

Improving Public Transit in Saskatoon

A Research-Based Approach

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 City of
Saskatoon

SASKATOON
transit

Introduction

SEAC

Saskatoon Environmental
Advisory Committee



City of
Saskatoon

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transit

CITY OF SASKATOON

SASKATOON ENVIRONMENTAL ADVISORY COMMITTEE

SUMMER 2011 TRANSIT REPORT

THE EFFECTS OF A REDUCED- OR ZERO-FARE STRUCTURE ON RIDERSHIP



AUGUST 2011

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SUMMER 2011 REPORT

TRANSIT RIDERSHIP AND SYSTEM IMPROVEMENT



SASKATOON ENVIRONMENTAL
ADVISORY COMMITTEE

AUGUST 2011

Report Descriptions

CITY OF SASKATOON

Report 1 (SEAC report):

SASKATOON ENVIRONMENTAL
ADVISORY COMMITTEE

1. Literature search on the effects on ridership from a reduced- or zero-fare structure



AUGUST 2011

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Report 2 (Transit report):

SUMMER 2011 REPORT

TRANSIT RIDERSHIP AND SYSTEM IMPROVEMENT

1. A study of transit in smaller cities that have high ridership per capita
2. Literature search on best practices for transit marketing
3. Literature search on best practices for getting youth using transit

AUGUST 2011

ADVISORY COMMITTEE

Why Should You Care?

✓ I got noticed...

TRANSIT Convenience trumps price: report

CHARLES HAMILTON
THE STAR
WITH S...
BY DAV...
down to \$2 might have a
little bit of an effect on how
to the bus,

Providing
not the bes
people usi
says a rep
by the S
mental a

Global
SASKATOON™



CBC

radio one

The StarPhoenix

ewar...
sit could increase
it could also lead to more
vandalism and vagrancy
and have an overall nega-
tive effect on the transit sys-
tem. Currently, there are no
North American cities with
a zero-fare system.
"Reducing fare from \$2.75
provide a manda...
pass at some high schools
and technical schools, the
expansion of the discounted
Ecopass to more businesses
and the location of buses
mapped in real time online.
"We...
dustry more...
he told the commit...
Smith said that he

Why Should You Care?

- ✓ I got noticed...
- ✓ I actually helped to make real changes...
 - Report recommendations proposed to City Council
 - Pilot projects and test programs for almost all major recommendations were undertaken immediately

Why Should You Care?

- ✓ I got noticed...
- ✓ I actually helped to make real changes...
- ✓ It was fun, engaging, and incredibly rewarding...
 - You don't need a paycheck to do something similar yourself!
 - The rewards are immense, and can be realized both personally and in the community at large

✓ Literature review

Journal of Public Transportation,
Transportation Research Record,
Canadian Urban Transit Association
(CUTA), American Public
Transportation Association (APTA),
and many more

✓ Statistical data

CUTA/APTA, government censuses,
Saskatoon Transit, and others

› Both Reports 1 & 2

Report 1 (SEAC)

Report 2 (Transit)

Methodology

Methodology

- ✓ Established theories and models in economics
 - Price elasticity of demand
 - The microeconomics of urban transportation started by Simpson & Curtin, 1968

Both Reports 1 & 2
› Report 1 (SEAC)
Report 2 (Transit)

✓ Qualitative-to-quantitative data conversion

- Telephone interviews conducted with managers and planners at successful transit agencies
- Interview responses coded into quantitative, category-based data and indexed

Both Reports 1 & 2

Report 1 (SEAC)

> Report 2 (Transit)

Methodology

A Confession...



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SUMMER 2011 TRANSIT REPORT

THE EFFECTS OF A REDUCED- OR ZERO-FARE STRUCTURE ON RIDERSHIP



AUGUST 2011

Report #1 (SEAC):

The Effects of a Reduced- or
Zero-Fare Structure on Ridership

Results

Fare Reduction

- Price elasticity of demand
(Fare elasticity of ridership)
- Simpson-Curtin rule: Ridership changes by $-\frac{1}{3}$ of the original fare change (in %)
- However, many new theories predict more responsive elasticity values, from -0.4 to -0.9.

Annual Saskatoon Transit Ridership vs. Various Fare Reductions (using the Litman model)

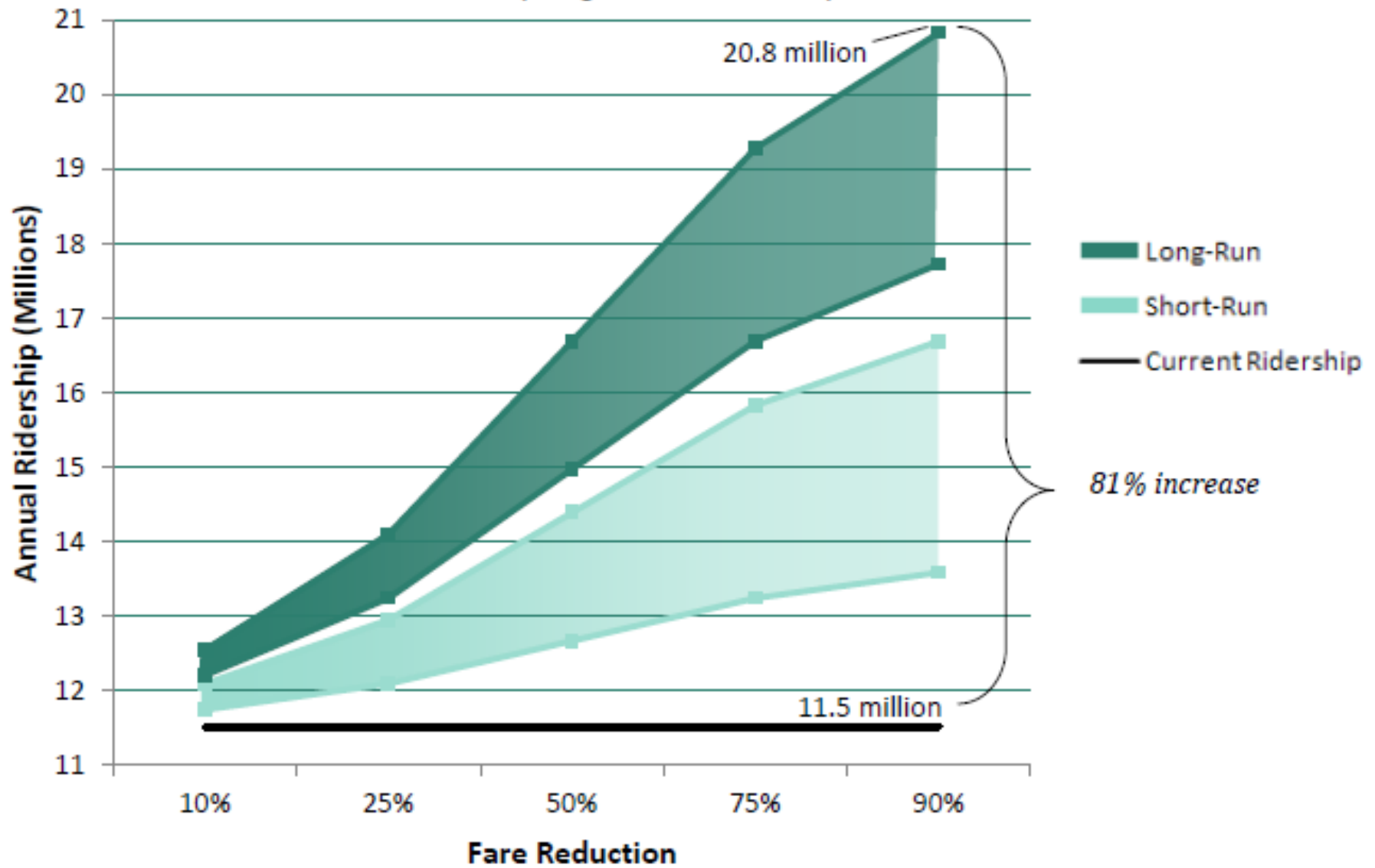


Figure 2-4: Annual ridership vs. fare reduction under the Litman model (pg. 11)

Fare Removal

- Similar economic analysis would be useless
- Case studies and historical precedent were used to investigate zero-fare
- Zero-fare transit systems have essentially failed across the board over the past few decades
 - With the exception of geographically-limited zero-fare sub-networks within a regular fare-paying network

Other Significant Findings

- There are many other factors that have a much more significant impact on ridership than fare, such as:
 - Service frequency, coverage, availability, convenience, travel time, ease of use...
- These factors can all be referred to as “end-user utility,” and together they are **by far** the most important factor for determining ridership
- A better value for money > saving money

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AUGUST 2011

Report #2 (Saskatoon Transit):

Transit Ridership and
System Improvement

Results

PART III

BEST PRACTICES FOR BUILDING YOUTH RIDERSHIP

Young people are an important demographic for transit agencies to focus on. Those youths who cannot or do not drive are often “left out to dry” without independent transportation or transportation at all, and because of this, they are a prime transit market. Furthermore, recent data has shown that youth today are less attracted to automobiles and prefer public transit (as well as active transportation) more now than in previous years (Neff, 2010). This spells a major opportunity for transit agencies to hook the next generation early on and try to ensure that they become life-long riders.

As an additional thought, certain young people may be dependent on transit, but in many cases, transit is also dependent on youth. A third of Canada’s entire transit ridership are young people, and in small-to-mid sized cities, youth can make up over half of the ridership – as high as 65% in Moose Jaw and Red Deer, for example (CUTA, 2004).

Clearly, there is a significant relationship between young people and transit. Transit agencies are faced with the challenge of attracting youth (who are traditionally very sensitive to branding and marketing) to riding the bus, which – until very recently, as data might suggest – has typically not been seen as very “cool.” If successful, however, such an endeavour can prove to be very rewarding for all parties involved.

-  Longueuil, Quebec
-  Gatineau, Quebec
-  Victoria, British Columbia.....
-  Halifax, Nova Scotia
-  London, Ontario.....
-  Sherbrooke, Quebec
-  Champaign-Urbana, Illinois
-  Durham, North Carolina
-  Gainesville, Florida.....
-  Eugene, Oregon

Response Category	L, QC	G, QC	V, BC	H, NS	L, ON	S, QC	C-U, IL	D, NC	G, FL	E, OR	Total
Partnerships	•	•	•	•	•	•	•	•	•	•	10
Post-secondary		•	•	•	•	•	•		•	•	8
Schools						•		•		•	3
Employers			•			•			•		3
City		•									1
Community		•									1
Other transit systems	•										1
Design/planning/admin	•	•	•		•	•		•			6
Infrastructure	•	•		•						•	4
Reserved/queue-jump lanes	•	•		•						•	4
Signal priority	•	•		•						•	4
Park-and-ride		•		•							2
Smart cards	•	•									2
BRT				•						•	2
Technology		•					•				2
Business strength					•						1
Customer service							•				1
Socioeconomics								•			1
Zero-fare								•			1
Total	6	11	4	7	4	5	4	5	3	7	

Table 2: High ridership response types of all ten cities

Explanations for High Ridership

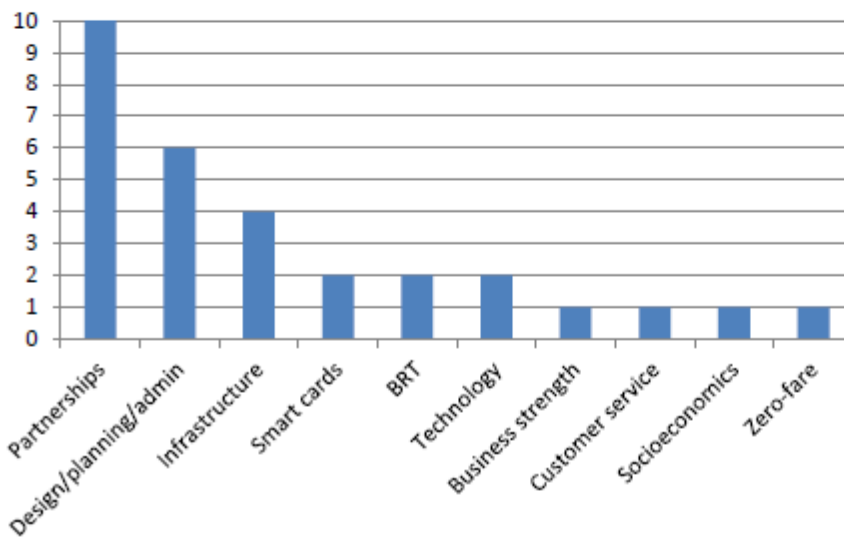


Figure 3: Explanations for high ridership by number of cities with response type

PRIMARY RECOMMENDATIONS

- **Create & Strengthen Aggressive Partnerships**
- **Go Digital & Tech-Savvy**
- **Review & Improve End-User Utility**

SECONDARY RECOMMENDATIONS

- **Universal “Smart” Go-Pass Card**
- **Develop a Ubiquitous Brand**
- **Develop Partnerships with Community Groups/Businesses**
- **More & Better Market Research**

TERTIARY RECOMMENDATIONS

- **Go Technologically Advanced**
- **Consider Signal Priority, Bus Lanes, & Park-and-Ride**

SEAC: bitly.com/TransitReport1
Transit: bitly.com/TransitReport2

 @lt_smith

What can you
improve in your city
with a little research?



Thanks for
listening.