



BOARD MEMORANDUM

Date: February 9, 2022
To: Board of Trustees
From: Shawna Walter, Acting Superintendent
Originator(s): Liliana LeVesconte, Associate Superintendent, Corporate Services
Subject: Network Optimization Project Update

Purpose:

For information.

Background:

The Network Optimization Project was identified as a top priority for the Division back in 2018-2019. The main concerns identified to support the approval of the project were:

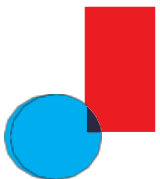
- Outdated and inconsistent versions of firmware on network devices, which did not have the latest security patches and bug fixes from the manufacturers; and
- Poorly configured network devices, which led to inefficient flow of data and lack of proper segmenting of the traffic for the different areas leading to unnecessary security risks.

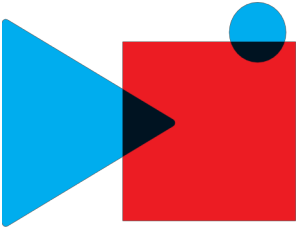
The remediation in this area began in 2019-2020, and will be fully completed in 2022-2023.

The following tasks outline some of the work required:

1. Partial or complete overhaul and redesign of network configuration at each school.
 - a. All network switches reprogrammed to a constant configuration following industry best practices.
 - b. The wireless network is being redone, with the removal of existing access points and deployment of new access points with next generation features.
2. Review and optimization of school configuration. This includes Wi-fi coverage at each school.

The cost of the project varies from school to school. When updating Sturgeon Composite High School, the investment was approximately \$75,000 in new equipment.





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After the initial redesign for each school, the Network Optimization Project is shifting from a maintenance mode to an evergreening concept of replacing the hardware as it becomes end of life rather than having to re-cable and redesign. The expected evergreening cycle for the access points is six to eight years.

The Division has noted significant improvement in all of the schools completed in the past two years.

The full schedule for the Network Optimization Project, including completed projects, is:

2019-2020

Sturgeon Composite High School
Sturgeon Heights School
Four Winds Public School (new build)

2020-2021

Gibbons School
Guthrie School
Landing Trail School
Camilla School (rebuild)

2021-2022

Bon Accord Community School
Redwater School
École Morinville Public School

2022-2023

Lilian Schick School
Namao School
Oak Hill School
Ochre Park School

Administration is prepared to respond to questions at the February 9, 2022, Committee of the Whole meeting.

Sincerely,

Shawna Walter, M.Ed
Acting Superintendent

