Chapter 12 Saskatchewan Health Authority—Maintaining Healthcare Facilities Located in Saskatoon and Surrounding Areas

1.0 Main Points

There are over 50 healthcare facilities located in Saskatoon and surrounding areas serving over 360,000 Saskatchewan residents in more than 100 communities.

By November 2024, the Saskatchewan Health Authority implemented four of the eight remaining recommendations we first made in 2019 about maintaining healthcare facilities in Saskatoon and surrounding areas. It continued to work on addressing the four other recommendations.

The Authority implemented a maintenance IT system in 2023 to help control the accuracy of maintenance data (e.g., only certain users can modify data). While it expected to use the data about planned maintenance activities to inform its annual maintenance budget, the Authority had yet to do so for budgeting purposes in 2024.

The Authority developed standardized preventive maintenance activities for key healthcare facilities and components (e.g., emergency eyewash stations)—it expected to implement these standards for all maintenance activities by June 2025. The Authority needs to work on completing maintenance activities (preventative and demand) timelier. Not completing timely maintenance increases the risk that an asset may fail and cause harm to residents, patients, visitors, or staff.

The Authority also worked with the Ministry of SaskBuilds and Procurement to assess its facility conditions and established a formal service objective to help determine potential facilities or components at risk and those in immediate need of maintenance. Having a minimum facility condition standard will allow the Authority to take a risk-informed approach to maintenance planning.

Further, the Authority revised its capital planning strategy to confirm capital project funding aligns with established priorities (e.g., preventing facilities from experiencing poor or very poor facility conditions). Our review of 11 capital projects planned for Saskatoon and area healthcare facilities found appropriate rationale for their prioritization and funding requests.

Maintaining healthcare facilities to acceptable conditions helps the Authority meet service delivery requirements.

2.0 Introduction

2.1 Background

The Saskatchewan Health Authority, under *The Provincial Health Authority Act*, is responsible for planning, organizing, delivering, and evaluating health services in the province. It is also responsible for constructing, renovating, altering, maintaining, and managing its healthcare facilities.

In 2023–24, the Authority spent \$88.9 million on repairs and maintenance expenses, along with \$241.7 million on additions to buildings and improvements, and on in-progress construction.¹

Over 50 healthcare facilities located in the City of Saskatoon and surrounding areas serve more than 360,000 residents in more than 100 communities, which include cities, towns, rural municipalities, and First Nations communities. These facilities include 10 hospitals, 29 long-term care facilities, and 16 health centres and other healthcare facilities.^{2,3} See **Section 4.0** for a listing of these facilities.

2.2 Focus of Follow-Up Audit

This chapter describes our second follow-up audit of management's actions on the recommendations we originally made in 2019.

We concluded, for the 12-month period ending November 30, 2018, the Saskatchewan Health Authority did not have effective processes to maintain healthcare facilities located in Saskatoon and surrounding areas.⁴ We made 10 recommendations. By 2022, the Authority implemented two recommendations.⁵

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

To carry out our follow-up audit, we discussed actions taken with management, reviewed the Authority's policies and procedures, and examined documents related to maintenance activities completed and planned. We observed maintenance data within the Authority's maintenance IT system and tested the prioritization and timely completion of preventative and demand maintenance.

¹ Saskatchewan Health Authority, 2023–24 Annual Report, pp. 73 and 101.

² Information provided by the Saskatchewan Health Authority.

³ The Saskatchewan Health Authority owns 30 facilities and leases one more facility in Saskatoon and surrounding areas with the remainder owned by healthcare affiliates. Healthcare affiliates are designated by, and responsible for providing contracted health services on behalf of, the Authority, which is not responsible for maintaining healthcare affiliate facilities but may complete maintenance upon request.

⁴ <u>2019 Report – Volume 1, Chapter 12</u>, pp. 187–205.

⁵ <u>2022 Report – Volume 2, Chapter 20</u>, pp. 215–225.

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 November 30, 2024, and the Saskatchewan Health Authority's actions up to that date.

3.1 Service Objectives for Guiding Maintenance Set

We recommended the Saskatchewan Health Authority establish measurable service objectives for its key healthcare facilities and critical components located in the City of Saskatoon and surrounding areas.

(2019 Report – Volume 1, p. 193, Recommendation 1; Public Accounts Committee agreement March 1, 2022)

Status—Implemented

The Saskatchewan Health Authority partnered with the Ministry of SaskBuilds and Procurement to assess the conditions of its healthcare facilities and the Authority set a measurable service objective (i.e., minimum acceptable facility condition index [FCI] rating) to assess its facility conditions against in Saskatoon and surrounding area.⁶

In May 2024, the Authority entered into a five-year agreement with SaskBuilds to assess the conditions of its facilities and refresh the related FCI data. The agreement included a change in methodology to align with the methodology SaskBuilds uses when determining FCI for other government agencies. SaskBuilds expects to assess the Authority's facilities' FCI annually using a methodology that considers maintenance deferred in the current year (potentially increasing FCI). Previously, the Authority used historical FCI calculated over a multi-year (i.e., four year) period.⁷

In 2024, SaskBuilds' condition assessment for the Authority's 66 facilities in Saskatoon and surrounding area found the average FCI for these facilities was 6.37%—meaning overall in <u>fair condition</u> (see **Figure 1**). **Figure 1** shows that 50 out of 66 facilities in Saskatoon and surrounding area were assessed as good or fair condition.

Figure 1—Facility Condition Index for the Authority's Saskatoon-area Facilities (2024)

Facility Condition Index %	Condition ^A	Number of Facilities in Category
0–5	Good	36
5–10	Fair	14
10–30	Poor	15
>30	Very Poor	1
		Total = 66

Source: Adapted from information provided by the Saskatchewan Health Authority.

^A The Authority, through its agreement with the Ministry of SaskBuilds and Procurement, considers guidance from the American Society for Testing and Materials as good commercial practice for building condition assessments, including definitions, standards, and business practices. www.astm.org/e2018-15.html (3 March 2025).

⁶ Facilities condition index (FCI) is an industry standard for measuring facility condition which is used by most real property managers in both the public and private sector. The FCI is a comparative indicator of the relative condition of facilities, expressed as a ratio of the current cost of remedying required deferred maintenance to the current replacement value of the building. The higher the FCI, the worse the condition of the building relative to replacement cost.

⁷ Previously, the Saskatchewan Health Authority looked at the total deferred maintenance for a facility as opposed to the new methodology, which looks at costs to study and repair existing facilities to keep them from falling into poor or very poor condition.

The Authority recognizes the FCI results in **Figure 1** show significant improvement in the average FCI for its facilities in Saskatoon and surrounding area when compared to results from 2019 (i.e., FCI was 50%) and 2022 (i.e., FCI was 62%). We found the Authority is working with SaskBuilds to assess the accuracy of the results (e.g., incorporate thorough analysis of boiler rooms) and make necessary adjustments so results reflect the true condition of each facility.

During 2024, the Authority also established a measurable service objective (i.e., an FCI Sustainability Target of 10%) for its facilities. This means the Authority is aiming to maintain its facilities at a standard FCI of 10% and striving to keep its facilities overall in <u>fair condition</u> or better.

Having a minimum condition standard takes a risk-informed approach to maintenance planning. It assists in comparing current conditions of all facilities to the expected standard to identify particular facilities or components at risk. This helps determine the extent of resources needed for maintenance and where best to focus maintenance efforts.

3.2 Maintenance IT System Controls Improved

We recommended the Saskatchewan Health Authority control the accuracy and reliability of maintenance data in its IT system for key healthcare facilities and components located in the City of Saskatoon and surrounding areas. (2019 Report – Volume 1, p. 195, Recommendation 2; Public Accounts Committee agreement March 1, 2022)

Status—Implemented

The Saskatchewan Health Authority implemented a maintenance IT system in October 2023 to control the accuracy and reliability of maintenance data (e.g., only certain users can modify data, changes made get tracked in the system).

The maintenance IT system has various security levels limiting a user's ability to change information (e.g., the highest level provides users with significant change/delete privileges). Additionally, the IT system allows the Authority to only grant users access to change data for facilities the users are assigned to maintain. We tested all 12 users with the ability to change or delete information and found each user only had access to the facilities assigned to them.

We also found the IT system enables the Authority to track any changes to the system by generating audit logs. The audit logs provide information to monitor all information entered and deleted in the system, including the name of the user who made the changes. We tested 10 work orders and confirmed the system properly generated audit logs to track changes made (e.g., nature of change, user making the change, date, time).

Having sufficient access controls in the maintenance IT system can help to improve the accuracy and completeness of the system's data.

3.3 Preventative Maintenance Activities Consistently Set

We recommended the Saskatchewan Health Authority consistently set the nature, extent, and frequency of preventative maintenance activities for similar categories of key healthcare facilities and components located in the City of Saskatoon and surrounding areas. (2019 Report – Volume 1, p. 198,

Recommendation 4; Public Accounts Committee agreement March 1, 2022)

Status—Intent of Recommendation Met

The Saskatchewan Health Authority developed a consistent process for implementing standardized preventive maintenance activities for key healthcare facilities and components (e.g., emergency eyewash stations, nurse call systems) in Saskatoon and surrounding areas.

In June 2022, the Authority began implementing Building Operations Maintenance Programs across the province. We found these programs detail crucial aspects of component/equipment maintenance, such as the personnel authorized to complete the work, frequency of maintenance activities, and guidelines and safety standards associated with the equipment.

By February 2025, we found the Authority identified 231 different programs—with 80 programs implemented and 21 awaiting final approval. The Authority continued to work on creating the remaining programs and expected to implement them by June 2025.

We tested a sample of eight different pieces of equipment (e.g., exhaust fans, hot water heaters) to verify whether the work orders included appropriate maintenance procedures and safety standards (e.g., manufacturer and code requirements) and found all eight work orders included defined procedures and standards as expected. Each safety standard was complete and matched the information in the listed maintenance procedures contained in the work order.

Using a consistent process and aligning the frequency of preventive maintenance activities with appropriate standards reduces the risk of key healthcare facilities and component assets failing or the Authority using resources inefficiently.

3.4 Preventative Maintenance Not Completed Timely

We recommended the Saskatchewan Health Authority complete preventative maintenance on its key healthcare facilities and components located in the City of Saskatoon and surrounding areas within expected timeframes. (2019 Report – Volume 1, p. 200, Recommendation 6; Public Accounts Committee agreement March 1, 2022)

Status—Partially Implemented

The Saskatchewan Health Authority does not always conduct preventative maintenance activities on key healthcare facilities and components in Saskatoon and surrounding areas in a timely manner.

Preventative maintenance work orders set out the expected timing for completing maintenance of facilities and component assets. In April 2023, the Authority established a work standard setting out expected timeframes based on a combination of the priority rating and the frequency of the maintenance as set out in **Figure 2**. For example, the Authority expects to complete daily insignificant risk work orders (e.g., water tests) the same day of creation as opposed to monthly insignificant risk work orders (e.g., fire extinguisher checks) within two weeks of creation as certain maintenance tasks need to be conducted more frequently than others.

Figure 2—Preventative Maintenance Expected Timeframes

Major Risk	Moderate Risk	Minor Risk	Insignificant Risk
100% Completion	85% on Time	70% on Time	50% on Time
Required	Completion Required*	Completion Required*	Completion Required*
Completion +/-	Completion +/-	Completion +/-	Completion +/-
0 days	0 days	0 days	0 days
Completion +/-	Completion +/-	Completion +/-	Completion +/-
0 days	1 day	2 days	3 days
Completion +/-	Completion +/-	Completion +/-	Completion +/-
1 week	1 week	1 week	2 weeks
Completion +/-	Completion +/-	Completion +/-	Completion +/-
1 week	2 weeks	3 weeks	4 weeks
Completion +/-	Completion +/-	Completion +/-	Completion +/-
2 weeks	4 weeks	6 weeks	8 weeks
Completion +/-	Completion +/-	Completion +/-	Completion +/-
4 weeks	8 weeks	8 weeks	12 weeks
	Completion +/- 0 days Completion +/- 0 days Completion +/- 1 week Completion +/- 1 week Completion +/- 2 weeks Completion +/-	100% Completion Required85% on Time Completion Required*Completion +/- 0 daysCompletion +/- 0 daysCompletion +/- 1 weekCompletion +/- 1 weekCompletion +/- 1 weekCompletion +/- 2 weeksCompletion +/- 2 weeksCompletion +/- 2 weeksCompletion +/- 2 weeksCompletion +/- 4 weeks	100% Completion Required85% on Time Completion Required*70% on Time Completion Required*Completion +/- 0 daysCompletion +/- 0 daysCompletion +/- 0 daysCompletion +/- 1 dayCompletion +/- 2 daysCompletion +/- 1 weekCompletion +/- 1 weekCompletion +/- 1 weekCompletion +/- 2 weeksCompletion +/- 3 weeksCompletion +/- 2 weeksCompletion +/- 6 weeksCompletion +/- 2 weeksCompletion +/- 6 weeks

^{*}In all cases, if staff deferred preventative maintenance at the last interval, it must be completed at the next interval.

Source: Adapted from the Saskatchewan Health Authority's Building Services Operational Standard—Work Order Prioritization.

Each week, the Authority creates work orders for preventative maintenance activities coming due over the next seven days. The maintenance IT system assigns work orders to maintenance personnel who are responsible for closing the orders in the IT system upon completion of the maintenance activities.

While the Authority established a work standard specifying the timeframe within which staff should complete various work orders, when testing maintenance work orders in November 2024, we found certain staff were not aware that the work standard existed and therefore were not following the expectations outlined in the work standard.

Our testing of 30 preventative maintenance work orders found staff completed only eight work orders within the expected timeframes (i.e., 73% not completed timely)—lateness ranged from 4–96 days late. Our review of the untimely work orders found staff do not consistently use the reporting features of the maintenance IT system. For example, for 18 untimely work orders, maintenance staff did not record reasons for not completing work within the expected timeframes, even though the maintenance IT system has features allowing staff to describe reasons for delays.

Our testing also found the maintenance IT system allows staff to generate multiple work orders for the same procedure—creating the risk staff duplicate work. Furthermore, this increases the risk staff may not close orders on the dates maintenance occurred (i.e., only close one work order leaving a duplicate work order active), leading to potentially unreliable data.

Not completing preventative maintenance in a timely manner increases the risk that an asset may fail and cause harm to residents, patients, visitors, or staff. This could also lead to increased future repair costs.

3.5 Demand Maintenance Guidance Updated but Further Clarity Required and Not Always Followed

We recommended the Saskatchewan Health Authority have written guidance for classifying and prioritizing requests for demand maintenance on key healthcare facilities and components located in the City of Saskatoon and surrounding areas. (2019 Report – Volume 1, p. 201, Recommendation 7; Public Accounts Committee agreement March 1, 2022)

Status—Partially Implemented

We recommended the Saskatchewan Health Authority complete demand maintenance in line with priority rankings for key healthcare facilities and components located in the City of Saskatoon and surrounding areas.

(2019 Report – Volume 1, p. 201, Recommendation 8; Public Accounts Committee agreement March 1, 2022)

Status—Partially Implemented

The Saskatchewan Health Authority updated its guidance for prioritizing and completing demand maintenance requests, but staff do not always follow this guidance. Authority staff did not complete 15% of work orders we analyzed within the expected response timeframes. Additionally, the guidance does not include clear instructions on how to prioritize requests for demand maintenance. We found almost 50% of work orders tested were rated as major risk (requiring a faster response time) without a prioritization assessment potentially done.

In October 2023, the Authority developed a work standard to prioritize demand maintenance requests in the maintenance IT system by assigning an associated risk and desired timeframe to complete each request, as set out in **Figure 3**. However, the standard does not include directives on how to prioritize requests (e.g., emergency versus routine priority). We found that all system users can update the priority levels for requests—increasing the risk of staff assigning priority of requests inappropriately or inconsistently.

Figure 3—Priority Levels and Response Times for Demand Maintenance

Risk Rating and Required Completion Rate	Priority Level	Expected Response Time
Major Risk 100% On-Time Completion	Emergency Priority	Response Time: 30 min (with manager notification) Rectification Time: 1 day
Moderate Risk 85% On-Time Completion	Urgent Priority	Response Time: 3 hours Rectification Time: 1 week
Minor Risk 75% On-Time Completion	Medium Priority	Response Time: 1 day Rectification Time: 1 month
Insignificant Risk 50% On-Time Completion	Routine Priority	Response Time: 1 month Rectification Time: 6 months

Source: Adapted from the Saskatchewan Health Authority's Building Services Operational Standard—Work Order Prioritization.

Starting in August 2024, Authority staff started to adjust priority ratings when submitting maintenance requests. The system automatically assigns all orders as major risk and thus all requests are given emergency priority—previously, no expectations to adjust this rating existed. How each maintenance request is rated then determines the desired timeframes to complete work orders (e.g., emergency priority expects response time of 30 minutes and one-day rectification time).

We observed the Authority designated one employee to evaluate and assign ratings to work orders created for healthcare facilities in Saskatoon and surrounding areas beginning in August 2024. However, if this employee is absent, the Authority has not established a backup person, which can result in maintenance personnel updating ratings themselves based on personal knowledge of the tasks or simply leaving the task rated as a major risk, even if that task is routine and lower risk in nature.

Our testing of 30 untimely demand maintenance requests completed since August 1, 2024, found 10 (33%) had priority ratings set per the established work standard. Most requests continued to be ranked at the highest emergency priority level, which can lead to prioritizing completion of less critical requests before other more significant requests. For example, one request tested related to a chair with a broken arm classified as a major risk instead of a less significant priority level. Furthermore, only 8 of 30 work orders selected for testing had reasonable rationale documented explaining why a delay in completion of work occurred (i.e., did not meet the expected rectification time).

We also analyzed over 6,300 demand maintenance work orders closed between August 1, 2024, and October 31, 2024, and found staff completed 85% of work orders within the expected response timeframes. Most work orders not completed timely were classified as major risk. In total, major risk orders accounted for 48% of all work orders in this timeframe. As the maintenance IT system automatically assigns all work orders as major risk, any work orders not reassessed remain rated as major risk indefinitely. This suggests staff may not have always completed demand maintenance work orders based on accurate prioritizations.

In October 2024, the Authority's capital planning team began preparing monthly reports on key performance indicators for each region (e.g., number of completed demand maintenance work orders by priority, number of outstanding work orders). Such reporting can help management monitor the completion of maintenance activities. The Authority expected to adjust these reports based on feedback from management to help improve the usefulness of the information.

When demand maintenance requests are not appropriately prioritized, there is increased risk personnel do not first complete priority maintenance of assets critical for the delivery of healthcare services. Not completing timely demand maintenance in order of actual priority increases the risk that key assets may remain unrepaired longer than expected.

3.6 Need to Consider Planned Maintenance Activities When Setting the Maintenance Budget

We recommended the Saskatchewan Health Authority use its planned maintenance activities as an input to setting its Saskatoon-area maintenance budget. (2019 Report – Volume 1, p. 199, Recommendation 5; Public Accounts Committee agreement March 1, 2022)

Status—Partially Implemented

The Saskatchewan Health Authority does not use planned maintenance activity data as an input to set its annual maintenance budget. While the Authority expects to use data about planned maintenance activities from the maintenance IT system it implemented in October 2023 to inform its maintenance budget, the Authority had yet to use this IT system for this purpose.

We found the Authority continues to establish its maintenance budgets based on historical figures. Linking the maintenance budget to planned maintenance activities can help mitigate potential differences between actual and planned maintenance costs.

We found the maintenance IT system includes several capabilities to assist the Authority in understanding costs associated with planned maintenance activities. For example, the system can capture data on age, life expectancy, useful life, warranty, and replacement value costs for all equipment. Additionally, the system can provide information about labour costs associated with planned maintenance activities that can help the Authority establish an informed maintenance budget.

Not using planned maintenance activities to set budgets increase the risk of insufficiently funding all required maintenance. This may result in the Authority not completing maintenance at appropriate times or in deferring maintenance, which can negatively affect the delivery of healthcare, safety, and future costs.

3.7 Capital Maintenance Project Prioritization Consistently Documented

We recommended the Saskatchewan Health Authority consistently document the priority of capital maintenance projects undertaken in the City of Saskatoon and surrounding areas. (2019 Report – Volume 1, p. 202,

Recommendation 9; Public Accounts Committee agreement March 1, 2022)

Status—Implemented

The Saskatchewan Health Authority selected Saskatoon-area capital maintenance projects based on priority and maintained documentation supporting project selection.

The Authority updated its capital planning strategy in 2023 to assist in capital project funding aligning with established priorities. As part of the new strategy, the Authority places a focus on preventing healthcare facilities from experiencing poor or very poor conditions, along with addressing assets with urgent or high-priority deferred maintenance. Each spring, the capital planning team finalizes plans for capital projects for the following two years and develops a tentative plan for the third year.

We found the Authority's 2026–27 capital plan included projects based on prioritization ratings. We reviewed 11 projects planned for Saskatoon and area facilities and found each project met the established criteria for having high or urgent deferred maintenance needs. This prioritization supports the Authority's objective of allocating funding to more critical projects based on the current state of capital assets.

Documenting rationale for selecting projects enables the Authority to prioritize and complete capital maintenance projects that best address its needs. In addition, it allows the Authority to utilize resources (e.g., staff, budget) effectively.

4.0 SASKATOON AND SURROUNDING AREA FACILITIES

Hospitals (Acute Care)			
Authority-Owned			
Royal University Hospital (Saskatoon)	Saskatoon City Hospital	Jim Pattison Children's Hospital (Saskatoon)	
Humboldt District Health Complex	Lanigan Hospital	Rosthern Hospital	
Wadena Hospital	Watrous District Health Complex	Wynyard Hospital	
Healthcare Affiliates			
St. Paul's Hospital (Saskatoon)			

	Health Centre and Other Facilities	
	Authority-Owned	
Calder Centre (Saskatoon)	Wakaw Primary Health and Collaborative Emergency Centre	Kinsmen Children's Centre (Saskatoon)
Larson House Brief Detox (Saskatoon)	Youth Resource Centre (Saskatoon)	Borden Primary Health Centre
Delisle Community Health & Social Centre	Leroy Community Health & Social Centre	Nokomis Health Centre
Quill Lake Community Health & Social Centre	Rosthern Community Services Building	Watson Community Health Centre
South East Health Centre (Saskatoon)—leased	Idylwyld Health Centre (Saskatoon)	
	Healthcare Affiliates	
Strasbourg & District Health Centre	Cameco Renal Health Centre (Saskatoon)	
	Long-Term Care Facilities	
	Authority-Owned	
Cudworth Nursing Home/Health Centre	Golden Acres (Wynyard)	Pleasant View Care Home (Wadena)
Manitou Lodge (Watson)	Parkridge Centre (Saskatoon)	St. Mary's Villa (Humboldt)
Quill Plains Centennial Lodge (Watson)	Preston Special Care Home (Saskatoon)	
	Healthcare Affiliates	
Central Haven Special Care Home (Saskatoon)	Circle Drive Special Care Home (Saskatoon)	Last Mountain Pioneer Home (Strasbourg)
Luther Special Care Home (Saskatoon)	Oliver Lodge (Saskatoon)	Porteous Lodge (Saskatoon)
Saskatoon Convalescent Home	Sherbrooke Community Centre (Saskatoon)	St. Ann's Home (Saskatoon)
St. Joseph's Home (Saskatoon)	Stensrud Lodge (Saskatoon)	Sunnyside Adventist Care Centre (Saskatoon)
Spruce Manor Special Care Home (Dalmeny)	Lutheran Sunset Home (Saskatoon)	Bethany Pioneer (Middle Lake)
Goodwill Manor (Duck Lake)	Lakeview Pioneer Lodge (Wakaw)	Langham Senior Citizen's Home
Mennonite Nursing Home (Rosthern)	Warman Mennonite Special Care Home	Samaritan Place (Saskatoon)

Source: Adapted from information provided by the Saskatchewan Health Authority.