



**APPENDIX "A" – REPORT CAO-A-1410**

**PRINT ROOM**

**AUDIT REPORT**

**FINAL**

**September 23, 2014**

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## ***Executive Summary***

At the request of the City Clerk in 2013, an operational audit of the print room was approved as part of the Internal Audit Work Plan for 2014.

The print room operates as a work area within the Clerk's department and is equipped to serve staff located at City Hall through the printer network. There are four (4) printer/copiers (2 black and white, 2 colour) and print jobs may be routed to any of these units from within the network.

These high capacity, high speed units are intended to produce large print jobs that would otherwise occupy the departmental machines for long periods preventing other staff from using them.

The print room is primarily used by the Committee Coordinators in Clerk's to prepare agendas and packages for Council, Standing Committees, Media and Staff. In the past there was a full-time staff person assigned to the print room to handle all print functions but this position was made redundant in 2010.

The budget for the print room is managed by the City Clerk's office and is approximately \$36,000 per year. This is a zero-based, fully recovered operating budget whereby user departments are charged back for the paper and printing costs. The actual costs are marked up using a formula that fluctuates based on the total number of users in order to bring the print room budget to zero. Therefore, the more users utilizing the print room, the less they are charged and conversely, if fewer users utilize the print room, the higher the cost per user.

Financial analysis of data supplied by the vendor indicates that the total costs for printing on all units located at City Hall were approximately \$52,300 for the 12 months ending July 31, 2014. This includes both black and white and colour printing on approximately 52 machines.

The majority of printers are leased and the contract terms include black and white toner cartridges at no charge and colour toner cartridges at market price.

Paper purchases are made throughout the organization and pricing is negotiated as part of a provincial purchasing group agreement that ensures the lowest prices for paper when using the designated vendor.

The audit evaluated the work load and capacity of Clerk's staff with respect to the time spent in the print room and found that the average number of hours that staff spend printing and collating print jobs is between 15 and 24 hours per month.

Research conducted for this audit included a market comparison of external print costs to internal print room operating costs. It is clearly apparent that internal production costs are significantly less than third-party providers and therefore it is recommended that the print room at City Hall should continue to provide existing services.

While there are opportunities for improvement the audit research and analysis has concluded that the print room operates efficiently and effectively.

## ***Objectives***

The following objectives were established for this operational audit.

1. Assess efficiency and effectiveness of existing processes
2. Assess staff workload and capacity
3. Evaluate the existing level of service and impacts to customers
4. Evaluate the process for zeroing out the print shop budget
5. Assess viability of optional service delivery models

## ***Scope***

The scope of the audit includes:

- Financial Analysis of business unit (3-year historical)
- Cost of outsourcing vs in-house production
- Corporate-wide outsourcing expenditures by service area (3-year historical)
- Cost recovery analyses for copy paper
- Staff interviews – process review

### **Out of Scope:**

- Printer – Copier Contracts and Pricing
- Departmental analysis of printing-copying

## ***Methodology***

The following research and analysis was undertaken for the audit:

- Time study of staff print room functions
- Financial analysis of print room budget, actual and historical costs
- Staff interviews (5)
- Cost per copy analysis (based on information from vendor billings)
- Verification of cost recovery calculations and departmental chargebacks
- Analyses of all outsourced printing costs

## Findings and Recommendations

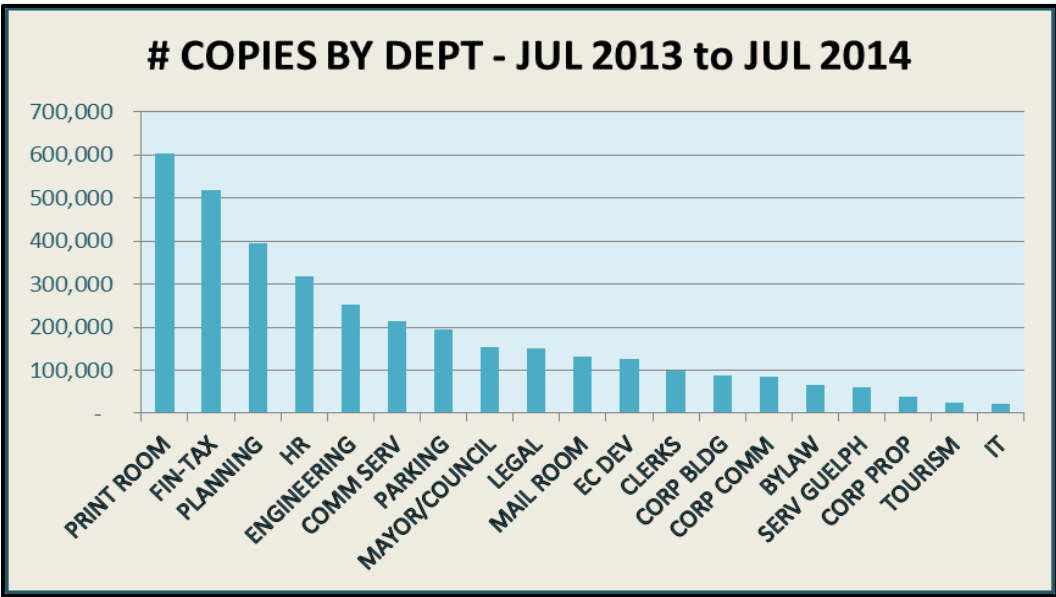
	Finding	Recommendation
1.	<b>The print room operates effectively and efficiently and outsourcing this function would increase costs and reduce the flexibility of current production timelines.</b>	The City should continue to operate the print room internally.
2.	<b>Print room supplies are not secured and are often taken by other departments without appropriate charges allocated for paper, toner and other supplies.</b>	Toner and paper should be locked in the back storage area. The door should have a lock installed and only Clerk's staff should have access to this area.
3.	<b>Paper purchases are not made exclusively from the designated vendor which may result in higher costs for copy paper.</b>	Management should not approve any purchases for copy paper unless they are made through the designated vendor.
4.	<b>The current process for distribution of agendas and packages is complex, labour intensive and often wasteful as the recipients often do not need all of the information they receive. This results in substantial paper waste. The average number of packages produced is between 35 and 40. All of these documents are available online and are easily accessed by staff.</b>	<p>Distribution lists prepared by the Committee Coordinators should be limited to Council and Committee members and the Executive Team. All other staff should print the documents they require through the online resources available. Alternatively, Clerks' staff should distribute the packages electronically as PDF files so recipients can choose which documents to print.</p> <p>This would reduce the number of packages being produced by over 50%. <u>Only 20 packages would be required</u> resulting in time savings.</p>
5.	<b>The Committee Coordinators currently each spend an average of 15 to 24 hours per month in the print room preparing agendas and packages for Council, Committees, Media and Staff. This equates to approximately 2 ½ days for each of 3 Committee Coordinators. This is not value-added work given the job grade and experience level of these staff who are trained to provide support to Council, their assigned Standing Committees and the City Clerk's Office.</b>	<p>If current work processes and volumes continue unchanged, it is recommended that management consider hiring a part-time resource for approximately 2 days per week solely for the purpose of producing agendas and packages.</p> <p><i>This option is only viable if the time saved for Committee Coordinators is effectively reassigned to more value-added work such as increased support to Council and Committees and the City Clerk's Office. This will also reduce overtime costs.</i></p> <p>If recommendation # 4 is fully implemented there would be no requirement for additional resources as the average number of packages would be reduced from approximately 40 to 20.</p>

6.	<b>Reports and documents submitted to Clerk’s for inclusion in Council and Committee packages are not always received electronically. Hard copies must be copied and then inserted manually which further complicates the printing process and they must then be physically filed in archives.</b>	All documents should be submitted to Clerks electronically for consistency, ease of access and storage and general efficiency. Electronic signatures should be used by all senior management when submitting their reports to Clerks.
7.	<b>The new high-speed printers have many features that improve efficiency and reduce production time but staff have not been fully trained to use the units to full capacity.</b>	Committee Coordinators and other staff using the print room machines frequently should receive advanced training from the vendor in order to utilize all the available features of the equipment.
8.	<b>Submission deadlines for Clerks are not adhered to resulting in staff working overtime to get the agendas and packages out on time. Records provided by Clerk’s report that nearly 50% of all reports are submitted late.</b>	The deadlines for submission of reports to Clerks should be considered firm with few exceptions. Senior management should strive to ensure that these deadlines are met in all but the most urgent situations.

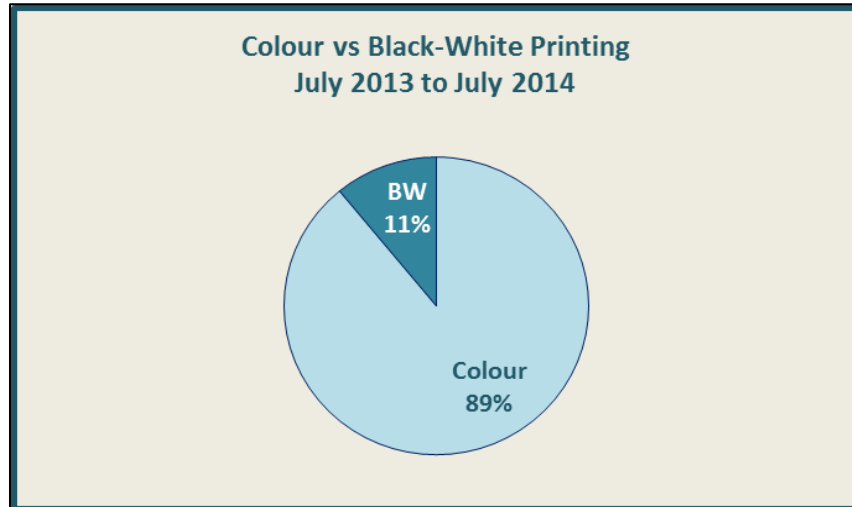
## Financial Analysis

The following chart illustrates the number of copies by department for printers located at City Hall.

Chart 1



The total number of copies produced at City Hall for the 12 months ended July 2014 is 3,531,827. The number of colour copies was 3,144,556 and the remaining 387,272 were black and white copies as illustrated in Chart 2 below.



The cost per copy varies and is determined by the model of printer and the type of toner cartridges required for each unit. The average cost per copy for ALL units located **at City Hall is .016 and the actual total printing costs for the 12 months ended July 2014 are \$52,359. This does not include the cost of copy paper.**

If colour printing were reduced by 50% the potential savings would be approximately \$25,000 per year. It is possible to program the printers to require an entry code to print in colour and this is an option management may choose in order to reduce costs in their departments.

The purchase of copy paper has been negotiated through a provincial buying group to ensure large volume pricing is as low as possible. When the City purchases paper through the designated vendor these prices are guaranteed. If individual departments purchase paper through other sources they may be paying a higher cost per carton for copy paper. It may not be well communicated throughout the organization that ALL paper purchases must be made through the designated vendor and preferably, all paper purchases should be made through the Clerk's office.

Total paper purchases from 2011 to June 2014 are as follows:

<b>2011</b>	\$16,064	<b>2012</b>	\$18,655
<b>2013</b>	\$10,524	<b>2014</b>	\$ 8,215

## ***Work Process Analysis***

The work processes in the print room generally appear to be efficient and effective. The equipment meets current capacity requirements and staff are easily able to complete their tasks.

There are periodic issues with other users sending print jobs to the print room equipment and not coming to pick their materials up immediately. If machines become jammed with no one in attendance, other print jobs will not be processed and it is most often left to the Clerk's staff to tend the equipment and sort out the print jobs.

The physical demands of working in the print room are a challenge due to heat, fumes and standing for long periods on concrete flooring. The fatigue mats provided are badly worn and should be replaced.

## ***Outsourcing Analysis***

The research conducted for the audit indicates that outsourcing the production of Council and Committee packages would not provide a cost-effective option.

Using standard market quotes for quick printing services the following costs were estimated:

Document (all black & white):

Size: 8.5" x 11"

Colour: black & white

Paper: 20lb white bond

# Pages: 466 (=233 double sided sheets)

Finishing: 3 hole drill

40 sets = \$690.00 +HST

Document (90% black & white / 10% colour ):

Size: 8.5" x 11"

Colour: black & white / full colour

Paper: 20lb white bond

# Pages: 466 (=233 double sided sheets)

Finishing: 3 hole drill / collate

40 sets = approx. \$1,280.00 +HST

The current costs for producing this same package of materials internally are approximately \$250 including staff time, paper and cost per copy.

It is therefore recommended that the City continue to produce these materials using the internal print room.

## ***Conclusion***

The internal print room is an effective and efficient means of producing large volumes of copy and print material. Although staff resources are sufficient to complete the work these resources could be better utilized to provide increased support to Council



members as well as the City Clerk's office. Some of the additional work that has been identified by management includes improved web updates, improved monitoring of report deadlines and agenda management.

If the existing printing processes are continued it would be more efficient to add a part-time resource for the sole purpose of producing Council and Committee packages.

By changing the work processes and reducing the volume of copy and print work currently being produced, the existing staff resources would be adequate and the additional capacity could be used for the additional tasks identified by management.

## ***Next Steps***

Management is requested to provide their response to the audit findings and recommendations by October 31, 2014. A template for the management response will be forwarded separately.

This audit report will be presented to Council in early 2015.