

Chapter 14

Horizon School Division No. 205—Maintaining Facilities

1.0 MAIN POINTS

By January 2022, Horizon School Division No. 205 improved its processes to maintain its facilities. The Division implemented one recommendation and partially implemented four recommendations we originally made in our 2020 audit.

The Division:

- Progressed in adding unique asset identification tags for significant components and updating information on these components in its maintenance IT system. This identification method enhances the Division’s ability to plan, track, and monitor the maintenance of its facilities and their significant components.
- Actively used its maintenance IT system to track information on its maintenance activities (e.g., service requests, preventative maintenance tasks and their status). However, the Division needs to effectively monitor timelines to complete maintenance activities, as well as keep information on completed tasks and service requests up-to-date (i.e., accurate).

Improved use of the maintenance IT system will assist the Division in prioritizing maintenance deficiencies and in monitoring maintenance completion.

- Began prioritizing maintenance on deficiencies found during fire protection and suppression system inspections; however, it did not always address identified deficiencies timely.

Prioritizing important maintenance deficiencies can help the Division avoid non-compliance with applicable codes and provide safe environments for all students, staff, and the public.

- Gave the Division’s Board of Education periodic (i.e., monthly, annual) maintenance reports that included information on facilities with higher maintenance concerns, year-over-year trends on facility conditions, and outstanding maintenance activities.

Sufficient analysis and reporting of maintenance results enables the Board to assess whether the Division effectively maintains its facilities and significant components, and efficiently uses maintenance funding.

Maintenance is one key aspect of asset management. In general, maintenance costs rise as infrastructure ages. As such, the consequences of not conducting effective maintenance and repairs on facilities includes potential health and safety problems for users (administrators, staff, and students), reduced quality of space, loss of facility value, higher future repair costs, and facilities not meeting their expected service life (e.g., replacing a building earlier than intended).



2.0 INTRODUCTION

2.1 Background

Under *The Education Act, 1995*, and related regulations, the Ministry of Education is responsible for providing leadership and direction to the pre-kindergarten through Grade 12 education sector. This includes providing school divisions with leadership in all areas, which includes facility maintenance. The Act requires the Ministry to review and approve school divisions' estimated expenditures and significant capital projects.¹ Each year, the Ministry gives divisions funding to operate, including facility maintenance funding.

The Ministry expects divisions to maintain facilities in satisfactory operating condition.²

The Act gives each school division's Board of Education the authority to administer and manage the educational affairs of its division and to exercise general supervision and control over the schools in the school division.

Under the Act, a school division is responsible for:

- Providing and maintaining school accommodation, equipment, and facilities necessary for the educational programs and instructional services approved by the school division for each of its schools
- Setting out procedures with respect to the maintenance of school accommodations for maintaining satisfactory standards of comfort, safety and sanitation for students and other users

Horizon School Division No. 205 is located in central Saskatchewan. The Division owns 38 of the 43 schools it operates.³ In 2020–21, the Division spent \$3.8 million (2019–20: \$1.8 million) specifically on maintenance of its facilities (e.g., contracted maintenance, renovations, supplies).⁴

2.2 Focus of Follow-Up Audit

This chapter describes our first follow-up audit of management's actions on the recommendations we made in 2020.

In 2020, we assessed Horizon School Division No. 205's processes to maintain its facilities. Our *2020 Report – Volume 1*, Chapter 8, concluded that for the 12-month period ended September 30, 2019, the Division had effective processes to maintain its facilities, except for the areas outlined in our five recommendations.

¹ *The Education Act* requires the Ministry to approve capital projects of school divisions costing more than \$1 million (i.e., major), which include renovations to buildings. The Ministry may also supply school divisions with capital grants to help fund renovations (s. 311) and to assist with preventative maintenance and repairs costing less than \$1 million (i.e., minor). It may appoint a person to provide advice with respect to approval of plans for the maintenance of school buildings (s. 4(1.1) (k)).

² *Ministry of Education Preventable Maintenance and Renewal Funding Program Policy Guidelines*, Revised July 1, 2017, pubsaskdev.blob.core.windows.net/pubsask-prod/87251/87251-PMR_Funding_Program_-_Guidelines.pdf (9 March 2022).

³ The Division supplies staff and support to five schools in its area it does not own—three Hutterite schools, a village-owned school, and a school on George Gordon First Nation.

⁴ Adapted from information obtained from Horizon School Division No. 205's financial system.

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Division’s progress toward meeting our recommendations, we used the relevant criteria from the original audit. Division management agreed with the criteria in the original audit.

To perform this follow-up audit, we reviewed facility maintenance policies and procedures, interviewed facilities management staff, and reviewed documentation in the maintenance IT system for significant components (e.g., fire alarm inspection certificates). We also conducted analysis and tested information documented in its maintenance IT system (e.g., time to complete service requests and preventative maintenance tasks). In addition, we reviewed facility maintenance reports presented to the Board.

3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at January 31, 2022, and Horizon School Division No. 205’s actions up to that date.

3.1 Need to Identify and Address Fire Protection and Suppression System Deficiencies in a Timely Way

We recommended Horizon School Division No. 205 prioritize all identified maintenance deficiencies associated with fire protection and suppression systems and boilers to enable determination of the nature and timing of necessary maintenance. (2020 Report – Volume 1, p. 92, Recommendation 1; Public Accounts Committee agreement January 12, 2022)

Status—Partially Implemented

Horizon School Division No. 205 had current boiler inspections done but did not always have updated fire protection and suppression system inspection certificates in its IT system, nor did it always address deficiencies found during inspections in a timely way.

All 16 boilers we tested had current inspection certificates.

The Division uses its IT system to track the inspection results of its fire protection and suppression systems. The Division indicated it does not have the in-house capacity (i.e., personnel skills) to conduct fire protection and suppression system inspections.⁵ Therefore, the Division has contracted with third-party inspectors to inspect these systems, which are to occur annually. Once the contracted inspector completes an inspection, the Division receives an inspection certificate and is supposed to upload the certificate to its IT system.

We found the Division did not have an updated inspection certificate in its IT system for three of the eight fire protection and suppression systems we tested. Two of these systems were overdue for an annual inspection by approximately two months (i.e., expired

⁵ The Division considers fire alarms and sprinklers to be part of its fire protection and suppression systems.



inspection certificate on file) at January 2022; one system had an inspection done but the certificate was not on file. Management told us inspectors experienced delays in completing inspections because of the COVID-19 pandemic.

During annual inspections, the contracted inspector identifies and documents deficiencies (e.g., fire extinguishers due for replacement, emergency lights failed 30-minute test) with the Division's fire protection and suppression systems on the inspection certificates. For example, emergency lights need to be kept in working order in order to guide people to safety quickly and effectively in the event of a fire. The Division uses the third-party inspectors to resolve any identified deficiencies.

For the eight fire protection and suppression systems tested, we found three instances where the inspector identified deficiencies, but the Division had not addressed the deficiencies as at November 2021. Fire suppression system components need periodic replacing to keep the system fully functioning. Management told us it delayed the completion of repairs to the three fire suppression systems until a time when staff and students were away from the school (i.e., scheduled repairs during Easter break [April 2022] to avoid sprinklers leaking water onto staff and students).

For the 16 boilers we tested, we found two instances where the inspector identified deficiencies.⁶ One of the boilers had identified deficiencies addressed in January 2022. Management told us the remaining deficiency was delayed in getting addressed as the contractor was waiting on parts needed to make the repair (vendor projected a four-month delivery delay).

Prioritizing inspections as well as identified maintenance deficiencies associated with fire protection and suppression systems provide safe environments for all students and staff.⁷

3.2 Tracking of All Significant Components In Progress

We recommended Horizon School Division No. 205 develop a strategy to better use its maintenance IT system to plan, track, and monitor maintenance of its facilities and significant components. (2020 Report – Volume 1, p. 92, Recommendation 2; Public Accounts Committee agreement January 12, 2022)

Status—Partially Implemented

Horizon School Division No. 205 began the process of including all its significant components in its maintenance IT system to enable better tracking of completed and uncompleted maintenance, but still has more work to do.

As of January 2022, the Division has not developed a strategy to better use its maintenance IT system to plan, track, and monitor maintenance of its facilities and significant components. The Division considers assets such as heating, cooling, ventilation systems;

⁶ The Division employs staff who resolve any deficiencies identified during boiler inspections.

⁷ Saskatchewan adopts the National Fire Code by regulation under provisions of *The Fire Safety Act* as the standard for fire safe operation of buildings and facilities. The National Fire Code establishes three core objectives: safety, health, and fire protection of buildings and facilities.

roofs; and fire protection and suppression systems to be significant. However, it has not documented its definition of a significant component. A clear definition would assist future staff in understanding which assets the Division considers significant components and require tracking.

The Division uses unique asset barcodes to identify and track each significant component. Facilities management staff (e.g., an electrician and plumbers) attached asset barcodes on all major building components such as heating systems, fire alarm panels, and HVAC units. However, the Division indicated that it still has three to five more years of work to complete attaching asset barcodes on all of the Division's assets (i.e., both significant and insignificant components).

The Division plans to update information on significant components in its maintenance IT system as it replaces and installs them. Division staff will record asset condition and useful life for significant components.

The maintenance IT system uses condition and expected replacement year information for significant components to calculate a facility condition index and amount of deferred maintenance.⁸ Of the six significant components we tested, we found:

- Three components where the IT system did not contain information on the asset's condition
- One component where the IT system did not contain information on the asset's life expectancy

Tracking key information for all significant components in the maintenance IT system would enhance the Division's ability to plan for and monitor the maintenance of its facilities and significant components. It would also enable the Division to use the system to monitor changes in the facility condition index and in deferred maintenance to help determine whether it is doing the right maintenance at the right time.

3.3 Proper Updates in the Maintenance IT System Needed

We recommended staff of Horizon School Division No. 205 maintain up-to-date and accurate information in its maintenance IT system about completion of assigned maintenance activities. (2020 Report – Volume 1, p. 97, Recommendation 3; Public Accounts Committee agreement January 12, 2022)

Status—Partially Implemented

Horizon School Division No. 205 staff are not always documenting, in the Division's IT systems, the completion of maintenance activities performed or accurately reflecting the work outstanding to resolve a maintenance activity.

⁸ Facility condition index is a performance indicator used to evaluate the current condition of a building. It is measured on a scale of 0% to 100%, with a lower percentage showing a building is in poorer condition.



The Division expects staff to complete assigned maintenance (service request/preventative maintenance) within assessed priority or stated timeframes, and document the completion of maintenance in the appropriate module of the maintenance IT system.^{9,10}

For 50 service requests we tested, we found staff had not appropriately updated the IT system for nine service requests:

- Five urgent service requests (out of 10 tested) completed later than expected, ranging from one to six days late. An example of an urgent request was the repair of a leaking roof.

Management noted that in two instances, staff completed the repair, but had not updated the system accordingly. In two more instances, staff did a preliminary fix to address urgent service requests and should have updated the system to downgrade the priority rating for the remainder of the fix. For the remaining instance, staff had not completed timely repair, with no explanation in the system as to why. Documenting the completion of maintenance service requests or reasons why maintenance was not completed gives management key information to enable monitoring of maintenance staff performance.

- One high-priority service request (out of 10 tested) completed one day later than expected; however, staff should have downgraded the priority based on their assessment (e.g., management did not agree with the high-priority rating).
- Three medium-priority service requests (out of seven tested) completed later than expected, ranging from five to 61 days past the expected completion date. Management told us, in all instances, staff should have downgraded the service request in the system to low priority, but had not.
- Division staff completed all 23 low-priority service requests within the expected period.

For 18 preventative maintenance tasks we tested, we found:

- Two March 2022 monthly maintenance tasks marked as completed in the system at October 2020 and January 2021, which was not possible (i.e., work was planned monthly)
- Division staff completed the remaining 16 tasks within the expected timeframe

Effectively monitoring the completion status of maintenance activities helps ensure Division staff complete maintenance as expected, which reduces further deficiencies with the Division's facilities or significant components.

⁹ Preventative maintenance tasks are routine repairs and inspections intended to assist in systematic correction of emerging failures before they occur, or before they develop into major defects. Service requests are requests for minor maintenance (reactive maintenance) initiated through the service request module.

¹⁰ The Division classifies service requests into four priorities: urgent, high, medium and low. It expects maintenance staff to address urgent service requests within one day; high-priority service requests within five days; medium-priority service requests within 15 days; and low-priority requests are schedule and weather-dependent. In our sample, facilities management staff closed low-priority service requests between one and 44 days.

We recommended Horizon School Division No. 205 actively monitor the timeliness of completion of requested and expected maintenance.

(2020 Report – Volume 1, p. 98, Recommendation 4; Public Accounts Committee agreement January 12, 2022)

Status—Partially Implemented

Horizon School Division No. 205 monitors completion timeliness of requested and expected maintenance, but does not check the quality of information tracked in its maintenance IT system.

The Division assigns clear responsibility for staff to monitor maintenance activity performance, and its maintenance procedures require the Manager of Facility Services to monitor the ongoing operation of clean, safe, and well-maintained facilities. Management indicated it reviews information in the maintenance IT system weekly and monthly to capture any lagging service requests or preventative maintenance tasks, but it does not verify the quality of the information.

Without effectively monitoring the timeliness of maintenance activity completion and reviewing maintenance information in the maintenance IT system for quality, there is increased risk of maintenance not being completed as expected.

3.4 Regular Maintenance Reports Provided to the Board

We recommended Horizon School Division No. 205 provide its Board with periodic, comprehensive maintenance reports about the results of its maintenance activities (e.g., facilities' condition, deferred maintenance) and anticipated impact to inform decision-making. (2020 Report – Volume 1, p. 99, Recommendation 5; Public Accounts Committee agreement January 12, 2022)

Status—Implemented

Since 2020, Horizon School Division No. 205's management began providing the Board with annual reporting about the facility condition index of its schools and planned versus completed preventative maintenance activities. Management continued providing monthly reports on its maintenance activities.

The Division's Board Policy Handbook requires management to provide the Board with periodic reports on maintenance activities, along with information about facility project budgets, schedules, and variance reports.

The Board receives:

- Monthly reports (Facility Services Report): includes planned maintenance costs, project status updates (i.e., timelines associated with the maintenance task and indication whether still on schedule).



- Annual year-over-year facility condition index report: provides the Board with information on the overall condition of a facility based on deferred maintenance costs and replacement cost of the building. This shows whether the Division is doing the right maintenance at the right time. As of December 31, 2021, of the 38 schools owned by the Division, 36 schools had a facility condition index of poor or critical.
- Annual preventative maintenance reconciliation report: provides the Board with information on the amount of preventative maintenance funding carried forward from the previous fiscal year; how much the Division invested into preventative maintenance activities in the current period; and how much funding remained from preventative maintenance tasks not completed by year end. The report also breaks down completed maintenance activities (by school) and lists those maintenance activities still in progress.
- Annual three-year maintenance plan: provides the Board with information on upcoming planned preventative maintenance activities, the associated costs, and at which schools the work will occur.

We found the Board received comprehensive reporting to have an adequate understanding of the current state of the Division's schools, to determine how timely the Division completes maintenance activities, and to determine what upcoming maintenance activities will occur (and the associated costs).

Providing sufficient analysis and reporting of maintenance results allows the Board to assess whether the Division effectively maintains its facilities and significant components, and whether maintenance funding is sufficient and efficiently used.