

City Needs to Improve Software License Subscription Tracking, Utilization and Compliance

Date: June 23, 2021

To: Audit Committee

From: Auditor General

Wards: All

REASON FOR CONFIDENTIAL INFORMATION

The attachment to this report contains commercial information supplied in confidence to the City of Toronto, which, if disclosed, could reasonably be expected to prejudice the competitive position or interfere with the contractual or other negotiations of a person, group of persons, or organization.

SUMMARY

This report summarizes the Auditor General's review of an allegation of waste and its settlement regarding the City's non-compliance with a software end user agreement which resulted in the City making an advanced purchase for new software licenses that continue to remain underutilized.

The City purchases various proprietary software to meet its operational needs. Proprietary software is a software which is subject to copyright laws and restrictions on its use and distribution. Licensees (users) of the software are required to comply with the terms and conditions agreed by them in the end user license agreement. Non-compliance could lead to unexpected fees or litigation.

Software purchases are a significant expenditure for the City. In 2020, the City spent approximately \$11.2 million on software acquisitions and \$25.2 million on maintenance and support. Over the last five years, the City's total expenditures for software acquisition, maintenance and support was approximately \$183.3 million. The City has over 3,300 licensed software titles.

In March 2021, a complaint came to the Auditor General's office alleging "*the City was fined for using a vendor's proprietary software without a license*". The complainant claimed the City settled with the vendor by purchasing additional software, and that

"licenses were purchased in September last year and have been sitting on the shelf since". The Auditor General started her review of this matter after being informed of the allegation.

The City has been using this vendor's proprietary software for over 10 years to manage some information technology services on its servers. A key requirement of the end user agreement was for the City to install and properly configure the vendor's license reporting tool to track and report application usage on City servers.

In this case we confirmed that the City incurred significant costs by not complying with the software licensing agreement that required the City to install the vendor's reporting tool to track software usage. Management advised that instead of paying additional fees for non-compliance, for which the City would not realize any benefit, they settled by purchasing new software licenses earlier than planned.

We confirmed that the 12-month subscription period for most of the pre-purchased licenses will expire before the subscriptions are used. As of May 1, 2021, almost one year after the settlement, an aggregate of only 17 percent of all acquired licenses are being used. The cost of the unused license subscriptions (prorated to May 1) appears to be approximately \$775,000, which includes a one-time set-up fee, annual subscription and maintenance and support costs that expire between June and August 31, 2021.

If all subscriptions are renewed in June and August 2021 for another year without being needed, the costs for the unused subscriptions will continue to rise if there are further delays in the deployment of these licenses. Management provided an estimated timeline to use all subscriptions by the end of 2022.

The Auditor General has made three recommendations in this report to improve the City's compliance with software license agreements and exercising due diligence before signing these agreements. This public report also contains two administrative recommendations.

RECOMMENDATIONS

The Auditor General recommends that:

1. City Council request the Chief Technology Officer to:
 - a. Identify agreements that require license tracking and reporting,
 - b. Implement procedures to monitor compliance, and address any issues identified in a timely manner.
2. City Council request the Chief Technology Officer to improve the existing software procurement process to ensure:
 - a. Software subscriptions are thoroughly evaluated before purchasing,
 - b. All software subscriptions are deployed in a timely manner, so there are no excessive software subscriptions.

3. City Council request the Chief Technology Officer to consult with the City Solicitor to help ensure adequate clauses are included in all future software agreements to reduce potential liability in situations where the City is not able to comply with the agreement.
4. City Council request the Auditor General to forward this report for action (except for Confidential Attachment 1) to City Division Heads and Chief Executive Officers of major City agencies and corporations to review and implement the recommendations that may be relevant to their respective operations.
5. City Council direct that Confidential Attachment 1 remain confidential in its entirety, as it contains commercial information, supplied in confidence to the City of Toronto, which, if disclosed, could reasonably be expected to prejudice the competitive position or interfere with the contractual or other negotiations of a person, group of persons, or organization.

FINANCIAL IMPACT

The recommendations contained in this report help to avoid the cost of not complying with software agreements in the future.

DECISION HISTORY

The Auditor General recognizes that software licenses are an important City asset. Licenses must be managed properly to optimize their purchase, deployment, maintenance, usage, and disposal. The Auditor General has been proactive in performing audits in this area. Our most recent reports since 2015 are:

- (i) Information Technology Infrastructure and Asset Management Review: Phase 2: Establishing Processes for Improved Due Diligence, Monitoring and Reporting for Effective IT Projects and Asset Management, June 2018

<https://www.toronto.ca/legdocs/mmis/2018/au/bgrd/backgroundfile-118363.pdf>

In this audit, we made a recommendation that *"City Council request the Chief Information Officer to develop a reporting mechanism and criteria for reporting to the Executive Modernization Committee and respective Executive Project Sponsors on project implementation delays and unused software licenses with reports to include as a minimum:*

- a. Accumulated financial impact of delays*
- b. Unused assets, licenses and solutions*
- c. Forgone benefits as a result of project implementation delays*
- d. Plans in place to mitigate the impact of delays."*

During the current follow-up process, management reported this recommendation as implemented. The Auditor General will verify the implementation status during our 2021 follow-up review.

(ii) Software Licenses – Managing the Asset and Related Risks, February 2015

<http://www.toronto.ca/legdocs/mmis/2015/au/bgrd/backgroundfile-76330.pdf>

In this audit, we made a recommendation that *"City Council request the Chief Information Officer to ensure there is a software owner identified for all software assets and that activities to ensure compliance with software licensing agreements are performed in accordance with the divisional policy."*

This recommendation has been outstanding for over five years as management continues to develop and implement a process to manage and ensure license compliance of its software assets. Management continues to make progress in implementing outstanding information technology audit recommendations.

The Auditor General's review has shown that more attention is needed to ensure compliance with software license agreements. Most recently, and the subject of this report, the City pre-purchased subscriptions valued at approximately \$1.5 million as part of a settlement for not complying with licensing terms. Many of these subscriptions went unused. The cost of the unused license subscriptions (prorated to May 1) appears to be approximately \$775,000.

COMMENTS

In March 2021 the Auditor General's Office received a complaint that *"the City was using a vendor's proprietary software without a license"*. The complainant wrote that the City purchased *"various net new licenses so the fine does not appear on the books as such"*. The complainant claimed that *"the new licenses remain unused since September 2020"*.

The Auditor General began her review of this matter after being informed of the allegation through an anonymous complaint in March 2021.

The City has been using this vendor's proprietary software for over 10 years to manage some information technology services on its servers. One of the requirements of the end user agreement was for the City to install and properly configure the vendor's license reporting tool to track and report application usage on City servers.

This is not the first time the City has been involved in issues concerning compliance with software agreements or incurred costs for unused license subscriptions. The Auditor General has reported several times¹ on the importance and need for

¹ <https://www.toronto.ca/legdocs/mmis/2018/au/bgrd/backgroundfile-118363.pdf>

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implementing adequate controls to track and monitor compliance and the costs associated with underutilization of software subscriptions.

For example, in our June 2018 phase 2 report on information technology infrastructure and asset management², we identified several software solutions that have unused license subscriptions with acquisition and annual maintenance costs of approximately \$3.84 million. It is important that management consider each project's implementation timelines while acquiring licenses, so that unnecessary costs are not incurred on unused license subscriptions.

Appropriate contract administration starts with understanding the terms of the software license agreements and implementation of required controls so that the City can remain in compliance and efficiently manage license subscription utilization. In addition, the City needs to thoroughly evaluate software purchase decisions in relation to the anticipated deployment timelines to avoid prematurely paying for software subscription and maintenance and support.

Also, the City needs to be more vigilant when negotiating and signing software agreements, to ensure that consideration is given to appropriate clauses to protect the City's interests. For example, in this case the City agreed to pay additional charges should there be non-compliance. While we understand the City must be compliant, there is a need for the City to examine if any protections are available in future agreements and renewals such as limiting additional payments or only charging for historical usage when issues arise with software compliance. The City also needs to review current agreements, to ensure the City is complying with terms and conditions.

This report constitutes a high-level review to bring attention to a situation that is re-occurring and needs correcting. We will continue to monitor issues in this area. Overall, ineffective software management results in:

- Potential legal and financial exposure including reputational damage if there is non-compliance with software agreement terms and conditions
- Unnecessary costs incurred where the software licenses are not being used as planned

The work performed in relation to this report does not constitute an audit conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS). However, we believe we have performed sufficient work and gathered sufficient appropriate evidence to provide for a reasonable basis to support our observations and recommendations.

² <https://www.toronto.ca/legdocs/mmis/2018/au/bgrd/backgroundfile-118363.pdf>

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SIGNATURE

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ATTACHMENTS

Confidential Attachment 1 – City Needs to Improve Software License Subscription Tracking, Utilization and Compliance

Appendix 1 – Management's Response to the Auditor General's Report for Action Entitled: "City Needs to Improve Software License Subscription Tracking, Utilization and Compliance"