



Hamilton

# INFORMATION REPORT

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	August 11, 2016
<b>SUBJECT/REPORT NO:</b>	Hamilton Street Railway (HSR) Fare Integration (PW16066) (City Wide) (Outstanding Business List)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Nancy Purser Manager, Transit Support Services (905) 546-2424, Extension 1876
<b>SUBMITTED BY:</b>	Gerry Davis, CPA, CMA Strategic Advisor City Manager's Office
<b>SIGNATURE:</b>	

## Council Direction:

At its meeting on April 22, 2016 Council directed that Transit staff report back on the status of the Metrolinx Fare Integration Strategy.

## Information:

The Metrolinx Fare Integration Initiative is a research project created to determine the feasibility of regionally integrated fare. The foundation for the regional fare integration strategy is a framework including a common vision, goals and objectives for fare initiatives in the Greater Toronto Hamilton Area (GTHA). These were developed with extensive input from the region's transit agencies, and reflects the perspectives of the customer/rider, transit service provider and the region as a whole (i.e., with respect to GTHA mobility). They provide a basis for evaluation and business case analysis of fare strategy initiatives.

The vision for the strategy is to:

*"... increase customer mobility and transit ridership while maintaining the financial sustainability of GTHA's transit services. The strategy will remove barriers and enable transit in the GTHA to be perceived and experienced as one network composed of multiple systems/service providers."*

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OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

OUR Priorities: Community Engagement & Participation; Economic Prosperity and Growth; Healthy and Safe Communities; Clean and Green; Built Environment and Infrastructure; Culture and Diversity and Our People and Performance.

The goals to achieve this vision are:

- Simplicity: The fare strategy will simplify customer/rider experience and agency fare management/operations, attracting travelers to transit services throughout the GTHA.
- Value: The fare strategy will reflect the value of the trip taken, and maintain the financial sustainability of transit services.
- Consistency: The fare strategy will create a common fare structure with consistent definitions and rules across the GTHA.

There is already some fare integration throughout the region:

- Customers can travel between local transit systems in the 905 area with one fare
- Customers can transfer between local transit in the 905 area and GO Transit with a significant discount on the local fare
- BUT customers are required to pay two fares in key areas:
  - When travelling between local transit in the 905 area and the TTC
  - When transferring between the TTC and GO Transit

Through this work, 3 fare structure concepts (representing significantly different approaches to a regional fare structure) were developed in order to evaluate their performance in meeting both existing and future needs of the GTHA transit network.

These concepts include:

1. Modify the existing system – in this concept, we would retain the existing system, but reduce barriers for customers transferring between the TTC and other systems.
2. Create a new zone-based system – In this concept, we would create a new regional system where customers would pay a fare based on how many zones they cross on a trip.
3. Create a new system comprised of both flat fares and fare-by-distance – In this concept, we would create a new regional system where customers using local buses would pay a flat fare, while customers using subways, LRTs and GO Transit customers would pay based on distance travelled.

Early findings of these fare structure evaluations show:

1. All three concepts result in customers using transit more seamlessly
2. Building a more integrated fare system generates substantial social, economic and environmental benefits

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3. It is not possible to achieve both ridership and revenue growth simultaneously in the short (1-2 year) term

More work will be done on the three concepts to further refine and assess, with consideration given to the feasibility of implementation, through the summer and fall. An update to the Metrolinx Board will be provided in Fall 2016.

See Appendix A for additional detail on these fare structure concepts.

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# GTHA FARE INTEGRATION

Leslie Woo, Chief Planning Officer

Metrolinx Board of Directors Meeting  
June 28, 2016

# Overview

- Executive Summary
- Overview
- It's Complicated
- A Collaborative Process
- Vision, Goals and Objectives
- Three Concepts Analysed
- Key Findings
- Next Steps
- Appendices

# Executive Summary

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Preliminary findings are now emerging:

- Fare integration can strengthen the region's transit offering
  - Incremental modifications today can set us up for bigger changes tomorrow
  - Working with municipalities, stakeholders and the public will improve the quality of the solution and its delivery
- Further work will be completed over the Summer and a recommendation delivered in the Fall**

# A Growing Region

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- Every year the GTHA welcomes 100,000 new residents
- People are travelling across boundaries in greater numbers to work, homes, services and recreation
- Our rapid transit system expansion will offer more connections between transit lines and systems
- The fare structure made up of 11 existing structures does not encourage optimal ridership growth on the existing and the future transit services and infrastructure
- No single municipality or transit agency can solve this problem by itself

# A Transit Renaissance

**Rapid Transit in the Pipeline:** New GTHA rapid transit infrastructure projects, including municipal initiatives and \$31B\* of new provincial Moving Ontario Forward investments, benefit from fares that integrate them with connecting transit systems

**PRESTO Fare System across the Region:** PRESTO will provide a powerful platform for regional fare integration throughout the GTHA

- Available across the GTHA by the end of 2016
- PRESTO cards can be used on any transit system
- Enables new fare structures
- Will evolve with new methods of payment to meet the region's needs
- Negotiations are underway to develop sustainable agreements with municipalities

**Service Integration:** Strengthened cross-boundary transit services require fares to encourage ridership growth

**Customer Expectations:** Travellers expect fares that provide good value and a convenient transit experience across the region

\* Includes about \$16B in projects underway and about \$16B in projects through *Moving Ontario Forward*

# Fares Today

- There is already some fare integration:
  - Customers can travel between local transit systems in the 905 area with one fare
  - Customers can transfer between local transit in the 905 area and GO Transit with a significant discount on the local fare
- BUT customers are required to pay two fares in key areas:
  - When travelling between local transit in the 905 area and the TTC
  - When transferring between the TTC and GO Transit

# Double Fares

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**Discourage transit use and increase auto use for:**

- Short-to-medium length trips in both directions across the Toronto boundary
- Trips in Toronto to/from a GO station
- Long distance trips to destinations beyond walking distance from Union Station

**Cause people to make inconvenient travel choices such as:**

- Choosing cheaper and slower trips on TTC instead of more costly and faster trips on GO
- Driving to the Toronto boundary to avoid a double fare

**Reduce the market for new cross boundary transit service between Toronto and neighbouring municipalities**

# It's Complicated

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- Any change impacts over 1.5M people every day; impacts are individual, direct and personal
  - Even small changes can have many **direct and indirect impacts**
  - We cannot rely on precedents from other jurisdictions; every region is unique
  - **There is no obvious right or wrong solution**
  - A well-integrated fare system typically evolves over time

# A Collaborative Process

- Metrolinx with MTO and all 10 transit operators have been working together over the past 18 months
- Staff collaboration has led to a working vision, goals and objectives
  - Ongoing effort is underway to build consensus with municipalities
- Through 20 public open houses over February and March, staff received valuable feedback and a general interest in moving forward
- Engagement is continuing with municipal staff, and there have been discussions at the Premier's Mayors and Chairs Summit

# A Customer-First Vision

Developed with all GTHA transit agencies:

## Vision Statement

- The *GTHA Regional Fare Integration Strategy* will increase customer mobility and transit ridership while maintaining the financial sustainability of GTHA's transit services.
  - This strategy will remove barriers and enable transit to be perceived and experienced as one network composed of multiple systems/service providers.

# Goals and Objectives

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## Goal 1. Simplicity

Simplify the customer experience and agency fare management, attracting travellers to transit services throughout the GTHA.

## Goal 2. Value

Reflect the value of the trip taken, and maintain the financial sustainability of transit services.

## Goal 3. Consistency

Create a common fare structure with consistent definitions and rules across the GTHA.

## OBJECTIVES

- ✓ Travellers perceive one GTHA transit network, multiple agencies
  - ✓ Reflects value of service received
  - ✓ Supports transit ridership growth
  - ✓ Promotes social equity
  - ✓ Provides value for money on transit investments and costs
  - ✓ Generates revenue in support of cost recovery plans
  - ✓ Minimizes fare underpayment
  - ✓ Supports economic growth and environmental sustainability
- ✓ Easy to understand
  - ✓ Provides easy fare payment for trips involving multiple services or modes
  - ✓ Allows service providers to adapt to meet changing customer needs
  - ✓ Distributes demand efficiently throughout the network
  - ✓ Facilitates standardized fare management
- ✓ Suitable for different trip and traveller types
  - ✓ Adaptable to changes in service, operations, and infrastructure
  - ✓ Practical to implement, manage and revise over its lifecycle
- ✓ User friendly point of purchase experience

# Study Method

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## Includes:

- Business case analysis/assessment
- A purpose-built model to estimate ridership and revenue impacts for GTHA, service types, and broad travel markets for 2011 and 2031
- High level investigation of impact and cost of implementation through PRESTO
- Experience with similar structures in other regions
- Consultations with municipal staff, transit agencies and public

# Three Concepts Analysed

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- 1. Modify the existing system**
  - In this concept, we would retain the existing system, but reduce barriers for customers transferring between the TTC and other systems
    - Between the TTC and 905 transit agencies, customers could transfer at a reduced or no cost
    - Between the TTC and GO Transit, customers could transfer at a reduced cost
- 2. Create a new zone-based system**
  - In this concept, we would create a new regional system where customers would pay a fare based on how many zones they cross on a trip
- 3. Create a new hybrid system, using both fare-by-distance and flat fares**
  - In this concept, we would create a new regional system where customers using local buses would pay a flat fare, while customers using subways, LRTs and GO Transit customers would pay based on distance travelled

# Early Findings

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## **Concept 1 Modifying Existing:**

- Easiest to implement
- Greatest increase in GO ridership
- Least increase in transfers between TTC and 905 transit systems
- Reduces trips between 905 transit systems

## **Concept 2 Zone Based:**

- Complicated to implement
- Greatest ridership increase, particularly on local buses
- Significant change to customer experience and how people make choices
- Small reduction in longer distance subway trips

## **Concept 3 Flat Fare plus Fare-by-Distance:**

- Complicated to implement
- Greatest increase in transfers between TTC and 905 transit systems
- Least growth on GO Transit
- Small reduction in longer distance subway trips

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# Early Findings (Continued)

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- All three concepts result in customers using transit more seamlessly
  - Multi-modal trips increase 4-6%, with a corresponding decrease in single mode trips
- Building a more integrated fare system generates substantial social, economic and environmental benefits
  - Auto travel (2031 projection) is reduced by between 170 and 320 million vehicle km (0.4-0.7%) annually with resulting reduction in GHG emissions of 2-4 million tonnes
  - Benefit cost ratio over 60 years (for comparison with infrastructure projects) is between 3.3 and 5.0
- It is not possible to achieve both ridership and revenue growth simultaneously in the short (1-2 year) term
  - Each 1% in new ridership requires short term revenue reduction of 5-7%
  - In the longer term (5-10 year), greater ridership increases are possible due to travel adjustments and development of the transit network over time

# Early Findings (Continued)

- Addressing cross-boundary fares between Toronto and its neighbours results in key impacts:
  - Reducing the cross-boundary fare increases the volume of transit trips of all lengths across the boundaries by 9.5-16.5%
  - Auto trips across the Toronto boundary to TTC park and ride lots decrease by 20-25% in favour of bus service to the subway
  - Customers shift from GO to local transit for longer trips to the downtown due to lower fares, increasing ridership on the subway by 12,000-16,000 peak period trips, an increase of 1.2-1.6%
- Fare-by-distance should continue to be considered to because it enables:
  - Appropriate pricing of long trips as cross-boundary fares are reduced
  - Greater customer choice between subway, LRT and GO Transit service
  - Improved value for short-distance trips
  - Revenue decreases from fare reductions elsewhere to be offset

## Early Findings (continued)

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- Significant benefits can be achieved with modifications to the existing system without the complications of centralising fare-setting and revenue allocation.
  - Lower cost to develop and implement fare system changes
  - Fares could continue to be set by existing authorities
  - Allocation of revenue among agencies is simpler
  - Less change to existing customer experience

# Social Equity and Access

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- Maintaining social equity and access are critical to any fare strategy
- Fare policy should be combined with other mechanisms to address equity and access issues; other mechanisms may be more effective in directing benefits to particular groups
- The concepts evaluated:
  - Reduce the cost of regional transit trips, benefiting higher income groups
  - Reduce the cost of cross-boundary travel to employment outside the financial core, benefiting lower income residents
- Analysis of impact of concepts on transit travel by income group will continue

# Next Steps

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- More engagement is required with municipalities, stakeholders and the public
- We will continue to engage with municipalities as analytical work continues
- All three concepts will be further refined and assessed, with consideration given to the feasibility of implementation
- In addition, based upon the analysis to-date, a variation on Concept 1 will be developed for deeper evaluation, considering short-, medium- and longer-term opportunities
- We will report-back to the Working Group in the Summer and Fall 2016
- Updates on the fare integration initiative – including findings and reflecting municipal input – will be presented to the Metrolinx Board in Fall 2016
- MTO and Metrolinx continue to refine next steps, including with respect to the potential decision pathway

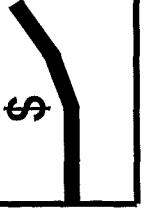
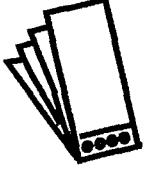
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# Appendix

# Elements of Fare Integration

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Payment System	Fare Structure	Concessions	Products	Price
			 	<p>System for fare collection: fare card, mobile device, credit card, etc.</p> <p>System for determining base fares (i.e., flat, zone, distance) and related transfer policies</p> <p>Customer types (i.e., child, youth, senior) eligible for fare discounts</p> <p>Fare products to reflect customer travel and volume of use (weekly pass, volume discount)</p> <p>Amount paid for travel, with fares for products/concessions typically derived from the adult cash fare</p>

# Service Types

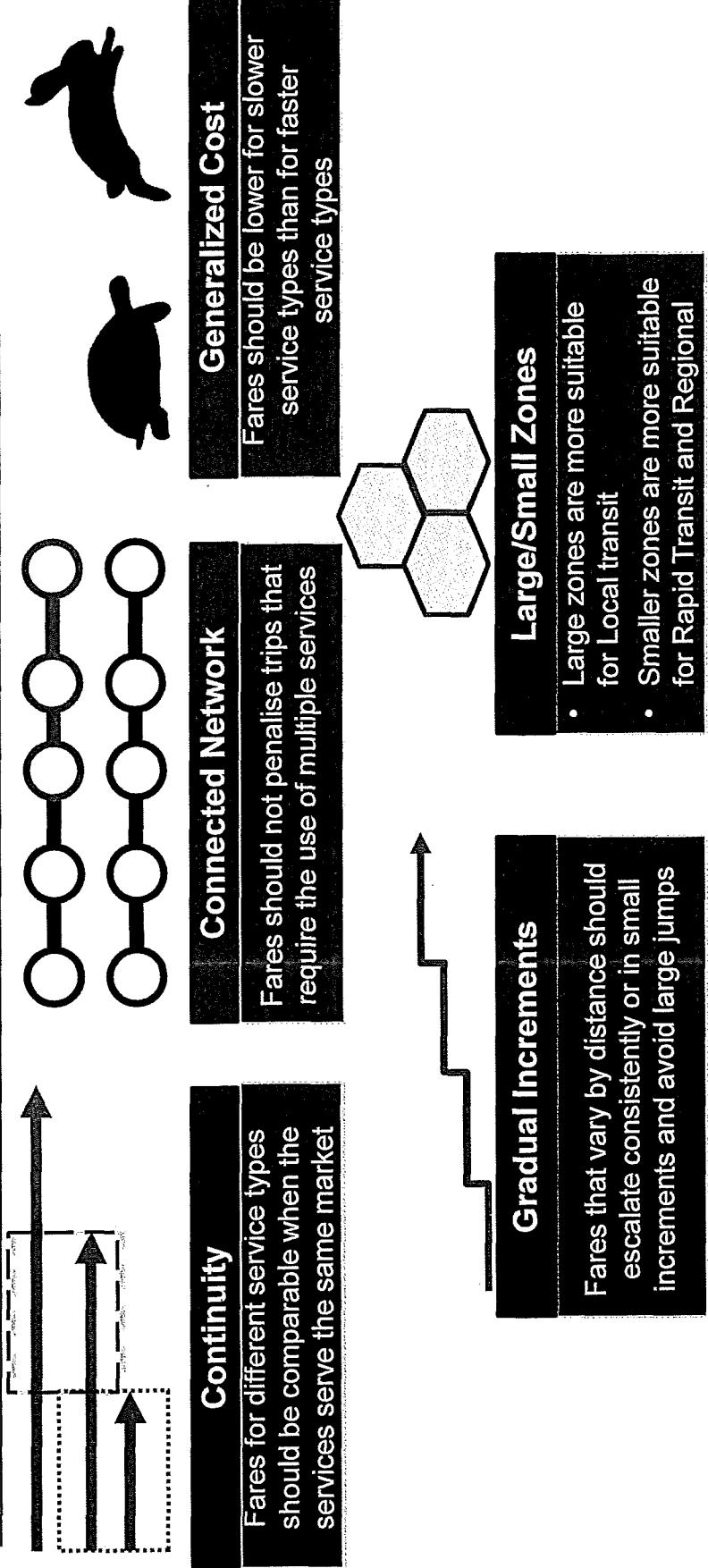
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For this investigation, transit services were grouped into three types:

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- “**Local:**” Slower services with frequent stops, including most bus services and streetcars
- “**Rapid Transit:**” Fast services with less frequent stops typically protected from traffic, including subway and LRT
- “**Regional:**” Fastest services designed for longer distance travel with limited stops, including GO rail and GO bus

# Fare Structure Design Principles



# Three Concepts Analyzed

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## 1. Modified Existing System

Modify current fare environment to address the most significant issues with the status quo

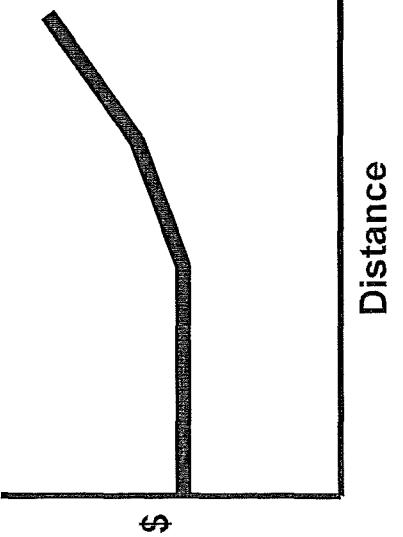
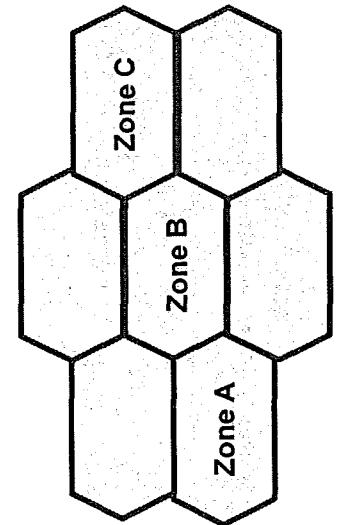
## 2. New Zone-Based System

Develop a new regional fare structure with fare by zone for “Local” and “Rapid Transit,” adding flexibility to pricing

## 3. New Hybrid System

Develop a new fare structure with region-wide flat fare for “Local,” with “Rapid Transit” and “Regional” using small zones or fare-by-distance

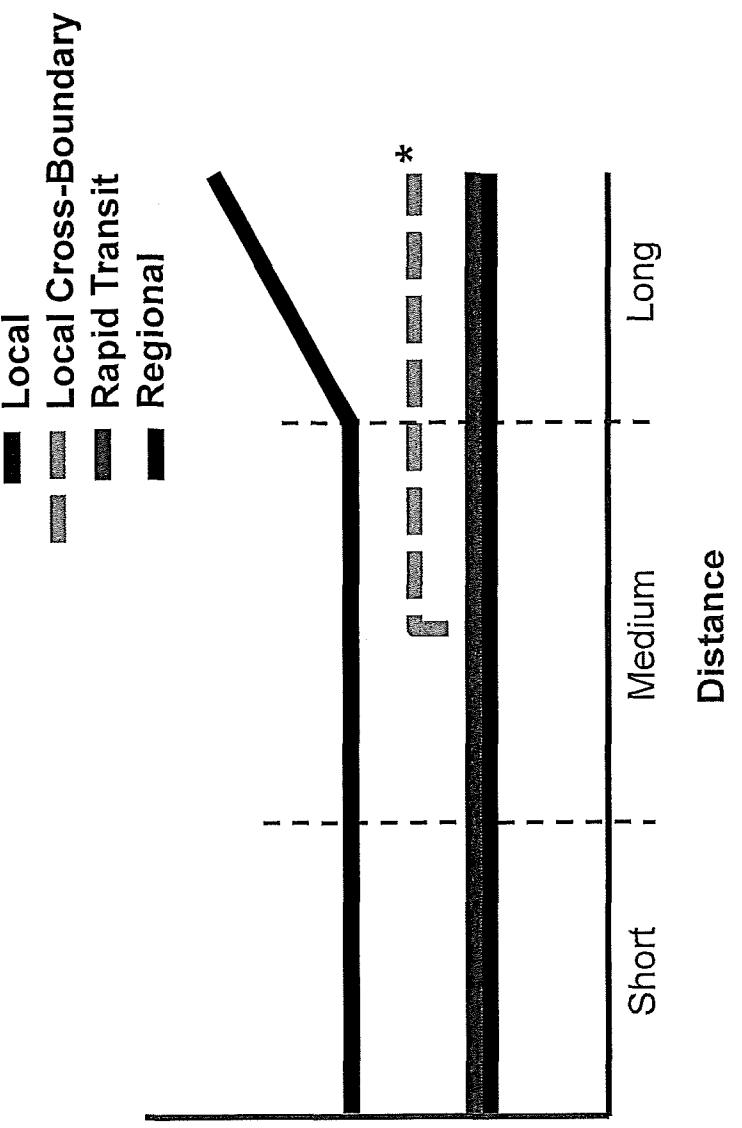
- Consistent transfer policy between municipal transit agencies
- Consistent transfer policy between municipal transit and Regional transit
- Regional base fare and Rapid Transit fares more closely aligned



# Existing Fare Structure: “Status Quo”

**Local:** Each municipal service provider sets their own fares; mostly flat with zones for some long trips\*

High



**Rapid Transit:** Same as “Local”

**Regional:** Small zones, with a flat fare for short- to medium-length trips

**Transfers:** Free between “905” operators, double fare between “905” and Toronto\*, co-fare between “905” and GO, double fare between Toronto and GO\*

# Concept 1: Modified Existing

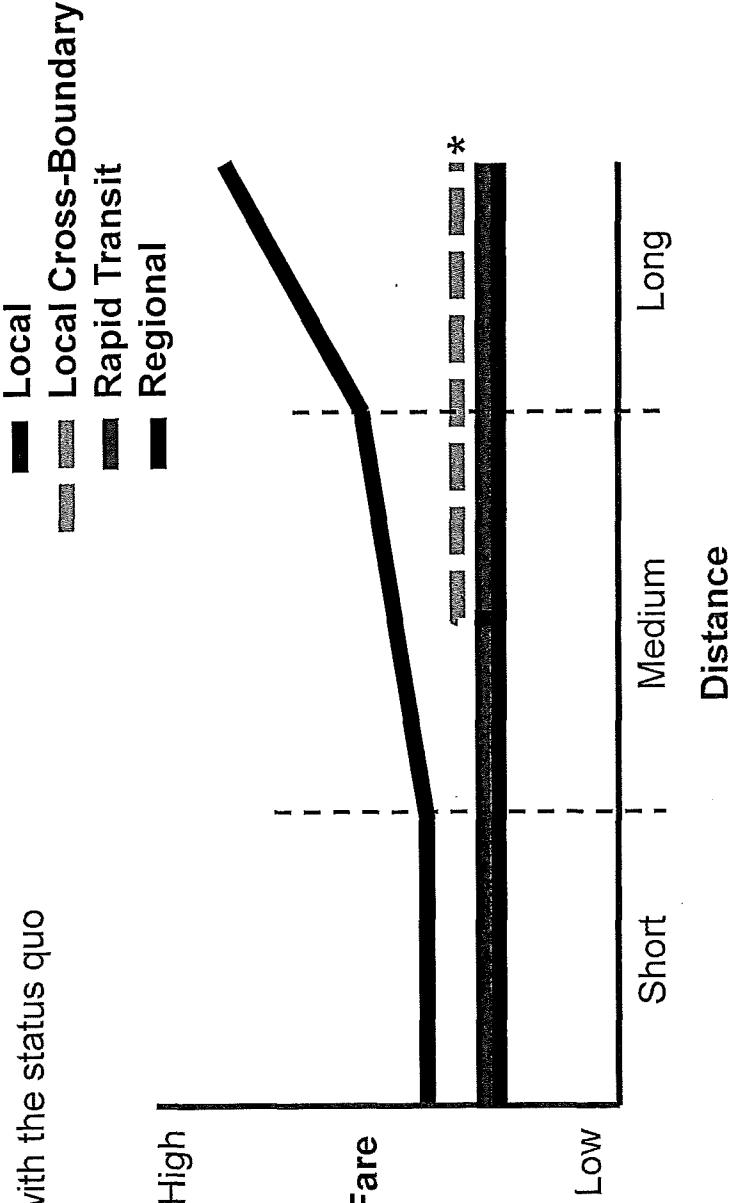
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**Design Rationale:** Modify current fare environment to address the most significant issues with the status quo

### Features:

- Consistent transfer policy between municipal transit agencies (may require additional fare\*)
- Consistent transfer policy between municipal transit and GO
- Regional base fare and “Rapid Transit” fares more closely aligned to improve continuity for medium-length trips



# Concept 2: New Zone-Based

**Design Rationale:** Develop a new regional fare structure with fare by zone for “Local” and “Rapid Transit,” adding flexibility to pricing

## Features:

- “Local” and “Rapid Transit” use large zones, aligned for simplicity, but may have different fares
- Regional fares for medium-distance trips are comparable to “Rapid Transit”
- Transfer policy required for transfers between service types



# Concept 3: Flat Fare + Fare by Distance

**Design Rationale:** Develop a new fare structure with region-wide flat fare for “Local,” with “Rapid Transit” and “Regional” using small zones or fare-by-distance

## Features:

- Region-wide flat “Local” fare
- “Rapid Transit” comparable to “Local” for short trips
- Regional fares comparable to “Rapid Transit” for medium-distance trips
- Transfer policy required for transfers between service types

High

Low

\$ Fare

