

## Chapter 33

# Prairie Spirit School Division No. 206—Maintaining Facilities

### 1.0 MAIN POINTS

By February 2019, Prairie Spirit School Division No. 206 made progress in improving its processes to maintain its facilities.

The Division required independent review of estimated maintenance costs. Prairie Spirit was developing service objectives and an overall maintenance plan for all of its facilities and significant components. The Division worked on making the records of its facilities and components more complete and accurate, including setting out what key information it expected staff to record.

While Prairie Spirit did not yet provide its Board with periodic comprehensive maintenance reports, it developed a reporting template to provide its Board with information about key risks impacting the Division's facilities. The Division expected to report this information to its Board by spring 2019.

Effective maintenance processes help enhance the future viability and safety of schools, improve the quality of space, protect against loss of facility value or service life (i.e., replacing a facility earlier than intended), and limit repair costs in the future.

### 2.0 INTRODUCTION

#### 2.1 Background

Prairie Spirit is a public school division that operates 37 schools in the area surrounding the City of Saskatoon.<sup>1</sup> Prairie Spirit educates about 11,000 students each year.<sup>2</sup> The Division is responsible for maintaining over 160,000 square metres of facilities.

In 2017-18, Prairie Spirit spent about 17% of its total annual expenses on plant operations and maintenance—its second largest expense after salaries and benefits (see **Figure 1**). Maintenance is the process of keeping existing facilities in good condition to meet service objectives.

<sup>1</sup> *Prairie Spirit School Division No. 206 Annual Report 2017/18*, p. 34.

<sup>2</sup> *Ibid.*, p. 7.

**Figure 1 – Capital and Maintenance Expenses**

	2018 Actual	2017 Actual
Plant Operations & Maintenance Expense	\$20.6 million	\$18.1 million
Total Expenses	\$123.1 million	\$119.5 million
% of Total Expenses Related to Plant Operation & Maintenance Expense	<b>16.8%</b>	<b>15.1%</b>
Buildings – Net Book Value <sup>A</sup>	\$175.0 million	\$178.9 million
Tangible Capital Assets – Net Book Value	\$195.8 million	\$198.8 million
% of Tangible Capital Assets Related to Buildings	<b>89.4%</b>	<b>90.0%</b>

Source: *Prairie Spirit School Division No. 206 Annual Report 2017/18*.

<sup>A</sup>Includes net book value of buildings, short-term buildings, and assets under construction.

Planning for and completing required maintenance is essential to the ongoing operation of the school division. Improper or untimely facility maintenance can lead to potential health and safety problems for students, staff, and the public. It can also result in reduced quality of space, loss of facility value or service life (i.e., replacing a facility earlier than intended), and higher repair costs in the future. Repairs can be disruptive and costly. Doing timely required maintenance may reduce or potentially eliminate the need for, and the extent of, major repairs.

## 2.2 Focus of Follow-Up Audit

This chapter describes our first follow-up of management's actions on the seven recommendations we made in our *2016 Report – Volume 1*, Chapter 12 about Prairie Spirit's processes to maintain its facilities. We concluded that for the 12-month period ended November 30, 2015, Prairie Spirit School Division No. 206 did not have effective processes to maintain its facilities.

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance (CSAE 3001)*. To evaluate Prairie Spirit's progress towards meeting our recommendations, we used the relevant criteria from the original audit. Prairie Spirit agreed with the criteria in the original audit.

To perform our follow-up audit, we examined Prairie Spirit's reports and documents relating to maintaining its facilities. We reviewed the Division's maintenance system and procedures, and tested a sample of maintenance items and maintenance cost estimates. We also interviewed staff responsible for maintaining facilities.

## 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 February 8, 2019, and Prairie Spirit's actions up to that date.

### 3.1 Division Working to Establish Service Objectives and Maintenance Plan

***We recommended that Prairie Spirit School Division No. 206 establish service objectives for each type of facility and significant related components.*** (2016 Report – Volume 1, p. 137, Recommendation 3; Public Accounts Committee agreement September 14, 2016)

**Status** – Partially Implemented

Prairie Spirit was establishing service objectives for its key types of facilities and significant components in conjunction with activities to update its records.<sup>3</sup> It expected to finalize service objectives by December 2021.

For facilities, Prairie Spirit expects to set a target facility condition index rating.<sup>4</sup> For significant components, Prairie Spirit's draft overall service objective is to maximize their useful life. To achieve this service objective, the Division was in the process of establishing the frequency of preventative maintenance. Preventative maintenance is repairs and inspections intended to assist in systematic correction of emerging failures before they occur or before they develop into major defects.

Having service objectives for types of facilities and significant components would help Prairie Spirit determine what future maintenance (preventative and reactive) to do and when.<sup>5</sup>

***We recommended that Prairie Spirit School Division No. 206 develop a maintenance plan for all of its facilities and their significant components, including short-, medium-, and long-term maintenance priorities and planned preventative maintenance strategies.*** (2016 Report – Volume 1, p. 140, Recommendation 4; Public Accounts Committee agreement September 14, 2016)

**Status** – Partially Implemented

At February 2019, Prairie Spirit was developing an overall maintenance plan for all of its facilities and their significant components. It was developing an administrative procedure that will form its maintenance plan. Prairie Spirit planned to complete this administrative procedure by spring 2019.

Our review of the draft administrative procedure found that it included prioritization criteria for short-, medium-, and long-term maintenance, as well as a summary of the Division's strategies for planned preventative and reactive maintenance.

Having an overall maintenance plan would assist the Division in determining the cost of its maintenance needs over the short, medium, and long term, and resources needed. It would demonstrate the Division's plans to reduce or potentially eliminate the need for, and the extent of, major repairs in the future. A maintenance plan would also help

<sup>3</sup> Service objectives are the intended purpose of a facility over a specified service life plan.

<sup>4</sup> Facility condition index is the amount of deferred maintenance divided by the current replacement value.

<sup>5</sup> Reactive maintenance is repairs made in response to service requests and are completed as issues arise.



Prairie Spirit determine the impact on its facilities of delaying maintenance (deferred maintenance).<sup>6</sup>

## 3.2 Division Updating Facilities and Components Records

***We recommended that Prairie Spirit School Division No. 206 set out, in writing, what minimum information it expects staff to gather and record about its facilities and significant components.*** (2016 Report – Volume 1, p. 134, Recommendation 1; Public Accounts Committee agreement September 14, 2016)

**Status** – Partially Implemented

Since our 2016 audit, Prairie Spirit was making the records of its facilities and significant components more complete and accurate. In addition, it was setting out what key information it expected staff to gather and record about its facilities and significant components. As of February 2019, it had not finalized its expectations.

Prairie Spirit better used its maintenance IT system to record information about its facilities and significant components (e.g., HVAC systems). The IT system requires staff to document specific information about the assets (e.g., serial number, model, manufacturer).

The Division made gathering information about each of its schools' HVAC systems (e.g., furnaces, air handling units, exhaust fans, force flow heaters, air conditioners) a priority.<sup>7</sup> The Division had added almost 2,000 items to its maintenance IT system since our 2016 audit. As of January 2019, its maintenance IT system tracked over 5,000 items.

Having complete and accurate records about its facilities and significant components provides a foundation for setting preventative maintenance requirements.

The Division was also revising its administrative procedures to give staff more guidance about what information to gather for each of its facilities and significant components. For example, its draft administrative procedures about facilities strategic planning require staff to periodically inspect all facilities in-depth so as to evaluate their actual facility condition index ratings. The Division expected to finalize its inspection requirements by December 2021.

Having documented processes about minimum maintenance information to track enables knowledge transfer in the event of staff turnover, and assists staff in understanding and following consistent processes. It can also hold those responsible accountable for their actions with clearly laid out expectations.

<sup>6</sup> Deferred maintenance is work that has been postponed or phased for future action.

<sup>7</sup> The Division hired a contractor to identify components of each of its schools' HVAC systems, and update its maintenance IT system. As of January 2019, the contractor updated the Division's records for about half of the schools.

### 3.3 Inspections and Maintenance Tracking Improved, But Incomplete

***We recommended that Prairie Spirit School Division No. 206 provide staff with written guidance on the nature, extent, and frequency of inspections of all of its facilities and related significant components.***

*(2016 Report – Volume 1, p. 135, Recommendation 2; Public Accounts Committee agreement September 14, 2016)*

**Status** – Partially Implemented

***We recommended that Prairie Spirit School Division No. 206 track maintenance completed on facilities and significant components.***

*(2016 Report – Volume 1, p. 143, Recommendation 5; Public Accounts Committee agreement September 14, 2016)*

**Status** – Partially Implemented

Since our 2016 audit, Prairie Spirit increased its use of the functionality of the maintenance IT system to schedule and track preventative maintenance. However, Prairie Spirit continued to use an informal process to follow up preventative maintenance due but not yet completed.

The Division better used the maintenance IT system to give staff guidance on when and how to inspect facilities and significant components for items recorded in the system. (See **Section 3.2** for activities underway to improve the completeness and accuracy of information in this system). In addition, staff used the system to track maintenance completed.

The maintenance IT system includes preventative maintenance tasks. These set out inspection procedures and information to collect about the nature and extent of the inspection. The system can automatically schedule the tasks based on a frequency the Division establishes (e.g., monthly inspection at a school). It can automatically assign the tasks to appropriate maintenance staff or contractors.

At January 2019, the Division had established over 670 preventative maintenance tasks to take place over a calendar year. In our 2016 audit, it had established about 100 tasks. The Division expected to finish establishing tasks for facilities and components included in its maintenance IT system by January 2020.

For each of the 30 preventative maintenance tasks we tested, the Division documented key information about nature, extent, and timing of the completed inspection in its maintenance IT system. For each of these, we found the system included evidence that maintenance staff completed expected tasks.

However, we found that the Division had not completed about one-third of total preventative maintenance tasks scheduled between December 2016 and January 2019 (i.e., over 300 preventative maintenance tasks). A significant portion of outstanding



maintenance was due to staff using a system-generated report that did not include all outstanding maintenance. The Division fixed this report problem in January 2019.

While the Division communicated guidance about inspections of facilities and significant components and tracked their completion, it only did so for assets within its maintenance IT system. Until it records all significant components, the Division cannot establish inspection requirements for them or track completion of the maintenance. Not having inspection requirements for all significant components increases the risk of not having sufficient information about the condition of them to develop maintenance plans.

### 3.4 Comprehensive Maintenance Reports Not Provided to Board

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***We recommended that Prairie Spirit School Division No. 206 provide its Board with periodic comprehensive maintenance reports (e.g., condition of facilities, timely completion of maintenance, deferred maintenance and its anticipated impact) to inform decision making. (2016 Report – Volume 1, p. 145, Recommendation 6; Public Accounts Committee agreement September 14, 2016)***

**Status** – Partially Implemented

As of February 2019, Prairie Spirit was not yet giving its Board periodic comprehensive maintenance reports. The Division had drafted a template for periodically reporting facilities information to the Board.

In the meantime, the Division continued to provide its Board with maintenance reports similar to those we identified in our 2016 audit. These reports include requests for maintenance and capital funding, and awarding of maintenance contracts. The reports did not outline or summarize the condition of the Division's facilities, status of completion of its preventative maintenance, or identify the nature and extent of deferred maintenance and its anticipated impact.

As of February 2019, the Division's draft template for periodic reporting of facilities information to the Board should capture sufficient information about key risks impacting the Division's facilities. The template includes information about facility condition index ratings, completion of maintenance, and project status updates. Management indicated that it expected to start using this template in spring 2019.

Without complete information, the Board cannot evaluate whether the Division sufficiently maintains its facilities and significant components, and whether it is focusing its maintenance efforts in the right areas. In addition, it does not know the impact of delaying maintenance today on health and safety of students and staff, or on future costs.

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## 3.5 Estimated Maintenance Costs Reviewed

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***We recommended that Prairie Spirit School Division No. 206 require estimated maintenance costs to be reviewed against supporting information for reasonableness by someone other than the preparer of the estimates.*** (2016 Report – Volume 1, p. 146, Recommendation 7; Public Accounts Committee agreement September 14, 2016)

**Status** – Implemented

Prairie Spirit required a formal review of reasonableness of estimated maintenance costs by someone other than the preparer of the estimates.

In late 2018, the Division began using a template to guide and document its maintenance cost estimation process for facilities projects. It used the template to document the preparation of the estimate and related support, and the review of the estimated costs by someone independent of the preparer.

For each of the five cost estimates we tested, staff consistently documented the preparation of the estimates using the new template, included sufficient support for them, and documented that someone independent of preparation reviewed the reasonableness of the estimates.

Properly supported cost estimates subjected to independent review reduces the risk of providing inaccurate and incomplete information upon which stakeholders may base decisions.

