

MEMO

Date: May 21, 2021

To: Walter Babicz, Acting City Manager

From: Bill McCloskey, Manager, IT Services

Subject: Municipal Cyber Security Incident Review

Per the direction of the May 10th Finance and Audit Committee meeting, a review was performed with municipalities that recently experienced cyber security incidents. The review included

- What was the root cause(s) of the incident?
- Was there an observed increase in cyber-security attacks following the incident?
- What changed following the incident?

The municipalities that responded to the review requests included Dawson Creek BC, Saskatoon Saskatchewan, and Burlington Ontario. Unfortunately, due to time constraints, Burlington's information is not included in this memo.

The results of the review are below,

What was the root cause(s) of the incident?

- Dawson Creek was an exploit of a technology vulnerability that resulted in a ransomware attack. IT identified the vulnerability early, but a lack of vendor updates, and a general underestimation of risk by the business owners, were some of the root causes in the ransomware incident.
- Saskatoon was a result of a social engineering incident that started with Saskatoon financial services receiving a banking change request. This is an example of a spear phishing attack that targets specific departments, divisions or staff.

Was there an observed increase in cyber-security attacks following the incident?

- Dawson Creek saw an increase in phishing emails and emails impersonating city staff (aka: spoofing emails)
- Saskatoon saw an increase in phishing emails, but noted phishing attacks are cyclical and the increase may have been part of a pre-existing cyclical pattern.

What changed following the incident?

- Dawson Creek blocked the vulnerability, performed a security assessment and implemented several recommended security changes. Recurring security assessments and other related security processes were also established.
- Saskatoon changed financial controls including multi-person approval and using different communication options to confirm the validity of the request. Saskatoon also approved a new position that is responsible for establishing and maintaining a corporate-wide Cybersecurity management program.