

Saskatoon Transit 2025 Fleet Renewal Request

ISSUE

City Council approved a long-term Saskatoon Transit fleet renewal plan in December 2023. To fund components of the fleet renewal plan, the City of Saskatoon (City) applied to the Zero Emission Transit Fund (ZETF), a federal funding program to assist in renewing the fleet through the shared federal government funding program. In September 2024, the Administration was notified that its application was denied.

Because the ZETF program was an integral component of the City's proposed long-term fleet renewal plan approved by City Council on December 20, 2023, the Administration is planning to bring forward an updated 10 Year Saskatoon Transit Fleet Renewal strategy to the Standing Policy Committee on Transportation in Q2 of 2025 when the Canadian Urban Transit Research and Innovation Consortium (CUTRIC) Saskatoon Transit Zero Emission Fleet Transition report is also anticipated to be completed and brought forward to Committee. These reports are being brought forward together since the CUTRIC report will influence the 10 year fleet renewal strategy.

However, the Administration has concluded that an interim fleet renewal decision for fleet purchases in 2025 is needed now, so that orders can be placed in time to help provide the City with new buses before the winter of 2026/2027.

BACKGROUND

History

City Council, at its regular business meeting held on November 21, 2022, considered the [Approaches to Address Saskatoon Transit's Long-Term Fleet Renewal and Funding Strategy](#) report, and resolved:

- “1. That the fleet replacement strategy provided in Option 3 – The Fully Accelerated Approach be approved, subject to additional reporting for the 30 diesel articulating buses and subject to a funding strategy for the city contributions for the ZETF program.”

At its meeting held on August 16, 2023, the Governance and Priorities Committee (GPC) received the [2024 – 2035 Major Capital Funding Plan](#) report, which included the funding strategy for the City's contributions for the ZETF program for a total contribution of \$23.5M in 2024 and 2025. The ZETF is an application-based federal program aimed at providing financial support for eligible transit agencies to convert their fleets to zero-emission buses, by providing 50% of eligible costs for bus purchases.¹ This plan was eventually approved by City Council as part of the 2024/2025 Multi-Year Business Plan and Budget Review meeting in November 2023, contingent on federal government funding approval under the ZETF.

¹ For more details, please consult <https://housing-infrastructure.canada.ca/zero-emissions-trans-zero-emissions/index-eng.html>

Potential ZETF funds were included in the budget prior to federal approval because of program requirements to have the funds fully spent by the program deadline of March 31, 2026.

City Council, at its regular business meeting held on December 20, 2023, considered the [Saskatoon Transit Long-Term Fleet Renewal and Funding Strategy Update](#) report and resolved:

- “1. That the updated fleet replacement strategy provided in the report of the Transportation & Construction Division dated December 5, 2023, be approved, subject to approval of funding from the federal government for the Zero Emission Transit Fund (ZETF) program.”

In September 2024, the City received notice from the Housing, Infrastructure and Communities Canada (HICC) that the funding application was unsuccessful. As a result, the funding plan was revised by removing the ZETF funding component of \$23.5M during the 2025 adjusted Multi-Year Business Plan and Budget deliberations.

Current Status

A formal announcement of funding for Saskatoon’s Bus Rapid Transit project under the Investing in Canada Infrastructure Program (ICIP) was made on November 16, 2023. Included within this grant funding approval is \$60M for new buses. In the 2022/2023 and 2024/2025 Multi-Year Business Plan and Budget meetings, \$45M of the total \$60M of City contributions for bus purchases under ICIP was approved under Capital Project P.02328. The remaining \$15M is to be included for approval consideration during the 2026/2027 Multi-Year Business Planning and Budget Deliberations.

Since City Council approved the Saskatoon Transit Fleet Renewal Plan in November 2022, the following bus purchases have been made:

- Two 40-foot battery electric buses entered serviced in July 2024.
- Five 40-foot diesel buses went into service in October 2024.
- Three 60-foot diesel buses were delivered to the Civic Operations Centre in late December 2024 and are anticipated to be in service in late January 2025.
- Ten 40-foot diesel and ten 60-foot diesel buses are on order and anticipated to be delivered in the fall 2025.

Zero Emission Transit Fund

In September 2024, the City was notified that it was unsuccessful in its application to the capital stream of the ZETF program. The ZETF program was an integral component of the City’s proposed long-term fleet renewal plan approved by City Council on December 20, 2023. The ZETF program’s main requirement was to purchase zero-emission buses.

The revised transit fleet renewal plan approved by City Council on December 20, 2023 included 15 40-foot battery electric buses for procurement in 2024 (\$23.5M) and

15 40-foot battery electric buses for procurement in 2025 (\$23.5M) with minimal costs anticipated for supporting charging infrastructure in the Civic Operations Centre (COC). At the time of the development of the revised fleet renewal plan, a detailed assessment had not been completed on the supporting charging infrastructure needs.

Upon further assessment in 2024, it was determined that approximately \$7.3M would be required for charging infrastructure at the COC to support up to 30 battery electric buses (i.e. step down transformers, main switchboard, dispensers and backup power generator). The number of battery electric buses in the ZETF application was subsequently reduced to a total of 24 40-foot buses to remain within the \$47M budget. If the ZETF funding was approved, it would have increased Saskatoon Transit's fleet to a total of 26 battery electric buses as two battery electric buses went into service in July 2024.

The Administration is collaborating with CUTRIC to complete a Zero Emissions Transition Plan for Saskatoon Transit. The planning study evaluates various zero emission fleet mixes compared to a baseline diesel fleet. It is funded through the planning stream of the ZETF with the federal government contributing 80% and the City contributing 20% of the funding. When CUTRIC completes the planning study, Administration plans to bring a report to Committee with the findings, conclusions, and recommendations on the Zero Emissions Transition Plan for Saskatoon Transit. This report is anticipated to be at the Standing Policy Committee on Transportation in Q2 of 2025.

Costs for New Fixed Route Buses

The revised fleet renewal strategy approved on December 20, 2023 was based on anticipated pricing in 2024. The 2025 Saskatoon Transit Fleet Renewal request is based upon anticipated pricing in 2025 of \$1.0M for a 40-foot diesel bus and \$1.4M for a 60-foot diesel bus. For reference, a 40-foot battery electric bus is estimated to cost \$1.5M, which does not include costs for supporting charging infrastructure at the COC estimated at \$250,000 per bus for up to 30 buses.

Only one of the major Canadian bus manufacturers currently produces a 60-foot battery electric bus. The cost for the bus itself is estimated at between \$2.0 and \$2.5M, excluding the cost of supporting charging infrastructure. Due to the high cost and limited suppliers, the Administration is not aware of any 60-foot battery electric buses in service in Canada.

Transitioning to battery electric buses would require more buses to service Saskatoon's transit routes since the battery charge does not last for an entire day of service before requiring a recharge. It is estimated the replacement ratio for an electric battery bus requires approximately 1.20 electric buses to be purchased to replace each diesel bus to maintain the same service levels.

Access Transit

Based on the most recent Saskatoon Transit Asset Management Plan presented to Standing Policy Committee on Transportation in October 2023, half of the paratransit fleet is in 'very poor' condition, with 11 buses expected to be retired at one time. Once the buses reach five or six years in service, they have reached the end of their service life. The average age of the 27 paratransit buses in the fleet in 2023 was 5.8 years.

To maintain the industry standard of a three-year average age and avoid having several units retired at one time, Access Transit requires five new paratransit buses per year. The most recent buses were purchased through reserve funds and the provincial Transit Assistance for People with Disabilities (TAPD) funding program. However, available funding in these two streams does not support the financial requirements of five buses per year, leaving an unfunded gap each year.

The cost of an Access Transit gas bus has increased from approximately \$115,000 in 2018 to approximately \$271,300 in 2025. The paratransit bus zero emission industry is lagging the fixed route industry and Administration is not aware of any Canadian municipalities that currently use zero emission paratransit buses.

Consistent replacement to provide stability in the paratransit fleet requires annual funding of \$1,356,500 (\$2025). Annual reserve transfers for paratransit bus purchases was \$310,000 in 2024 and is \$322,600 in 2025. Additionally, the provincial TAPD program provides \$110,000 annually (\$55,000 per bus for two buses) for a total of \$420,000 in 2024 and \$432,600 in 2025 budgeted for Access Transit bus replacements. This total funding level of reserve contributions and the provincial TAPD program allows for the purchase of two Access Transit buses per year, resulting in a funding gap of three buses to achieve five new buses per year.

The \$322,600 reserve transfer in 2025 was based on the estimated pricing of Access Transit buses when the budget was developed in 2023. Since that time, the estimated cost of a bus has increased further to \$271,300 (\$2025) resulting in a shortfall of \$110,000 in reserve transfers for the two Access Transit buses budgeted in 2025. Coupled with the funding gap of three buses at \$271,300 each, this results in a funding shortfall in 2025 of \$923,900 for the purchase of five Access Transit buses.

Updated 10 Year Saskatoon Transit Fleet Renewal Strategy

Since the ZETF application was denied, the Administration is reassessing Saskatoon Transit's long-term fleet renewal program. The updated 10 year fleet renewal strategy is planned to be presented to the Standing Policy Committee on Transportation in Q2 2025 alongside the CUTRIC Saskatoon Transit Zero Emission Transition Plan report as the CUTRIC study will influence the type of buses (i.e. diesel and/or zero emission buses) proposed in the strategy. The updated strategy will be based on currently available funding streams (ICIP fleet renewal funding of \$60M, city borrowing of \$23.5M, annual reserve contributions and the provincial TAPD program) and the report will identify funding gaps to maintain the fleets to industry standards.

The updated strategy will include both a fixed route fleet and Access Transit fleet renewal strategy. It will consider population growth and anticipated modal shift over time and target meeting industry standards for fleet average age and service life of buses.

As more information becomes available from the federal government on the Canadian Public Transit Funding program anticipated to start in 2026/2027, the Administration will look for opportunities to leverage this future program for fleet replacement.

City of Saskatoon's Current Approach

Saskatoon Transit's fleet renewal strategy is generally aligned with its existing Asset Management Plan but is subject to annual funding approvals. The most recent [Saskatoon Transit Asset Management Plan and report](#) outlining the state of the conventional bus fleet was presented to the Standing Policy Committee on Transportation in October 2023, in preparation for the 2024/2025 Multi-Year Business Plan and Budget Review. The Saskatoon Transit Asset Management Plan will be updated and presented to the Standing Policy Committee on Transportation in the summer of 2025 in preparation for the 2026/27 Multi-Year Business Planning and Budget deliberations.

Approaches in Other Jurisdictions

City of Winnipeg

Winnipeg announced in December 2024 that the 2025 budget instructs Winnipeg Transit to purchase diesel buses starting in 2027 due to the high capital costs associated with battery electric buses. The revised direction is based on using available funding to maximize the number of new bus purchases to position better for providing a reliable, dependable service with improved customer service to encourage more people to transition from cars to buses.

City of Calgary

In June 2023, the City of Calgary procured an order of 259 40-foot battery electric buses with a grant from the federal government but has experienced procurement delays and seen increasing costs for battery electric buses due to the demand associated with transition programs funded in part by the federal government. The program was scaled back to 180 buses due to higher bus purchase costs. The 180 battery electric buses are expected to be delivered in 2026 and be in operation in late 2027/early 2028. Calgary Transit is adding vehicles powered by several different sources, including compressed natural gas, electric and gas-powered vehicles, in addition to diesel. The City of Calgary has 240 40-foot compressed natural gas buses in their fleet with plans to operate 450 buses by 2027.

City of Edmonton

Between February 2019 and August 2021, the City of Edmonton purchased 60 battery electric buses. The buses remain in the fleet but have not performed as expected with no further battery electric buses introduced to the fleet. Edmonton Transit is now testing two hydrogen fuel cell electric buses in the fleet.

City of Regina

On February 9, 2024, the federal government announced a combined investment of \$52.2M over three years with the City of Regina to purchase 20 40-foot battery electric buses and related charging infrastructure, which works out to \$2.6M/bus. Seven buses have been ordered for delivery in 2025 at a cost of \$10.8M with plans to purchase 13 more in 2026 at a cost of \$22.4M. Additionally, \$21.2M will be needed for facility upgrades and infrastructure to support the electric buses.

OPTIONS

The Saskatoon Transit Fleet Renewal Plan approved by City Council in December 2023 included the purchase of 15 40-foot battery electric buses in 2024 (\$23.5M) and 15 40-foot battery electric buses in 2025 (\$23.5M) for a total of \$47.0M, subject to approval of 50% federal funding through the ZETF program. The City's ZETF application was subsequently revised in 2024 to include 24 40-foot battery electric buses and \$7.3M to support the required charging infrastructure at the COC. The strategy did not include any additional funding for Access Transit bus replacements.

As noted, the updated 10 year fleet renewal strategy is planned to be presented to the Standing Policy Committee on Transportation in Q2 2025 alongside the CUTRIC Saskatoon Transit Zero Emission Transition Plan report. However, an interim fleet renewal decision is needed to address pressures due to increasing ridership and the aging fleet. Given that the ZETF funding was denied, this leaves \$23.5M of approved City contribution borrowing available for bus purchases. The options proposed in this section use that fiscal ceiling to guide the adjusted Saskatoon Transit fleet renewal request for 2025.

For each option, the following fleet costs are used:

- Fixed Route 40-foot diesel bus - \$1M
- Fixed Route 60-foot diesel bus - \$1.4M
- Access Transit bus - \$271,300
- Fixed-Route 40-foot battery electric bus - \$1.75M
- The Administration is recommending delaying procurement of 60-foot battery electric buses until such time as more vendors are manufacturing the buses and there are some in service in other jurisdictions.

Option 1 – Purchase Fixed Route Diesel Buses and Access Transit Gas Buses

This option proposes to purchase:

- 17 40-foot diesel buses - \$17M;
- 4 60-foot diesel buses - \$5.6M; and
- 3 Access Transit gas buses plus 2025 inflation - \$923,900.
- Total - \$23,523,900

Option 2 – Purchase Fixed Route Battery Electric Buses and Access Transit Gas Buses

This option proposes to purchase:

- 13 40-foot battery electric buses - \$22.75M; and
- 3 Access Transit gas buses plus 2025 inflation - \$923,900.
- Total - \$23,673,900

Option 3 – Purchase a Combination of Fixed Route Diesel Buses and Battery Electric Buses and Access Transit Gas Buses

This option proposes to purchase:

- Combination of 40-foot diesel buses, 60-foot diesel buses and 40-foot battery electric buses totalling \$22,576,100; and
- 3 Access Transit gas buses plus 2025 inflation - \$923,900.
- Total - \$23,500,000

Option 4 – Purchase Fixed Route Diesel Buses

This option proposes to purchase:

- 23 40-foot diesel buses - \$23M.
- Total - \$23,000,000

Option 5 – Purchase Fixed Route Battery Electric Buses

This option proposes to purchase:

- 13 40-foot battery electric buses - \$22.75M.
- Total - \$22,750,000

Option 6 – Purchase a Combination of Fixed Route Diesel Buses and Battery Electric Buses

This option proposes to purchase:

- Combination of 40-foot diesel buses, 60-foot diesel buses and 40-foot battery electric buses - \$23.5M
- Total - \$23,500,000

Option 7 – Purchase An Equivalent Number of 40 Foot Battery Electric, Fixed Route 60 Foot Diesel Buses and Access Transit Gas Buses

This option proposes to purchase:

- Using an equivalency ratio of 1.20 battery electric buses to 1.0 diesel buses, this would result in the equivalency of 21 battery electric buses (17 diesel buses x 1.20) at a cost of \$36.75M;
- 4 60-foot diesel buses - \$5.6M; and
- 3 Access Transit gas buses plus 2025 inflation - \$923,900.
- Total - \$43,273,900

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

1. That the 2025 Saskatoon Transit Fleet Replacement request provided in Option 1 – Purchase Fixed Route Diesel Buses and Access Transit Gas Buses be approved, funded from \$23.5M of city contribution borrowing approved in the 2024 and 2025 budget;
2. That Capital Project P.00583 Transit Replacement Buses be increased by \$23,900 funded from the Transit Vehicles Replacement Reserve; and
3. That \$923,900 of borrowing be removed from Capital Project P.00583 Transit Replacement Buses and transferred to P.02095 Access Transit Bus Replacement, subject to public notice

RATIONALE

Administration is recommending Option 1 for the following reasons:

1. Maximizes the number of bus purchases with the available funding.

Factoring in the 20 buses expected to be delivered by the fall/winter of 2025, the average fixed route transit fleet age at the end of 2025 will be approximately 8.6 years (industry standard of 7.5 years) with the maximum bus age at 18 years and 22 buses in the fleet beyond the service life of 15 years. With the purchase of a total of 21 diesel buses in Option 1 for delivery in late 2026, the average age of the fleet at the end of 2026 will be reduced to 7.0 years, with the maximum bus age remaining at 18 years and 10 buses over the service life of 15 years. Options 2, 3, 5 and 6 will provide for fewer bus purchases than Option 1 which will result in a higher average age and number of buses in the fleet beyond the 15 year service life than Option 1 and carry forward into future years as well. In addition, battery electric buses will not have sufficient charge to run for an entire shift on longer routes and will need to travel back to COC in mid-shift for recharging, requiring another bus to complete the route. The reduction in the number of newer buses in the fleet and requirement for additional buses to service longer routes with Options 2, 3, 5 and 6 will increase the risks of not meeting service requirements during AM and PM peak hours due to potential bus shortages and also limit opportunities for future service expansion into new neighbourhoods or adding buses to routes with high ridership to address ridership demands.

2. Provides for three additional Access Transit bus purchases

Option 1 allows for the purchase of three additional Access Transit buses to supplement the two currently budgeted purchases from current reserves and TAPD funding to allow for the purchase of five total buses to meet the Asset Management Plan lifecycle replacement requirements for 2025. Addressing the Asset Management Plan lifecycle replacement requirements at this time will help mitigate against Access Transit experiencing risks to meeting levels of service due to bus shortages experienced due to an aging fleet with downtime due to mechanical issues.

3. Time is of the essence to procure the 2025 bus purchases

From the start of the procurement process to the time of bus delivery is between 18 and 24 months. For a target delivery date of the fall 2026 for the 2025 bus purchases requires the procurement process to start as soon as possible. If City Council approves Option 1 in January 2025, the procurement process can start in February 2025 with bus purchases anticipated between June and December 2026.

4. Allows for additional time to further assess battery electric bus performance

Proceeding with Option 1 will allow for additional time to assess the two battery electric buses that went into operation in Saskatoon Transit in July 2024 as well as learnings from the zero emission transition of other transit agencies across Canada before making further investments in zero emission buses.

In the first six months of operation, there have been some issues with downtime for the two battery electric buses in the Saskatoon Transit fleet that have limited operations to 2,500 km for one unit and 1,100 km for the second unit. The manufacturer has been onsite at COC on several occasions to address the issues under warranty. The five diesel buses that went into service in October 2024 have operated without issues and been in service for between 16,000 and 21,000 kms for each bus. Delaying purchases of additional battery electric buses for at least one year will allow for additional time to assess the operation and performance of the two battery electric buses in the current fleet.

Delaying the purchase of battery electric buses until the CUTRIC Saskatoon Transit Zero Emission Transition Strategy report is complete and presented to the Standing Policy Committee on Transportation will also allow for the findings, conclusions and recommendations to be considered in the decision for purchases of zero emission buses, including analysis on the total cost of ownership and green house gas reductions compared to the baseline case of a diesel fleet.

Saskatoon Transit will continue to monitor the transition strategies of other Canadian jurisdictions and advancements in technology in battery electric buses as well as other forms of propulsion currently on the market such as hydrogen fuel cell electric battery buses, hybrid buses and compressed natural gas buses.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

If approved, Option 1 will be funded with \$23.5M of City contributions from borrowing approved in the 2024 and 2025 budgets and \$23,900 from the Transit Vehicle Replacement Reserve.

Purchasing the maximum number of buses with available funding will position better for a reliable and dependable fleet that will result in improved customer service and a cost-effective transportation option that will encourage and entice a modal shift from vehicles to public transit with a resulting green house gas reduction in passenger vehicle

emissions due to less vehicles on the road and reduced traffic congestion during AM and PM peak hours.

NEXT STEPS

If approved, the Administration will proceed with procurement of 21 diesel-powered buses for anticipated commissioning in late 2026, and five gas-powered Access Transit buses for anticipated commissioning in late 2025. If approved, the Administration will bring forward a public notice report for authorization to transfer the borrowing from P.00583 Transit Replacement Buses and transferred to P.02095 Access Transit Bus Replacement.

As more information becomes available from the federal government on the Canadian Public Transit Funding program announced to start in 2026/2027, the Administration will explore this and other funding opportunities to leverage funding for fleet replacement and/or growth when the current federal ICIP program funding has been exhausted.

The Administration may adjust the exact numbers of buses ordered as outlined in this report based on factors such as actual tender prices and procurement timing. The numbers of buses in this report outline the overall 2025 Saskatoon Transit fleet purchase plan, and the Administration will report back to City Council only if significant deviation from the plan is being considered.

Administration is planning to bring forward an updated 10 Year Saskatoon Transit Fleet Renewal strategy to Committee in Q2 of 2025 when the CUTRIC Saskatoon Transit Zero Emission Fleet Transition report is also anticipated to be completed and brought forward to Committee.

The updated 10 year fleet renewal strategy will include both fixed route fleet and Access Transit fleet renewal, population growth and forecasted modal split increases, and be based on current available funding through the ICIP fleet renewal (\$60M), City contributions from borrowing (\$23.5M), reserve contributions and TAPD funding assistance. The updated 10 year fleet renewal strategy will be available for consideration in the 2026/2027 Multi-Year Business Planning and Budget deliberations.

Report Approval

Reviewed by: Mike Moellenbeck, Director of Saskatoon Transit
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