

Building Better Transit:

An Asset Management Plan for Transit And Access Transit Fleet



City of
Saskatoon



June 2016

Transit & Access Transit Fleet

INTRODUCTION

The Saskatoon Transit fleet is currently in a declining state of condition. Saskatoon Transit operates a spare ratio of 58% while the industry standard is 25-30%. This can be attributed to the fleet's average age of 11.9 years, with the oldest bus in service at 25 years of age. Canadian industry standards recommend an average fleet age of 7 years. In order to align the City of Saskatoon's (City) assets with industry standards, this report has been developed to provide insight into the current assets, their condition and potential funding options. The funding gap has partially been addressed through previous City Council decisions such as:

- On September 29, 2014, City Council approved the purchase of ten new Nova low-floor buses for a cost of \$4.63M funded by the Gas Tax Fund. These buses were delivered in 2015.
- On June 22, 2015, City Council approved the purchase of an additional ten new buses for delivery in 2016 from the Gas Tax Fund at a cost of \$4.95M. At this meeting, City Council also approved that Saskatoon Transit set as its target an average fleet age of 7 years to be achieved by 2020 in order to meet the current Canadian industry average.

These one-time funding injections along with future funding into the bus replacement program are necessary to address the deterioration.

This report does not address the buses needed as a result of the City's growth plan. It also does not address other asset sub-classes owned by Saskatoon Transit such as bus shelters. The remaining assets and their funding gaps will be added to the Asset Management Plan as it is updated annually.

EXPENDITURE LEVELS

The Administration evaluates the condition of the City's assets in order to develop annual programs to maintain the assets at a minimum cost. Condition assessments or evaluations are conducted and used to establish condition levels as well as develop annual capital improvement plans.

The level of service for each type of asset is defined differently but as the level of service increases for the asset so does the cost of maintaining the asset. In order to be able to compare the level of investment for all assets corporate-wide, five levels of expenditures are identified below. It should be noted that expenditure levels are not condition assessments but lead to a change in the asset condition over time. 'A' represents the highest level of expenditure and 'F' represents no expenditure.

Table 1

Expenditure Levels	Asset Condition	Description
A	Getting Better Quickly	Sufficient expenditures to keep asset in top condition and to increase asset condition/value quickly over time.
B	Getting Better	Sufficient expenditures to keep asset in top condition and to increase asset condition/value slowly over time.
C	Maintain Assets in Current Condition	Sufficient expenditures to keep asset in constant condition over time.
D	Getting Worse	Insufficient expenditures to maintain asset condition. Over time asset condition will deteriorate.
F	Getting Worse Quickly	No expenditures. Asset condition/value decreased rapidly.

Using the above criteria and the physical condition desired, the Administration has identified the following expenditure services levels for the buses as shown in Table 2.

Transit & Access Transit Fleet

Table 2: Funding Gap (in millions of dollars)

Asset	Actual Average Fleet Age	Desired Average Fleet Age	Expenditure Level	Required Annual Funding (to meet Expenditure Level)	2016 Budgeted Annual Funding*	Annual Funding Gap (to meet Expenditure Level)
Transit Buses	11.9 years	7.0 years	Level B	\$6.10	\$0.10	\$6.00
Access Transit Buses	4.6 years	3.0 years	Level B	\$0.65	\$0.25	\$0.40

*The Budgeted Annual Funding includes only ongoing funding dedicated to bus purchases and not one-time funding.

A desired average fleet age of 7.3 years can be reached by 2020 for Transit and the desired fleet age of 3.0 years can be reached by 2021 for Access Transit by allocating the required annual funding to these areas.



Transit & Access Transit Fleet

The current buses in the Transit fleet have a replacement cost of approximately \$81.91M and the Access Transit fleet has a replacement cost of \$3.38M as detailed in Table 3.

What do we own, what is it worth?

Table 3

Asset	Inventory	Replacement Cost
Transit - Conventional Buses	33	\$15,180,000
Transit - Low Floor Buses	101	\$53,530,000
Transit - Articulating Buses	10	\$8,000,000
Transit – Hybrid Buses	8	\$5,200,000
Access Transit – Coach	26	\$3,380,000

Transit – Conventional Buses

Conventional Buses are not at an Expenditure Level of 'B' like the remaining fleet as no further funding will be used to purchase conventional buses. They do not have the amenities such as proper climate control and also do not meet the requirement for accessibility (low-floor). The City will instead be purchasing low-floor or articulating buses and will be retiring the conventional buses when they are no longer operational.

Transit – Low-Floor Buses

In 2015 10 low-floor buses were delivered and an additional 10 were ordered and expected to be delivered in 2016. Both of these purchases were funded from the Gas Tax Fund. To meet the accessibility standards and reduce the spare buses required, beginning in 2016 an order will need to be placed annually for 7 to 10 low-floor buses. The estimated cost is \$530,000 per bus and the buses are expected to be delivered in the year following the order.

Transit – Articulating Buses

Articulating buses allow higher capacity buses to be placed on high-demand routes. The goal is to have a fleet that is one-third articulating buses to low-floor buses. To meet this goal, beginning in 2017 an order will need to be placed annually for 3 articulating buses. The estimated cost is \$800,000 per bus and the buses are expected to be delivered in the year following the order.

Transit – Hybrid Buses

There is no plan to purchase additional hybrid buses in the near future.

Access Transit - Coach

The number of Access Transit buses is limited to 26 units, which allows for 7 spares. The current fleet age is about 4.6 years; however, based on industry standards the desired fleet age is 3 years. To achieve the desired age, 5 new buses will be required each year at an estimated cost of \$130,000 per bus.

PROPOSED PLAN TO ADDRESS FUNDING GAP

Transit

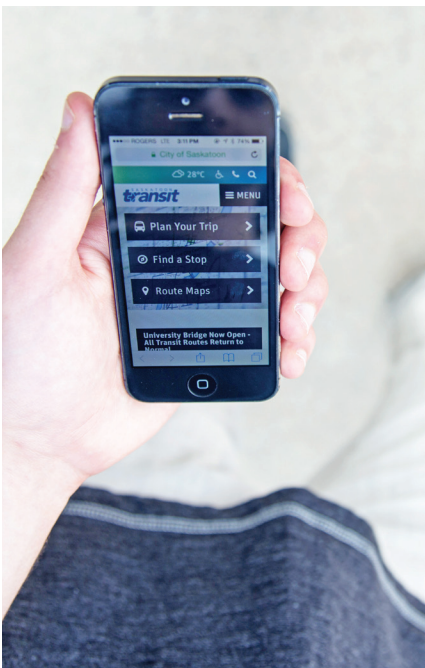
Current Reserve Funding

In 2016 there is funding of \$1,952,900 transferred to the Transit reserves (Transit Vehicle Replacement Reserve, Transit Capital Projects Reserve and Transit Additional Vehicle Reserve). Of these funds \$100,100 is allocated to the replacement of buses while the remaining funding is used for refurbishment of the existing fleet, engine overhauls, bus shelters, benches and ridership growth initiatives.

Reallocated Funding

The Federal Government has allocated \$29 million to Saskatchewan under Phase 1 of the Public Transit Infrastructure Fund (PTIF). Saskatoon's share of the PTIF funding is expected to be approximately \$17 million. The Federal Government will provide up to 50% for eligible projects and it is not known at this time what amount, if any, will be contributed by the Provincial Government. These funds will be used for transit related infrastructure, fleet renewal and planning and design to expand and improve the transit system.

It is estimated that approximately \$22 million will be spent in 2017 and 2018 for Transit and Access Transit fleet renewal with the Federal Government contributing 50% (approximately \$11.5M). The City's portion of funding will be from reallocated funding by using Building Canada Funds for water and wastewater projects and reallocating an equal dividend from the utilities to fund public transit.



CLIMATE ADAPTATION STRATEGY

During periods of extreme weather such as a major snow event, Saskatoon Transit has established a plan that will re-route buses to Priority 1 streets (high traffic, high speed roadways) to ensure movement of the Transit fleet. Priority 1 streets are the first streets to be cleared of snow in a snow event. Saskatoon Transit is also establishing a plan for a major flood event that will also re-route the Transit fleet to major roadways based on known flood prone intersections.

The Civic Operations Centre is scheduled to be operational in 2017 and will house the Transit fleet indoors which will lessen the impact of extreme cold on the fleet by minimizing cold weather idling.





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