

ADVISORY COMMITTEE REPORT

TO: Administration & Finance Committee
FROM: Saskatoon Environmental Advisory Committee
DATE: October 19, 2011
SUBJECT: Transit Research Studies
 (1) Impact of Fare Changes on Ridership (SEAC)
 (2) Best Practices – Transit Ridership & System Improvement (Transit Administration)
FILE NO.: CK. 175-9

RECOMMENDATION: that this report be submitted to City Council as information.

BACKGROUND:

Each year, the Saskatoon Environmental Advisory Committee (SEAC) undertakes a research project in order to fulfill its mandate to "provide advice to Council on policy matters relating to the environmental implications of City undertakings and to identify environmental issues of potential relevance to the City".

In May 2011, your Committee partnered with Transit Administration to obtain research on the impact of Transit Fares on Ridership, in terms of what would increase transit ridership and reduce the use of vehicular traffic. The Administration was interested in research on best practices for Transit Services in terms of what has worked in other cities. A candidate search was initiated and nine applicants were interviewed. The successful applicant – Mr. Lee Smith, a third year University of Saskatchewan student – was hired for a four month term to complete the two research reports. The Environmental Services Branch also assisted by providing in-kind support through the provision of office space and phone access.

REPORT:

Saskatoon is a city with public transportation needs. However it is also a city that, in no small part, is built for the automobile – almost exclusively in some areas. This is the case for most Canadian cities, particularly on the prairies. Its low overall density and sprawling highway-centric development, especially around the outskirts, lends to the private vehicle being the *de facto* standard of intra-urban transportation. A well used public transit system can have a positive impact on a city, such as: reduced overall traffic congestion; positive economic development or re-development of decaying areas; and, most significantly in terms of SEAC's interest, decreased aggregate carbon emissions from reduced vehicle traffic and new bus fuel technologies such as hybrid- or full-electric and compressed natural gas.

The primary objective of this report is to explore the effects that a reduction or complete removal of transit fare would have on Saskatoon Transit ridership. While this discussion, by nature, is

primarily economic, it is important to understand that the potential impact on increased transit ridership and the resulting greenhouse gas emission reductions are central to the mandate of SEAC.

The attached study examined the potential impact on transit ridership that results from either an increase or decrease in fares. It demonstrates that previous research on the subject has found public transit to be an inelastic good. This means that ridership generally decreases with an increase in fare and vice-versa, but in terms of percentage, ridership does not change as much as the fare change. Estimates based on the available research suggest that a fare reduction of 10% would result in a ridership increase of between 5 and 9%, while a fare reduction of 90% would lead to a ridership increase of between 30 and 68%.

The attached study also examines the potential impact of a system-wide fare elimination. It should be noted that no North American transit service currently offers a zero-fare system. A review of the currently available research does not support the implementation of a zero-fare system. A zero-fare system can lead to reduced quality and lowered ability to attract commuters, increased cost and loss of revenue, which in turn results in reduced service quality, have been identified as some of the negative consequences. However, it must be acknowledged that a zero-fare program could potentially be successful in a limited or isolated manner, such as within the downtown only or a single line between two major destinations (such as a downtown to University line). Therefore, SEAC does not recommend that Saskatoon Transit consider a zero-fare transit system, especially if the desire is to increase the ridership of commuting adults and attract motorists out of their cars.

There are many factors besides fare that can have a significant impact on ridership. In most cases, these factors are more influential than fare for determining ridership. Some of these factors outlined by past research and observation include service frequency, service coverage, service improvements, availability/convenience, travel time, and general good-quality transit service. The utility and overall cost of automobiles also has a significant impact on ridership, whereby if auto use is subsidized or treated preferentially, it can negatively impact ridership, and if it is priced higher or treated disadvantageously, it can positively impact ridership.

Given these observations, SEAC endorses the findings and recommendations outlined in the Transit Administration report “Best Practices – Transit Ridership & System Improvement”. In the opinion of SEAC, a focus on providing better and more reliable transit service to all areas of Saskatoon through the use and implementation of web-based technology, improved customer service, and better transit infrastructure will have a more positive impact on increased ridership than fare reductions or elimination. A successful implementation of the recommendations outlined in the report can lead to an overall reduction in greenhouse gas emissions for the city.

CONCLUDING COMMENTS:

SEAC would like to commend the efforts of Saskatoon Transit and the Environmental Services Branch in working together to produce the attached report.

As always, SEAC is available to assist City Council and City Administration on all matters pertaining to the environment and we look forward to providing our input in the future.

ATTACHMENTS:

1. "Summer 2011 Transit Report – The Effects of a Reduced – or Zero-Fare Structure on Ridership", by Lee Smith.

Written by: **Dr. Sean Shaw, Chair**
Saskatoon Environmental Advisory Committee

Approved: **"Sean Shaw"**
Dr. Sean Shaw, Chair
Saskatoon Environmental Advisory Committee
Dated: **October 31, 2011**