



Re-Attracting Customers Through Fare Policy



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CANADIAN URBAN TRANSIT ASSOCIATION
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executive summary

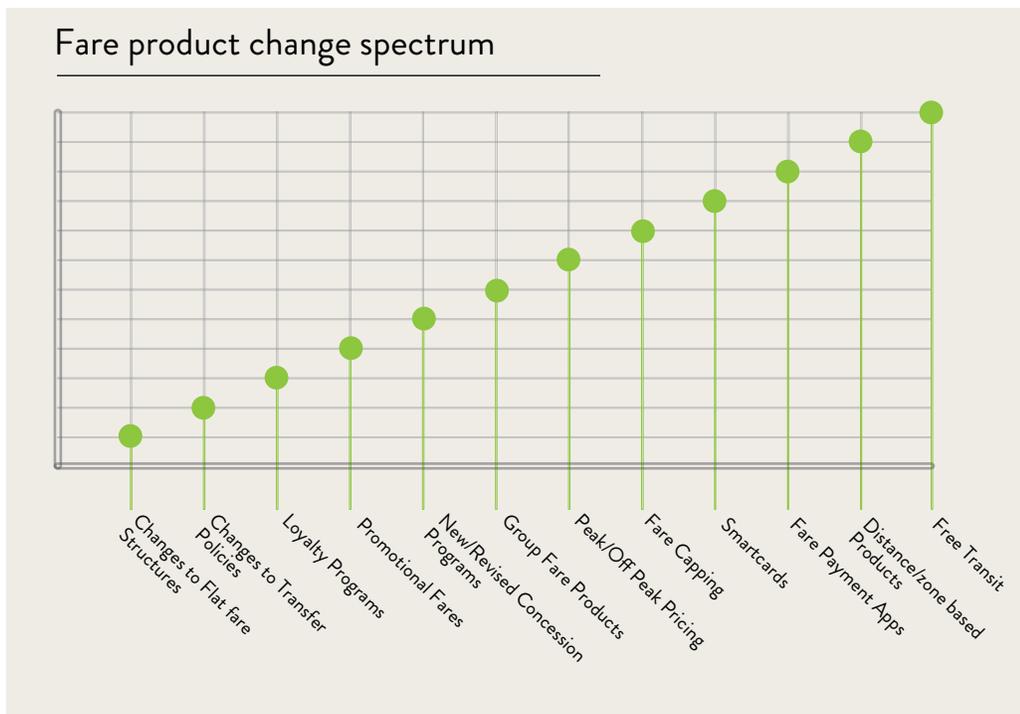
The Covid-19 pandemic led to the largest drop in public transit ridership ever seen in Canada, and the lost farebox revenue put financial pressure on many transit agencies. Collective action by the transit industry resulted in emergency government funding from the federal and provincial governments. With the long-term longevity of this funding remaining uncertain, transit systems must consider new strategies to bring ridership and revenue back to pre-pandemic levels. Failure to do so may force agencies to hike fares or cut service, which would push riders away and risk long-term impairment to transit agencies' finances.

At the same time, the pandemic has led to changes in travel behaviour with continued hybrid work and greater ridership outside typical weekday peak periods. As people reconsider their transportation needs, transit agencies have a critical opportunity to respond to changing needs, attract new riders, and increase their fare revenue.

This document presents a menu of different fare products and options that are available, so that transit agencies looking to change or diversify their fare products can easily explain ideas to others as necessary. A mix of 12 fare products were chosen, with each responding to at least one of the following three challenges:

1. Responding to changes in travel patterns
2. Short-term options to recapture lost riders
3. Long-term reattraction of riders.

Figure 1 below depicts the 12 assessed fare products on a spectrum of change.



Each fare product is evaluated against a set of six criteria to generate a qualitative analysis that allows for a general understanding of each option. Evaluation criteria includes factors such as a fare product's accessibility, its impact on transit agency finances, and its impact on transit ridership. The 12 fare products looked at in this document are:

Changes to Flat Fare Structures: when fares are uniform across the entire transit network

Peak/Off-Peak Pricing: different fare pricing during peak and off-peak times

Changes to Transfer Structures: changing the number of possible transfer options for each fare

Fare Capping: offering free rides once a user crosses a certain threshold of fares purchased

Loyalty Programs: incentivizing riders through points or rewards

Smartcards: a solution that loads and validates fares through a physical card

Promotional Fares: time-limited discounts or offers

Fare Payment Apps: a solution that loads and validates fares through a mobile application

New/Revised Concession Programs: targeted discounts or offers for specific groups of people

Distance/Zone Based Products: charging higher fares to riders who take longer trips

Group Fare Products: discounts for people traveling in a group

Free Transit: elimination of transit fares; fully funding transit through public subsidies



introduction

Many transit agencies are currently making or considering making changes to their fare policies in order to respond to changes in ridership and revenue since the start of the Covid-19 pandemic. Transit agencies in Canada typically receive funding from two primary sources: fares and municipal subsidies. However, the arrival of Covid-19 gutted ridership and fare revenue on public transit systems across Canada. Since the easing of public health restrictions, transit systems are now looking at new options in order to try to bring both ridership and revenue back to pre-pandemic levels.

Prior to the pandemic, about 51% of Canadian transit agencies' operating costs were covered by fare revenue, as opposed to about 39% in the U.S. While Canada's higher figure means that Canadian transit agencies can use fares to recover a larger amount of their costs, it also means that drops in ridership have a larger impact on the finances of transit agencies in Canada compared to the U.S. In Canada, ridership plunged 85% at the height of the pandemic, which represents the most serious drop in ridership that transit systems here have ever seen and therefore also a serious drop in fare revenue^[1].

Through the collective action and advocacy of the transit industry, federal and provincial governments delivered \$4.6 billion in unprecedented financial support for operating costs through the Safe Restart Agreement and 2022 supplement. This emergency funding has allowed transit agencies to restore service to near pre-pandemic levels and recall employees who were laid off.

However, longevity of operating funding support is unknown. At the same time, ridership has not yet recovered to pre-pandemic levels. Statistics Canada data shows that, nationwide, as of September 2022 transit ridership has recovered to 73% of pre-pandemic levels as measured in August 2019 (note that this percentage is a nationwide figure and does not show regional variations)^[2]. Given that ridership has not fully recovered to pre-pandemic levels, but government subsidies are winding down, transit agencies face the risk of revenue shortfalls resuming once more, which would result in the untenable situation of needing to raise fares, reduce service, or both.

Not only did the pandemic impact transit agencies financially, but it has also changed travel behaviours – for instance, many people now work remotely and do not need to commute to a fixed workplace every day. As a result of these changes, riders are reconsidering how to meet their transportation needs, thus making this a critical moment to encourage people to choose transit. Simply continuing with pre-pandemic fare structures runs the risk of not properly adapting to changes in travel behaviour, and thus missing opportunities to strengthen ridership. Now that transit systems are starting to recover, implementing new fare strategies is a critical way for transit agencies to respond to changes in travel patterns, reattract riders, and increase revenue



Existing fare products and policies remain to be aligned with pre-pandemic ridership patterns and fare structures, namely the monthly pass which is typically highly utilized by commuters. Between 2019 and 2021, customers paying the unit fare (e.g. pre-purchased tickets) went from 48% to 52%. The proportional utilization of monthly passes and concession fares is similar between 2019 and 2021. Travel patterns and transit system utilization has changed, as highlighted with the following trends:

- **The number of people usually taking public transit to work fell from 2 million in 2016 to 1 million in May 2021, declining for the first time since the census began collecting commuting data in 1996. In May 2022, the number of public transit commuters slightly increased to 1.2 million.**
- **In 2021, 11.9% of youths aged 15 to 24 commuted by public transit, compared with 7.0% of those aged 25 and older**
- **There was a shift in who used public transit from 2016 to 2021, with the share of immigrants and non-permanent resident commuters using public transit rising from 44.0% to 55.9%.**
- **As of December 2022, the Toronto Transit Commission (TTC) has reported a reduction of professional and general office commutes from 38% of pre-covid total boardings to 30% currently, a loss of 550,000 weekday daily boardings.**
- **In Metro Vancouver, ridership recovery is the strongest in suburban areas such as the South of Fraser and is lagging in areas with centralized business districts such as Downtown Vancouver.**

Although transit ridership and farebox revenue continues to recover from the pandemic, transit agencies still face the risk of having to resort to fare increases and service reductions in order to balance their operating budgets. If that happens, transit agencies risk pushing away riders just as transit systems are recovering from Covid-19. This will then further impede efforts to increase farebox revenue, which then encourages further fare hikes or service cuts. This cycle will lead to long-term damage to transit agencies' finances and significantly prolong the amount of time that it will take transit systems to recover from Covid-19 [1].

This document will present many different fare product options and strategies that are available, as well as provide examples of situations where these fare options have been put in place (either temporarily or permanently). By using these examples, transit systems will be able to reconsider their current fare options and potentially implement new options in order to better serve their riders. Transit agencies can consider their own specific needs and context, then consult the fare strategies presented here as a menu of potential options which can all be tailored to suit specific plans and budgets. Consolidating this type of information all in one place is meant to make it easy to read and understand, so that transit systems that are looking to diversify their fare products can easily explain these ideas to others if necessary.





methodology

First, baseline research was conducted in order to understand the revenue problems facing transit agencies as a result of Covid-19 drops in ridership. Then, a variety of fare products and strategies for ridership and revenue recovery were considered, with 12 selected for further evaluation. At the same time, a set of six evaluation criteria were also created in order to conduct a qualitative, macro level assessment that covered all aspects of the fare options. Each fare option was evaluated as “Meets Objectives,” “Partially Meets Objectives,” or “Does Not Meet Objectives” against each of the six evaluation categories, and an explanation is provided for each score.

The analysis that was done on each of the fare options was purely qualitative and not quantitative. This report also does not cover agency specific assessments or recommendations. This approach was selected with the understanding that these analysis frameworks could be interpreted differently for different systems, and they may not all work as described for specific transit systems. In other words, this was done purposefully so that fare products could be understood in the most general sense, and it is up to specific transit systems on how to best implement the fare options that they are looking at.



selection process

The 12 fare products analyzed in this report were chosen with three key concerns in mind: responding to changes in travel patterns, short-term recommendations to recapture lost riders, and long term reattraction of riders. Each of the fare products analyzed in this report address at least one of these three goals, in addition to other considerations.

Furthermore, the fare products were also selected to produce a range of options from least change to most change. Changes to flat fare structures or transfer structures represent small changes that could be implemented relatively easily. At the opposite end of the spectrum, distance/zone-based fare products or even free transit would entail significant changes.





evaluation criteria

Each of the fare product options were evaluated against this set of six criteria:

1. AFFORDABILITY AND EQUITY

Is the product financially attractive?

Fare products should be priced so that passengers, upon assessing the value of paying to take transit, decide that the fare product provides good value for money. In particular, fare products should be financially attractive when compared to alternative modes of transport.

Is the pricing structure equitable?

If a fare product is not financially accessible to certain groups of people, it imposes a cost barrier to accessing public transit. Price structures should accommodate users of different socioeconomic circumstances by ensuring that those with limited ability to pay have discounted or alternative options.

2. SIMPLICITY AND ACCESSIBILITY

Can the agency appropriately market and implement this fare product?

The fare product must be simple, clear, and easy to understand. If customers are confused by a fare product (especially how it works and how much it costs), it creates a barrier that discourages them from buying the fare product.

Can the agency make the fare product distinguishable?

While the fare product should be as simple as possible, it must also be unique and easily distinguished from other fare products. Customers should be able to quickly identify the key features and differences between this option and other fare products, so that they can avoid confusion and easily decide which best suits their needs.

Is the fare product easy to purchase and use?

The process of purchasing fare products should be simple and convenient, with as few steps as possible. Likewise, the validation of said fare product should be streamlined or accessible for everyday users before and during use of the transit system.

3. FINANCIAL SUSTAINABILITY

Will the fare product contribute revenue to transit operations?

Fare products should contribute revenue to transit operations. At the very minimum, revenue from fare products should offset the costs of administering the fare system and contribute to the overall operating revenue of the transit system.

What is the reliability and resilience of the fare product's revenue?

If revenue from a fare product is highly predictable, then transit agencies can rely on this knowledge to confidently perform planning and budgeting. If the revenue from a fare product is resilient against changing economic conditions, this also contributes to a high degree of financial certainty for transit agencies.

4. MAXIMIZING BENEFITS

Are the fare product's value and financial benefits equitably shared?

Fare products should not create an excess benefit for a specific group of customers while penalizing another group of customers. Rather, riders should feel that the fare product's value and financial benefits are distributed in a fair and reasonable manner.

How will the fare product be integrated with existing fare products and payment systems?

New fare products should be easy to integrate into existing fare payment systems/technologies. For instance, fare collectors should be able to easily sell or validate any new products alongside existing options. New fare products should also be well-integrated with other fare options, so that they deliver intended benefits without inadvertently harming other sources of revenue.

Does the fare product provide any additional benefits to riders, to the transit system, or to the community?

These secondary benefits can include improvements to other municipal services, additional progress on other policy goals (such as reducing greenhouse gas emissions), benefits to the local community, partnership and/or benefits to other stakeholders, etc.

Does the fare product integrate or align with neighbouring transit systems' fare products at all?

There is always a group of the population that travels between multiple transit systems on a regular basis. If the fare policy can integrate well with both systems, or is at least easily understood by users of neighbouring systems, it makes cross-municipality travel that much easier.

5. TRANSPARENCY AND FAIRNESS

Can the public understand how the fare product is priced?

The public should understand how the fare product is priced, including the rationale behind fare price increases. A transparent process can help make pricing and price increases seem fair. This can be accomplished with a clear policy or structure for pricing and price increases.

6. STRENGTHENS RIDERSHIP

Will the fare product attract new riders?

New or redesigned fare products have the potential to attract new riders who usually do not take transit at all, which can boost ridership in the long run.

Will the fare product lead to a low, medium, or high increase in the frequency of trips among existing riders?

In addition to attracting new riders, ridership can also be strengthened by increasing the number of trips that existing riders take. For instance, a fare product that encourages someone who takes about one trip every week to instead take multiple trips each week will have increased ridership.



summary of evaluation



Meets Objectives

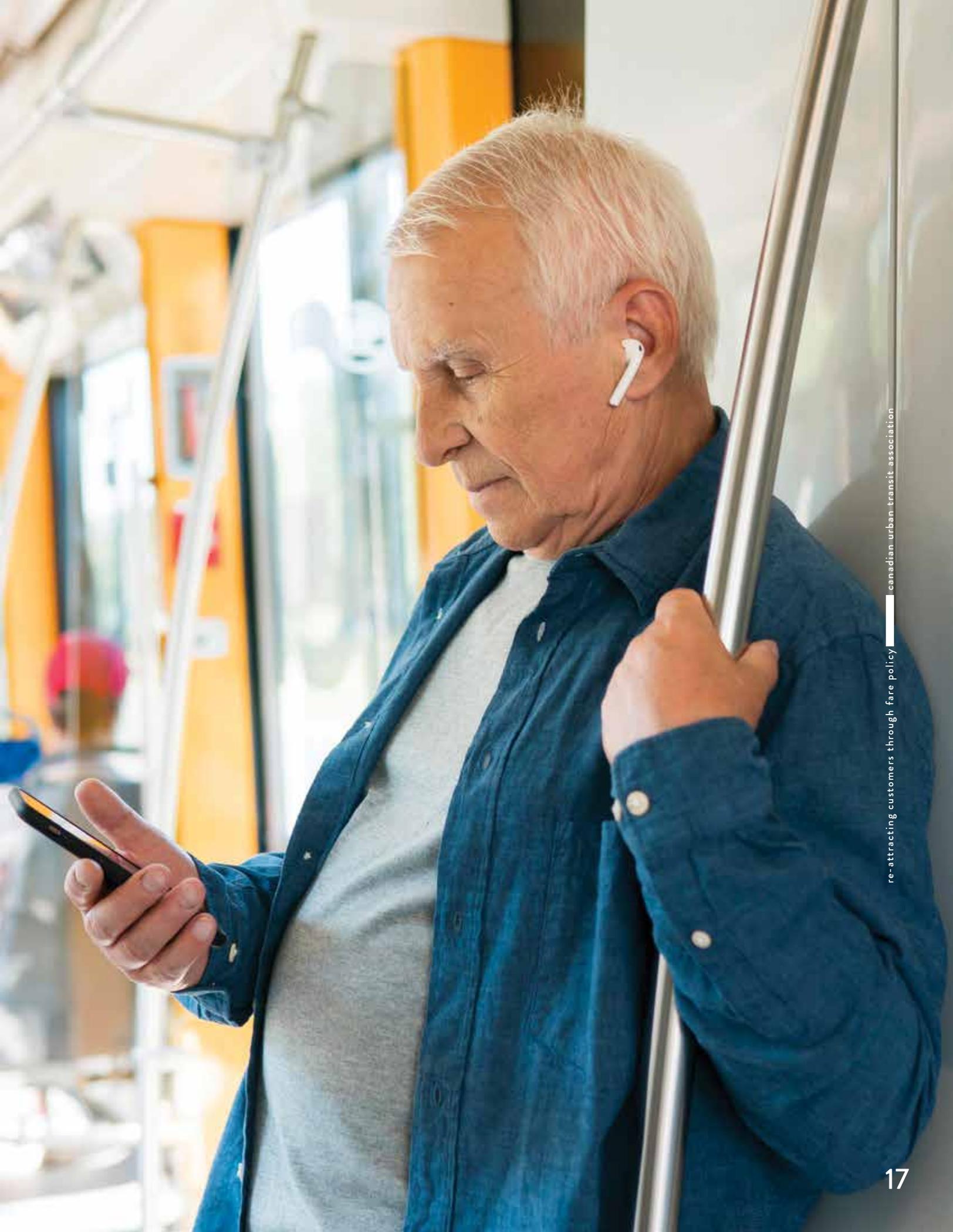


Partially Meets Objectives



Does Not Meet Objectives

	Affordability and Equity	Simplicity and Accessibility	Financial Sustainability	Maximizing Benefits	Transparency and Fairness	Strengthens Ridership
Changes to Flat Fare Structures	—	✓	—	—	—	✗
Changes to Transfer Policies	✓	—	—	✓	✓	✓
Loyalty Programs	✓	—	✓	✓	—	—
Promotional Fares	✓	✓	—	✓	—	✓
New/Revised Concession Programs	✓	—	✓	✓	✓	✓
Group Fare Products	✓	—	✓	✓	✓	✓
Peak/Off-Peak Pricing	✗	✓	✓	✓	✓	—
Fare Capping	✓	✓	—	—	✓	✓
Smartcards	✓	—	—	✓	✓	✓
Fare Payment App	—	—	—	✓	✓	✓
Distance/Zone Based Products	—	✓	✓	✓	—	✗
Free Transit	✓	✓	✗	—	—	✓





evaluation by product

Changes to Flat Fare Structures

A flat fare structure is when fares are uniform across the entire transit network. Riders pay the same fare for any trip on the system. Generally, this is done to simplify fare payment for users, and a by-product is that it also simplifies the calculation of fare revenue and ridership.

Why did we look at this fare strategy/tool?

- Flat fare structures are used by most transit agencies in Canada
- Flat fare structures are easily understood by customers and simple to operationalize

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

SEVERAL

Most transit agencies utilize a flat fare structure.

High Level Considerations

Advantages of this fare strategy/tool

- Already utilized by most transit agencies
- Change management practices already exist for changes for agencies with a flat fare structure (e.g., customer and operator communications)

Disadvantages of this fare strategy/tool

- Rigidity in what can be changed (e.g., flat fare could increase or decrease)

Risks in the utilization of this fare strategy/tool

- Customers who pay a flat fare are typically choice/occasional riders. Changes to flat fare structures will not likely incentive additional trips for customers who purchase bulk fares (e.g., tickets) or monthly passes.

Implementation considerations of this fare strategy/tool

- Impact to operating budget
- Change management (communications/marketing for fare changes)

For Transit Operations

- Minimal impact: changes to flat fare structures are common

For Customers

- Awareness of changes to the flat fare structure

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Partially Meets Objectives

Long distance commuters benefit more than short distance commuters because they each pay the same fare regardless of how much they travel. This presents an equity issue, because those who use transit less end up subsidizing the service for those who use it more. However, flat fares can still make transit financially attractive, especially compared to alternative modes of transport.

Simplicity and Accessibility – Meets Objectives

Flat fares are often implemented for simplicity since a flat fare is a unitary fare, meaning that everybody pays the same price. This structure also helps make fares easy to understand, purchase, and use.

Financial Sustainability – Partially Meets Objectives

Flat fares contribute revenue to transit operations and their simplicity makes fare revenue easy to track, predict and collect. However, a flat fare system also precludes opportunities to implement other strategies, such as charging more for customers who take longer trips or drawing in new riders with concession or promotional fares.

Maximizing Benefits – Partially Meets Objectives

Since flat fares preclude a wider variety of fare product options, flat fares inherently limit the value and potential financial benefits that both riders and transit systems could obtain. On the other hand, the simplicity of a flat fare makes changes for implementation relatively straightforward.

Transparency and Fairness – Partially Meets Objectives

The simplicity of a flat fare structure makes it easy to understand. However, the inequity of flat fares – having all riders pay the same fare, regardless of how much transit they use – is also easily apparent. Some passengers may not understand why there are not more diverse fare products.

Strengthens Ridership – Does Not Meet Objectives

The potential impact of any fare strategy based on flat fares will be limited given the absence of fare products to attract those who do not already use transit. Furthermore, flat fares do not encourage greater ridership among existing riders – in fact, they may even discourage it, since riders enjoy no cost benefits to taking additional trips.





Changes to Transfer Policies

Changes to transfer policies can involve changing the time duration that a fare is valid for, the number of transfers that a customer can make, or when and where they can transfer. Transfers can be between transit modes (e.g., bus to commuter rail) or between transit networks (e.g., TTC to York Region in the Greater Toronto Area).

Why did we look at this fare strategy/tool?

- All transit agencies have a transfer policy for passengers who need to connect from one service to another to complete a trip
- Transfer policies are in the purview of transit agencies and can be easily adjusted and changed

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

GTHA

In 2022, Metrolinx began offering free transfers between GO Transit and participating transit agencies in and around the Greater Toronto Area (though the program does not include the TTC, the region's largest individual transit agency). Riders using PRESTO cards to transfer between GO Transit and a local transit service such as York Region Transit will only have to pay for the GO fare. Provincial officials expressed that this is intended to reduce transportation costs for transit users, though the cost to Metrolinx will depend on the degree to which ridership rebounds from pandemic levels^[3].

TORONTO, ON

Starting August 2018, the TTC introduced a new transfer policy where customers enjoy unlimited transit usage and transfers within two hours of initially tapping onto the system with their PRESTO card. Prior to this, the TTC only allowed transfers between vehicles on different lines. This meant that anyone hopping on and off, or changing directions on the same line, would need to pay again. According to the TTC, the new policy will help make transit more flexible and affordable, especially for people who may want to run multiple errands (e.g., shopping, picking up or dropping off children, etc.) within the two-hour timeframe^[4].

BELLEVILLE, ON

In September 2021, the City of Belleville, Ontario changed their transfer policy to allow one transfer within 90 minutes anywhere in the city. Transfers were previously only allowed at four specific bus stops, but this policy resulted in customer complaints, especially as service expanded beyond the city centre. After reviewing the fare policy, transit staff determined that restricting transfers to only four specific stops was not industry standard and recommended a strictly time-based transfer policy instead. This recommendation was subsequently approved for implementation^{[5][6][7]}.

High Level Considerations

Advantages of this fare strategy/tool

- Transfer policies are typically easily understood by both operators and customers
- Transfer policies are in the realm of control for a transit agency where changes can be approved by either at a staff or City Council/Transit Board level

Disadvantages of this fare strategy/tool

- Increasing the ability of customers to transfer between trips or extending the length of time for the transfer window (e.g., 90 minutes to 120 minutes) does increase customer convenience but does have the risk of foregoing fare revenue

Risks in the utilization of this fare strategy/tool

- Likelihood of lost fare revenue

Implementation considerations of this fare strategy/tool

For Transit Operations:

- Change management communications required for transit operators informing them of changes to the transfer policy
- Potential changes to fare collection technology to accommodate changes in the transfer policy
- Requirement of printing new transfer stock and updating customer and operational notices throughout the transit system

For Customers:

- Communications strategies informing customers of the updated transfer policy

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Improving transfer structures will make transit more financially attractive, since it increases the number of possible trips that a rider can make on a single fare. Furthermore, this benefits users who make longer trips, and in particular users whose destinations are not traditional job centres (i.e., youth, seniors, certain workers, etc.).

Simplicity and Accessibility – Partially Meets Objectives

The main challenge is making it clear to riders what transfers are or are not allowed. While complicated transfer rules can create confusion, clear and straightforward rules can make transfers simple and convenient for passengers.

Financial Sustainability – Partially Meets Objectives

By increasing the possible trips that a rider can make on a single fare, many riders will no longer have to purchase multiple fares for their trip, which ultimately decreases revenue. However, given that fares will cost the same regardless of whether riders make the transfers that they are eligible for, fare revenue will be more predictable.

Maximizing Benefits – Meets Objectives

When transfers between different transit lines, modes, and/or systems are made easier, this increases ridership and improves riders' mobility. This may be particularly beneficial for transfers between different modes or systems. Additionally, there are no significant barriers to integrating transfers with other fare products.

Transparency and Fairness – Meets Objectives

Given that users are receiving greater value for the fare that they are paying, this fare product should be easy to understand and unlikely to generate opposition.

Strengthens Ridership – Meets Objectives

By unlocking a greater number of possible trips on a single fare, implementing or changing transfer structures can attract new riders who previously were dissuaded by the prospect of having to pay multiple fares for the trips that they want to take. Similarly, a greater number of possible trips will also lead to increased ridership among existing riders.

Loyalty Programs

Loyalty programs incentivize transit riders to modify their travel behaviour in exchange for points or rewards. Examples of changes to travel behaviour may include greater use of transit, use of transit at specific times or locations, or bringing additional riders onto the transit system.

Why did we look at this fare strategy/ tool?

- Loyalty programs are commonly used in other sectors for customer attraction and retention (e.g., rewards, points, partnerships)
- Some transit agencies have implemented loyalty programs tied to local partnerships and/or behaviour changes to attract transit ridership

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

EDMONTON, AB

In June 2022, the Edmonton Transit Service launched its “Rediscover ETS” program, which offers discounts, prizes, and more in collaboration with partners. For instance, people can use a valid ETS fare product to obtain a discount at participating partners, such as admission to several local museums. Municipal officials have expressed that the program is intended to bring greater value to taking transit, incentivize transit usage, and improve the public image of Edmonton’s transit service ^[8]^[9].

MONTREAL, QC

In 2013, La Société de Transport de Montréal (STM) launched a pilot project that rewarded transit users with shopping and entertainment offers based on how much they used public transit. Over the three years that the pilot ran, between 20% and 25% of participants increased their transit usage, and STM estimates that new ridership from the program netted them an additional \$100 million in revenue. That is in addition to \$6 million in advertising revenue from participating merchants, who were eager for the program to expand. However, the program was discontinued after a change in leadership within STM ^[10].

SAN FRANCISCO, CA

In 2019, the Bay Area Rapid Transit (BART) in California completed a pilot project that offered points to transit riders who changed their travel behaviour, with points being redeemable for gift cards. The incentives mainly aimed to decrease or increase ridership during peak and off-peak hours, respectively. The results found that incentive programs can create meaningful behaviour changes, and pilot participants increased travel during incentivized periods by up to 20% ^[11].

High Level Considerations

Advantages of this fare strategy/tool

- The principles and functions of loyalty programs are commonly understood by the general public
- Loyalty program can be developed to be bespoke in design and outcomes (e.g., targeting specific ridership segments, cultivating new partnerships)

Disadvantages of this fare strategy/tool

- Could be resource intensive during the initial program design and deployment
- Contingent on third party partners to participate, provide resources and incentives

Risks in the utilization of this fare strategy/tool

- Loyalty program is only as useful as the partners and incentives offered
- Upfront operational costs in the development and implementation of the loyalty program

Implementation considerations of this fare strategy/tool

For Transit Operations

- Collection of customer insights on target markets to inform loyalty program design
- Marketing and promotion to solicit customer participants
- Development of partnership framework between the transit agency and third-party program partners
- Development of an evaluation framework to assess the effectiveness of the loyalty program

For Customers

- Process/portal for customers to opt in and participate in the loyalty program

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Typically, loyalty programs are optional, which means they can deliver benefits to interested riders without negatively impacting other users. Transit agencies may even find that loyalty programs can help them accommodate users of different socioeconomic circumstances, since people can use loyalty programs to help them get more value out of transit. Finally, loyalty programs are very affordable, since they are typically free to join.

Simplicity and Accessibility – Partially Meets Objectives

Currently, people are already faced with numerous loyalty programs from various businesses. Loyalty programs must be simple to sign up for, easy to use, and as rewarding as possible, or else they risk being overlooked. These requirements often make implementation complex.

Financial Sustainability – Meets Objectives

A loyalty program can encourage greater use of transit and thus greater revenue for transit operations post program implementation. Additionally, data from a loyalty program could help with long-term planning and budgeting depending on the information collected when a transit customer registers in the loyalty program.

Maximizing Benefits – Meets Objectives

Loyalty programs can be an excellent opportunity to work with local businesses and other community partners. They can also be leveraged to introduce riders to other fare products (for example, other products can be used as rewards).

Transparency and Fairness – Partially Meets Objectives

A loyalty program will usually be much more complex than a conventional fare product, and as such may pose a barrier to allowing the public to understand how it works. This can be countered with intentional efforts to make a loyalty program simple and easy to understand.

Strengthens Ridership – Partially Meets Objectives

Loyalty programs are, by definition, specifically geared towards increasing ridership among existing riders. Since loyalty programs are primarily geared towards increasing ridership among existing riders rather than attracting new ones, their ability to attract new riders may be limited.

Promotional Fares

Promotional fares are special discounts or offers that are specific to a particular period of time and/or location, and which are intended to raise awareness or create a temporary injection of fare revenue. They can be one-time programs, or they can reoccur on a regular basis.

Why did we look at this fare strategy/ tool?

- Promotional fares have been utilized to re-attract riders back to public transit during the pandemic

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

METROLINX, ON

In 2021, Metrolinx launched weekend passes — \$10 for a day, or \$15 for the whole weekend — for unlimited travel across southern Ontario. The promotion was specifically designed to encourage leisure travel, and it came just as Ontario began lifting pandemic restrictions that had limited most transit usage to essential travel only ^[12].

CALGARY, AB

In 2022, Calgary launched discounted monthly passes for August and September. The promotion offered a 50% discount for adult monthly passes and a 30% discount for youth passes. As part of the announcement, the City of Calgary highlighted a wide variety of activities and events throughout the city that were accessible by transit ^[13].

WHISTLER, B.C.

In June 2022, Whistler city council approved a staff recommendation for a Return to Transit Loyalty Program composed of a limited period of free transit, followed by time-limited discounts on transit passes. Monthly passes were discounted at 30% off, half-year passes discounted at 40% off, and yearly passes at 50% off, thereby encouraging riders to buy longer passes. These promotional fares were largely in response to a prolonged labour disruption that suspended transit service in the city. The staff report noted that the municipality's net savings during the job action should be able to cover the cost of the promotional program, with a longer free transit period possible if there is additional funding from other sources ^[14].

High Level Considerations

Advantages of this fare strategy/tool

- Can be time limited and targeted to re-attract and obtain riders
- Easy to communicate (e.g., the use of promotional pricing is very common in other sectors)

Disadvantages of this fare strategy/tool

- Potential lost revenue from existing customers during time the promotional fare period

Risks in the utilization of this fare strategy/tool

- May create the expectation that other promotional fare programs could be implemented in the future

- Could create a short-term surge of passenger demand leading to issues of crowding and service issues for regular users

Implementation considerations of this fare strategy/tool

For Transit Operations

- Clearly define market segments you are looking to attract on to transit
- Internal operator and customer service orientation on the promotional fare product and associated conditions
- Third party communications for external fare vendors

For Customers

- Information at the points of sale about the promotional fare program (e.g., time period, conditions)

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Promotions can help make transit financially attractive compared to alternative modes of transport. Additionally, targeted or limited time discounts will provide some financial relief to those who may struggle to afford transit.

Simplicity and Accessibility – Meets Objectives

Promotional fares provide a marketing opportunity for transit agencies to not only advertise special fares, but the transit system as a whole. However, agencies must remember to make the purchase and validation of promotional fares at least as easy as purchasing and validating regular fares.

Financial Sustainability – Partially Meets Objectives

Discounts can increase revenue if there is an increase in purchasing volume, but they can also decrease revenue since riders are paying less than they normally would. Temporary promotions can have long-term benefits for ridership and revenue, but they may also generate unpredictability, especially in the short-term.

Maximizing Benefits – Meets Objectives

Promotional fares can be an effective way to generate long-term interest in existing fare options. Additionally, promotions that are done in collaboration with local businesses or other partners can provide additional benefits to the community.

Transparency and Fairness – Partially Meets Objectives

Promotional fares, by definition, need to be promoted to potential customers in order to maximize their impact. While marketing can raise awareness of this new product and improve transparency, it can also risk disrupting regular transit users by inundating regular service with a surge of passengers.

Strengthens Ridership – Meets Objectives

Promotional fares can attract new riders to the system, and many of those riders may even stay after the promotion ends. Among existing riders, promotional fares can increase ridership during the promotional period.





New/Revised Concession Programs

Concession programs are targeted discounts or benefits for specific groups of people. Many transit agencies offer concession programs, with some of the most common being different prices for seniors, students, children, and/or low-income individuals, but there can be other options as well.

Why did we look at this fare strategy/ tool?

- Most transit agencies have concession programs tailored to a variety of needs (e.g., financial, program specific)

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

CALGARY, AB

Calgary Transit offers a variety of concession fares, including discounts for youth ages 6 to 17, a low-income monthly pass, and a senior yearly pass. In 2012, adults paying full fares accounted for 59% of ridership and 79% of revenue, while youth accounted for 19% of ridership and 13% of revenue; all remaining groups accounted for 22% of ridership and 8% of revenue. As of 2022, the basic structure of Calgary Transit's concession programs remains the same, though prices have increased. Notably, Calgary uses a sliding scale to determine a low-income individual's fare: their Low-Income Monthly Pass is offered at different price points depending on the income of the purchaser^{[15][16]}.

HAMILTON, ON

The Hamilton Street Railway (HSR) has concession agreements with local post-secondary institutions to provide transit passes for students. For instance, as of 2022, all McMaster University students each pay about \$230 per year for a mandatory transit pass. This is heavily discounted from the regular price of \$110 per month (or \$1,320 per year). In this arrangement, some students will not use transit, so they end up subsidizing those who do. Fares are reduced because the HSR receives guaranteed revenue from full-time students, and students vote every three years whether or not to renew the agreement^[17].

High Level Considerations

Advantages of this fare strategy/tool

- Concession programs are commonly used by transit agencies and can be direct as specific ridership groups (e.g., youth, students, seniors, low-income)
- Agencies with concession programs already have administrative procedures and systems to operate each specific program

Disadvantages of this fare strategy/tool

- Concession programs provide a fare discount to a specific ridership group. The discount results in less fare revenue which would need to be recouped through increased subsidy from either the municipal tax base, external government funding or increases in other fare categories.

Risks in the utilization of this fare strategy/tool

- Loss of fare revenue
- Desire of other ridership groups requesting bespoke concession fare programs tailored to their own circumstances

Implementation considerations of this fare strategy/tool

For Transit Operations

- Projection of revenue loss from the implementation of a new or revised concession fare program
- Marketing and promotion of the new/revised concession program targeted to the specific ridership groups
- Changes to the administrative process (e.g., eligibility criteria, documentation)
- Development of an evaluation process to understand the effectiveness of the new/revised concession program

For Customers

- Marketing and promotion to build awareness of the new/revised concession program
- Submission of new or updated administration documentation to participate in the new/revised concession program

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Targeted concession programs can ensure affordable access to transit and a wide range of desired equity outcomes, while still ensuring that those with the ability to pay in full continue to do so.

Simplicity and Accessibility – Partially Meets Objectives

Concession systems can be very complicated to implement, purchase, and use, since they require extra verification systems for riders to determine their eligibility. However, given that they target specific demographic or socioeconomic groups, concession fares can be made simple to understand and easy to distinguish from other fare products.

Financial Sustainability – Meets Objectives

While concession groups do not contribute as much fare revenue as full fare passengers, any concession program can be designed so that its revenue exceeds the cost of administering the concession program. Furthermore, since concession fares target people that depend heavily on transit and may need help accessing it, concession fares tend to be a reliable source of revenue. There could be potential opportunities to seek external funding from relevant partners to offset lost revenue.

Maximizing Benefits – Meets Objectives

Concession programs can be designed to deliver equity at specific, targeted groups. They can be implemented alongside existing fare options. They also provide additional benefits to the community, given that they allow a wider range of groups to access public transit.

Transparency and Fairness – Meets Objectives

Focusing on equity goals can help the public understand how concession fares are priced. If relevant, choosing concession categories that are commonly used outside of transit contexts as well (e.g., students, seniors, people with disabilities, etc.) can help with public understanding.

Strengthens Ridership – Meets Objectives

Concession programs will attract new riders from groups that face financial barriers purchasing transit fares at full price. Among existing riders, lower fares for specific concession groups can encourage eligible riders increase the frequency of their trips.

Group Fare Products

Discounted fares for groups are a way to incentivize transit usage and discourage car travel, particularly for people who would otherwise choose to take an alternative mode (e.g., carpool, taxi, or rideshare). They work on the premise that people will choose car travel if they perceive that traveling with their family or group by car is cheaper and/or more convenient than taking transit.

Why did we look at this fare strategy/ tool?

- Some transit agencies have utilized group fares to encourage off peak ridership
 - The lack of group fares for specific trip purposes (e.g., travel to/from a major event) has been a common complaint from riders
-

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

REGINA, SK

Regina Transit offers weekends-only family passes for either two adults plus three children or one adult plus four children. These are valid for unlimited trips within one day and cost \$10. For comparison, one adult fare is \$3.25 and one child fare is \$2.75 ^[18].

ORILLIA, ON

Orillia Transit offers a family program and group passes. For the family program, up to two primary-aged children can ride free with an adult. Separately, large groups of children plus three to five adults can purchase a monthly group pass, which range in price from \$21.50 to \$35. For comparison, a monthly pass for an individual is \$63.60 ^[19].

High Level Considerations

Advantages of this fare strategy/tool

- Potential to attract off-peak riders and provide a cost-effective alternative than other modes (e.g., Uber/taxi/parking)

Disadvantages of this fare strategy/tool

- Potential lost revenue
- Complexity in determining the appropriate size of the “group” and pricing

Risks in the utilization of this fare strategy/tool

- Fare enforcement could be challenging when checking fares and determining who is in the group and who is not
- Agencies with fare collection infrastructure (e.g., fare gates) may need to reprogram technology to accommodate a group fare or staff stations at particular times and locations when a group fare is in effect

Implementation considerations of this fare strategy/tool

For Transit Operations

- Defining the size/age of the group
- Defining the time period of the group fare
- Determining what fare collection infrastructure changes are required (e.g. fare gates – if applicable)
- Operator orientation on the new fare media and conditions
- Orientation and information for third party fare vendors

For Customers

- Information and promotional materials to build awareness of the new fare product

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Group fare products make transit a financially attractive option to groups such as families. They also make transit fares more equitable for these targeted customers by making group travel more affordable. However, affordability can depend on how a group is defined, since there can be a diverse range of different types of social groups (such as nuclear families versus multigenerational families).

Simplicity and Accessibility – Partially Meets Objectives

A single fare for multiple people may be difficult to validate, especially for transit systems that use fare gates. However, this product can be appropriately marketed and made distinguishable if it targets people for whom alternative fare products are not simple or accessible.

Financial Sustainability – Partially Meets Objectives

Group fare products have the potential to decrease revenue because people who previously paid separate fares can now pay a single, discounted fare. However, since group fare products make transit more affordable and financially attractive for certain groups of people, they have potential to contribute towards more reliable and resilient revenue.

Maximizing Benefits – Meets Objectives

By targeting a niche category of riders who are not well-served by other fare products, group fares can ensure more equitable distribution of benefits. Furthermore, the increased mobility for this category of riders can bring additional benefits, such as easier recreational travel for families.

Transparency and Fairness – Meets Objectives

Discounts for people traveling in groups are relatively easy to justify, since group fare products are comparable to buying in bulk.

Strengthens Ridership – Meets Objectives

Group fare products will attract new riders who otherwise would have chosen to carpool or rideshare. They also have the potential to increase trips among existing riders — especially those who previously limited their transit usage due to the high cost of paying separate fares for each traveler in the group.

Peak/Off-Peak Pricing

Different fare pricing for peak and off-peak times can be used to incentivize travel outside of traditional peak times. Typically, higher fares during specific times will encourage riders to travel outside of those times if possible. By spreading out ridership over a longer time span, transit systems can decrease overcrowding and congestion during specific times, such as rush hour. This can be implemented through either raising fares during peak times or reducing fares during non-peak times.

Why did we look at this fare strategy/ tool?

- Some Canadian and US transit agencies already use a form of peak and off-peak pricing
 - This fare strategy has the opportunity shape travel behaviour by financially incentivizing customers to ride transit during specific time periods (e.g., off peak time periods when there is ample system capacity to accommodate riders)
-

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

VANCOUVER, B.C.

Currently, Vancouver discounts evening and weekend fares by eliminating zone surcharges during those times. This encourages travel during off-peak hours, though at the expense of decreased revenue. In 2018, TransLink recommended further study on expanding the use of off-peak discounts so that they can be more specifically targeted towards key times or select geographic areas ^[20].

WASHINGTON, D.C.

WMATA, Washington, D.C.'s transit agency, charges peak rail fares of up to US\$6 and non-peak rail fares of up to US\$3.85, depending on the distance traveled. Currently, WMATA does not expect peak period ridership to quickly recover to pre-pandemic levels, given the growth of remote work and hybrid work schedules. As a result, WMATA is exploring new fare structures to make up for the revenue loss and boost ridership. One new initiative starting July 2022 is discount fares after 9:30pm, which is expected to support the night-time economy, reduce congestion earlier in the evening, and reduce revenue by about US\$1 million ^{[21][22]}.

High Level Considerations

Advantages of this fare strategy/tool

- There is a direct connection between fare pricing and promoting changes in travel behaviour

Disadvantages of this fare strategy/tool

- Continuous customer communications and enforcement (for existing and new customers) will be required to inform them of the operating periods and differential fare structures for peak and off-peak pricing

Risks in the utilization of this fare strategy/tool

- Increased frequency of fare related customer disputes, particularly at the transition times between peak and off-peak pricing

Implementation considerations of this fare strategy/tool

For Transit Operations

- Ability to program fare collection technology to accommodate peak and off-peak pricing
- Two sets of printed fare media for peak and off-peak pricing

For Customers

- Standardized information notifying regular and new customers of the operating periods and corresponding fare structures for peak and off-peak pricing

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Does Not Meet Objectives

Riders with limited ability to pay are disproportionately impacted by peak pricing, especially if they have no choice but to travel during peak hours. While peak/off-peak pricing can be used as a tool to decrease congestion, there is little equity benefit to doing so. In fact, peak/off-peak pricing can hinder equity, since it is mainly done by targeting those who are most sensitive to the higher fares during peak hours and pressuring them to travel during off-peak hours instead.

Simplicity and Accessibility – Meets Objectives

Clear messaging on what specific hours are considered peak versus off-peak can ensure that customers are sufficiently informed to confidently make travel choices.

Financial Sustainability – Meets Objectives

By charging higher fares during peak hours particularly during higher demand time periods, transit agencies can earn greater revenue than they otherwise would. The fact that customers can ride transit for cheaper during off-peak hours can also help partially insulate fare revenue from economic downturns.

Maximizing Benefits – Meets Objectives

In addition to generating additional fare revenue, peak/off-peak pricing can also be used as a tool to control congestion. This creates additional benefits, such as more comfortable transit experiences for riders and greater flexibility in scheduling trains and buses.

Transparency and Fairness – Meets Objectives

If peak/off-peak pricing policy is made both clear and relevant to users, then they can more easily understand it. For instance, users will understand policies that are intended to reduce congestion, since highly congested transit vehicles are acutely felt by most riders onboard.

Strengthens Ridership – Partially Meets Objectives

Off-peak pricing can draw in new riders, but peak pricing can also turn potential new riders away. Similarly, the peak/off-peak pricing can potentially increase or decrease ridership among existing riders, depending on how it is implemented.





Fare Capping

Fare capping is the process where a rider is offered free fares once they pass a certain threshold, (usually number of trips or cash threshold reached) within a specific time frame (usually either a day, week, or month). For example, if a system puts in place a fare capping program where a rider is rewarded with free fares once they use 30 rides in a month, every ride after the 30th ride would be free for them.

Why did we look at this fare strategy/ tool?

- Fare capping will be introduced within two large Canadian transit system in the near term
-

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

PORTLAND, OR

In June 2017, Portland introduced a fare capping system, partially for equity reasons – a portion of TriMet’s riders cannot afford the upfront cost of a monthly pass. Under the fare capping system, each ride costs US\$2.50, with fares capped at US\$5 per day and US\$100 per month. In other words, riders pay at most for two trips per day, and any additional trips beyond that are free. Riders who have paid the equivalent of a monthly pass can then ride free for the rest of that month. While this has helped TriMet work towards their equity goals, the agency estimates that this initiative has reduced revenue by 1 to 1.5 percent ^{[23][24]}.

TORONTO, ON

In February 2022, the TTC Board directed staff to conduct detailed financial analysis on the possibility of introducing a fare capping policy. The staff report identified fare capping as a policy that would be suitable for replacing existing monthly passes. Since before the pandemic, the popularity of monthly passes had been declining due to changes in travel behaviour. A fare capping policy would respond to that by improving affordability, equity, and flexibility for customers, although depending on the exact parameters, there would be a financial cost to the TTC ^{[25][26]}.

High Level Considerations

Advantages of this fare strategy/tool

- Fare capping financially rewards frequent transit customers who exceed a trip threshold in a defined time period

Disadvantages of this fare strategy/tool

- Potential revenue loss from frequent transit users. Lost revenue will need to be recovered through fare increases, additional tax support or other sources

Risks in the utilization of this fare strategy/tool

- Lost fare revenue
- Fare collection technology will need to be able to accommodate fare capping
- Technology requirements for each transit agency smartcard system differs

Implementation considerations of this fare strategy/tool

For Transit Operations

- Technology changes to accommodate fare capping
- Identification of fare products eligible for fare capping

For Customers

- Customer communications to build awareness

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Fare capping makes transit more financially attractive, since people know they cannot overpay for transit. Furthermore, it is especially beneficial for low-income users who cannot afford to pay the up-front cost of a day pass or monthly pass.

Simplicity and Accessibility – Meets Objectives

If fare capping is applied automatically, then it will be incredibly easy to use, since customers will not have to do anything.

Financial Sustainability – Partially Meets Objectives

People who previously paid more for transit than they had to will no longer be able to do so, which means revenue will decrease. Nevertheless, fare capping can help insulate fare revenue from changing economic conditions, since transit is made more affordable and users enjoy greater financial certainty with the knowledge that their transit expenditures are capped.

Maximizing Benefits – Partially Meets Objectives

Fare capping brings significant equity benefits for all customers, and in particular higher-frequency passengers, many of whom may be lower income. However, this comes at the cost of limited compatibility with day passes, monthly passes, and other similar fare products, unless these fare products become eligible with fare capping.

Transparency and Fairness – Meets Objectives

Riders will appreciate fare capping because customers will no longer be penalized for being unable to afford the up-front cost of a pass, or for buying a pass only to later realize they did not fully utilize it.

Strengthens Ridership – Meets Objectives

Fare capping will lead to an increase in the frequency of trips among existing riders, since they can ride with greater confidence, knowing that their transit expenditures cannot exceed a certain threshold.

Smartcards

Smartcards are a technology-based solution to load and validate fares through a card. They tend to be account-based (i.e., cards can be registered to a specific user and loaded with different types of fare products) and they often also have the ability to collect travel data, such as trip origins and destinations.

Why did we look at this fare strategy/ tool?

- Smartcard technology has been deployed in most midsize and large transit agencies in Canada
- Smartcard technology can provide flexibility in the deployment of new fare categories and programs depending on agency specific technology requirements

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

Most large transit agencies use a smartcard, such as Compass in Vancouver and Opus in Montreal. Transit agencies can also share a smartcard system: PRESTO is used by several transit agencies across southern Ontario.

High Level Considerations

Advantages of this fare strategy/tool

- Smartcards have the ability to centralize and tailor all fare media into one physical product
- Different fare products can be loaded onto a customer's smartcard such as monthly passes, single ride tickets, concession fares, promotional fares and more
- Data from smartcard taps could be used to further understand rider characteristics (e.g., demographic data) and trip data (e.g., origin, destination, time of day)
- Many smartcard systems are now permitting open payment (e.g., paying fares with debit, credit, Apple Pay)
- Built in mechanisms to encourage customer loyalty (e.g., lost card, negative card protection)
- Additional communications channel to reach out to customers (e.g., service and fare related information messages to registered smartcard users)

Disadvantages of this fare strategy/tool

- Smartcard technology comes with a significant capital cost at the launch of the program (e.g., installation of fare readers on board transit vehicles and stations) and backend systems for transactions and collect revenue data
- Technology and infrastructure requirements need to be defined in advance of a procurement process
- Strong and sophisticated contract management is required for the multi-year commercial relationship between the smartcard vendor and transit agency

- Significant change management required for both customers and staff at the launch of the smartcard program
- New staffing and functional requirements for the operations and maintenance of the smartcard infrastructure

Risks in the utilization of this fare strategy/tool

- Strong privacy protections are required for the collection of customer data
- Changes in fare products or policies (e.g., zone based fares to distance based fares) will require allowances in the contract to design and deploy fare structure changes, typically with additional costs
- Long lead time required for program definition, procurement, testing and deployment
- Ongoing costs for transaction processing, contractual changes
- Risk of abuse, such as hacked cards

Implementation considerations of this fare strategy/tool

- Implementation considerations will differ depending on the smartcard technology deployed by the transit agencies. Card-based systems store transaction data on board transit vehicles and are not updated until the transit vehicle returns to the garage. Card-based systems don't provide real-time data processing or updates to fare systems. Account based systems transmit transaction data in near real-time and expand the reach of payment options (e.g., credit cards, smartphones). Account based systems rely heavily on a central system to validate fares and accounts.
- Requirements for customer facing, operational and back-end infrastructure
- Coordination with other information technology requirements within the municipality
- Ability to shape and implement future fare policies and programs

For Transit Operations

- There is a significant impact on transit operations where customers utilize smartcards at fare payment machines when boarding a transit vehicle. Operators will need to be versed on how to validate fares, how to answer questions about how to use the smartcard system and how to troubleshoot minor customer related issues. New fare enforcement equipment will be required to check for validated fares on the transit system.
- Operator training for customer information, fare validation and troubleshooting
- Revenue collection, tracking and reporting
- Data collection opportunities and privacy

For Customers

- Significant change management communications will be required at the launch of the smartcard program. Information should include how to obtain a smartcard, account registration, loading fare products, how to validate fares and so forth. Continuous communications will be required for occasional transit users.

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Smartcards can facilitate a wide range of fare products, which in turn ensures that fare price structures can accommodate a wide variety of users.

Simplicity and Accessibility – Partially Meets Objectives

Implementation may pose a challenge, since transit agencies will need to secure a supply of smartcards, set up special vending machines, install card readers for fare validation and backend data processing infrastructure. Some riders may find using smartcards easier and faster than cash or paper tickets, while others may struggle with using or adapting to new technology. Using smartcards to validate concession fares may pose additional challenges (such as the risk of people using concession fares that they are ineligible for).

Financial Sustainability – Partially Meets Objectives

One challenge with smartcards is the cost of smartcard infrastructure, including implementing and maintaining card readers and dispensers. While charging a fee for smartcards can offset that cost, this fee cannot be so high that it dissuades people from riding transit. Separately, smartcards have the benefit of being able to provide more travel data, which can aid in long-term planning and budgeting.

Maximizing Benefits – Meets Objectives

Transit agencies can offer a wide variety of fare products that can all be loaded onto the same smartcard. Smartcard travel data is an additional benefit for transit agencies, and smartcards that are integrated with retail can provide further benefits for businesses and other community stakeholders.

Transparency and Fairness – Meets Objectives

Smartcards that are both well-designed can be positioned as a product that will deliver greater convenience to passengers at a low, reasonable cost. Additionally, smartcard travel data can help users gain greater insight into their transit expenditures and how riders utilize the transit system.

Strengthens Ridership – Meets Objectives

The convenience of a smartcard may result in some new riders, as well as an increase in the frequency of trips among existing riders. Given the pandemic, this is especially true if a touchless smartcard system replaces a cash or paper system.







Fare Payment Apps

Fare payment apps are a technology-based solution to load and validate fares through a mobile application. Fare products can be purchased and loaded through the application, and fares can be validated at transit locations through a phone's contactless communication feature.

Why did we look at this fare strategy/ tool?

- Fare payment apps have been recently deployed at some transit agencies
- Could potentially be implemented at a lower cost when compared to Smartcard systems
 - Customers with smartphones will be familiar with utilizing apps for the purchase of goods and services

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

CALGARY, AB

In July 2020, Calgary Transit launched the MyFare app, which allows transit riders to use their phones to purchase and validate their fares. Usage of the app has steadily increased since its inception, and as of 2021 about half of all tickets were purchased using the app as opposed to ticket vending machines ^{[27][28]}.

HALIFAX, NS

In July 2022, Halifax Regional Council awarded a U.K. company with a contract to develop a mobile ticketing solution for Halifax Transit. Municipal officials expressed that a key benefit of a payment app over a smartcard is that payment apps do not require setting up vending machines to dispense physical cards ^{[29][30]}.

High Level Considerations

Advantages of this fare strategy/tool

- Potentially less capital in terms of infrastructure costs
- Familiarity of app technology amongst smartphone users
- Potentially shorter implementation timeframe when compared to other fare collection technology such as Smartcards

Disadvantages of this fare strategy/tool

- New technology in the fare collection space
- Not available for customers without smartphone technology (e.g., low-income, seniors)

Risks in the utilization of this fare strategy/tool

- App maintenance from third party vendors, continuity of service, consistent app updates and upgrades
- Collection of customer data through a third party

Implementation considerations of this fare strategy/tool

- Contract management with a third-party vendor

For Transit Operations

- Operator training/familiarization during fare app deployment (e.g., customer information, fare validation and troubleshooting)
- Fare enforcement, ability to determine if fare has been validated

For Customers

- Information on how to download, set up an account and purchase fares. Information to customers on this new fare payment option

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Partially Meets Objectives

Fare payment apps can provide information about fare products or automate selecting the most applicable one to ensure equitable transit. A payment app, being free, would also be very affordable, since users would not be required to pay any costs beyond their pre-existing cell phone expenditures. Customers without smartphones (e.g., low-income riders or seniors) will not be able to use this fare payment technology.

Simplicity and Accessibility – Partially Meets Objectives

Since a fare payment app leverages riders' smartphones, there is no need to dispense any physical fares or smartcards, thus simplifying the implementation. However, implementing effective fare validation systems may be a challenge, and the requirement that users carry a working smartphone may present a barrier to some.

Financial Sustainability – Partially Meets Objectives

Transit agencies will incur costs in developing a fare payment app, yet cannot pass this cost on, as users will expect any fare payment app to be free. However, travel data from a fare payment app can help with planning and budgeting.

Maximizing Benefits – Meets Objectives

A free payment app will ensure that benefits are equitably shared. A fare payment app is also one of the few fare products that presents an advertisement opportunity (and therefore additional revenue) for transit agencies.

Transparency and Fairness – Meets Objectives

Fare payment apps can ensure that customers always have all of their travel information and transit expenditures in one accessible location. As long as the app is free, well-designed, and generally devoid of technical problems, then interested users will enjoy using it.

Strengthens Ridership – Meets Objectives

The convenience of a fare payment app may attract new users, such as tourists and young people. A contactless fare validation process may also boost rider confidence, especially if the alternatives are to pay with cash or a physical ticket.

Distance/Zone Based Products

A distance or zone based fare product charges higher fares to riders who take longer trips. Typically, whenever riders tap on or off to board or exit a transit vehicle, the distance between their origin and destination can be automatically calculated, and this determines the fare that they pay. A distance-based model charges fares based on total distance traveled, while a zone-based system separates a transit network into several zones, with higher fares depending on how many zone boundaries are crossed.

Why did we look at this fare strategy/ tool?

- Distance/Zone based fare structures have been implemented in Vancouver, Toronto and Montreal

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

MONTREAL, QC

In December 2020, the Autorité régionale de transport métropolitain (ARTM) approved a plan to simplify fare and zone structures around the greater Montreal region, with implementation starting July 2022. Eight zones managed by several different transit agencies have been simplified down to four zones with transit passes that work across different transit systems and modes of transport in the region. Fares and prices are priced depending on how many zones travelers want to travel through^{[31][32][33]}.

PUGET SOUND (SEATTLE)

Seattle's Sound Transit charges different fares depending on travel distance. For light rail, fares range from US\$2.25 to US\$3.50, and for trains, fares range from US\$3.25 to US\$5.75. Fares are charged automatically when riders tap their ORCA smartcards when arriving or leaving a station, or when riders purchase a ticket at a machine. There is a flat fare for buses and concession groups (seniors, youth, etc.)^[34].

High Level Considerations

Advantages of this fare strategy/tool

- Potential to capture additional fare revenue for longer distance trips
- Ability to use fare pricing as an incentive to shift travel patterns and service utilization (e.g., elimination of zone pricing after 6:30pm in Metro Vancouver)

Disadvantages of this fare strategy/tool

- Complexity in customer communications (notification of zone boundaries, fare pricing by distance)
- Higher number of customer touchpoints and interactions (fare purchasing and validation, tap in/out at fare gates)
- Potential for different fare media depending on the fare technology used on the system

Risks in the utilization of this fare strategy/tool

- Sensitivity with the identification of fare zone/distance boundaries
- Fare evasion, potentially more difficult to track

Implementation considerations of this fare strategy/tool

- Ability to articulate fare/distance boundary changes
- Ability to enforce proper fare validate by zone/distance (staff, technology and infrastructure)
- Ability to transfer between different transit systems

For Transit Operations

- Operator familiarization on the geographic location of fare zones, distance based fares
- Continuous customer communications on how to purchase and validate fares for different fare zones and distances
- Ability for fare collection technology to calculate and charge the correct fare depending on zone/distance

For Customers

- Knowledge base and information to identify how many zones or distance travelled when purchasing fares

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Partially Meets Objectives

Overall, the pricing structure can be considered equitable because those who make greater use of transit are asked to pay more for it. However, people who travel long distances on transit because they live far away from their place of work or school (and therefore feel the largest financial impact) tend to be people of lower economic status and thus have lower ability to afford higher fares.

Simplicity and Accessibility – Meets Objectives

Conceptually, distance or zone based fare products are easy to understand. As long as it is implemented in such a way that minimizes the need for riders to spend time calculating their own zones or distances, then distance or zone-based fares can be made very easy to purchase and use.

Financial Sustainability – Meets Objectives

This fare product can increase the revenue that is collected from longer trips. Distance or zone based fare products can also generate more travel data than flat fares, and this data can help with long-term planning and budgeting.

Maximizing Benefits – Meets Objectives

The value of fares will be more equitably distributed with a zone or distance based model because, generally, consumers who use more transit pay more, while those who use less pay less (though this is more true for distanced based fare products than with zone based options).

Transparency and Fairness – Partially Meets Objectives

The general concept of charging more for riders who travel more, and less for riders who travel less, is easy to understand. However, the final cost may be difficult to calculate for distance-based fares, which can hinder transparency and impact perceived fairness. Some may also find zone-based fares unfair, especially those who make short trips over a zone boundary.

Strengthens Ridership – Does Not Meet Objectives

Distance or zone based products may attract new riders or increase trip frequency if fares are lowered, especially for shorter trips. However, higher fares for longer trips may dissuade potential new riders from trying transit while also leading to a decrease in the frequency of trips among existing riders.

Free Transit

Free transit would be the elimination of transit fares, with the cost of transit fully funded by a public sector actor instead. This can be the full elimination of transit fares across the entire transit system, or fares can be partially eliminated. Partial free transit can be implemented solely in a specific geographic area or timeframe, and/or only for specific concession groups.

Why did we look at this fare strategy/ tool?

- Free transit programs have been recently piloted or implemented in various transit agencies across North America
 - Has been a policy topic of discussion in some cities (e.g. Ottawa)
-

TRANSIT SYSTEMS USING THIS STRATEGY / TOOL

SALT LAKE CITY, UT

Salt Lake City announced a month of free transit in 2022 – dubbed “Fare Free February” – in celebration of the 20th anniversary of the 2002 Olympic Games. The lost fare revenue was offset by an agreement with local governments, partner agencies, and private businesses that were willing to support the initiative. Weekday ridership increased 16.2%, Saturday ridership increased 58.1%, and Sunday ridership increased 32.5%. A feedback survey indicated that 21.8% of riders were using the transit system for the first time, and 81.8% of all riders had a positive impression of the program ^[35].

BOSTON, MA

In March 2022, Boston launched a pilot program where fares were eliminated on three popular bus routes that run through neighbourhoods home to many immigrants, low-income individuals, and Black residents. Boston city officials have promoted the program as a way to fight climate change and achieve racial justice goals. Initial results showed that ridership jumped 22% on one of the pilot routes, and buses moved faster since riders could simply board without spending time validating their fare ^[36].

ALBUQUERQUE, NM

Albuquerque is currently running a year-long pilot where transit will be free over the course of 2022. The project was approved in 2021 and was influenced by a 2017 survey which found that 84% of riders reported an annual household income of under \$35,000 and 67% of transit riders were visible minorities. As of February 2022, the second month of the year-long pilot, transit ridership has increased 46% compared to February 2021 ^[37].

High Level Considerations

Advantages of this fare strategy/tool

- Creates universal access to public transit services regardless of income
- Eliminates the need for fare collection technology and infrastructure

Disadvantages of this fare strategy/tool

- Significant loss of operating revenue. New revenue source(s) would be required to maintain service levels and prevent service cuts
- Reduces financial ability of the transit agency to scale service (e.g., no additional funding for additional service)
- Unknown demand with free transit and transit agencies' ability to accommodate new riders in a free fare scenario

- Loss of transit agency's ability to estimate system-wide ridership from revenue collection

Risks in the utilization of this fare strategy/tool

- Potential for an increase in non-destination riders
- Potential for increase in disorder incidents on public transit

Implementation considerations of this fare strategy/tool

- Removal of fare collection equipment on the transit system
- Revisions to transit safety policies (e.g., loitering on transit vehicles and at stations)

For Transit Operations

- Changes in the role of responsibilities of various transit staff (e.g. operators no longer collecting fares, transit enforcement officers no longer conducting fare enforcement)

For Customers

- Communications on the removal of transit fares

Evaluation of the Fare Strategy or Tool

Affordability and Equity – Meets Objectives

Free transit has the lowest financial cost to riders out of all fare products. With free transit, users will face virtually no financial barriers to accessing transit. This, in turn, can help achieve equity goals by ensuring that all populations have access to transit and its benefits.

Simplicity and Accessibility – Meets Objectives

Unless free transit is implemented with restrictions, the marketing should be straightforward and easy. Furthermore, if riders have no need at all to purchase fares, then that provides maximum simplicity and convenience for riders. The only exception is if free transit is only partially implemented.

Financial Sustainability – Does Not Meet Objectives

Free transit, by definition, does not bring in revenue and therefore does not contribute to transit operations. On the other hand, so long as transit is fully funded by other means, then transit agencies will enjoy a higher degree of financial certainty, since changes in ridership or economic conditions will have little impact on cash flow.

Maximizing Benefits – Partially Meets Objectives

Free transit provides maximum benefits to all customers, plus additional benefits for other stakeholders, such as greater reduction in greenhouse gas emissions and increased foot traffic in commercial districts. However, free transit is, by definition, incompatible with other fare products – people will not buy a daypass, concession fare, or any other fare product if they can simply hop on the bus or train for free. This means free transit will require eliminating those pre-existing sources of revenue.

Transparency and Fairness – Partially Meets Objectives

Given the high degree of simplicity inherent with using free transit, the public should be able to easily understand it. However, in the absence of fares, some members of the public may struggle to understand how free transit is being funded. Additionally, service quality may also be negatively impacted by increased congestion.

Strengthens Ridership – Meets Objectives

Free transit will attract new riders and boost ridership in the long run. It will also lead to a high increase in the frequency of trips among existing riders. Overall, there is a potential for a high increase in ridership as long as service levels are maintained at a minimum.







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