the Administration's recommendation to enter into a sole source agreement with Google Inc. for the provision of desktop/office productivity tools.

3.   Audit Objectives

We established two objectives to address City Council's motion.

Audit Objective 1:

To determine whether the process leading to the decision to sole source the procurement of Google cloud-based productivity tools was justified given the technology that existed at the time the decision was made.

The public procurement principles of openness, fairness, transparency and accountability were used to guide this assessment.

Audit Objective 2:

To determine if the assumptions used to forecast the $9.2 million cost avoidance over 5 years were comprehensive and reasonable at the time the business case was prepared and whether the savings are still attainable in the current environment.

We used the following criteria to assess forecasted costs and cost avoidance:

- The assumptions used to forecast potential saving were thoroughly researched and accurately reflected the City's operating environment.
- Projected savings were accurately calculated based on future operational needs.

4.   Observations and Recommendations

4.1.   Procurement Process

To determine whether the sole source was justified at the time the decision was made we reviewed outputs from the Information Technology project management process. The focus of the review was on elements that influenced the procurement.

Procurement Management is one of 13 project management knowledge areas set out in the City's Project Management Resource Guide. The development of the guide was led

by the Corporate Centre for Project Management. This guide is currently applied for all major capital projects but the principles can be applied to any initiative.
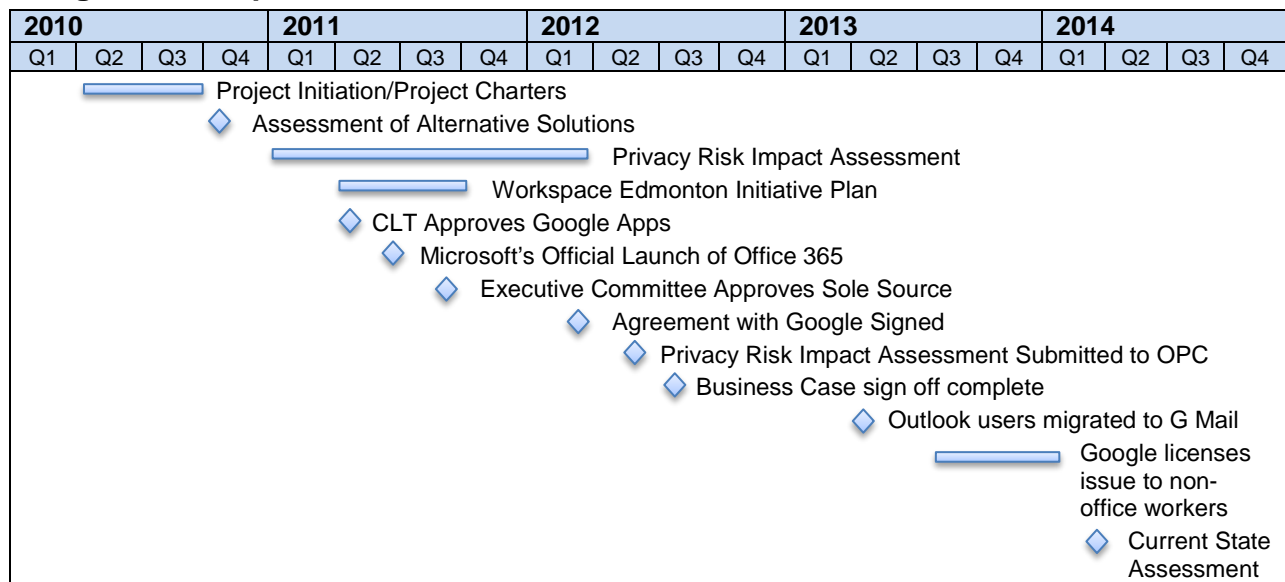
The Workspace Edmonton initiative was guided by the Information Technology Branch's gating process that incorporates many of the project management principles set out in the Project Management Resource Guide. One of the key differences between the project management process outlined in the Project Management Resource Guide and gating process are six Go/No Go decision points or gates. These predetermined decision points provide decision makers the opportunity to ensure the outputs from each stage are complete and the project is ready to proceed to the next gate.

We reviewed output documents for each of the gating phases to gain a general understanding of the work undertaken in each of the phases. To better understand the procurement activities that took place we also met with representatives from the Materials Management and Information Technology branches and reviewed a variety of correspondence between the branches.

Overall, the documents we reviewed indicated that the analysis and evaluation required in each phase had been undertaken.

Implementation of the Workspace Edmonton initiative took place over a period of four years. The Workspace Edmonton project had five project managers over two years. Based on our assessment of the information collected, we identified a number of key events and documents where there is potential for improvement. Diagram 1 sets out significant events that took place over the four years implementation period.

Diagram 1 – Implementation Timeline

2010				2011				2012				2013				2014			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

Project Initiation/Project Charters

◇ Assessment of Alternative Solutions

Privacy Risk Impact Assessment

Workspace Edmonton Initiative Plan

◇ CLT Approves Google Apps

◇ Microsoft's Official Launch of Office 365

◇ Executive Committee Approves Sole Source

◇ Agreement with Google Signed

◇ Privacy Risk Impact Assessment Submitted to OPC

◇ Business Case sign off complete

◇ Outlook users migrated to G Mail

Google licenses issue to non-office workers

◇ Current State Assessment

Project Initiation/

Project Charters

April-September 2010

Between April and September 2010 the project charter was prepared. The project charter consisted of five separate documents, one for the overall initiative and four for specific activities. These documents set out the goals, objectives, scope, roles and responsibilities, deliverables and budget for the defined work. The opening statement in the project charter states that once approved the documents serve as a reference point to guide the work. Four of these charters were consolidated into the Workspace Edmonton Initiative Plan in April 2011.

Assessment of

Alternate Solutions

November 2010

Seven alternatives, including status quo, were identified and evaluated. In the initial evaluation that considered functionality and cost, five of the alternatives were eliminated.

A detailed evaluation was conducted on the two remaining options, Google Apps and Microsoft Business Productivity Online Service. The latter is the predecessor to Microsoft Office 365. The detailed evaluation concluded that both products provided the baseline functionality and that Google provides a superior match to the City's overall needs.

Workspace Edmonton

Initiative Plan

April 2011

In April 2011 the first draft of the Workspace Edmonton Initiative Plan that consolidated four of the five project charter documents was prepared. The fifth project charter *"Next Generation Office RFP – Phase 2"* was cancelled as Information Technology had determined that only one of the alternatives evaluated was a viable option. The final draft plan was issued on September 8, 2011.

The City's Project Management Resource Guide describes a project plan as a "living document" that gets updated, modified and edited throughout the project by the project manager. The guide also notes that the project plan should be signed and dated by a designated representative from the branch. We were advised that the Workspace Edmonton Initiative Plan was approved by the Information Technology Leadership Team at a meeting on February 7, 2012.

Corporate Leadership

Team Approval

April 2011

On April 21, 2011 the Corporate Leadership Team approved the Workspace Edmonton recommendation to implement Google Apps Premier Edition (GAPE) combined with Microsoft Office and SharePoint being maintained where required to meet business needs.

At that time Google Apps was the only product that provided a

cloud based productivity suite to address the City's vision to provide employees with the capability to work anytime, from any place, with any device.

Initial Release of Office 365 *June 2011*	Microsoft announced Office 365 in October 2010 as a replacement for Microsoft Business Productivity Online Service. In April 2011, Microsoft engaged various organizations to beta test their product prior to its general release. Beta testing is a form of user acceptance testing.

In May 2011, City and Microsoft representatives discussed the City's decision to enter into an agreement with Google. Information Technology Staff reviewed each of the Microsoft's comments/suggestions. In June 2011, the City responded to Microsoft confirming the decision to enter into an agreement with Google Inc. We were advised by the Information Technology Branch that they did not believe Microsoft Office 365 at this point in its development was a viable option (e.g., did not support real-time collaboration) for the City of Edmonton. This premise was also supported by independent analysis of the two products at that time.

On June 28, 2011, Microsoft released the first version of its Office 365 product for general use.

Executive Committee Approval *August 2011*	On August 24, 2011, Executive Committee was asked to approve entering into a sole source agreement with Google Inc. The City's procurement practices include complying with the New West Partnership Trade Agreement (see Appendix 1.) One of the exception criteria that allows sole source procurement states, "Where it can be demonstrated that only one supplier is able to meet the requirements of a procurement (copyright, patents, prototypes,

exclusive rights)." With the release of Microsoft Office 365 in June 2011 there were two vendors claiming to provide "cloud" offerings. The report provided to Executive Committee did not reference Microsoft's release of the Office 365 product.

Information Technology Branch management believed they were in compliance with Trade Agreement requirements as the version Microsoft Office 365 offered at that time did not provide full functionality through a browser (e.g., Windows Explorer, Google Chrome) as a cloud solution. Full functionality required Microsoft Office and Outlook to be installed on client equipment, which requires ongoing internal support to manage system upgrades and hardware requirements. Further, the product, at that time, did not afford staff the ability to work anytime, from any place, with any device.

During discussion on the sole source request some committee members commented that the report should have included a cost/benefit analysis to help them understand the request. The response to this request was provided verbally at the meeting versus in a

written report. At the conclusion of the discussion the recommendation to sole source was approved without the report explicitly identifying a potential for a challenge of non-compliance with the New West Partnership Trade Agreement or examining a cost/benefit analysis.

The approval of a sole source is not a unique occurrence. The City often enters into sole source arrangements for a variety of professional service and material purchases. In May 2012, the OCA presented a report on Contract Tendering to the Audit Committee in which we recommended that the Administration identify any potential for a challenge of non-compliance with the New West Partnership Trade Agreement when requesting approval of sole source procurement. The Administration has implemented reporting changes to address the recommendations contained in the report. Therefore, we are not making a recommendation for this occurrence.

Privacy Risk Impact Assessment Submitted to OIPC

May 2012

An information security risk assessment of Google Services was completed in January 2011. Specific risks and mitigation actions are documented in this assessment. Security, in this context, refers to the mechanisms in place to protect the privacy of information. This includes access controls and safeguards to prevent unauthorized disclosure, alteration, loss or destruction of information. This is typically accomplished through operational and technical controls.

A detailed Privacy Risk Impact Assessment was also completed in April 2012. Privacy encompasses controlling who is authorized to access information and under what conditions information may be accessed, used and/or disclosed. This is typically achieved through policy and procedure.

The detailed assessment was developed in consultation with the City's FOIP office, City Clerk, Law, IT Security Specialist, and IT Architects. The report identified specific risks associated with securing and accessing data as well as the associated mitigating factors. We were advised that independent security reviews have been completed and the City does not have any concerns related to the security of data stored on Google servers.

The April 2012 report identifies City procedures, policies and directives that are designed to protect information assets. The report also sets out data classification guidelines and information protection levels to help business areas make informed decisions as to how new technology may impact business processes.

A summarized version of the Privacy Risk Impact Assessment was completed in May 2012 and sent to the Office of the Information and Privacy Commissioner of Alberta (OIPC). This document summarized the internal privacy assessments completed to this point.

The document provided to the Office of the Information and Privacy Commissioner notes that the Information Technology Branch was not able to make definitive statements about exactly what personal information is collected, used and disclosed by each business area. Custodianship of data is the responsibility of business areas. The document goes on to state each business area is individually responsible for updating or conducting appropriate privacy analysis to reflect the impact (if any) of technology change and to ensure personal information used by their program or system is appropriately managed.

We were advised that an investigation by the Office of the Information and Privacy Commissioner has taken place and that the result was positive. As of this report date, a formal response from the Privacy Commissioner has not been received. A formal response is required to conclude whether the risk assessment adequately addresses privacy requirements from the perspective of the Office of the Information and Privacy Commissioner.

In June 2012, the Office of the Privacy Commissioner of Canada and the Offices of the Information and Privacy Commissioner of Alberta and British Columbia jointly issued Cloud Computing for Small and Medium-sized Enterprises guidelines: This joint guideline signals the importance of understanding the potential impact on privacy of moving to cloud based services.

We believe that privacy assessments should be completed for all changes in technology that involve moving to cloud based services prior to procurement of the service.

Recommendation 1 – Privacy Impact Assessment
The OCA recommends that the FOIP Manager ensure that privacy assessments are completed for all technology changes involving movement to the cloud and that the assessments are completed prior to procurement taking place.
Management Response and Action Plan
Accepted **Action Plan**: The recommendation from the City Auditor aligns with Administration's procedures related to all new technology programs. This is an important task to carry out with the growing movement to cloud-based technologies. To reaffirm this expectation, the General Manager of Corporate Services will circulate a memo on behalf of the FOIP Manager as a reminder of this critical step in the process of implementing a new technology solution. **Planned Implementation Date:** September 30, 2014 **Responsible Party:** FOIP Manager

**Business Case
Sign-off**

July 2012

The City's Project Management Resource Guide shows that a business case[1] is required prior to capital project funding being approved.

The draft Workspace Edmonton business case was dated April 20, 2011, prior to Corporate Leadership Team approving implementation of Google Apps. The final business case is dated March 27, 2012.

We noted that the approval signature of the Corporate Services General Manager is dated June 6, 2012 and the signature of a representative for the General Manager of Financial Services and Utilities is dated July 24, 2012. Both of these signatures are after the signing of the procurement agreement which took place in March 2012. We were advised that throughout negotiations, Administration ensured that the contracts included opt-out clauses in the event that appropriate approvals were not obtained.

The financial information presented in the business case is highly summarized. The details that support the business case are contained in the financial analysis that was prepared for the Workspace Edmonton initiative. We were advised by Financial Services staff that they reviewed the business case and financial analysis for reasonableness and confirm the information supported the business case conclusion.

Business cases and supporting financial information should be reviewed prior to approval of any funding, either capital or operating.

**Current State
Assessment**

May 2014

In February of 2014, the current General Manager of Corporate Services initiated an independent assessment on the current state of the information technology platform used in the City. We reviewed the reports produced by Deloitte LLP and believe their qualitative assessment complements the work done by the OCA.

The Deloitte report identifies a number of activities and next steps that they and the Information Technology Branch believe should be taken to optimize the productivity suite model now being used by the City.

We agree with the directions suggested in the report. In particular, steps that improve efficiency, reduce software requirements and licensing costs. These steps include:

- Application Integration – Reviewing the applications still requiring access to Gmail for workflow, etc., and developing a plan to further integrate applications with focus on applications that will drive productivity gains for the end users.

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[1]The City's Program Management Resource Guide defines a Business Case as: An effective business case is a multi-purpose, decision making document that generates the support and participation needed to turn an idea into reality. … At the CoE the business case is owned by the Finance department.

- Productivity Suite Functionality – Continuing to review and refine licensing for desktop productivity solutions provided for staff.

- Internal SharePoint Sites – Reviewing the use of SharePoint for City users and support their transition to Google Sites where feasible to reduce Microsoft licensing requirements.

We also agree with Deloitte's suggestions that the Information Technology Branch develop and implement a stronger project management structure. Furthermore, we believe the Information Technology Branch should consider leveraging the work done by the City's Corporate Centre for Project Management Office and the Financial Services Branch.

Recommendation 2 – Next Steps
The OCA recommends that the Information Technology Branch Manager address the consultant's suggestions that will further optimize the desktop environment.
Management Response and Action Plan
Accepted   **Action Plan**: Following the work carried out with the consultants, the IT Branch began to implement the recommendations outlined above. Each of the recommendations will further optimize our delivery of technology and desktop solutions for the organization, and improve internal processes for the branch.   **Planned Implementation Date:** August 31, 2015   **Responsible Party:** Branch Manager, Information Technology

4.2.   Financial Analysis

The business case identifies two financial elements: implementation costs and future cost avoidance.

4.2.1.   Implementation Costs

The approved Workspace Edmonton Business Case allocated $5.5 million of the $12.0 million budget to the implementation of desktop productivity software. The remaining $6.5 million was allocated to the Central Software Systems project.

In November 2013, funding approved for Central Software Systems was reallocated to the implementation of desktop productivity software to cover incremental scope changes. In total $3.4 million was allocated to cover migration of public folders, decommissioning of Exchange, migration of non-active email, and desktop productivity tools. As shown in Table 2 this brings the total implementation cost estimate for desktop productivity to $8.9 million. The request to reallocate the funding also stated: *"In addition, the expenditures to provide support and ongoing change management*

exceeded original projections." Further funding was used to improve user based communication, orientation and training materials.

Table 2 – Estimated Implementation Cost
(millions of dollars)

	Original estimate	Reallocation	Revised Estimate	Actual to April 2014
Desktop Productivity	$5.5	$3.4	$8.9	$11.1
Central Software System	6.5	(3.4)	3.1	0.4*
TOTAL IMPLEMENTATION	**$12.0**	**--**	**$12.0**	**$11.5**

* The implementation of the central software project was scaled back significantly as the detailed analysis showed the costs would exceed the benefits.

As of April 2014, the Information Technology Branch has expended $11.1 million for implementation of the new desktop productivity solution. These costs do not include expenses incurred by operational areas for end user training which are typically born by the business areas as a day to day operating expense. We were advised by Financial Services that implementation costs, including training, incurred in the business areas for the Workspace Edmonton initiative have not been tracked. This aligns with standard procedures for the City of Edmonton

4.2.2. Cost Avoidance

The Business Case projected $9.2 million in cost avoidance in the first five years which includes the conversion period. Table 3 summarizes the cost avoidance by type of cost.

Table 3 – Estimated 5 Year Cost Avoidance by Type of Cost
(thousands of dollars)

	Status Quo[1]	Hybrid[2]	Cost Avoidance
1. Licensing	$11,831	$6,634	$5,197
2. Operation Staff (FTE)	14,552	12,709	1,843
3. Hardware and Software	13,948	11,769	2,179
TOTAL	**$40,331**	**$31,112**	**$9,219**

1. Status Quo – Maintaining on-premise delivery of all IT services per the 2010 desktop operating model and technologies
2. Hybrid – Combination of Google apps cloud service and on-premise Microsoft service

1. Licensing Costs

a) Business Case

The most significant cost avoidance is due to changes in license requirements. We reviewed the actual costs incurred for licensing for 2012 through 2014 and the projected licensing costs based on signed agreements through to 2016[2]. The results of our analysis are shown in Table 4.

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[2] Licensing agreement fiscal year starting in October and Ends in September of the following year.

This table is limited to comparing actual requirements/expenditures of the organization against the projections from the approved business case – which was premised on 8,500 users. The financial analysis that supports the $9.2 million cost avoidance show 8,500 users in the first year of implementation. The analysis also shows 8,500 Google licenses in the first year, increasing to 11,600 in the second year. In the fourth year (2014-15) the number of Google licenses increases to 13,765. The business requirements have shifted dramatically since the approved business case as has the number of users supported. We discussed changes in the licensing environment with Information Technology staff to determine how it would impact the cost estimates presented in the business case. Table 6 shows how changes in the licensing environment and planned licensing optimization influence the cost avoidance.

Table 4 – Licensing Cost Analysis – Business Case
(millions of dollars)

	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)	Year 4 (2014-15)	Year 5 (2015-16)	Total	Cost Avoidance
Business Case							
Status Quo[1]	$1.6	$1.7	$2.8	$2.9	$2.8	$11.8	
Hybrid[2]	1.6	0.8	1.1	1.3	1.8	6.6	$5.2
Actual/Projected	1.2	2.4	1.9	2.8	2.8	11.1	0.7

1. Status Quo – Maintaining on-premise delivery of all IT services per the 2010 desktop operating model and technologies
2. Hybrid – Combination of Google apps cloud service and on-premise Microsoft service

Our analysis shows that licensing costs for the five year period 2012 through 2016 will be $11.1 million not the $6.6 million projected in the business case.

The increase in licensing cost is due to:

- Having to retain more Microsoft licenses than projected to enable broader access to some Corporate systems not yet integrated with Google and to access documents filed in SharePoint sites.

  Microsoft's new licensing agreement includes Office 365. Effectively, the City is licensed for both Google and Microsoft productivity tools on all desktops at this point.

- Underestimation of the number of Google licenses that are required during transition. Information Technology estimated that in 2014 the City would require 13,765 licenses. The City is currently licensed for 16,000 users as shown in Table 5. We were advised that this has been done to accommodate a 12 month retention period for transitioned records during implementation (part of a planned mitigation strategy to enable access to electronic records during the transition from Microsoft email to Google Mail).

Table 5 – Allocation of Google Licenses in July 2014

Purpose	Number
Active Users/Current employees	12,352
Suspended Users/Former employees[1]	3,009
Unused Licenses[2]	639
Total	**16,000**

1. Suspended Users – The City is required to retain documents contained in former employee email accounts for one 1 year in accordance with record retention policy.

2. Unused Licenses – This is a pool of licenses that are maintained to accommodate staff turnover.

b) Current Licensing Environment

The Information Technology Branch advised us that a new Microsoft Office enterprise agreement that can be adopted by public sector organizations is in place for 2013-2016. They believe that this agreement reasonably represents what the City would pay to license Microsoft products in an on-premise Microsoft desktop environment (as was the case prior to the decision to transition to the hybrid service.) Table 6 shows the revised cost avoidance based on a status quo using the pricing included in the public sector organization agreement.

Table 6 – Licensing Cost Analysis – Current Environment
(millions of dollars,)

	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)	Year 4 (2014-15)	Year 5 (2015-16)	Total	Cost Avoidance
Current Environment							
Status Quo[1]	$2.7	$3.0	$2.9	$2.9	$2.9	$14.4	
Hybrid[2] - Actual/Projected	1.2	2.4	1.9	2.8	2.8	11.1	$3.3
Optimized	1.2	2.4	1.9	2.8	2.2	10.5	3.9

1. Status Quo – Maintaining on-premise delivery of all IT services per the 2010 desktop operating model and technologies under the Provincial enterprise agreement
2. Hybrid – Combination of Google apps cloud service and on-premise Microsoft service

The five year estimate for the status quo increases from $11.8 million shown in the business case to $14.4 million reflecting the new user volumes, and the pricing negotiated for public sector organizations. When compared to the projected costs the estimated cost avoidance increases from $0.7 million based on the assumptions used in the business case to $3.3 million.

The Information Technology Branch advised us that in addition to the cost avoidance included in the $3.3 million, an additional $1.2 million saving was achieved prior to the five year period analyzed. This savings related to the cancellation of Microsoft Software Assurance fees for the period October 2010 to September 2011.

Deloitte suggested that the number of licenses the City holds could be reduced or optimized further. The forecasted reduction in costs from optimization is $0.6 million in

2016 (the target year for achieving this savings, which will be an annual cost avoidance when implemented). This will increase the estimated cost avoidance for 2011 through 2016 from $3.3 million to $3.9 million based on the current licensing environment. Optimization includes rationalizing the need for Microsoft Licenses and implementing document review procedures for suspended Google licenses for former City employees.

2. Operational Staff

The Information Technology branch forecasted they would be able to redeploy some positions and reduce others as a result of moving to the hybrid environment. Table 7 shows the expected cost avoidance reflected in the business case and the revised projection for the first five years.

Table 7 – Operational Staff Analysis
(millions of dollars)

	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)	Year 4 (2014-15)	Year 5 (2015-16)	Total	Cost Avoidance
Business Case Status Quo[1] Hybrid[2]	$1.9 1.9	$2.3 2.8	$3.1 2.6	$3.5 2.8	$3.7 2.6	$14.5 12.7	$1.8
Revised Projection	1.9	2.3	2.9	3.3	3.5	13.9	0.6

1. Status Quo – Maintaining on-premise delivery of all IT services per the 2010 desktop operating model and technologies
2. Hybrid – Combination of Google apps cloud service and on-premise Microsoft service

We were advised that the biggest reduction in operational staff costs was to come from the centralization of software. As this component of the Workspace Edmonton Initiative is no longer going to take place (see Table 2) the expected cost avoidance drops from $1.8 million to $0.6 million when compared to the business case. The total savings over five years from staff reductions, due to the move to Google, will be $650,000.

3. Hardware and Software

Moving to the cloud environment, allows the City to reduce the number of servers it needs to maintain. The Information Technology branch expected to avoid $2.2 million in costs associated with the purchase/replacement of services and renewal of associated software licenses. Table 8 shows the expected cost avoidance reflected in the business case and the revised projection for the first five years.

Table 8 – Hardware/Software Cost Analysis

(millions of dollars)

	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)	Year 4 (2014-15)	Year 5 (2015-16)	Total	Cost Avoidance
Business Case							
Status Quo[1]	$2.1	$3.0	$2.4	$4.3	$2.2	$14.0	
Hybrid[2]	2.2	5.3	1.6	1.7	1.0	11.8	$2.2
Revised Projection	2.1	3.0	2.0	3.9	1.9	12.9	1.1

1. Status Quo – Maintaining on-premise delivery of all IT services
2. Hybrid – Combination of Google apps cloud service and on-premise Microsoft service

As shown in Table 8, it is anticipated that half of the expected cost avoidance will be achieved in the first five years when compared to the business case (for a total of $1.1 million in cost savings). This will be achieved through the elimination of infrastructure supporting, Microsoft Exchange, EVault, and extraneous storage.

We were also advised that the remaining cost avoidance is primarily associated with changes in reducing licenses for tools such as SharePoint. This cost avoidance will be achieved after the optimization of licensing has taken place.

Overall Cost Avoidance

As shown in Table 9, the business case estimated cost avoidance for the first five years would be $9.2 million from the implementation of desktop productivity tools. Based on actual expenditures in the first two years, the City's signed licensing agreements and other expected expenditure reductions we estimate that the cost avoidance will be $2.4 million when compared to the approved business case.

Table 9 – Cost Avoidance 2011-12 through 2015-16

(millions of dollars)

Type of Cost	Business Case	Actual/ Projected	Current Environment
Licensing	$5.2	$0.7	$3.3
Operation Staff (FTE)	1.8	0.6	0.6
Hardware and Software	2.2	1.1	1.1
License Optimization	--	--	0.6
Total Cost Avoidance	**$9.2**	**$2.4**	**$5.6**[*]

* Does not include $1.2 million saved in 2010-11 by cancelling the Microsoft Assurance Fees

Information Technology estimates that the five year cost avoidance from the project would be $5.6 million if the current licensing environment and all operational costs are taken into account. These costs will continue beyond the five year period as ongoing operational savings. They estimate that if the prior year (2010-2011) initial license saving of $1.2 million are taken into account, the six year cost avoidance would be $6.8 million.

5.   Conclusions

Our first objective was to determine whether the decision to sole source was justified at the time it was made.

At the time the Information Technology branch evaluated productivity suite products, the only cloud based solution that met most of the City's requirements was Google Apps.

Based on the review of the documentation and interviews with project staff, it appears that the Information Technology Branch undertook sufficient due diligence to justify the recommendation to sole source to Google. However, when sole source recommendations are made reports should explicitly identify a potential for a challenge of non-compliance with the New West Partnership Trade Agreement and should, where applicable, provide a cost/benefit analysis.

Our second objective was to determine whether the assumptions used to forecast the $9.2 million cost avoidance were reasonable and whether the cost savings are still attainable.

Costs exceeded the estimates provided in the Workspace Edmonton Initiative business case in two areas.

1. Desktop Productivity Tools Implementation – Costs increased from an estimated $5.5 million shown in the Business Case to actual cost of $11.1 million as of April 2014 due to scope changes, and investments required to improve user adoptions of the technology. The increase in costs was funded by reallocating budget from the Central Software System component of the budget.

2. Five Year Cost Avoidance – The Office of the City Auditor does not believe that the forecasted five year cost avoidance of $9.2 million in the business case will be achieved. Based on actual expenditures observed to date and current licensing volumes, cost avoidance may only reach $2.4 million when compared to the approved business case.

   However, Administration estimates that cost avoidance could be closer to $6.8 million for the six year period October 2010 through to September of 2016. This estimate takes into consideration scope changes, volume increases and opportunities for further optimization. The $6.8 million also includes pre-implementation savings and the impact of the public sector license agreement had the City not moved to a hybrid environment.

We would like to thank, Corporate Services management and staff for their cooperation and support during this review.

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Materials Management Branch

Competitive Procurement Exception Request Form ($10,000 - $500,000)

*This Form is used to support and seek approval for an exception to a competitive procurement process for all **non-PSA** Sole Source or Single Source procurements valued between $10,000 and $500,000 (including GST).*

Complete Sections A to D of this form and then forward to your Materials Management (MM) representative

A. Description of requested Procurement

Recommended Supplier:	
Total Purchase Amount: Total Cost including GST, contingencies and all options or extensions.	$ *Total Cost with Price breakdown or attach quote/proposal*
Description of Goods / Services / Construction	
Department/Branch:	
Contact Name:	

B. NWPTA Excluded Procurements

The Trade Agreements provide a list of valid exceptions shown below. Indicate if the requested purchase meets **one of** the following exceptions. *Note: confirmation of NWPTA exception subject to MM approval.*

☐ Below trade agreement threshold $75,000 goods & services or $200,000 for construction

☐ Where an unforeseeable situation or urgency exists and the goods or service could not be obtained in time through open procurement procedures

☐ Where it can be demonstrated that only one supplier is able to meet the requirements of a procurement (copyright, patents, prototypes, exclusive rights)

☐ When the acquisition is of a confidential or privileged nature and disclosure through an open bidding process could compromise confidentiality, cause economic disruption or be contrary to public interest

☐ In the absence of a receipt of any bids in response to a call for tenders

☐ Of goods purchased for representational or promotional purposes

☐ Of health services and social services

☐ From a public body or a non-profit organization

☐ Of goods intended for resale to the public

☐ To promote renewable or alternative energy

See the New West Partnership Trade Agreement for a complete listing of excluded procurements

C. Justification and Supporting Documentation for Exception Request

Explain why an open and competitive procurement process should not be used with respect to this Single Source or Sole Source purchase and provide justification for selection of product/service/solution and reasoning for selection of the supplier.

D. Consequences of not Approving Exception Request

Describe the consequences if this exception request is not approved, including the financial impact to the City if applicable.

E. For Materials Management Use Only

All exception requests are subject to review by MM. Where MM determines that the exception request does not fall into a Trade Agreement exception or that a competitive process should be used, then MM will indicate so and provide recommended action.

Trade Agreement Exception: ☐ Yes/Agree   ☐ No/Disagree

Signature:	Date:
Printed Name:	Phone:
Comments/Reason:	
Recommended action:	

MM will indicate the required approver by selecting the appropriate delegated authority below.

Required Approver: ☐ General Manager   ☐ Other _____   ☐ Not required

Section F is only to be completed after Materials Management has completed Section E and returned to the Department for further action or for signature by the delegated authority if required.

F. Department Approval, if required

☐ Approve - proceed with Single Source/Sole Source purchase

☐ Not Approved – use competitive process or follow recommended action from MM

Signature:	Date:
Printed Name:	**Title:** (Indicate if Acting in the position)