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REPORT FOR ACTION WITH CONFIDENTIAL ATTACHMENT

Cybersecurity Audit of Toronto Community Housing and Toronto Seniors Housing Corporations – Phase One: Overall Network Security and Cybersecurity Assessment of Select Critical Systems

Date: July 10, 2024
To: Toronto Community Housing Corporation Board of Directors
From: Auditor General
Wards: All

REASON FOR CONFIDENTIAL INFORMATION

Confidential Attachment 1 and Confidential Attachment 2 to this report involves the security of the property of the City of Toronto and its agencies and corporations.

SUMMARY

The Auditor General's 2024 Work Plan included a cybersecurity audit of the Toronto Community Housing Corporation (TCHC). TCHC also provides information technology services to Toronto Seniors Housing Corporation (TSHC) which is integrated with TCHC's enterprise information technology environment. As such, we also included TSHC's systems in our audit scope.

Confidential attachment 1 is our cybersecurity report that includes our findings covering both TCHC and TSHC, with recommendations to the TCHC. We have provided the confidential detailed technical report to management of TCHC's Information and Technology Services Division to be able to implement the recommendations, as they manage both TCHC and TSHC's network, systems, and applications.

A separate cover report will be provided to the TSHC's Board of Directors for their information. In addition, the Auditor General will be making a confidential presentation to the TSHC's Board at their July 18, 2024 meeting.

Toronto Community Housing Corporation (TCHC) is the largest social housing provider in Canada and the second largest in North America. TCHC houses tenants in 106 of

Toronto's 158 neighbourhoods, providing homes to over 41,000 low and moderate-income households.[1]

Toronto Seniors Housing Corporation (TSHC) provides subsidized rental housing for approximately 15,000 low and moderate-income seniors in 83 buildings across the city. TSHC began operating in June 2022 after the City's Tenants First plan and partnered closely with TCHC which owns the buildings.[2]

Technology plays a vital role in all aspects of TCHC and TSHC's operations. TCHC has provided technology services to TSHC since June 2022.

Cybersecurity threats are constantly evolving and becoming more sophisticated

Cybersecurity threats are constantly evolving and becoming more sophisticated. The 2023-2024 National Cyber Threat Assessment from the Canadian Centre for Cyber Security provided an overview of cyber threats and notes that:

"…Due to its impact on an organization's ability to function, ransomware is almost certainly the most disruptive form of cybercrime facing Canadians. Cybercriminals deploying ransomware have evolved in a growing and sophisticated cybercrime ecosystem and will continue to adapt to maximize profits."

and warns that:

"The cyber threat landscape will almost certainly evolve further over the next two years as technologies such as digital assets, machine learning, and quantum computing bring new opportunities and new threats."[3]

Since 2015, the Auditor General has been proactive in her audits of cybersecurity and has completed several vulnerability assessments and penetration testing of critical systems at the City, and its agencies and corporations.

This Phase 1 report includes the results of our cybersecurity audit of TCHC and TSHC's network, systems, and applications security. The report contains three administrative recommendations. The confidential findings and recommendations are contained in Confidential Attachment 1 to this report.

RECOMMENDATIONS

The Auditor General recommends that:

1. The Board adopt the confidential instructions to staff in Confidential Attachment 1 to this report from the Auditor General.

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1 https://www.torontohousing.ca/about-us

2 https://www.torontoseniorshousing.ca/about/about-us/

3 National Cyber Threat Assessment 2023-2024 - Canadian Centre for Cyber Security

2. The Board forward this report including the Confidential Attachment 1 to City Council for information through the City's Audit Committee.

3. The Board recommend City Council authorize the public release of Confidential Attachment 1 to the report from the Auditor General at the discretion of the Auditor General, after discussions with the appropriate Toronto Community Housing Corporation, Toronto Seniors Housing Corporation, and City Officials.

FINANCIAL IMPACT

Implementing the audit recommendations will strengthen cybersecurity controls at TCHC and TSHC. The extent of costs and resources needed to implement the recommendations is not determinable at this time. The investment needed to improve controls to manage and respond to cyber threats offsets the potentially significant costs that could result from security breaches, which could include data recovery/cleanup, financial loss, reputational damage, fines, or litigation.

DECISION HISTORY

The Auditor General's 2024 Work Plan included TCHC's cybersecurity audit and is available at:

[Auditor General's Office 2024 Work Plan and Budget Highlights (toronto.ca)](toronto.ca)

Given that TSHC's technology environment is integrated with TCHC's enterprise information technology environment, we also included TSHC's systems in our audit scope.

COMMENTS

What is a cyberattack?

The National Institute of Standards and Technology (NIST) defines a cyberattack as:

"Any kind of malicious activity that attempts to collect, disrupt, deny, degrade, or destroy information system resources or the information itself" [4]

Rising Cyber Threats on Government Services

According to the Report of the Standing Committee on National Defence published in June 2023, cyberspace has emerged as a new domain of warfare, competition, and confrontation between and among countries.[5]

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4 https://csrc.nist.gov/glossary/term/Cyber_Attack

5 The Cyber Defence of Canada (ourcommons.ca)

Examples of high-profile cyber incidents include Canada's national anti-money laundering agency Financial Transactions and Reports Analysis Centre of Canada (FINTRAC), the Royal Canadian Mounted Police (RCMP), and Global Affairs Canada.[6]

Recent cyberattacks on City agencies

- Toronto Transit Commission (TTC) - in late 2021, the TTC became a victim of a ransomware cyberattack that disrupted several computer systems and critical services.[7]
- Toronto Public Library – the library experienced a significant cyberattack in October 2023 that disrupted systems and online services across its library branches.[8]
- Toronto Zoo – in an early 2024 cyber incident, current, former, and retired employees had some personal information stolen.[9]

As cybersecurity threats expand and evolve, it is important that the Auditor General continues her audits of cybersecurity so that she can make recommendations to improve security controls across the City and its agencies and corporations.

The phase 1 audit focused on TCHC and TSHC's network, systems, and applications security. The confidential findings and recommendations are contained in Confidential Attachment 1 to this report. The Auditor General will re-test cybersecurity controls after management has implemented the recommendations.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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6 Cyber attacks are getting easier, experts warn after 3rd federal incident - National | Globalnews.ca

7 TTC provides update on cyber security incident

8 Toronto Public Library Recovers from Ransomware Attack | Library Journal

9 Toronto Zoo | Ransomware/ Cyber Incident

SIGNATURE

Tara Anderson
Auditor General

ATTACHMENTS

Confidential Attachment 1: Cybersecurity Audit of Toronto Community Housing and Toronto Seniors Housing Corporation - Phase One: Overall Network Security and Cybersecurity Assessment of Select Critical Systems.

Confidential Attachment 2: Confidential Presentation to Toronto Community Housing Building Investment, Finance and Audit Committee and the Board of Directors.