Executive Summary

Introduction

The purpose of this report is to develop an understanding of the role that fare structures, fare collection systems and incentives play in producing and maintaining high ridership levels and successful public transit systems. More specifically, this report seeks to answer the question: "What can Toronto learn from Zurich's fare structures practices?" Zurich, Switzerland has been acknowledged around the world as having one of the most successful public transportation systems, with its success reflected in its high per capita ridership levels. It is for this reason that it was chosen to be a "best practice" example.

Literature Review

Public transportation systems play a vital role in encouraging connectivity throughout a region and in supporting more sustainable means of travel. There are a multiplicity of factors that affect the success of a public transit system including fare structure, service, frequency and convenience. The degree to which these are provided can have a significant impact on ridership levels and the success of a system.

Switzerland is a small land-locked country located in the centre of Western Europe. The city of Zurich, one of the country's economic hubs, is located in the northern part of Switzerland within the canton of Zurich, with a population of less than 500,000. Regardless of its size, the city and greater region have been able to consistently provide residents with one of the best public transit systems in the world. There is consensus among scholars that the success of Zurich's public transit system is largely due to the fact that frequency, coverage, speed, reliability, safety and quality are all provided within a well-coordinated and integrated network. Figure A presents a map of Switzerland and highlights the city of Zurich within the country.

Figure A: Map of Switzerland

Figure B presents a map of the Province of Ontario and locates the city of Toronto within it. Despite the current problems that exist within its transit system, Toronto was once considered a pioneer for its forward-looking approach to public transit. This success has been overshadowed by suburban sprawl and the dependency on the automobile contributing to today's declining ridership levels.

Figure B: Map of Ontario, Canada

The literature suggests that direct changes in fares and pricing can result in an increase in riders as well as contribute to modal shifts. Transportation within the canton of Zurich, for example, saw significant success in its transit system after it implemented a multi-modal fare system that eased transfers and promoted heavily discounted passes. More specifically, a simplified fare structure, coordinated system, technology, pricing incentives, fare collection and fare recovery are all factors that can have a direct impact on the success of a transit system. These features are all directly related to the level of service, frequency and convenience that a system can provide.

Methodology

A comparative case method was used in this report in order to identify areas of comparability and difference between Zurich and Toronto's transit systems. Since Zurich has long been considered a pioneer in successful public transportation systems it was used as a basis of comparison in order to understand how fare systems can be structured in order to help encourage transit use and increase ridership levels. An extensive literature review helped to establish the evaluative framework used throughout this report. Specifically six criteria, as shown in Table 1, were developed in order to assess the current fare structure and incentives present in the Zurich and Toronto's public transit systems. For each criterion, each city was assessed on an individual basis followed by a comparative section in order to highlight the areas of similarity and difference.

Analysis

Table A presents a summary of these findings from the analysis chapter of the report. Please note that a more detailed analysis can be found in Chapter 4.

Table A: Findings from the Case Study Analysis

Criteria	Zurich	Toronto
Fare Pricing		
• Number of Passes available	6	5
• What is the fare structure?	Zonal	Single System
Coordinated Ticketing System		
• Can individuals use one pass on various means of transit?	Yes	Yes
• Can individuals use one pass as they travel outside of the city	Yes	Yes
• Is the city's transit/fares incorporated into the region?	Yes	No
Travel Incentives		
• Are there off-peak travel incentives?	Yes	Some
• Are there:		
o Discount Cards	Yes	No
o Promotional discounts	Yes	Sometimes
Technology		
• Are There:		
o Printable maps/schedules	Yes	Yes
o Trip Planner	Yes	Yes
o Transit information center	Yes	Yes
o Different Languages	Yes (up to 4)	No
• Is there automated traveler transit information:		
o At the stop?	Yes	Sometimes
o On the vehicle?	Yes	Sometimes
Fare Collection and Costs		
• Proof of payment	Self-Service	Boarding or Entrance
• Ticketing Machines	Readily Available	Limited
• Simple Fare Structure		
o Number of fare zones	45	1
Fare Recovery (based on 2009 Figures)		
• Expenditures	**$913,991,544	$1,286,957,165
• Revenues	$522,792,661	$859,511,656
• Ridership Level	567,000,000	471,233,000
• Per Capita Ridership	422	188

** Please note that the ZVV expenditures likely include both operating and capital expenses making a direct comparison with the TTC not possible.

Recommendations

A series of recommendations were developed, to address the ways in which the TTC and transit within the GTA could be enhanced. This strategy focuses on improvements for the first 5 criteria, which if implements, could in turn, help increase the financial success of the overall system.

Fare Pricing

- Introduce more passes to better meet the needs of riders
- Offer annual passes with greater financial incentives
- Coordinate fares with surrounding transit authorities

Coordinated ticketing system

- Extend the validity of the GTA pass to monthly and annually
- Consider moving to a zonal system across the GTA
- Coordinate transit systems across the GTA

Travel Incentives

- Offer off-peak transit passes (or fares) on both the TTC and GO Transit
- Offer promotional discounts that combine transit with a local attraction or event
- Introduce a discount card that applies to transit across the entire region (TTC, Go Transit, Via Rail, Greyhound)

Technology

- Provide transit information in both official languages
- Improve information available at transit stops (route numbers, timetables)
- Introduce real-time information on-board all transit
- Introduce real-time information at all major transit stops and stations

Fare Collection and Costs

- Introduce ticketing machines at all major stations, equipped to sell all types of passes
- Implement self-service boarding at peak hours on bus and streetcar routes in order to minimize boarding times.

Conclusions

In order to see improvement in Toronto's public transit system many small adjustments need to be made in order to make the transit experience more straightforward and financially attractive. While there were many similarities between Zurich and Toronto's transit systems, Zurich consistently outperformed Toronto on all six criterions.

Implementing some or all of the recommendations put forth in this report could help increase the number of people who opt to use transit. This, in turn, will allow the TTC to maintain and improve its fare recovery ratios and help ensure the success of the transit system in the future.